

PLASTRO EMITTERS

HYDRAULIC PERFORMANCE DATA FOR DESIGNERS

Written and edited

By

Plastro's Design Department



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INTRODUCTION

This booklet contains a compilation of performance data for all **PLASTRO** emitters. It has been prepared by **PLASTRO** to be used by designers, dealers and customers throughout the world. Proper system design complete data about an emitter's performance. Using this data, the designer can avoid common mistakes and improve his product. The following situations demonstrate how this information can be particularly helpful.

- *Specifying an emitter for the first time.
- *Optimal product determination for large scale projects.
- *Distribution under varying pressure or topographical constraints.
- *Experimental projects.

The concept of low volume irrigation is relatively new and the terms used may be unfamiliar. The generic term "Low volume emitter" refers to drippers, in-line drippers, mini-sprinklers, bubblers, etc. This can lead to some confusion in product identification, in part because the commercial names given to these products are not consistent. We in **PLASTRO** refer to our emitters by their full names in order to avoid this confusion. Each emitter belongs to a distinctive family and product line. Each product line is then subdivided to all of the "family members". Each product line is presented here in a different chapter. All of the important performance details for each product are presented in a table or a graph form.

The content of this manual is organized by product. The first chapter includes a general overview of all **PLASTRO** emitters, head connectors and microtubes. The following chapters are dedicated exclusively to **PLASTRO** families of products. For each family there is a full list of models, accessories and hydraulic performances.

This data is also available on a compact disk. The software form is edited exactly as the printed data. New emitter data will be compiled in the same format. We hope that our clients and customers will find this manual useful and practical. Any comment or criticism is welcome. We promise to consider any recommendations for future editions.

Plastro Design Department.

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CONSTANTS - PLASTRO EMITTERS

EMITTER TYPE	COLOR CODE	NOMINAL FLOW RATE * (LPH)	Q=A _x H ^{1/2} B **		% DH ***	FLOW RATE (LPH) AT PRESSURE				
			A	B		10 m	15 m	20 m	25 m	30 m
“TORNADO” ray-jet	Black	25	6.5060	0.5050	20.7	20.8	25.5	29.5	33.1	36.2
	Blue	34	7.4170	0.5610	18.5	27.0	33.9	39.8	45.1	50.0
	Green	55	14.4080	0.4990	21.0	45.5	55.7	64.2	71.8	78.6
	Red	70	22.7390	0.4170	25.6	59.4	70.3	79.3	87.0	93.9
“TORNADO” mini - Sprinkler	Black	33	8.6000	0.4580	23.1	24.7	29.7	33.9	37.6	40.8
	Blue	43	11.0270	0.4560	23.2	31.5	37.9	43.2	47.9	52.0
	Green	75	20.3040	0.4420	24.0	56.2	67.2	76.3	84.2	91.3
	Red	100	21.1990	0.5170	20.2	69.7	86.0	99.8	112.0	123.0
	White	115	26.0170	0.4950	21.2	81.3	99.4	114.6	128.0	140.1
“TORNADO” Mist Sprayer	Black	22	3.6540	0.5240	20.0	12.2	15.1	17.6	19.7	21.7
	Blue	27	4.7600	0.5040	20.8	15.2	18.7	20.2	22.6	24.8
	Green	38	6.4770	0.5210	20.0	21.5	26.6	30.8	34.6	38.1
	Red	45	8.9130	0.4770	22.1	26.7	32.4	37.2	41.4	45.1
“TORNADO” Online Dripper	Black	16	6.3360	0.3946	27.3	15.7	18.5	20.7	22.6	24.3
	Blue	18	7.5135	0.3770	28.7	17.9	20.9	23.2	25.3	27.1
	Green	25	10.1941	0.3821	28.3	24.6	28.7	32.0	34.9	37.4
	Red	29	12.3103	0.3738	29.1	29.1	33.9	37.7	41.0	43.9
“RONDO” Mini Sprinkler	Black	40	11.4600	0.4132	25.9	29.7	35.1	39.5	43.3	46.7
	Blue	50	12.7864	0.4587	23.0	36.8	44.3	50.5	56.0	60.9
	Green	75	15.7554	0.5157	20.0	51.7	63.7	73.9	82.9	91.0
	Red	100	24.2567	0.4845	21.7	74.0	90.1	103.6	115.4	126.0
	White	135	30.0681	0.4984	21.0	94.7	116.0	133.8	149.6	163.8
	Violet	175	35.6470	0.5290	19.7	120.5	149.3	173.9	195.7	215.5
	Yellow	215	49.9256	0.4847	21.7	152.4	185.5	213.3	237.6	259.6
	Brown	260	58.6624	0.4972	21.0	184.3	225.5	260.2	290.7	318.3
	Orange	300	57.1814	0.5578	18.6	206.6	259.0	304.1	344.4	381.2
“RONDO XL” midi sprinkler	White	135	30.8589	0.4918	21.5	94.0	117.0	134.0	150.0	165.0
	Violet	170	41.202	0.477	22.2	122.0	149.0	171.0	191.0	209.0
	Yellow	210	50.1694	0.4807	21.9	150.0	183.0	212.0	235.0	258.0
	Brown	260	63.5234	0.4712	22.4	185.0	225.0	259.0	290.0	315.0
	Orange	305	73.3716	0.4768	22.1	217.0	265.0	305.0	341.0	373.0
	Gray	367	82.5585	0.4977	21.5	259.0	317.0	367.0	410.0	449.0

* COEF. FLOW FUNCTIO

** Q= LPH H=m

*** %DH - MAXIMUM ALLOWABLE HEAD LOSS DIFFERENCE (AS PERCENTAGE OF WORKING HEAD)

WITHIN AN IRRIGATION PLOT IN ORDER TO KEEP FLOW RATE DIFFERENCES ≤ 10%

TECHNICAL DATA FOR PLASTRO EMITTERS

INTEGRAL DRIPLINE

HYDRODRIPII

EMITTER TYPE	FLOW (l/h)	DIA.	DIA.	DRIP.	DRIP.	DH=7.5%		DH=10%		WCADI	Min.	Color
		NOM mm	INT. mm	COEF	EXP.	Pmin (m)	Pmax (m)	Pmin (m)	Pmax (m)	CAT.	Press- ure (m)	
12-/26/40	2.1	12	10.4	0.6442	0.506	9.25	10.75	9	11	26611017		green
	2.9											
	3.6											
16/18	1.6	16	15.2	0.5300	0.4830	9.19	10.81	8.91	11.09	26611816		green
	2.2	16	15.2	0.7260	0.4840	9.19	10.81	8.91	11.09	26611822		yellow
	3.6	16	15.2	1.1940	0.4792	9.19	10.81	8.90	11.10	26611836		white
16-/25/35 -40/45	1.7	16	15.2	0.5212	0.5090	9.24	10.76	8.97	11.03	26611018		green
	2.3	16	15.2	0.7646	0.4704	9.17	10.83	8.88	11.12	26611023		yellow
	3.6	16	15.2	1.1940	0.4792	9.19	10.81	8.90	11.10	26611036		white
20-/24/36/44	1.7	20	17.6	0.5212	0.5090	9.24	10.76	8.97	11.03	26611018		green
	2.3	20	17.6	0.7646	0.4704	9.17	10.83	8.88	11.12	26611023		yellow
	3.6	20	17.6	1.1940	0.4792	9.19	10.81	8.90	11.10	26611036		white
25-/17/34	1.7	25	22.2	0.5212	0.5090	9.24	10.76	8.97	11.03	26611018		green
	2.3	25	22.2	0.7646	0.4704	9.17	10.83	8.88	11.12	26611023		yellow
	3.6	25	22.2	1.1940	0.4792	9.19	10.81	8.90	11.10	26611036		white

HYDRO P.C. and HYDRO P.C. N.D.

EMITTER TYPE	FLOW (l/h)	DIA.	DIA.	DRIP.	DRIP.	DH=7.5%		DH=10%		WCADI	Min.	Color
		NOM mm	INT. mm	COEF	EXP.	Pmin (m)	Pmax (m)	Pmin (m)	Pmax (m)	CAT.	Press- ure (m)	
16-/35/40/45	# 1.2									26621612		
	# 1.6									26621616		
	# 2.2									26621622		
17-/35/40/45	1.6	17.8	15.3	1.6	0					26621716	7.5	violet
	2.2	17.8	15.3	2.25	0					26621722	7.5	yellow
	3.0	17.8	15.3	3.1	0					26621703	7.5	red
	3.6	17.8	15.3	3.6	0					26621736	7.5	white
20-/35/40/45	1.6	20	17.6	1.60	0.00					26622016	5	violet
	* 2.2	20	17.6	2.25	0.00					26622022	7.5	yellow
	# 3	20	17.6							26622003	7.5	red
	* 3.6	20	17.6	3.60	0.00					26622036	7.5	white

* regular and no drain

HYDROGOL.

EMITTER TYPE	FLOW (l/h)	DIA.	DIA.	DRIP.	DRIP.	DH=7.5%		DH=10%		WCADI	Min.	Color
		NOM mm	INT. Mm	COEF	EXP.	Pmin (m)	Pmax (m)	Pmin (m)	Pmax (m)	CAT.	Press- ure (m)	
12/25/1	1.0	12	10.4	0.3270	0.4733	9.17	10.83	8.88	11.12	26122501		pink
12/25/2	2.2	12	10.4	0.7426	0.4705	9.17	10.83	8.88	11.12	26122502		green
12/25/3	3.0	12	10.4	1.0593	0.4540	9.14	10.86	8.83	11.17	26122503		red
12/35/2	# 2.2									26123502		green
12/35/3	# 3.0									26123503		red
12/40/2	# 2.1									26124002		green
12/40/3	# 2.9									26124003		red
16/25/2	2.2	16	13.8	0.7616	0.4621	9.15	10.85	8.85	11.15			green
16/25/4	# 4.1											white
16/35/1.6	1.8	16	13.8	0.5770	0.4900	9.20	10.80	8.93	11.07			violet
16/35/2	2.2	16	13.8	0.6920	0.5020	9.23	10.77	8.95	11.05			green
16/35/4	4.1	16	13.8	1.2748	0.5077	9.23	10.77	8.97	11.03	26163504		white
16/35/10	10.7	16	13.8	3.3483	0.5047	9.23	10.77	8.96	11.04	26163510		blue
16/40/1.6	1.6	16	13.8	0.5318	0.4797	9.19	10.81	8.90	11.10	26164016		violet
16/40/2	2.1	16	13.8	0.6749	0.4850	9.20	10.80	8.91	11.09	26164002		green
16/40/4	3.9	16	13.8	1.3071	0.4766	9.18	10.82	8.89	11.11	26164004		white
16/40/10	10.5	16	13.8	3.2938	0.5010	9.22	10.78	8.95	11.05	26164010		blue
16/45/1.6	1.5	16	13.8	0.4889	0.4920	9.21	10.79	8.93	11.07	26164516		violet
16/45/2	2.0	16	13.8	0.7119	0.4510	9.13	10.87	8.82	11.18	26164502		green
16/45/4	3.8	16	13.8	1.3089	0.4605	9.15	10.85	8.85	11.15	26164504		white
16/45/10	9.5	16	13.8	2.9919	0.5011	9.22	10.78	8.95	11.05	26164510		blue
20/35/2	2.3	20	17.6	0.6970	0.5180	9.25	10.75	8.99	11.01	26203502		green
20/35/2.5	2.8	20	17.6	0.8430	0.5110	9.24	10.76	8.97	11.03	26203525		yellow
20/35/3	3.2	20	17.6	1.0211	0.5000	9.22	10.78	8.95	11.05	26203503		red
20/35/4	4.7	20	17.6	1.4900	0.4983	9.22	10.78	8.95	11.05	26203504		white
20/40/2	2.2	20	17.6	0.6715	0.5220	9.26	10.74	9.00	11.00	26204002		green
20/40/2.5	2.6	20	17.6	0.7790	0.5180	9.25	10.75	8.99	11.01	26204025		yellow
20/40/3	3.1	20	17.6	0.9790	0.5000	9.22	10.78	8.95	11.05	26204003		red
20/40/4	4.5	20	17.6	1.3120	0.5290	9.27	10.73	9.01	10.99	26204004		white
20/45/2	2.2	20	17.6	0.7031	0.486	9.20	10.80	8.92	11.08	26204502		green
20/45/2.5	# 2.5									26204525		yellow
20/45/3	3.0	20	17.6	0.9797	0.488	9.20	10.80	8.92	11.08	26204503		red
20/45/4	# 4.4									26204504		white

NOT YET AVAILABLE (The data is not final)

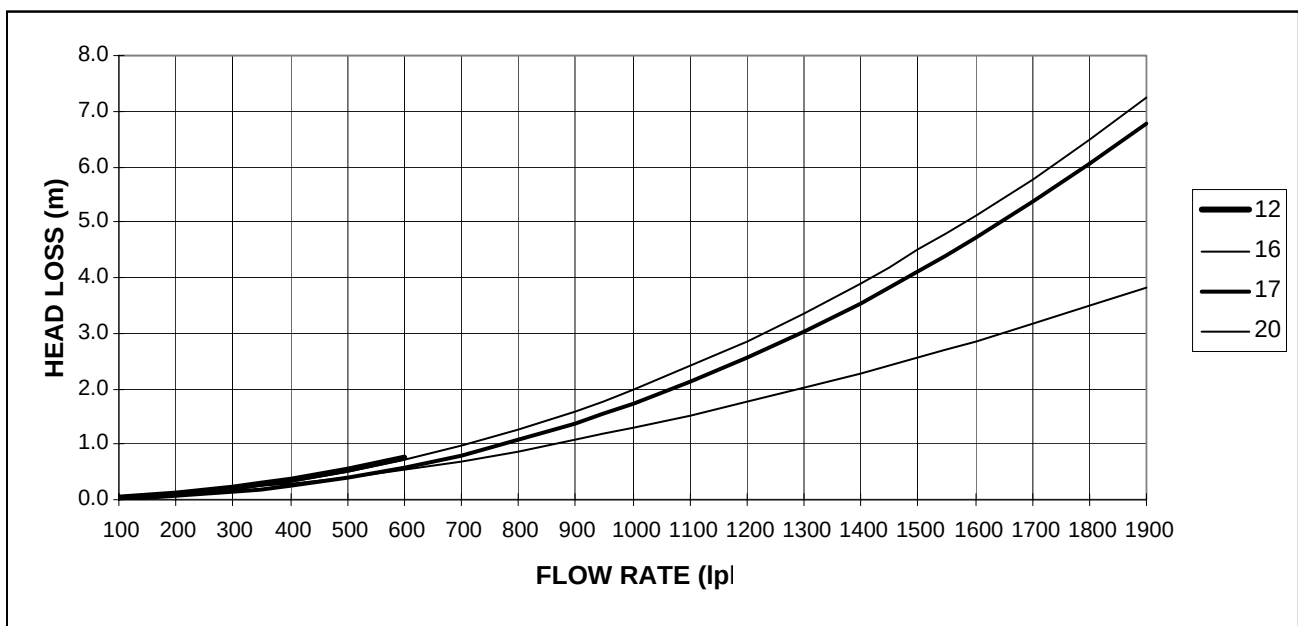
EMITTER TYPE	COLOR CODE	NOMINAL FLOW RATE * (LPH)	Q=AxH^B **		% DH ***	FLOW RATE (LPH) AT PRESSURE				
			A	B		10 m	15 m	20 m	25 m	30 m
"TORNADO" online dripper	Black	16	6.3360	0.3946	27.3	15.7	18.5	20.7	22.6	24.3
	Blue	18	7.5135	0.3770	28.7	17.9	20.9	23.2	25.3	27.1
	Green	25	10.1941	0.3821	28.3	24.6	28.7	32.0	34.9	37.4
	Red	29	12.3103	0.3738	29.1	29.1	33.9	37.7	41.0	43.9
"TUFFTIF" online dripper	Black	2	0.6150	0.5390	19.3	2.1	2.6	3.1	3.5	3.8
	Black	4	1.3643	0.4780	22.0	4.1	5.0	5.7	6.4	6.9
	Green	8	2.7257	0.4650	22.7	8.0	9.6	11.0	12.2	13.3
	Red	11	4.3329	0.4146	25.8	11.3	13.3	15.0	16.5	17.8

PLASTRO – HEADCONNECTORS

LOCAL PRESSURE HEAD LOSS

FOR COMMON LATERALS

NOMINAL SIZE (mm)	FLOW RATE (LPH)																		
	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900
12	0.0	0.1	0.2	0.4	0.5	0.8													
16	0.0	0.1	0.2	0.3	0.5	0.7	1.0	1.3	1.6	2.0	2.4	2.9	3.4	3.9	4.5	5.1	5.8	6.5	7.2
17	0.0	0.1	0.1	0.2	0.4	0.6	0.8	1.1	1.4	1.7	2.1	2.6	3.0	3.5	4.1	4.7	5.4	6.1	6.8
20	0.0	0.1	0.2	0.3	0.4	0.5	0.7	0.9	1.1	1.3	1.5	1.8	2.0	2.3	2.6	2.9	3.2	3.5	3.8

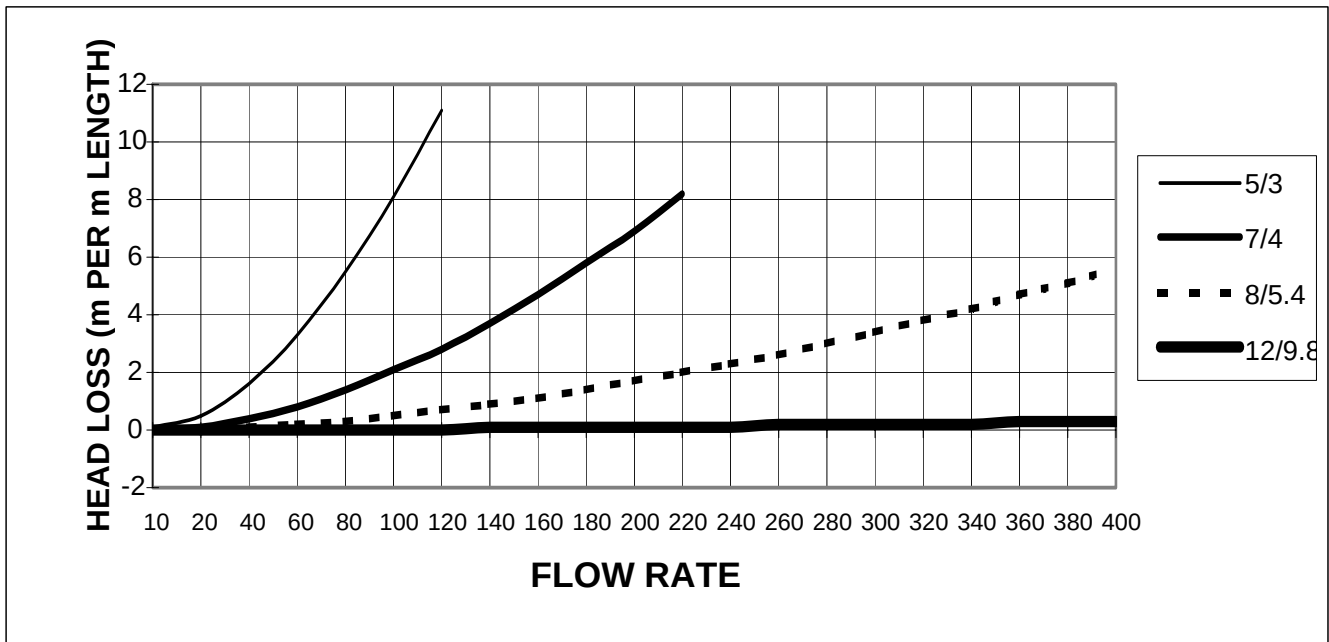


GENERAL

FRICTIONAL PRESSURE HEAD LOSS IN PLASTRO MICRO-TUBES M PER m LENGTH

MICRO TUBES DIAMETER (in mm) (OD/ID)	FLOW RATE (LPH)																				
	10	20	40	60	80	100	120	140	160	180	200	220	240	260	280	300	320	340	360	380	400
5/3	0.1	0.5	1.6	3.3	5.5	8.1	11.1	*	*	*	*	*	*	*	*	*	*	*	*	*	*
7/4	0.0	0.1	0.4	0.8	1.4	2.1	2.8	3.7	4.7	5.8	6.9	8.2	*	*	*	*	*	*	*	*	*
8/5.4	0.0	0.0	0.1	0.2	0.3	0.5	0.7	0.9	1.1	1.4	1.7	2.0	2.3	2.6	3.0	3.4	3.8	4.2	4.7	5.1	5.6
12/9.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3

* VELOCITY OVER 5 M/SEC



GENERAL

HYDRO P.C.& N.D.■ (No Drain) DRIPLINES

**A new integral dripline with
Incorporated flow-regulated cylindrical
Drippers (with a built-in no-drain
device). ■**

Main features:

- * The unique configuration of the primary labyrinth provides a dual pressure – compensating mechanism, both in the labyrinth itself, as well as by means of a diaphragm. This ensures especially high resistance to emitter clogging.
- * Built-in No-Drain device prevents ■ water draining from dripline when water has been shut off.
- * The water intake filter is flushed continuously by the water flow through the dripline

MATERIALS:

- * Tubing: Linear LDPE.
 - * Dropper: PE
 - * Diaphragm: Silicon
- All materials are resistant to chemicals and fertilizers commonly used in agriculture, U.V. radiation and mechanical stress.



SPECIFICATIONS: HYDRO P.C.

- * Dripline diameter:
I.D.: 13.8, 15.3, 17.6 mm
 - * Available in wall thickness of:
0.9, 1.0, 1.1, 1.15 mm
 - * Colour coded Drippers:
1.2 lph
1.6 lph
2.2 lph
3.0 lph
3.6 lph
- Working Pressure – 0.8-3.5 bar
for 20 mm - 1.6 lph – 0.5-3.5 bar.

SPECIFICATIONS: HYDRO P.C.N.D. ■

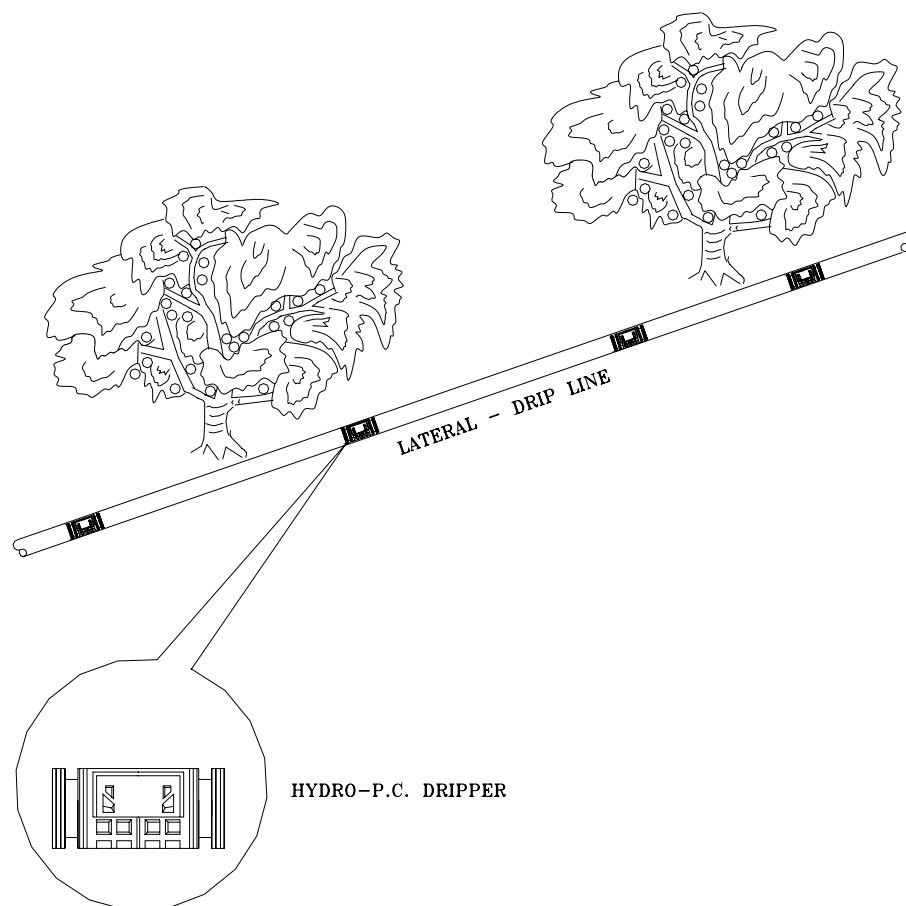
- * I.D.: 13.8♣, 15.3, 17.6 mm
- * Available in wall thickness of:
0.9, 1.0, 1.1, 1.15 mm
- * Colour coded emission rates:
1.2 lph
1.6 lph
2.2 lph
3.0 lph
3.6 lph
- * Working Pressure – 0.8-3.5 bar
♣ Soon available.

ORCHARDS & PLANTATION

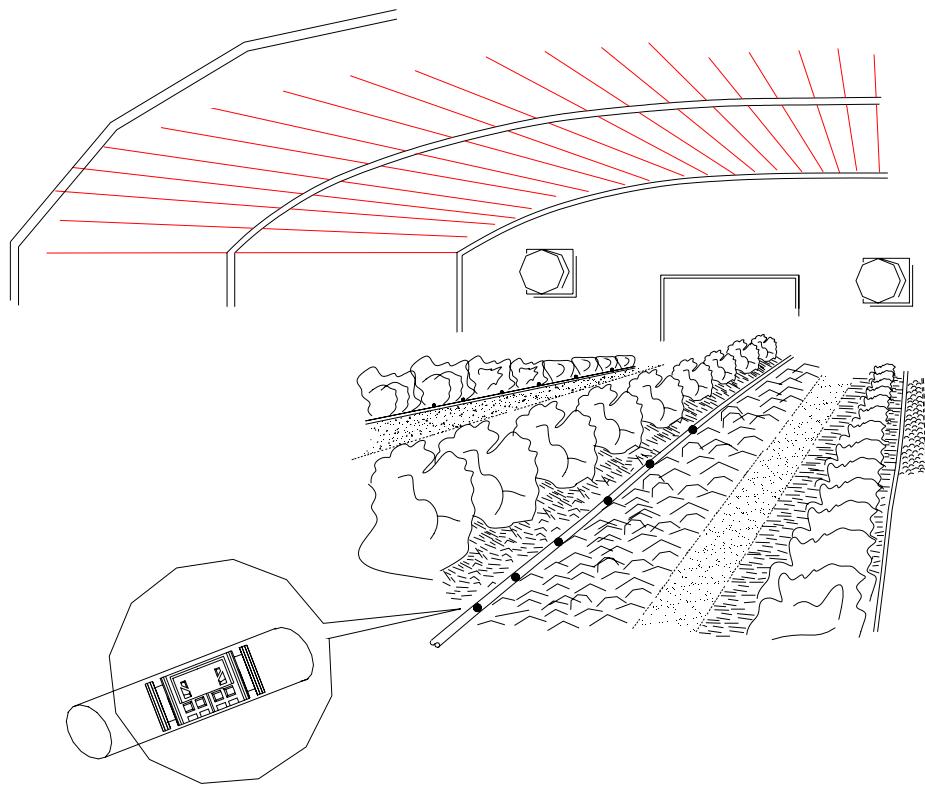
DRIP IRRIGATION

HYDRO P.C.

INTEGRAL DRIPLINE



GREENHOUSE
DRIP IRRIGATION
HYDRO P.C.
INTEGRAL DRIPLINE

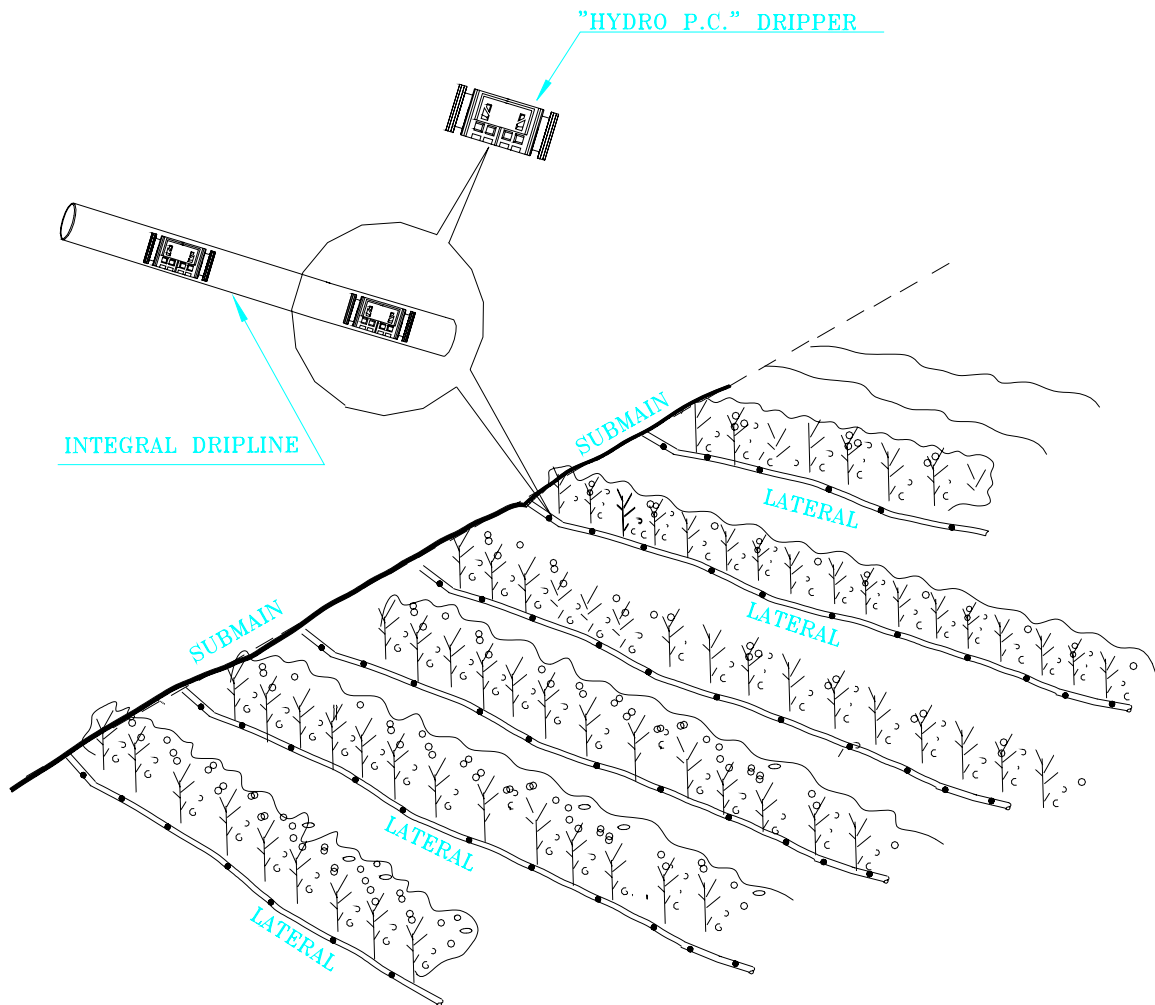


FIELD/ROW CROPS

DRIP IRRIGATION

HYDRO P.C.

INTEGRAL DRIPLINE



**HYDRO P.C. &
HYDRO P.C.N.D.* (No Drain)
DRIPLINE
FLOW RATE DATA**

Dripline Type	Flow Rate l/h	Working Pressure (m)
16	1.2	6-35
	1.6	8-35
	2.2	8-35
17	1.2	6-35
	1.6	8-35
	2.2	8-35
	3.0	8-35
	3.6	8-35
20	1.2	6-35
	1.6	5-35
	2.2	8-35
	3.0	8-35
	3.6	8-35

***Hydro P.C. & Hydro P.C.N.D - 1.2* L/H**
MAXIMUM RECOMMENDED DRIPLINE LENGTH (m)
PIPE DIAMETER -16/13.8 (OD/ID)

Pressure (m)	Slope %	Emitter Spacing (m)									
		0.2	0.3	0.4	0.5	0.6	0.7	0.8	1.00	1.25	1.50
10	0	65	92	117	140	161	181	201	236	278	315
	2	71	104	135	166	195	223	251	305	371	434
	4	76	113	150	186	221	256	290	357	439	519
12	0	75	107	135	162	186	209	231	273	321	365
	2	81	117	152	185	217	248	278	337	408	476
	4	85	126	165	204	241	279	314	386	473	558
14	0	83	118	149	179	206	232	256	302	355	405
	2	88	128	165	201	235	268	301	363	438	510
	4	92	136	178	219	258	298	335	410	501	590
16	0	90	127	161	193	223	251	278	327	385	438
	2	94	137	176	214	250	286	319	385	464	539
	4	98	144	188	232	273	314	354	431	525	617
18	0	95	135	172	206	238	267	296	349	411	468
	2	100	144	186	226	264	301	337	405	486	566
	4	104	152	198	243	286	328	370	450	546	641
20	0	101	143	181	217	251	282	312	369	434	494
	2	105	151	195	237	276	314	352	423	508	588
	4	109	159	207	253	298	341	384	467	566	663
22	0	105	149	190	228	263	296	327	387	455	519
	2	109	158	203	246	287	327	366	439	526	611
	4	113	165	214	262	308	354	397	482	585	684
24	0	110	156	198	237	274	309	342	403	475	540
	2	114	164	211	256	298	339	378	455	545	630
	4	117	171	222	271	319	365	410	497	601	702
26	0	114	161	205	246	284	320	354	419	493	561
	2	118	169	218	264	308	350	390	469	561	650
	4	121	176	229	279	328	375	421	510	618	720
28	0	117	167	212	254	294	331	366	433	510	581
	2	121	175	224	272	317	361	402	482	578	668
	4	125	181	235	287	337	385	432	523	631	737
30	0	121	172	219	262	303	342	378	447	526	600
	2	125	179	231	279	325	370	413	495	591	684
	4	128	186	241	294	345	394	442	535	646	752

SLOPE – FLAT & DOWNHILL.

Constant I.D – 15.3 mm

* **Soon** Available in wall thickness of: 0.9, 1.0, 1.1, 1.15 mm – (35, 40, 45, ~46 mil).

Hydro P.C. & Hydro P.C.N.D - 1.2 L/H
MAXIMUM RECOMMENDED DRIPLINE LENGTH (m)
PIPE DIAMETER - 17/15.3 (OD/ID)

Pressure (m)	Slope %	Emitter Spacing (m)									
		0.2	0.3	0.4	0.5	0.6	0.7	0.8	1.00	1.25	1.50
10	0	81	114	144	171	197	221	243	286	335	380
	2	90	131	170	208	244	280	314	383	464	545
	4	98	145	191	237	281	325	369	454	559	663
12	0	94	132	166	198	227	255	281	330	388	440
	2	102	147	190	232	271	310	347	421	509	594
	4	109	160	210	259	306	353	399	489	599	708
14	0	103	146	184	219	251	282	311	366	429	488
	2	111	160	206	251	293	335	374	452	544	635
	4	117	172	225	277	327	376	424	518	633	746
16	0	112	157	198	237	272	305	337	396	465	528
	2	119	171	220	267	311	356	398	479	575	669
	4	125	183	238	292	344	396	446	543	661	777
18	0	119	167	212	252	290	326	360	423	496	564
	2	126	181	232	282	328	374	418	503	604	701
	4	132	192	250	306	360	413	465	566	688	807
20	0	126	177	223	266	306	344	380	447	524	596
	2	132	189	243	295	343	391	436	524	629	729
	4	138	201	260	318	374	429	482	586	711	833
22	0	131	185	234	279	321	361	398	469	550	626
	2	138	197	253	307	357	406	453	544	651	755
	4	143	208	270	330	388	443	498	604	733	857
24	0	137	193	244	291	335	376	415	489	574	651
	2	143	205	263	318	370	420	469	562	673	779
	4	148	215	279	341	400	457	513	622	753	879
26	0	142	200	253	302	347	391	431	508	595	677
	2	148	212	272	328	382	433	483	579	693	801
	4	153	222	288	350	411	470	527	638	771	900
28	0	147	207	262	312	359	404	446	525	616	701
	2	152	218	280	338	393	446	498	595	711	822
	4	158	228	295	360	422	482	540	653	789	921
30	0	151	213	270	322	370	417	460	542	635	723
	2	157	224	287	347	403	458	510	611	729	843
	4	162	234	303	369	431	493	553	668	806	939

SLOPE – FLAT & DOWNHILL.

Constant I.D – 15.3 mm

Available in wall thickness of: 0.9, 1.0, 1.1, 1.15 mm – (35, 40, 45, ~46 mil).

***Hydro P.C. & Hydro P.C.N.D - 1.2* L/H**
MAXIMUM RECOMMENDED DRIPLINE LENGTH (m)
PIPE DIAMETER -20/17.6 (OD/ID)

Pressure (m)	Slope %	Emitter Spacing (m)									
		0.2	0.3	0.4	0.5	0.6	0.7	0.8	1.00	1.25	1.50
10	0	107	149	187	223	255	286	314	369	431	489
	2	122	178	232	284	334	383	431	525	640	752
	4	134	200	265	329	392	454	515	637	786	933
12	0	123	172	216	257	295	330	364	427	499	566
	2	137	198	257	313	368	421	472	573	695	813
	4	148	219	288	357	423	489	553	680	836	989
14	0	136	190	239	284	326	365	403	473	554	627
	2	149	215	277	338	395	452	506	612	740	864
	4	159	235	308	379	449	517	584	716	878	1035
16	0	147	206	258	308	353	396	436	512	599	680
	2	159	229	295	358	419	478	535	646	779	908
	4	169	248	324	399	471	542	611	747	913	1076
18	0	156	219	276	328	376	422	466	547	640	726
	2	168	242	311	377	440	501	561	676	814	947
	4	178	260	339	416	491	564	635	775	945	1112
20	0	165	231	291	346	397	446	492	578	676	768
	2	176	253	325	394	459	523	585	703	845	983
	4	186	271	353	432	509	584	658	801	975	1143
22	0	173	242	305	363	416	468	516	606	709	806
	2	183	263	338	409	477	543	606	728	874	1014
	4	193	281	365	447	525	602	678	824	1001	1175
24	0	180	252	318	378	434	487	538	632	740	840
	2	190	273	350	423	493	561	626	751	901	1046
	4	199	290	376	460	541	620	696	846	1026	1202
26	0	186	262	330	393	451	506	558	656	769	873
	2	197	282	361	436	508	578	645	773	926	1073
	4	206	299	387	473	555	636	714	866	1050	1229
28	0	193	271	341	406	466	524	578	679	795	903
	2	203	290	372	449	523	594	662	794	950	1100
	4	211	307	397	485	569	650	730	885	1073	1254
30	0	199	279	352	419	481	540	596	700	820	932
	2	208	298	382	461	536	608	678	813	973	1125
	4	217	314	407	496	581	665	746	904	1094	1275

SLOPE – FLAT & DOWNHILL.

Constant I.D – 17.6 mm

* **Soon** Available in wall thickness of: 0.9, 1.0, 1.1, 1.15 mm – (35, 40, 45, ~46 mil).

Hydro P.C. & *Hydro P.C.N.D* – 1.6 L/H
MAXIMUM RECOMMENDED DRIPLINE LENGTH (m)
PIPE DIAMETER 16/13.8 (OD/ID)

Pressure (m)	Slope %	Emitter Spacing (m)									
		0.2	0.3	0.4	0.5	0.6	0.7	0.8	1.00	1.25	1.50
10	0	46	65	82	99	113	127	141	166	195	222
	2	50	74	96	117	139	159	179	218	265	311
	4	54	81	107	133	158	183	208	257	318	377
12	0	56	80	101	121	139	157	174	205	240	273
	2	60	87	113	138	162	185	208	251	304	356
	4	64	94	123	152	180	208	235	288	354	417
14	0	64	91	115	138	159	179	198	233	274	312
	2	67	98	126	153	179	205	230	277	334	389
	4	71	104	136	167	197	227	255	312	381	449
16	0	70	100	126	151	175	197	218	257	301	344
	2	73	106	137	166	194	221	248	298	359	416
	4	76	112	146	179	211	242	273	332	404	474
18	0	75	107	136	163	188	211	234	277	325	371
	2	79	113	146	177	207	235	263	316	380	441
	4	81	119	154	189	223	256	287	349	424	497
20	0	80	114	144	173	200	225	250	294	346	395
	2	83	120	154	187	218	248	277	333	399	462
	4	86	125	162	199	233	267	301	365	443	516
22	0	84	120	152	183	211	237	262	310	365	416
	2	87	125	161	196	228	259	290	347	416	482
	4	90	131	170	207	243	278	312	379	459	536
24	0	88	125	159	191	220	249	275	325	383	435
	2	91	131	168	204	237	270	301	361	433	500
	4	93	136	176	215	252	288	323	392	474	552
26	0	92	130	166	199	229	258	286	338	399	455
	2	94	136	174	211	246	279	312	374	446	516
	4	97	140	182	222	260	298	334	404	488	569
28	0	95	135	172	206	238	268	297	351	413	471
	2	98	140	180	218	254	288	322	385	461	533
	4	100	145	188	229	268	306	343	415	500	582
30	0	98	139	177	213	245	277	306	363	428	488
	2	101	145	186	225	262	297	331	396	474	546
	4	103	149	193	235	275	314	352	425	513	597

SLOPE – FLAT & DOWNHILL.

Constant I.D – 13.8 mm

Available in wall thickness of: 0.9, 1.0, 1.1, 1.15 mm – (35, 40, 45, ~46 mil).

* SOON AVAILABLE

17/02/00

Hydro P.C. & Hydro P.C.N.D – 1.6 L/H
MAXIMUM RECOMMENDED DRIPLINE LENGTH (m)
PIPE DIAMETER 17/15.3 (OD/ID)

Pressure (m)	Slope %	Emitter Spacing (m)									
		0.2	0.3	0.4	0.5	0.6	0.7	0.8	1.00	1.25	1.50
10	0	58	81	102	121	139	156	172	202	236	269
	2	65	95	123	151	177	203	229	279	339	398
	4	71	105	139	173	206	239	270	334	411	489
12	0	71	99	125	149	171	192	212	249	291	332
	2	77	111	144	175	205	235	263	318	385	450
	4	82	121	159	196	232	267	302	371	454	536
14	0	80	113	142	170	195	219	242	284	333	378
	2	86	124	160	194	227	258	290	349	420	489
	4	91	133	174	214	252	290	326	399	486	572
16	0	88	124	156	187	214	241	266	313	366	417
	2	93	134	173	209	244	278	311	374	450	522
	4	98	143	186	228	268	308	346	422	514	603
18	0	95	133	168	201	231	260	286	337	395	449
	2	100	143	184	223	260	295	330	396	475	551
	4	104	152	197	241	283	324	365	443	538	629
20	0	101	142	179	214	245	276	305	359	420	479
	2	105	151	194	235	273	310	346	416	498	576
	4	110	159	206	252	296	339	380	461	559	653
22	0	106	149	188	225	259	291	322	378	444	504
	2	110	158	203	245	286	324	362	433	519	600
	4	115	166	215	262	308	351	394	478	579	675
24	0	111	156	197	236	271	305	336	396	465	528
	2	115	165	211	255	296	337	375	450	538	621
	4	119	173	223	272	319	364	408	493	596	695
26	0	115	162	205	245	282	317	350	412	484	551
	2	119	171	219	264	307	349	389	465	555	641
	4	123	178	230	281	328	375	420	508	613	714
28	0	119	168	213	254	292	329	363	428	503	572
	2	123	176	226	273	317	360	401	479	571	660
	4	127	184	238	289	338	386	432	521	629	732
30	0	123	174	220	263	302	340	375	442	519	590
	2	127	182	233	281	326	370	412	492	588	678
	4	131	189	244	297	347	396	442	534	644	749

SLOPE – FLAT & DOWNHILL.

Constant I.D – 15.3 mm

Available in wall thickness of: 0.9, 1.0, 1.1, 1.15 mm – (35, 40, 45, ~46 mil).

Hydro P.C. & Hydro P.C.N.D – 1.6 L/H
MAXIMUM RECOMMENDED DRIPLINE LENGTH (m)
PIPE DIAMETER 20/17.6 (OD/ID)

Pressure (m)	Slope %	Emitter Spacing (m)									
		0.2	0.3	0.4	0.5	0.6	0.7	0.8	1.00	1.25	1.50
10	0	96	134	168	200	229	257	283	332	389	441
	2	106	153	198	241	283	323	363	440	533	623
	4	114	169	222	274	324	374	423	520	638	753
12	0	107	150	189	225	258	290	319	375	439	498
	2	117	168	217	264	308	352	394	476	575	671
	4	125	183	239	295	348	400	452	553	676	797
14	0	117	164	207	246	282	316	349	410	480	545
	2	126	181	233	283	330	376	421	507	610	710
	4	133	195	254	312	368	423	477	582	709	833
16	0	126	176	222	264	303	340	375	440	515	585
	2	134	192	247	299	349	397	444	534	641	744
	4	141	206	268	328	386	442	498	607	738	866
18	0	133	187	235	280	322	361	398	467	548	621
	2	141	202	260	314	366	416	465	558	669	776
	4	148	215	280	342	401	460	518	629	764	894
20	0	140	196	247	295	338	379	418	492	576	654
	2	148	211	271	327	381	433	483	580	695	806
	4	154	224	290	355	416	477	535	650	788	921
22	0	146	205	258	308	353	397	438	514	603	684
	2	153	220	281	340	395	449	501	600	719	831
	4	160	232	300	366	430	491	552	669	810	947
24	0	152	213	269	320	368	413	455	535	628	713
	2	159	227	291	351	409	463	517	619	740	857
	4	165	239	310	377	442	505	567	687	830	969
26	0	157	221	278	332	381	428	472	555	650	738
	2	164	234	300	362	421	477	532	637	761	879
	4	170	246	318	388	454	519	582	703	850	992
28	0	162	228	287	342	394	442	487	573	671	762
	2	169	241	308	372	433	491	546	654	780	902
	4	175	253	327	397	465	531	595	719	868	1013
30	0	167	235	296	353	405	455	502	590	691	786
	2	174	248	316	382	443	503	560	670	799	923
	4	180	259	334	407	476	543	608	734	885	1032

SLOPE – FLAT & DOWNHILL.

Constant I.D – 17.6 mm

Available in wall thickness of: 0.9, 1.0, 1.1, 1.15 mm – (35, 40, 45, ~46 mil).

Hydro P.C. & *Hydro P.C.N.D* - 2.2 L/H
MAXIMUM RECOMMENDED DRIPLINE LENGTH (m)
PIPE DIAMETER - 16/13.8 (OD/ID)

Pressure (m)	Slope %	Emitter Spacing (m)									
		0.2	0.3	0.4	0.5	0.6	0.7	0.8	1.00	1.25	1.50
10	0	37	53	67	80	92	104	114	135	159	182
	2	40	59	76	93	109	125	141	170	208	243
	4	43	64	84	104	123	142	162	198	244	288
12	0	46	65	82	99	113	127	142	167	196	224
	2	48	70	90	110	128	146	165	198	240	279
	4	51	74	97	120	142	162	184	224	274	323
14	0	52	74	94	112	129	146	161	190	224	255
	2	54	78	101	123	143	163	182	220	264	308
	4	56	83	107	132	155	178	201	244	298	348
16	0	57	81	103	123	142	160	177	209	246	281
	2	59	85	110	133	155	176	198	237	285	330
	4	61	89	116	142	167	191	214	261	316	369
18	0	61	87	110	133	153	172	190	225	265	302
	2	63	91	117	142	166	188	210	252	303	350
	4	65	95	123	150	176	202	227	275	333	389
20	0	65	92	117	141	163	183	203	240	283	321
	2	67	96	124	150	175	198	222	266	318	368
	4	69	100	130	158	185	212	238	288	348	405
22	0	68	97	124	148	171	193	214	253	298	339
	2	70	101	130	157	183	208	232	278	333	384
	4	72	104	135	165	193	221	248	299	361	420
24	0	71	102	129	155	179	202	224	265	311	356
	2	73	105	135	164	191	216	242	289	345	399
	4	75	109	141	171	200	229	257	310	374	435
26	0	74	106	134	162	187	210	233	275	325	371
	2	76	109	140	170	197	224	250	299	358	413
	4	78	113	146	177	208	237	266	320	385	449
28	0	77	110	140	168	193	218	242	286	336	384
	2	79	113	145	176	204	232	258	309	369	425
	4	80	116	150	183	214	244	273	329	396	461
30	0	79	113	144	173	200	225	250	295	348	396
	2	81	116	150	181	211	239	266	318	379	438
	4	83	120	154	188	220	251	281	338	406	471

SLOPE – FLAT & DOWNHILL.

Constant I.D – 13.8 mm

Available in wall thickness of: 0.9, 1.0, 1.1, 1.15 mm – (35, 40, 45, ~46 mil).

- SOON AVAILABLE

17/02/00

Hydro P.C. & *Hydro P.C.N.D* - 2.2 L/H
MAXIMUM RECOMMENDED DRIPLINE LENGTH (m)
PIPE DIAMETER - 17/15.3 (OD/ID)

Pressure (m)	Slope %	Emitter Spacing (m)									
		0.2	0.3	0.4	0.5	0.6	0.7	0.8	1.00	1.25	1.50
10	0	43	61	76	91	104	118	130	152	178	203
	2	48	70	91	111	131	150	169	205	249	293
	4	52	77	102	127	151	175	198	245	303	359
12	0	55	77	98	116	134	150	166	195	228	260
	2	59	85	110	134	157	179	201	242	293	341
	4	63	92	120	149	175	202	228	279	341	402
14	0	63	89	112	134	154	173	191	225	264	384
	2	67	96	124	150	176	200	223	269	324	507
	4	70	103	134	164	193	222	250	304	370	599
16	0	70	98	124	149	171	192	212	249	293	332
	2	73	105	135	164	191	217	242	291	349	404
	4	77	111	144	177	208	238	267	325	394	461
18	0	76	107	134	161	185	208	230	270	316	360
	2	79	113	145	175	204	232	258	310	371	429
	4	82	119	154	188	220	252	282	343	415	485
20	0	80	113	144	171	197	221	245	288	338	384
	2	84	120	153	185	215	244	273	326	390	452
	4	86	125	162	197	231	264	296	358	433	506
22	0	85	120	151	181	208	234	258	304	358	407
	2	88	126	161	194	226	256	286	341	408	471
	4	91	131	169	206	241	275	308	373	450	524
24	0	89	125	159	190	218	245	271	319	375	426
	2	92	131	168	203	235	267	298	355	424	489
	4	94	136	176	214	250	286	319	386	465	540
26	0	93	131	165	198	227	256	282	333	390	444
	2	95	136	174	210	244	277	308	368	439	506
	4	98	141	182	221	259	295	330	398	479	557
28	0	96	136	172	205	236	265	293	345	405	461
	2	99	141	180	217	252	286	318	380	453	522
	4	101	146	188	228	266	304	340	409	493	572
30	0	99	140	177	212	244	274	303	357	420	477
	2	102	145	186	224	260	295	328	391	466	537
	4	104	150	194	235	274	312	349	420	505	585

SLOPE – FLAT & DOWNHILL.

Constant I.D – 15.3 mm

Available in wall thickness of: 0.9, 1.0, 1.1, 1.15 mm – (35, 40, 45, ~46 mil).

* SOON AVAILABLE

17/02/00

Hydro P.C. & Hydro P.C.N.D 2.2 L/H
MAXIMUM RECOMMENDED DRIPLINE LENGTH (m)
PIPE DIAMETER - 20/17.6 (OD/ID)

Pressure (m)	Slope %	Emitter Spacing (m)									
		0.2	0.3	0.4	0.5	0.6	0.7	0.8	1.00	1.25	1.50
10	0	57	79	99	118	135	151	166	195	229	260
	2	65	95	124	152	179	205	231	282	344	405
	4	72	107	142	177	211	244	278	344	425	504
12	0	72	101	127	151	173	194	214	250	293	333
	2	79	115	148	180	211	242	271	328	396	464
	4	85	126	165	204	241	278	314	385	473	558
14	0	83	116	146	174	199	223	246	290	339	384
	2	89	129	166	201	235	268	300	362	435	507
	4	95	139	182	223	263	302	341	416	509	599
16	0	91	128	162	192	221	248	273	321	376	426
	2	98	140	180	218	254	289	323	389	468	543
	4	103	150	195	239	281	323	363	442	538	632
18	0	99	139	175	208	239	268	296	348	408	462
	2	105	150	192	233	271	308	344	413	495	575
	4	110	159	207	253	297	340	382	464	564	660
20	0	105	148	186	222	255	286	315	371	435	494
	2	111	158	203	245	286	324	362	434	520	602
	4	116	168	217	265	311	356	399	484	586	686
22	0	111	156	197	234	269	302	334	392	459	522
	2	116	166	213	257	299	339	378	453	541	627
	4	121	175	226	276	323	370	414	502	608	708
24	0	116	164	206	246	282	316	350	411	481	548
	2	121	173	222	268	311	353	393	470	561	650
	4	126	182	235	286	335	382	429	518	626	731
26	0	121	170	215	256	294	330	365	429	503	570
	2	126	180	230	277	322	365	407	487	581	671
	4	130	188	243	296	346	395	442	534	644	750
28	0	126	177	223	266	305	343	378	445	521	593
	2	130	186	238	287	332	377	420	502	599	690
	4	135	194	250	304	356	406	454	548	660	770
30	0	130	182	230	275	316	355	391	460	540	614
	2	134	192	245	295	343	388	432	516	615	710
	4	139	200	257	313	365	417	466	562	676	786

SLOPE – FLAT & DOWNHILL.

Constant I.D – 17.6 mm

Available in wall thickness of: 0.9, 1.0, 1.1, 1.15 mm – (35, 40, 45, ~46 mil).

17/02/00

Hydro P.C. & Hydro P.C.N.D – 3.0 L/H *
MAXIMUM RECOMMENDED DRIPLINE LENGTH (m)
PIPE DIAMETER 16/13.8 (OD/ID)

Pressure (m)	Slope %	Emitter Spacing (m)									
		0.2	0.3	0.4	0.5	0.6	0.7	0.8	1.00	1.25	1.50
10	0	30	42	54	64	74	83	92	108	128	146
	2	32	46	59	73	85	97	109	132	159	186
	4	33	49	65	80	94	109	123	151	185	218
12	0	37	52	66	79	91	102	114	134	158	179
	2	39	55	71	86	101	115	129	155	186	216
	4	40	58	76	93	109	125	142	172	209	246
14	0	41	59	75	90	103	116	129	152	179	204
	2	43	62	80	97	112	128	143	172	206	239
	4	44	65	84	103	121	138	155	188	229	267
16	0	45	65	82	99	113	128	142	168	198	225
	2	47	68	86	105	122	139	155	186	223	258
	4	48	70	91	111	130	148	166	202	244	285
18	0	49	70	88	106	122	138	153	181	213	243
	2	50	72	93	112	131	148	166	198	238	273
	4	51	75	96	118	138	158	177	213	258	300
20	0	52	74	94	113	130	147	162	192	226	258
	2	53	76	98	119	138	157	174	209	250	288
	4	54	79	102	124	145	165	186	224	270	314
22	0	55	78	99	119	137	155	171	203	239	272
	2	56	80	103	125	145	165	183	219	261	302
	4	57	83	106	130	152	173	194	233	281	326
24	0	57	81	103	124	143	162	179	212	250	285
	2	58	84	107	130	151	172	190	228	271	314
	4	59	86	111	135	157	179	201	242	291	338
26	0	59	85	108	129	149	169	186	221	260	297
	2	61	87	111	135	157	178	198	236	281	324
	4	62	89	115	140	163	186	208	250	300	348
28	0	61	88	112	134	155	174	194	229	270	308
	2	63	90	115	139	162	183	205	244	291	335
	4	64	92	118	144	168	192	214	258	309	359
30	0	63	90	115	138	160	181	200	237	279	318
	2	65	93	119	144	167	189	210	252	300	345
	4	66	95	122	148	173	197	220	265	318	368

SLOPE – FLAT & DOWNHILL.

Constant I.D – 15.3 mm

Available in wall thickness of: 0.9, 1.0, 1.1, 1.15 mm – (35, 40, 45, ~46 mil).

* SOON AVAILABLE

12/12/00

Hydro P.C. & Hydro P.C.N.D – 3.0 L/H
MAXIMUM RECOMMENDED DRIPLINE LENGTH (m)
PIPE DIAMETER 17/15.3 (OD/ID)

Pressure (m)	Slope %	Emitter Spacing (m)									
		0.2	0.3	0.4	0.5	0.6	0.7	0.8	1.00	1.25	1.50
10	0	35	49	61	73	84	94	104	122	143	162
	2	38	54	70	86	101	116	130	157	190	222
	4	40	60	78	97	115	133	150	185	226	267
12	0	44	62	78	93	107	120	133	156	183	209
	2	47	67	86	105	122	139	156	187	225	261
	4	49	72	93	115	135	155	174	213	259	305
14	0	51	71	90	108	124	139	154	180	211	240
	2	53	76	98	118	137	156	174	209	251	291
	4	55	80	104	127	149	171	192	233	283	332
16	0	56	79	100	119	137	154	170	200	235	267
	2	58	83	106	129	150	170	190	227	271	314
	4	60	87	113	138	161	184	206	250	303	353
18	0	60	85	108	129	148	167	184	216	254	288
	2	62	89	114	138	160	182	203	243	290	335
	4	64	93	120	146	172	195	219	265	319	372
20	0	64	91	115	137	158	177	196	231	271	308
	2	66	95	121	146	170	193	214	256	305	353
	4	68	98	127	154	181	206	230	278	334	389
22	0	68	96	121	145	167	188	207	244	286	326
	2	70	100	127	154	178	202	225	268	320	369
	4	71	103	133	161	188	215	240	289	348	404
24	0	71	100	127	152	175	197	217	256	300	342
	2	73	104	133	160	186	211	234	279	333	383
	4	75	107	138	168	196	223	250	300	360	419
26	0	74	104	132	158	182	205	226	267	314	357
	2	76	108	138	166	193	218	243	290	345	398
	4	77	111	143	174	203	230	258	310	373	431
28	0	77	108	137	164	189	213	235	277	325	371
	2	78	112	143	172	200	226	251	299	356	410
	4	80	115	148	179	209	238	266	319	383	444
30	0	79	112	142	170	196	220	243	287	336	383
	2	81	115	147	178	206	233	259	309	366	422
	4	82	119	152	185	215	244	273	328	393	455

SLOPE – FLAT & DOWNHILL.

Constant I.D – 15.3 mm

Available in wall thickness of: 0.9, 1.0, 1.1, 1.15 mm – (35, 40, 45, ~46 mil).

***Hydro P.C. & Hydro P.C.N.D – 3.0* L/H**
MAXIMUM RECOMMENDED DRIPLINE LENGTH (m)
PIPE DIAMETER -20/17.6 (OD/ID)

Pressure (m)	Slope %	Emitter Spacing (m)									
		0.2	0.3	0.4	0.5	0.6	0.7	0.8	1.00	1.25	1.50
10	0	50	70	88	104	119	134	147	173	203	230
	2	55	80	103	125	147	168	190	229	279	326
	4	59	88	116	143	170	195	222	272	335	396
12	0	61	86	108	128	147	165	182	214	250	284
	2	66	94	122	147	172	196	220	265	319	372
	4	69	102	133	163	193	221	250	305	373	438
14	0	69	98	123	146	167	188	207	244	285	324
	2	73	105	135	164	191	217	242	291	350	407
	4	77	113	146	179	211	241	271	330	401	470
16	0	76	107	135	161	184	207	228	268	314	357
	2	80	114	147	177	206	235	262	313	375	435
	4	83	121	157	192	225	258	289	351	425	497
18	0	82	115	145	173	199	223	246	289	339	384
	2	86	122	156	189	220	249	278	333	398	461
	4	89	129	166	203	238	272	304	369	446	521
20	0	87	122	154	184	211	237	262	308	360	410
	2	90	129	165	199	232	263	293	350	418	483
	4	94	135	175	213	249	284	318	385	465	542
22	0	92	129	162	194	223	250	276	324	380	432
	2	95	135	173	209	242	274	306	365	436	503
	4	98	141	182	222	259	295	331	399	481	560
24	0	96	135	170	203	233	262	289	340	399	453
	2	99	141	180	217	252	286	318	379	453	522
	4	102	147	189	230	269	306	342	413	498	578
26	0	100	140	177	211	242	272	301	354	415	471
	2	103	146	187	225	261	295	329	393	468	539
	4	106	152	196	238	277	316	354	425	511	594
28	0	103	145	184	219	251	283	312	367	430	489
	2	106	151	193	233	269	305	340	405	483	555
	4	109	157	202	245	286	325	363	437	525	611
30	0	107	150	190	226	260	292	322	379	445	506
	2	110	156	199	240	278	314	350	417	496	570
	4	112	161	208	252	293	334	373	448	539	624

SLOPE – FLAT & DOWNHILL.

Constant I.D – 17.6 mm

* **Soon** Available in wall thickness of: 0.9, 1.0, 1.1, 1.15 mm – (35, 40, 45, ~46 mil).

Hydro P.C. & Hydro P.C.N.D – 3.6 L/H
MAXIMUM RECOMMENDED DRIPLINE LENGTH (m)
PIPE DIAMETER 16/13.8 (OD/ID)

Pressure (m)	Slope %	Emitter Spacing (m)									
		0.2	0.3	0.4	0.5	0.6	0.7	0.8	1.00	1.25	1.50
10	0	27	38	49	58	67	76	83	98	116	132
	2	29	41	54	65	76	87	98	118	143	165
	4	30	44	58	71	84	97	110	134	164	192
12	0	33	47	60	72	82	93	103	121	143	162
	2	35	50	64	78	91	103	115	139	166	194
	4	36	52	68	83	98	112	126	154	186	219
14	0	38	53	68	81	94	106	117	138	163	186
	2	39	56	72	87	101	116	129	154	185	215
	4	40	58	75	92	108	124	139	168	204	239
16	0	41	59	74	89	103	116	129	152	179	204
	2	43	61	78	95	110	125	140	167	200	231
	4	43	63	82	100	116	133	150	181	219	254
18	0	44	63	80	96	111	125	138	164	194	221
	2	46	65	84	101	118	134	150	179	214	246
	4	46	67	87	106	124	141	158	191	231	269
20	0	47	67	85	102	118	133	147	174	205	234
	2	48	69	88	107	125	141	158	189	225	260
	4	49	71	92	112	130	149	166	201	241	281
22	0	49	71	90	108	124	140	155	184	216	248
	2	51	73	93	112	131	148	166	198	235	272
	4	51	74	96	117	136	155	174	210	253	293
24	0	52	74	94	113	130	147	162	193	226	258
	2	53	76	97	117	136	155	172	206	245	282
	4	54	77	100	122	142	162	181	218	261	303
26	0	54	77	98	117	136	153	170	200	236	270
	2	55	79	101	122	142	160	178	213	254	293
	4	56	80	104	126	147	167	187	225	270	312
28	0	56	80	101	122	140	158	176	208	245	279
	2	57	81	104	126	146	166	185	220	263	302
	4	57	83	107	130	152	173	193	232	278	323
30	0	57	82	104	126	145	164	182	215	254	290
	2	58	84	107	130	151	171	190	227	270	311
	4	59	86	110	134	156	178	198	238	285	330

SLOPE – FLAT & DOWNHILL.

Constant I.D – 15.3 mm

Available in wall thickness of: 0.9, 1.0, 1.1, 1.15 mm – (35, 40, 45, ~46 mil).

12/12/00

Hydro P.C. & Hydro P.C.N.D 3.6 L/H

MAXIMUM RECOMMENDED DRIPLINE LENGTH (m)
PIPE DIAMETER **17/15.3** (OD/ID)

Pressure (m)	Slope %	Emitter Spacing (m)									
		0.2	0.3	0.4	0.5	0.6	0.7	0.8	1.00	1.25	1.50
10	0	31	44	56	66	76	85	94	111	130	147
	2	34	50	64	78	91	104	117	142	171	200
	4	37	54	71	87	103	119	134	165	201	239
12	0	40	56	71	85	97	109	121	142	166	189
	2	42	61	78	95	110	125	140	169	203	236
	4	44	65	84	103	121	139	156	190	231	272
14	0	46	65	82	98	112	126	139	164	193	219
	2	48	69	88	107	124	141	158	189	226	261
	4	50	72	94	115	134	153	172	209	253	296
16	0	51	71	90	108	124	139	154	182	213	242
	2	53	75	96	117	136	153	171	205	245	284
	4	54	79	102	124	145	165	186	224	270	315
18	0	55	77	98	117	134	151	167	197	231	263
	2	57	81	104	125	145	165	183	219	261	302
	4	58	84	108	132	154	176	197	237	286	333
20	0	58	82	104	125	143	161	178	210	246	281
	2	60	86	110	132	154	174	194	231	275	318
	4	62	89	114	139	162	185	207	249	300	348
22	0	61	87	110	131	151	170	188	222	260	296
	2	63	90	115	139	161	183	203	242	289	332
	4	65	93	120	145	170	193	216	260	313	362
24	0	64	91	115	138	158	179	197	232	273	311
	2	66	94	120	145	168	190	212	252	300	345
	4	67	97	125	151	176	201	224	270	324	375
26	0	67	95	120	144	165	186	206	242	285	324
	2	69	98	125	151	175	197	220	262	311	359
	4	70	101	129	157	182	208	232	279	334	387
28	0	69	98	124	149	172	193	214	252	295	336
	2	71	101	129	156	181	204	227	271	321	369
	4	72	104	134	162	188	214	239	287	344	398
30	0	72	101	129	154	178	200	221	260	306	348
	2	73	104	133	161	186	211	234	279	331	381
	4	75	107	138	167	194	221	246	295	353	408

SLOPE – FLAT & DOWNHILL.

Constant I.D – 15.3 mm

Available in wall thickness of: 0.9, 1.0, 1.1, 1.15 mm – (35, 40, 45, ~46 mil).

Hydro P.C. & Hydro P.C.N.D 3.6 L/H
MAXIMUM RECOMMENDED DRIPLINE LENGTH (m)
PIPE DIAMETER - 20/17.6 (OD/ID)

Pressure (m)	Slope %	Emitter Spacing (m)									
		0.2	0.3	0.4	0.5	0.6	0.7	0.8	1.00	1.25	1.50
10	0	41	57	72	86	98	110	122	142	166	189
	2	46	66	86	105	123	141	158	191	233	272
	4	49	73	96	119	142	163	185	227	279	330
12	0	52	73	92	110	125	141	155	183	214	243
	2	56	81	104	126	147	167	187	226	271	317
	4	59	87	113	139	164	188	212	259	316	371
14	0	60	84	106	127	145	163	179	211	248	281
	2	64	91	117	142	164	187	209	251	301	350
	4	67	97	126	154	181	207	233	283	343	402
16	0	66	93	117	140	161	181	199	234	274	311
	2	70	100	127	154	179	203	226	272	325	377
	4	72	105	136	166	194	222	250	302	365	426
18	0	72	101	127	151	174	195	215	253	296	338
	2	75	107	136	165	191	217	242	289	345	399
	4	77	112	144	176	206	235	263	319	385	449
20	0	76	107	135	161	185	208	230	270	316	360
	2	79	113	144	174	202	229	255	305	364	420
	4	82	118	152	185	216	246	276	333	401	468
22	0	80	113	143	170	196	220	242	285	335	380
	2	83	119	152	183	212	240	267	319	380	438
	4	86	124	159	193	226	257	288	347	418	486
24	0	84	119	150	179	205	230	254	299	351	399
	2	87	124	158	191	221	250	278	332	395	456
	4	89	129	166	201	235	267	298	359	431	501
26	0	88	124	156	186	214	240	266	312	366	416
	2	90	129	164	198	229	260	289	344	409	471
	4	93	133	171	208	242	276	308	371	445	516
28	0	91	128	162	193	222	249	275	324	380	432
	2	93	133	170	204	237	268	298	355	423	486
	4	96	138	177	214	250	284	318	381	458	531
30	0	94	132	167	200	230	258	285	335	394	447
	2	96	137	175	211	244	277	307	366	435	500
	4	99	142	182	220	257	292	326	392	470	545

SLOPE – FLAT & DOWNHILL.

Constant I.D – 17.6 mm

Available in wall thickness of: 0.9, 1.0, 1.1, 1.15 mm – (35, 40, 45, ~46 mil).

17/02/00

“HYDRODRIP™ II”

Integral drip lateral

MAIN FEATURES

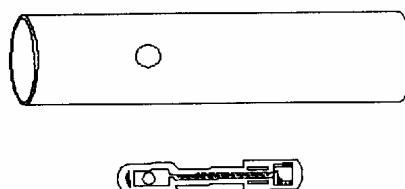
- * High clogging resistance.
- * Uniform emission rate.
- * Easy to roll and unroll.
- * Accurate spacing between emitters.
- * Suitable for poor water conditions.

- * Resistant to chemicals, fertilizers, U.V. and mechanical stress.

OPERATING RANGE

- * Working pressure range
0.5-2.5 bar.

- * Nominal flow rate:
1.8, 2.0, 2.3, 3.6 l/h
at 1.0 bar.



RANGE OF TUBE DIAMETERS

- * Ø16 - ID 15.2 mm.
- * Ø20 - ID 17.6 mm.
- * Ø24 - ID 22.2 mm.

SPACING

- * Available in range
from 15-200cm.

21 February 2001

HYDRODRIPII

	FLOW	DIA.	DIA.	DRIP.	DRIP	DH=7.5%		DH=10%		Max.	color
		NOM.	INT.	COEF.	EXP.	Pmin	Pmax	Pmin	Pmax	Pressure	
16/18/1.8	1.74	16	15.2	0.5653	0.4888	9.2	10.8	8.9	11.1	15	Green
16/25/1.8	1.83	16	15.2	0.5701	0.5078	9.2	10.8	9.0	11.0	25	Green
16/35/1.8	1.88	16	15.2	0.5951	0.4998	9.2	10.8	8.9	11.1	30	Green
16/45/1.8	1.88	16	15.2	0.5951	0.4998	9.2	10.8	8.9	11.1	35	Green
16/18/2	1.96	16	15.2	0.6275	0.4942	9.2	10.8	8.9	11.1	15	Green
16/25/2	2.04	16	15.2	0.6381	0.5057	9.2	10.8	9.0	11.0	25	Green
16/35/2	2.08	16	15.2	0.6638	0.4980	9.2	10.8	8.9	11.1	30	Green
16/45/2	2.08	16	15.2	0.6638	0.4980	9.2	10.8	8.9	11.1	35	Green
16/18/2.3	2.33	16	15.2	0.7620	0.4867	9.2	10.8	8.9	11.1	15	Yellow
16/25/2.3	2.42	16	15.2	0.7747	0.4970	9.2	10.8	8.9	11.1	25	Yellow
16/35/2.3	2.59	16	15.2	0.8228	0.4993	9.2	10.8	8.9	11.1	30	Yellow
16/45/2.3	2.59	16	15.2	0.8228	0.4993	9.2	10.8	8.9	11.1	35	Yellow
16/18/3.6	3.67	16	15.2	1.2155	0.4809	9.2	10.8	8.9	11.1	15	White
16/25/3.6	3.75	16	15.2	1.1972	0.4956	9.2	10.8	8.9	11.1	25	White
16/35/3.6	3.82	16	15.2	1.2543	0.4858	9.2	10.8	8.9	11.1	30	White
16/45/3.6	3.82	16	15.2	1.2543	0.4858	9.2	10.8	8.9	11.1	35	White
20/18/1.8	1.72	20	17.6	0.5415	0.4993	9.2	10.8	8.9	11.1	15	Green
20/25/1.8	1.96	20	17.6	0.5889	0.5221	9.3	10.7	9.0	11.0	25	Green
20/35/1.8	1.93	20	17.6	0.5850	0.5191	9.3	10.7	9.0	11.0	30	Green
20/45/1.8	1.93	20	17.6	0.5850	0.5191	9.3	10.7	9.0	11.0	35	Green
20/18/2	1.94	20	17.6	0.6174	0.4952	9.2	10.8	8.9	11.1	15	Green
20/25/2	2.16	20	17.6	0.6653	0.5114	9.2	10.8	9.0	11.0	25	Green
20/35/2	2.13	20	17.6	0.6640	0.5044	9.2	10.8	9.0	11.0	30	Green
20/45/2	2.13	20	17.6	0.6640	0.5044	9.2	10.8	9.0	11.0	35	Green
20/18/2.3	2.31	20	17.6	0.7708	0.4787	9.2	10.8	8.9	11.1	15	Yellow
20/25/2.3	2.7	20	17.6	0.7797	0.5280	9.3	10.7	9.0	11.0	25	Yellow
20/35/2.3	2.66	20	17.6	0.8119	0.5140	9.2	10.8	9.0	11.0	30	Yellow
20/45/2.3	2.66	20	17.6	0.8119	0.5140	9.2	10.8	9.0	11.0	35	Yellow
20/18/3.6	3.6	20	17.6	1.1546	0.4929	9.2	10.8	8.9	11.1	15	White
20/25/3.6	3.98	20	17.6	1.2074	0.5187	9.3	10.7	9.0	11.0	25	White
20/35/3.6	4.07	20	17.6	1.2363	0.5168	9.2	10.8	9.0	11.0	30	White
20/45/3.6	4.07	20	17.6	1.2363	0.5168	9.2	10.8	9.0	11.0	35	White
25/18/1.8	1.74	25	22.2	0.5653	0.4888	9.2	10.8	8.9	11.1	12	Green
25/35/1.8	1.77	25	22.2	0.5330	0.5219	9.3	10.7	9.0	11.0	25	Green
25/18/2	1.96	25	22.2	0.6275	0.4942	9.2	10.8	8.9	11.1	12	Green
25/35/2	1.84	25	22.2	0.5797	0.4993	9.2	10.8	8.9	11.1	25	Green
25/18/2.3	2.33	25	22.2	0.7620	0.4867	9.2	10.8	8.9	11.1	12	Yellow
25/35/2.3	2.35	25	22.2	0.7388	0.5033	9.2	10.8	9.0	11.0	25	Yellow
25/18/3.6	3.67	25	22.2	1.2155	0.4809	9.2	10.8	8.9	11.1	12	White
25/35/3.6	3.53	25	22.2	1.0972	0.5064	9.2	10.8	9.0	11.0	25	White

** Q=LPH H=m.

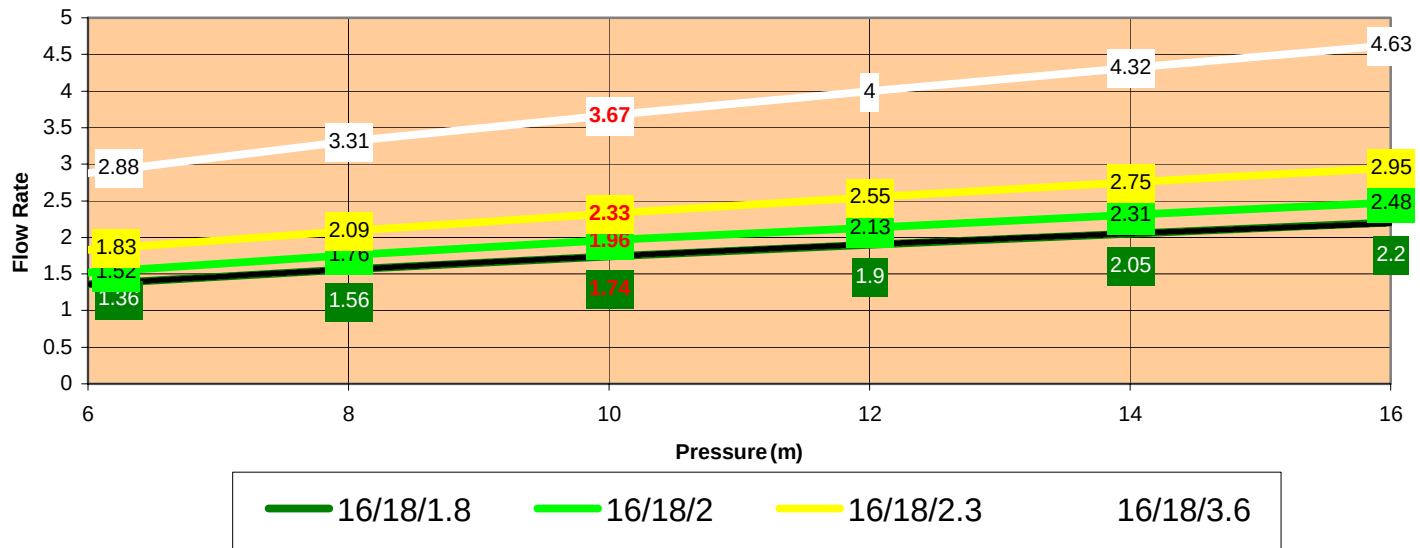
*** %DH - MAXIMUM ALLOWABLE HEAD LOSS DIFFERENCE.
ALONG A LATERAL (AS PERCENT OF THE WORKING PRESSURE).
TO KEEP FLOW RATE DIFFERENCE $\leq 10\%$
OF WORKING FLOW RATE.

*** FOR Ø12 PIPE.

PERFORMANCE CHART

WORKING PRESSURE RANGE 5-25m.

Flow Vs. Pressure - Hydrodrip 16/18

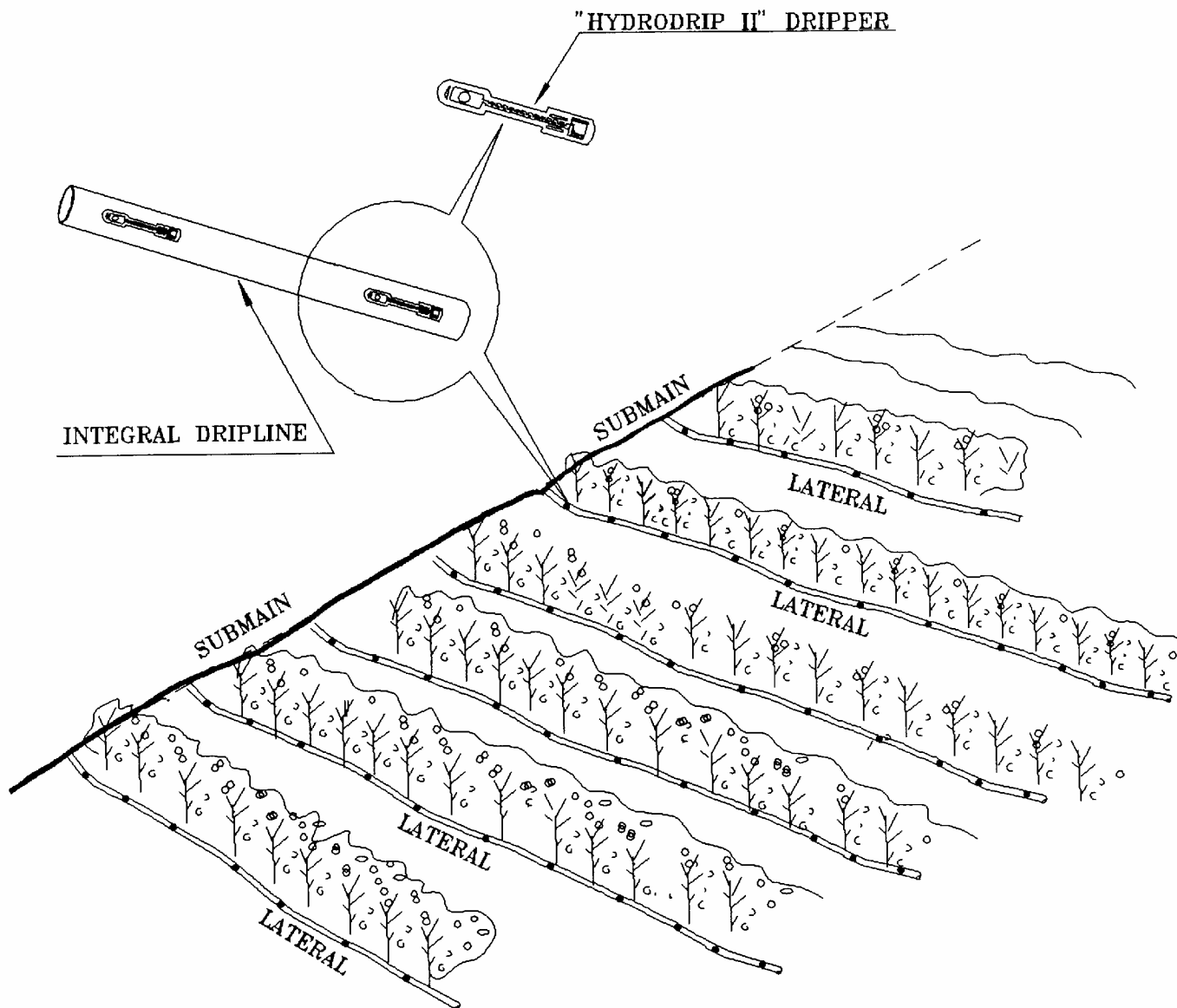


FIELD / ROW CROPS

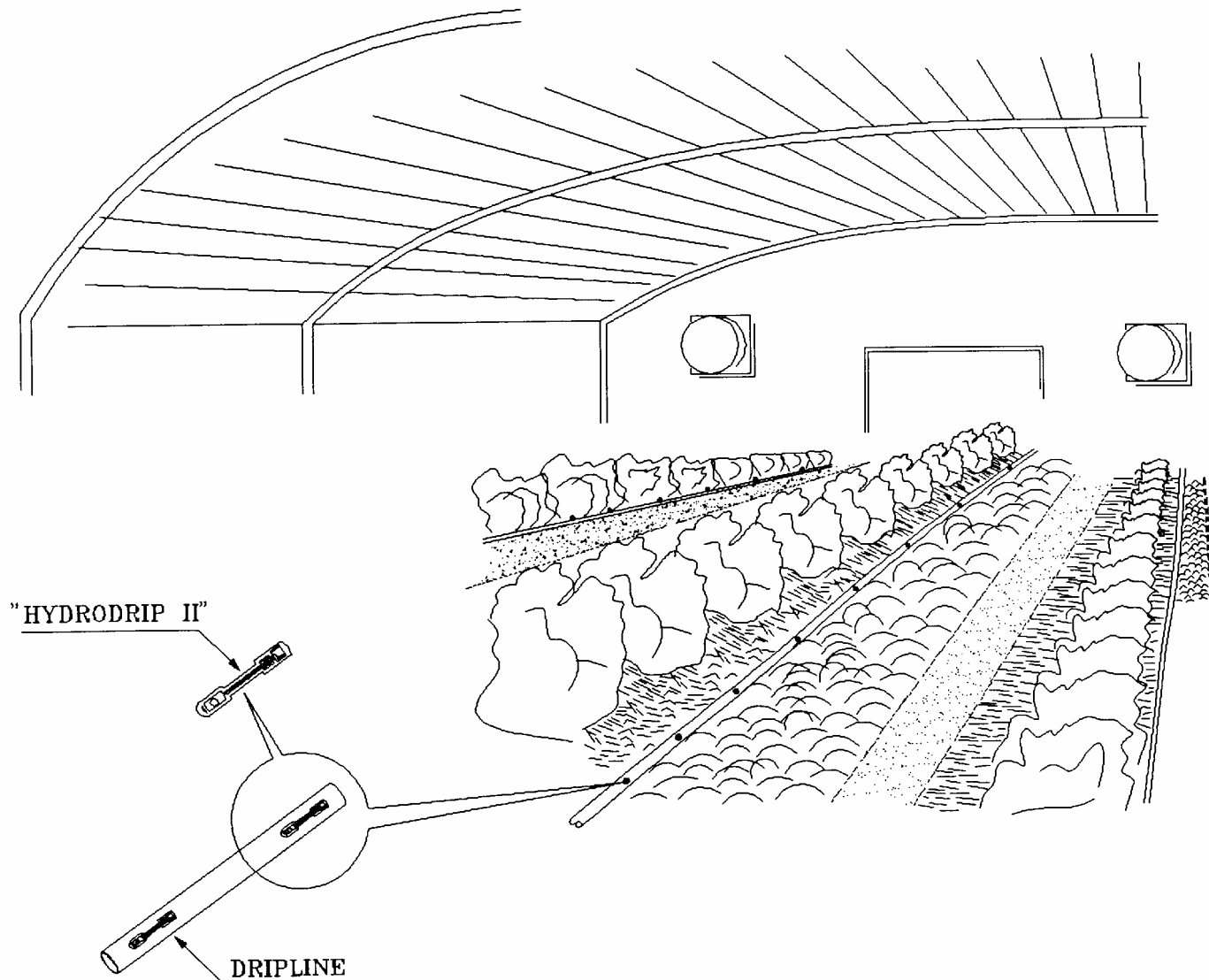
DRIP IRRIGATION

"HYDRODRIP II"

INTEGRAL DRIPLINE



GREENHOUSE
DRIP IRRIGATION
"HYDRODRIP II"
INTEGRAL DRIPLINE



Hydrodrip Specifications

26.12.00

No.	Dripline	Color	Flow rate	W.T.	I.D.	No D	MAX PRE
			l/h	MIL	mm	mm	M
1	16/18/1.8	Green	1.74	18	15.2	16	15
2	16/25/1.8	Green	1.83	25	15.2	16	25
2	16/35/1.8	Green	1.88	35	15.2	16	30
3	16/45/1.8	Green	1.88	45	15.2	16	35
3	16/18/2	Green	1.96	18	15.2	16	15
4	16/25/2	Green	2.04	25	15.2	16	25
4	16/35/2	Green	2.08	35	15.2	16	30
5	16/45/2	Green	2.08	45	15.2	16	35
5	16/18/2.3	Yellow	2.33	18	15.2	16	15
6	16/25/2.3	Yellow	2.42	25	15.2	16	25
6	16/35/2.3	Yellow	2.59	35	15.2	16	30
7	16/45/2.3	Yellow	2.59	45	15.2	16	35
7	16/18/3.6	White	3.67	18	15.2	16	15
8	16/25/3.6	White	3.75	25	15.2	16	25
8	16/35/3.6	White	3.82	35	15.2	16	30
9	16/45/3.6	White	3.82	45	15.2	16	35
9	20/18/1.8	Green	1.72	18	17.6	20	15
10	20/25/1.8	Green	1.96	25	17.6	20	25
10	20/35/1.8	Green	1.93	35	17.6	20	30
11	20/45/1.8	Green	1.93	45	17.6	20	35
11	20/18/2	Green	1.94	18	17.6	20	15
12	20/25/2	Green	2.16	25	17.6	20	25
12	20/35/2	Green	2.13	35	17.6	20	30
13	20/45/2	Green	2.13	45	17.6	20	35
13	20/18/2.3	Yellow	2.31	18	17.6	20	15
14	20/25/2.3	Yellow	2.7	25	17.6	20	25
14	20/35/2.3	Yellow	2.66	35	17.6	20	30
15	20/45/2.3	Yellow	2.66	45	17.6	20	35
15	20/18/3.6	White	3.6	18	17.6	20	15
16	20/25/3.6	White	3.98	25	17.6	20	25
16	20/35/3.6	White	4.07	35	17.6	20	30
17	20/45/3.6	White	4.07	45	17.6	20	35
17	25/18/1.8	Green	1.74	18	22.2	25	12
18	25/35/1.8	Green	1.77	35	22.2	25	25
18	25/18/2	Green	1.96	18	22.2	25	12
19	25/35/2	Green	1.84	35	22.2	25	25
19	25/18/2.3	Yellow	2.33	18	22.2	25	12
20	25/35/2.3	Yellow	2.35	35	22.2	25	25
20	25/18/3.6	White	3.67	18	22.2	25	12
21	25/35/3.6	White	3.53	35	22.2	25	25

HYDRODRIP II INTEGRAL DRIPPER

HYDRODRIP II

Maximum Recommended Dripline Length (m)

Emitter Type - HYDRODRIP II 16/18/1.8 (GREEN)

Nominal Flow Rate – **1.7 lph**

Working Pressure - 1.0 bar

Dripline Diameter **16/15.2 (O.D/I.D)**

* Slope %	Max. Flow rate Difference % **	Spacing Between Emitters (cm)											
		15	20	30	33	40	50	60	70	75	80	90	100
-2	7.5	36	42	50	52	55	59	61	64	65	65	67	67
	10	42	50	61	63	68	74	78	82	83	84	86	88
-1	7.5	41	49	62	65	72	81	87	93	95	98	103	106
	10	47	57	72	77	85	96	104	112	116	119	125	130
0	7.5	46	57	77	82	94	109	123	137	143	150	161	173
	10	52	64	86	92	105	122	138	153	161	167	181	194
1	7.5	51	64	89	95	111	132	152	172	181	190	209	226
	10	56	70	97	104	121	144	166	186	197	206	226	245
2	7.5	55	69	98	106	124	149	172	196	204	216	237	254
	10	59	76	106	114	134	160	185	210	222	234	257	280

* Slopes: - Flat Terrain (0) ; Downhill (1,2);Uphill(-1,-2)

** Maximum Allowable Flow Rate Variation Along The Same Lateral.

Emission Uniformity (EU) -90%

(Working pressure - 1.2 bar)

$$EU = \frac{Q_{\min}}{Q_{avr}} * (1 - 1.27 * CV)$$

* Slope %	Spacing Between Emitters (cm)											
	15	20	30	33	40	50	60	70	75	80	90	100
-2	57	67	82	86	92	101	107	112	114	116	120	122
-1	63	76	98	103	115	129	141	151	156	161	169	177
0	69	88	117	125	141	167	189	209	219	229	248	265
1	75	94	133	139	161	197	219	246	264	279	306	331
2	79	100	139	150	179	213	241	273	287	300	327	351

HYDRODRIP II

Maximum Recommended Dripline Length (m)

Emitter Type - HYDRODRIP II 16/25/1.8 (GREEN)

Nominal Flow Rate – **1.8 lph**

Working Pressure - 1.0 bar

Dripline Diameter **16/15.2 (O.D/I.D)**

* Slope %	Max. Flow rate Difference % **	Spacing Between Emitters (cm)											
		15	20	30	33	40	50	60	70	75	80	90	100
-2	7.5	34	40	48	50	53	57	59	61	62	62	64	65
	10	40	47	58	60	65	71	75	78	80	81	83	85
-1	7.5	39	47	59	63	69	77	83	89	92	94	98	101
	10	45	54	69	73	81	92	100	107	111	114	120	125
0	7.5	44	55	73	78	89	104	118	130	137	142	154	165
	10	49	61	82	88	100	117	132	146	153	160	173	185
1	7.5	49	61	84	91	106	126	145	164	173	182	199	216
	10	53	67	92	100	116	137	158	178	188	197	215	233
2	7.5	52	66	93	101	118	142	164	187	201	213	234	260
	10	57	72	101	109	127	153	176	200	212	223	245	267

* SLOPES: - Flat Terrain (0) ; Downhill (1,2);Uphill(-1,-2)

** Maximum Allowable Flow Rate Variation Along The Same Lateral.

Emission Uniformity (EU) -90%

(Working pressure - 1.2 bar)

$$EU = \frac{Q_{\min}}{Q_{avr}} * (1 - 1.27 * CV)$$

* Slope %	Spacing Between Emitters (cm)											
	15	20	30	33	40	50	60	70	75	80	90	100
-2	55	64	79	82	89	97	103	108	110	112	115	118
-1	61	73	94	99	110	124	135	146	150	154	163	170
0	67	84	112	116	137	160	180	200	210	219	237	251
1	74	90	123	133	159	182	211	242	255	267	292	306
2	76	99	135	148	171	201	233	261	274	287	312	336

HYDRODRIP II

Maximum Recommended Dripline Length (m)

Emitter Type - HYDRODRIP II 16/35/1.8 (GREEN)

Emitter Type - HYDRODRIP II 16/45/1.8 (GREEN)

Nominal Flow Rate – **1.9 lph**

Working Pressure - 1.0 bar

Dripline Diameter **16/15.2 (O.D/I.D)**

* Slope %	Max. Flow rate Difference % **	Spacing Between Emitters (cm)											
		15	20	30	33	40	50	60	70	75	80	90	100
-2	7.5	34	40	48	50	53	57	59	62	62	63	64	65
	10	40	47	58	60	65	71	75	78	80	82	84	85
-1	7.5	39	47	59	62	69	77	83	89	92	94	98	102
	10	44	54	69	73	81	91	100	107	110	114	120	125
0	7.5	44	54	72	78	88	103	116	129	135	141	152	163
	10	49	61	81	87	99	116	131	145	152	158	171	183
1	7.5	48	60	83	90	104	124	143	161	170	178	196	213
	10	53	66	91	98	114	136	155	175	185	194	212	230
2	7.5	51	65	92	99	116	140	162	184	195	99	88	83
	10	56	71	99	107	125	150	174	197	209	219	241	262

* SLOPES: - Flat Terrain (0) ; Downhill (1,2);Uphill(-1,-2)

** Maximum Allowable Flow Rate Variation Along The Same Lateral.

Emission Uniformity (EU) -90%

(Working pressure - 1.2 bar)

$$EU = \frac{Q_{\min}}{Q_{avr}} * (1 - 1.27 * CV)$$

* Slope %	Spacing Between Emitters (cm)											
	15	20	30	33	40	50	60	70	75	80	90	100
-2	54	64	78	82	89	97	103	108	110	112	115	118
-1	60	73	93	98	109	123	134	145	149	154	162	169
0	67	80	111	116	136	158	178	198	207	217	234	250
1	70	90	122	133	156	180	211	239	251	264	288	302
2	75	94	134	146	164	200	230	258	271	283	308	332

HYDRODRIP II

Maximum Recommended Dripline Length (m)

Emitter Type - HYDRODRIP II 16/18/2 (GREEN)

Nominal Flow Rate - **2 lph**

Working Pressure - 1.0 bar

Dripline Diameter **16/15.2 (O.D/I.D)**

* Slope %	Max. Flow rate Difference % **	Spacing Between Emitters (cm)											
		15	20	30	33	40	50	60	70	75	80	90	100
-2	7.5	34	39	47	49	53	57	59	62	62	63	65	66
	10	40	47	57	60	65	71	75	78	80	82	84	86
-1	7.5	38	46	58	61	68	76	83	88	91	94	97	101
	10	44	53	68	72	80	90	98	106	110	113	119	124
0	7.5	43	53	71	76	87	101	114	127	133	138	149	160
	10	48	59	80	85	97	113	128	142	149	155	167	180
1	7.5	47	59	81	88	102	121	139	157	166	174	191	207
	10	52	65	89	96	111	132	152	171	180	189	207	224
2	7.5	50	64	89	97	113	136	157	179	189	199	214	234
	10	55	69	97	105	122	146	169	192	203	214	234	255

* SLOPES: - Flat Terrain (0) ; Downhill (1,2);Uphill(-1,-2)

** Maximum Allowable Flow Rate Variation Along The Same Lateral.

Emission Uniformity (EU) -90%

(Working pressure - 1.2 bar)

$$EU = \frac{Q_{\min}}{Q_{avr}} * (1 - 1.27 * CV)$$

* Slope %	Spacing Between Emitters (cm)											
	15	20	30	33	40	50	60	70	75	80	90	100
-2	53	63	77	81	88	96	103	108	110	112	115	118
-1	59	71	92	97	108	122	133	144	148	152	160	168
0	65	80	106	116	133	151	175	194	203	212	227	245
1	69	89	121	131	153	176	208	233	245	258	273	301
2	75	92	132	138	161	196	224	251	264	277	302	324

HYDRODRIP II

Maximum Recommended Dripline Length (m)

Emitter Type - HYDRODRIP II 16/25/2 (GREEN)

Nominal Flow Rate – **2 lph**

Working Pressure - 1.0 bar

Dripline Diameter **16/15.2 (O.D/I.D)**

* Slope %	Max. Flow rate Difference % **	Spacing Between Emitters (cm)											
		15	20	30	33	40	50	60	70	75	80	90	100
-2	7.5	33	38	46	48	51	55	58	60	61	62	63	64
	10	38	45	56	58	63	69	73	76	78	79	81	83
-1	7.5	37	44	56	59	66	74	80	85	88	90	95	98
	10	42	51	65	69	77	87	95	103	106	109	115	120
0	7.5	41	51	68	73	84	97	110	122	128	133	144	154
	10	46	57	77	82	94	109	123	137	143	150	161	173
1	7.5	45	57	78	84	98	117	134	151	159	167	184	199
	10	50	62	86	92	107	127	146	165	173	182	199	215
2	7.5	48	61	86	93	109	131	151	172	182	192	213	235
	10	53	67	93	101	118	141	163	184	195	205	226	245

* SLOPES: - Flat Terrain (0) ; Downhill (1,2);Uphill(-1,-2)

** Maximum Allowable Flow Rate Variation Along The Same Lateral.

Emission Uniformity (EU) -90%

(Working pressure - 1.2 bar)

$$EU = \frac{Q_{\min}}{Q_{avr}} * (1 - 1.27 * CV)$$

* Slope %	Spacing Between Emitters (cm)											
	15	20	30	33	40	50	60	70	75	80	90	100
-2	52	61	75	79	86	94	100	105	107	109	113	115
-1	57	69	89	93	104	118	129	139	143	148	156	163
0	63	78	104	112	128	149	169	187	196	202	221	237
1	68	83	118	127	143	174	200	224	230	242	269	292
2	70	90	123	133	159	189	214	242	255	267	290	312

HYDRODRIP II

Maximum Recommended Dripline Length (m)

Emitter Type - HYDRODRIP II 16/35/2 (GREEN)

Emitter Type - HYDRODRIP II 16/45/2 (GREEN)

Nominal Flow Rate – **2.1 lph**

Working Pressure - 1.0 bar

Dripline Diameter **16/15.2 (O.D/I.D)**

* Slope %	Max. Flow rate Difference % **	Spacing Between Emitters (cm)											
		15	20	30	33	40	50	60	70	75	80	90	100
-2	7.5	32	38	46	48	51	55	58	60	61	62	63	64
	10	38	45	55	58	63	69	73	76	78	79	82	84
-1	7.5	37	44	56	59	65	73	80	85	88	90	95	98
	10	42	50	65	69	76	87	95	102	106	109	114	120
0	7.5	41	50	68	72	82	96	109	120	126	131	142	152
	10	46	56	76	81	92	108	122	135	141	147	159	171
1	7.5	44	56	77	83	96	115	132	148	157	165	180	196
	10	49	62	85	91	105	125	143	162	170	178	195	212
2	7.5	47	60	84	91	107	129	149	169	179	188	198	209
	10	52	66	92	99	116	138	160	181	191	202	221	241

* SLOPES: - Flat Terrain (0) ; Downhill (1,2);Uphill(-1,-2)

** Maximum Allowable Flow Rate Variation Along The Same Lateral.

Emission Uniformity (EU) -90%

(Working pressure - 1.2 bar)

$$EU = \frac{Q_{\min}}{Q_{avr}} * (1 - 1.27 * CV)$$

* Slope %	Spacing Between Emitters (cm)											
	15	20	30	33	40	50	60	70	75	80	90	100
-2	51	60	75	78	85	93	100	105	107	109	113	116
-1	56	68	88	93	103	117	128	138	143	146	155	162
0	61	77	103	111	126	147	166	185	194	201	218	234
1	67	82	116	125	141	172	197	214	227	241	266	288
2	69	90	121	133	156	186	211	238	251	263	286	308

HYDRODRIP II

Maximum Recommended Dripline Length (m)

Emitter Type - HYDRODRIP II 16/18/2.3 (YELLOW)

Nominal Flow Rate – **2.3 lph**

Working Pressure - 1.0 bar

Dripline Diameter **16/15.2 (O.D/I.D)**

* Slope %	Max. Flow rate Difference % **	Spacing Between Emitters (cm)											
		15	20	30	33	40	50	60	70	75	80	90	100
-2	7.5	31	37	45	47	50	55	58	60	61	62	64	65
	10	36	43	53	56	61	67	72	76	77	78	81	84
-1	7.5	35	42	53	56	63	71	77	83	86	88	92	96
	10	40	48	62	65	73	83	91	99	102	105	111	116
0	7.5	38	47	63	68	78	91	102	113	119	124	134	143
	10	43	53	71	76	87	102	115	127	133	139	150	161
1	7.5	41	52	72	77	90	107	122	138	146	153	167	181
	10	46	58	79	85	98	117	134	151	158	166	182	197
2	7.5	44	56	78	85	99	119	137	155	165	174	191	107
	10	48	61	85	92	107	128	148	167	177	186	204	223

* SLOPES: - Flat Terrain (0) ; Downhill (1,2);Uphill(-1,-2)

** Maximum Allowable Flow Rate Variation Along The Same Lateral.

Emission Uniformity (EU) -90%

(Working pressure - 1.2 bar)

$$EU = \frac{Q_{\min}}{Q_{avr}} * (1 - 1.27 * CV)$$

* Slope %	Spacing Between Emitters (cm)											
	15	20	30	33	40	50	60	70	75	80	90	100
-2	49	58	72	76	82	91	97	103	105	107	112	115
-1	53	65	83	88	99	112	123	133	137	142	149	157
0	59	70	97	104	119	139	157	174	182	190	205	220
1	61	79	106	116	135	156	181	206	217	227	248	268
2	66	81	116	121	141	173	198	223	234	242	267	288

HYDRODRIP II

Maximum Recommended Dripline Length (m)

Emitter Type - HYDRODRIP II 16/25/2.3 (YELLOW)

Nominal Flow Rate - **2.4 lph**

Working Pressure - 1.0 bar

Dripline Diameter **16/15.2 (O.D/I.D)**

* Slope %	Max. Flow rate Difference % **	Spacing Between Emitters (cm)											
		15	20	30	33	40	50	60	70	75	80	90	100
-2	7.5	30	36	43	45	49	53	56	58	59	60	62	63
	10	35	42	52	55	59	65	70	74	75	77	79	81
-1	7.5	34	41	52	55	61	69	75	81	83	86	89	93
	10	38	46	60	63	71	81	88	96	99	102	108	113
0	7.5	37	46	62	66	75	88	99	110	115	120	130	139
	10	41	51	69	74	84	98	111	123	129	134	145	156
1	7.5	40	50	69	75	87	103	118	133	140	148	162	175
	10	44	56	76	82	95	113	129	145	153	161	176	190
2	7.5	43	54	76	82	96	115	133	151	159	167	185	201
	10	47	59	82	89	104	124	143	162	171	180	198	215

* SLOPES: - Flat Terrain (0) ; Downhill (1,2);Uphill(-1,-2)

** Maximum Allowable Flow Rate Variation Along The Same Lateral.

Emission Uniformity (EU) -90%

(Working pressure - 1.2 bar)

$$EU = \frac{Q_{\min}}{Q_{avr}} * (1 - 1.27 * CV)$$

* Slope %	Spacing Between Emitters (cm)											
	15	20	30	33	40	50	60	70	75	80	90	100
-2	47	56	70	74	80	89	95	100	103	105	109	112
-1	52	63	81	86	96	109	119	129	134	138	146	153
0	57	70	94	100	115	134	151	168	176	184	199	213
1	60	77	104	113	131	151	177	199	209	220	239	252
2	62	80	109	118	140	167	192	211	227	238	258	279

HYDRODRIP II

Maximum Recommended Dripline Length (m)

Emitter Type - HYDRODRIP II 16/35/2.3 (YELLOW)

Emitter Type - HYDRODRIP II 16/45/2.3 (YELLOW)

Nominal Flow Rate – **2.6 lph**

Working Pressure - 1.0 bar

Dripline Diameter **16/15.2 (O.D/I.D)**

* Slope %	Max. Flow rate Difference % **	Spacing Between Emitters (cm)											
		15	20	30	33	40	50	60	70	75	80	90	100
-2	7.5	29	34	42	44	48	52	55	57	59	59	61	62
	10	34	40	50	53	58	64	68	71	74	75	77	80
-1	7.5	32	39	50	53	59	66	73	78	80	82	86	91
	10	37	45	58	61	68	78	85	92	95	98	104	109
0	7.5	35	44	59	63	72	84	95	105	110	114	124	133
	10	40	49	66	70	80	94	106	118	123	129	139	149
1	7.5	38	48	66	71	82	98	113	127	134	140	154	167
	10	42	53	73	78	90	107	123	138	146	153	167	181
2	7.5	41	52	72	78	91	109	126	143	151	159	176	191
	10	44	56	78	85	98	118	136	153	162	170	188	204

* SLOPES: - Flat Terrain (0) ; Downhill (1,2);Uphill(-1,-2)

** Maximum Allowable Flow Rate Variation Along The Same Lateral.

Emission Uniformity (EU) -90%

(Working pressure - 1.2 bar)

$$EU = \frac{Q_{\min}}{Q_{avr}} * (1 - 1.27 * CV)$$

* Slope %	Spacing Between Emitters (cm)											
	15	20	30	33	40	50	60	70	75	80	90	100
-2	46	54	68	71	78	86	92	98	101	102	106	110
-1	50	60	78	83	92	105	115	125	129	133	140	148
0	53	67	90	96	110	126	145	161	168	176	190	204
1	58	71	100	108	121	148	169	190	200	203	226	246
2	60	77	106	115	134	159	181	205	216	226	247	266

HYDRODRIP II

Maximum Recommended Dripline Length (m)

Emitter Type - HYDRODRIP II 16/18/3.6 (WHITE)

Nominal Flow Rate - **3.7 lph**

Working Pressure - 1.0 bar

Dripline Diameter **16/15.2 (O.D/I.D)**

* Slope %	Max. Flow rate Difference % **	Spacing Between Emitters (cm)											
		15	20	30	33	40	50	60	70	75	80	90	100
-2	7.5	25	29	37	39	42	47	50	53	55	55	58	59
	10	28	34	43	46	50	56	61	65	67	69	72	74
-1	7.5	27	32	42	45	50	57	62	68	70	72	77	80
	10	30	37	48	51	58	66	73	79	83	85	90	95
0	7.5	29	35	47	51	58	68	77	85	89	93	100	108
	10	32	40	53	57	65	76	86	95	100	104	113	121
1	7.5	31	38	52	56	65	77	88	99	104	110	120	130
	10	34	42	58	62	72	85	97	109	115	120	131	142
2	7.5	32	40	56	61	71	85	98	111	116	122	135	146
	10	35	44	62	66	77	92	106	120	126	133	145	158

* SLOPES: - Flat Terrain (0) ; Downhill (1,2);Uphill(-1,-2)

** Maximum Allowable Flow Rate Variation Along The Same Lateral.

Emission Uniformity (EU) -90%

(Working pressure - 1.2 bar)

$$EU = \frac{Q_{\min}}{Q_{avr}} * (1 - 1.27 * CV)$$

* Slope %	Spacing Between Emitters (cm)											
	15	20	30	33	40	50	60	70	75	80	90	100
-2	38	46	58	61	68	76	82	88	91	93	97	101
-1	41	50	65	69	78	89	98	106	110	114	122	128
0	44	54	73	78	89	104	118	130	137	142	154	165
1	45	58	77	83	98	117	133	150	153	162	179	194
2	47	60	84	91	102	125	144	162	170	178	194	210

HYDRODRIP II

Maximum Recommended Dripline Length (m)

Emitter Type - HYDRODRIP II 16/25/3.6 (WHITE)

Nominal Flow Rate – **3.8 lph**

Working Pressure - 1.0 bar

Dripline Diameter **16/15.2 (O.D/I.D)**

* Slope %	Max. Flow rate Difference % **	Spacing Between Emitters (cm)											
		15	20	30	33	40	50	60	70	75	80	90	100
-2	7.5	24	29	36	38	41	46	49	52	53	54	56	58
	10	28	33	42	45	49	55	59	64	65	66	69	72
-1	7.5	26	32	41	44	49	55	61	66	68	70	75	78
	10	29	36	47	50	56	64	71	77	80	83	88	93
0	7.5	28	35	47	50	57	66	75	83	87	90	98	105
	10	31	39	52	56	64	75	84	93	98	102	110	118
1	7.5	30	37	51	55	64	76	86	97	103	107	118	127
	10	33	41	56	61	70	83	95	106	112	118	129	139
2	7.5	31	40	55	59	69	83	95	108	114	120	132	143
	10	34	43	60	65	76	90	104	117	123	130	142	154

* Slopes: - Flat Terrain (0) ; Downhill (1,2);Uphill(-1,-2)

** Maximum Allowable Flow Rate Variation Along The Same Lateral.

Emission Uniformity (EU) -90%

(Working pressure - 1.2 bar)

$$EU = \frac{Q_{\min}}{Q_{avr}} * (1 - 1.27 * CV)$$

* Slope %	Spacing Between Emitters (cm)											
	15	20	30	33	40	50	60	70	75	80	90	100
-2	37	45	57	60	66	74	80	86	89	90	95	99
-1	40	49	64	67	76	87	96	104	108	112	119	125
0	43	53	71	76	87	102	115	127	134	139	150	161
1	45	57	76	83	96	114	131	146	152	161	176	190
2	46	60	83	89	101	123	141	158	167	174	191	206

HYDRODRIP II

Maximum Recommended Dripline Length (m)

Emitter Type - HYDRODRIP II 16/35/3.6 (WHITE)

Emitter Type - HYDRODRIP II 16/45/3.6 (WHITE)

Nominal Flow Rate – **3.8 lph**

Working Pressure - 1.0 bar

Dripline Diameter **16/15.2 (O.D/I.D)**

* Slope %	Max. Flow rate Difference % **	Spacing Between Emitters (cm)											
		15	20	30	33	40	50	60	70	75	80	90	100
-2	7.5	24	29	36	38	41	46	49	52	53	54	57	58
	10	28	33	42	45	49	55	59	64	65	67	70	73
-1	7.5	26	31	41	43	48	55	61	66	68	70	75	78
	10	29	36	47	50	56	64	71	77	80	82	88	93
0	7.5	28	34	46	49	56	66	74	83	86	90	97	104
	10	31	39	52	55	63	74	83	92	97	101	109	117
1	7.5	29	37	51	55	63	75	86	96	101	106	116	126
	10	33	41	56	60	70	82	94	105	111	116	127	137
2	7.5	31	39	54	59	68	82	94	106	113	118	131	141
	10	34	43	59	64	74	89	103	116	122	128	140	152

* Slopes: - Flat Terrain (0) ; Downhill (1,2);Uphill(-1,-2)

** Maximum Allowable Flow Rate Variation Along The Same Lateral.

Emission Uniformity (EU) -90%

(Working pressure - 1.2 bar)

$$EU = \frac{Q_{\min}}{Q_{avr}} * (1 - 1.27 * CV)$$

* Slope %	Spacing Between Emitters (cm)											
	15	20	30	33	40	50	60	70	75	80	90	100
-2	37	45	57	60	66	74	80	86	89	90	95	99
-1	40	48	63	67	75	86	95	104	107	111	118	125
0	43	53	71	76	86	100	114	126	132	138	149	160
1	45	56	76	82	96	113	129	141	151	159	174	188
2	45	59	82	86	101	121	139	156	164	173	188	204

HYDRODRIP II

Maximum Recommended Dripline Length (m)

Emitter Type - HYDRODRIP II 20/18/1.8 (GREEN)

Nominal Flow Rate – **1.7 lph**

Working Pressure - 1.0 bar

Dripline Diameter **20/17.6 (O.D/I.D)**

* Slope %	Max. Flow rate Difference % **	Spacing Between Emitters (cm)											
		15	20	30	33	40	50	60	70	75	80	90	100
-2	7.5	43	49	56	57	60	63	65	66	67	67	68	68
	10	52	59	70	72	77	82	85	87	88	89	90	92
-1	7.5	52	61	76	79	86	94	101	106	108	110	113	117
	10	60	71	89	94	103	114	124	131	134	138	143	148
0	7.5	61	76	101	107	122	142	161	178	186	194	210	225
	10	69	85	113	120	137	160	180	200	209	218	235	252
1	7.5	69	87	120	130	151	180	208	235	248	261	286	311
	10	76	95	131	141	164	195	225	253	267	281	308	334
2	7.5	75	96	135	146	172	96	83	80	78	77	77	75
	10	82	104	145	157	184	221	256	131	121	117	113	108

* SLOPES: - Flat Terrain (0) ; Downhill (1,2);Uphill(-1,-2)

** Maximum Allowable Flow Rate Variation Along The Same Lateral.

Emission Uniformity (EU) -90%

(Working pressure - 1.2 bar)

$$EU = \frac{Q_{\min}}{Q_{avr}} * (1 - 1.27 * CV)$$

* Slope %	Spacing Between Emitters (cm)											
	15	20	30	33	40	50	60	70	75	80	90	100
-2	70	80	95	99	105	112	118	121	123	124	127	129
-1	81	96	121	127	140	155	167	178	183	187	195	202
0	91	112	151	164	182	218	241	273	286	298	317	345
1	101	127	175	188	221	258	301	341	349	366	407	443
2	109	137	194	209	241	285	324	361	378	394	427	455

HYDRODRIP II

Maximum Recommended Dripline Length (m)

Emitter Type - HYDRODRIP II 20/25/1.8 (GREEN)

Nominal Flow Rate – **2.0 lph**

Working Pressure - 1.0 bar

Dripline Diameter **20/17.6 (O.D/I.D)**

* Slope %	Max. Flow rate Difference % **	Spacing Between Emitters (cm)											
		15	20	30	33	40	50	60	70	75	80	90	100
-2	7.5	40	45	52	54	56	59	61	62	63	63	64	65
	10	47	55	65	67	72	76	79	82	83	84	86	87
-1	7.5	47	56	69	73	79	87	94	99	101	103	106	109
	10	55	65	82	86	95	105	114	121	125	127	133	138
0	7.5	56	68	91	97	111	129	145	161	169	176	190	203
	10	62	76	102	109	124	145	163	181	189	197	213	228
1	7.5	62	78	108	117	136	162	187	211	222	234	257	278
	10	68	86	118	127	148	176	202	228	240	252	276	299
2	7.5	68	86	121	131	154	185	83	77	76	75	74	73
	10	74	93	130	141	165	198	229	260	127	118	111	105

* SLOPES: - Flat Terrain (0) ; Downhill (1,2);Uphill(-1,-2)

** Maximum Allowable Flow Rate Variation Along The Same Lateral.

Emission Uniformity (EU) -90%

(Working pressure - 1.2 bar)

$$EU = \frac{Q_{\min}}{Q_{avr}} * (1 - 1.27 * CV)$$

* Slope %	Spacing Between Emitters (cm)											
	15	20	30	33	40	50	60	70	75	80	90	100
-2	64	74	89	92	99	106	111	115	116	118	121	122
-1	74	88	111	117	128	143	155	165	170	174	182	189
0	83	105	136	149	170	198	223	246	259	270	292	312
1	91	114	162	169	200	232	271	307	323	339	365	399
2	98	123	175	184	218	257	293	327	343	358	387	414

HYDRODRIP II

Maximum Recommended Dripline Length (m)

Emitter Type - HYDRODRIP II 20/35/1.8 (GREEN)

Emitter Type - HYDRODRIP II 20/45/1.8 (GREEN)

Nominal Flow Rate – **1.9 lph**

Working Pressure - 1.0 bar

Dripline Diameter **20/17.6 (O.D/I.D)**

* Slope %	Max. Flow rate Difference % **	Spacing Between Emitters (cm)											
		15	20	30	33	40	50	60	70	75	80	90	100
-2	7.5	40	46	53	54	57	60	61	63	64	64	65	65
	10	48	55	65	68	72	77	80	83	83	85	86	87
-1	7.5	48	57	70	73	80	88	94	99	102	104	107	110
	10	55	66	83	87	96	106	115	123	125	129	134	139
0	7.5	56	69	92	98	112	130	147	162	170	178	192	206
	10	63	77	103	110	126	146	165	183	191	199	215	231
1	7.5	63	79	110	118	137	164	188	213	224	236	259	282
	10	69	87	119	129	149	178	204	230	242	254	279	303
2	7.5	68	87	122	132	155	187	82	78	77	75	74	72
	10	74	94	132	143	166	200	232	263	127	118	110	106

* SLOPES: - Flat Terrain (0) ; Downhill (1,2);Uphill(-1,-2)

** Maximum Allowable Flow Rate Variation Along The Same Lateral.

Emission Uniformity (EU) -90%

(Working pressure - 1.2 bar)

$$EU = \frac{Q_{\min}}{Q_{avr}} * (1 - 1.27 * CV)$$

* Slope %	Spacing Between Emitters (cm)											
	15	20	30	33	40	50	60	70	75	80	90	100
-2	65	75	90	93	99	107	112	116	117	118	122	123
-1	74	89	112	118	130	144	157	167	172	176	184	191
0	83	106	141	149	172	199	226	246	260	273	295	316
1	92	119	164	171	201	242	271	311	327	342	366	402
2	99	124	177	185	220	260	296	330	346	362	391	418

HYDRODRIP II

Maximum Recommended Dripline Length (m)

Emitter Type - HYDRODRIP II 20/18/2 (GREEN)

Nominal Flow Rate – **1.9 lph**

Working Pressure - 1.0 bar

Dripline Diameter **20/17.6 (O.D/I.D)**

* Slope %	Max. Flow rate Difference % **	Spacing Between Emitters (cm)											
		15	20	30	33	40	50	60	70	75	80	90	100
-2	7.5	41	47	55	56	59	62	64	66	66	67	68	69
	10	49	57	68	70	75	80	83	86	87	88	90	91
-1	7.5	49	58	72	75	82	91	97	103	105	107	112	115
	10	56	67	85	89	98	110	118	126	130	133	139	144
0	7.5	57	70	93	100	114	133	149	165	173	181	195	209
	10	64	79	105	112	128	149	167	186	194	202	219	235
1	7.5	64	80	111	119	139	165	190	215	227	238	262	284
	10	70	88	121	130	151	180	206	232	245	258	282	306
2	7.5	69	88	124	134	157	189	91	83	82	79	78	77
	10	75	96	133	144	168	202	234	265	145	132	119	114

* SLOPES: - Flat Terrain (0) ; Downhill (1,2);Uphill(-1,-2)

** Maximum Allowable Flow Rate Variation Along The Same Lateral.

Emission Uniformity (EU) -90%

(Working pressure - 1.2 bar)

$$EU = \frac{Q_{\min}}{Q_{avr}} * (1 - 1.27 * CV)$$

* Slope %	Spacing Between Emitters (cm)											
	15	20	30	33	40	50	60	70	75	80	90	100
-2	66	77	92	95	102	110	115	119	121	122	125	127
-1	76	91	114	120	132	148	160	171	176	180	188	196
0	85	107	143	149	174	201	229	246	263	277	300	321
1	94	120	165	173	201	238	272	314	331	347	367	402
2	100	126	179	187	221	263	300	335	351	367	397	425

HYDRODRIP II

Maximum Recommended Dripline Length (m)

Emitter Type - HYDRODRIP II 20/25/2 (GREEN)

Nominal Flow Rate – **2.2 lph**

Working Pressure - 1.0 bar

Dripline Diameter **20/17.6 (O.D/I.D)**

* Slope %	Max. Flow rate Difference % **	Spacing Between Emitters (cm)											
		15	20	30	33	40	50	60	70	75	80	90	100
-2	7.5	39	44	52	53	56	59	61	63	64	64	65	66
	10	46	53	64	66	71	76	79	82	83	84	86	87
-1	7.5	45	54	67	70	77	85	92	97	99	102	105	109
	10	52	62	79	83	92	102	111	118	122	125	131	135
0	7.5	53	65	86	92	105	122	137	153	160	166	180	193
	10	59	72	96	103	118	137	154	171	179	186	202	216
1	7.5	58	74	101	109	127	151	174	197	207	218	239	260
	10	64	81	111	119	138	164	189	213	224	235	257	280
2	7.5	63	81	113	122	143	172	95	83	81	79	77	75
	10	69	87	122	132	154	185	214	242	256	145	122	114

* SLOPES: - Flat Terrain (0) ; Downhill (1,2);Uphill(-1,-2)

** Maximum Allowable Flow Rate Variation Along The Same Lateral.

Emission Uniformity (EU) -90%

(Working pressure - 1.2 bar)

$$EU = \frac{Q_{min}}{Q_{avr}} * (1 - 1.27 * CV)$$

* Slope %	Spacing Between Emitters (cm)											
	15	20	30	33	40	50	60	70	75	80	90	100
-2	62	72	87	90	97	104	110	114	116	118	121	123
-1	70	84	107	112	124	139	151	161	166	170	178	185
0	80	99	132	141	160	187	210	234	245	255	272	296
1	86	110	151	164	184	224	249	281	301	318	347	375
2	91	116	164	177	201	242	276	308	323	338	366	392

HYDRODRIP II

Maximum Recommended Dripline Length (m)

Emitter Type - HYDRODRIP II 20/35/2 (GREEN)

Emitter Type - HYDRODRIP II 20/45/2(GREEN)

Nominal Flow Rate – **2.1 lph**

Working Pressure - 1.0 bar

Dripline Diameter **20/17.6 (O.D/I.D)**

* Slope %	Max. Flow rate Difference % **	Spacing Between Emitters (cm)											
		15	20	30	33	40	50	60	70	75	80	90	100
-2	7.5	39	45	52	54	57	60	62	64	65	65	66	67
	10	47	54	65	67	72	77	80	83	85	86	87	89
-1	7.5	46	55	68	72	78	87	93	99	101	103	107	110
	10	53	63	80	84	93	104	113	120	124	126	132	138
0	7.5	53	66	87	93	106	124	140	155	162	169	183	196
	10	60	74	98	105	119	139	157	174	182	190	205	219
1	7.5	59	75	103	111	129	154	177	200	211	222	243	264
	10	65	82	113	121	140	167	192	216	228	239	262	284
2	7.5	64	82	115	124	145	175	97	85	82	81	78	77
	10	70	89	124	134	156	188	217	246	260	146	123	116

* SLOPES: - Flat Terrain (0) ; Downhill (1,2);Uphill(-1,-2)

** Maximum Allowable Flow Rate Variation Along The Same Lateral.

Emission Uniformity (EU) -90%

(Working pressure - 1.2 bar)

$$EU = \frac{Q_{\min}}{Q_{avr}} * (1 - 1.27 * CV)$$

* Slope %	Spacing Between Emitters (cm)											
	15	20	30	33	40	50	60	70	75	80	90	100
-2	63	73	88	91	98	106	111	116	117	119	122	124
-1	72	86	108	114	126	141	152	163	168	172	181	188
0	82	100	134	143	161	190	211	238	249	259	281	299
1	89	110	151	165	187	226	261	284	302	321	353	381
2	93	120	165	180	203	246	280	313	329	343	372	398

HYDRODRIP II

Maximum Recommended Dripline Length (m)

Emitter Type - HYDRODRIP II 20/18/2.3 (YELLOW)

Nominal Flow Rate – **2.3 lph**

Working Pressure - 1.0 bar

Dripline Diameter **20/17.6 (O.D/I.D)**

* Slope %	Max. Flow rate Difference % **	Spacing Between Emitters (cm)											
		15	20	30	33	40	50	60	70	75	80	90	100
-2	7.5	39	45	53	55	58	62	64	66	67	67	68	70
	10	46	53	65	67	72	78	82	85	87	88	90	92
-1	7.5	45	53	67	70	77	86	92	99	101	103	108	111
	10	51	62	78	83	92	103	112	120	123	126	132	138
0	7.5	51	63	84	89	102	119	134	148	155	162	176	188
	10	57	70	94	100	114	133	151	167	174	182	196	210
1	7.5	56	71	98	105	122	145	167	188	198	209	229	248
	10	62	78	107	115	133	158	181	204	215	226	248	268
2	7.5	61	77	108	117	137	164	190	202	94	90	86	83
	10	66	84	117	126	147	176	204	231	244	257	283	138

* SLOPES: - Flat Terrain (0) ; Downhill (1,2);Uphill(-1,-2)

** Maximum Allowable Flow Rate Variation Along The Same Lateral.

Emission Uniformity (EU) -90%

(Working pressure - 1.2 bar)

$$EU = \frac{Q_{\min}}{Q_{avr}} * (1 - 1.27 * CV)$$

* Slope %	Spacing Between Emitters (cm)											
	15	20	30	33	40	50	60	70	75	80	90	100
-2	62	72	87	91	98	106	112	117	119	121	124	127
-1	69	83	105	111	123	138	150	161	166	170	179	186
0	76	96	128	133	156	177	205	228	238	242	267	287
1	83	104	143	153	181	210	241	278	292	306	324	352
2	88	111	154	166	197	229	266	298	313	327	355	381

HYDRODRIP II

Maximum Recommended Dripline Length (m)

Emitter Type - HYDRODRIP II 20/25/2.3 (YELLOW)

Nominal Flow Rate – **2.7 lph**

Working Pressure - 1.0 bar

Dripline Diameter **20/17.6 (O.D/I.D)**

* Slope %	Max. Flow rate Difference % **	Spacing Between Emitters (cm)											
		15	20	30	33	40	50	60	70	75	80	90	100
-2	7.5	34	40	47	49	52	55	57	59	60	61	61	62
	10	41	47	57	59	64	69	73	76	77	78	80	82
-1	7.5	40	47	59	62	68	76	82	88	90	92	96	99
	10	45	54	69	73	81	91	99	106	109	112	118	122
0	7.5	45	55	74	79	90	105	118	131	137	142	154	165
	10	50	62	83	88	101	117	132	146	153	160	173	185
1	7.5	50	62	86	92	107	127	146	165	174	183	201	218
	10	55	68	94	101	117	139	159	179	188	198	217	235
2	7.5	53	68	95	102	120	144	167	99	89	83	78	75
	10	58	74	102	111	129	155	179	202	214	225	248	128

* SLOPES: - Flat Terrain (0) ; Downhill (1,2);Uphill(-1,-2)

** Maximum Allowable Flow Rate Variation Along The Same Lateral.

Emission Uniformity (EU) -90%

(Working pressure - 1.2 bar)

$$EU = \frac{Q_{\min}}{Q_{avr}} * (1 - 1.27 * CV)$$

* Slope %	Spacing Between Emitters (cm)											
	15	20	30	33	40	50	60	70	75	80	90	100
-2	55	64	78	81	88	96	101	106	108	110	113	115
-1	61	74	94	99	110	123	134	144	149	153	160	168
0	68	85	113	121	138	160	180	201	210	219	237	253
1	75	91	129	134	160	190	211	244	257	269	293	317
2	77	100	136	149	173	201	235	263	275	288	313	336

HYDRODRIP II

Maximum Recommended Dripline Length (m)

Emitter Type - HYDRODRIP II 20/35/2.3 (YELLOW)

Emitter Type - HYDRODRIP II 20/45/2.3 (YELLOW)

Nominal Flow Rate – **2.7 lph**

Working Pressure - 1.0 bar

Dripline Diameter **20/17.6 (O.D/I.D)**

* Slope %	Max. Flow rate Difference % **	Spacing Between Emitters (cm)											
		15	20	30	33	40	50	60	70	75	80	90	100
-2	7.5	35	41	48	50	53	57	59	61	62	62	63	64
	10	41	48	59	61	66	71	75	78	80	81	83	84
-1	7.5	40	48	61	64	70	78	84	90	92	94	98	102
	10	46	55	71	75	83	93	101	109	112	114	121	125
0	7.5	46	56	75	80	92	107	121	133	140	146	158	168
	10	51	63	84	90	103	120	135	149	156	163	176	189
1	7.5	51	63	87	94	109	130	149	168	177	186	204	221
	10	56	70	95	103	119	141	162	182	192	202	221	239
2	7.5	54	69	96	104	122	146	170	193	93	86	81	78
	10	59	75	104	113	132	157	182	206	218	229	252	135

* SLOPES: - Flat Terrain (0) ; Downhill (1,2);Uphill(-1,-2)

** Maximum Allowable Flow Rate Variation Along The Same Lateral.

Emission Uniformity (EU) -90%

(Working pressure - 1.2 bar)

$$EU = \frac{Q_{\min}}{Q_{avr}} * (1 - 1.27 * CV)$$

* Slope %	Spacing Between Emitters (cm)											
	15	20	30	33	40	50	60	70	75	80	90	100
-2	56	65	80	83	90	98	103	108	110	112	115	118
-1	63	75	95	101	112	126	137	147	152	156	164	171
0	68	87	115	123	140	164	181	204	214	223	241	258
1	75	93	131	137	161	193	215	246	261	274	299	323
2	79	100	137	149	176	209	239	267	281	294	319	343

HYDRODRIP II

Maximum Recommended Dripline Length (m)

Emitter Type - HYDRODRIP II 20/18/3.6 (WHITE)

Nominal Flow Rate – **3.6 lph**

Working Pressure - 1.0 bar

Dripline Diameter **20/17.6 (O.D/I.D)**

* Slope %	Max. Flow rate Difference % **	Spacing Between Emitters (cm)											
		15	20	30	33	40	50	60	70	75	80	90	100
-2	7.5	31	36	44	46	50	54	56	59	60	61	62	64
	10	36	43	53	55	60	66	71	74	76	78	80	82
-1	7.5	34	41	53	56	62	70	76	81	84	86	90	94
	10	39	47	61	65	72	82	89	97	100	103	109	114
0	7.5	38	47	63	67	76	89	100	111	116	122	131	140
	10	43	53	70	75	86	100	112	125	131	136	147	158
1	7.5	41	52	71	76	88	105	120	135	143	150	164	177
	10	46	57	78	84	97	115	131	147	155	163	178	193
2	7.5	44	56	77	84	98	117	135	153	161	170	187	204
	10	48	61	84	91	106	126	145	165	173	182	201	218

* SLOPES: - Flat Terrain (0) ; Downhill (1,2);Uphill(-1,-2)

** Maximum Allowable Flow Rate Variation Along The Same Lateral.

Emission Uniformity (EU) -90%

(Working pressure - 1.2 bar)

$$EU = \frac{Q_{\min}}{Q_{avr}} * (1 - 1.27 * CV)$$

* Slope %	Spacing Between Emitters (cm)											
	15	20	30	33	40	50	60	70	75	80	90	100
-2	49	57	71	75	82	90	96	102	104	106	110	113
-1	53	64	83	87	97	110	121	130	135	139	147	154
0	58	70	96	100	117	136	151	170	179	186	201	215
1	61	79	106	115	133	153	179	202	212	222	243	255
2	66	81	115	120	141	170	195	218	227	241	262	282

HYDRODRIP II

Maximum Recommended Dripline Length (m)

Emitter Type - HYDRODRIP II 20/25/3.6 (WHITE)

Nominal Flow Rate – **4.0 lph**

Working Pressure - 1.0 bar

Dripline Diameter **20/17.6 (O.D/I.D)**

* Slope %	Max. Flow rate Difference % **	Spacing Between Emitters (cm)											
		15	20	30	33	40	50	60	70	75	80	90	100
-2	7.5	29	34	41	43	46	50	53	55	56	57	59	60
	10	33	39	49	51	56	62	66	69	71	72	75	77
-1	7.5	32	38	49	52	57	65	70	76	78	80	84	88
	10	36	44	56	60	67	76	83	90	93	95	101	106
0	7.5	35	43	58	62	70	82	92	102	107	112	121	129
	10	39	48	65	69	79	92	103	115	120	125	135	145
1	7.5	38	48	65	70	81	96	110	124	131	137	150	163
	10	42	52	71	77	89	105	121	135	143	150	163	176
2	7.5	40	51	71	77	89	107	124	140	148	155	171	186
	10	44	56	77	83	97	116	133	151	159	167	184	199

* SLOPES: - Flat Terrain (0) ; Downhill (1,2);Uphill(-1,-2)

** Maximum Allowable Flow Rate Variation Along The Same Lateral.

Emission Uniformity (EU) -90%

(Working pressure - 1.2 bar)

$$EU = \frac{Q_{\min}}{Q_{avr}} * (1 - 1.27 * CV)$$

* Slope %	Spacing Between Emitters (cm)											
	15	20	30	33	40	50	60	70	75	80	90	100
-2	45	53	66	70	76	84	90	95	98	99	104	107
-1	49	59	77	81	90	102	112	121	125	130	137	144
0	53	66	88	94	108	125	142	157	164	171	185	198
1	58	70	98	106	121	145	165	185	189	202	222	240
2	60	77	105	114	132	153	179	200	211	221	240	259

HYDRODRIP II

Maximum Recommended Dripline Length (m)

Emitter Type - HYDRODRIP II 20/35/3.6 (WHITE)

Emitter Type - HYDRODRIP II 20/45/3.6 (WHITE)

Nominal Flow Rate – **4.1 lph**

Working Pressure - 1.0 bar

Dripline Diameter **20/17.6 (O.D/I.D)**

* Slope %	Max. Flow rate Difference % **	Spacing Between Emitters (cm)											
		15	20	30	33	40	50	60	70	75	80	90	100
-2	7.5	28	33	41	43	46	50	53	55	56	57	59	60
	10	33	39	49	51	56	61	65	69	71	72	75	77
-1	7.5	32	38	48	51	57	64	70	75	77	79	84	87
	10	36	43	56	59	66	75	82	89	92	95	100	105
0	7.5	35	43	57	61	70	81	91	101	106	110	120	128
	10	39	48	64	68	78	91	103	113	119	124	134	143
1	7.5	38	47	64	69	80	95	109	123	129	135	148	160
	10	41	52	71	76	88	104	119	133	140	147	161	174
2	7.5	40	50	70	76	88	106	122	138	146	154	169	184
	10	44	55	76	82	96	114	131	148	157	165	181	197

* SLOPES: - Flat Terrain (0) ; Downhill (1,2);Uphill(-1,-2)

** Maximum Allowable Flow Rate Variation Along The Same Lateral.

Emission Uniformity (EU) -90%

(Working pressure - 1.2 bar)

$$EU = \frac{Q_{\min}}{Q_{avr}} * (1 - 1.27 * CV)$$

* Slope %	Spacing Between Emitters (cm)											
	15	20	30	33	40	50	60	70	75	80	90	100
-2	45	53	66	69	76	83	89	95	97	99	103	106
-1	49	59	76	80	90	101	112	120	125	129	136	143
0	53	66	87	93	106	124	140	155	162	170	183	196
1	57	70	97	101	120	143	163	177	189	200	220	237
2	60	76	104	112	130	151	176	197	209	218	238	256

HYDRODRIP II

Maximum Recommended Dripline Length (m)

Emitter Type - HYDRODRIP II 25/18/1.8 (GREEN)

Nominal Flow Rate – **1.7 lph**

Working Pressure - 1.0 bar

Dripline Diameter **25/22.2 (O.D/I.D)**

* Slope %	Max. Flow rate Difference % **	Spacing Between Emitters (cm)											
		15	20	30	33	40	50	60	70	75	80	90	100
-2	7.5	54	59	64	65	67	69	67	68	69	70	69	72
	10	67	75	84	86	89	92	94	95	96	96	97	98
-1	7.5	71	81	98	101	107	114	121	124	125	126	128	132
	10	83	98	119	124	134	146	154	160	164	166	170	174
0	7.5	91	112	149	159	181	211	238	264	275	290	312	332
	10	102	126	168	179	204	238	269	298	311	325	351	376
1	7.5	107	136	190	205	239	286	331	376	399	198	173	167
	10	117	148	206	222	259	309	357	405	428	450	494	538
2	7.5	119	153	91	85	81	76	73	75	73	74	74	72
	10	129	165	233	252	133	115	109	106	106	106	104	104

* SLOPES: - Flat Terrain (0) ; Downhill (1,2);Uphill(-1,-2)

** Maximum Allowable Flow Rate Variation Along The Same Lateral.

Emission Uniformity (EU) -90%

(Working pressure - 1.2 bar)

$$EU = \frac{Q_{\min}}{Q_{avr}} * (1 - 1.27 * CV)$$

* Slope %	Spacing Between Emitters (cm)											
	15	20	30	33	40	50	60	70	75	80	90	100
-2	91	102	116	119	123	128	131	134	134	135	137	138
-1	112	132	161	168	182	198	210	220	224	228	235	240
0	136	170	226	238	278	324	361	395	414	441	480	502
1	156	197	272	292	341	405	458	526	554	581	630	679
2	168	212	299	320	368	429	467	512	533	552	585	252

HYDRODRIP II

Maximum Recommended Dripline Length (m)

Emitter Type - HYDRODRIP II 25/35/1.8 (GREEN)

Nominal Flow Rate – **2.0 lph**

Working Pressure - 1.0 bar

Dripline Diameter **25/22.2 (O.D/I.D)**

* Slope %	Max. Flow rate Difference % **	Spacing Between Emitters (cm)											
		15	20	30	33	40	50	60	70	75	80	90	100
-2	7.5	52	56	61	62	63	65	65	66	66	66	67	67
	10	64	71	79	81	84	86	88	89	89	90	91	91
-1	7.5	68	79	93	97	103	110	114	118	119	121	122	125
	10	80	94	114	119	128	138	146	152	155	157	160	164
0	7.5	89	109	145	155	177	206	232	257	269	281	303	325
	10	99	122	162	174	198	230	260	288	302	314	339	364
1	7.5	105	133	185	200	234	281	325	369	185	170	160	154
	10	114	144	200	217	252	302	348	395	417	439	482	279
2	7.5	117	150	83	78	74	72	70	69	69	70	69	70
	10	125	161	227	246	116	105	100	98	98	98	97	96

* SLOPES: - Flat Terrain (0) ; Downhill (1,2);Uphill(-1,-2)

** Maximum Allowable Flow Rate Variation Along The Same Lateral.

Emission Uniformity (EU) -90%

(Working pressure - 1.2 bar)

$$EU = \frac{Q_{\min}}{Q_{avr}} * (1 - 1.27 * CV)$$

* Slope %	Spacing Between Emitters (cm)											
	15	20	30	33	40	50	60	70	75	80	90	100
-2	88	98	110	113	118	122	125	127	128	129	130	131
-1	108	127	155	161	174	190	201	211	215	218	224	229
0	135	162	222	232	271	315	356	386	411	430	452	496
1	152	192	264	285	329	401	451	513	539	564	613	659
2	165	210	290	311	357	415	451	494	513	531	560	244

HYDRODRIP II

Maximum Recommended Dripline Length (m)

Emitter Type - HYDRODRIP II 25/18/2 (GREEN)

Nominal Flow Rate – **2.0 lph**

Working Pressure - 1.0 bar

Dripline Diameter **25/22.2 (O.D/I.D)**

* Slope %	Max. Flow rate Difference % **	Spacing Between Emitters (cm)											
		15	20	30	33	40	50	60	70	75	80	90	100
-2	7.5	52	57	63	64	66	68	68	69	70	70	70	71
	10	64	72	81	83	86	90	92	93	94	94	95	96
-1	7.5	67	78	93	97	104	112	117	121	123	125	127	129
	10	78	92	113	118	128	139	148	155	158	160	165	169
0	7.5	85	104	139	148	169	196	221	245	257	268	289	310
	10	95	117	155	166	189	220	248	275	288	300	325	348
1	7.5	98	125	174	188	219	263	304	344	364	383	419	473
	10	108	136	188	203	237	283	326	368	390	410	451	490
2	7.5	109	140	110	90	82	78	76	76	75	74	74	73
	10	118	151	212	230	270	118	110	108	107	106	104	103

* SLOPES: - Flat Terrain (0) ; Downhill (1,2);Uphill(-1,-2)

** Maximum Allowable Flow Rate Variation Along The Same Lateral.

Emission Uniformity (EU) -90%

(Working pressure - 1.2 bar)

$$EU = \frac{Q_{\min}}{Q_{avr}} * (1 - 1.27 * CV)$$

* Slope %	Spacing Between Emitters (cm)											
	15	20	30	33	40	50	60	70	75	80	90	100
-2	87	98	112	115	120	125	128	131	132	133	134	136
-1	106	124	152	159	173	189	202	211	216	220	227	233
0	128	155	211	220	258	300	331	376	382	402	444	475
1	144	181	249	268	310	376	425	485	510	534	581	626
2	154	195	271	295	340	397	448	478	498	516	552	580

HYDRODRIP II

Maximum Recommended Dripline Length (m)

Emitter Type - HYDRODRIP II 25/35/2 (GREEN)

Nominal Flow Rate – **1.8 lph**

Working Pressure - 1.0 bar

Dripline Diameter **25/22.2 (O.D/I.D)**

* Slope %	Max. Flow rate Difference % **	Spacing Between Emitters (cm)											
		15	20	30	33	40	50	60	70	75	80	90	100
-2	7.5	53	58	63	64	66	67	68	69	69	70	69	70
	10	65	73	82	83	86	90	91	92	93	94	95	95
-1	7.5	69	79	95	98	105	113	118	122	123	125	127	129
	10	80	94	115	120	130	141	149	156	158	161	166	169
0	7.5	88	108	144	154	175	204	230	255	267	278	301	322
	10	98	121	161	172	196	229	258	286	299	312	337	361
1	7.5	103	131	182	197	230	275	319	362	383	400	476	565
	10	113	142	197	213	248	296	342	387	410	430	473	515
2	7.5	115	147	93	85	79	76	74	74	74	73	73	72
	10	123	158	223	242	132	112	107	104	104	102	102	101

* SLOPES: - Flat Terrain (0) ; Downhill (1,2);Uphill(-1,-2)

** Maximum Allowable Flow Rate Variation Along The Same Lateral.

Emission Uniformity (EU) -90%

(Working pressure - 1.2 bar)

$$EU = \frac{Q_{\min}}{Q_{avr}} * (1 - 1.27 * CV)$$

* Slope %	Spacing Between Emitters (cm)											
	15	20	30	33	40	50	60	70	75	80	90	100
-2	88	99	113	115	120	125	128	131	132	133	134	135
-1	109	127	156	163	176	192	204	214	218	222	229	234
0	130	161	214	232	261	303	353	386	408	427	452	494
1	150	189	260	281	324	384	451	507	527	558	606	652
2	161	204	286	308	353	412	464	494	513	532	566	252

HYDRODRIP II

Maximum Recommended Dripline Length (m)

Emitter Type - HYDRODRIP II 25/18/2.3 (YELLOW)

Nominal Flow Rate – **2.3 lph**

Working Pressure - 1.0 bar

Dripline Diameter **25/22.2 (O.D/I.D)**

* Slope %	Max. Flow rate Difference % **	Spacing Between Emitters (cm)											
		15	20	30	33	40	50	60	70	75	80	90	100
-2	7.5	50	55	62	63	65	67	68	69	70	70	71	71
	10	60	68	79	81	84	89	91	93	94	94	95	96
-1	7.5	62	72	88	91	99	107	113	118	120	122	125	127
	10	72	85	105	110	120	132	141	148	152	154	160	164
0	7.5	76	93	124	133	151	176	199	220	230	240	259	278
	10	85	104	139	149	170	197	223	246	258	270	291	312
1	7.5	87	110	153	165	192	230	266	300	317	334	368	400
	10	95	120	166	179	208	248	286	323	341	358	394	428
2	7.5	96	123	173	188	92	82	79	77	77	77	77	76
	10	104	132	186	201	236	146	120	114	112	110	108	107

* SLOPES: - Flat Terrain (0) ; Downhill (1,2);Uphill(-1,-2)

** Maximum Allowable Flow Rate Variation Along The Same Lateral.

Emission Uniformity (EU) -90%

(Working pressure - 1.2 bar)

$$EU = \frac{Q_{\min}}{Q_{avr}} * (1 - 1.27 * CV)$$

* Slope %	Spacing Between Emitters (cm)											
	15	20	30	33	40	50	60	70	75	80	90	100
-2	81	92	107	110	116	123	127	130	131	132	134	135
-1	96	114	142	149	162	178	191	202	207	211	219	225
0	113	140	185	199	225	270	301	337	343	362	398	426
1	127	160	220	237	275	326	373	421	451	474	516	552
2	136	172	241	263	302	355	402	445	465	470	505	535

HYDRODRIP II

Maximum Recommended Dripline Length (m)

Emitter Type - HYDRODRIP II 25/35/2.3 (YELLOW)

Nominal Flow Rate – **2.3 lph**

Working Pressure - 1.0 bar

Dripline Diameter **25/22.2 (O.D/I.D)**

* Slope %	Max. Flow rate Difference % **	Spacing Between Emitters (cm)											
		15	20	30	33	40	50	60	70	75	80	90	100
-2	7.5	48	54	60	61	63	65	67	67	68	68	68	69
	10	59	67	77	79	82	86	88	90	91	91	93	93
-1	7.5	61	71	86	89	96	104	110	115	116	118	122	124
	10	70	83	103	108	118	129	137	145	148	150	156	160
0	7.5	75	92	122	131	149	174	196	217	227	237	256	274
	10	83	103	137	147	167	194	220	243	254	266	287	307
1	7.5	86	109	151	163	190	228	263	298	314	331	365	209
	10	94	119	164	177	206	246	283	320	338	355	390	424
2	7.5	95	121	172	186	87	79	76	74	74	74	73	73
	10	102	131	184	199	234	133	115	108	106	106	104	102

* SLOPES: - Flat Terrain (0) ; Downhill (1,2);Uphill(-1,-2)

** Maximum Allowable Flow Rate Variation Along The Same Lateral.

Emission Uniformity (EU) -90%

(Working pressure - 1.2 bar)

$$EU = \frac{Q_{\min}}{Q_{avr}} * (1 - 1.27 * CV)$$

* Slope %	Spacing Between Emitters (cm)											
	15	20	30	33	40	50	60	70	75	80	90	100
-2	80	91	105	108	114	120	124	127	128	129	131	132
-1	95	112	139	146	159	175	188	198	203	206	214	220
0	113	140	182	199	222	266	299	333	339	361	392	421
1	125	158	218	234	271	326	368	421	447	468	510	549
2	135	172	241	259	299	350	397	439	459	462	497	526

HYDRODRIP II

Maximum Recommended Dripline Length (m)

Emitter Type - HYDRODRIP II 25/18/3.6 (WHITE)

Nominal Flow Rate – **3.7 lph**

Working Pressure - 1.0 bar

Dripline Diameter **25/22.2 (O.D/I.D)**

* Slope %	Max. Flow rate Difference % **	Spacing Between Emitters (cm)											
		15	20	30	33	40	50	60	70	75	80	90	100
-2	7.5	42	48	56	57	60	64	65	67	68	69	69	70
	10	50	57	68	71	76	81	85	88	89	90	92	94
-1	7.5	49	58	72	76	83	92	98	104	107	109	113	117
	10	56	67	85	89	99	110	119	127	131	134	140	146
0	7.5	57	70	93	99	114	132	149	165	173	180	194	209
	10	64	78	104	112	127	148	167	186	194	202	219	234
1	7.5	63	80	110	119	138	164	189	214	225	237	259	175
	10	70	87	120	129	150	178	205	231	243	256	280	304
2	7.5	68	87	122	132	155	187	100	87	85	83	82	80
	10	74	95	132	143	167	200	232	263	278	145	126	120

* SLOPES: - Flat Terrain (0) ; Downhill (1,2);Uphill(-1,-2)

** Maximum Allowable Flow Rate Variation Along The Same Lateral.

Emission Uniformity (EU) -90%

(Working pressure - 1.2 bar)

$$EU = \frac{Q_{\min}}{Q_{avr}} * (1 - 1.27 * CV)$$

* Slope %	Spacing Between Emitters (cm)											
	15	20	30	33	40	50	60	70	75	80	90	100
-2	67	77	93	96	103	111	116	121	123	125	128	130
-1	75	91	114	121	133	149	161	172	177	182	190	198
0	84	104	138	149	174	201	229	246	263	277	299	320
1	93	117	160	172	201	236	271	313	329	335	365	402
2	99	125	173	186	221	262	299	333	350	366	396	424

HYDRODRIP II

Maximum Recommended Dripline Length (m)

Emitter Type - HYDRODRIP II 25/35/3.6 (WHITE)

Nominal Flow Rate – **3.5 lph**

Working Pressure - 1.0 bar

Dripline Diameter **25/22.2 (O.D/I.D)**

* Slope %	Max. Flow rate Difference % **	Spacing Between Emitters (cm)											
		15	20	30	33	40	50	60	70	75	80	90	100
-2	7.5	41	47	54	55	58	61	63	64	65	66	67	67
	10	49	57	67	70	74	79	82	85	86	86	88	90
-1	7.5	49	58	72	75	82	91	97	102	104	106	110	113
	10	56	67	85	89	98	109	118	126	129	132	138	143
0	7.5	58	71	94	101	115	134	151	167	175	182	197	211
	10	64	79	106	113	129	150	169	188	197	205	221	237
1	7.5	64	81	112	121	141	168	194	218	231	242	266	289
	10	71	89	122	132	153	182	209	236	249	262	287	311
2	7.5	70	89	125	136	159	192	85	80	79	78	76	75
	10	76	97	135	146	171	206	238	270	131	122	113	109

* SLOPES: - Flat Terrain (0) ; Downhill (1,2);Uphill(-1,-2)

** Maximum Allowable Flow Rate Variation Along The Same Lateral.

Emission Uniformity (EU) -90%

(Working pressure - 1.2 bar)

$$EU = \frac{Q_{min}}{Q_{avr}} * (1 - 1.27 * CV)$$

* Slope %	Spacing Between Emitters (cm)											
	15	20	30	33	40	50	60	70	75	80	90	100
-2	67	77	92	95	102	109	114	118	120	122	124	126
-1	76	91	115	121	133	148	160	171	176	180	188	195
0	88	108	145	150	176	201	232	257	264	279	302	324
1	94	120	166	180	203	248	276	316	336	352	384	406
2	101	130	180	195	223	267	304	339	355	371	401	430

HYDROGOL DRIPLINES

Main features:

- * Large surface inlet screen
- * High clogging resistance
- * Complies with emission uniformity category A
- * Available in spacing of 10-250cm between emitters.
- * Can be ordered with one or two orifice outlets.

MATERIALS:

Dripline: Linear Low Density P.E.

Dripper: Polyethylene

SPECIFICATION:

- * Dripline nominal diameter: 12,16, 20 mm
constant I.D. – 10.4, 13.8, 17.6 mm.
 - * Dripline wall thickness: 0.65, 0.9, 1.0, 1.1 mm
 - * Recommended working pressure:
0.8-1.4 bar
 - * Operating range: 0.8-3.5 bar
- Nominal emission rate:
- Hydrogol 12 mm: 1.0, 2.2, 3.0 lph
- Hydrogol 16 mm: 1.6, 2.2, 4.0,10.0 lph
- Hydrogol 20 mm: 2.2, 2.5, 3.0, 4.0 lph



HYDROGOL – 12/25

INTEGRAL DRIPPER

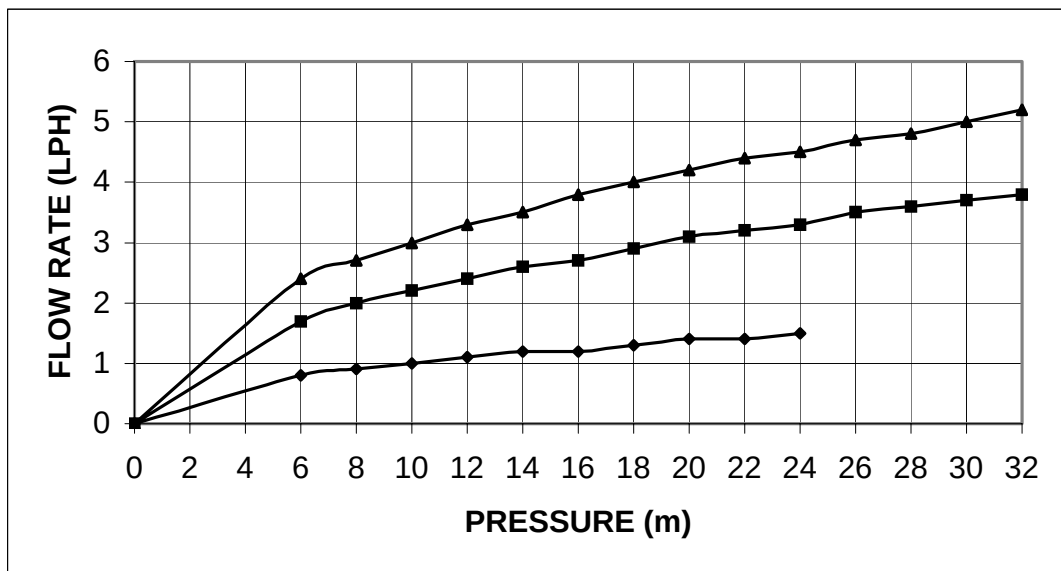
FLOW RATE DATA

TYPE	COLOR	Q=AxH^B *		%DH **	FLOW RATE (LPH) VS PRESSURE															
		A	B		6m	8m	10m	12m	14m	16m	18m	20m	22m	24m	26m	28m	30m	32m		
12/25/1	GREY	0.3270	0.4733	22.30	0.8	0.9	1.0	1.1	1.2	1.2	1.3	1.4	1.4	1.5						
12/25/2	GREEN	0.7426	0.4705	22.50	1.7	2.0	2.2	2.4	2.6	2.7	2.9	3.1	3.2	3.3	3.5	3.6	3.7	3.8		
12/25/3	RED	1.0593	0.4540	23.40	2.4	2.7	3.0	3.3	3.5	3.8	4.0	4.2	4.4	4.5	4.7	4.8	5.0	5.2		

* - Q= LPH H=m.

** - %DH - MAXIMUM ALLOWABLE HEAD LOSS VARIATION
ALONG A LATERAL (AS PERCENT OF THE WORKING PRESSURE)
TO KEEP FLOW RATE VARIATION $\leq 10\%$
OF WORKING FLOW RATE.

Performance Chart



HYDROGOL – 16/25

INTEGRAL DRIPPER

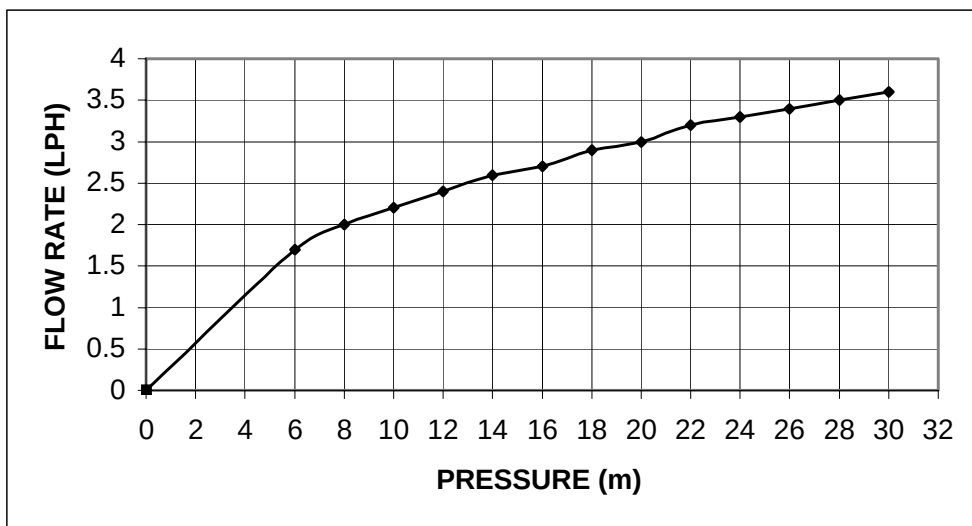
FLOW RATE DATA

TYPE	COLOR	Q=A _x H ^B *		%DH **	FLOW RATE (LPH) VS PRESSURE													
		A	B		6m	8m	10m	12m	14m	16m	18m	20m	22m	24m	26m	28m	30m	32m
16/25/2	GREEN	0.7616	0.4621	22.9	1.7	2.0	2.2	2.4	2.6	2.7	2.9	3.0	3.2	3.3	3.4	3.5	3.6	

* - Q= LPH H=m.

** - %DH - MAXIMUM ALLOWABLE HEAD LOSS VARIATION
ALONG A LATERAL (AS PERCENT OF THE WORKING PRESSURE)
TO KEEP FLOW RATE VARIATION $\leq 10\%$
OF WORKING FLOW RATE.

Performance Chart



HYDROGOL – 16/35

INTEGRAL DRIPPER

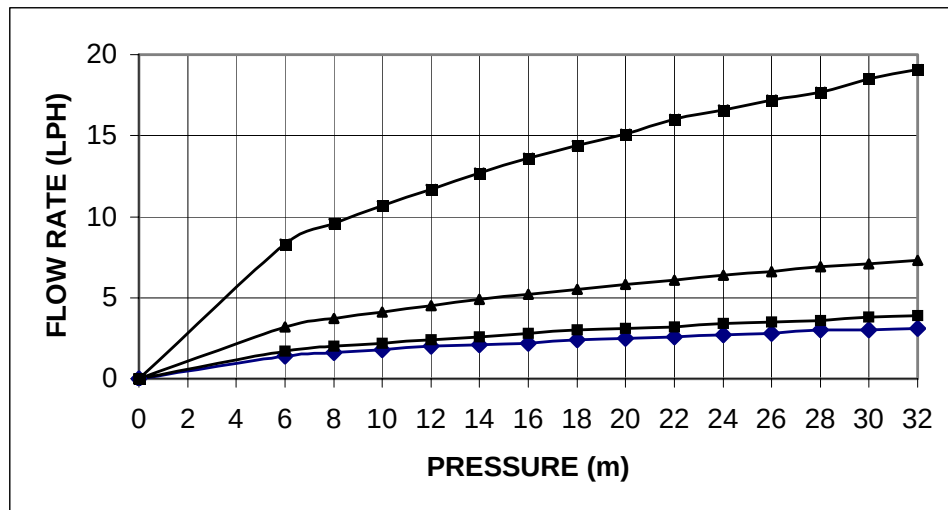
FLOW RATE DATA

TYPE	COLOR	Q=A _x H ^B *		%DH **	FLOW RATE (LPH) VS PRESSURE													
		A	B		6m	8m	10m	12m	14m	16m	18m	20m	22m	24m	26m	28m	30m	32m
16/35/1.6	VIOLET	0.5770	0.4900	21.50	1.4	1.6	1.8	2.0	2.1	2.2	2.4	2.5	2.6	2.7	2.8	3.0	3.0	3.1
16/35/2	GREEN	0.6920	0.5020	20.90	1.7	2.0	2.2	2.4	2.6	2.8	3.0	3.1	3.2	3.4	3.5	3.6	3.8	3.9
16/35/4	WHITE	1.2748	0.5077	20.70	3.2	3.7	4.1	4.5	4.9	5.2	5.5	5.8	6.1	6.4	6.6	6.9	7.1	7.3
16/35/10	BLUE	3.3483	0.5047	20.80	8.3	9.6	10.7	11.7	12.7	13.6	14.4	15.1	16.0	16.6	17.2	17.7	18.5	19.1

* - Q= LPH H=m.

** - %DH - MAXIMUM ALLOWABLE HEAD LOSS VARIATION
ALONG A LATERAL (AS PERCENT OF THE WORKING PRESSURE)
TO KEEP FLOW RATE VARIATION ≤ 10%
OF WORKING FLOW RATE.

Performance Chart



HYDROGOL – 16/40

INTEGRAL DRIPPER

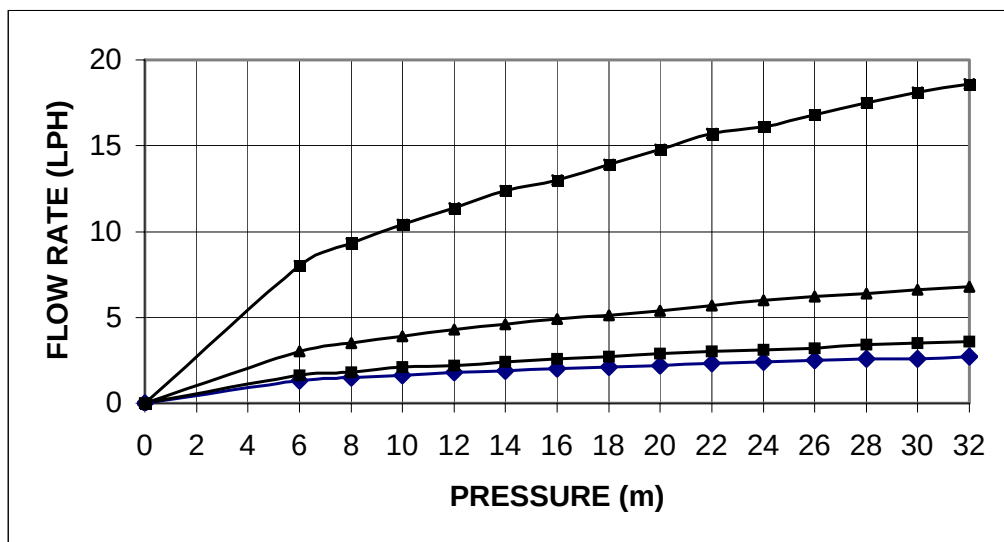
FLOW RATE DATA

TYPE	COLOR	Q=A $\times$ H ^A B * *		%DH **	FLOW RATE (LPH) VS PRESSURE													
		A	B		6m	8m	10m	12m	14m	16m	18m	20m	22m	24m	26m	28m	30m	32m
16/40/1.6	VIOLET	0.5318	0.4797	22.0	1.3	1.5	1.6	1.8	1.9	2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.6	2.7
16/40/2	GREEN	0.6749	0.4850	21.7	1.6	1.8	2.1	2.2	2.4	2.6	2.7	2.9	3.0	3.1	3.2	3.4	3.5	3.6
16/40/4	WHITE	1.3071	0.4766	22.1	3.0	3.5	3.9	4.3	4.6	4.9	5.1	5.4	5.7	6.0	6.2	6.4	6.6	6.8
16/40/10	BLUE	3.2938	0.5010	21.0	8.0	9.3	10.4	11.4	12.4	13.0	13.9	14.8	15.7	16.1	16.8	17.5	18.1	18.6

* - Q= LPH H=m.

** - %DH - MAXIMUM ALLOWABLE HEAD LOSS VARIATION
ALONG A LATERAL (AS PERCENT OF THE WORKING PRESSURE)
TO KEEP FLOW RATE VARIATION $\leq 10\%$
OF WORKING FLOW RATE.

Performance Chart



HYDROGOL – 16/45

INTEGRAL DRIPPER

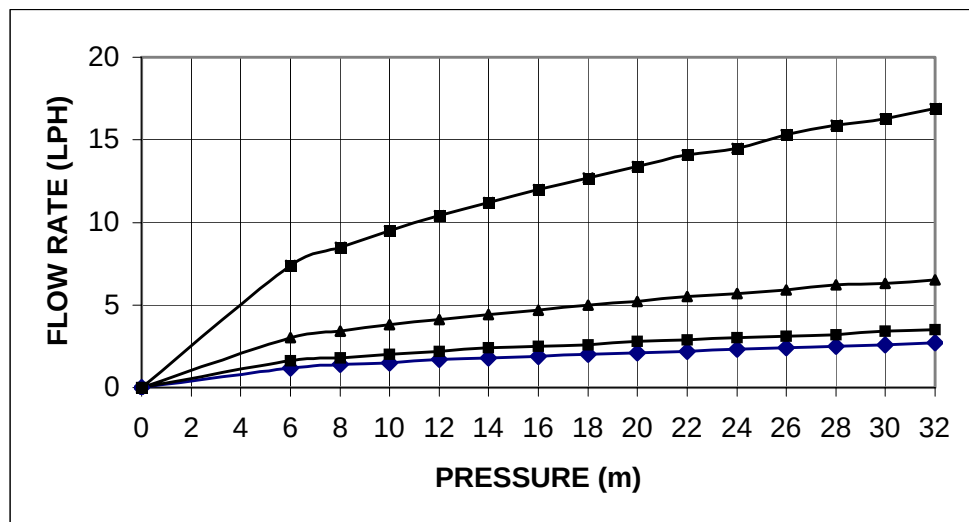
FLOW RATE DATA

TYPE	COLOR	Q=A _x H ^B *		%D H **	FLOW RATE (LPH) VS PRESSURE													
		A	B		6m	8m	10m	12m	14m	16m	18m	20m	22m	24m	26m	28m	30m	32m
16/45/1.6	VIOLET	0.4889	0.4920	21.4	1.2	1.4	1.5	1.7	1.8	1.9	2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.7
16/45/2	GREEN	0.7119	0.4510	23.5	1.6	1.8	2.0	2.2	2.4	2.5	2.6	2.8	2.9	3.0	3.1	3.2	3.4	3.5
16/45/4	WHITE	1.3089	0.4605	23.0	3.0	3.4	3.8	4.1	4.4	4.7	5.0	5.2	5.5	5.7	5.9	6.2	6.3	6.5
16/45/10	BLUE	2.9919	0.5011	20.9	7.4	8.5	9.5	10.4	11.2	12.0	12.7	13.4	14.1	14.5	15.3	15.9	16.3	16.9

* - Q= LPH H=m.

** - %DH - MAXIMUM ALLOWABLE HEAD LOSS VARIATION
ALONG A LATERAL (AS PERCENT OF THE WORKING PRESSURE)
TO KEEP FLOW RATE VARIATION ≤ 10%
OF WORKING FLOW RATE.

Performance Chart



HYDROGOL – 20/35

INTEGRAL DRIPPER

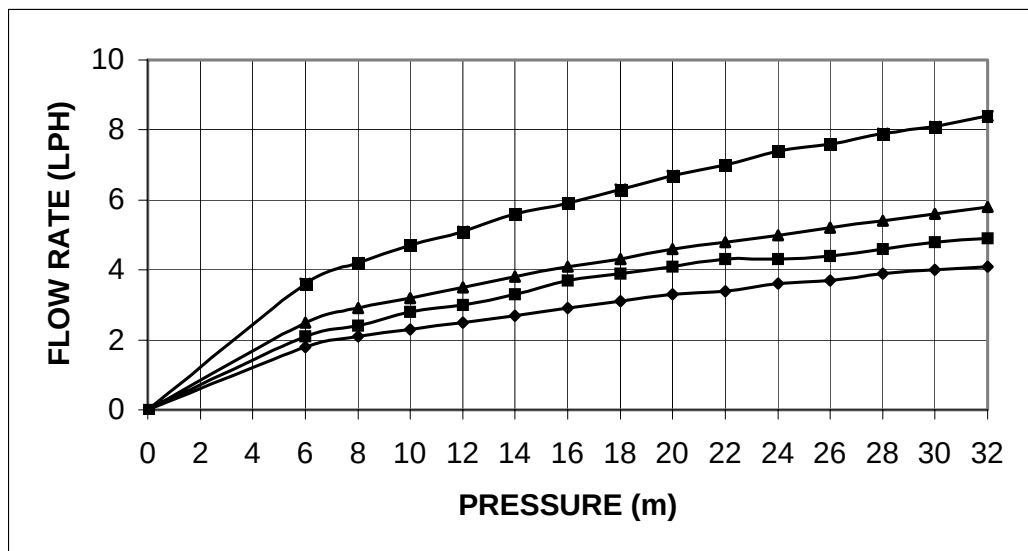
FLOW RATE DATA

TYPE	COLOR	Q=A $\times$ H ^A B *		%DH **	FLOW RATE (LPH) VS PRESSURE													
		A	B		6m	8m	10m	12m	14m	16m	18m	20m	22m	24m	26m	28m	30m	32m
20/35/2	GREEN	0.6970	0.5180	20.0	1.8	2.1	2.3	2.5	2.7	2.9	3.1	3.3	3.4	3.6	3.7	3.9	4.0	4.1
20/35/2.5	YELLOW	0.8430	0.5110	20.0	2.1	2.4	2.8	3.0	3.3	3.7	3.9	4.1	4.3	4.3	4.4	4.6	4.8	4.9
20/35/3	RED	1.0211	0.5000	21.0	2.5	2.9	3.2	3.5	3.8	4.1	4.3	4.6	4.8	5.0	5.2	5.4	5.6	5.8
20/35/4	WHITE	1.4900	0.4983	21.0	3.6	4.2	4.7	5.1	5.6	5.9	6.3	6.7	7.0	7.4	7.6	7.9	8.1	8.4

* - Q= LPH H=m.

** - %DH - MAXIMUM ALLOWABLE HEAD LOSS VARIATION
ALONG A LATERAL (AS PERCENT OF THE WORKING PRESSURE)
TO KEEP FLOW RATE VARIATION $\leq 10\%$
OF WORKING FLOW RATE.

Performance Chart



HYDROGOL – 20/40

INTEGRAL DRIPPER

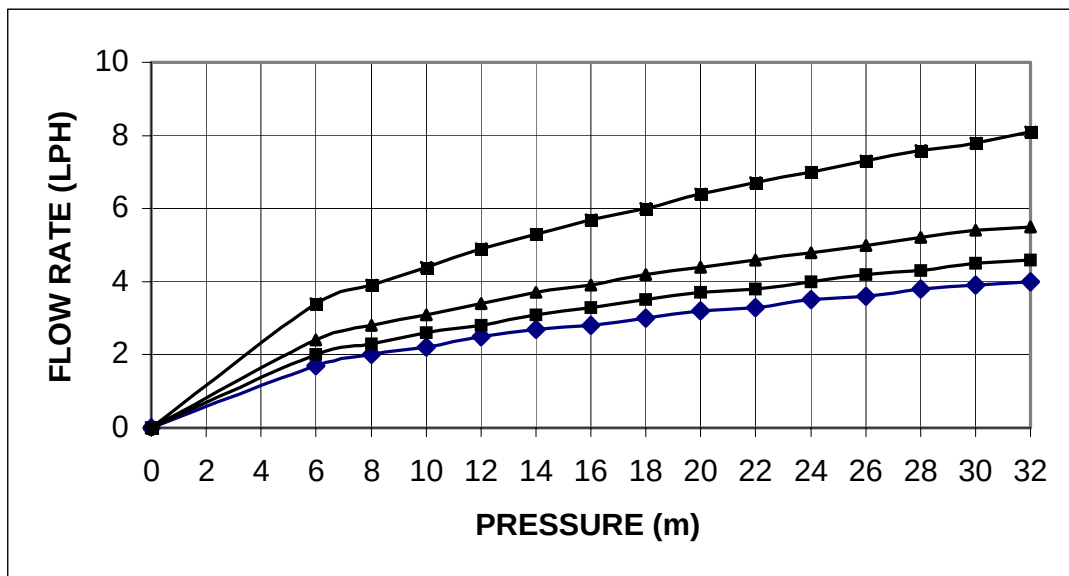
FLOW RATE DATA

TYPE	COLOR	Q=AxH^B *		%DH **	FLOW RATE (LPH) VS PRESSURE													
		A	B		6m	8m	10m	12m	14m	16m	18m	20m	22m	24m	26m	28m	30m	32m
20/40/2	GREEN	0.6715	0.5220	20.0	1.7	2.0	2.2	2.5	2.7	2.8	3.0	3.2	3.3	3.5	3.6	3.8	3.9	4.0
20/40/2.5	YELLOW	0.7790	0.5180	20.2	2.0	2.3	2.6	2.8	3.1	3.3	3.5	3.7	3.8	4.0	4.2	4.3	4.5	4.6
20/40/3	RED	0.9790	0.5000	21.0	2.4	2.8	3.1	3.4	3.7	3.9	4.2	4.4	4.6	4.8	5.0	5.2	5.4	5.5
20/40/4	WHITE	1.3120	0.5290	19.7	3.4	3.9	4.4	4.9	5.3	5.7	6.0	6.4	6.7	7.0	7.3	7.6	7.8	8.1

* - Q= LPH H=m.

** - %DH - MAXIMUM ALLOWABLE HEAD LOSS VARIATION
ALONG A LATERAL (AS PERCENT OF THE WORKING PRESSURE)
TO KEEP FLOW RATE VARIATION $\leq 10\%$
OF WORKING FLOW RATE.

Performance Chart



HYDROGOL – 20/45

INTEGRAL DRIPPER

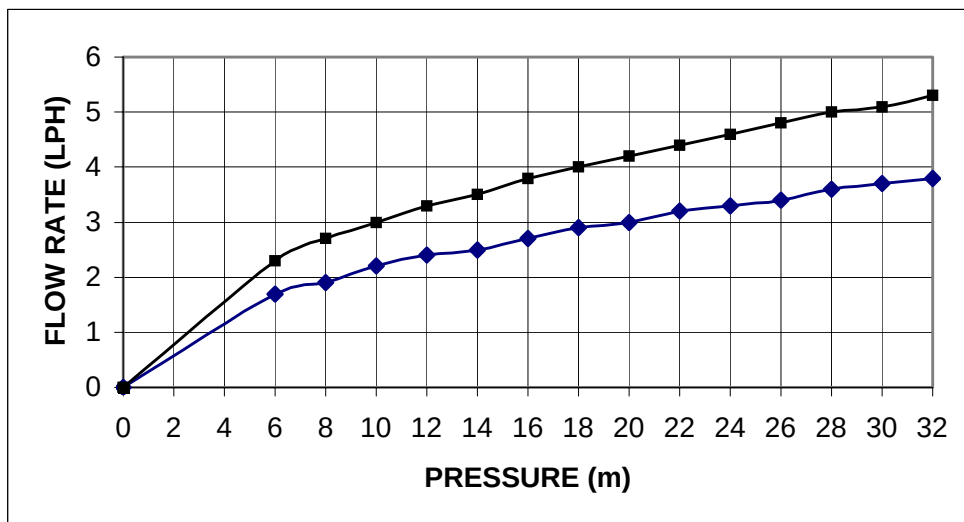
FLOW RATE DATA

TYPE	COLOR	Q=AxH^B *		%DH **	FLOW RATE (LPH) VS PRESSURE														
		A	B		6m	8m	10m	12m	14m	16m	18m	20m	22m	24m	26m	28m	30m	32m	
20/45/2	GREEN	0.7031	0.4860	21.7	1.7	1.9	2.2	2.4	2.5	2.7	2.9	3.0	3.2	3.3	3.4	3.6	3.7	3.8	
20/45/3	RED	0.9797	0.4880	21.6	2.3	2.7	3.0	3.3	3.5	3.8	4.0	4.2	4.4	4.6	4.8	5.0	5.1	5.3	

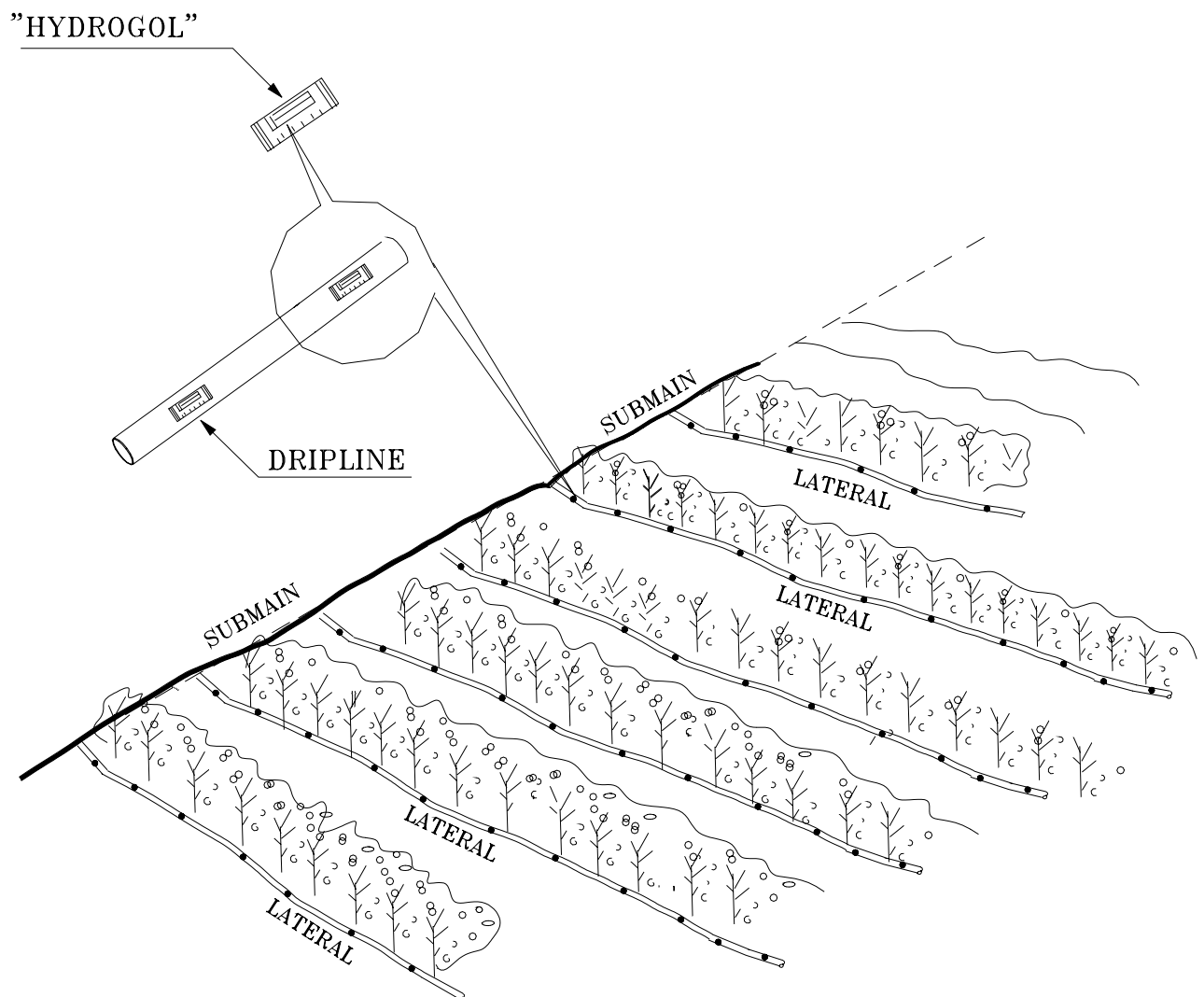
* - Q= LPH H=m.

** - %DH - MAXIMUM ALLOWABLE HEAD LOSS VARIATION
ALONG A LATERAL (AS PERCENT OF THE WORKING PRESSURE)
TO KEEP FLOW RATE VARIATION ≤ 10%
OF WORKING FLOW RATE.

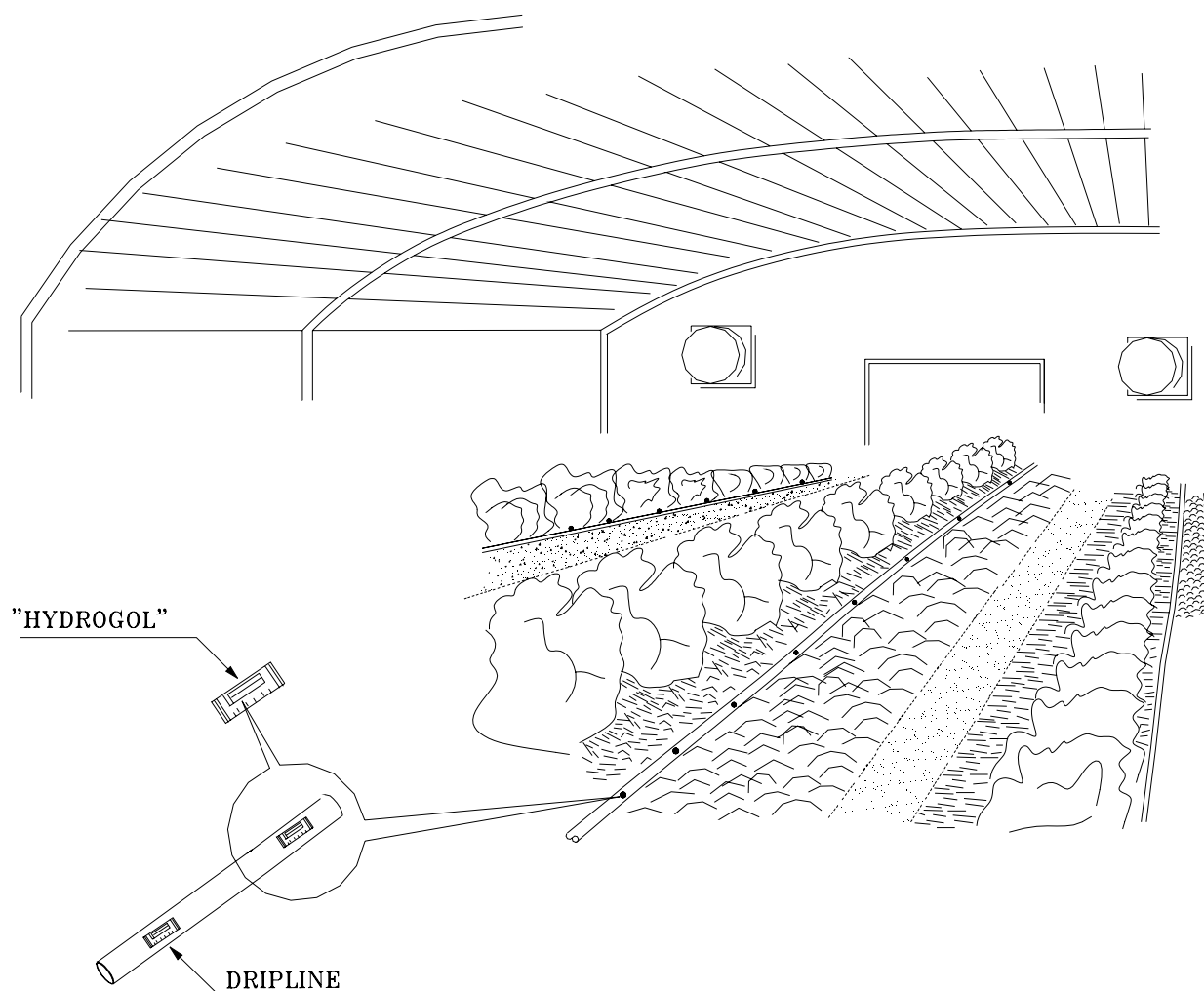
Performance Chart



FIELD/ROW CROPS
DRIP IRRIGATION
“HYDROGOL”
INTEGRAL DRIPLINE



GREENHOUSE
DRIP IRRIGATION
“HYDROGOL”
INTEGRAL DRIPLINE



HYDROGOL

MAXIMUM RECOMMENDED DRIPLINE LENGTH (m)

EMITTER TYPE - **HYDROGOL 12/25**

NOMINAL FLOW RATE – **1.0 LPH**

WORKING PRESSURE - 1.0 BAR

LATERAL DIAMETER **10.4** (I.D.)

* SLOPE %	MAX. FLOW RATE VARIATION % **	SPACING BETWEEN EMITTERS (cm)											
		15	20	30	33	40	50	60	70	75	80	90	100
-2	7.5	26	32	41	43	48	54	58	62	63	65	68	69
	10	29	36	48	51	57	64	70	75	77	79	83	86
-1	7.5	28	34	46	50	56	65	72	78	82	84	90	94
	10	31	39	53	56	64	75	83	92	95	99	105	111
0	7.5	29	37	52	56	65	77	88	99	104	109	118	127
	10	33	42	58	63	73	87	99	111	116	122	132	143
1	7.5	31	40	56	61	72	86	100	113	120	126	140	152
	10	34	44	62	68	80	95	110	125	132	139	153	166
2	7.5	32	41	60	65	77	94	110	126	134	141	157	171
	10	35	46	66	72	85	103	121	137	146	154	170	185

* SLOPES: FLAT TERRAIN (0) ; DOWNHILL (1,2); UPHILL (-1,-2)

** MAXIMUM ALLOWABLE FLOW RATE VARIATION ALONG THE SAME DRIPLINE.

EMISSION UNIFORMITY (EU) -90%

(working pressure - 1.2 bar)

$$EU = \frac{Q_{\min}}{Q_{\text{avr}}} \quad * (1 - 1.27 * CV)$$

* SLOPE %	SPACING BETWEEN EMITTERS (cm)											
	15	20	30	33	40	50	60	70	75	80	90	100
-2	45	50	76	83	81	101	121	141	148	122	137	152
-1	45	60	76	83	101	126	121	141	152	162	182	202
0	45	60	76	83	101	126	151	176	189	162	182	202
1	45	60	91	100	121	126	151	176	189	202	227	252
2	45	60	91	100	121	151	181	211	227	202	227	252

HYDROGOL

MAXIMUM RECOMMENDED DRIPLINE LENGTH (m)

EMITTER TYPE - **HYDROGOL 12/25**

NOMINAL FLOW RATE - **2.2 LPH**

WORKING PRESSURE - 1.0 BAR

LATERAL DIAMETER 10.4 (I.D.)

* SLOPE %	MAX. FLOW RATE VARIATION % **	SPACING BETWEEN EMITTERS (cm)											
		15	20	30	33	40	50	60	70	75	80	90	100
-2	7.5	16	20	27	28	32	37	41	44	46	47	50	53
	10	18	23	31	33	37	43	48	52	54	56	59	63
-1	7.5	17	21	29	31	35	41	46	51	53	55	59	63
	10	19	23	32	35	40	47	53	58	61	64	68	73
0	7.5	17	22	30	33	38	45	52	58	61	64	69	75
	10	19	24	34	37	43	51	58	65	68	72	78	84
1	7.5	18	23	32	35	41	49	56	64	68	71	77	84
	10	20	25	36	39	45	55	63	71	75	78	86	93
2	7.5	18	23	34	36	43	52	60	69	73	76	84	92
	10	20	26	37	40	47	57	66	76	80	84	92	101

* SLOPES: FLAT TERRAIN (0) ; DOWNHILL (1,2); UPHILL (-1,-2)

** MAXIMUM ALLOWABLE FLOW RATE VARIATION ALONG THE SAME DRIPLINE.

EMISSION UNIFORMITY (EU) -90%

(working pressure - 1.2 bar)

$$EU = \frac{Q_{\min}}{Q_{\text{avr}}} * (1 - 1.27 * CV)$$

* SLOPE %	SPACING BETWEEN EMITTERS (cm)											
	15	20	30	33	40	50	60	70	75	80	90	100
-2	30	40	46	50	61	76	88	96	99	102	110	102
-1	30	40	46	50	61	76	91	106	110	114	123	132
0	30	40	61	67	61	76	91	106	114	122	137	152
1	30	40	61	67	81	76	91	106	114	122	137	152
2	30	40	61	67	81	101	121	106	114	122	137	152

HYDROGOL

MAXIMUM RECOMMENDED DRIPLINE LENGTH (m)

EMITTER TYPE - **HYDROGOL 12/25**

NOMINAL FLOW RATE – **3.0 LPH**

WORKING PRESSURE - 1.0 BAR

LATERAL DIAMETER 10.4 (I.D.)

* SLOPE %	MAX. FLOW RATE VARIATION % **	SPACING BETWEEN EMITTERS (cm)											
		15	20	30	33	40	50	60	70	75	80	90	100
-2	7.5	13	17	23	24	28	32	35	39	41	42	45	47
	10	15	19	26	27	32	37	41	45	47	49	52	55
-1	7.5	14	17	24	26	30	35	39	43	46	47	51	54
	10	15	19	27	29	33	39	44	49	52	54	58	62
0	7.5	14	18	25	27	32	38	43	48	50	53	58	62
	10	16	20	28	30	35	42	48	54	56	59	65	69
1	7.5	14	19	26	29	34	40	46	52	55	58	63	68
	10	16	21	29	32	37	44	51	57	61	64	70	76
2	7.5	15	19	27	29	35	42	49	55	59	62	68	74
	10	16	21	30	33	38	46	53	60	64	67	74	80

* SLOPES: FLAT TERRAIN (0) ; DOWNHILL (1,2); UPHILL (-1,-2)

** MAXIMUM ALLOWABLE FLOW RATE VARIATION ALONG THE SAME DRIPLINE.

EMISSION UNIFORMITY (EU) -90%

(working pressure - 1.2 bar)

$$EU = \frac{Q_{\min}}{Q_{\text{avr}}} * (1 - 1.27 * CV)$$

* SLOPE %	SPACING BETWEEN EMITTERS (cm)											
	15	20	30	33	40	50	60	70	75	80	90	100
-2	23	30	46	49	57	66	73	71	77	82	92	97
-1	23	30	46	50	59	71	79	89	92	98	92	102
0	23	30	46	50	61	76	85	96	103	106	114	127
1	23	30	46	50	61	76	91	103	110	118	128	137
2	23	30	46	50	61	76	91	106	114	122	132	147

“HYDROGOL” DRIPLINE

BC 14

HYDROGOL

MAXIMUM RECOMMENDED DRIPLINE LENGTH (m)

EMITTER TYPE - **HYDROGOL 12/35/1**

NOMINAL FLOW RATE – **0.9 LPH**

WORKING PRESSURE - 1.0 BAR

LATERAL DIAMETER 10.4 (I.D.)

* SLOPE %	MAX. FLOW RATE VARIATION % **	SPACING BETWEEN EMITTERS (cm)											
		15	20	30	33	40	50	60	70	75	80	90	100
-2	7.5	25	31	40	42	47	52	56	60	61	62	65	66
	10	29	36	47	50	56	63	69	74	76	78	81	84
-1	7.5	27	34	46	49	55	64	71	77	80	82	87	92
	10	31	39	53	56	64	74	83	91	95	98	104	110
0	7.5	29	37	52	56	65	77	88	99	104	109	118	127
	10	33	42	59	63	73	87	100	111	117	122	133	144
1	7.5	31	40	57	62	73	88	102	116	122	129	142	154
	10	35	44	63	69	81	97	113	127	135	142	157	170
2	7.5	32	42	61	66	79	96	112	129	137	144	159	174
	10	36	47	67	73	86	105	123	140	149	157	174	189

* SLOPES: FLAT TERRAIN (0) ; DOWNHILL (1,2); UPHILL (-1,-2)

** MAXIMUM ALLOWABLE FLOW RATE VARIATION ALONG THE SAME DRIPLINE.

EMISSION UNIFORMITY (EU) -90%

(working pressure - 1.2 bar)

$$EU = \frac{Q_{\min}}{Q_{\text{avr}}} * (1 - 1.27 * CV)$$

* SLOPE %	SPACING BETWEEN EMITTERS (cm)											
	15	20	30	33	40	50	60	70	75	80	90	100
-2	46	56	75	80	90	101	111	120	123	126	133	139
-1	49	61	82	88	101	118	130	142	150	156	167	176
0	52	66	92	99	115	137	156	176	187	196	209	225
1	54	70	100	108	127	153	178	202	213	224	246	267
2	57	74	106	115	136	164	191	216	229	242	270	293

HYDROGOL

MAXIMUM RECOMMENDED DRIPLINE LENGTH (m)

EMITTER TYPE - **HYDROGOL 12/35/2**

NOMINAL FLOW RATE – **2.2 LPH**

WORKING PRESSURE - 1.0 BAR

LATERAL DIAMETER 10.4 (I.D.)

* SLOPE %	MAX. FLOW RATE VARIATION % **	SPACING BETWEEN EMITTERS (cm)											
		15	20	30	33	40	50	60	70	75	80	90	100
-2	7.5	16	19	26	27	31	36	40	43	44	46	48	50
	10	18	22	30	32	36	42	47	51	53	54	58	61
-1	7.5	16	20	28	30	34	40	45	49	52	54	58	61
	10	19	23	32	34	39	46	52	57	60	62	67	71
0	7.5	17	22	30	32	38	45	51	57	60	63	68	74
	10	19	24	34	37	42	51	58	65	68	71	77	84
1	7.5	17	22	32	34	40	49	56	64	67	70	77	84
	10	20	25	35	39	45	54	62	71	74	78	86	93
2	7.5	18	23	33	36	43	52	61	69	73	77	85	92
	10	20	26	37	40	47	57	67	76	80	84	93	101

* SLOPES: FLAT TERRAIN (0) ; DOWNHILL (1,2); UPHILL (-1,-2)

** MAXIMUM ALLOWABLE FLOW RATE VARIATION ALONG THE SAME DRIPLINE.

EMISSION UNIFORMITY (EU) -90%

(working pressure - 1.2 bar)

$$EU = \frac{Q_{min}}{Q_{avr}} * (1 - 1.27 * CV)$$

* SLOPE %	SPACING BETWEEN EMITTERS (cm)											
	15	20	30	33	40	50	60	70	75	80	90	100
-2	28	36	47	51	58	68	75	82	86	89	95	100
-1	29	37	50	54	62	74	83	92	96	100	108	115
0	30	39	54	59	67	80	91	104	110	114	125	134
1	31	40	58	62	73	86	100	113	119	125	137	150
2	32	41	60	65	77	93	108	120	127	134	147	159

20/02/2000

HYDROGOL

“HYDROGOL” DRIPLINE

BC 16

MAXIMUM RECOMMENDED DRIPLINE LENGTH (m)

EMITTER TYPE - **HYDROGOL 12/35/3**

NOMINAL FLOW RATE – **3.0 LPH**

WORKING PRESSURE - 1.0 BAR

LATERAL DIAMETER 10.4 (I.D.)

* SLOPE %	MAX. FLOW RATE VARIATION % **	SPACING BETWEEN EMITTERS (cm)											
		15	20	30	33	40	50	60	70	75	80	90	100
-2	7.5	13	16	22	24	27	31	35	38	40	41	43	46
	10	15	18	25	27	30	36	40	43	45	46	50	53
-1	7.5	14	17	23	25	29	34	38	43	44	46	50	53
	10	15	19	26	28	32	38	43	48	50	52	56	60
0	7.5	14	18	25	27	32	38	43	48	50	53	58	62
	10	16	20	28	30	35	42	47	53	56	58	64	69
1	7.5	15	19	26	29	34	40	46	53	56	58	64	69
	10	16	20	29	31	36	44	50	57	60	63	69	75
2	7.5	15	19	27	30	35	43	49	56	59	62	68	75
	10	16	21	30	32	38	46	53	61	64	67	74	81

* SLOPES: FLAT TERRAIN (0) ; DOWNHILL (1,2); UPHILL (-1,-2)

** MAXIMUM ALLOWABLE FLOW RATE VARIATION ALONG THE SAME DRIPLINE.

EMISSION UNIFORMITY (EU) -90%

(working pressure - 1.2 bar)

$$EU = \frac{Q_{\min}}{Q_{\text{avr}}} \quad * (1 - 1.27 * CV)$$

* SLOPE %	SPACING BETWEEN EMITTERS (cm)											
	15	20	30	33	40	50	60	70	75	80	90	100
-2	23	29	40	43	49	57	64	70	73	75	81	85
-1	24	30	42	45	52	61	69	77	80	84	90	96
0	25	31	44	48	56	66	76	85	89	94	102	110
1	25	32	46	50	59	71	82	92	98	102	113	122
2	26	33	47	52	61	75	86	98	104	109	120	130

20/02/2000

HYDROGOL

MAXIMUM RECOMMENDED DRIPLINE LENGTH (m)

“HYDROGOL” DRIPLINE

BC 17

EMITTER TYPE - **HYDROGOL 16/25/1**

NOMINAL FLOW RATE – **1.2 LPH**

WORKING PRESSURE – 1.0 BAR

LATERAL DIAMETER 13.8 (I.D.)

* SLOPE %	MAX. FLOW RATE VARIATION % **	SPACING BETWEEN EMITTERS (cm)											
		15	20	30	33	40	50	60	70	75	80	90	100
-2	7.5	35	41	51	54	58	63	66	69	70	70	72	73
	10	40	49	62	65	71	78	83	88	89	90	94	95
-1	7.5	39	47	62	66	74	83	91	97	101	103	108	113
	10	44	55	72	77	86	99	109	118	122	126	132	138
0	7.5	43	54	74	80	92	109	124	139	146	152	166	178
	10	48	61	84	90	104	123	140	157	164	172	187	201
1	7.5	46	59	84	91	107	130	151	171	181	190	210	228
	10	51	66	93	101	118	143	166	188	198	209	230	250
2	7.5	49	64	92	100	119	145	169	193	114	122	92	99
	10	54	70	101	110	130	157	184	210	222	235	259	152

* SLOPES: FLAT TERRAIN (0) ; DOWNHILL (1,2); UPHILL (-1,-2)

** MAXIMUM ALLOWABLE FLOW RATE VARIATION ALONG THE SAME DRIPLINE.

EMISSION UNIFORMITY (EU) -90%

(working pressure - 1.2 bar)

$$EU = \frac{Q_{\min}}{Q_{\text{avr}}} * (1 - 1.27 * CV)$$

* SLOPE %	SPACING BETWEEN EMITTERS (cm)											
	15	20	30	33	40	50	60	70	75	80	90	100
-2	63	76	97	102	114	126	137	143	148	151	158	162
-1	68	85	112	120	135	154	173	185	191	201	212	223
0	75	95	131	141	164	193	220	246	258	270	293	315
1	81	104	147	159	187	225	260	294	310	326	357	388
2	85	110	157	171	201	241	278	314	332	348	380	410

21/02/2000

HYDROGOL

MAXIMUM RECOMMENDED DRIPLINE LENGTH (m)

EMITTER TYPE - **HYDROGOL 16/25/1.6**

“HYDROGOL” DRIPLINE

BC 18

NOMINAL FLOW RATE – **1.9 LPH**
 WORKING PRESSURE - 1.0 BAR
 LATERAL DIAMETER 13.8 (I.D.)

* SLOPE %	MAX. FLOW RATE VARIATION % **	SPACING BETWEEN EMITTERS (cm)											
		15	20	30	33	40	50	60	70	75	80	90	100
-2	7.5	28	34	44	46	51	56	61	64	65	66	68	71
	10	32	39	50	53	59	66	71	76	78	80	83	86
-1	7.5	30	38	50	53	60	69	76	83	86	89	94	98
	10	34	42	56	60	68	78	87	95	98	102	108	114
0	7.5	33	41	57	61	71	84	95	106	112	118	127	137
	10	36	45	63	68	78	93	106	118	124	130	140	151
1	7.5	35	44	63	68	80	96	111	125	133	140	153	167
	10	38	48	68	74	86	104	120	136	143	151	166	180
2	7.5	36	47	67	73	86	105	122	140	149	157	173	189
	10	39	51	73	79	93	113	131	150	158	167	185	201

* SLOPES: FLAT TERRAIN (0) ; DOWNHILL (1,2); UPHILL (-1,-2)

** MAXIMUM ALLOWABLE FLOW RATE VARIATION ALONG THE SAME DRIPLINE.

EMISSION UNIFORMITY (EU) -90% (working pressure - 1.2 bar)

$$EU = \frac{Q_{\min}}{Q_{\text{avr}}} * (1 - 1.27 * CV)$$

* SLOPE %	SPACING BETWEEN EMITTERS (cm)											
	15	20	30	33	40	50	60	70	75	80	90	100
-2	50	61	79	84	95	106	117	125	129	133	138	145
-1	53	66	90	94	107	125	140	151	157	162	176	185
0	57	72	99	107	124	146	167	186	196	205	226	244
1	60	77	109	118	138	165	191	216	228	239	262	284
2	62	81	115	125	147	177	205	232	245	258	282	305

21/02/2000

HYDROGOL

MAXIMUM RECOMMENDED DRIPLINE LENGTH (m)

EMITTER TYPE - **HYDROGOL 16/25**

NOMINAL FLOW RATE – **2.2 LPH**

“HYDROGOL” DRIPLINE
 BC 19

WORKING PRESSURE - 1.0 BAR
LATERAL DIAMETER 13.8 (I.D.)

* SLOPE %	MAX. FLOW RATE VARIATION % **	SPACING BETWEEN EMITTERS (cm)											
		15	20	30	33	40	50	60	70	75	80	90	100
-2	7.5	27	33	42	44	49	55	59	62	64	66	68	70
	10	30	37	49	52	58	65	71	76	79	81	85	88
-1	7.5	28	35	47	51	57	66	73	80	83	86	91	96
	10	32	40	54	57	65	76	84	92	96	99	106	112
0	7.5	30	38	53	57	66	78	88	99	104	109	118	127
	10	34	43	59	63	73	87	99	111	116	122	131	142
1	7.5	32	41	57	62	73	87	100	113	120	126	139	150
	10	35	45	63	68	80	96	110	125	131	138	151	164
2	7.5	33	42	61	66	78	95	110	125	133	140	155	169
	10	36	47	66	72	85	103	119	136	144	152	167	183

* SLOPES: FLAT TERRAIN (0) ; DOWNHILL (1,2); UPHILL (-1,-2)

** MAXIMUM ALLOWABLE FLOW RATE VARIATION ALONG THE SAME DRIPLINE.

EMISSION UNIFORMITY (EU) -90%

(working pressure - 1.2 bar)

$$EU = \frac{Q_{\min}}{Q_{\text{avr}}} * (1 - 1.27 * CV)$$

* SLOPE %	SPACING BETWEEN EMITTERS (cm)											
	15	20	30	33	40	50	60	70	75	80	90	100
-2	46	57	75	80	88	101	111	120	123	126	133	139
-1	49	61	82	87	100	115	128	141	149	154	165	174
0	52	66	91	98	113	134	152	174	179	187	203	219
1	54	70	98	107	125	150	173	195	206	217	237	257
2	56	73	104	113	133	160	185	209	221	233	255	276

21/02/2000

HYDROGOL

MAXIMUM RECOMMENDED DRIPLINE LENGTH (m)

EMITTER TYPE - **HYDROGOL 16/25/4**

NOMINAL FLOW RATE – **4.4 LPH**

WORKING PRESSURE - 1.0 BAR

“HYDROGOL” DRIPLINE

BC 20

LATERAL DIAMETER 13.8 (I.D.)

* SLOPE %	MAX. FLOW RATE VARIATION % **	SPACING BETWEEN EMITTERS (cm)											
		15	20	30	33	40	50	60	70	75	80	90	100
-2	7.5	17	21	27	29	33	37	41	44	46	47	50	52
	10	19	24	32	34	38	43	48	52	54	55	59	61
-1	7.5	18	22	30	32	36	42	47	52	54	56	59	63
	10	20	25	34	36	41	48	54	60	62	65	69	74
0	7.5	18	23	32	35	40	48	54	60	64	66	72	78
	10	21	26	36	39	45	54	61	68	71	74	81	87
1	7.5	19	24	34	37	43	52	60	67	71	75	82	89
	10	21	27	38	41	48	58	67	75	80	83	91	99
2	7.5	20	25	36	39	46	56	64	73	77	82	90	98
	10	22	28	40	44	51	62	71	81	86	90	99	108

* SLOPES: FLAT TERRAIN (0) ; DOWNHILL (1,2); UPHILL (-1,-2)

** MAXIMUM ALLOWABLE FLOW RATE VARIATION ALONG THE SAME DRIPLINE.

EMISSION UNIFORMITY (EU) -90%

(working pressure - 1.2 bar)

$$EU = \frac{Q_{\min}}{Q_{\text{avr}}} * (1 - 1.27 * CV)$$

* SLOPE %	SPACING BETWEEN EMITTERS (cm)											
	15	20	30	33	40	50	60	70	75	80	90	100
-2	30	38	51	53	61	70	78	85	89	91	97	102
-1	31	40	54	58	66	76	87	96	101	104	112	119
0	32	41	58	63	72	85	97	108	114	120	131	141
1	34	43	61	66	78	93	107	119	125	132	144	156
2	35	45	63	69	81	99	115	130	137	144	158	168

21/02/2000

HYDROGOL

MAXIMUM RECOMMENDED DRIPLINE LENGTH (m)

EMITTER TYPE - **HYDROGOL 16/35/1**

NOMINAL FLOW RATE – **1.1 LPH**

WORKING PRESSURE – **1.0 BAR**

LATERAL DIAMETER 13.8 (I.D.)

“HYDROGOL” DRIPLINE

BC 21

* SLOPE %	MAX. FLOW RATE VARIATION % **	SPACING BETWEEN EMITTERS (cm)											
		15	20	30	33	40	50	60	70	75	80	90	100
-2	7.5	37	44	54	56	60	65	68	70	71	72	73	74
	10	44	52	65	69	75	82	86	90	92	94	95	98
-1	7.5	42	51	67	70	78	89	96	103	106	109	113	118
	10	48	59	78	83	93	105	116	125	129	133	140	146
0	7.5	47	59	81	88	101	119	136	151	159	166	181	194
	10	52	66	92	98	114	135	153	171	179	188	204	219
1	7.5	50	65	93	101	118	143	166	189	200	210	232	253
	10	56	72	103	111	131	157	182	207	219	230	254	276
2	7.5	54	70	102	111	132	161	188	206	214	216	92	95
	10	59	77	111	121	143	174	204	232	247	261	182	152

* SLOPES: FLAT TERRAIN (0) ; DOWNHILL (1,2); UPHILL (-1,-2)

** MAXIMUM ALLOWABLE FLOW RATE VARIATION ALONG THE SAME DRIPLINE.

EMISSION UNIFORMITY (EU) -90% (working pressure - 1.2 bar)

$$EU = \frac{Q_{\min}}{Q_{\text{avr}}} * (1 - 1.27 * CV)$$

* SLOPE %	SPACING BETWEEN EMITTERS (cm)											
	15	20	30	33	40	50	60	70	75	80	90	100
-2	68	82	106	109	121	133	145	153	154	159	165	169
-1	75	92	122	129	146	166	183	202	206	212	227	238
0	82	105	144	155	180	212	242	270	283	296	321	346
1	89	115	163	176	207	249	287	325	343	361	395	429
2	94	122	174	189	222	267	307	347	365	383	418	455

21/02/2000

HYDROGOL

MAXIMUM RECOMMENDED DRIPLINE LENGTH (m)

EMITTER TYPE - **HYDROGOL 16/35**

NOMINAL FLOW RATE – **1.8 LPH**

WORKING PRESSURE - 1.0 BAR

LATERAL DIAMETER 13.8 (I.D.)

* SLOPE %	MAX. FLOW RATE VARIATION % **	SPACING BETWEEN EMITTERS (cm)											
		15	20	30	33	40	50	60	70	75	80	90	100
-2	7.5	28	34	44	46	50	56	59	62	64	65	67	69
	10	33	40	52	55	61	68	73	78	80	82	85	88
-1	7.5	31	38	51	54	61	70	77	83	86	89	94	98
	10	35	44	59	62	71	81	91	99	102	106	113	118
0	7.5	33	42	58	62	72	86	97	109	114	119	130	139
	10	37	47	65	71	82	97	110	123	129	135	147	157
1	7.5	35	45	64	69	81	98	113	128	135	142	157	170
	10	39	51	71	77	90	108	125	141	149	157	172	188
2	7.5	37	48	69	75	88	107	125	143	152	161	177	192
	10	41	53	76	82	97	118	137	156	166	174	193	210

* SLOPES: FLAT TERRAIN (0) ; DOWNHILL (1,2); UPHILL (-1,-2)

** MAXIMUM ALLOWABLE FLOW RATE VARIATION ALONG THE SAME DRIPLINE.

EMISSION UNIFORMITY (EU) -90%

(working pressure - 1.2 bar)

$$EU = \frac{Q_{\min}}{Q_{\text{avr}}} \quad * (1 - 1.27 * CV)$$

* SLOPE %	SPACING BETWEEN EMITTERS (cm)											
	15	20	30	33	40	50	60	70	75	80	90	100
-2	45	60	76	83	101	101	121	141	152	162	137	152
-1	53	60	91	100	101	126	151	141	152	162	182	202
0	53	70	91	100	121	151	151	176	189	202	227	252
1	53	70	106	100	121	151	181	211	227	242	227	252
2	53	70	106	116	141	176	181	211	227	242	272	302

HYDROGOL

MAXIMUM RECOMMENDED DRIPLINE LENGTH (m)

EMITTER TYPE - **HYDROGOL 16/35**

NOMINAL FLOW RATE - **2.15 LPH**

WORKING PRESSURE - 1.0 BAR

LATERAL DIAMETER 13.8 (I.D.)

* SLOPE %	MAX. FLOW RATE VARIATION % **	SPACING BETWEEN EMITTERS (cm)											
		15	20	30	33	40	50	60	70	75	80	90	100
-2	7.5	25	31	40	42	46	52	55	59	60	62	64	66
	10	29	35	46	48	54	61	66	70	72	74	77	80
-1	7.5	27	34	45	48	54	62	69	75	78	81	86	90
	10	30	38	51	54	62	71	79	87	90	93	99	105
0	7.5	29	37	51	55	63	75	85	95	100	104	113	122
	10	32	41	56	60	70	83	94	106	111	116	126	135
1	7.5	31	40	57	60	70	84	97	110	116	122	133	144
	10	34	44	62	66	77	93	107	120	128	134	145	157
2	7.5	32	41	59	63	75	91	106	120	128	136	149	163
	10	35	45	65	69	82	99	115	131	139	146	161	175

* SLOPES: FLAT TERRAIN (0) ; DOWNHILL (1,2); UPHILL (-1,-2)

** MAXIMUM ALLOWABLE FLOW RATE VARIATION ALONG THE SAME DRIPLINE.

EMISSION UNIFORMITY (EU) -90% (working pressure - 1.2 bar)

$$EU = \frac{Q_{\min}}{Q_{\text{avr}}} \quad * (1 - 1.27 * CV)$$

* SLOPE %	SPACING BETWEEN EMITTERS (cm)											
	15	20	30	33	40	50	60	70	75	80	90	100
-2	43	52	68	72	80	90	98	106	114	122	116	121
-1	46	57	76	81	92	106	118	130	134	139	148	156
0	49	62	86	92	107	127	145	161	170	177	193	207
1	52	67	94	102	120	143	166	187	197	208	228	247
2	54	70	100	109	128	154	178	202	212	224	245	265

HYDROGOL

MAXIMUM RECOMMENDED DRIPLINE LENGTH (m)

EMITTER TYPE - **HYDROGOL 16/35**

NOMINAL FLOW RATE – **4.11 LPH**

WORKING PRESSURE - 1.0 BAR

LATERAL DIAMETER 13.8 (I.D.)

* SLOPE %	MAX. FLOW RATE VARIATION % **	SPACING BETWEEN EMITTERS (cm)											
		15	20	30	33	40	50	60	70	75	80	90	100
-2	7.5	17	22	29	30	34	39	43	46	47	49	51	53
	10	20	25	33	35	40	45	50	55	56	58	61	65
-1	7.5	18	23	31	33	38	44	49	54	56	58	62	66
	10	21	26	35	38	43	50	56	62	65	67	72	77
0	7.5	19	24	34	36	42	50	56	63	66	69	75	81
	10	21	27	38	40	47	56	63	71	74	78	85	91
1	7.5	20	25	36	39	45	54	62	71	74	78	86	93
	10	22	28	40	43	50	60	69	78	82	86	95	102
2	7.5	21	27	38	41	48	58	68	77	82	86	95	103
	10	23	29	41	45	53	64	74	84	89	94	103	112

* SLOPES: FLAT TERRAIN (0) ; DOWNHILL (1,2); UPHILL (-1,-2)

** MAXIMUM ALLOWABLE FLOW RATE VARIATION ALONG THE SAME DRIPLINE.

EMISSION UNIFORMITY (EU) -90% (working pressure - 1.2 bar)

$$EU = \frac{Q_{\min}}{Q_{\text{avr}}} \quad * (1 - 1.27 * CV)$$

* SLOPE %	SPACING BETWEEN EMITTERS (cm)											
	15	20	30	33	40	50	60	70	75	80	90	100
-2	31	39	52	55	63	71	79	85	92	94	96	102
-1	32	40	56	60	69	79	88	99	103	106	114	122
0	33	42	61	65	75	89	100	110	118	122	132	147
1	35	44	62	68	81	96	112	127	133	142	150	162
2	37	46	65	72	83	101	118	134	144	150	164	177

HYDROGOL

MAXIMUM RECOMMENDED DRIPLINE LENGTH (m)

EMITTER TYPE - **HYDROGOL 16/35**

NOMINAL FLOW RATE – **10.7 LPH**

WORKING PRESSURE - 1.0 BAR

LATERAL DIAMETER 13.8 (I.D.)

* SLOPE %	MAX. FLOW RATE VARIATION % **	SPACING BETWEEN EMITTERS (cm)											
		15	20	30	33	40	50	60	70	75	80	90	100
-2	7.5	10	13	17	18	21	24	27	29	31	32	34	36
	10	11	14	19	21	24	27	31	34	35	37	39	41
-1	7.5	10	13	18	19	22	26	29	32	34	35	38	40
	10	11	14	20	22	24	29	32	36	38	39	42	46
0	7.5	11	13	19	20	23	28	31	35	37	38	41	45
	10	12	15	21	22	26	31	35	39	41	42	46	50
1	7.5	11	14	19	21	24	29	34	38	40	42	45	49
	10	12	15	21	23	27	32	37	41	44	46	50	54
2	7.5	11	14	20	22	25	31	35	40	42	44	49	52
	10	12	16	22	24	28	33	38	43	46	48	53	57

* SLOPES: FLAT TERRAIN (0) ; DOWNHILL (1,2); UPHILL (-1,-2)

** MAXIMUM ALLOWABLE FLOW RATE VARIATION ALONG THE SAME DRIPLINE.

EMISSION UNIFORMITY (EU) -90%

(working pressure - 1.2 bar)

$$EU = \frac{Q_{\min}}{Q_{\text{avr}}} * (1 - 1.27 * CV)$$

* SLOPE %	SPACING BETWEEN EMITTERS (cm)											
	15	20	30	33	40	50	60	70	75	80	90	100
-2	18	23	31	33	38	44	49	54	56	58	63	67
-1	18	23	32	34	39	46	52	58	61	63	68	73
0	19	24	33	36	41	49	56	62	66	69	75	80
1	19	25	34	37	43	51	59	67	71	74	80	87
2	20	25	35	38	45	54	61	70	74	78	85	92

“HYDROGOL” DRIPLINE

BC 26

HYDROGOL

MAXIMUM RECOMMENDED DRIPLINE LENGTH (m)

EMITTER TYPE - **HYDROGOL 16/40/1**

NOMINAL FLOW RATE – **1.0 LPH**

WORKING PRESSURE – 1.0 BAR

LATERAL DIAMETER 13.8 (I.D.)

* SLOPE %	MAX. FLOW RATE VARIATION % **	SPACING BETWEEN EMITTERS (cm)											
		15	20	30	33	40	50	60	70	75	80	90	100
-2	7.5	38	45	55	57	62	66	69	71	72	73	74	75
	10	45	54	67	70	76	83	88	92	93	94	97	99
-1	7.5	43	53	69	73	81	91	99	106	109	111	116	120
	10	50	61	80	85	96	109	119	128	132	136	143	149
0	7.5	49	61	84	91	105	124	141	158	165	173	187	202
	10	55	69	95	102	118	140	160	178	187	195	212	228
1	7.5	53	68	97	105	124	150	174	197	209	221	243	265
	10	59	75	107	116	136	164	191	216	229	241	266	289
2	7.5	56	73	107	116	138	168	197	206	210	212	229	243
	10	62	81	116	127	150	183	214	244	259	262	277	291

* SLOPES: FLAT TERRAIN (0) ; DOWNHILL (1,2); UPHILL (-1,-2)

** MAXIMUM ALLOWABLE FLOW RATE VARIATION ALONG THE SAME DRIPLINE.

EMISSION UNIFORMITY (EU) -90%

(working pressure - 1.2 bar)

$$EU = \frac{Q_{min}}{Q_{avr}} * (1 - 1.27 * CV)$$

* SLOPE %	SPACING BETWEEN EMITTERS (cm)											
	15	20	30	33	40	50	60	70	75	80	90	100
-2	70	85	107	114	123	138	147	155	156	162	167	171
-1	77	95	125	133	150	173	188	207	214	217	229	244
0	86	109	150	161	186	220	251	280	294	307	334	359
1	93	120	170	184	216	259	300	339	358	376	412	447
2	98	127	182	197	231	278	320	361	380	402	444	478

21/02/2000

HYDROGOL

MAXIMUM RECOMMENDED DRIPLINE LENGTH (m)

EMITTER TYPE - **HYDROGOL 16/40**

NOMINAL FLOW RATE – **1.6 LPH**

WORKING PRESSURE - 1.0 BAR

LATERAL DIAMETER **13.8** (I.D.)

* SLOPE %	MAX. FLOW RATE VARIATION % **	SPACING BETWEEN EMITTERS (cm)											
		15	20	30	33	40	50	60	70	75	80	90	100
-2	7.5	30	36	46	48	52	58	61	64	66	66	68	70
	10	35	43	55	57	64	71	76	81	83	85	87	90
-1	7.5	33	41	54	57	64	73	80	88	90	93	98	102
	10	37	47	62	66	75	86	95	104	107	111	118	124
0	7.5	36	45	62	67	78	92	104	116	122	128	139	149
	10	40	51	70	76	87	103	118	132	138	144	157	169
1	7.5	38	49	69	75	87	105	122	139	146	154	169	184
	10	42	54	77	83	97	117	134	153	161	170	186	202
2	7.5	40	52	74	81	96	117	136	155	165	174	187	202
	10	44	57	82	89	105	127	148	169	179	189	209	228

* SLOPES: FLAT TERRAIN (0) ; DOWNHILL (1,2); UPHILL (-1,-2)

** MAXIMUM ALLOWABLE FLOW RATE VARIATION ALONG THE SAME DRIPLINE.

EMISSION UNIFORMITY (EU) -90%

(working pressure - 1.2 bar)

$$EU = \frac{Q_{\min}}{Q_{\text{avr}}} * (1 - 1.27 * CV)$$

* SLOPE %	SPACING BETWEEN EMITTERS (cm)											
	15	20	30	33	40	50	60	70	75	80	90	100
-2	48	59	79	83	93	106	115	124	129	130	137	142
-1	51	63	86	91	105	121	136	148	155	162	168	182
0	54	67	94	101	117	139	157	176	185	194	209	227
1	56	71	101	110	127	151	175	197	208	222	240	262
2	57	74	106	115	135	164	190	215	227	242	263	287

“HYDROGOL” DRIPLINE

BC 28

HYDROGOL

MAXIMUM RECOMMENDED DRIPLINE LENGTH (m)

EMITTER TYPE - **HYDROGOL 16/40**

NOMINAL FLOW RATE –**2.1 LPH**

WORKING PRESSURE - 1.0 BAR

LATERAL DIAMETER 13.8 (I.D.)

* SLOPE %	MAX. FLOW RATE VARIATION % **	SPACING BETWEEN EMITTERS (cm)											
		15	20	30	33	40	50	60	70	75	80	90	100
-2	7.5	26	32	41	43	48	53	56	60	62	62	65	67
	10	30	37	48	51	57	64	70	74	76	78	81	84
-1	7.5	28	35	47	50	56	65	71	78	80	83	88	92
	10	32	40	54	57	65	75	84	92	95	98	104	111
0	7.5	30	38	53	57	66	78	89	99	104	109	118	127
	10	34	43	59	64	74	88	100	112	117	122	133	143
1	7.5	32	41	58	63	73	88	101	115	122	128	140	153
	10	36	46	65	70	82	97	113	127	134	142	155	168
2	7.5	33	43	62	67	79	96	112	128	136	143	158	173
	10	37	48	68	74	87	106	123	140	148	156	173	188

* SLOPES: FLAT TERRAIN (0) ; DOWNHILL (1,2); UPHILL (-1,-2)

** MAXIMUM ALLOWABLE FLOW RATE VARIATION ALONG THE SAME DRIPLINE.

EMISSION UNIFORMITY (EU) -90%

(working pressure - 1.2 bar)

$$EU = \frac{Q_{\min}}{Q_{\text{avr}}} * (1 - 1.27 * CV)$$

* SLOPE %	SPACING BETWEEN EMITTERS (cm)											
	15	20	30	33	40	50	60	70	75	80	90	100
-2	46	60	76	83	94	101	116	125	129	132	137	145
-1	48	60	81	87	101	123	126	141	152	162	173	183
0	52	66	91	100	113	134	152	176	189	202	203	218
1	55	70	99	107	126	151	174	196	207	218	239	259
2	57	74	105	114	134	161	187	211	227	242	272	301

HYDROGOL

MAXIMUM RECOMMENDED DRIPLINE LENGTH (m)

EMITTER TYPE - **HYDROGOL 16/40**

NOMINAL FLOW RATE – **3.9 LPH**

WORKING PRESSURE - 1.0 BAR

LATERAL DIAMETER 13.8 (I.D.)

* SLOPE %	MAX. FLOW RATE VARIATION % **	SPACING BETWEEN EMITTERS (cm)											
		15	20	30	33	40	50	60	70	75	80	90	100
-2	7.5	18	22	29	31	35	39	43	46	47	49	51	53
	10	21	26	35	38	42	49	53	58	60	62	66	69
-1	7.5	19	24	32	34	39	45	50	55	58	60	64	68
	10	22	28	38	41	46	54	61	67	70	72	77	82
0	7.5	20	25	35	38	44	52	59	66	69	72	78	84
	10	23	29	41	44	50	60	68	76	80	84	91	98
1	7.5	21	27	38	41	48	57	66	75	79	83	91	99
	10	24	31	43	46	54	65	75	84	89	94	103	111
2	7.5	22	28	40	43	51	62	72	82	86	91	101	109
	10	25	32	45	49	57	69	80	91	96	101	112	121

* SLOPES: FLAT TERRAIN (0) ; DOWNHILL (1,2); UPHILL (-1,-2)

** MAXIMUM ALLOWABLE FLOW RATE VARIATION ALONG THE SAME DRIPLINE.

EMISSION UNIFORMITY (EU) -90%

(working pressure - 1.2 bar)

$$EU = \frac{Q_{\min}}{Q_{\text{avr}}} * (1 - 1.27 * CV)$$

* SLOPE %	SPACING BETWEEN EMITTERS (cm)											
	15	20	30	33	40	50	60	70	75	80	90	100
-2	31	40	56	60	62	76	86	94	98	101	107	113
-1	33	41	60	64	74	80	91	106	111	115	124	132
0	34	43	61	67	80	96	109	113	119	124	137	152
1	38	45	64	69	81	101	120	136	143	150	165	165
2	38	50	67	72	85	102	121	141	152	160	177	192

“HYDROGOL” DRIPLINE

BC 30

HYDROGOL

MAXIMUM RECOMMENDED DRIPLINE LENGTH (m)

EMITTER TYPE - **HYDROGOL 16/40**

NOMINAL FLOW RATE –**10.5 LPH**

WORKING PRESSURE - 1.0 BAR

LATERAL DIAMETER 13.8 (I.D.)

* SLOPE %	MAX. FLOW RATE VARIATION % **	SPACING BETWEEN EMITTERS (cm)											
		15	20	30	33	40	50	60	70	75	80	90	100
-2	7.5	10	13	17	19	21	25	27	30	31	32	34	36
	10	11	14	20	21	24	28	31	34	36	37	40	42
-1	7.5	11	13	18	20	22	26	29	33	35	35	39	41
	10	12	15	20	22	25	30	33	37	38	40	43	46
0	7.5	11	14	19	21	24	28	32	36	38	39	42	46
	10	12	15	21	22	26	31	35	40	41	43	48	51
1	7.5	11	14	20	21	25	30	34	39	41	42	46	50
	10	12	15	22	23	27	33	37	42	44	46	50	55
2	7.5	11	14	20	22	26	31	36	41	43	45	50	54
	10	12	16	22	24	28	34	39	44	47	49	54	58

* SLOPES: FLAT TERRAIN (0) ; DOWNHILL (1,2); UPHILL (-1,-2)

** MAXIMUM ALLOWABLE FLOW RATE VARIATION ALONG THE SAME DRIPLINE.

EMISSION UNIFORMITY (EU) -90%

(working pressure - 1.2 bar)

$$EU = \frac{Q_{\min}}{Q_{\text{avr}}} * (1 - 1.27 * CV)$$

* SLOPE %	SPACING BETWEEN EMITTERS (cm)											
	15	20	30	33	40	50	60	70	75	80	90	100
-2	18	23	31	34	38	44	50	55	57	60	64	68
-1	18	23	32	34	41	47	53	58	62	64	69	74
0	19	24	33	35	41	49	56	62	65	68	74	80
1	19	24	34	36	42	51	58	65	69	72	79	85
2	19	25	35	37	44	53	61	68	72	75	83	89

HYDROGOL

MAXIMUM RECOMMENDED DRIPLINE LENGTH (m)

EMITTER TYPE - **HYDROGOL 16/45**

NOMINAL FLOW RATE –**1.5 LPH**

WORKING PRESSURE - 1.0 BAR

LATERAL DIAMETER 13.8 (I.D.)

* SLOPE %	MAX. FLOW RATE VARIATION % **	SPACING BETWEEN EMITTERS (cm)											
		15	20	30	33	40	50	60	70	75	80	90	100
-2	7.5	31	37	47	49	54	59	62	65	67	67	69	71
	10	36	44	56	59	65	72	78	82	84	86	89	91
-1	7.5	34	42	55	59	66	75	83	90	92	95	100	105
	10	39	48	64	68	77	89	98	106	110	114	121	127
0	7.5	37	47	65	69	80	95	108	120	127	132	144	154
	10	42	53	73	78	90	107	122	137	143	150	162	175
1	7.5	39	51	72	77	91	110	127	144	152	160	176	192
	10	44	56	80	86	101	121	140	159	167	176	194	211
2	7.5	41	54	77	84	100	122	142	162	172	182	197	218
	10	46	59	85	93	109	133	155	176	187	197	218	238

* SLOPES: FLAT TERRAIN (0) ; DOWNHILL (1,2); UPHILL (-1,-2)

** MAXIMUM ALLOWABLE FLOW RATE VARIATION ALONG THE SAME DRIPLINE.

EMISSION UNIFORMITY (EU) -90%

(working pressure - 1.2 bar)

$$EU = \frac{Q_{\min}}{Q_{\text{avr}}} * (1 - 1.27 * CV)$$

* SLOPE %	SPACING BETWEEN EMITTERS (cm)											
	15	20	30	33	40	50	60	70	75	80	90	100
-2	53	60	91	100	101	126	121	141	152	162	181	152
-1	53	70	91	100	121	126	151	176	189	202	182	202
0	60	70	106	116	121	151	181	211	189	202	227	252
1	60	80	106	116	141	176	211	211	227	242	272	302
2	60	80	121	133	141	176	211	246	264	282	317	352

HYDROGOL

MAXIMUM RECOMMENDED DRIPLINE LENGTH (m)

EMITTER TYPE - **HYDROGOL 16/45**

NOMINAL FLOW RATE –**2.0 LPH**

WORKING PRESSURE - 1.0 BAR

LATERAL DIAMETER 13.8 (I.D.)

* SLOPE %	MAX. FLOW RATE VARIATION % **	SPACING BETWEEN EMITTERS (cm)											
		15	20	30	33	40	50	60	70	75	80	90	100
-2	7.5	28	34	44	47	51	56	61	64	65	66	69	72
	10	32	39	52	54	61	69	73	78	80	82	87	87
-1	7.5	30	37	50	54	61	69	76	82	88	90	96	97
	10	34	42	58	60	69	79	88	96	99	106	110	117
0	7.5	33	41	56	62	71	84	94	106	110	118	128	137
	10	36	45	64	68	79	94	106	117	125	130	141	152
1	7.5	34	44	62	68	79	96	109	124	133	138	155	167
	10	38	48	68	75	87	104	121	134	144	150	164	182
2	7.5	36	46	67	73	87	106	124	141	148	154	173	187
	10	39	51	73	80	93	114	133	152	159	166	182	202

* SLOPES: FLAT TERRAIN (0) ; DOWNHILL (1,2); UPHILL (-1,-2)

** MAXIMUM ALLOWABLE FLOW RATE VARIATION ALONG THE SAME DRIPLINE.

EMISSION UNIFORMITY (EU) -90%

(working pressure - 1.2 bar)

$$EU = \frac{Q_{\min}}{Q_{\text{avr}}} * (1 - 1.27 * CV)$$

* SLOPE %	SPACING BETWEEN EMITTERS (cm)											
	15	20	30	33	40	50	60	70	75	80	90	100
-2	48	60	76	83	97	101	118	127	133	138	137	147
-1	51	63	85	90	103	126	133	145	152	162	177	187
0	54	68	95	101	117	139	160	176	189	202	222	227
1	57	72	103	111	131	156	181	204	215	226	249	267
2	59	76	109	118	139	169	193	218	230	246	272	302

HYDROGOL

MAXIMUM RECOMMENDED DRIPLINE LENGTH (m)

EMITTER TYPE - **HYDROGOL 16/45**

NOMINAL FLOW RATE –**3.8 LPH**

WORKING PRESSURE - 1.0 BAR

LATERAL DIAMETER 13.8 (I.D.)

* SLOPE %	MAX. FLOW RATE VARIATION % **	SPACING BETWEEN EMITTERS (cm)											
		15	20	30	33	40	50	60	70	75	80	90	100
-2	7.5	19	23	30	32	36	41	44	48	50	50	53	55
	10	21	27	35	37	42	48	53	57	59	62	65	68
-1	7.5	20	25	33	36	40	47	52	57	60	62	67	70
	10	22	28	38	41	46	54	61	67	70	72	77	82
0	7.5	21	26	36	39	45	54	61	69	72	75	81	88
	10	23	29	41	44	51	60	68	76	80	84	92	98
1	7.5	22	28	39	42	50	59	68	77	82	86	95	102
	10	24	31	43	47	55	66	76	85	90	94	104	112
2	7.5	22	29	41	45	53	64	74	85	89	94	104	113
	10	25	32	45	49	58	70	81	92	98	102	113	123

* SLOPES: FLAT TERRAIN (0) ; DOWNHILL (1,2); UPHILL (-1,-2)

** MAXIMUM ALLOWABLE FLOW RATE VARIATION ALONG THE SAME DRIPLINE.

EMISSION UNIFORMITY (EU) -90%

(working pressure - 1.2 bar)

$$EU = \frac{Q_{\min}}{Q_{\text{avr}}} * (1 - 1.27 * CV)$$

* SLOPE %	SPACING BETWEEN EMITTERS (cm)											
	15	20	30	33	40	50	60	70	75	80	90	100
-2	34	42	56	60	68	77	86	94	98	101	106	112
-1	35	44	60	65	74	86	95	106	111	116	124	132
0	37	46	64	69	81	96	110	120	127	133	144	155
1	38	48	68	74	86	103	121	137	144	151	166	179
2	39	50	71	77	91	109	127	143	152	161	178	193

“HYDROGOL” DRIPLINE

BC 34

HYDROGOL

MAXIMUM RECOMMENDED DRIPLINE LENGTH (m)

EMITTER TYPE - **HYDROGOL 16/45**

NOMINAL FLOW RATE –**9.5 LPH**

WORKING PRESSURE - 1.0 BAR

LATERAL DIAMETER 13.8 (I.D.)

* SLOPE %	MAX. FLOW RATE VARIATION % **	SPACING BETWEEN EMITTERS (cm)											
		15	20	30	33	40	50	60	70	75	80	90	100
-2	7.5	11	13	18	19	22	25	28	31	32	33	35	37
	10	12	15	20	22	24	29	32	35	37	38	41	43
-1	7.5	11	14	19	20	23	27	31	34	35	37	40	42
	10	12	15	21	22	26	30	34	38	40	42	44	48
0	7.5	11	14	20	21	24	29	33	36	38	40	44	47
	10	12	16	22	23	27	32	37	41	43	45	49	52
1	7.5	11	14	20	22	26	31	35	39	41	43	48	51
	10	13	16	23	24	28	34	39	43	46	48	52	57
2	7.5	12	15	21	23	26	32	37	41	44	46	50	55
	10	13	16	23	25	29	35	40	46	48	50	55	60

* SLOPES: FLAT TERRAIN (0) ; DOWNHILL (1,2); UPHILL (-1,-2)

** MAXIMUM ALLOWABLE FLOW RATE VARIATION ALONG THE SAME DRIPLINE.

EMISSION UNIFORMITY (EU) -90%

(working pressure - 1.2 bar)

$$EU = \frac{Q_{\min}}{Q_{\text{avr}}} * (1 - 1.27 * CV)$$

* SLOPE %	SPACING BETWEEN EMITTERS (cm)											
	15	20	30	33	40	50	60	70	75	80	90	100
-2	20	26	35	40	46	55	62	67	70	74	79	85
-1	20	26	36	39	46	55	63	68	71	74	92	87
0	20	26	36	39	47	56	64	72	73	76	83	102
1	20	26	37	39	47	57	65	73	77	78	85	91
2	20	26	37	40	46	57	66	74	78	82	86	93

“HYDROGOL” DRIPLINE

BC 35

HYDROGOL

MAXIMUM RECOMMENDED DRIPLINE LENGTH (m)

EMITTER TYPE - **HYDROGOL 20/35**

NOMINAL FLOW RATE –**2.3 LPH**

WORKING PRESSURE - 1.0 BAR

LATERAL DIAMETER 17.6 (I.D.)

* SLOPE %	MAX. FLOW RATE VARIATION % **	SPACING BETWEEN EMITTERS (cm)											
		15	20	30	33	40	50	60	70	75	80	90	100
-2	7.5	37	43	53	55	59	64	67	69	71	71	73	74
	10	41	49	60	63	69	75	79	83	84	86	87	89
-1	7.5	41	50	65	68	76	86	94	100	103	106	111	115
	10	45	55	72	76	86	97	106	114	118	122	128	133
0	7.5	45	57	78	84	96	113	129	144	151	158	170	183
	10	49	62	85	91	105	124	140	156	164	171	185	200
1	7.5	49	63	88	95	112	134	155	176	186	196	215	235
	10	53	68	95	102	120	144	166	188	199	209	230	250
2	7.5	52	67	96	105	124	151	176	206	214	220	232	249
	10	56	72	103	111	132	160	186	212	225	237	253	271

* SLOPES: FLAT TERRAIN (0) ; DOWNHILL (1,2); UPHILL (-1,-2)

** MAXIMUM ALLOWABLE FLOW RATE VARIATION ALONG THE SAME DRIPLINE.

EMISSION UNIFORMITY (EU) -90%

(working pressure - 1.2 bar)

$$EU = \frac{Q_{\min}}{Q_{\text{avr}}} * (1 - 1.27 * CV)$$

* SLOPE %	SPACING BETWEEN EMITTERS (cm)											
	15	20	30	33	40	50	60	70	75	80	90	100
-2	66	80	101	106	115	129	136	145	148	150	155	162
-1	73	89	118	124	141	159	175	190	197	202	213	222
0	78	100	136	149	173	201	232	250	264	282	308	327
1	84	108	152	166	193	229	271	299	317	334	362	402
2	89	114	163	176	207	251	295	320	339	362	398	423

HYDROGOL

MAXIMUM RECOMMENDED DRIPLINE LENGTH (m)

EMITTER TYPE - **HYDROGOL 20/35**

NOMINAL FLOW RATE – **2.8 LPH**

WORKING PRESSURE - 1.0 BAR

LATERAL DIAMETER 17.6 (I.D.)

* SLOPE %	MAX. FLOW RATE VARIATION % **	SPACING BETWEEN EMITTERS (cm)											
		15	20	30	33	40	50	60	70	75	80	90	100
-2	7.5	33	40	49	52	56	61	64	67	68	69	70	72
	10	37	45	56	59	64	71	75	79	80	82	85	86
-1	7.5	37	45	59	62	70	79	86	93	96	98	104	108
	10	40	50	65	70	78	89	98	106	110	113	119	124
0	7.5	40	51	70	75	86	101	115	128	134	141	152	164
	10	44	55	76	81	94	110	125	139	146	153	166	178
1	7.5	43	56	78	84	98	118	137	155	163	172	189	205
	10	47	60	83	90	106	127	146	165	174	184	202	219
2	7.5	46	59	85	92	108	132	154	175	185	196	217	232
	10	49	63	90	98	116	140	163	185	196	206	229	252

* SLOPES: FLAT TERRAIN (0) ; DOWNHILL (1,2); UPHILL (-1,-2)

** MAXIMUM ALLOWABLE FLOW RATE VARIATION ALONG THE SAME DRIPLINE.

EMISSION UNIFORMITY (EU) -90%

(working pressure - 1.2 bar)

$$EU = \frac{Q_{\min}}{Q_{\text{avr}}} * (1 - 1.27 * CV)$$

* SLOPE %	SPACING BETWEEN EMITTERS (cm)											
	15	20	30	33	40	50	60	70	75	80	90	100
-2	59	71	91	98	105	121	130	138	140	142	150	152
-1	64	78	106	111	125	146	157	176	182	186	200	202
0	70	88	121	129	149	176	199	222	234	246	272	287
1	75	96	134	146	171	204	235	264	279	294	321	347
2	79	101	145	156	183	219	253	285	302	322	344	372

“HYDROGOL” DRIPLINE

BC 37

HYDROGOL

MAXIMUM RECOMMENDED DRIPLINE LENGTH (m)

EMITTER TYPE - **HYDROGOL 20/35**

NOMINAL FLOW RATE – **3.23 LPH**

WORKING PRESSURE - 1.0 BAR

LATERAL DIAMETER 17.6 (I.D.)

* SLOPE %	MAX. FLOW RATE VARIATION % **	SPACING BETWEEN EMITTERS (cm)											
		15	20	30	33	40	50	60	70	75	80	90	100
-2	7.5	31	37	46	48	52	58	61	64	65	66	68	70
	10	35	43	55	58	64	71	76	81	83	84	87	90
-1	7.5	33	41	54	57	64	73	80	87	89	92	97	101
	10	38	47	62	66	75	86	95	103	107	110	117	123
0	7.5	36	46	62	67	77	91	103	115	121	126	137	147
	10	41	51	71	76	87	103	117	130	137	142	155	166
1	7.5	39	49	69	75	87	105	121	137	144	152	167	181
	10	43	55	77	83	97	116	133	151	159	167	184	199
2	7.5	40	52	75	81	96	116	135	154	163	172	189	150
	10	45	58	82	89	105	127	147	167	177	187	205	225

* SLOPES: FLAT TERRAIN (0) ; DOWNHILL (1,2); UPHILL (-1,-2)

** MAXIMUM ALLOWABLE FLOW RATE VARIATION ALONG THE SAME DRIPLINE.

EMISSION UNIFORMITY (EU) -90%

(working pressure - 1.2 bar)

$$EU = \frac{Q_{\min}}{Q_{\text{avr}}} * (1 - 1.27 * CV)$$

* SLOPE %	SPACING BETWEEN EMITTERS (cm)											
	15	20	30	33	40	50	60	70	75	80	90	100
-2	54	65	86	88	101	114	121	131	133	138	141	147
-1	58	72	95	101	119	131	148	162	170	170	182	197
0	63	79	109	118	135	159	181	201	212	222	240	257
1	67	86	121	131	153	181	211	236	249	262	285	312
2	70	90	128	139	163	196	226	253	268	282	312	347

“HYDROGOL” DRIPLINE

BC 38

HYDROGOL

MAXIMUM RECOMMENDED DRIPLINE LENGTH (m)

EMITTER TYPE - **HYDROGOL 20/35**

NOMINAL FLOW RATE – **4.7 LPH**

WORKING PRESSURE - 1.0 BAR

LATERAL DIAMETER 17.6 (I.D.)

* SLOPE %	MAX. FLOW RATE VARIATION % **	SPACING BETWEEN EMITTERS (cm)											
		15	20	30	33	40	50	60	70	75	80	90	100
-2	7.5	25	30	38	41	45	50	54	57	59	60	62	64
	10	29	35	45	48	54	60	65	70	72	74	77	80
-1	7.5	27	33	44	47	52	60	67	72	75	78	82	87
	10	30	38	50	54	61	70	78	85	89	92	98	103
0	7.5	28	36	49	53	61	72	81	90	95	99	107	115
	10	32	40	55	59	68	81	92	102	107	112	122	131
1	7.5	30	38	53	58	67	80	92	104	110	115	126	138
	10	34	43	59	64	75	89	102	116	122	128	140	152
2	7.5	31	40	57	61	72	88	101	116	122	129	142	155
	10	35	44	63	68	80	96	112	127	134	141	155	169

* SLOPES: FLAT TERRAIN (0) ; DOWNHILL (1,2); UPHILL (-1,-2)

** MAXIMUM ALLOWABLE FLOW RATE VARIATION ALONG THE SAME DRIPLINE.

EMISSION UNIFORMITY (EU) -90%

(working pressure - 1.2 bar)

$$EU = \frac{Q_{\min}}{Q_{\text{avr}}} * (1 - 1.27 * CV)$$

* SLOPE %	SPACING BETWEEN EMITTERS (cm)											
	15	20	30	33	40	50	60	70	75	80	90	100
-2	45	53	71	77	83	96	103	113	114	118	123	132
-1	47	59	77	83	97	109	121	134	140	146	155	162
0	50	62	86	93	107	126	145	159	167	174	191	202
1	52	66	94	101	117	141	160	183	193	202	227	247
2	54	69	98	106	125	151	172	197	208	218	236	257

HYDROGOL

MAXIMUM RECOMMENDED DRIPLINE LENGTH (m)

EMITTER TYPE - **HYDROGOL 20/40**

NOMINAL FLOW RATE – **2.24 LPH**

WORKING PRESSURE - 1.0 BAR

LATERAL DIAMETER 17.6 (I.D.)

* SLOPE %	MAX. FLOW RATE VARIATION % **	SPACING BETWEEN EMITTERS (cm)											
		15	20	30	33	40	50	60	70	75	80	90	100
-2	7.5	36	42	51	53	57	61	64	66	67	68	69	70
	10	41	49	61	64	69	76	80	83	85	86	88	90
-1	7.5	40	49	64	67	75	84	91	97	100	102	107	111
	10	46	56	73	78	87	98	107	116	119	122	129	135
0	7.5	45	57	78	84	96	113	128	143	150	157	170	182
	10	50	63	86	93	107	126	143	159	167	174	189	203
1	7.5	49	63	88	95	112	135	156	177	187	197	216	236
	10	54	69	96	104	122	147	169	192	203	214	235	255
2	7.5	52	67	97	105	125	152	177	190	111	113	87	80
	10	57	73	105	114	134	163	190	217	230	242	137	127

* SLOPES: FLAT TERRAIN (0) ; DOWNHILL (1,2); UPHILL (-1,-2)

** MAXIMUM ALLOWABLE FLOW RATE VARIATION ALONG THE SAME DRIPLINE.

EMISSION UNIFORMITY (EU) -90%

(working pressure - 1.2 bar)

$$EU = \frac{Q_{\min}}{Q_{\text{avr}}} * (1 - 1.27 * CV)$$

* SLOPE %	SPACING BETWEEN EMITTERS (cm)											
	15	20	30	33	40	50	60	70	75	80	90	100
-2	65	80	101	103	117	126	136	141	148	150	155	162
-1	72	88	115	123	141	156	178	187	193	202	213	227
0	79	100	137	148	169	199	226	253	264	278	299	322
1	86	110	155	167	195	234	271	306	320	338	371	402
2	90	116	166	179	211	251	289	323	343	362	407	437

HYDROGOL

MAXIMUM RECOMMENDED DRIPLINE LENGTH (m)

EMITTER TYPE - **HYDROGOL 20/40**

NOMINAL FLOW RATE – **2.57 LPH**

WORKING PRESSURE - 1.0 BAR

LATERAL DIAMETER 17.6 (I.D.)

* SLOPE %	MAX. FLOW RATE VARIATION % **	SPACING BETWEEN EMITTERS (cm)											
		15	20	30	33	40	50	60	70	75	80	90	100
-2	7.5	33	40	49	51	55	59	62	64	65	66	68	69
	10	38	46	58	60	66	72	77	81	82	83	86	87
-1	7.5	37	45	59	62	70	79	86	92	95	98	102	106
	10	42	52	68	72	81	92	101	109	113	116	122	128
0	7.5	41	52	71	76	88	103	117	130	137	143	155	167
	10	46	58	79	85	98	115	131	146	152	159	173	186
1	7.5	44	57	80	86	101	121	140	159	169	178	194	212
	10	49	63	87	94	110	132	153	173	183	193	212	229
2	7.5	47	61	87	95	112	136	159	181	114	122	92	90
	10	51	66	95	103	121	147	171	194	206	218	239	152

* SLOPES: FLAT TERRAIN (0) ; DOWNHILL (1,2); UPHILL (-1,-2)

** MAXIMUM ALLOWABLE FLOW RATE VARIATION ALONG THE SAME DRIPLINE.

EMISSION UNIFORMITY (EU) -90%

(working pressure - 1.2 bar)

$$EU = \frac{Q_{\min}}{Q_{\text{avr}}} * (1 - 1.27 * CV)$$

* SLOPE %	SPACING BETWEEN EMITTERS (cm)											
	15	20	30	33	40	50	60	70	75	80	90	100
-2	60	73	92	100	111	121	130	138	144	146	150	157
-1	66	81	107	116	129	151	160	176	185	194	204	207
0	72	91	125	134	155	184	208	232	242	254	276	302
1	78	100	140	153	177	211	244	278	290	306	335	362
2	82	106	151	162	191	229	262	295	313	326	362	397

“HYDROGOL” DRIPLINE

BC 41

HYDROGOL

MAXIMUM RECOMMENDED DRIPLINE LENGTH (m)

EMITTER TYPE - **HYDROGOL 20/40**

NOMINAL FLOW RATE – **3.11 LPH**

WORKING PRESSURE - 1.0 BAR

LATERAL DIAMETER 17.6 (I.D.)

* SLOPE %	MAX. FLOW RATE VARIATION % **	SPACING BETWEEN EMITTERS (cm)											
		15	20	30	33	40	50	60	70	75	80	90	100
-2	7.5	31	37	47	49	53	58	62	65	66	67	69	70
	10	36	44	56	59	65	72	77	81	83	85	88	91
-1	7.5	34	42	55	58	66	74	82	88	91	94	99	103
	10	39	48	64	68	76	88	97	105	109	112	119	125
0	7.5	37	47	64	69	80	94	106	118	124	130	140	151
	10	42	53	72	78	90	106	120	134	140	146	159	171
1	7.5	40	51	71	77	90	108	124	141	149	157	173	187
	10	44	57	80	86	100	119	138	155	164	173	190	206
2	7.5	42	54	77	84	99	120	139	159	168	178	137	102
	10	46	60	85	92	108	131	152	173	183	193	212	232

* SLOPES: FLAT TERRAIN (0) ; DOWNHILL (1,2); UPHILL (-1,-2)

** MAXIMUM ALLOWABLE FLOW RATE VARIATION ALONG THE SAME DRIPLINE.

EMISSION UNIFORMITY (EU) -90%

(working pressure - 1.2 bar)

$$EU = \frac{Q_{\min}}{Q_{\text{avr}}} * (1 - 1.27 * CV)$$

* SLOPE %	SPACING BETWEEN EMITTERS (cm)											
	15	20	30	33	40	50	60	70	75	80	90	100
-2	55	67	89	93	101	116	121	131	137	138	146	152
-1	60	73	98	105	121	134	151	166	174	178	186	197
0	65	81	112	121	139	164	187	211	219	226	245	267
1	69	88	124	134	157	186	217	243	257	270	294	322
2	72	93	133	144	169	201	232	260	275	290	317	347

“HYDROGOL” DRIPLINE

BC 42

HYDROGOL

MAXIMUM RECOMMENDED DRIPLINE LENGTH (m)

EMITTER TYPE - **HYDROGOL 20/40**

NOMINAL FLOW RATE – **4.45 LPH**

WORKING PRESSURE - 1.0 BAR

LATERAL DIAMETER 17.6 (I.D.)

* SLOPE %	MAX. FLOW RATE VARIATION % **	SPACING BETWEEN EMITTERS (cm)											
		15	20	30	33	40	50	60	70	75	80	90	100
-2	7.5	24	29	37	39	42	47	50	53	54	55	58	59
	10	28	35	45	47	52	59	64	68	70	71	74	77
-1	7.5	26	32	42	45	51	58	64	69	72	74	78	82
	10	30	37	50	53	60	69	77	83	87	90	95	101
0	7.5	28	35	48	52	60	71	80	89	94	98	106	114
	10	32	40	55	59	68	81	92	102	107	112	122	131
1	7.5	30	38	53	57	67	80	92	104	110	115	127	138
	10	34	43	60	65	76	90	104	117	123	129	142	154
2	7.5	31	40	57	62	72	88	102	116	123	130	143	162
	10	35	45	63	69	81	98	113	128	136	143	158	172

* SLOPES: FLAT TERRAIN (0) ; DOWNHILL (1,2); UPHILL (-1,-2)

** MAXIMUM ALLOWABLE FLOW RATE VARIATION ALONG THE SAME DRIPLINE.

EMISSION UNIFORMITY (EU) -90%

(working pressure - 1.2 bar)

$$EU = \frac{Q_{\min}}{Q_{\text{avr}}} * (1 - 1.27 * CV)$$

* SLOPE %	SPACING BETWEEN EMITTERS (cm)											
	15	20	30	33	40	50	60	70	75	80	90	100
-2	45	54	73	77	82	97	106	113	117	121	126	131
-1	47	60	78	83	98	113	121	137	143	147	157	166
0	50	63	90	93	108	127	150	168	169	177	192	206
1	53	68	95	103	121	143	165	186	196	206	227	252
2	55	71	101	109	128	154	181	200	211	222	242	263

“HYDROGOL” DRIPLINE

BC 43

HYDROGOL

MAXIMUM RECOMMENDED DRIPLINE LENGTH (m)

EMITTER TYPE - **HYDROGOL 20/40**

NOMINAL FLOW RATE – **8.0 LPH**

WORKING PRESSURE - 1.0 BAR

LATERAL DIAMETER 17.6 (I.D.)

* SLOPE %	MAX. FLOW RATE VARIATION % **	SPACING BETWEEN EMITTERS (cm)											
		15	20	30	33	40	50	60	70	75	80	90	100
-2	7.5	18	22	28	30	33	38	41	44	46	47	50	51
	10	20	24	32	34	38	44	48	53	54	56	59	61
-1	7.5	19	23	31	33	37	43	48	53	55	57	60	64
	10	21	26	35	37	42	49	55	60	63	65	69	74
0	7.5	20	25	34	36	42	49	56	62	65	69	74	80
	10	22	27	38	40	46	55	62	69	73	76	83	89
1	7.5	20	26	36	39	46	54	62	70	74	78	86	92
	10	22	29	40	43	50	60	68	77	81	86	94	101
2	7.5	21	27	38	41	48	58	67	76	81	85	94	102
	10	23	30	42	45	53	64	73	83	88	93	102	110

* SLOPES: FLAT TERRAIN (0) ; DOWNHILL (1,2); UPHILL (-1,-2)

** MAXIMUM ALLOWABLE FLOW RATE VARIATION ALONG THE SAME DRIPLINE.

EMISSION UNIFORMITY (EU) -90%

(working pressure - 1.2 bar)

$$EU = \frac{Q_{\min}}{Q_{\text{avr}}} * (1 - 1.27 * CV)$$

* SLOPE %	SPACING BETWEEN EMITTERS (cm)											
	15	20	30	33	40	50	60	70	75	80	90	100
-2	32	40	53	56	62	72	80	86	89	93	98	103
-1	33	41	57	61	69	79	89	99	103	106	114	121
0	35	44	61	66	76	90	102	111	117	122	135	145
1	37	46	64	69	81	98	113	127	134	140	150	163
2	38	49	67	73	85	102	120	136	143	150	165	179

20.10.99

HYDROGOL

MAXIMUM RECOMMENDED DRIPLINE LENGTH (m)

EMITTER TYPE - **HYDROGOL 20/45**

NOMINAL FLOW RATE – **2.2 LPH**

WORKING PRESSURE - 1.0 BAR

LATERAL DIAMETER 17.6 (I.D.)

* SLOPE %	MAX. FLOW RATE VARIATION % **	SPACING BETWEEN EMITTERS (cm)											
		15	20	30	33	40	50	60	70	75	80	90	100
-2	7.5	38	44	54	56	60	65	68	70	71	72	73	74
	10	44	53	66	69	75	82	86	90	92	94	95	98
-1	7.5	42	52	67	71	78	88	96	103	106	108	113	117
	10	49	60	78	83	93	105	115	124	128	132	139	145
0	7.5	47	59	81	87	100	118	134	149	157	164	177	191
	10	53	67	92	98	113	133	152	169	177	185	201	216
1	7.5	51	66	92	100	117	141	163	185	195	206	226	246
	10	57	73	102	110	129	155	179	203	214	225	248	269
2	7.5	54	70	101	110	130	158	184	206	213	216	92	90
	10	60	77	110	121	142	172	200	228	242	255	182	152

* SLOPES: FLAT TERRAIN (0) ; DOWNHILL (1,2); UPHILL (-1,-2)

** MAXIMUM ALLOWABLE FLOW RATE VARIATION ALONG THE SAME DRIPLINE.

EMISSION UNIFORMITY (EU) -90%

(working pressure - 1.2 bar)

$$EU = \frac{Q_{\min}}{Q_{\text{avr}}} * (1 - 1.27 * CV)$$

* SLOPE %	SPACING BETWEEN EMITTERS (cm)											
	15	20	30	33	40	50	60	70	75	80	90	100
-2	72	87	110	116	127	140	149	158	163	162	169	173
-1	79	97	128	136	153	174	193	209	216	223	236	246
0	85	108	147	158	183	215	245	273	287	300	325	350
1	91	116	162	175	205	245	282	318	335	352	385	417
2	95	122	172	187	218	262	302	342	360	378	414	452

HYDROGOL

MAXIMUM RECOMMENDED DRIPLINE LENGTH (m)

EMITTER TYPE - **HYDROGOL 20/45**

NOMINAL FLOW RATE – **3.0 LPH**

WORKING PRESSURE - 1.0 BAR

LATERAL DIAMETER 17.6 (I.D.)

* SLOPE %	MAX. FLOW RATE VARIATION % **	SPACING BETWEEN EMITTERS (cm)											
		15	20	30	33	40	50	60	70	75	80	90	100
-2	7.5	32	38	47	50	54	59	62	65	67	67	69	71
	10	37	45	56	59	66	73	78	82	84	86	89	91
-1	7.5	35	43	56	59	66	75	83	89	92	95	100	104
	10	40	49	65	69	78	89	98	106	110	114	121	126
0	7.5	38	48	65	70	81	95	108	120	126	132	143	154
	10	43	54	74	79	91	107	122	136	143	149	162	174
1	7.5	41	52	73	78	92	110	127	144	152	160	176	191
	10	45	58	81	87	102	122	140	159	167	176	194	210
2	7.5	43	55	78	86	101	122	142	162	172	182	137	102
	10	47	61	86	94	110	134	155	176	187	197	217	237

* SLOPES: FLAT TERRAIN (0) ; DOWNHILL (1,2); UPHILL (-1,-2)

** MAXIMUM ALLOWABLE FLOW RATE VARIATION ALONG THE SAME DRIPLINE.

EMISSION UNIFORMITY (EU) -90%

(working pressure - 1.2 bar)

$$EU = \frac{Q_{\min}}{Q_{\text{avr}}} * (1 - 1.27 * CV)$$

* SLOPE %	SPACING BETWEEN EMITTERS (cm)											
	15	20	30	33	40	50	60	70	75	80	90	100
-2	60	73	94	99	110	123	134	141	145	148	154	163
-1	64	80	106	113	128	147	163	176	184	190	203	215
0	68	86	119	128	147	174	197	221	232	242	263	282
1	72	92	129	139	162	194	223	251	265	278	304	330
2	75	96	136	147	172	206	238	270	284	298	318	351

“HYDROGOL” DRIPLINE

BC 46

“KATIF”

All Purpose, Flow-Regulated Self-Flushing Dripper

MAIN FEATURES

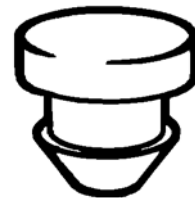
- * On-line emitter with very low profile
- * Self-flushing when pressure builds up, minimizing clogging problems
- * Flow-regulated, allowing long laterals and uniformity in water distribution
- * Highly resistant to chemicals and fertilizers commonly used in agriculture
- * Insertable in houses of 12-32 mm (OD) at any requires spacing



Side outlet

OPERATING RANGE

- * Pressure range 0.6-3.0 bar
- * Nominal flow rate:
2.3, 2.8, 3.75 & 8.4 l/h



Top outlet

MODELS AND TYPES

- * Side outlet: for general use
- * Top outlet: for overhead use
- * Colour coded for
flow rate identification

“KATIF”

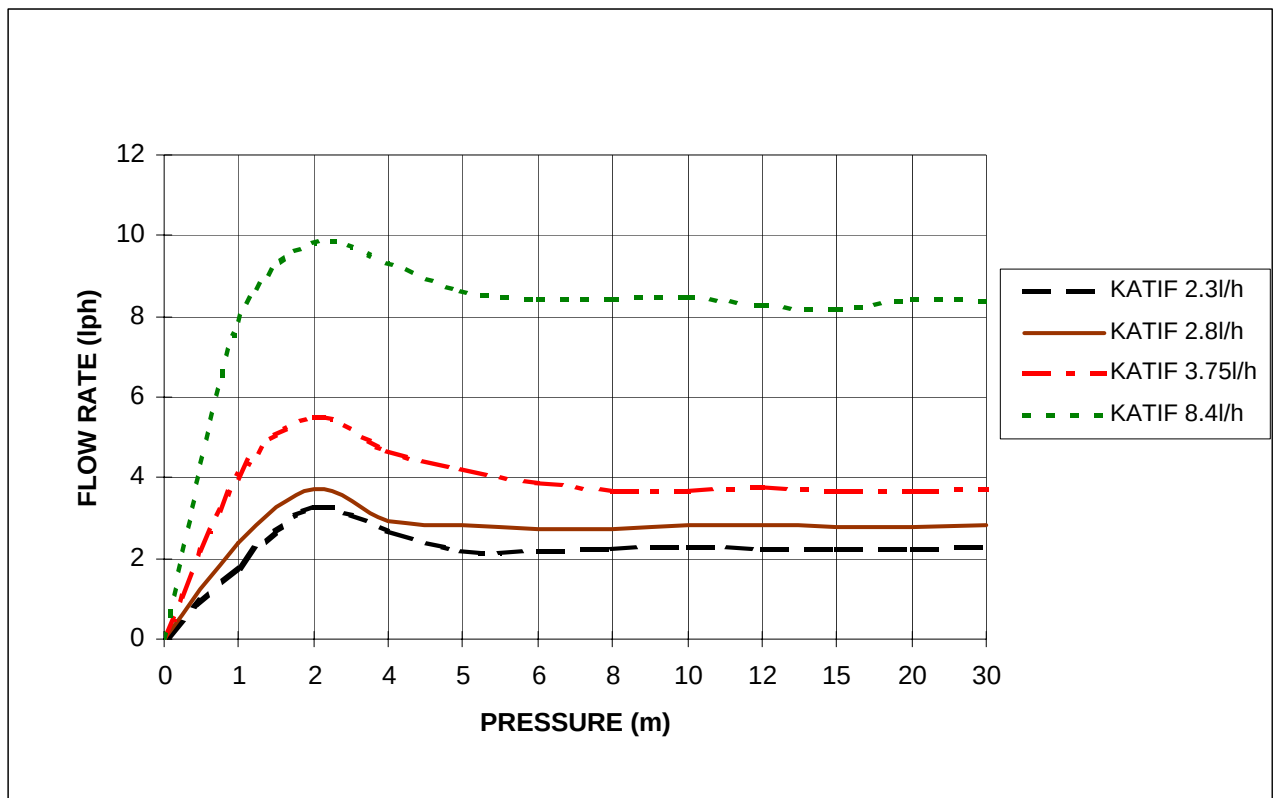
DRIPPER

FLOW RATE DATA

TYPE		FLOW RATE (LPH) AT PRESSURE										
		1 m	2 m	4 m	5 m	6 m	8 m	10 m	12 m	15 m	20 m	30 m
BLACK	(2.3)	1.8	3.25	2.7	2.18	2.18	2.24	2.28	2.24	2.25	2.25	2.28
BROWN	(2.8)	2.4	3.7	2.92	2.82	2.72	2.75	2.83	2.82	2.78	2.77	2.84
RED	(3.75)	4	5.52	4.68	4.22	3.88	3.65	3.66	3.76	3.65	3.66	3.7
GREEN	(8.4)	7.87	9.8	9.3	8.62	8.42	8.45	8.46	8.27	8.2	8.41	8.4

Performance Chart

Working Pressure Range 6-30m

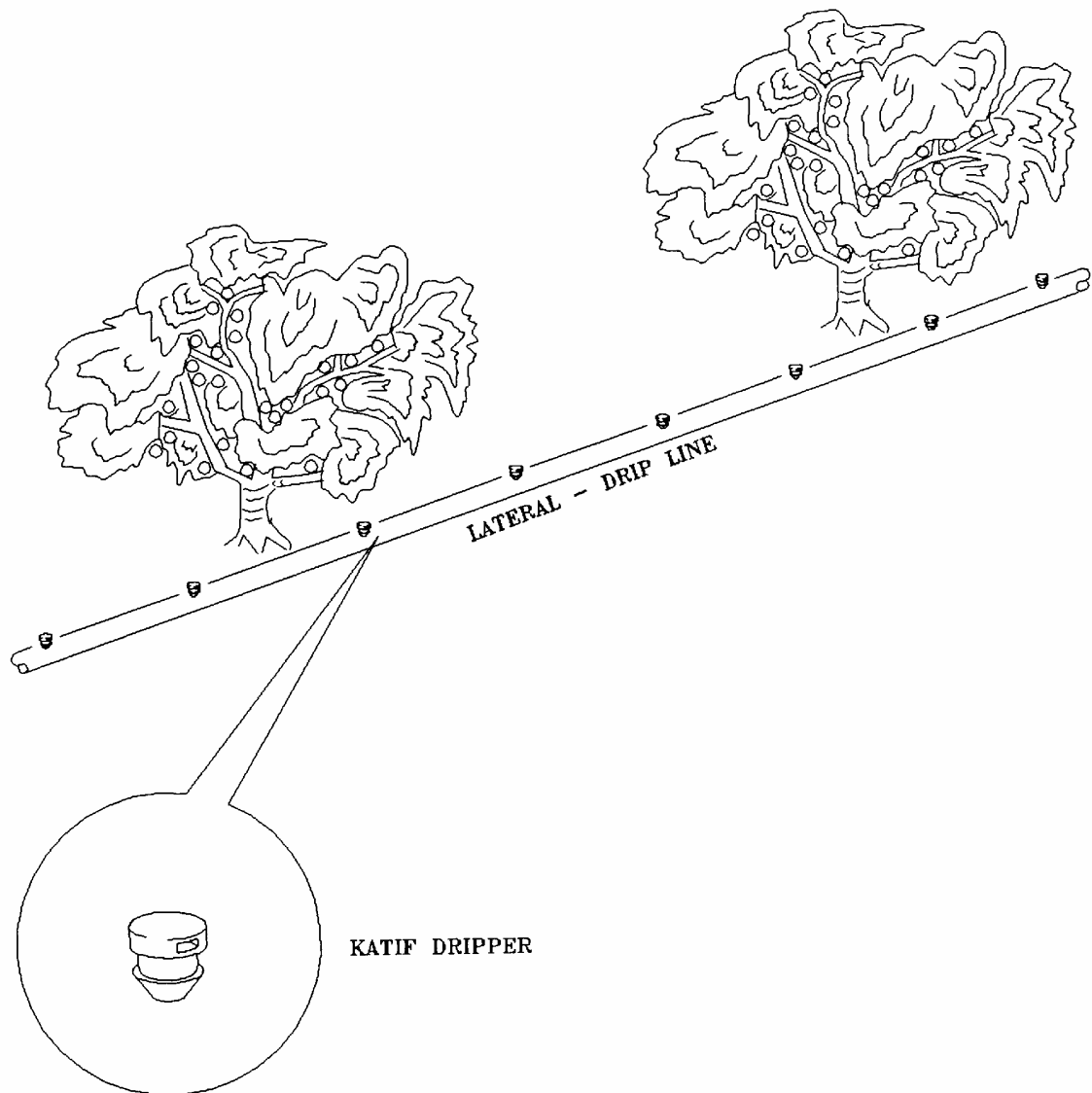


ORCHARDS & PLANTATION

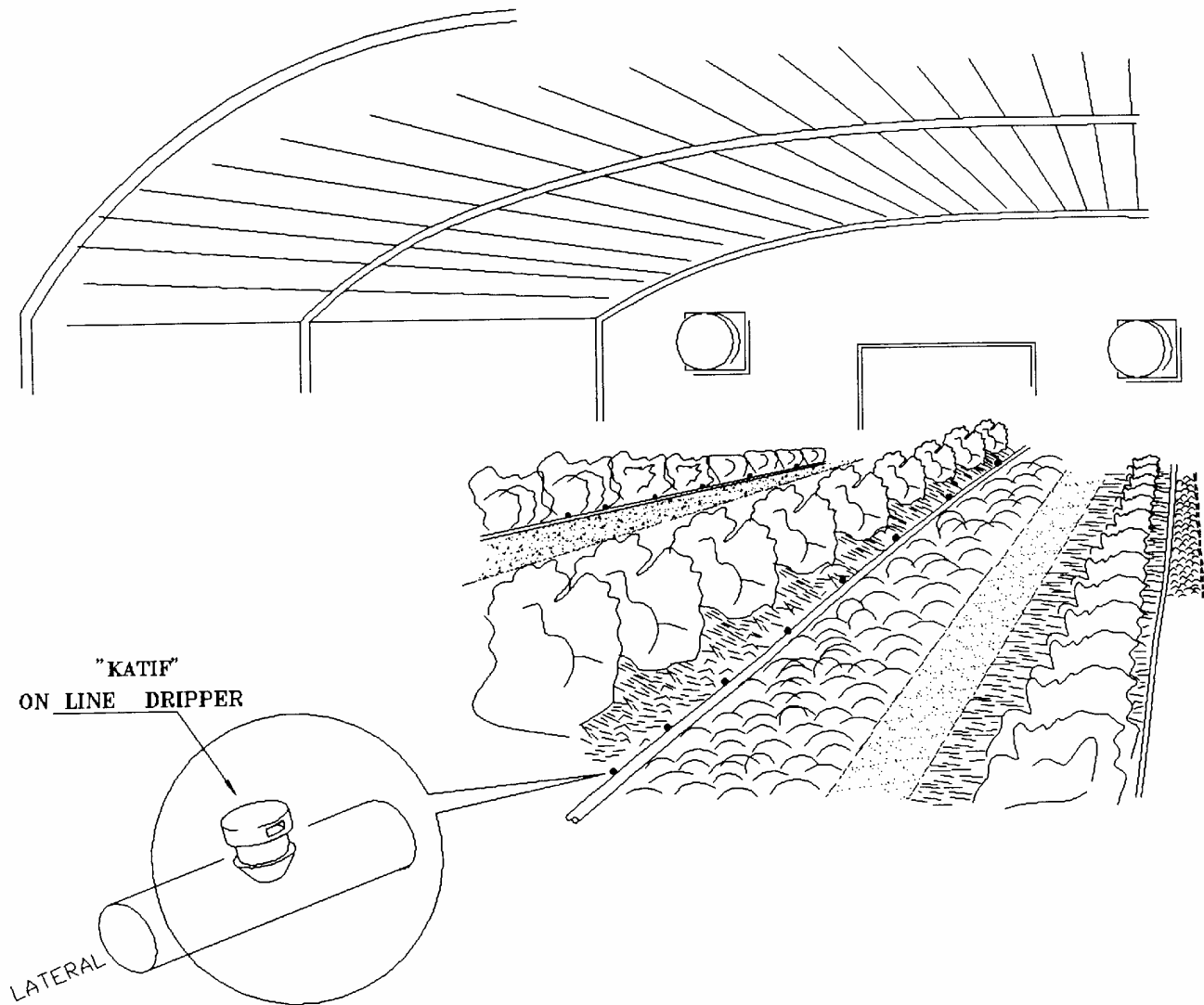
DRIP IRRIGATION

“KATIF”

ON-LINE - COMPENSATED DRIPPER



GREENHOUSE
DRIP IRRIGATION
“KATIF”
COMPENSATED DRIPPER



“KATIF” DRIPPER - 2.3 lph

Maximum recommended Lateral Length (m)

Pipe Diameter **12/9.8** (OD/ID)

Inlet Pressure(m)	Slope %	Emitter Spacing (m)							
		0.33	0.4	0.5	0.6	0.75	1.0	1.25	1.5
8	0	3	4	5	6	7	10	12	15
	2	9	14	20	24	21	39	36	58
	4	6	15	19	26	29	44	61	58
	6	12	19	24	31	36	52	73	88
10	0	23	28	34	39	47	61	72	83
	2	25	30	38	45	53	71	85	100
	4	26	31	39	47	59	78	96	113
	6	27	33	42	50	62	84	106	126
12	0	29	35	43	50	61	77	92	107
	2	31	37	46	55	65	85	102	121
	4	31	38	47	57	70	92	113	133
	6	33	40	50	60	74	98	122	144
14	0	34	41	49	58	70	89	106	123
	2	35	42	52	62	74	96	115	136
	4	36	43	53	63	78	102	125	147
	6	37	44	55	66	81	108	134	157
16	0	37	45	55	64	77	98	117	136
	2	38	46	57	68	81	105	126	148
	4	39	47	58	96	84	110	134	156
	6	40	48	60	71	87	114	141	167
18	0	40	48	59	69	83	106	127	147
	2	41	50	61	73	87	112	135	156
	4	42	50	62	73	90	116	140	164
	6	42	51	63	75	92	120	147	174
20	0	42	52	63	74	89	113	135	157
	2	43	53	65	76	92	117	141	164
	4	44	52	65	76	93	121	146	171
	6	44	53	65	78	95	125	152	180
22	0	45	54	66	78	94	120	143	166
	2	46	55	67	79	96	122	146	170
	4	46	55	67	79	97	125	151	177
	6	46	55	68	81	99	129	158	186

Slope - Flat & Downhill

for Uphill - Inlet pressure Including Flat slope + Difference level

(Continued from page 5)

“KATIF” DRIPPER - 2.3 lph

Maximum recommended Lateral Length (m)

Pipe Diameter **12/9.8** (OD/ID)

Inlet Pressure(m)	Slope %	Emitter Spacing (m)							
		0.33	0.4	0.5	0.6	0.75	1.0	1.25	1.5
24	0	47	56	69	81	98	125	150	173
	2	47	57	70	82	99	127	152	176
	4	48	56	69	82	100	130	157	183
	6	48	57	70	83	102	133	163	192
26	0	49	58	71	84	101	129	155	179
	2	49	59	72	85	103	131	157	182
	4	49	58	72	85	103	134	162	189
	6	49	59	72	86	105	137	167	197
28	0	50	60	73	86	105	133	160	185
	2	50	60	74	87	106	135	162	187
	4	51	60	74	87	106	137	166	194
	6	51	60	75	88	108	141	171	202
30	0	52	62	76	88	108	137	165	190
	2	52	62	76	90	108	138	166	193
	4	52	62	76	90	109	141	171	199
	6	52	62	77	91	111	145	176	208

Slope - Flat & Downhill

for Uphill - Inlet pressure Including Flat slope + Difference level

“KATIF” DRIPPER - 2.3 lph

Maximum recommended Lateral Length (m)

Pipe Diameter **16/13.6** (OD/ID)

Inlet Pressure(m)	Slope %	Emitter Spacing (m)							
		0.33	0.4	0.5	0.6	0.75	1.0	1.25	1.5
8	0	13	14	15	18	23	25	28	30
	2	26	36	40	53	67	89	118	133
	4	36	44	60	66	89	124	161	186
	6	39	48	70	84	104	139	174	223
10	0	49	57	70	79	95	117	138	158
	2	56	67	81	97	119	152	186	216
	4	61	74	92	109	135	179	222	260
	6	66	79	100	120	149	197	247	296
12	0	62	73	88	102	121	150	178	202
	2	68	81	98	116	142	180	220	254
	4	73	87	108	127	157	205	251	294
	6	77	92	115	138	169	223	276	329
14	0	72	84	101	117	140	174	205	234
	2	76	91	111	130	157	202	243	281
	4	81	97	120	140	172	224	274	320
	6	85	102	126	150	185	242	298	352
16	0	79	93	112	130	155	193	227	260
	2	84	100	120	142	171	218	262	302
	4	88	104	128	150	183	237	289	338
	6	90	108	134	158	196	256	315	373
18	0	86	101	121	140	167	208	246	281
	2	90	106	129	150	181	229	274	317
	4	92	109	134	157	191	247	300	352
	6	94	113	139	165	204	266	328	386
20	0	91	107	129	150	178	222	263	300
	2	94	111	135	157	189	238	285	330
	4	96	114	139	163	199	256	311	364
	6	98	118	145	171	211	275	338	398
22	0	96	113	136	158	188	235	277	317
	2	98	116	140	163	196	248	296	342
	4	100	118	144	169	206	265	321	376
	6	102	122	150	177	218	284	348	409

Slope - Flat & Downhill

for Uphill - Inlet pressure Including Flat slope + Difference level

(Continued from page 7)

“KATIF” DRIPPER - 2.3 lph

Maximum recommended Lateral Length (m)

Pipe Diameter **16/13.6** (OD/ID)

Inlet Pressure(m)	Slope %	Emitter Spacing (m)							
		0.33	0.4	0.5	0.6	0.75	1.0	1.25	1.5
24	0	100	118	142	165	197	246	290	332
	2	101	120	145	168	203	256	306	354
	4	103	122	149	174	212	273	331	386
	6	105	126	154	182	225	292	358	420
26	0	103	122	147	170	204	255	301	344
	2	105	124	150	174	209	264	315	364
	4	106	126	153	180	219	281	340	397
	6	108	129	159	187	231	299	366	430
28	0	107	126	152	176	210	263	311	355
	2	108	127	154	179	216	272	325	375
	4	109	130	158	185	225	288	349	407
	6	111	133	163	192	236	306	375	439
30	0	110	129	156	181	216	270	320	366
	2	111	131	158	184	221	279	333	385
	4	112	133	162	190	230	297	357	416
	6	114	136	167	197	242	313	383	449

Slope - Flat & Downhill

for Uphill - Inlet pressure Including Flat slope + Difference level

“KATIF” DRIPPER - 2.3 lph

Maximum recommended Lateral Length (m)

Pipe Diameter **17.8/15.2** (OD/ID)

Inlet Pressure(m)	Slope %	Emitter Spacing (m)							
		0.33	0.4	0.5	0.6	0.75	1.0	1.25	1.5
8	0	16	18	20	24	30	33	37	45
	2	42	50	64	71	89	119	161	193
	4	52	59	74	95	119	169	218	268
	6	55	71	89	119	153	199	261	313
10	0	62	72	86	99	117	145	172	195
	2	73	86	107	125	153	197	241	283
	4	81	89	119	143	176	233	290	346
	6	86	106	132	160	200	264	330	394
12	0	78	92	110	127	150	187	219	249
	2	88	103	128	149	181	230	281	327
	4	95	113	139	165	203	265	327	385
	6	100	122	150	181	224	294	364	432
14	0	90	106	127	147	173	215	253	288
	2	98	116	142	167	201	256	310	360
	4	105	125	154	182	222	289	353	416
	6	110	133	164	197	243	316	390	461
16	0	100	117	140	162	192	239	280	319
	2	107	127	155	180	218	275	330	382
	4	113	134	164	193	236	305	374	439
	6	117	141	174	207	257	335	411	485
18	0	108	127	152	175	208	258	303	351
	2	115	135	164	190	229	288	344	399
	4	118	140	172	201	246	317	388	456
	6	122	147	182	215	267	348	428	503
20	0	115	135	162	187	222	275	324	369
	2	120	141	171	198	238	300	359	415
	4	123	146	178	209	255	328	401	471
	6	127	153	188	223	275	358	440	517
22	0	121	142	170	197	234	291	342	390
	2	124	147	177	206	247	311	371	430
	4	127	151	185	216	263	339	414	485
	6	131	158	194	230	284	369	452	531

Slope - Flat & Downhill

for Uphill - Inlet pressure Including Flat slope + Difference level

(Continued from page 9)

“KATIF” DRIPPER - 2.3 lph

Maximum recommended Lateral Length (m)

Pipe Diameter **17.8/15.2** (OD/ID)

Inlet Pressure(m)	Slope %	Emitter Spacing (m)							
		0.33	0.4	0.5	0.6	0.75	1.0	1.25	1.5
24	0	127	149	178	206	245	304	359	409
	2	129	152	183	213	256	322	383	444
	4	131	156	191	223	272	349	426	498
	6	135	163	200	236	291	379	466	543
26	0	131	154	185	214	254	316	372	425
	2	133	157	189	220	264	331	395	457
	4	136	161	196	229	279	359	437	510
	6	139	167	206	243	299	388	474	555
28	0	135	159	190	220	262	326	384	441
	2	137	161	195	226	271	341	406	470
	4	140	165	202	236	286	368	447	522
	6	143	171	211	249	306	396	485	567
30	0	138	163	196	226	270	336	395	451
	2	141	166	200	232	279	350	416	482
	4	143	170	207	241	294	376	457	534
	6	146	176	216	254	313	405	495	578

Slope - Flat & Downhill

for Uphill - Inlet pressure Including Flat slope + Difference level

“KATIF” DRIPPER - 2.3 lph

Maximum recommended Lateral Length (m)

Pipe Diameter **20/17.4** (OD/ID)

Inlet Pressure(m)	Slope %	Emitter Spacing (m)							
		0.33	0.4	0.5	0.6	0.75	1.0	1.25	1.5
8	0	23	26	30	35	38	50	56	60
	2	66	76	95	113	134	189	211	284
	4	79	96	120	143	194	264	324	374
	6	92	112	150	174	239	299	399	464
10	0	86	100	117	135	158	193	225	255
	2	108	126	155	181	217	279	336	398
	4	121	145	178	211	262	342	418	490
	6	133	161	201	237	299	389	484	572
12	0	110	128	151	173	203	248	288	327
	2	128	151	182	212	254	324	388	455
	4	141	168	205	241	295	382	463	543
	6	152	182	226	266	329	427	527	621
14	0	127	147	174	199	234	285	333	377
	2	144	168	203	235	282	357	426	497
	4	155	184	224	263	321	412	499	582
	6	166	198	244	288	353	456	561	659
16	0	141	163	193	220	259	317	369	418
	2	156	182	220	254	303	380	454	525
	4	165	195	238	279	339	436	527	615
	6	176	210	258	305	373	480	588	689
18	0	152	177	209	238	280	343	400	453
	2	165	192	230	266	317	397	474	547
	4	173	203	248	290	352	452	547	640
	6	183	219	268	317	387	500	608	715
20	0	162	189	223	254	299	366	428	483
	2	172	201	240	277	330	413	492	567
	4	180	211	257	301	364	467	564	659
	6	189	226	277	327	399	514	625	734
22	0	172	199	235	269	316	387	451	511
	2	179	208	249	288	342	428	509	586
	4	186	219	265	311	376	481	580	678
	6	196	233	285	337	411	528	640	751

Slope - Flat & Downhill

for Uphill - Inlet pressure Including Flat slope + Difference level

(Continued from page 11)

“KATIF” DRIPPER - 2.3 lph

Maximum recommended Lateral Length (m)

Pipe Diameter **20/17.4** (OD/ID)

Inlet Pressure(m)	Slope %	Emitter Spacing (m)							
		0.33	0.4	0.5	0.6	0.75	1.0	1.25	1.5
24	0	180	208	247	282	331	405	474	536
	2	185	216	257	297	353	441	525	604
	4	192	225	274	320	387	494	595	695
	6	202	240	293	346	421	540	655	767
26	0	186	216	255	293	344	421	492	558
	2	191	222	265	306	364	454	540	621
	4	198	232	281	329	397	507	610	711
	6	207	247	301	354	431	553	669	783
28	0	192	222	263	302	355	435	507	575
	2	196	229	273	315	374	467	555	637
	4	203	238	289	337	407	519	624	727
	6	212	253	308	363	440	564	682	798
30	0	197	229	271	310	365	448	523	592
	2	202	235	280	324	384	479	569	653
	4	208	244	296	346	417	530	637	742
	6	218	259	315	370	450	575	695	812

Slope - Flat & Downhill

for Uphill - Inlet pressure Including Flat slope + Difference level

“KATIF” DRIPPER - 2.8 lph

Maximum recommended Lateral Length (m)

Pipe Diameter **12/9.8** (OD/ID)

Inlet Pressure(m)	Slope %	Emitter Spacing (m)							
		0.33	0.4	0.5	0.6	0.75	1.0	1.25	1.5
8	0	3	4	5	6	7	10	12	15
	2	9	11	15	19	23	31	41	48
	4	12	15	19	23	29	41	51	62
	6	13	16	21	26	34	47	59	74
10	0	20	24	29	34	41	52	63	72
	2	22	26	32	38	47	61	74	87
	4	23	28	35	41	50	67	83	98
	6	24	29	36	43	54	72	89	107
12	0	26	30	37	43	53	67	80	92
	2	27	32	40	47	57	74	90	105
	4	28	33	42	49	60	79	96	114
	6	29	34	43	51	64	84	103	123
14	0	29	35	43	50	61	77	91	107
	2	30	36	45	53	65	83	101	117
	4	31	38	47	55	68	88	108	126
	6	32	38	48	57	71	92	114	135
16	0	32	39	47	55	67	85	101	117
	2	33	40	49	58	71	91	110	128
	4	34	41	51	60	74	95	116	137
	6	35	42	52	62	76	99	123	144
18	0	35	42	51	59	72	92	110	128
	2	36	43	53	62	76	97	118	137
	4	37	44	54	64	79	102	124	146
	6	37	45	56	66	81	106	129	153
20	0	37	44	54	64	77	98	118	135
	2	38	46	56	66	80	103	125	146
	4	39	46	57	68	83	107	130	153
	6	39	47	59	70	86	111	136	161
22	0	39	47	57	67	86	103	124	143
	2	40	48	59	69	84	108	130	152
	4	41	49	60	71	87	112	136	159
	6	41	50	61	73	89	116	141	167

Slope - Flat & Downhill

for Uphill - Inlet pressure Including Flat slope + Difference level

(Continued from page 13)

“KATIF” DRIPPER - 2.8 lph

Maximum recommended Lateral Length (m)

Pipe Diameter **12/9.8** (OD/ID)

Inlet Pressure(m)	Slope %	Emitter Spacing (m)							
		0.33	0.4	0.5	0.6	0.75	1.0	1.25	1.5
24	0	41	49	60	70	85	108	130	150
	2	42	50	61	72	88	113	136	159
	4	43	51	63	74	90	117	141	167
	6	43	52	64	76	93	120	148	173
26	0	43	51	62	73	89	113	135	156
	2	44	52	64	75	92	117	141	165
	4	44	53	65	77	94	121	148	171
	6	45	54	66	78	96	125	153	179
28	0	44	53	65	76	92	117	140	162
	2	45	54	66	77	95	121	146	170
	4	46	55	67	79	97	125	151	177
	6	46	55	68	81	99	128	156	185
30	0	46	54	67	78	95	121	145	168
	2	47	56	68	80	98	125	151	176
	4	47	56	69	82	100	129	156	183
	6	48	57	71	83	102	132	161	189

Slope - Flat & Downhill

for Uphill - Inlet pressure Including Flat slope + Difference level

“KATIF” DRIPPER - 2.8 lph

Maximum recommended Lateral Length (m)

Pipe Diameter **16/13.6** (OD/ID)

Inlet Pressure(m)	Slope %	Emitter Spacing (m)							
		0.33	0.4	0.5	0.6	0.75	1.0	1.25	1.5
8	0	10	11	13	16	21	24	27	30
	2	26	30	40	47	58	80	99	116
	4	31	40	50	59	77	104	130	159
	6	37	45	58	71	91	123	159	191
10	0	44	51	61	70	83	103	121	138
	2	50	59	73	85	103	133	160	186
	4	54	65	80	95	117	152	186	221
	6	58	70	87	104	129	170	210	249
12	0	55	65	78	90	107	132	155	177
	2	61	72	88	102	123	157	189	219
	4	64	77	95	111	136	176	214	251
	6	68	81	101	119	147	192	236	278
14	0	64	75	90	104	123	153	180	204
	2	68	81	99	115	138	176	210	243
	4	72	86	105	123	150	193	234	275
	6	75	90	111	131	161	208	255	300
16	0	71	83	100	115	137	169	199	227
	2	75	88	107	125	150	190	228	264
	4	78	93	114	133	162	207	250	293
	6	81	97	119	140	172	222	271	318
18	0	76	90	108	124	148	183	215	246
	2	80	95	115	134	161	203	243	281
	4	83	99	121	142	172	219	265	309
	6	86	103	126	149	182	234	284	333
20	0	81	96	115	132	158	195	230	263
	2	85	100	122	142	170	215	256	296
	4	88	104	127	149	181	230	278	323
	6	91	108	133	156	190	244	296	347
22	0	86	101	121	140	166	206	243	278
	2	89	105	128	148	179	225	269	309
	4	92	109	133	155	188	240	289	336
	6	95	113	138	163	197	254	308	360

Slope - Flat & Downhill

for Uphill - Inlet pressure Including Flat slope + Difference level

(Continued from page 15)

“KATIF” DRIPPER - 2.8 lph

Maximum recommended Lateral Length (m)

Pipe Diameter **16/13.6** (OD/ID)

Inlet Pressure(m)	Slope %	Emitter Spacing (m)							
		0.33	0.4	0.5	0.6	0.75	1.0	1.25	1.5
24	0	90	106	127	146	174	216	255	291
	2	93	110	133	155	186	234	279	323
	4	96	114	139	162	196	249	300	348
	6	99	117	144	169	205	263	318	371
26	0	94	110	132	152	182	225	266	303
	2	97	114	138	161	193	243	290	333
	4	99	118	144	167	203	258	309	359
	6	102	122	148	174	212	271	328	381
28	0	97	114	137	158	188	234	276	315
	2	100	118	143	166	200	251	299	345
	4	103	122	148	173	209	265	319	369
	6	105	125	153	179	218	278	336	392
30	0	100	118	142	164	195	242	285	326
	2	103	122	148	172	206	259	309	354
	4	106	126	153	178	215	273	328	378
	6	108	129	157	184	224	285	345	402

Slope - Flat & Downhill

for Uphill - Inlet pressure Including Flat slope + Difference level

“KATIF” DRIPPER - 2.8 lph

Maximum recommended Lateral Length (m)

Pipe Diameter **17.8/15.2** (OD/ID)

Inlet Pressure(m)	Slope %	Emitter Spacing (m)							
		0.33	0.4	0.5	0.6	0.75	1.0	1.25	1.5
8	0	14	16	18	22	27	30	34	40
	2	35	42	54	64	82	107	131	161
	4	43	55	69	82	106	142	178	216
	6	52	63	80	100	1225	170	218	264
10	0	56	65	77	89	104	128	150	171
	2	65	77	95	110	134	174	206	242
	4	72	86	106	125	155	201	246	291
	6	78	94	117	139	172	226	280	332
12	0	71	83	99	113	134	164	193	219
	2	79	93	113	132	159	202	243	282
	4	85	101	124	146	178	229	279	327
	6	90	108	133	158	194	253	310	366
14	0	82	96	114	131	155	190	223	252
	2	89	105	127	148	178	224	269	311
	4	94	112	137	161	195	250	303	354
	6	100	119	146	172	211	273	334	393
16	0	90	106	126	145	171	211	246	281
	2	97	114	138	160	193	243	290	335
	4	102	122	148	173	209	268	324	377
	6	107	128	156	184	225	290	353	414
18	0	98	114	136	157	185	228	268	303
	2	104	122	148	172	206	259	309	356
	4	109	129	157	184	222	283	341	398
	6	114	135	165	194	236	304	370	434
20	0	104	122	145	167	197	243	285	324
	2	110	130	156	181	217	273	325	375
	4	115	136	165	193	233	296	356	414
	6	120	142	173	203	248	317	385	450
22	0	110	128	153	176	209	257	301	342
	2	116	136	164	190	227	285	340	392
	4	121	142	173	201	243	308	370	431
	6	125	148	181	212	257	329	398	465

Slope - Flat & Downhill

for Uphill - Inlet pressure Including Flat slope + Difference level

(Continued from page 17)

“KATIF” DRIPPER - 2.8 lph

Maximum recommended Lateral Length (m)

Pipe Diameter **17.8/15.2** (OD/ID)

Inlet Pressure(m)	Slope %	Emitter Spacing (m)							
		0.33	0.4	0.5	0.6	0.75	1.0	1.25	1.5
24	0	116	135	161	185	218	270	316	359
	2	121	142	171	198	237	297	354	407
	4	125	148	179	209	252	319	384	446
	6	129	154	187	219	266	340	410	479
26	0	120	140	168	193	228	281	330	375
	2	125	147	178	205	246	308	366	422
	4	130	153	186	216	260	330	395	459
	6	134	159	193	226	274	350	423	492
28	0	120	146	174	200	236	292	343	389
	2	125	152	184	212	254	318	378	435
	4	134	158	192	223	269	340	406	471
	6	138	164	199	233	281	359	433	504
30	0	129	151	180	207	245	302	354	402
	2	134	157	189	219	262	328	389	447
	4	138	163	197	229	276	349	418	483
	6	142	168	204	239	289	368	444	516

Slope - Flat & Downhill

for Uphill - Inlet pressure Including Flat slope + Difference level

“KATIF” DRIPPER - 2.8 lph

Maximum recommended Lateral Length (m)

Pipe Diameter **20/17.4** (OD/ID)

Inlet Pressure(m)	Slope %	Emitter Spacing (m)							
		0.33	0.4	0.5	0.6	0.75	1.0	1.25	1.5
8	0	21	24	27	32	35	45	50	55
	2	51	61	79	92	113	154	189	230
	4	65	81	102	121	155	207	258	314
	6	78	95	120	148	185	252	322	377
10	0	74	86	102	116	136	166	193	219
	2	90	106	130	151	182	234	283	330
	4	101	122	149	176	216	280	343	405
	6	111	134	166	197	244	320	389	461
12	0	95	110	130	148	174	213	248	281
	2	108	128	154	179	215	273	328	380
	4	119	141	172	202	246	316	384	452
	6	127	152	188	222	272	354	428	504
14	0	110	127	150	171	201	246	286	324
	2	122	143	172	199	239	301	360	417
	4	131	156	189	221	268	343	415	485
	6	140	166	204	240	293	379	454	534
16	0	121	140	166	190	223	273	318	360
	2	132	155	187	216	258	325	388	447
	4	141	167	203	236	287	365	440	513
	6	150	178	217	255	311	400	476	557
18	0	131	152	180	205	242	295	345	390
	2	142	166	199	230	275	345	411	474
	4	150	178	215	250	302	384	463	539
	6	158	188	229	268	326	418	487	573
20	0	140	162	192	219	257	315	368	417
	2	150	176	211	243	290	363	431	498
	4	158	187	226	262	317	401	483	560
	6	166	196	239	280	340	435	504	592
22	0	148	171	203	232	272	333	389	441
	2	157	184	221	254	304	380	451	519
	4	165	195	235	274	329	417	500	581
	6	173	204	248	290	352	450	516	604

Slope - Flat & Downhill

for Uphill - Inlet pressure Including Flat slope + Difference level

(Continued from page 19)

“KATIF” DRIPPER - 2.8 lph

Maximum recommended Lateral Length (m)

Pipe Diameter **20/17.4** (OD/ID)

Inlet Pressure(m)	Slope %	Emitter Spacing (m)							
		0.33	0.4	0.5	0.6	0.75	1.0	1.25	1.5
24	0	154	179	212	243	285	350	408	462
	2	164	192	230	265	316	395	469	539
	4	172	202	244	284	341	431	516	599
	6	179	212	257	301	363	463	527	621
26	0	161	187	222	253	298	365	426	485
	2	170	199	238	275	327	409	485	557
	4	178	209	252	293	352	444	531	617
	6	185	219	2635	310	374	476	538	636
28	0	167	194	230	263	309	379	443	501
	2	176	206	246	284	338	422	500	573
	4	184	216	260	302	362	457	546	632
	6	190	225	273	318	384	488	550	644
30	0	173	201	238	272	320	392	458	519
	2	182	212	254	293	348	434	514	590
	4	189	222	267	310	372	468	560	647
	6	196	231	280	326	393	499	562	655

Slope - Flat & Downhill

for Uphill - Inlet pressure Including Flat slope + Difference level

“KATIF” DRIPPER - 3.75 lph

Maximum recommended Lateral Length (m)

Pipe Diameter **12/9.8** (OD/ID)

Inlet Pressure(m)	Slope %	Emitter Spacing (m)							
		0.33	0.4	0.5	0.6	0.75	1.0	1.25	1.5
8	0	3	4	5	6	7	10	12	15
	2	6	8	10	14	19	19	23	34
	4	8	12	13	17	23	31	39	43
	6	9	13	14	19	24	29	43	51
10	0	16	20	25	28	34	44	52	60
	2	18	21	26	31	39	48	59	69
	4	19	23	27	33	41	53	65	77
	6	19	23	29	35	43	56	71	85
12	0	21	25	31	37	44	56	66	77
	2	22	27	33	39	47	59	73	84
	4	23	28	33	40	49	64	78	92
	6	23	28	35	42	51	67	83	98
14	0	24	29	36	42	50	64	77	89
	2	25	30	37	44	54	68	82	96
	4	26	31	38	45	55	71	87	102
	6	26	31	39	47	57	73	90	107
16	0	27	32	40	46	56	71	85	98
	2	28	33	41	48	59	74	89	105
	4	28	34	41	49	60	77	93	108
	6	29	34	42	50	61	79	96	112
18	0	29	35	43	50	61	77	92	106
	2	30	36	43	51	62	80	95	110
	4	30	36	44	51	63	81	98	114
	6	30	36	44	52	64	82	100	117
20	0	30	37	45	53	64	82	98	112
	2	31	37	46	54	65	84	101	115
	4	31	38	46	54	66	84	102	119
	6	32	38	46	55	66	86	104	122
22	0	32	38	47	55	66	85	102	118
	2	32	39	47	56	68	87	105	120
	4	33	39	48	56	68	88	106	123
	6	33	39	48	57	69	89	108	126

Slope - Flat & Downhill

for Uphill - Inlet pressure Including Flat slope + Difference level

(Continued from page 21)

“KATIF” DRIPPER - 3.75 lph

Maximum recommended Lateral Length (m)

Pipe Diameter **12/9.8** (OD/ID)

Inlet Pressure(m)	Slope %	Emitter Spacing (m)							
		0.33	0.4	0.5	0.6	0.75	1.0	1.25	1.5
24	0	33	40	49	57	69	88	106	123
	2	34	40	49	58	70	90	109	124
	4	34	41	50	58	71	91	110	128
	6	34	40	50	59	72	92	112	131
26	0	34	41	50	59	72	92	110	127
	2	35	41	51	60	73	93	112	129
	4	35	42	51	60	73	94	113	132
	6	35	42	51	61	74	95	115	135
28	0	35	42	52	61	74	94	114	131
	2	36	43	52	62	75	96	116	133
	4	36	43	53	62	75	96	117	136
	6	36	43	53	62	76	98	119	139
30	0	37	44	53	63	76	97	117	135
	2	37	44	54	63	77	99	119	137
	4	37	44	54	63	77	99	120	139
	6	37	44	54	64	78	101	122	142

Slope - Flat & Downhill

for Uphill - Inlet pressure Including Flat slope + Difference level

“KATIF” DRIPPER - 3.75 lph

Maximum recommended Lateral Length (m)

Pipe Diameter **16/13.6** (OD/ID)

Inlet Pressure(m)	Slope %	Emitter Spacing (m)							
		0.33	0.4	0.5	0.6	0.75	1.0	1.25	1.5
8	0	7	8	10	12	15	20	25	30
	2	20	26	25	35	48	59	74	74
	4	20	30	35	41	59	79	99	124
	6	28	32	45	48	67	89	111	134
10	0	36	42	50	58	69	86	102	116
	2	40	48	57	67	83	105	127	149
	4	42	51	63	74	92	120	147	175
	6	45	54	67	80	101	132	163	194
12	0	45	53	64	74	88	110	130	147
	2	49	58	70	82	100	126	152	176
	4	51	61	75	88	108	140	170	199
	6	53	64	79	93	116	150	185	216
14	0	52	61	74	85	102	126	150	170
	2	55	65	79	92	112	142	170	196
	4	57	68	83	98	120	152	183	213
	6	59	71	86	102	124	160	195	230
16	0	57	68	81	94	113	140	165	189
	2	60	71	86	101	121	153	182	211
	4	62	73	89	104	126	160	193	224
	6	63	75	91	107	131	168	204	240
18	0	62	73	88	102	122	152	179	205
	2	64	76	91	106	128	161	192	221
	4	65	77	93	109	132	168	201	234
	6	66	78	95	112	136	175	213	249
20	0	66	77	93	108	129	161	191	218
	2	67	79	96	111	133	168	200	230
	4	67	80	97	114	137	174	209	243
	6	69	81	99	117	142	181	220	258
22	0	68	80	97	113	135	169	200	228
	2	69	82	99	115	138	174	208	239
	4	70	83	101	118	143	181	217	251
	6	71	84	103	121	147	187	228	266

Slope - Flat & Downhill

for Uphill - Inlet pressure Including Flat slope + Difference level

(Continued from page 23)

“KATIF” DRIPPER - 3.75 lph

Maximum recommended Lateral Length (m)

Pipe Diameter **16/13.6** (OD/ID)

Inlet Pressure(m)	Slope %	Emitter Spacing (m)							
		0.33	0.4	0.5	0.6	0.75	1.0	1.25	1.5
24	0	71	84	101	117	140	175	207	237
	2	72	85	103	119	143	180	215	247
	4	73	86	104	122	147	187	224	259
	6	74	87	106	125	151	193	235	274
26	0	73	86	104	121	145	181	214	245
	2	74	88	106	123	148	186	222	255
	4	75	89	108	126	152	192	230	267
	6	76	90	110	128	156	199	241	282
28	0	76	89	107	125	149	187	221	253
	2	76	90	109	127	152	192	228	263
	4	77	91	111	129	156	198	237	274
	6	78	93	113	132	160	204	247	289
30	0	78	92	111	128	154	192	228	261
	2	79	93	113	130	157	198	235	270
	4	79	94	114	133	160	203	243	281
	6	80	95	116	136	164	209	253	296

Slope - Flat & Downhill

for Uphill - Inlet pressure Including Flat slope + Difference level

“KATIF” DRIPPER - 3.75 lph

Maximum recommended Lateral Length (m)

Pipe Diameter **17.8/15.2** (OD/ID)

Inlet Pressure(m)	Slope %	Emitter Spacing (m)							
		0.33	0.4	0.5	0.6	0.75	1.0	1.25	1.5
8	0	10	12	15	18	22	23	25	30
	2	23	28	40	41	63	84	105	126
	4	29	42	45	53	79	109	132	163
	6	36	43	54	71	93	129	161	193
10	0	45	53	63	72	85	106	125	143
	2	50	60	74	86	106	136	165	193
	4	54	67	81	96	121	156	192	227
	6	59	71	89	106	133	175	216	255
12	0	57	67	80	92	109	136	159	182
	2	61	73	98	104	127	161	194	226
	4	65	79	96	113	140	181	219	257
	6	69	83	103	122	150	196	240	285
14	0	66	77	92	107	126	157	184	210
	2	70	83	101	117	124	180	215	250
	4	73	88	107	126	152	194	234	272
	6	77	91	112	131	160	207	254	301
16	0	72	85	102	118	140	174	204	233
	2	76	90	110	127	153	193	229	264
	4	79	94	114	133	160	204	245	285
	6	81	96	117	138	168	217	265	313
18	0	78	92	110	127	151	189	221	252
	2	81	96	115	134	161	202	240	276
	4	83	98	119	139	167	212	256	297
	6	84	100	122	144	175	225	275	325
20	0	83	97	117	135	160	200	236	269
	2	85	100	120	140	168	211	250	288
	4	86	102	124	144	174	221	267	308
	6	88	104	127	149	181	233	284	335
22	0	87	102	122	141	168	209	246	281
	2	88	104	125	145	174	219	260	298
	4	90	106	128	150	181	229	275	319
	6	91	108	132	154	187	241	293	345

Slope - Flat & Downhill

for Uphill - Inlet pressure Including Flat slope + Difference level

(Continued from page 25)

“KATIF” DRIPPER - 3.75 lph

Maximum recommended Lateral Length (m)

Pipe Diameter **17.8/15.2** (OD/ID)

Inlet Pressure(m)	Slope %	Emitter Spacing (m)							
		0.33	0.4	0.5	0.6	0.75	1.0	1.25	1.5
24	0	90	105	127	147	174	217	256	292
	2	91	108	129	150	180	226	269	309
	4	93	110	133	155	187	236	283	328
	6	94	112	136	159	193	248	302	355
26	0	92	106	131	152	181	225	265	302
	2	94	111	134	155	186	233	277	319
	4	96	113	137	160	192	243	291	338
	6	97	115	140	164	199	255	310	364
28	0	95	113	135	156	186	232	274	312
	2	97	115	138	160	192	240	285	328
	4	98	116	141	164	197	250	299	347
	6	100	118	144	168	204	261	317	372
30	0	98	116	139	161	192	239	281	321
	2	100	118	142	164	197	247	293	337
	4	101	119	144	168	202	256	307	355
	6	102	121	147	173	209	267	325	381

Slope - Flat & Downhill

for Uphill - Inlet pressure Including Flat slope + Difference level

“KATIF” DRIPPER - 3.75 lph

Maximum recommended Lateral Length (m)

Pipe Diameter **20/17.4** (OD/ID)

Inlet Pressure(m)	Slope %	Emitter Spacing (m)							
		0.33	0.4	0.5	0.6	0.75	1.0	1.25	1.5
8	0	17	16	20	24	30	30	38	45
	2	43	44	65	72	89	124	136	164
	4	46	60	75	96	119	159	199	224
	6	59	76	90	114	134	194	236	284
10	0	63	73	86	98	114	140	163	186
	2	75	87	107	124	149	191	228	264
	4	82	98	120	144	174	225	276	321
	6	90	108	131	158	194	255	311	371
12	0	81	93	110	126	148	180	210	238
	2	90	105	128	147	177	225	267	308
	4	97	115	140	165	200	255	311	361
	6	104	124	151	180	218	283	346	408
14	0	93	107	127	145	170	209	243	275
	2	101	118	143	165	197	249	294	338
	4	108	128	153	178	214	271	327	382
	6	113	133	161	189	231	299	366	431
16	0	102	119	141	161	189	231	270	305
	2	110	102	154	178	211	263	311	356
	4	115	135	162	187	224	284	342	399
	6	119	140	169	198	240	311	380	447
18	0	111	128	152	174	205	250	292	331
	2	116	136	162	187	221	275	325	372
	4	120	141	169	196	234	295	355	414
	6	124	146	176	206	250	322	393	461
20	0	118	137	162	185	218	268	312	353
	2	121	142	169	195	231	286	338	387
	4	125	146	176	204	243	306	368	428
	6	128	151	183	214	259	333	405	475
22	0	123	143	169	194	228	274	326	370
	2	126	147	175	202	240	297	351	401
	4	130	152	182	210	252	317	380	441
	6	133	156	189	221	267	343	416	488

Slope - Flat & Downhill

for Uphill - Inlet pressure Including Flat slope + Difference level

(Continued from page 27)

“KATIF” DRIPPER - 3.75 lph

Maximum recommended Lateral Length (m)

Pipe Diameter **20/17.4** (OD/ID)

Inlet Pressure(m)	Slope %	Emitter Spacing (m)							
		0.33	0.4	0.5	0.6	0.75	1.0	1.25	1.5
24	0	128	148	176	201	237	291	339	384
	2	131	152	182	209	248	308	362	415
	4	134	157	188	217	260	327	391	454
	6	137	161	195	227	275	352	427	500
26	0	132	153	182	208	245	301	351	398
	2	135	157	187	216	256	317	374	427
	4	138	162	194	224	267	336	402	466
	6	141	166	201	234	282	361	438	511
28	0	136	158	188	215	253	310	363	411
	2	139	162	193	222	263	326	484	439
	4	142	166	199	230	275	345	412	478
	6	145	171	206	240	289	370	448	522
30	0	140	163	193	221	260	320	374	423
	2	143	167	199	228	270	335	394	451
	4	146	171	204	236	282	353	422	489
	6	149	175	211	246	296	379	457	533

Slope - Flat & Downhill

for Uphill - Inlet pressure Including Flat slope + Difference level

“KATIF” DRIPPER – 8.4 lph

Maximum recommended Lateral Length (m)

Pipe Diameter **12/9.8** (OD/ID)

Inlet Pressure(m)	Slope %	Emitter Spacing (m)							
		0.5	0.6	0.75	1.0	1.25	1.5	1.75	2.0
8	0	4	5	6	7	9	11	11	12
	2	6	7	10	11	14	17	19	22
	4	7	8	10	14	18	21	25	30
	6	8	9	12	16	20	26	30	34
10	0	15	17	20	26	31	36	40	44
	2	15	18	22	28	34	39	46	50
	4	16	19	23	29	36	42	49	54
	6	16	19	23	31	38	45	53	58
12	0	18	22	26	33	40	45	51	56
	2	19	22	27	35	41	48	56	62
	4	19	23	28	36	44	51	58	66
	6	20	23	29	37	45	54	61	70
14	0	21	25	30	38	45	53	60	66
	2	22	25	31	39	48	56	63	70
	4	22	26	32	41	49	57	67	74
	6	22	26	32	42	51	60	68	76
16	0	23	27	33	42	50	59	65	72
	2	24	28	34	43	53	60	68	76
	4	24	28	35	44	54	63	72	80
	6	25	29	35	46	55	65	74	84
18	0	25	29	35	45	54	63	70	78
	2	26	30	36	46	56	65	74	82
	4	26	31	37	48	58	68	77	86
	6	26	31	38	49	59	69	79	88
20	0	27	31	38	48	58	68	75	84
	2	27	32	38	49	60	69	79	88
	4	27	32	39	51	61	72	81	90
	6	28	32	40	52	63	74	84	94
22	0	28	33	40	51	61	71	81	88
	2	29	34	41	52	63	74	82	92
	4	29	34	41	53	64	75	86	94
	6	29	34	42	54	66	77	88	98

Slope - Flat & Downhill

for Uphill - Inlet pressure Including Flat slope + Difference level

9.1.2000

(Continued from page 29)

“KATIF” DRIPPER – 8.4 lph

Maximum recommended Lateral Length (m)

Pipe Diameter **12/9.8** (OD/ID)

Inlet Pressure(m)	Slope %	Emitter Spacing (m)							
		0.5	0.6	0.75	1.0	1.25	1.5	1.75	2.0
24	0	30	34	42	53	64	74	84	92
	2	30	35	43	54	65	77	86	96
	4	30	35	43	55	68	78	89	100
	6	30	36	44	56	69	80	91	102
26	0	31	36	44	55	66	77	88	96
	2	31	36	44	57	69	80	89	100
	4	31	37	45	58	70	81	93	102
	6	32	37	46	59	71	83	95	106
28	0	32	37	45	58	69	80	91	100
	2	32	38	46	59	71	83	93	104
	4	32	38	47	60	73	84	95	106
	6	33	38	47	60	74	86	98	108
30	0	33	38	47	59	71	83	93	104
	2	33	39	47	60	73	84	96	106
	4	33	39	48	61	74	87	98	110
	6	34	40	49	62	75	89	100	112

Slope - Flat & Downhill

for Uphill - Inlet pressure Including Flat slope + Difference level

9.1.2000

“KATIF” DRIPPER – 8.4 lph

Maximum recommended Lateral Length (m)

Pipe Diameter **16/13.6** (OD/ID)

Inlet Pressure(m)	Slope %	Emitter Spacing (m)							
		0.5	0.6	0.75	1.0	1.25	1.5	1.75	2.0
8	0	9	10	11	14	16	18	21	22
	2	14	16	20	27	34	41	47	54
	4	17	21	26	36	45	54	63	72
	6	20	25	32	43	54	66	77	88
10	0	30	35	41	51	60	69	77	84
	2	33	38	47	59	70	81	93	102
	4	35	41	50	65	79	92	105	118
	6	37	44	54	70	85	101	116	130
12	0	39	44	53	66	78	89	98	108
	2	41	47	57	72	86	99	112	124
	4	43	50	61	77	94	108	123	138
	6	45	52	64	82	100	117	133	150
14	0	45	51	61	76	89	102	114	124
	2	47	54	65	82	98	113	126	140
	4	48	56	68	87	104	120	137	152
	6	50	58	71	91	110	129	147	164
16	0	49	57	68	84	99	113	126	138
	2	51	59	71	89	106	123	138	152
	4	53	61	74	94	113	131	147	164
	6	54	64	77	98	119	138	158	176
18	0	53	61	73	91	108	123	137	150
	2	55	64	77	96	114	132	147	164
	4	57	66	80	100	120	140	158	174
	6	58	68	82	105	126	147	166	186
20	0	57	65	78	97	114	131	145	160
	2	58	68	81	102	121	140	156	172
	4	60	70	84	106	128	147	166	184
	6	61	71	86	110	133	153	175	194
22	0	60	69	83	102	121	138	154	170
	2	61	71	86	107	128	147	165	182
	4	63	73	88	111	133	153	173	192
	6	64	75	91	115	139	161	182	202

Slope - Flat & Downhill

for Uphill - Inlet pressure Including Flat slope + Difference level

9.1.2000

(Continued from page 31)

“KATIF” DRIPPER – 8.4 lph

Maximum recommended Lateral Length (m)

Pipe Diameter **16/13.6** (OD/ID)

Inlet Pressure(m)	Slope %	Emitter Spacing (m)							
		0.5	0.6	0.75	1.0	1.25	1.5	1.75	2.0
24	0	63	73	86	107	126	144	161	178
	2	64	74	89	112	133	153	172	190
	4	66	76	92	116	139	161	180	200
	6	67	78	95	120	144	167	189	210
26	0	65	76	90	112	133	152	168	186
	2	67	77	93	116	139	159	179	196
	4	68	79	95	120	144	165	187	208
	6	70	81	98	124	149	173	194	216
28	0	68	78	93	116	138	156	175	192
	2	69	80	96	120	143	165	184	204
	4	71	82	98	124	149	171	193	214
	6	72	83	101	128	154	177	201	224
30	0	70	81	97	120	141	162	180	198
	2	71	83	99	124	148	170	191	210
	4	73	85	101	128	153	176	198	220
	6	74	86	104	132	158	183	207	230

Slope - Flat & Downhill

for Uphill - Inlet pressure Including Flat slope + Difference level

9.1.2000

“KATIF” DRIPPER – 8.4 lph

Maximum recommended Lateral Length (m)

Pipe Diameter **17.8/15.2** (OD/ID)

Inlet Pressure(m)	Slope %	Emitter Spacing (m)							
		0.5	0.6	0.75	1.0	1.25	1.5	1.75	2.0
8	0	11	12	14	17	20	23	25	28
	2	19	22	28	37	45	54	63	72
	4	24	29	36	49	61	74	86	98
	6	28	34	44	59	74	90	105	120
10	0	38	44	52	64	75	86	95	104
	2	43	49	59	75	90	104	117	132
	4	46	54	65	84	101	119	137	152
	6	49	58	71	92	113	132	151	170
12	0	49	56	66	82	96	110	121	132
	2	53	61	73	92	109	126	142	158
	4	56	65	78	99	120	140	158	176
	6	58	68	83	107	129	152	173	194
14	0	57	65	77	95	111	126	140	152
	2	60	69	83	103	123	141	159	176
	4	63	73	88	111	133	155	175	192
	6	65	76	92	118	143	165	189	214
16	0	63	72	85	105	123	140	156	170
	2	66	76	90	113	134	155	173	192
	4	68	79	95	120	144	167	187	210
	6	71	82	100	127	153	177	201	224
18	0	68	77	92	113	134	152	168	184
	2	70	82	97	121	144	165	186	204
	4	73	85	101	128	153	177	200	222
	6	75	88	106	134	161	188	212	236
20	0	72	83	98	121	143	162	180	198
	2	75	86	103	129	153	176	196	216
	4	77	89	107	135	161	186	210	232
	6	79	92	111	141	169	197	222	248
22	0	76	88	104	128	150	171	191	208
	2	79	91	108	135	160	183	207	228
	4	81	94	113	142	169	195	219	244
	6	83	97	116	147	176	204	231	258

Slope - Flat & Downhill

for Uphill - Inlet pressure Including Flat slope + Difference level

9.1.2000

(Continued from page 33)

“KATIF” DRIPPER – 8.4 lph

Maximum recommended Lateral Length (m)

Pipe Diameter **17.8/15.2** (OD/ID)

Inlet Pressure(m)	Slope %	Emitter Spacing (m)							
		0.5	0.6	0.75	1.0	1.25	1.5	1.75	2.0
24	0	80	92	109	134	158	179	200	218
	2	82	95	113	141	168	192	215	236
	4	84	98	117	147	175	203	228	252
	6	87	101	121	153	184	212	240	266
26	0	83	95	113	140	164	188	208	228
	2	86	98	118	147	174	200	222	246
	4	88	101	122	153	181	210	236	262
	6	90	104	125	158	190	219	247	274
28	0	86	99	118	145	170	194	215	236
	2	89	102	122	152	180	206	231	254
	4	91	105	126	158	188	216	243	270
	6	93	107	129	163	195	225	256	282
30	0	89	103	122	150	176	201	224	246
	2	91	106	126	157	185	212	238	262
	4	94	108	130	163	194	222	250	276
	6	96	111	134	168	200	231	261	290

Slope - Flat & Downhill

for Uphill - Inlet pressure Including Flat slope + Difference level

9.1.2000

“KATIF” DRIPPER – 8.4 lph
Maximum recommended Lateral Length (m)

Pipe Diameter **20/17.4** (OD/ID)

Inlet Pressure(m)	Slope %	Emitter Spacing (m)							
		0.5	0.6	0.75	1.0	1.25	1.5	1.75	2.0
8	0	14	16	18	22	25	29	32	34
	2	27	32	40	52	65	78	91	102
	4	35	42	53	71	89	107	124	142
	6	42	50	64	86	109	131	152	174
10	0	51	58	68	83	96	110	121	132
	2	58	67	80	101	121	140	158	176
	4	64	74	90	115	139	164	186	208
	6	69	80	98	127	155	183	210	236
12	0	65	74	86	106	124	140	156	170
	2	71	82	98	122	145	167	189	208
	4	76	88	107	135	163	189	214	238
	6	81	94	114	146	178	207	236	266
14	0	75	85	100	123	144	162	180	196
	2	80	92	110	137	163	188	210	232
	4	85	98	119	149	179	207	235	262
	6	89	104	126	160	193	225	256	286
16	0	83	94	111	136	159	180	200	218
	2	88	101	120	150	178	204	228	252
	4	92	107	128	161	193	222	252	280
	6	96	112	135	172	206	240	273	304
18	0	89	102	120	147	173	195	217	236
	2	94	109	129	160	190	218	243	270
	4	99	114	137	171	205	236	266	296
	6	103	119	143	182	218	252	287	320
20	0	95	109	128	157	184	209	231	252
	2	100	115	137	170	200	230	257	284
	4	104	121	144	181	215	248	280	310
	6	108	125	151	190	228	264	299	332
22	0	101	115	136	166	194	221	245	268
	2	105	121	143	178	210	242	270	298
	4	109	126	151	189	225	258	291	322
	6	113	131	158	198	238	275	310	346

Slope - Flat & Downhill

for Uphill - Inlet pressure Including Flat slope + Difference level

9.1.2000

(Continued from page 35)

“KATIF” DRIPPER – 8.4 lph

Maximum recommended Lateral Length (m)

Pipe Diameter **20/17.4** (OD/ID)

Inlet Pressure(m)	Slope %	Emitter Spacing (m)							
		0.5	0.6	0.75	1.0	1.25	1.5	1.75	2.0
24	0	106	121	142	174	204	231	256	280
	2	110	127	150	186	220	251	282	310
	4	114	131	157	196	234	269	303	334
	6	117	136	164	206	245	284	320	356
26	0	110	126	149	182	213	242	268	292
	2	114	131	156	193	228	261	292	322
	4	118	136	163	203	241	278	312	346
	6	122	141	169	212	254	293	331	368
28	0	114	131	154	189	221	251	278	304
	2	118	136	161	200	236	270	301	332
	4	122	141	168	210	249	287	322	356
	6	126	145	174	219	261	302	340	378
30	0	118	135	159	195	229	260	287	314
	2	122	140	167	206	243	278	310	342
	4	126	145	173	216	256	294	331	366
	6	129	149	179	225	268	309	348	386

Slope - Flat & Downhill

for Uphill - Inlet pressure Including Flat slope + Difference level

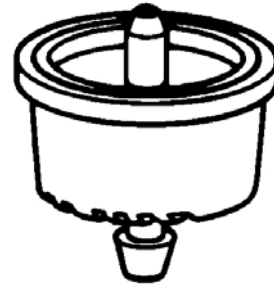
9.1.2000

“SUPERTIF” & SUPERTIF “NO DRAIN”

**A TURBULENT FLOW TYPE EMITTER. COMPLETELY
FLOW REGULATED WITH OUTSTANDING
CLOGGING RESISTANCE**

MAIN FEATURES

- * Flow-regulated, allowing long laterals and uniformity in water distribution
- * Highly resistant to chemicals and fertilizers commonly used in agriculture
- * Suitable for poor water quality
- * Insertable in hoses of 12-32 mm (OD) at any required spacing
- * Built-in No-Drain N.D. device prevents water draining from dripline when water has been shut off.



ADDITIONAL FEATURES

- * 1, 2, 4 and 6 outlet branching adaptors for microtube 5/3 mm. (Snaps easily onto Supertif outlet).

OPERATING RANGE

*** Supertif**

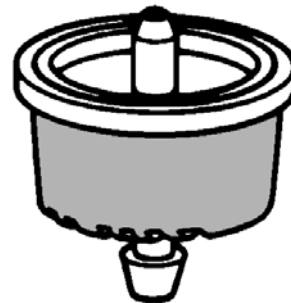
- * Working pressure range 0.6 – 3.5 bar
- * Nominal flow rate:
 - * 2.2, 3.8, 8.0 and 12.0 lph.

*** Supertif N.D.**

Nominal Flow Rate:
2.2, 3.8, 8.0, 12.0 lph
Sealing at: 0.2 bar
Opening at: 0.4 bar

*** Supertif N.D.H.**

Nominal Flow Rate: 3.1, 5.2 lph
Sealing at: 0.4 bar
Opening at: 0.75 bar



MODELS AND TYPES

- * Barbed connection
- * Colour coded for flow rate identification

“SUPERTIF”

DRIPPER

FLOW RATE DATA

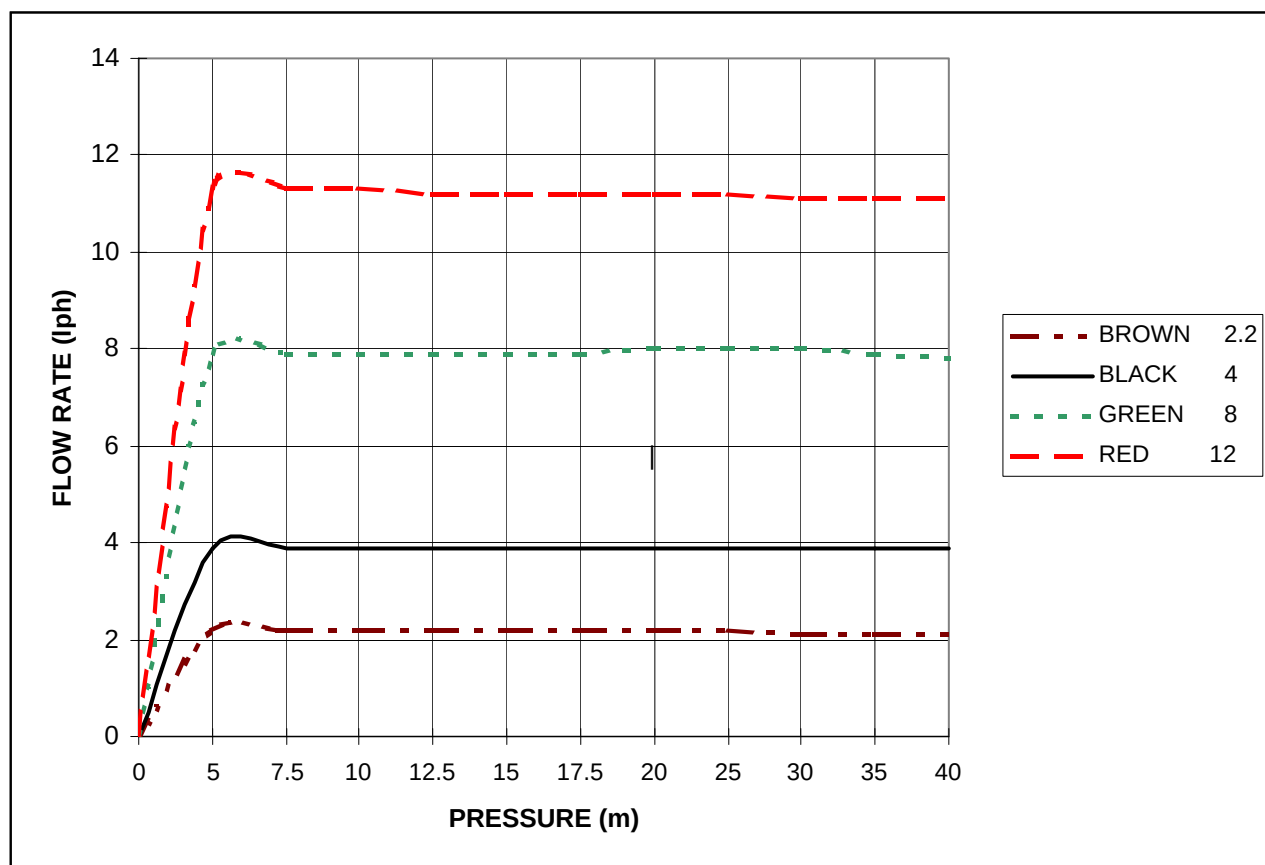
DRIPPER		FLOW RATE (LPH) AT PRESSURE										
COLOR	LPH	5m	7.5m	10m	12.5m	15m	17.5m	20m	25m	30m	35m	40m
BROWN	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.1
BLACK	4	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
GREEN	8	7.9	7.9	7.9	7.9	7.9	7.9	8.0	8.0	8.0	7.9	7.8
RED	12	11.3	11.3	11.3	11.2	11.2	11.2	11.2	11.2	11.1	11.1	11.1

Note: Black Base – Regular Dripper.

Brown Base – No Drain Dripper.

Performance Chart

Working Pressure Range



SUPERTIF “NO DRAIN” N.D.H.

DRIPPER

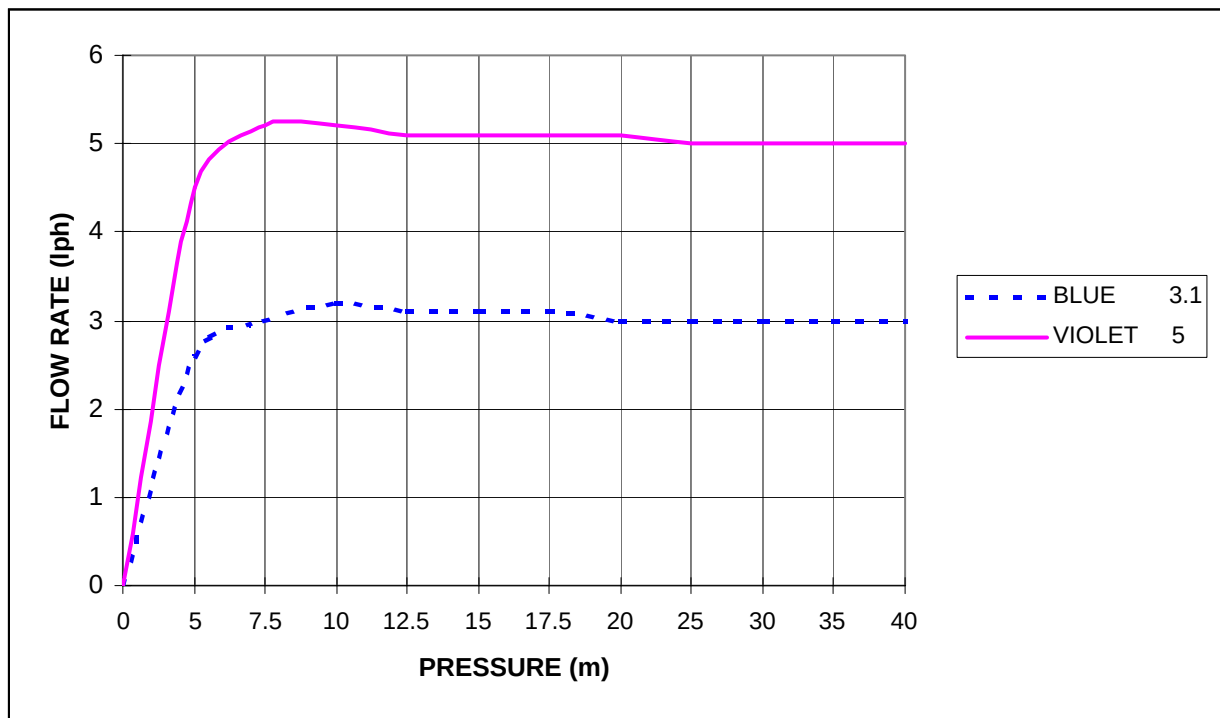
FLOW RATE DATA

DRIPPER		FLOW RATE (LPH) AT PRESSURE										
COLOR	LPH	5m	7.5m	10m	12.5m	15m	17.5m	20m	25m	30m	35m	40m
BLUE	3.1	2.6	3.0	3.2	3.1	3.1	3.1	3.0	3.0	3.0	3.0	3.0
VIOLET	5	4.5	5.2	5.2	5.1	5.1	5.1	5.1	5.0	5.0	5.0	5.0

Note: Base Color– Brown.

Performance Chart

Working Pressure Range

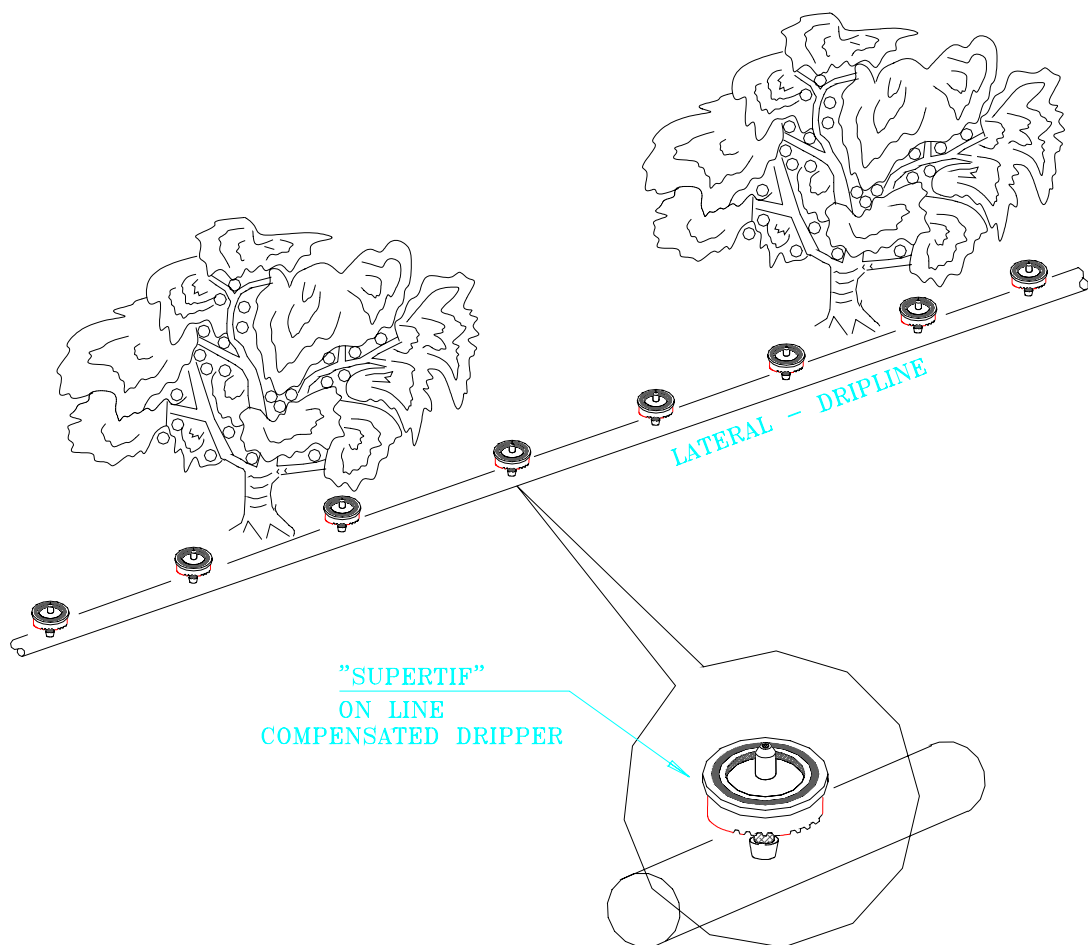


ORCHARDS & PLANTATION

DRIP IRRIGATION

“SUPERTIF”

ON LINE - COMPENSATED DRIPPER

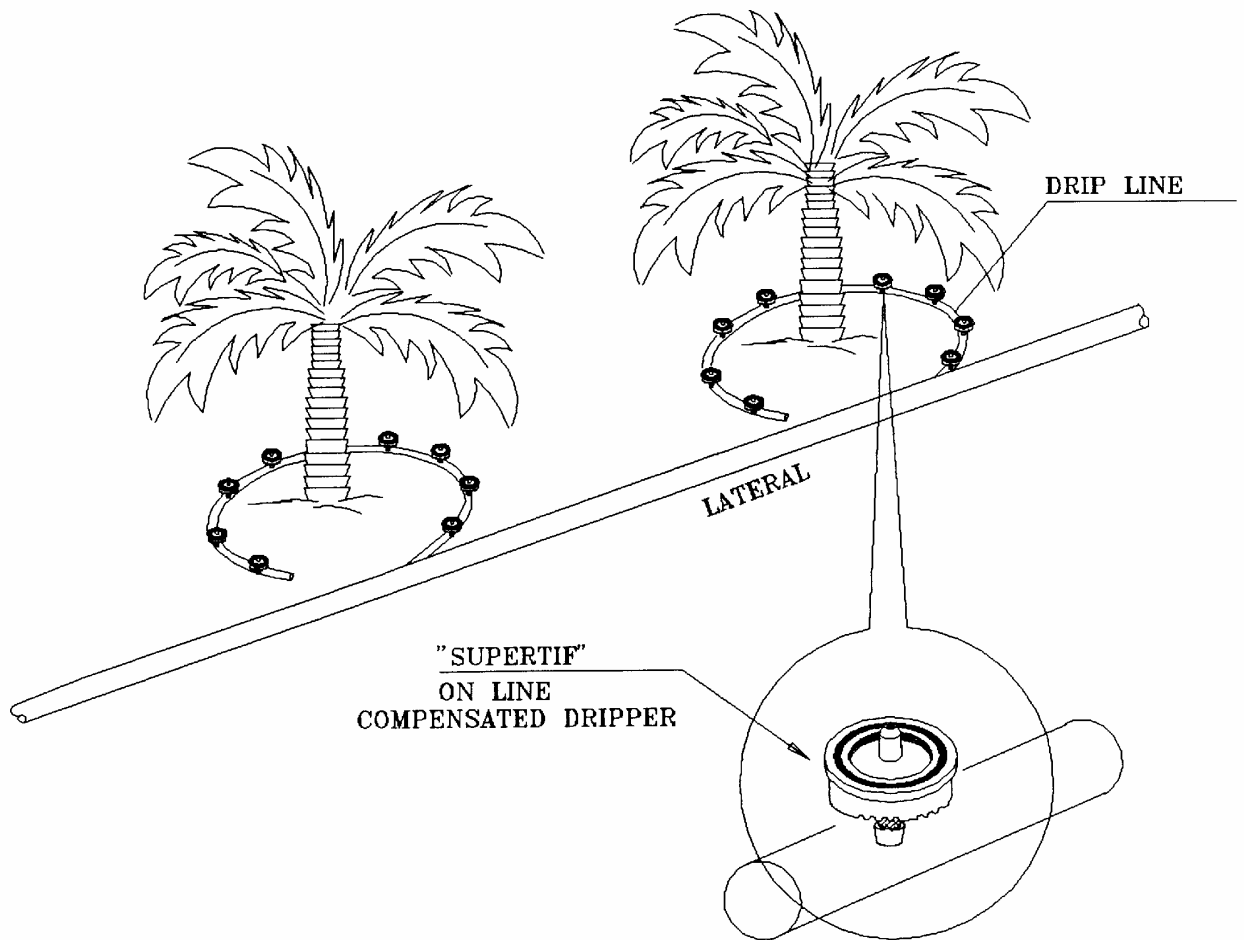


PALMS

DRIP IRRIGATION

"SUPERTIF"

ON LINE - COMPENSATED DRIPPER



“SUPERTIF” DRIPPER - 2.2 L/H

MAXIMUM RECOMMENDED LATERAL LENGTH (m)

PIPE DIAMETER - **12/9.8** (OD/ID)

Pressure bar	Slope %	Emitter Spacing (m)							
		0.3	0.4	0.5	0.6	0.75	1	1.25	1.5
0.8	0	26	33	40	46	54	67	79	90
	2	28	36	44	51	62	79	95	111
	4	29	38	47	55	68	88	108	126
	6	31	40	50	59	73	96	119	140
1.0	0	33	42	50	58	69	86	101	116
	2	35	45	54	63	76	96	115	134
	4	36	46	57	67	81	104	126	149
	6	37	48	60	70	86	112	136	161
1.2	0	38	48	58	67	80	99	118	134
	2	39	51	61	71	86	109	130	150
	4	40	52	64	75	91	116	140	164
	6	41	54	67	78	95	123	150	176
1.4	0	42	53	64	74	89	110	130	149
	2	43	56	67	78	94	119	141	164
	4	44	57	70	82	99	126	151	177
	6	45	59	72	85	104	133	161	189
1.6	0	45	57	69	80	95	119	140	161
	2	46	60	72	84	101	127	153	176
	4	47	61	75	87	106	134	161	188
	6	48	63	77	90	110	141	170	200
1.8	0	48	61	74	85	102	127	150	171
	2	49	63	77	89	107	135	161	186
	4	50	65	79	92	112	142	170	198
	6	51	66	81	95	116	148	179	209
2.0	0	50	64	78	90	107	134	159	182
	2	52	66	80	94	113	142	169	195
	4	53	68	83	97	117	148	178	207
	6	53	70	85	100	121	155	186	218
2.2	0	53	68	82	94	113	140	166	189
	2	54	70	84	98	117	148	176	203
	4	55	71	86	101	122	154	185	215
	6	56	72	88	103	125	160	194	225
2.4	0	55	70	85	98	117	146	173	198
	2	56	75	87	101	122	154	183	212
	4	57	74	90	104	126	160	191	222
	6	58	75	92	107	130	166	200	233
2.6	0	57	73	88	102	122	152	180	206
	2	58	75	90	105	126	159	190	218
	4	59	76	93	108	131	165	198	230
	6	60	78	95	110	134	171	206	240
2.8	0	59	75	91	106	126	157	186	213
	2	60	77	93	109	131	164	195	225
	4	61	78	96	112	134	170	204	236
	6	62	80	97	114	138	176	211	246
3.0	0	61	78	94	109	130	162	191	219
	2	62	80	96	112	134	169	201	231
	4	62	81	98	115	138	175	209	242
	6	63	82	100	117	142	180	218	252

“SUPERTIF” DRIPPER - 2.2 L/H
MAXIMUM RECOMMENDED LATERAL LENGTH (m)
PIPE DIAMETER - 16/13.6 (OD/ID)

Pressure Bar	Slope %	Emitter Spacing (m)							
		0.3	0.4	0.5	0.6	0.75	1	1.25	1.5
0.8	0	51	64	76	86	102	125	146	165
	2	58	74	90	105	127	162	195	227
	4	63	82	101	119	146	190	233	273
	6	68	90	111	132	164	214	265	314
1.0	0	65	82	97	111	131	160	188	212
	2	71	91	110	127	153	193	231	267
	4	76	98	120	140	170	219	265	311
	6	80	105	129	152	187	242	296	350
1.2	0	75	94	112	128	151	185	216	245
	2	80	102	123	143	171	215	258	297
	4	85	109	133	155	188	240	290	339
	6	89	116	142	167	203	262	320	375
1.4	0	83	104	124	142	167	205	240	272
	2	88	112	135	156	186	234	279	321
	4	92	118	144	167	203	258	310	362
	6	96	124	152	179	218	279	339	396
1.6	0	90	112	134	154	181	222	260	294
	2	95	120	144	167	200	250	296	342
	4	98	126	153	178	215	273	328	381
	6	102	132	161	189	229	293	355	416
1.8	0	95	120	143	164	193	237	278	315
	2	100	127	153	176	211	264	313	360
	4	104	133	161	188	226	286	344	398
	6	108	139	169	198	240	306	370	432
2.0	0	101	127	151	173	204	250	293	333
	2	105	134	160	185	221	276	328	377
	4	109	140	169	196	236	298	358	414
	6	113	145	176	206	249	318	375	447
2.2	0	106	133	158	181	214	263	308	348
	2	110	140	167	193	230	288	341	392
	4	114	145	175	204	245	309	370	428
	6	117	151	183	214	258	329	375	450
2.4	0	110	138	165	189	223	274	321	365
	2	114	145	174	200	239	298	354	407
	4	118	150	182	211	253	319	381	441
	6	121	156	189	221	266	338	375	450
2.6	0	114	144	171	196	231	285	333	378
	2	118	150	180	208	248	308	365	419
	4	122	156	187	218	261	329	393	455
	6	125	161	195	227	274	348	375	450
2.8	0	118	148	177	203	239	294	345	392
	2	122	155	185	214	255	318	376	432
	4	125	160	193	224	269	338	404	467
	6	129	165	200	233	281	356	375	450
3.0	0	122	153	182	209	247	304	355	404
	2	125	159	191	220	262	327	386	443
	4	129	164	198	230	275	346	414	477
	6	132	170	205	239	288	365	375	450

“SUPERTIF” DRIPPER - 2.2 L/H
MAXIMUM RECOMMENDED LATERAL LENGTH (m)
PIPE DIAMETER - 17.8/15.2 (OD/ID)

Pressure Bar	Slope %	Emitter Spacing (m)							
		0.3	0.4	0.5	0.6	0.75	1	1.25	1.5
0.8	0	65	80	95	107	126	154	179	203
	2	75	96	117	136	164	207	250	293
	4	83	108	133	157	192	249	305	360
	6	91	120	148	176	217	284	350	416
1.0	0	83	102	121	138	161	197	230	260
	2	92	117	140	163	195	246	294	341
	4	99	128	156	182	221	284	345	404
	6	106	138	170	200	245	318	389	458
1.2	0	95	118	140	160	187	228	266	300
	2	104	131	158	182	218	273	326	377
	4	110	142	172	201	243	310	375	437
	6	117	152	186	218	266	342	416	489
1.4	0	105	131	155	176	207	253	295	333
	2	113	143	172	198	236	296	353	407
	4	120	153	186	216	260	331	399	450
	6	126	163	198	232	282	350	440	515
1.6	0	114	142	168	191	224	274	320	362
	2	121	153	184	212	252	315	375	432
	4	128	163	197	229	276	349	420	450
	6	134	172	209	245	297	350	460	537
1.8	0	121	151	179	204	239	293	341	386
	2	128	162	194	224	266	332	395	453
	4	134	172	207	241	289	366	439	450
	6	140	181	219	256	310	350	478	557
2.0	0	128	160	189	215	253	309	361	408
	2	135	170	204	235	279	348	413	474
	4	141	180	216	251	302	380	455	450
	6	147	188	228	266	322	350	494	576
2.2	0	134	167	198	226	266	325	379	428
	2	141	178	212	245	291	362	429	492
	4	147	187	225	261	313	394	471	450
	6	152	195	236	275	332	350	500	592
2.4	0	140	174	206	236	277	339	395	447
	2	146	185	221	254	302	375	444	510
	4	152	193	233	269	323	406	485	535
	6	158	202	244	284	342	350	500	590
2.6	0	145	181	214	245	287	352	410	464
	2	152	191	228	262	311	387	459	525
	4	157	200	240	278	332	418	499	450
	6	162	208	251	292	352	350	500	621
2.8	0	150	187	222	253	297	364	424	480
	2	156	197	235	271	321	399	471	540
	4	162	205	247	286	341	429	511	450
	6	167	213	258	299	360	350	500	600
3.0	0	155	193	229	261	307	375	438	495
	2	161	203	242	278	330	410	484	555
	4	166	211	253	293	350	440	524	450
	6	171	219	264	307	369	350	500	600

“SUPERTIF” DRIPPER - 2.2 L/H
MAXIMUM RECOMMENDED LATERAL LENGTH (m)
PIPE DIAMETER - 20/17.4 (OD/ID)

Pressure Bar	Slope %	Emitter Spacing (m)							
		0.3	0.4	0.5	0.6	0.75	1	1.25	1.5
0.8	0	86	105	123	140	163	198	229	258
	2	104	132	159	185	223	283	343	399
	4	117	152	187	220	269	341	425	501
	6	130	170	211	250	308	402	500	566
1.0	0	109	135	158	179	209	254	294	332
	2	125	158	190	220	263	331	398	461
	4	138	177	216	252	305	383	475	558
	6	150	194	238	280	343	444	548	649
1.2	0	126	156	183	207	242	294	341	384
	2	141	178	212	245	292	366	438	506
	4	153	196	237	276	333	415	513	599
	6	164	212	258	305	368	474	583	698
1.4	0	140	172	202	230	268	326	379	426
	2	154	193	231	266	316	395	470	543
	4	165	210	254	295	356	441	543	633
	6	176	226	275	320	389	499	611	729
1.6	0	152	187	219	249	290	353	410	462
	2	165	207	246	283	336	420	499	575
	4	176	223	269	312	374	464	563	662
	6	186	238	289	330	408	521	636	758
1.8	0	161	199	234	266	310	377	438	494
	2	174	218	260	299	355	441	524	602
	4	185	234	282	326	392	484	583	675
	6	195	249	302	340	413	521	636	758
2.0	0	171	211	247	281	328	399	463	522
	2	183	229	272	313	371	461	546	627
	4	193	245	294	340	407	502	603	675
	6	203	259	313	350	413	521	636	758
2.2	0	179	221	259	295	344	418	486	549
	2	191	239	284	326	386	479	568	651
	4	201	254	305	352	422	519	623	675
	6	211	268	324	360	413	521	636	758
2.4	0	186	230	271	307	359	436	506	572
	2	198	248	294	338	400	496	586	672
	4	208	263	315	364	434	535	643	675
	6	218	277	333	380	413	521	636	758
2.6	0	194	239	281	319	373	453	526	594
	2	205	256	304	349	413	512	605	693
	4	215	271	324	374	447	550	663	675
	6	224	284	343	390	413	521	636	758
2.8	0	200	248	291	330	386	469	545	615
	2	211	264	313	359	425	526	621	711
	4	221	278	333	385	458	563	675	675
	6	230	292	351	400	413	521	636	758
3.0	0	206	255	300	341	398	484	563	635
	2	217	272	322	369	437	540	638	729
	4	227	286	342	394	470	577	683	675
	6	236	299	359	410	413	521	636	758

“SUPERTIF” DRIPPER – 3.95 L/H
MAXIMUM RECOMMENDED LATERAL LENGTH (m)
PIPE DIAMETER – 12/9.8 (OD/ID)

Pressure Bar	Slope %	Emitter Spacing (m)							
		0.3	0.4	0.5	0.6	0.75	1	1.25	1.5
0.8	0	12	14	17	19	23	28	34	38
	2	14	16	21	25	30	39	46	56
	4	15	19	23	28	34	44	54	65
	6	17	20	25	30	37	50	61	72
1.0	0	21	24	30	34	41	50	59	68
	2	22	26	32	37	45	57	69	80
	4	23	28	34	40	48	62	75	87
	6	24	28	35	41	51	66	80	95
1.2	0	25	30	36	41	50	62	74	84
	2	26	31	38	44	53	68	81	93
	4	27	32	40	46	56	72	86	101
	6	28	34	41	48	59	76	93	108
1.4	0	29	34	41	47	56	71	84	95
	2	30	35	43	50	60	76	90	104
	4	31	36	44	52	62	80	96	111
	6	31	37	46	53	65	83	101	117
1.6	0	32	37	45	52	62	78	91	105
	2	32	38	47	54	65	82	98	113
	4	33	40	48	56	68	86	104	120
	6	34	40	49	58	70	90	109	126
1.8	0	34	40	49	56	67	84	99	113
	2	35	41	50	58	70	88	105	122
	4	36	42	51	60	72	92	110	128
	6	36	43	53	61	74	95	115	134
2.0	0	36	43	52	59	71	89	105	120
	2	37	44	53	62	74	93	111	128
	4	38	44	54	63	77	97	116	134
	6	38	45	56	65	78	100	120	140
2.2	0	38	45	54	63	75	94	111	126
	2	39	46	56	65	78	98	116	134
	4	39	47	57	66	80	101	121	140
	6	40	48	58	68	82	104	125	146
2.4	0	40	47	57	65	79	98	116	132
	2	41	48	58	67	81	102	121	140
	4	41	49	59	69	83	105	126	146
	6	42	50	60	70	86	108	130	152
2.6	0	42	49	59	68	82	102	121	138
	2	42	50	60	70	84	106	126	146
	4	43	50	62	71	86	109	130	150
	6	43	51	63	73	89	112	135	156
2.8	0	43	51	61	71	85	106	125	144
	2	44	52	63	73	87	110	130	150
	4	44	52	64	74	89	113	135	156
	6	45	53	65	76	91	116	139	161
3.0	0	44	52	63	73	88	109	130	149
	2	45	53	64	75	90	113	135	155
	4	46	54	66	76	92	116	139	161
	6	46	54	67	77	94	119	143	165

“SUPERTIF” DRIPPER – 3.95 L/H

MAXIMUM RECOMMENDED LATERAL LENGTH (m)

PIPE DIAMETER – **16/13.6** (OD/ID)

Pressure Bar	Slope %	Emitter Spacing (m)							
		0.3	0.4	0.5	0.6	0.75	1	1.25	1.5
0.8	0	23	27	32	37	43	53	61	69
	2	30	36	44	52	63	81	99	116
	4	35	41	52	61	75	99	121	144
	6	38	46	58	68	86	113	139	167
1.0	0	41	48	57	65	77	94	110	125
	2	46	54	65	76	90	114	136	158
	4	49	58	71	83	101	129	156	183
	6	52	62	76	89	110	141	173	203
1.2	0	51	59	70	80	94	116	135	153
	2	54	64	77	89	107	133	159	183
	4	57	68	82	95	116	147	178	206
	6	60	71	87	101	124	159	193	225
1.4	0	57	67	80	91	107	132	154	176
	2	61	71	86	99	119	148	176	203
	4	63	75	91	106	127	161	194	225
	6	66	78	95	111	135	172	209	243
1.6	0	63	73	87	100	118	145	170	192
	2	66	78	93	107	128	160	190	219
	4	69	81	98	114	137	173	206	240
	6	71	84	102	119	144	184	221	258
1.8	0	68	79	94	108	128	156	184	209
	2	71	83	100	115	137	171	203	233
	4	73	86	104	121	145	183	219	254
	6	76	89	108	126	152	194	233	270
2.0	0	72	84	100	115	135	167	195	221
	2	75	88	105	122	145	180	214	245
	4	77	91	110	127	152	192	229	266
	6	80	94	114	133	160	202	243	282
2.2	0	76	88	106	121	143	176	205	234
	2	79	92	111	128	152	189	224	257
	4	81	95	115	133	159	200	239	276
	6	83	98	119	138	167	210	253	293
2.4	0	80	93	110	127	149	184	215	245
	2	82	96	115	133	158	197	233	267
	4	84	99	119	138	166	208	248	285
	6	86	102	123	143	173	218	261	303
2.6	0	83	96	115	132	155	192	224	255
	2	85	100	120	138	164	204	241	276
	4	88	103	124	143	171	215	256	296
	6	89	105	127	148	178	225	269	312
2.8	0	86	100	119	137	161	199	233	264
	2	88	103	124	143	170	211	250	285
	4	90	106	128	148	176	222	264	303
	6	92	109	131	152	183	231	276	320
3.0	0	88	103	123	141	167	205	241	273
	2	91	106	128	147	175	217	258	294
	4	93	109	132	152	182	228	271	312
	6	95	112	135	157	188	237	284	327

“SUPERTIF” DRIPPER – 3.95 L/H
MAXIMUM RECOMMENDED LATERAL LENGTH (m)
PIPE DIAMETER – 17.8/15.2 (OD/ID)

Pressure Bar	Slope %	Emitter Spacing (m)							
		0.3	0.4	0.5	0.6	0.75	1	1.25	1.5
0.8	0	29	34	40	46	53	65	75	86
	2	40	47	57	68	82	105	128	149
	4	46	55	69	80	100	130	160	189
	6	51	62	77	92	114	150	188	222
1.0	0	52	60	71	80	95	115	135	152
	2	59	69	83	96	115	145	174	201
	4	64	75	92	107	131	167	201	236
	6	68	81	100	118	143	185	226	266
1.2	0	64	74	87	100	117	143	166	188
	2	70	82	98	113	135	169	201	231
	4	74	87	106	123	149	189	228	264
	6	78	93	113	133	161	206	250	293
1.4	0	73	84	100	113	133	163	190	215
	2	78	91	109	126	149	187	223	255
	4	82	96	117	136	163	206	246	287
	6	86	102	124	144	175	223	269	314
1.6	0	80	92	109	125	146	179	209	237
	2	85	99	118	136	162	202	240	275
	4	89	104	126	146	175	220	264	305
	6	92	109	132	154	186	236	285	332
1.8	0	86	100	118	134	158	193	225	255
	2	91	106	126	146	173	215	255	291
	4	94	111	133	154	185	233	278	321
	6	98	116	140	163	196	248	299	347
2.0	0	91	106	126	143	168	206	240	272
	2	96	112	134	154	182	227	268	308
	4	100	117	140	162	194	244	290	336
	6	103	121	146	170	205	259	311	362
2.2	0	96	112	132	151	177	217	254	287
	2	101	117	140	161	191	237	280	321
	4	104	122	147	169	203	254	303	348
	6	107	126	153	177	213	269	323	374
2.4	0	101	117	138	158	186	227	265	300
	2	105	122	146	168	199	247	291	333
	4	108	127	152	176	210	263	313	362
	6	112	131	158	184	221	278	333	386
2.6	0	105	122	144	164	194	237	276	314
	2	109	127	151	174	206	256	303	345
	4	112	132	158	182	218	272	323	372
	6	116	136	163	190	227	286	343	396
2.8	0	109	126	150	171	201	246	286	326
	2	113	131	157	180	213	264	311	357
	4	116	136	163	188	224	280	333	383
	6	119	140	168	195	233	294	351	407
3.0	0	113	130	155	176	208	254	296	336
	2	116	136	161	185	220	272	321	366
	4	120	140	167	193	230	288	341	393
	6	122	144	173	200	240	302	360	416

“SUPERTIF” DRIPPER – 3.95 L/H
MAXIMUM RECOMMENDED LATERAL LENGTH (m)
PIPE DIAMETER – 20/17.4 (OD/ID)

Pressure Bar	Slope %	Emitter Spacing (m)							
		0.3	0.4	0.5	0.6	0.75	1	1.25	1.5
0.8	0	39	44	52	59	68	83	96	108
	2	55	66	79	94	113	144	176	206
	4	66	78	97	114	141	183	225	267
	6	74	90	111	132	163	214	265	167
1.0	0	69	79	93	105	122	149	173	195
	2	80	94	112	130	155	195	234	270
	4	88	104	127	148	179	229	278	324
	6	96	114	139	164	200	257	314	116
1.2	0	85	97	114	130	151	184	214	240
	2	94	110	131	152	180	225	269	309
	4	102	120	145	168	203	257	309	360
	6	109	129	157	183	222	284	345	75
1.4	0	96	111	130	148	173	210	244	275
	2	105	123	146	168	200	248	295	339
	4	113	132	159	184	221	278	334	387
	6	119	140	170	198	239	305	368	39
1.6	0	106	122	143	163	190	231	269	303
	2	115	133	158	182	215	267	316	363
	4	121	142	170	197	236	297	355	411
	6	127	150	181	211	254	322	388	6
1.8	0	114	132	155	175	205	249	290	327
	2	122	142	169	194	229	284	336	386
	4	129	150	180	208	249	312	373	431
	6	135	158	191	221	266	337	405	0
2.0	0	121	140	165	187	218	265	309	348
	2	129	150	178	204	242	299	353	404
	4	136	158	189	218	260	326	389	449
	6	141	166	199	232	278	351	420	0
2.2	0	128	148	173	197	230	280	325	368
	2	135	157	187	214	253	312	369	422
	4	142	165	198	227	272	339	404	465
	6	147	173	207	241	288	363	435	0
2.4	0	134	154	182	206	241	293	341	386
	2	141	164	194	223	263	325	383	438
	4	147	172	205	236	281	351	418	480
	6	153	179	215	248	297	374	448	0
2.6	0	140	161	189	215	251	306	355	401
	2	147	170	202	231	272	336	396	453
	4	153	178	212	244	290	362	430	495
	6	158	185	221	256	306	385	460	0
2.8	0	145	167	196	223	260	317	369	416
	2	152	176	208	238	281	347	409	467
	4	157	183	219	251	299	373	441	509
	6	163	190	228	263	314	395	471	0
3.0	0	150	172	203	230	269	328	381	431
	2	156	181	215	245	290	357	420	480
	4	162	188	225	259	307	382	453	521
	6	167	195	234	270	323	405	483	0

“SUPERTIF” DRIPPER – 8 L/H
MAXIMUM RECOMMENDED LATERAL LENGTH (m)
PIPE DIAMETER – 12/9.8 (OD/ID)

Pressure Bar	Slope %	Emitter Spacing (m)							
		0.3	0.4	0.5	0.6	0.75	1	1.25	1.5
0.8	0	7	9	11	12	14	18	21	24
	2	8	10	12	14	17	22	26	32
	4	9	11	13	16	20	25	31	36
	6	10	11	15	17	21	27	34	39
1.0	0	13	15	18	21	26	31	38	42
	2	13	16	19	22	27	34	41	47
	4	14	16	20	23	29	36	44	51
	6	14	17	21	25	29	38	46	54
1.2	0	16	18	23	26	31	39	46	53
	2	16	19	23	27	32	41	49	57
	4	17	20	24	28	34	43	51	60
	6	17	20	25	29	35	45	54	63
1.4	0	18	21	26	29	35	44	53	60
	2	18	22	26	31	37	46	55	63
	4	19	22	27	31	38	48	58	66
	6	19	22	28	32	39	49	60	69
1.6	0	20	23	28	32	39	48	58	66
	2	20	24	29	33	40	50	60	69
	4	20	24	29	34	41	52	63	72
	6	21	24	30	35	42	53	64	75
1.8	0	21	25	30	35	42	52	61	71
	2	22	25	31	35	43	54	64	74
	4	22	26	31	37	44	55	66	77
	6	22	26	32	37	45	57	69	80
2.0	0	22	26	32	37	44	55	65	75
	2	23	27	33	38	46	57	68	78
	4	23	27	33	38	47	59	70	81
	6	23	28	34	39	47	60	73	83
2.2	0	24	28	34	39	47	58	69	80
	2	24	28	34	40	48	60	71	83
	4	24	28	35	40	49	61	74	84
	6	24	29	35	41	50	63	75	87
2.4	0	25	29	35	41	49	61	73	83
	2	25	30	36	41	50	63	75	86
	4	25	30	36	42	51	64	76	89
	6	25	30	37	43	52	65	79	90
2.6	0	26	30	37	43	51	64	75	87
	2	26	31	37	43	52	65	78	89
	4	26	31	38	44	53	67	80	92
	6	26	31	38	44	53	68	81	93
2.8	0	27	31	38	44	53	66	79	90
	2	27	32	39	44	54	67	80	92
	4	27	32	39	46	55	69	83	95
	6	27	32	40	46	56	70	84	96
3.0	0	27	32	39	46	55	68	81	93
	2	28	33	40	46	56	70	83	95
	4	28	33	40	47	56	71	85	98
	6	28	33	41	47	57	72	86	99

“SUPERTIF” DRIPPER – 8 L/H
MAXIMUM RECOMMENDED LATERAL LENGTH (m)
PIPE DIAMETER – 16/13.6 (OD/ID)

Pressure Bar	Slope %	Emitter Spacing (m)							
		0.3	0.4	0.5	0.6	0.75	1	1.25	1.5
0.8	0	15	17	20	23	27	33	39	44
	2	18	21	26	30	36	46	56	65
	4	20	23	29	34	41	54	65	77
	6	21	25	32	37	47	60	74	89
1.0	0	25	30	36	40	48	59	69	78
	2	27	32	39	45	54	67	80	93
	4	29	34	41	48	58	74	89	104
	6	30	36	44	51	62	79	96	113
1.2	0	31	36	44	50	59	72	85	96
	2	33	38	47	53	64	80	95	108
	4	34	40	49	56	68	86	103	119
	6	35	42	51	59	71	91	109	128
1.4	0	36	42	50	57	67	82	96	110
	2	37	44	52	60	72	89	106	122
	4	38	45	54	63	75	95	113	131
	6	39	46	56	65	79	100	120	140
1.6	0	39	46	55	62	74	91	106	120
	2	41	47	57	65	78	97	115	132
	4	42	49	59	68	82	102	121	141
	6	43	50	61	70	85	107	129	149
1.8	0	42	49	59	67	80	98	115	131
	2	43	51	61	70	83	104	123	141
	4	45	52	63	73	87	109	130	149
	6	45	53	65	75	90	113	135	158
2.0	0	45	52	63	71	85	104	123	138
	2	46	54	65	74	89	110	130	149
	4	47	55	66	77	92	115	136	156
	6	48	56	68	79	95	119	143	165
2.2	0	47	55	66	76	89	110	129	146
	2	48	56	68	78	93	115	136	156
	4	49	58	70	80	96	120	143	164
	6	50	59	71	82	99	124	149	171
2.4	0	50	58	69	79	93	115	135	153
	2	51	59	71	82	97	120	143	162
	4	52	60	73	84	100	125	149	170
	6	52	61	74	86	103	129	154	177
2.6	0	52	60	72	82	98	120	140	159
	2	53	61	74	85	101	125	148	168
	4	54	62	75	87	104	129	154	176
	6	54	64	77	89	107	134	159	183
2.8	0	53	62	74	85	101	124	146	165
	2	54	64	76	88	104	129	153	174
	4	55	65	78	90	107	134	159	182
	6	56	66	79	92	110	138	164	189
3.0	0	55	64	77	88	104	128	150	171
	2	56	66	79	91	107	133	158	180
	4	57	67	80	92	110	138	163	188
	6	58	68	82	94	113	142	169	194

“SUPERTIF” DRIPPER – 8 L/H
MAXIMUM RECOMMENDED LATERAL LENGTH (m)
PIPE DIAMETER – 17.8/15.2 (OD/ID)

Pressure Bar	Slope %	Emitter Spacing (m)							
		0.3	0.4	0.5	0.6	0.75	1	1.25	1.5
0.8	0	18	21	25	28	33	41	48	54
	2	23	27	33	38	47	59	71	83
	4	26	31	38	44	54	70	85	102
	6	28	34	42	49	61	80	98	116
1.0	0	32	38	44	50	59	72	84	96
	2	35	41	50	57	68	85	101	117
	4	38	44	54	62	74	95	114	132
	6	39	47	57	66	80	103	124	146
1.2	0	40	46	55	62	73	89	104	119
	2	42	49	59	68	81	100	119	137
	4	44	52	63	72	86	109	130	152
	6	46	54	66	76	92	117	140	164
1.4	0	45	52	62	71	83	102	119	135
	2	48	56	66	76	90	112	133	152
	4	49	58	70	80	96	120	144	165
	6	51	60	72	84	101	127	153	177
1.6	0	50	58	68	78	92	112	131	149
	2	52	60	72	83	98	122	144	164
	4	54	62	75	86	104	130	154	177
	6	55	65	78	90	108	136	164	189
1.8	0	54	62	74	84	99	121	141	161
	2	55	65	77	89	105	130	154	176
	4	57	67	80	92	110	138	164	188
	6	58	69	83	96	115	144	173	200
2.0	0	57	66	78	89	105	129	150	171
	2	59	68	82	94	111	137	163	185
	4	60	70	85	97	116	145	171	197
	6	62	72	87	101	121	151	180	209
2.2	0	60	70	83	94	111	136	159	180
	2	62	72	86	98	116	144	170	194
	4	63	74	89	102	122	151	179	206
	6	65	76	91	105	126	158	188	216
2.4	0	63	73	87	99	116	142	166	188
	2	64	75	90	103	122	150	178	203
	4	66	77	92	106	126	157	186	213
	6	67	79	95	109	131	163	195	224
2.6	0	65	76	90	103	121	148	173	197
	2	67	78	93	107	126	156	184	210
	4	68	80	96	110	131	163	193	221
	6	70	82	98	113	135	169	201	231
2.8	0	68	79	93	107	125	154	180	204
	2	69	81	96	110	131	161	190	216
	4	71	82	99	113	135	168	199	228
	6	72	84	101	116	140	174	206	239
3.0	0	70	81	97	110	130	159	186	210
	2	72	83	99	114	135	166	196	224
	4	73	85	102	117	139	173	204	234
	6	74	87	104	120	143	179	213	245

“SUPERTIF” DRIPPER – 8 L/H
MAXIMUM RECOMMENDED LATERAL LENGTH (m)
PIPE DIAMETER – 20/17.4 (OD/ID)

Pressure Bar	Slope %	Emitter Spacing (m)							
		0.3	0.4	0.5	0.6	0.75	1	1.25	1.5
0.8	0	24	28	33	37	43	52	60	68
	2	32	38	45	53	63	80	98	113
	4	37	43	53	62	75	98	119	141
	6	40	48	59	70	86	112	138	164
1.0	0	43	49	58	65	77	93	108	122
	2	48	56	67	77	91	113	135	155
	4	52	60	73	85	101	128	154	180
	6	55	64	78	91	110	141	170	200
1.2	0	53	61	72	81	95	115	134	152
	2	57	66	79	91	107	133	158	180
	4	60	70	84	98	116	147	175	203
	6	63	74	90	104	125	159	191	222
1.4	0	60	69	82	92	108	131	153	173
	2	64	74	88	101	119	148	175	200
	4	67	78	93	108	128	161	191	221
	6	70	82	98	114	137	172	206	240
1.6	0	66	76	90	102	119	145	169	191
	2	70	81	96	110	130	160	189	216
	4	73	84	101	116	138	173	205	236
	6	75	88	106	122	146	184	220	254
1.8	0	71	82	97	110	128	156	181	206
	2	75	86	103	118	139	171	201	230
	4	78	90	107	124	146	183	216	249
	6	80	93	112	129	155	194	231	267
2.0	0	76	88	103	117	137	166	194	219
	2	79	92	109	124	146	180	213	242
	4	82	95	113	130	155	192	228	261
	6	84	98	118	136	162	203	241	279
2.2	0	80	92	109	123	144	175	204	231
	2	83	96	114	130	153	189	223	254
	4	86	100	118	136	161	200	238	272
	6	88	102	123	142	169	211	250	290
2.4	0	84	96	114	129	151	184	214	242
	2	87	100	119	136	160	197	231	264
	4	89	104	123	142	167	208	246	282
	6	91	106	127	146	175	218	259	299
2.6	0	87	100	118	134	158	192	223	252
	2	90	104	123	141	166	204	240	273
	4	92	107	128	146	173	215	254	291
	6	95	110	132	152	180	225	268	308
2.8	0	90	104	123	140	163	199	231	261
	2	93	108	128	146	172	211	248	282
	4	95	111	132	151	179	222	261	300
	6	98	114	136	157	186	232	275	317
3.0	0	93	108	127	144	169	205	239	270
	2	96	111	132	151	177	218	255	291
	4	98	114	136	156	184	228	269	308
	6	101	117	140	161	191	238	281	324

“SUPERTIF” DRIPPER – 11.5 L/H

MAXIMUM RECOMMENDED LATERAL LENGTH (m)

PIPE DIAMETER – **12/9.8** (OD/ID)

Pressure Bar	Slope %	Emitter Spacing (m)							
		0.3	0.4	0.5	0.6	0.75	1	1.25	1.5
0.8	0	6	7	9	10	11	14	16	20
	2	6	8	9	11	14	17	20	24
	4	7	8	10	12	15	19	24	27
	6	7	9	11	13	16	21	25	30
1.0	0	10	12	15	17	20	25	30	35
	2	11	12	15	18	21	27	33	38
	4	11	13	16	19	23	28	34	39
	6	11	13	17	19	23	30	36	42
1.2	0	13	15	18	21	25	31	36	42
	2	13	15	19	22	26	33	39	45
	4	13	16	19	22	27	34	40	47
	6	13	16	20	23	28	35	43	50
1.4	0	14	17	21	23	29	35	41	48
	2	15	17	21	24	29	37	44	51
	4	15	18	21	25	30	38	45	53
	6	15	18	22	25	31	39	46	54
1.6	0	16	18	23	26	31	39	46	53
	2	16	19	23	26	32	40	48	56
	4	16	19	23	27	32	41	49	57
	6	16	19	24	28	33	42	50	59
1.8	0	17	20	24	28	34	42	50	57
	2	17	20	25	28	35	43	51	59
	4	17	20	25	29	35	44	53	60
	6	18	21	25	29	35	45	54	63
2.0	0	18	21	26	30	35	45	53	60
	2	18	22	26	30	36	46	54	63
	4	18	22	27	31	37	47	56	65
	6	19	22	27	31	38	48	58	66
2.2	0	19	22	27	31	38	47	55	63
	2	19	22	28	32	38	48	58	66
	4	19	23	28	32	39	49	59	68
	6	20	23	28	32	39	50	60	69
2.4	0	20	23	28	33	39	49	59	66
	2	20	24	29	33	40	50	60	69
	4	20	24	29	34	41	51	61	71
	6	20	24	29	34	41	52	63	72
2.6	0	21	24	30	34	41	51	60	69
	2	21	24	30	35	41	52	63	71
	4	21	25	30	35	42	53	64	74
	6	21	25	31	35	43	54	65	75
2.8	0	22	25	31	35	42	53	63	72
	2	22	25	31	36	43	54	64	74
	4	22	26	31	36	44	55	65	75
	6	22	26	32	37	44	56	66	77
3.0	0	22	26	32	37	44	55	65	75
	2	22	26	32	37	44	56	66	77
	4	22	26	32	37	45	57	68	78
	6	22	26	33	38	45	57	69	80

“SUPERTIF” DRIPPER – 11.5 L/H
MAXIMUM RECOMMENDED LATERAL LENGTH (m)
PIPE DIAMETER – 16/13.6 (OD/ID)

Pressure Bar	Slope %	Emitter Spacing (m)							
		0.3	0.4	0.5	0.6	0.75	1	1.25	1.5
0.8	0	12	14	16	19	22	27	31	35
	2	14	16	20	23	28	35	43	50
	4	16	18	22	26	32	41	50	59
	6	16	19	24	28	35	46	55	66
1.0	0	21	24	29	32	38	47	55	63
	2	22	26	31	35	43	53	64	72
	4	23	27	33	38	45	57	69	80
	6	23	28	34	40	48	61	74	87
1.2	0	25	29	35	40	47	58	68	78
	2	26	31	37	43	51	63	75	86
	4	27	32	39	44	53	67	80	93
	6	28	33	40	46	56	71	85	99
1.4	0	29	33	40	46	54	66	78	89
	2	29	34	42	48	57	71	84	96
	4	30	36	43	50	59	75	89	102
	6	31	36	44	52	62	78	94	108
1.6	0	31	37	44	50	59	73	85	98
	2	32	38	45	52	62	77	91	105
	4	33	39	47	54	65	81	96	111
	6	34	40	48	56	67	84	100	116
1.8	0	34	40	47	54	64	79	93	105
	2	35	40	49	56	67	83	98	111
	4	35	42	50	58	69	86	103	117
	6	36	42	51	59	71	89	106	123
2.0	0	36	42	50	58	68	84	99	111
	2	37	43	52	59	71	88	104	119
	4	37	44	53	61	73	91	108	123
	6	38	45	54	62	75	94	111	129
2.2	0	38	44	53	61	72	88	104	117
	2	39	45	54	62	74	92	109	125
	4	39	46	55	64	77	95	113	129
	6	40	47	57	65	78	98	116	135
2.4	0	40	46	55	64	75	93	109	123
	2	40	47	57	65	77	96	114	129
	4	41	48	58	67	80	99	118	135
	6	42	49	59	68	81	102	121	140
2.6	0	41	48	58	66	78	96	113	129
	2	42	49	59	68	80	100	118	135
	4	43	50	60	69	83	103	121	140
	6	43	50	61	70	84	106	125	144
2.8	0	43	50	60	68	81	100	118	134
	2	43	51	61	70	83	103	121	140
	4	44	52	62	71	86	106	126	144
	6	45	52	63	73	87	109	129	149
3.0	0	44	52	62	71	84	103	121	138
	2	45	52	63	73	86	107	126	144
	4	45	53	64	74	88	109	130	149
	6	46	54	65	75	89	112	133	153

“SUPERTIF” DRIPPER – 11.5 L/H
MAXIMUM RECOMMENDED LATERAL LENGTH (m)
PIPE DIAMETER – 17.8/15.2 (OD/ID)

Pressure Bar	Slope %	Emitter Spacing (m)							
		0.3	0.4	0.5	0.6	0.75	1	1.25	1.5
0.8	0	15	17	20	23	27	33	38	44
	2	18	21	26	30	36	45	55	63
	4	20	24	29	34	41	54	65	75
	6	22	26	32	37	47	60	73	87
1.0	0	26	30	36	41	47	58	68	77
	2	28	32	39	45	54	67	80	92
	4	29	34	42	49	58	73	88	102
	6	31	36	44	51	62	79	95	111
1.2	0	32	37	44	50	59	72	84	95
	2	33	39	47	54	64	79	94	108
	4	35	41	49	57	68	85	101	117
	6	36	42	51	59	71	90	109	126
1.4	0	36	42	50	57	67	82	96	108
	2	38	44	53	61	72	89	105	120
	4	39	46	55	63	75	94	113	129
	6	40	47	57	65	79	99	119	138
1.6	0	40	46	55	63	74	90	105	120
	2	41	48	58	66	78	97	114	131
	4	43	50	60	68	82	102	121	140
	6	44	51	61	71	85	107	128	147
1.8	0	43	50	59	68	80	97	114	129
	2	44	52	62	71	83	103	121	140
	4	45	53	64	73	87	109	129	147
	6	46	54	65	76	90	113	135	155
2.0	0	46	53	63	72	85	104	121	137
	2	47	55	65	75	89	109	129	147
	4	48	56	67	77	92	114	135	155
	6	49	57	69	79	95	119	141	162
2.2	0	48	56	66	76	89	109	128	144
	2	49	58	69	79	93	115	135	155
	4	50	59	70	81	96	120	141	162
	6	51	60	72	83	99	124	148	170
2.4	0	51	58	70	79	94	115	134	152
	2	52	60	72	82	97	120	141	161
	4	53	61	73	85	100	125	148	168
	6	54	62	75	86	103	129	153	176
2.6	0	53	61	72	83	98	119	140	158
	2	54	62	74	85	101	125	146	167
	4	55	64	76	88	104	129	153	174
	6	55	65	78	89	107	133	158	182
2.8	0	55	63	75	86	101	124	145	164
	2	55	64	77	88	104	129	151	173
	4	56	66	79	91	107	133	158	180
	6	57	67	80	92	110	137	163	188
3.0	0	56	65	78	89	104	128	150	170
	2	57	67	80	91	108	133	156	179
	4	58	68	81	93	110	137	163	185
	6	59	69	83	95	113	141	168	192

“SUPERTIF” DRIPPER – 11.5 L/H
MAXIMUM RECOMMENDED LATERAL LENGTH (m)
PIPE DIAMETER – 20/17.4 (OD/ID)

Pressure Bar	Slope %	Emitter Spacing (m)							
		0.3	0.4	0.5	0.6	0.75	1	1.25	1.5
0.8	0	20	22	26	29	35	42	49	56
	2	25	29	35	41	49	61	75	86
	4	28	33	40	47	57	74	90	105
	6	31	36	45	52	65	84	103	122
1.0	0	34	40	47	53	62	75	88	99
	2	38	44	53	61	71	89	105	120
	4	40	47	57	65	78	99	119	137
	6	43	50	61	70	85	108	130	152
1.2	0	43	49	58	65	77	93	108	122
	2	45	53	63	71	85	105	124	141
	4	48	55	66	76	91	114	136	156
	6	50	58	70	80	97	122	146	170
1.4	0	49	56	66	74	87	106	123	140
	2	51	59	70	80	95	117	138	158
	4	53	62	74	85	101	126	149	171
	6	55	64	77	89	107	133	159	185
1.6	0	53	61	72	82	96	117	135	153
	2	55	64	76	88	103	127	149	170
	4	57	67	80	92	109	135	160	185
	6	59	69	83	95	114	143	170	197
1.8	0	57	66	78	88	104	126	146	165
	2	59	69	82	94	110	136	159	182
	4	61	71	85	98	116	144	170	195
	6	63	74	88	101	121	151	180	207
2.0	0	61	70	83	94	110	134	156	176
	2	63	73	87	99	116	143	169	192
	4	65	75	90	103	122	151	179	204
	6	66	78	93	107	127	158	188	216
2.2	0	64	74	87	99	116	141	164	186
	2	66	77	91	104	122	150	176	201
	4	68	79	94	108	128	158	186	213
	6	70	81	97	111	132	165	195	225
2.4	0	67	78	92	104	122	148	173	195
	2	69	80	95	109	128	157	184	209
	4	71	82	98	112	133	164	194	222
	6	72	84	101	116	137	171	203	233
2.6	0	70	81	95	108	127	154	179	203
	2	72	83	99	113	133	163	191	218
	4	74	85	102	116	137	170	200	230
	6	75	87	104	119	142	177	209	240
2.8	0	73	84	99	112	131	160	186	210
	2	75	86	102	116	137	168	198	224
	4	76	88	105	120	142	175	206	236
	6	78	90	108	124	146	182	215	248
3.0	0	75	87	102	116	136	165	193	218
	2	77	89	105	120	141	174	204	231
	4	78	91	108	124	146	181	213	243
	6	80	93	111	127	151	187	221	254

“SUPERTIF NON DRAIN” – (N.D.H.) – 3.1 LPH
MAXIMUM RECOMMENDED DRIP LINE LENGTH (m)
PIPE DIAMETER - 12/9.8 (OD/ID)

Pressure bar	Slope %	Emitter Spacing (m)								
		0.2	0.3	0.4	0.5	0.6	0.75	1	1.25	1.5
1.0	0	11	16	21	25	29	35	43	50	57
	2	12	18	23	29	33	41	52	63	74
	4	13	19	25	31	37	45	59	73	86
	6	13	20	27	34	40	50	65	81	96
1.2	0	17	24	30	37	43	50	63	74	84
	2	17	25	32	39	46	56	70	84	98
	4	18	26	34	42	49	59	76	93	108
	6	18	27	35	44	52	63	82	100	117
1.4	0	20	29	36	44	50	61	75	89	102
	2	20	29	38	46	54	65	82	98	113
	4	21	30	40	48	56	68	88	106	123
	6	21	31	41	50	59	72	93	113	132
1.6	0	22	32	41	49	57	68	85	100	114
	2	23	33	42	52	60	72	91	109	126
	4	23	34	44	53	62	76	96	116	135
	6	24	35	45	55	65	79	101	123	143
1.8	0	24	35	45	54	62	74	93	110	125
	2	25	36	46	56	65	78	98	118	135
	4	25	37	47	58	67	81	103	124	144
	6	26	37	48	59	70	85	108	130	153
2.0	0	26	38	48	58	67	80	99	118	134
	2	27	38	49	60	69	83	105	125	144
	4	27	39	50	61	71	86	110	131	153
	6	27	40	52	63	74	89	114	138	161
2.2	0	28	40	51	61	71	85	105	125	143
	2	28	41	52	63	73	88	111	133	152
	4	28	41	53	65	76	91	115	139	161
	6	29	42	54	66	77	94	120	144	168
2.4	0	29	42	53	64	74	89	111	131	150
	2	29	42	54	66	77	92	116	139	159
	4	30	43	56	68	79	95	121	145	167
	6	30	44	56	69	81	98	125	150	174
2.6	0	30	44	56	67	78	93	116	138	158
	2	31	44	57	69	80	96	121	144	165
	4	31	45	58	70	82	99	125	150	174
	6	31	45	59	72	84	101	129	156	182
2.8	0	31	45	58	70	81	97	121	143	164
	2	32	46	59	72	83	100	125	149	173
	4	32	47	60	73	85	103	130	155	180
	6	32	47	61	74	87	105	134	161	186
3.0	0	33	47	60	72	83	100	125	148	170
	2	33	47	61	74	86	103	130	154	177
	4	33	48	62	75	88	106	134	160	185
	6	34	49	63	77	89	108	138	165	192

02/12/99

“SUPERTIF NON DRAIN” – (S.N.D.) – 3.1 LPH
MAXIMUM RECOMMENDED DRIP LINE LENGTH (m)
PIPE DIAMETER - 16/13.6 (OD/ID)

Pressure bar	Slope %	Emitter Spacing (m)								
		0.2	0.3	0.4	0.5	0.6	0.75	1	1.25	1.5
1.0	0	23	32	40	48	55	65	79	93	104
	2	26	38	49	60	70	85	108	131	153
	4	29	42	55	69	81	100	130	159	189
	6	31	46	61	76	91	113	148	183	218
1.2	0	34	47	60	71	81	95	117	136	155
	2	36	52	66	80	93	112	141	169	197
	4	38	56	72	88	103	125	160	194	227
	6	40	59	77	94	111	137	177	216	254
1.4	0	41	57	71	85	97	114	140	164	186
	2	43	61	77	93	108	129	162	194	224
	4	44	64	82	100	117	141	180	218	254
	6	46	67	87	106	125	152	196	238	279
1.6	0	46	64	80	95	109	129	158	185	210
	2	48	68	86	103	119	143	179	213	245
	4	49	71	90	110	128	154	196	235	273
	6	51	73	95	116	136	164	210	255	299
1.8	0	50	70	88	104	119	141	173	203	230
	2	52	73	93	112	129	154	192	229	263
	4	53	76	97	118	137	165	209	250	290
	6	55	79	102	123	144	175	223	270	314
2.0	0	53	75	94	112	128	152	186	218	248
	2	55	78	99	119	137	164	205	243	279
	4	56	81	103	125	145	174	220	264	305
	6	58	83	107	130	152	184	234	283	329
2.2	0	57	79	100	119	136	161	197	231	263
	2	58	82	104	125	145	173	215	255	293
	4	60	85	108	131	152	183	230	275	318
	6	61	87	112	137	159	192	244	294	342
2.4	0	59	83	105	125	143	169	208	244	276
	2	61	86	109	131	151	180	225	266	306
	4	62	89	114	137	159	191	240	286	332
	6	64	91	117	142	166	200	253	304	354
2.6	0	62	87	110	131	149	176	217	254	288
	2	64	90	114	137	158	188	234	278	318
	4	65	92	118	142	165	197	249	296	342
	6	66	95	122	147	172	206	262	314	365
2.8	0	65	91	114	136	155	184	226	265	300
	2	66	93	118	142	163	194	242	288	329
	4	67	96	122	147	170	204	257	306	353
	6	68	98	126	152	177	213	270	324	375
3.0	0	67	94	118	141	161	191	234	274	312
	2	68	96	122	146	169	201	250	296	339
	4	69	99	126	152	176	210	264	315	363
	6	71	101	130	157	182	219	277	331	384

02/12/99

“SUPERTIF NON DRAIN” – (N.D.H.) – 3.1 LPH
MAXIMUM RECOMMENDED DRIP LINE LENGTH (m)
PIPE DIAMETER – 17.8/15.2 (OD/ID)

Pressure bar	Slope %	Emitter Spacing (m)								
		0.2	0.3	0.4	0.5	0.6	0.75	1	1.25	1.5
1.0	0	30	41	51	60	68	80	97	113	128
	2	34	50	64	78	91	110	140	170	200
	4	38	56	74	91	107	131	171	210	248
	6	41	62	82	102	121	150	197	244	290
1.2	0	44	60	75	88	101	118	144	168	189
	2	47	67	85	103	119	143	180	216	251
	4	50	73	94	114	133	162	208	251	296
	6	53	78	101	124	146	179	232	283	333
1.4	0	52	72	90	106	121	142	173	201	228
	2	55	78	99	119	137	164	206	245	284
	4	58	83	107	129	151	182	232	279	326
	6	61	88	114	139	163	198	254	309	363
1.6	0	59	81	101	119	136	160	195	228	258
	2	62	87	110	131	152	181	226	269	309
	4	64	92	117	141	164	198	251	301	350
	6	67	96	124	150	176	213	272	330	386
1.8	0	64	89	110	131	149	175	214	249	282
	2	67	94	118	142	163	194	243	288	332
	4	69	98	126	151	176	211	267	320	371
	6	72	103	132	160	187	226	288	348	405
2.0	0	69	95	118	140	160	188	230	268	303
	2	71	100	126	151	174	207	258	305	351
	4	74	104	133	160	185	223	281	336	389
	6	76	108	139	168	196	237	301	363	423
2.2	0	73	101	126	149	170	200	244	285	323
	2	75	106	133	159	183	218	271	320	368
	4	78	110	140	168	194	233	293	350	405
	6	80	114	146	176	205	247	313	378	438
2.4	0	76	106	132	157	179	210	257	300	339
	2	79	110	139	166	191	227	283	335	384
	4	81	115	146	175	203	242	305	364	420
	6	83	119	152	183	213	256	324	390	453
2.6	0	80	111	138	164	187	219	269	314	354
	2	82	115	145	173	199	236	294	348	398
	4	84	119	151	182	210	251	315	376	434
	6	86	123	157	189	220	265	335	401	467
2.8	0	83	115	144	170	194	228	279	326	369
	2	85	119	150	180	206	245	304	359	411
	4	87	123	156	188	217	260	325	388	447
	6	89	127	162	195	227	272	344	413	479
3.0	0	86	119	149	176	202	236	290	338	383
	2	88	123	156	186	214	253	314	370	425
	4	90	127	161	194	224	267	335	398	459
	6	92	131	167	201	233	280	353	423	491

02/12/99

“SUPERTIF NON DRAIN” – (S.N.D.) – 3.1 LPH
MAXIMUM RECOMMENDED DRIP LINE LENGTH (m)
PIPE DIAMETER - 20/17.4 (OD/ID)

Pressure bar	Slope %	Emitter Spacing (m)								
		0.2	0.3	0.4	0.5	0.6	0.75	1	1.25	1.5
1.0	0	40	54	66	78	88	103	125	145	164
	2	48	69	88	107	125	151	193	234	273
	4	55	80	104	128	151	185	240	295	348
	6	60	89	118	145	173	213	280	345	411
1.2	0	59	80	98	115	131	152	185	215	243
	2	65	92	116	139	161	193	243	291	338
	4	71	101	130	158	184	224	286	346	407
	6	76	110	142	174	205	250	323	394	465
1.4	0	70	96	118	139	157	183	223	259	291
	2	76	106	134	160	184	220	275	328	380
	4	81	115	147	177	206	248	316	381	444
	6	86	123	158	193	226	274	351	426	501
1.6	0	79	108	133	156	178	207	251	293	330
	2	85	118	148	176	203	241	301	358	411
	4	89	126	160	193	224	269	340	409	474
	6	94	134	171	207	242	293	374	453	530
1.8	0	87	118	146	171	194	227	275	320	362
	2	92	127	160	190	218	259	322	383	440
	4	96	135	171	206	238	286	360	431	501
	6	100	142	182	220	256	309	393	475	554
2.0	0	93	127	156	184	209	243	296	344	389
	2	98	135	170	202	232	275	341	404	464
	4	102	143	181	217	251	300	378	453	524
	6	106	150	191	231	268	323	410	494	576
2.2	0	99	134	166	195	221	259	314	365	413
	2	103	143	179	212	244	289	358	424	485
	4	107	150	190	227	263	314	394	470	543
	6	111	157	200	241	280	336	426	511	596
2.4	0	104	141	175	205	233	272	331	385	434
	2	108	149	187	222	254	302	373	441	506
	4	112	157	198	237	273	326	408	488	563
	6	116	163	208	250	290	348	440	528	614
2.6	0	108	148	182	215	244	284	346	403	455
	2	113	156	194	231	265	313	388	458	524
	4	116	163	205	245	283	337	422	503	581
	6	120	169	214	258	299	359	453	543	630
2.8	0	113	154	190	223	254	296	360	419	473
	2	117	161	202	239	274	324	401	473	540
	4	121	168	212	253	292	347	435	518	596
	6	124	175	221	266	308	368	465	556	645
3.0	0	117	159	197	231	263	307	374	434	491
	2	121	167	208	247	283	334	413	486	557
	4	124	173	218	261	300	357	446	530	611
	6	128	180	228	273	316	378	476	570	660

02/12/99

“SUPERTIF NON DRAIN” – (N.D.H.) – 5.2 LPH
MAXIMUM RECOMMENDED DRIP LINE LENGTH (m)
PIPE DIAMETER – 12/9.8 (OD/ID)

Pressure bar	Slope %	Emitter Spacing (m)								
		0.2	0.3	0.4	0.5	0.6	0.75	1	1.25	1.5
1.0	0		12	15	19	21	26	31	36	42
	2		13	17	20	23	29	37	44	51
	4		14	18	22	26	32	41	50	59
	6		14	19	23	28	34	44	55	65
1.2	0		17	22	27	31	37	46	55	62
	2		18	24	29	33	40	50	60	69
	4		19	24	30	35	42	54	65	75
	6		19	25	31	36	44	57	69	81
1.4	0		21	27	32	37	44	55	65	75
	2		21	28	34	39	47	59	70	81
	4		22	28	35	40	49	62	75	87
	6		22	29	36	42	51	65	79	92
1.6	0		23	30	36	42	50	62	74	84
	2		24	31	37	43	52	66	79	90
	4		24	32	38	45	54	69	83	96
	6		25	32	39	46	56	71	86	101
1.8	0		26	33	40	46	55	68	80	92
	2		26	34	41	47	56	71	85	98
	4		26	34	42	49	59	74	89	102
	6		27	35	43	50	60	77	93	108
2.0	0		27	35	42	49	59	73	86	99
	2		28	36	43	50	61	76	90	104
	4		28	36	44	52	62	79	94	110
	6		29	37	45	53	64	81	98	114
2.2	0		29	37	45	52	62	77	91	105
	2		29	38	46	53	64	80	96	110
	4		30	38	47	55	65	83	99	114
	6		30	39	48	56	68	85	103	119
2.4	0		30	39	47	55	65	81	96	110
	2		31	40	48	56	67	84	100	116
	4		31	40	49	57	68	87	104	120
	6		32	41	50	58	71	89	108	125
2.6	0		32	41	49	57	68	85	101	116
	2		32	41	50	58	70	88	105	120
	4		32	42	51	59	71	90	108	125
	6		33	42	52	61	73	93	111	129
2.8	0		33	42	51	59	71	89	105	120
	2		33	43	52	61	73	91	109	125
	4		34	44	53	61	74	94	111	129
	6		34	44	54	62	76	96	115	134
3.0	0		34	44	53	61	74	92	109	125
	2		35	44	54	62	75	94	113	129
	4		35	45	55	64	77	97	115	134
	6		35	46	55	65	78	99	119	137

02/12/99

“SUPERTIF NON DRAIN” – (N.D.H.) – 5.2 LPH
MAXIMUM RECOMMENDED DRIP LINE LENGTH (m)
PIPE DIAMETER – 16/13.6 (OD/ID)

Pressure bar	Slope %	Emitter Spacing (m)								
		0.2	0.3	0.4	0.5	0.6	0.75	1	1.25	1.5
1.0	0	8	24	30	35	40	47	58	68	77
	2	9	27	34	42	49	59	75	90	105
	4	9	29	38	47	55	68	88	108	126
	6	10	32	42	52	61	75	98	121	144
1.2	0	12	35	44	52	59	70	86	100	114
	2	13	37	47	57	66	80	100	119	138
	4	13	39	50	62	72	87	111	134	156
	6	13	41	53	65	77	94	120	146	171
1.4	0	15	42	52	62	71	84	103	121	137
	2	15	44	56	67	77	92	115	138	158
	4	15	46	58	71	82	99	126	151	176
	6	15	47	61	74	87	106	135	163	191
1.6	0	16	47	59	70	80	95	116	136	155
	2	17	49	62	74	86	102	128	151	174
	4	17	50	64	78	91	109	137	165	191
	6	17	52	67	81	95	115	146	176	206
1.8	0	18	51	64	77	88	104	127	149	170
	2	18	53	67	81	93	111	138	164	188
	4	18	55	70	84	97	117	147	176	204
	6	18	56	72	87	101	123	156	188	218
2.0	0	19	55	69	82	94	111	137	160	182
	2	19	56	72	86	99	118	147	174	200
	4	19	58	74	89	104	124	156	186	215
	6	20	59	76	93	107	130	164	198	228
2.2	0	20	58	73	87	100	118	145	170	194
	2	20	60	76	91	104	125	155	184	210
	4	21	61	78	94	109	131	164	195	225
	6	21	63	80	97	113	136	172	206	239
2.4	0	21	61	77	92	105	124	153	179	203
	2	21	63	79	95	110	131	162	193	221
	4	22	64	82	98	114	136	171	204	234
	6	22	65	84	101	118	141	178	214	248
2.6	0	22	64	80	96	110	130	160	188	213
	2	22	65	83	99	115	136	169	200	228
	4	22	67	85	102	118	142	177	211	243
	6	23	68	87	105	122	146	185	221	255
2.8	0	23	66	84	100	114	135	166	195	221
	2	23	68	86	103	119	141	175	208	237
	4	23	69	88	106	122	146	183	218	251
	6	23	71	90	109	126	152	191	228	263
3.0	0	24	69	86	103	118	140	172	201	230
	2	24	70	89	106	122	146	181	214	245
	4	24	71	91	109	127	151	189	225	258
	6	24	73	93	112	130	156	196	234	270

02/12/99

“SUPERTIF NON DRAIN” – (N.D.H.) – 5.2 LPH
MAXIMUM RECOMMENDED DRIP LINE LENGTH (m)
PIPE DIAMETER – 17.8/15.2 (OD/ID)

Pressure bar	Slope %	Emitter Spacing (m)								
		0.2	0.3	0.4	0.5	0.6	0.75	1	1.25	1.5
1.0	0	17	30	37	44	50	59	71	84	95
	2	19	35	44	54	63	76	96	116	135
	4	20	39	50	62	73	89	115	140	165
	6	21	42	55	68	81	100	130	160	189
1.2	0	25	44	55	65	74	87	106	124	140
	2	26	48	61	73	85	101	126	151	174
	4	27	51	66	80	92	112	143	173	201
	6	28	54	70	85	100	122	157	190	224
1.4	0	30	53	66	78	89	104	127	149	168
	2	31	56	71	85	98	117	146	174	200
	4	32	59	75	91	106	127	161	193	224
	6	33	62	79	97	113	137	174	210	246
1.6	0	33	59	74	88	100	118	144	168	189
	2	34	62	79	94	109	129	161	191	219
	4	35	65	83	100	116	139	175	210	243
	6	36	68	87	105	122	148	188	226	264
1.8	0	36	65	81	96	109	128	157	184	207
	2	37	68	86	102	118	140	174	205	236
	4	38	71	90	108	124	149	187	224	258
	6	39	73	93	113	131	158	200	240	279
2.0	0	39	70	87	103	118	138	169	198	224
	2	40	72	91	109	125	149	185	218	251
	4	41	75	95	114	132	158	198	236	272
	6	42	77	98	119	138	166	210	251	291
2.2	0	41	74	92	109	125	146	179	210	237
	2	42	77	96	115	132	157	194	230	263
	4	43	79	100	120	139	166	207	246	284
	6	44	81	103	125	145	173	219	263	303
2.4	0	44	78	97	115	131	155	189	220	249
	2	44	80	101	121	139	164	203	240	275
	4	45	83	104	125	145	173	216	256	296
	6	46	85	108	130	151	181	227	271	315
2.6	0	45	81	102	120	137	161	198	230	261
	2	46	84	105	126	144	171	212	250	285
	4	47	86	109	130	151	179	224	266	306
	6	48	88	112	135	156	187	235	281	324
2.8	0	47	84	106	125	143	168	206	240	272
	2	48	87	109	130	149	177	219	259	296
	4	49	89	112	135	155	185	231	275	315
	6	49	91	116	139	161	193	242	289	335
3.0	0	49	87	109	130	148	174	213	249	282
	2	50	90	113	135	155	183	227	268	305
	4	50	92	116	139	160	191	238	283	324
	6	51	94	119	143	166	198	249	298	342

02/12/99

“SUPERTIF NON DRAIN” – (N.D.H.) – 5.2 LPH
MAXIMUM RECOMMENDED DRIP LINE LENGTH (m)
PIPE DIAMETER - 20/17.4 (OD/ID)

Pressure bar	Slope %	Emitter Spacing (m)								
		0.2	0.3	0.4	0.5	0.6	0.75	1	1.25	1.5
1.0	0	22	40	49	57	65	76	92	106	120
	2	24	48	61	74	86	104	131	159	185
	4	27	54	70	86	101	124	160	195	230
	6	28	60	78	97	115	141	184	225	267
1.2	0	32	59	72	85	96	113	136	159	179
	2	34	65	82	98	113	135	169	201	233
	4	36	71	90	109	127	153	195	235	275
	6	37	76	97	119	139	169	217	264	309
1.4	0	38	70	87	102	116	135	164	190	215
	2	40	76	96	114	131	155	194	230	264
	4	42	81	103	124	143	173	218	261	303
	6	43	86	110	133	155	187	239	289	336
1.6	0	43	79	98	115	130	152	185	215	243
	2	45	85	106	126	145	172	213	253	290
	4	46	89	113	136	157	188	236	283	327
	6	47	94	119	144	167	202	256	308	359
1.8	0	47	87	107	126	143	167	203	235	266
	2	48	92	115	136	157	185	229	271	311
	4	50	96	122	145	168	200	251	300	347
	6	51	100	128	154	178	214	271	325	378
2.0	0	50	93	115	135	154	179	218	254	287
	2	52	98	122	145	166	197	243	288	329
	4	53	102	129	154	178	212	265	315	363
	6	54	106	135	162	187	225	284	340	395
2.2	0	53	99	122	143	163	191	232	269	303
	2	55	103	129	153	175	207	256	301	345
	4	56	107	135	162	186	221	277	329	380
	6	57	111	141	169	196	234	295	353	410
2.4	0	56	104	128	151	172	200	244	284	320
	2	57	108	135	160	184	217	268	315	360
	4	59	112	141	169	194	230	288	341	393
	6	60	116	147	176	203	243	306	365	423
2.6	0	58	109	134	158	179	209	255	296	335
	2	60	113	141	167	191	225	278	328	374
	4	61	117	147	175	201	239	298	354	407
	6	62	120	152	182	211	251	316	376	435
2.8	0	61	113	140	164	187	218	265	309	348
	2	62	117	146	173	198	233	288	339	387
	4	63	121	152	181	208	247	307	364	419
	6	64	125	157	188	217	259	325	388	447
3.0	0	63	117	145	170	193	226	275	320	362
	2	64	121	151	179	205	241	297	349	399
	4	65	125	157	187	214	254	316	375	431
	6	66	128	162	194	223	266	334	398	458

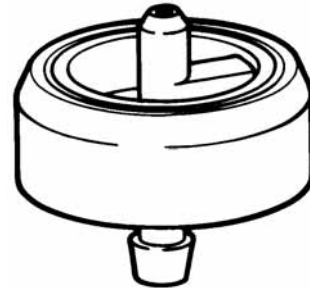
02/12/99

“TUFFTIF”

Non - Compensating, Turbulent-Flow, Clog-Resistant Dripper

MAIN FEATURES

- * Turbulent flow through labyrinth design, minimum with water passage 1.1mm
- * Suitable for poor water quality
- * Resistant to fertilizers and chemicals commonly used in agriculture
- * Low profile construction avoids mechanical damage in the fields
- * Insertable in any tube at any spacing



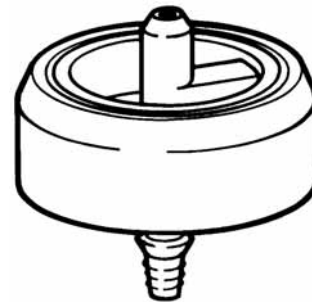
Barbed connection

ADDITIONAL FEATURES

- * One discharge source can provide water for 1.2 or 4 drip locations
- * Compatible with the multi-outlet adaptor

OPERATING RANGE

- * Working pressure range 0.8-2.5 bar
- * Nominal flow rate: 2.0, 4.0, 8.0, and 11.0 l/h at 1.0 bar



Threaded connection

MODELS AND TYPES

- * Barbed connection
- * 10/32" Threaded connection
- * Also available without protruding outlet for easy manual assembly

“TUFFTIF”

DRIPPER

FLOW RATE DATA

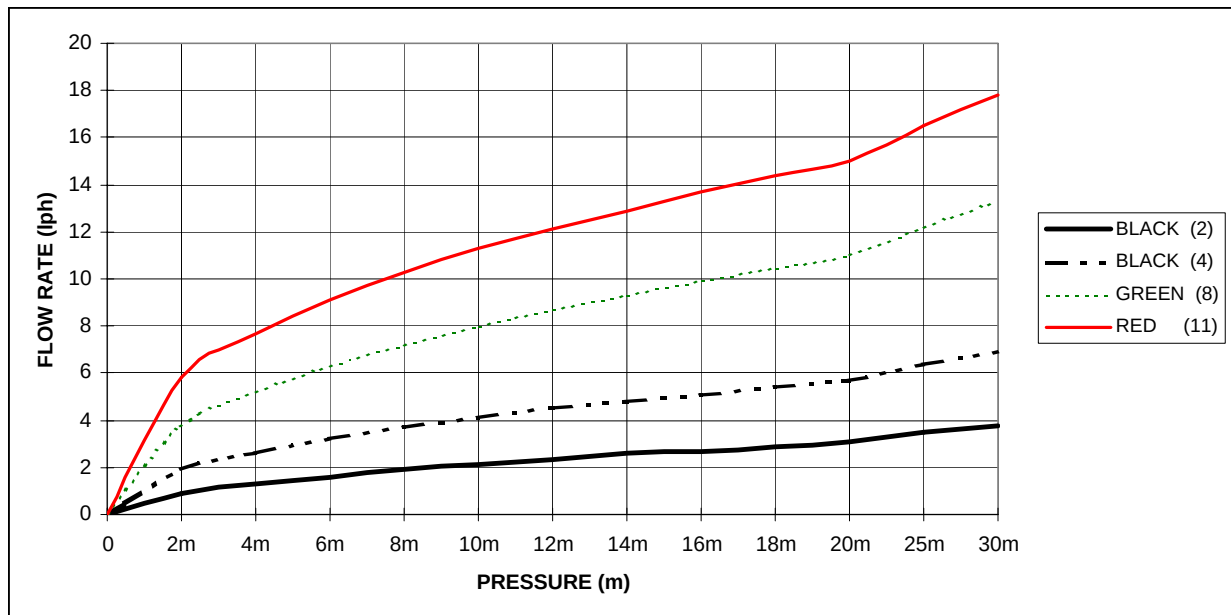
TYPE		Q=A _x H ^A B *		%DH ***	FLOW RATE (LPH) AT PRESSURE											
COLOR	(mm)	A	B		2m	4m	6m	8m	10m	12m	14m	16m	18m	20m	25m	30m
BLACK	(2)	0.615	0.539	19.3	0.9	1.3	1.6	1.9	2.1	2.3	2.6	2.7	2.9	3.1	3.5	3.8
BLACK	(4)	1.3643	0.478	22	1.9	2.6	3.2	3.7	4.1	4.5	4.8	5.1	5.4	5.7	6.4	6.9
GREEN	(8)	2.7257	0.465	22.7	3.8	5.2	6.3	7.2	8.0	8.7	9.3	9.9	10.5	11.0	12.2	13.3
RED	(11)	4.3329	0.414	25.8	5.8	7.7	9.1	10.3	11.3	12.1	12.9	13.7	14.4	15.0	16.5	17.8

* Q=LPH H=m.

** %DH - MAXIMUM ALLOWABLE HEAD LOSS DIFFERENCE.
ALONG A LATERAL (AS PERCENT OF THE WORKING PRESSURE).
TO KEEP FLOW RATE DIFFERENCE $\leq 10\%$
OF WORKING FLOW RATE.

PERFORMANCE CHART

WORKING PRESSURE RANGE 8-25m.

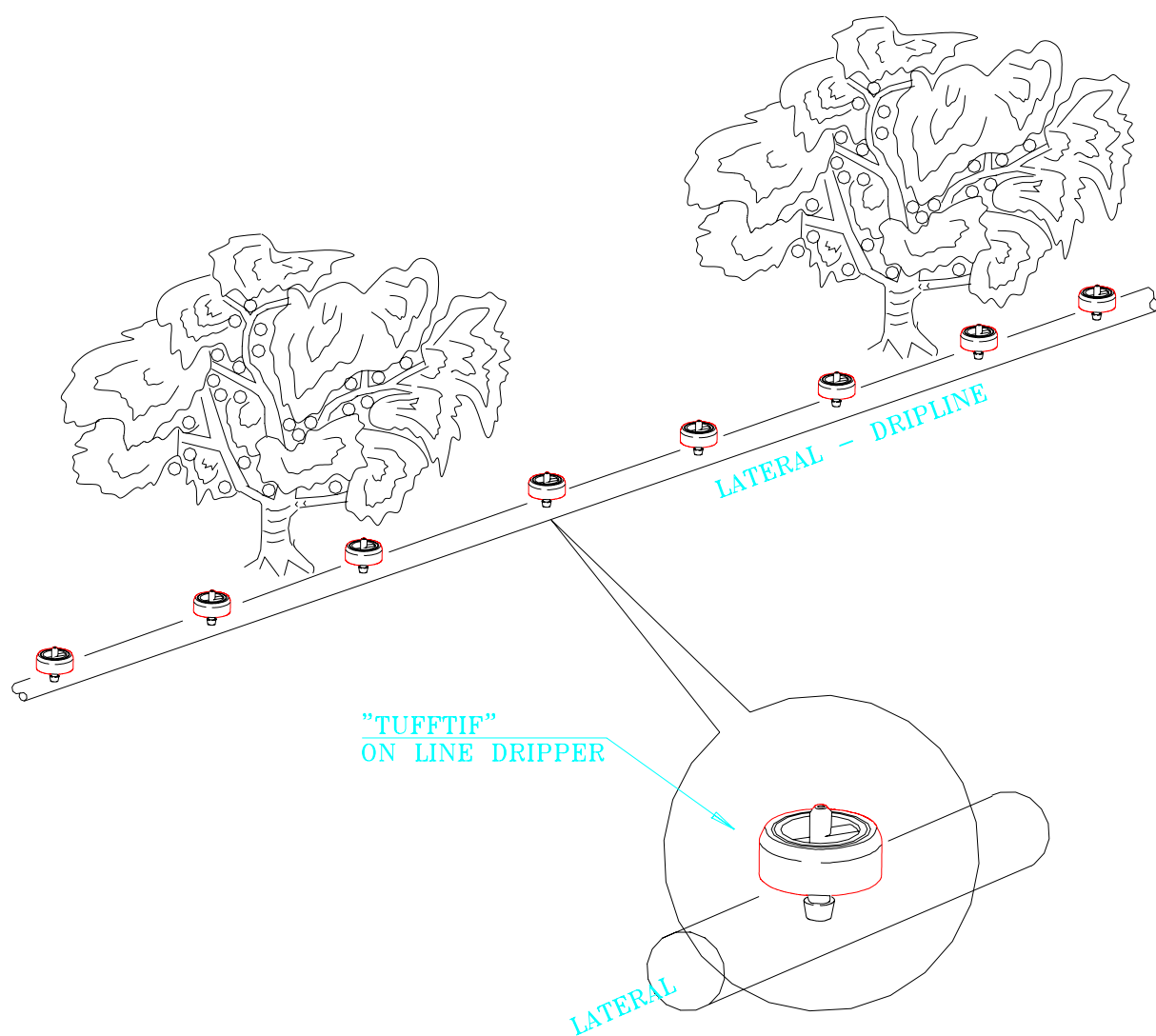


ORCHARDS & PLANTATION

DRIP IRRIGATION

“TUFFTIF”

ON LINE - NON COMPENSATING DRIPPER

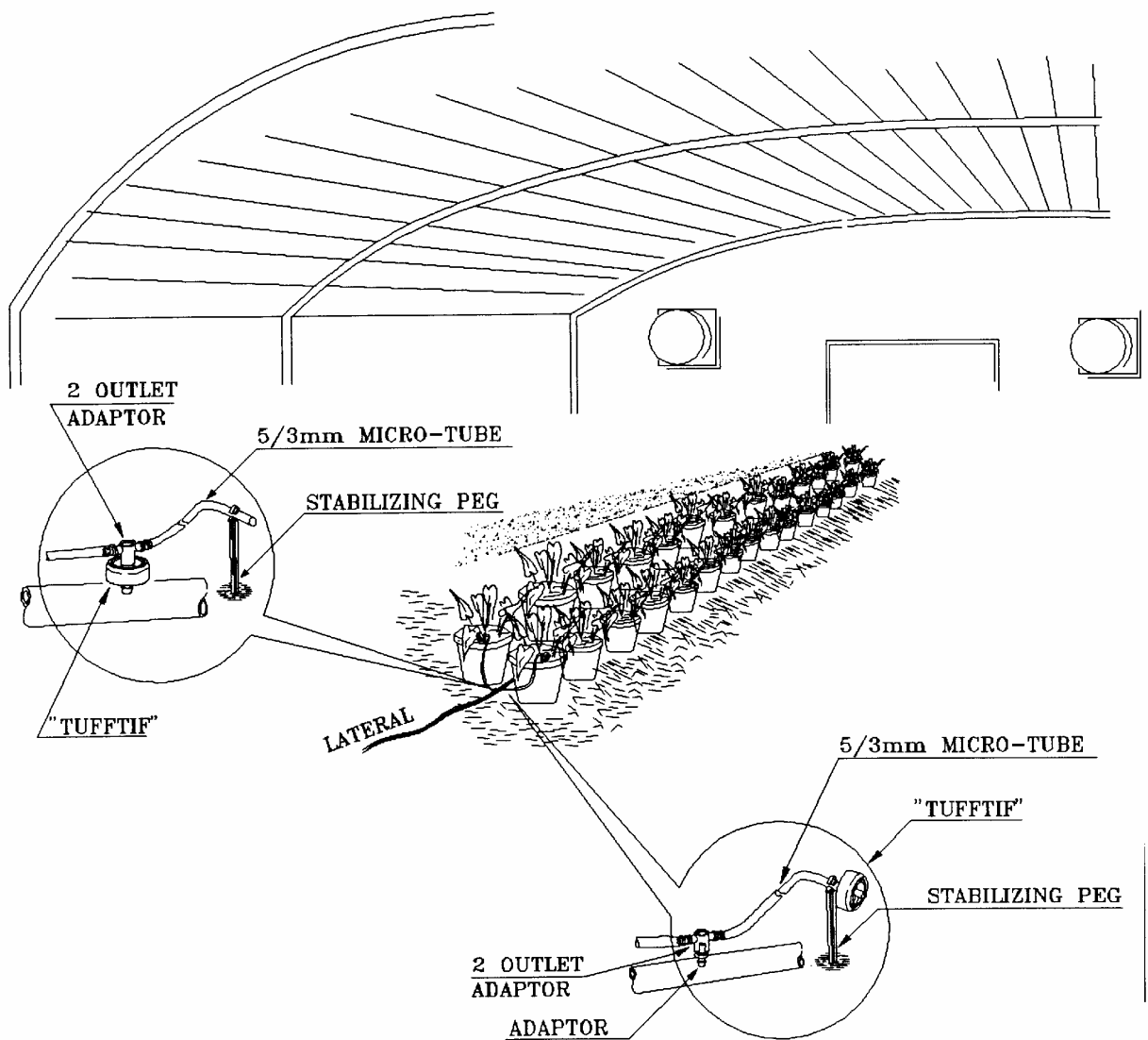


GREENHOUSE

DRIP IRRIGATION

"TUFFTIF"

ON LINE - NON COMPENSATING DRIPPER



“TUFFTIF” DRIPPER WITH “POLYTIF” PEG

FLOW RATE DATA

NOMINAL PRESSURE 1.0 bar

Dripper Type Color (lph)	Flow rate (lph) at pressure				
	Standard	2-Outlets	4-Outlets	6-Outlets	8-Outlets
BROWN (2)	2.25	2.12	2.14	2.2	2.27
BLACK (4)	4.12	3.51	3.92	4	4.05
GREEN (8)	8.13	5.17	6.85	7.55	7.71
RED (11)	10.85	5.77	8.29	9.55	9.81

TUFFTIF
BROWN - 2 lph
Maximum Recommended Lateral Length (m)
(Max. Flow Rate Variation - 7.5% or 10%)

Emitter Spacing (m)	Slope (%)	Pipe Diameter in mm (OD/ID)					
		16/13.6		17.8/15.2		20/17.4	
		7.5%	10%	7.5%	10%	7.5%	10%
0.2	-2	35	41	41	48	47	57
	-1	40	46	47	54	58	66
	0	45	50	55	61	69	77
	1	49	54	61	67	78	86
	2	53	58	66	72	86	94
0.3	-2	43	50	48	57	55	66
	-1	50	57	59	68	71	82
	0	58	65	71	79	89	100
	1	65	72	80	89	104	115
	2	71	77	88	96	116	126
0.4	-2	48	57	54	64	60	73
	-1	58	67	68	78	80	94
	0	70	78	85	95	107	120
	1	80	88	98	108	128	141
	2	87	95	110	119	145	157
0.5	-2	52	63	58	70	63	79
	-1	65	76	75	88	89	105
	0	81	90	98	110	123	138
	1	93	103	116	127	151	165
	2	103	112	130	141	172	186
0.6	-2	55	67	60	74	65	82
	-1	71	83	82	96	95	113
	0	90	101	110	123	139	155
	1	106	116	132	145	172	188
	2	118	128	149	161	198	214

(-) Uphill

(+) Downhill

(Continued from page6)

**TUFFTIF
BROWN - 2 lph**

Emitter Spacing (m)	Slope (%)	Pipe Diameter in mm (OD/ID)					
		16/13.6		17.8/15.2		20/17.4	
		7.5%	10%	7.5%	10%	7.5%	10%
0.7	-2	58	71	62	78	67	85
	-1	76	90	88	103	101	121
	0	99	111	121	135	153	171
	1	118	130	148	161	193	211
	2	133	144	168	181	176	240
0.8	-2	60	74	64	81	69	87
	-1	81	95	92	110	106	127
	0	108	122	131	147	166	186
	1	130	142	162	178	214	233
	2	147	159	186	201	96	205
0.9	-2	62	77	66	83	69	89
	-1	86	101	96	115	110	133
	0	117	131	141	158	179	201
	1	142	155	177	194	234	254
	2	161	174	104	220	99	228
1	-2	63	79	67	85	70	91
	-1	89	106	100	120	114	138
	0	125	140	151	170	192	215
	1	153	167	191	209	254	275
	2	175	189	112	238	101	126
1.2	-2	66	83	68	88	72	92
	-1	96	114	107	130	120	146
	0	140	157	170	191	215	241
	1	175	191	221	239	292	316
	2	202	217	136	154	107	132
1.5	-2	68	86	71	90	74	95
	-1	102	123	114	138	126	156
	0	158	174	192	213	246	273
	1	201	216	257	275	345	368
	2	149	245	111	137	95	120

(-) Uphill

(+) Downhill

TUFFTIF
BLACK - 4 lph
Maximum Recommended Lateral Length (m)
(Max. Flow Rate Variation - 7.5% or 10%)

Emitter Spacing (m)	Slope (%)	Pipe Diameter in mm (OD/ID)					
		16/13.6		17.8/15.2		20/17.4	
		7.5%	10%	7.5%	10%	7.5%	10%
0.2	-2	27	30	32	36	38	43
	-1	29	32	34	39	43	48
	0	31	34	38	41	47	52
	1	33	36	40	44	52	56
	2	34	38	43	46	55	60
0.3	-2	33	39	39	44	46	53
	-1	37	41	44	49	53	60
	0	40	44	49	54	62	68
	1	43	47	53	58	68	74
	2	46	50	57	62	74	80
0.4	-2	38	44	44	51	52	60
	-1	43	48	51	57	62	70
	0	48	53	58	64	74	81
	1	52	57	64	70	83	91
	2	56	61	70	75	91	98
0.5	-2	42	49	49	57	57	67
	-1	49	55	58	65	70	79
	0	56	61	67	74	85	94
	1	61	67	75	82	98	106
	2	66	71	82	88	108	116
0.6	-2	46	53	53	61	61	71
	-1	54	61	63	71	76	87
	0	62	68	76	83	95	105
	1	69	76	85	93	111	120
	2	75	81	94	101	123	132

(-) Uphill

(+) Downhill

(Continued from page8)

TUFFTIF BLACK - 4 lph

Emitter Spacing (m)	Slope (%)	Pipe Diameter in mm (OD/ID)					
		16/13.6		17.8/15.2		20/17.4	
		7.5%	10%	7.5%	10%	7.5%	10%
0.7	-2	50	57	56	65	64	76
	-1	58	66	69	78	82	94
	0	69	76	83	92	105	116
	1	77	84	95	104	124	134
	2	83	90	104	113	139	148
0.8	-2	52	61	58	69	66	79
	-1	62	71	74	83	87	100
	0	74	82	90	100	114	126
	1	84	92	105	114	136	147
	2	92	99	116	125	153	164
0.9	-2	55	64	61	72	68	82
	-1	67	76	77	88	92	106
	0	80	88	97	107	123	136
	1	92	100	113	123	149	160
	2	101	108	127	136	167	179
1	-2	57	67	63	75	70	85
	-1	70	80	82	93	96	112
	0	86	95	104	115	132	145
	1	99	107	123	133	160	173
	2	109	117	137	147	182	194
1.2	-2	61	72	67	80	73	89
	-1	77	88	89	102	104	121
	0	96	107	116	130	148	163
	1	113	121	139	151	182	197
	2	125	134	157	168	209	223
1.5	-2	65	77	71	84	77	93
	-1	84	95	96	111	113	132
	0	107	117	132	144	170	185
	1	128	137	162	173	216	230
	2	143	152	183	194	247	260

(-) Uphill

(+) Downhill

TUFFTIF

GREEN - 8 lph

Maximum Recommended Lateral Length (m)
(Max. Flow Rate Variation - 7.5% or 10%)

Emitter Spacing (m)	Slope (%)	Pipe Diameter in mm (OD/ID)					
		16/13.6		17.8/15.2		20/17.4	
		7.5%	10%	7.5%	10%	7.5%	10%
0.2	-2	18	21	22	25	27	31
	-1	19	22	23	26	29	33
	0	20	23	25	28	31	35
	1	21	24	26	29	33	37
	2	22	24	27	30	35	38
0.3	-2	23	26	27	32	33	39
	-1	25	28	29	34	37	42
	0	26	29	32	36	40	45
	1	28	31	34	38	43	48
	2	29	32	35	39	46	50
0.4	-2	27	31	32	37	38	45
	-1	29	33	35	40	43	49
	0	31	35	38	43	48	54
	1	33	37	41	45	52	58
	2	35	39	43	48	56	62
0.5	-2	31	36	36	42	43	50
	-1	34	38	40	46	49	56
	0	36	41	44	49	56	63
	1	39	43	48	53	61	68
	2	41	45	51	56	66	72
0.6	-2	34	39	39	46	46	55
	-1	37	42	44	50	54	62
	0	40	46	49	55	62	70
	1	44	49	54	59	70	77
	2	46	51	58	63	75	82

(-) Uphill

(+) Downhill

(Continued from page10)

TUFFTIF GREEN - 8 lph

Emitter Spacing (m)	Slope (%)	Pipe Diameter in mm (OD/ID)					
		16/13.6		17.8/15.2		20/17.4	
		7.5%	10%	7.5%	10%	7.5%	10%
0.7	-2	36	42	42	49	50	59
	-1	41	46	48	55	59	67
	0	45	50	54	61	69	77
	1	48	54	60	66	77	85
	2	52	57	64	71	84	92
0.8	-2	38	45	45	53	52	62
	-1	43	50	51	59	63	73
	0	49	54	59	66	74	84
	1	53	58	66	72	85	94
	2	57	62	70	78	93	101
0.9	-2	41	48	47	56	55	66
	-1	47	53	55	63	67	77
	0	52	59	64	71	80	90
	1	58	64	71	78	92	102
	2	62	68	77	85	101	110
1	-2	43	50	49	58	57	69
	-1	49	56	58	67	70	82
	0	56	63	68	76	86	97
	1	62	68	76	84	99	109
	2	67	73	83	91	109	119
1.2	-2	47	55	53	64	61	74
	-1	54	62	64	74	77	90
	0	62	71	77	85	96	108
	1	70	77	86	96	113	124
	2	76	83	95	103	126	136
1.5	-2	50	59	57	69	65	80
	-1	59	68	71	81	86	99
	0	69	78	86	96	110	123
	1	80	86	99	108	132	143
	2	86	93	110	119	147	158

(-) Uphill

(+) Downhill

TUFFTIF

RED - 11 lph

Maximum Recommended Lateral Length (m)
(Max. Flow Rate Variation - 7.5% or 10%)

Emitter Spacing (m)	Slope (%)	Pipe Diameter in mm (OD/ID)					
		16/13.6		17.8/15.2		20/17.4	
		7.5%	10%	7.5%	10%	7.5%	10%
0.2	-2	16	18	19	21	23	27
	-1	16	18	20	22	25	28
	0	17	19	20	23	26	29
	1	17	19	21	24	27	30
	2	18	20	22	24	28	31
0.3	-2	20	23	24	27	29	34
	-1	21	24	25	29	31	35
	0	22	24	26	30	34	38
	1	23	25	28	31	35	39
	2	23	26	29	32	37	41
0.4	-2	24	27	28	32	34	39
	-1	25	28	30	34	37	42
	0	26	29	32	36	40	45
	1	27	30	34	37	43	48
	2	28	32	35	39	45	50
0.5	-2	27	31	32	36	38	45
	-1	29	32	34	39	42	48
	0	30	34	37	41	47	52
	1	32	36	39	43	50	56
	2	33	37	41	45	53	59
0.6	-2	29	34	35	40	42	49
	-1	31	36	38	43	47	53
	0	34	38	41	46	52	58
	1	36	40	44	49	56	62
	2	37	41	46	51	61	66

(-) Uphill

(+) Downhill

(Continued from page12)

**TUFFTIF
RED-11 lph**

Emitter Spacing (m)	Slope (%)	Pipe Diameter in mm (OD/ID)					
		16/13.6		17.8/15.2		20/17.4	
		7.5%	10%	7.5%	10%	7.5%	10%
0.7	-2	32	37	37	43	45	53
	-1	34	39	41	47	51	58
	0	37	42	46	50	57	64
	1	40	44	49	54	63	69
	2	42	46	52	57	67	74
0.8	-2	34	39	40	46	48	57
	-1	38	42	45	50	54	63
	0	41	46	49	55	62	70
	1	43	48	54	59	69	76
	2	46	50	57	62	74	81
0.9	-2	36	42	42	50	50	59
	-1	40	45	48	54	59	68
	0	43	49	53	59	68	76
	1	47	52	58	64	75	82
	2	50	55	62	68	81	88
1	-2	38	45	45	52	53	63
	-1	42	48	50	58	62	71
	0	46	52	57	64	72	80
	1	50	56	62	69	80	88
	2	53	59	66	73	87	95
1.2	-2	42	49	48	58	58	68
	-1	47	54	55	64	68	79
	0	52	59	64	71	80	90
	1	56	64	70	78	91	101
	2	61	67	76	83	100	108
1.5	-2	45	53	53	62	62	75
	-1	51	59	62	71	75	87
	0	57	65	71	80	92	102
	1	63	71	80	89	105	116
	2	69	75	87	95	116	125

(-) Uphill

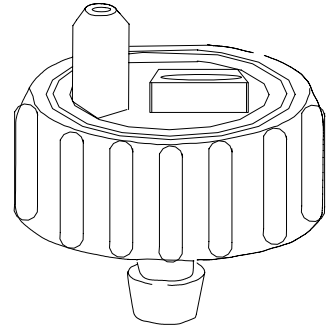
(+) Downhill

“O-TIF”

Take apart on line dripper

MAIN FEATURE

- * A take apart emitter allowing easy on-site cleaning.
- * A distinctive turbulent flow-through labyrinth
- * Minimum water passage width of 1mm.
- * Outstanding resistance to clogging.
- * Only two parts, labyrinth built-in to cover. No risk of losing the labyrinth when taking apart.
- * Molded-in press-fit outlet, ensures no water run off along the drip line.
- * Compatible with Plastro's branching adaptors. (1 to 8 outlets)



MATERIALS:

- * Engineering grade Polypropylene + PBT
Resistant to chemicals and fertilizers commonly used in agriculture, U.V. radiation and mechanical stress.

SPECIFICATIONS:

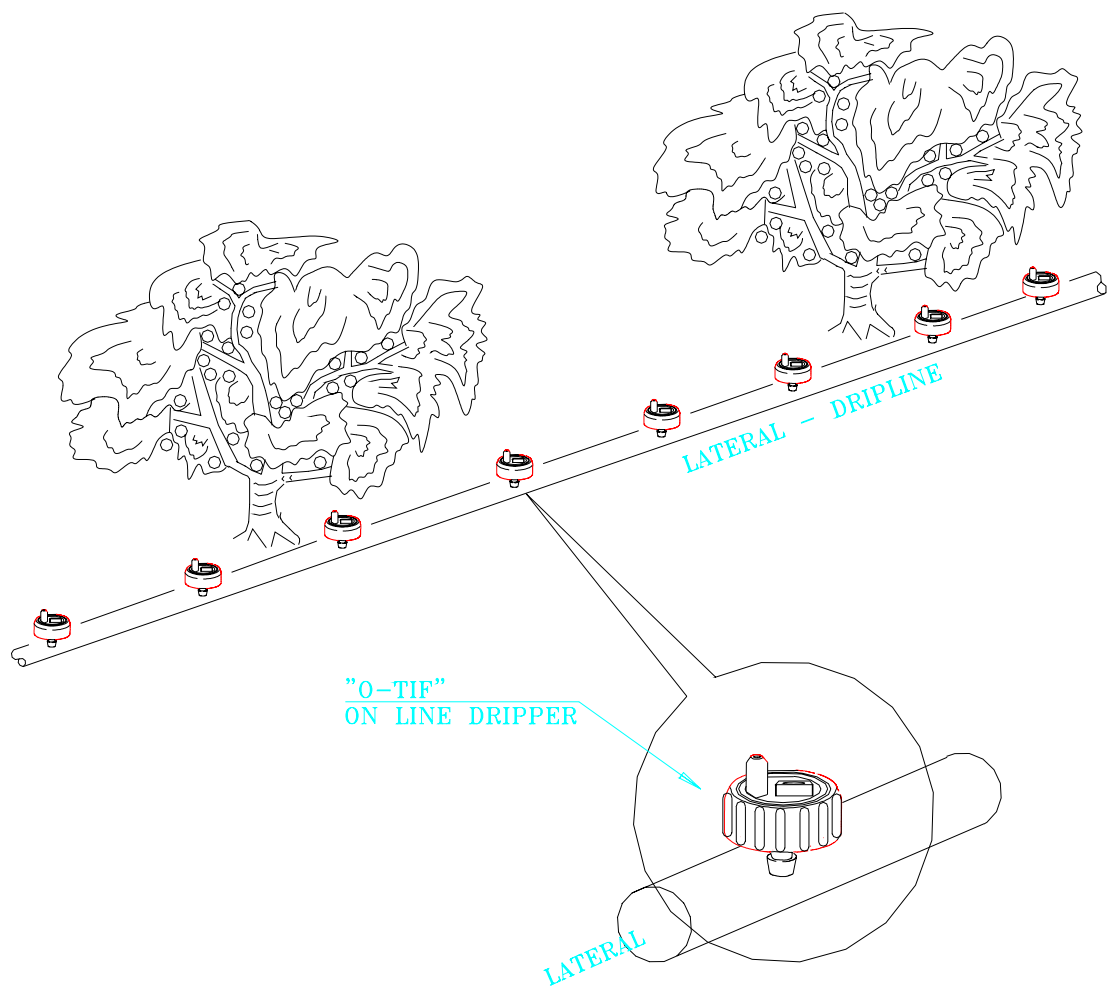
- * 3 colour coded emission rates:
Brown 2.0 lph
Black 4.0 lph
Green 7.7 lph
Violet 16.7 lph
- * Maximum recommended operation pressure: 20m.

ORCHARDS & PLANTATION

DRIP IRRIGATION

"O-TIF"

ON LINE – NON COMPENSATING DRIPPER

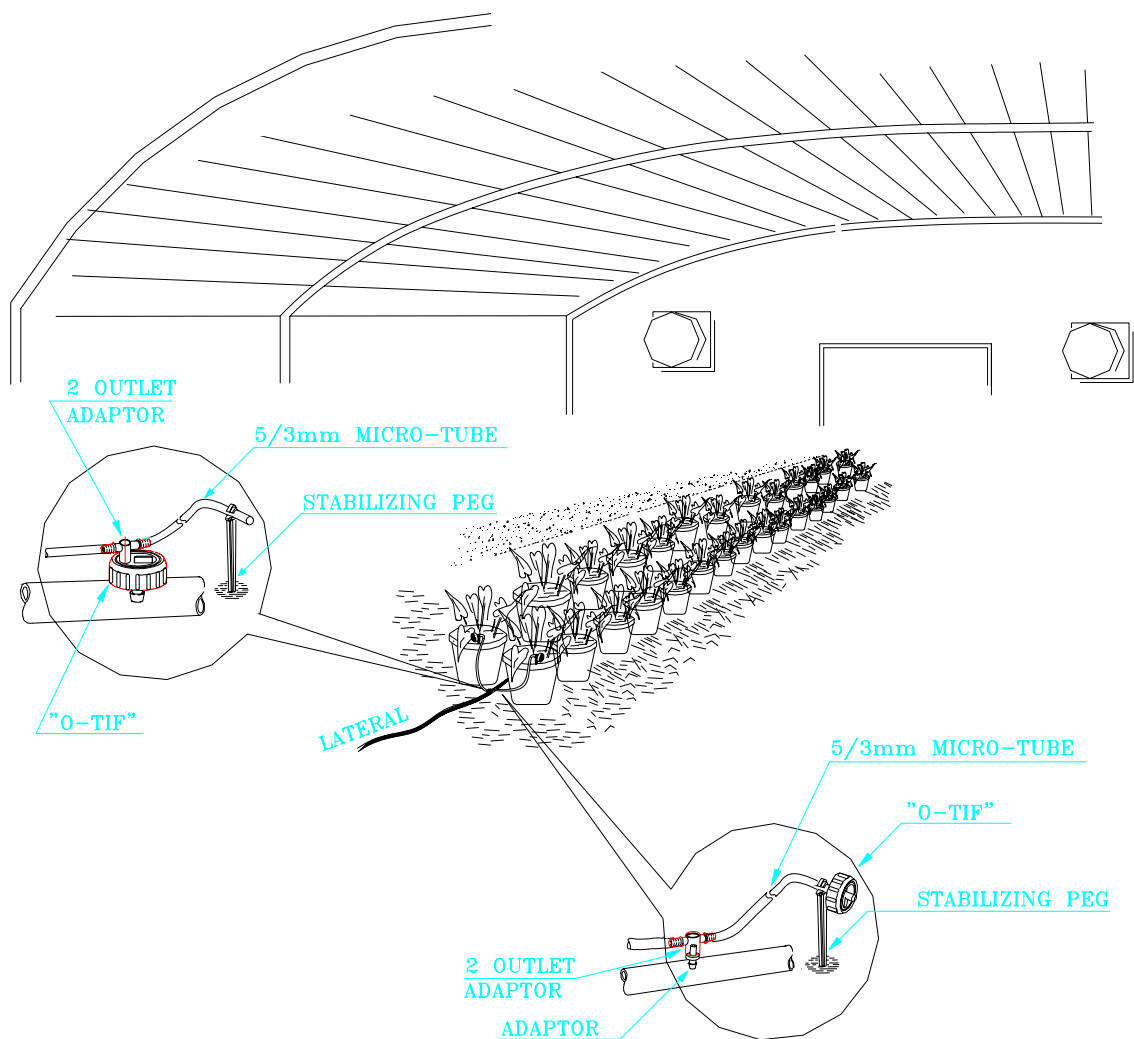


GREENHOUSE

DRIP IRRIGATION

"O-TIF"

NON COMPENSATING DRIPPER



“O-TIF”

DRIPPER

FLOW RATA DATA

YPE	COLOR	Q=AxH^A B *		%DH	FLOW RATE (LPH) VS PRESSURE									
		A	B	**	4m	6m	8m	10m	12m	14m	16m	18m	20m	
2 L/H	BROWN	0.634	0.484	21.8	1.1	1.5	1.8	2.0	2.1	2.3	2.4	2.5	2.5	
4 L/H	BLACK	1.394	0.460	23.0	2.6	3.2	3.6	4.0	4.4	4.7	4.9	5.2	5.4	
7.7 L/H	GREEN	2.530	0.480	21.8	4.8	6.0	7.0	7.7	8.4	9.0	9.5	10.2	10.5	
16.7 L/H	VIOLET	5.100	0.514	19.3	10.0	13.0	15.0	17.0	19.0	20.0	21.0	22.0	23.0	

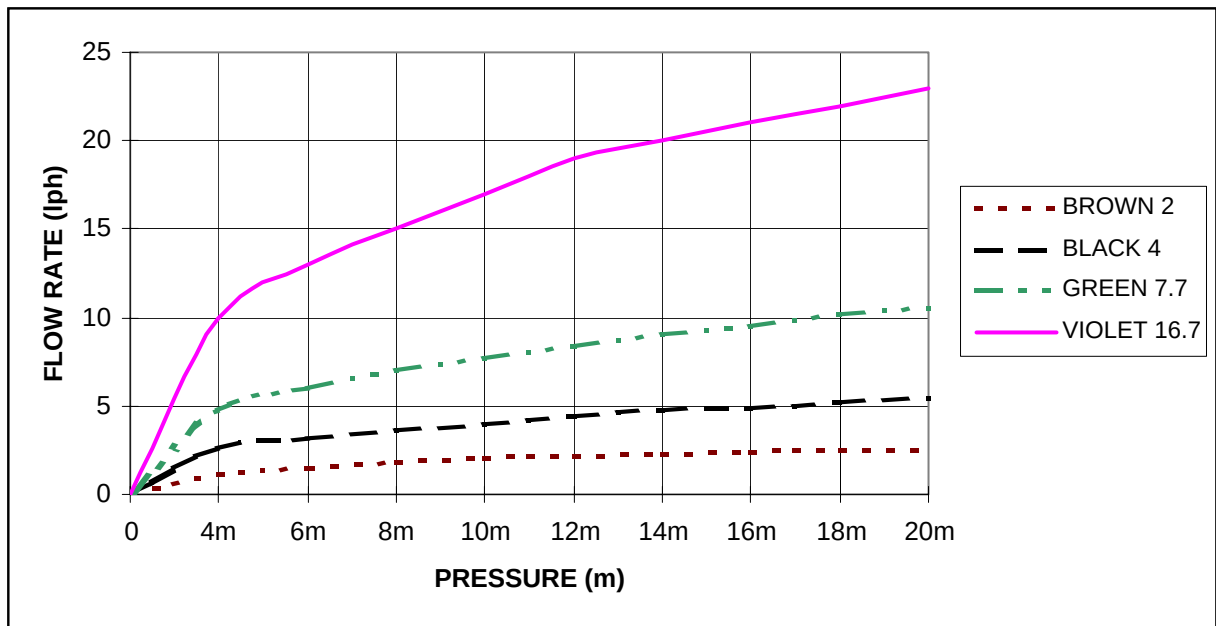
* - Q=LPH

H=m

** - %DH -

MAXIMUM ALLOWABLE HEAD LOSS VARIATION
ALONG A LATERAL (AS PERCENT OF THE
WORKING PRESSURE) TO KEEP FLOW RATE
VARIATION $S \leq 10\%$ OF WORKING FLOW RATE.

Performance Chart



O-TIF

COLOR CODE - BROWN - 2 LPH

MAXIMUM RECOMMENDED LATERAL LENGTH (m)

(MAX. FLOW RATE VARIATION OF - 7.5% OR 10%)

EMITTER SPACING (m)	SLOPE (%)	PIPE DIAMETER (in mm)							
		(OD / ID)							
		12/9.8		16/13.6		17.8/15.2		20/17.4	
		7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%
0.2	-2	17	20	32	37	38	45	47	56
	-1	18	20	35	40	44	50	56	65
	0	19	21	39	43	49	55	66	74
	1	20	22	42	46	54	60	75	82
	2	20	22	44	48	58	63	82	88
0.3	-2	24	27	41	48	47	57	56	68
	-1	25	29	47	53	57	66	71	83
	0	27	30	54	60	68	76	90	100
	1	29	32	59	65	77	84	105	114
	2	30	33	64	69	83	90	116	125
0.4	-2	29	33	47	56	54	65	61	76
	-1	32	36	56	65	68	79	82	97
	0	34	38	67	75	84	94	110	123
	1	37	40	76	83	97	106	132	144
	2	39	42	82	89	108	116	149	160
0.5	-2	34	39	52	63	59	72	65	82
	-1	37	42	65	75	77	90	92	109
	0	41	46	80	89	99	111	129	144
	1	45	49	91	100	117	128	159	172
	2	48	52	101	109	131	141	180	193
0.6	-2	37	43	56	68	62	77	67	86
	-1	42	48	72	83	84	99	99	119
	0	47	53	91	101	113	126	146	164
	1	52	57	106	116	136	148	184	199
	2	56	61	118	127	152	164	210	224

(-) UPHILL
(+) DOWNHILL

(Continued from page 5)

O-TIF

COLOR CODE - BROWN - 2 LPH

EMITTER SPACING (m)	SLOPE (%)	PIPE DIAMETER (in mm) (OD / ID)							
		12/9.8		16/13.6		17.8/15.2		20/17.4	
		7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%
0.7	-2	41	48	59	73	64	81	69	89
	-1	47	53	78	91	90	107	105	127
	0	53	60	102	113	126	141	162	182
	1	60	65	120	131	154	167	208	225
	2	64	69	134	144	174	186	94	254
0.8	-2	44	51	62	77	66	84	70	91
	-1	51	58	83	98	96	114	110	134
	0	59	66	111	125	138	154	178	199
	1	66	73	134	146	171	186	231	250
	2	72	78	150	162	195	209	88	284
0.9	-2	46	55	64	80	68	86	71	94
	-1	55	63	88	104	101	121	114	141
	0	65	72	122	135	149	167	193	215
	1	73	80	148	160	188	204	254	274
	2	79	86	167	178	117	230	86	136
1.0	-2	49	58	65	82	69	89	72	95
	-1	59	68	92	110	105	127	118	147
	0	70	78	130	146	161	180	207	231
	1	79	87	161	174	205	222	276	297
	2	87	94	182	195	96	251	83	126
1.2	-2	53	64	68	86	71	92	73	97
	-1	65	76	100	120	112	137	125	156
	0	80	89	148	166	182	203	233	260
	1	92	101	186	202	238	256	320	343
	2	102	110	212	227	88	292	82	118
1.5	-2	57	71	71	92	74	96	75	101
	-1	74	86	110	132	120	149	131	167
	0	93	105	173	192	212	236	270	302
	1	111	120	222	240	284	306	383	410
	2	123	132	92	273	84	125	81	113

(-) UPHILL
(+) DOWNHILL

O-TIF

COLOR CODE - BLACK - 4 LPH

MAXIMUM RECOMMENDED LATERAL LENGTH (m)

(MAX. FLOW RATE VARIATION OF - 7.5% OR 10%)

EMITTER SPACING (m)	SLOPE (%)	PIPE DIAMETER (in mm)							
		(OD / ID)							
		12/9.8		16/13.6		17.8/15.2		20/17.4	
		7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%
0.2	-2	11	13	22	25	27	31	34	40
	-1	12	13	23	26	29	33	38	43
	0	12	13	24	27	31	35	42	47
	1	12	13	25	28	33	36	45	50
	2	12	14	26	29	35	38	48	53
0.3	-2	16	18	29	33	35	40	43	50
	-1	16	18	31	35	39	44	50	57
	0	17	19	34	38	43	48	57	63
	1	17	19	36	40	46	51	63	69
	2	18	20	38	41	49	54	68	74
0.4	-2	20	22	34	40	41	48	49	59
	-1	20	23	38	44	47	54	59	68
	0	22	24	42	47	53	59	70	78
	1	22	25	46	50	58	64	79	87
	2	23	26	48	53	63	68	86	94
0.5	-2	23	26	39	46	46	55	54	66
	-1	25	28	45	51	54	62	67	78
	0	26	29	50	56	63	70	82	92
	1	27	30	55	61	70	77	94	103
	2	29	31	59	64	76	83	104	112
0.6	-2	26	29	43	51	50	60	58	71
	-1	28	31	50	57	60	69	74	86
	0	30	33	57	64	71	80	93	104
	1	32	35	64	70	81	89	109	118
	2	33	37	68	74	88	96	120	130

(-) UPHILL
(+) DOWNHILL

(Continued from page 7)

O-TIF

COLOR CODE - BLACK - 4 LPH

EMITTER SPACING (m)	SLOPE (%)	PIPE DIAMETER (in mm) (OD / ID)							
		12/9.8		16/13.6		17.8/15.2		20/17.4	
		7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%
0.7	-2	29	33	47	55	53	64	61	76
	-1	31	35	55	63	66	76	80	94
	0	34	38	64	71	80	89	103	116
	1	36	40	72	79	91	100	122	133
	2	38	41	78	85	100	109	137	147
0.8	-2	31	36	50	59	56	68	64	79
	-1	34	38	59	69	70	82	86	101
	0	37	42	70	78	87	98	113	126
	1	40	44	80	87	102	110	135	147
	2	42	46	87	94	112	121	152	163
0.9	-2	33	39	52	63	59	72	66	83
	-1	37	42	64	74	75	87	90	107
	0	41	45	77	86	95	106	122	137
	1	44	49	87	95	111	122	149	161
	2	47	51	96	104	123	133	167	180
1.0	-2	36	41	55	66	61	75	68	85
	-1	40	45	68	78	79	93	95	112
	0	44	49	82	92	102	114	131	147
	1	48	53	95	104	120	131	161	175
	2	51	56	105	113	134	145	182	195
1.2	-2	40	46	59	72	65	80	71	90
	-1	44	50	74	86	86	102	102	122
	0	50	56	94	104	115	128	148	166
	1	55	61	109	120	139	151	185	200
	2	59	65	121	131	156	168	211	226
1.5	-2	45	53	63	78	69	87	74	95
	-1	51	59	84	98	96	114	111	135
	0	59	66	110	122	134	150	171	192
	1	66	72	131	143	165	179	221	239
	2	71	78	146	158	188	201	242	270

(-) UPHILL
(+) DOWNHILL

O-TIF

COLOR CODE - GREEN - 8 LPH

MAXIMUM RECOMMENDED LATERAL LENGTH (m)

(MAX. FLOW RATE VARIATION OF - 7.5% OR 10%)

EMITTER SPACING (m)	SLOPE (%)	PIPE DIAMETER (in mm)							
		(OD / ID)							
		12/9.8		16/13.6		17.8/15.2		20/17.4	
		7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%
0.2	-2	7	8	15	16	18	21	24	27
	-1	7	8	15	17	19	22	25	29
	0	8	8	16	17	20	22	27	30
	1	8	9	16	18	21	23	29	32
	2	8	9	17	18	22	24	30	33
0.3	-2	10	12	20	22	24	28	31	35
	-1	11	12	21	23	26	29	34	38
	0	11	12	22	24	28	31	37	41
	1	11	12	23	25	29	32	40	44
	2	11	13	24	26	31	34	42	46
0.4	-2	13	14	24	27	29	34	36	42
	-1	13	15	26	29	32	36	41	46
	0	14	15	27	30	34	38	46	51
	1	14	16	29	32	37	41	50	55
	2	15	16	30	33	39	43	53	58
0.5	-2	16	18	28	32	33	39	41	48
	-1	16	18	30	34	37	42	47	54
	0	17	19	33	36	41	46	54	60
	1	17	19	35	39	44	49	59	65
	2	18	20	37	40	47	52	64	70
0.75	-2	20	23	35	41	41	48	49	59
	-1	22	24	39	45	47	54	59	68
	0	23	26	44	49	54	61	71	79
	1	24	26	47	53	60	66	80	88
	2	25	28	51	56	65	71	88	95

(-) UPHILL
(+) DOWNHILL

(Continued from page 9)

O-TIF

COLOR CODE - GREEN - 8 LPH

EMITTER SPACING (m)	SLOPE (%)	PIPE DIAMETER (in mm) (OD / ID)							
		12/9.8		16/13.6		17.8/15.2		20/17.4	
		7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%
1.0	-2	25	28	41	48	47	56	55	66
	-1	26	30	47	54	56	65	69	80
	0	28	32	54	60	66	74	85	96
	1	30	33	59	65	75	82	100	109
	2	32	35	64	70	82	89	110	119
1.25	-2	29	33	45	54	51	63	59	73
	-1	31	35	54	61	64	74	76	90
	0	34	38	63	70	78	86	99	111
	1	36	40	70	78	89	98	118	129
	2	38	41	76	84	98	106	131	143
1.50	-2	32	36	50	59	56	68	62	78
	-1	35	39	59	69	69	81	84	99
	0	38	42	71	80	87	98	111	125
	1	41	45	81	89	102	111	135	147
	2	44	48	89	96	113	122	153	164
2.0	-2	36	44	56	66	62	76	68	84
	-1	42	48	70	80	80	94	94	114
	0	46	52	86	96	106	118	134	150
	1	50	56	100	110	126	138	168	182
	2	54	60	112	120	142	152	192	204
2.50	-2	43	48	60	73	65	80	70	90
	-1	48	55	78	90	90	105	105	125
	0	55	60	100	113	123	138	155	175
	1	60	68	118	130	150	163	198	215
	2	65	73	133	143	170	183	215	245
3.0	-2	45	54	63	78	69	87	72	93
	-1	54	60	84	99	96	114	111	135
	0	60	69	111	126	138	153	174	195
	1	69	75	135	147	171	186	228	246
	2	75	81	153	165	195	210	256	282

(-) UPHILL
(+) DOWNHILL

O-TIF

COLOR CODE - VIOLET - 16 LPH

MAXIMUM RECOMMENDED LATERAL LENGTH (m)

(MAX. FLOW RATE VARIATION OF - 7.5% OR 10%)

EMITTER SPACING (m)	SLOPE (%)	PIPE DIAMETER (in mm)							
		(OD / ID)							
		12/9.8		16/13.6		17.8/15.2		20/17.4	
		7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%
0.2	-2	4	4	9	9	12	12	15	16
	-1	4	5	9	10	12	12	16	17
	0	5	5	10	10	12	13	17	17
	1	5	5	10	10	13	13	17	18
	2	5	5	10	10	13	13	18	18
0.3	-2	6	6	12	13	16	16	20	21
	-1	6	6	13	13	16	17	21	22
	0	6	7	14	14	17	18	23	24
	1	7	7	14	14	18	18	24	25
	2	7	7	14	14	18	19	25	26
0.4	-2	8	8	15	16	19	20	24	26
	-1	8	8	16	16	20	21	26	27
	0	8	8	17	17	21	22	28	29
	1	8	9	17	18	22	23	30	31
	2	9	9	18	18	23	24	31	32
0.5	-2	9	10	18	19	22	23	28	30
	-1	10	10	19	20	24	25	31	32
	0	10	10	20	21	25	26	33	34
	1	10	11	21	22	26	27	35	36
	2	11	11	22	22	27	28	37	38
0.75	-2	12	13	23	24	29	30	35	38
	-1	13	14	25	26	31	32	39	41
	0	13	14	27	28	34	35	44	45
	1	14	15	29	29	35	37	47	49
	2	14	15	29	30	38	38	50	52

(-) UPHILL
(+) DOWNHILL

(Continued from page 11)

O-TIF

COLOR CODE - VIOLET - 16 LPH

EMITTER SPACING (m)	SLOPE (%)	PIPE DIAMETER (in mm)							
		(OD / ID)							
		12/9.8		16/13.6		17.8/15.2		20/17.4	
		7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%
1.0	-2	15	16	28	29	33	35	41	43
	-1	16	16	30	31	37	38	46	49
	0	16	17	33	34	41	42	53	55
	1	18	18	35	36	44	45	58	60
	2	18	19	37	38	47	48	62	64
1.25	-2	18	19	31	33	38	40	46	49
	-1	19	19	34	36	41	44	53	55
	0	19	20	39	40	48	50	61	64
	1	21	21	41	43	51	54	68	70
	2	21	23	44	45	55	56	74	76
1.5	-2	20	21	35	36	41	44	50	53
	-1	21	21	38	41	47	48	59	62
	0	21	23	44	45	54	56	69	72
	1	24	26	47	48	59	62	78	80
	2	26	26	50	51	63	65	84	87
2.0	-2	24	24	40	42	48	50	56	60
	-1	24	26	46	48	54	58	68	72
	0	26	28	52	54	64	68	84	86
	1	30	30	58	60	72	74	96	98
	2	32	32	62	64	78	80	104	108
2.5	-2	28	28	45	48	53	55	60	65
	-1	28	30	53	55	63	65	75	80
	0	30	33	58	60	75	78	98	100
	1	35	35	68	70	85	88	113	115
	2	38	38	73	75	93	95	125	128
3.0	-2	30	30	48	51	57	60	66	69
	-1	30	33	57	60	69	72	84	87
	0	33	36	66	69	84	87	108	111
	1	39	42	78	81	96	99	129	132
	2	42	42	84	87	108	111	144	147

(-) UPHILL
(+) DOWNHILL

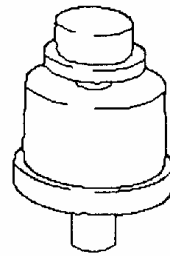
"TORNADO"

DRIPPER

None-Regulated High Capacity

MAIN FEATURES

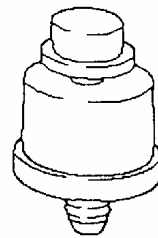
- * Low flow rate emitter with wide water passage which assures very high clogging resistance



Conic connection

OPERATING RANGE

- * Working pressure range 1.0-2.0 bar.
- * Nominal flow rate: 12,15,22 and 27 l/h at 1.0 bar.



Threaded connection

MODELS AND TYPES

- * Conic Press-fit connection
- * threaded connection
- * Colour coded for flow rate identification

TORNADO

DRIPPER

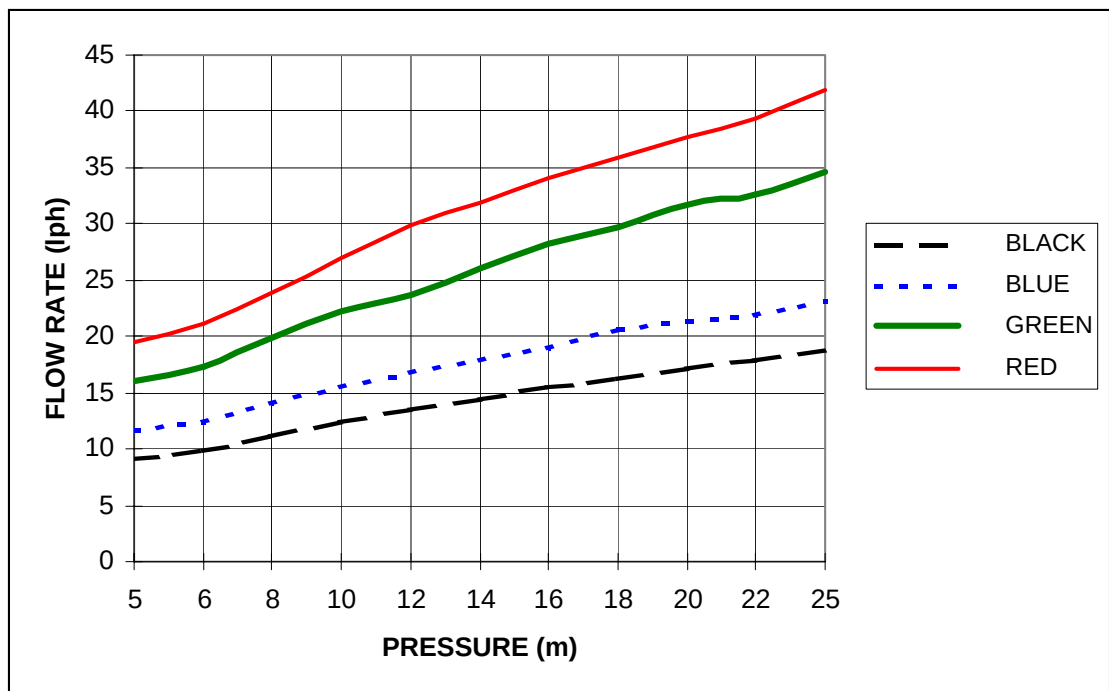
FLOW RATE DATA

DRIPPER COLOR CODE)	Q=A _x H ^A B *		%DH ***	FLOW RATE (LPH) AT PRESSURE										
	A	B		5m	6m	8m	10m	12m	14m	16m	18m	20m	22m	25m
BLACK	4.5339	0.440	21.8	9.2	9.9	11.2	12.4	13.4	14.4	15.4	16.3	17.2	17.8	18.7
BLUE	5.8024	0.4298	22.8	11.6	12.4	14.0	15.5	16.8	17.9	19.0	20.5	21.4	21.9	23.2
GREEN	7.3515	0.4814	21.1	16.0	17.3	19.9	22.2	23.7	26.1	28.2	29.7	31.7	32.6	34.7
RED	9.0168	0.4766	22.0	19.5	21.2	23.8	27.0	29.8	31.8	34.0	35.8	37.7	39.4	41.9

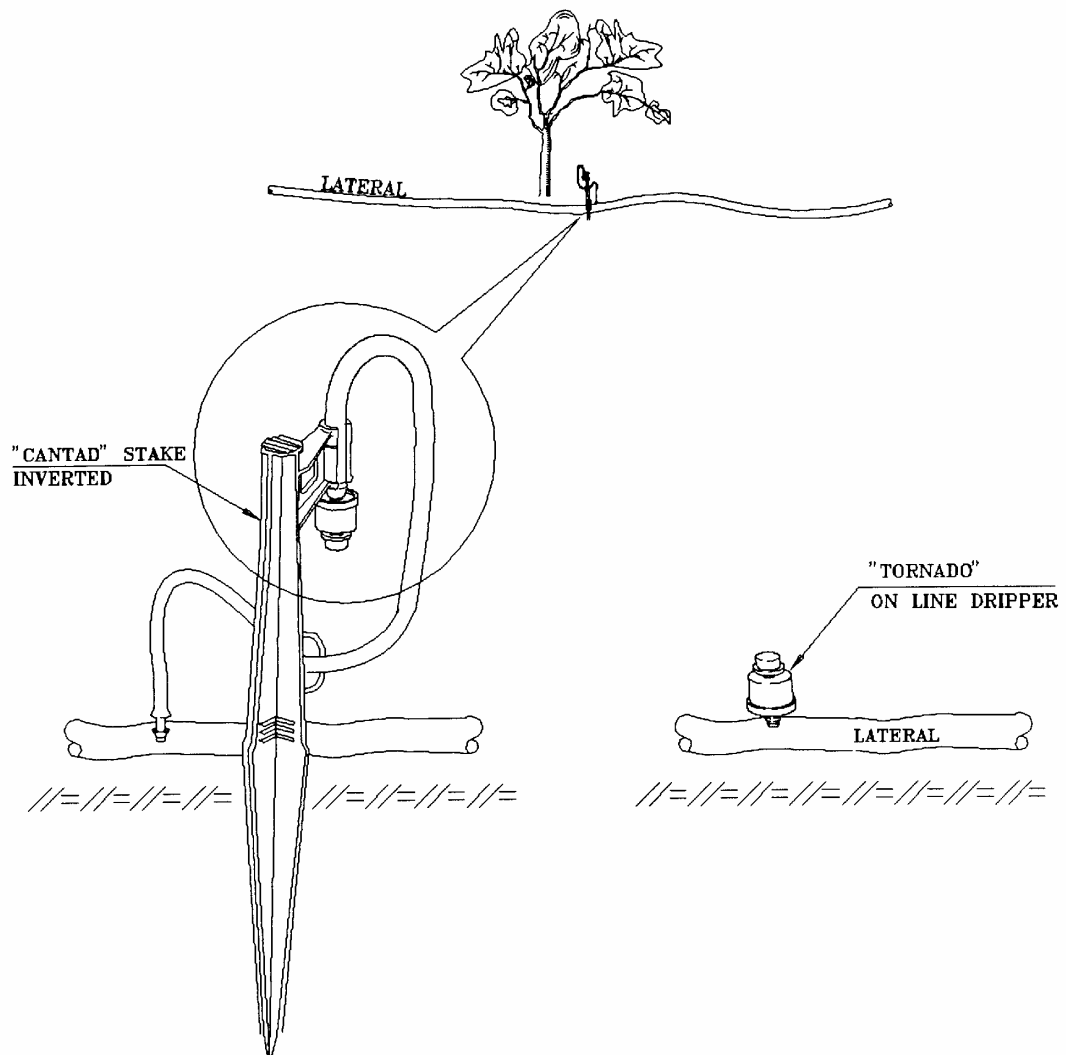
* Q=LPH H=m.
 ** %DH - MAXIMUM ALLOWABLE HEAD LOSS DIFFERENCE.
 ALONG A LATERAL (AS PERCENT OF THE WORKING PRESSURE).
 TO KEEP FLOW RATE DIFFERENCE $\leq 10\%$
 OF WORKING FLOW RATE.

PERFORMANCE CHART

WORKING PRESSURE RANGE 8-25m.



ORCHARDS & PLANTATION
(YOUNG/SMALL TREE)
"TORNADO"
DRIPPER



TORNADO - DRIPPER**Black Nozzle - 12 lph**

Maximum No. of Emitters per Lateral

(Max. Flow Rate Variation - 7.5% or 10%)

Emitter Spacing (m)	Slope (%)	Pipe Diameter in mm (OD/ID)									
		16/13.2		16/13.6		17.8/15.2		20/17		20/17.4	
		7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%
2	-2	24	28	26	29	30	34	34	40	35	41
	-1	27	30	28	32	34	38	40	45	41	47
	0	30	33	31	34	38	42	46	51	48	53
	1	32	35	34	37	42	46	52	56	54	59
	2	34	37	36	39	45	49	56	60	59	63
2.5	-2	22	25	23	26	26	31	30	35	31	36
	-1	24	27	26	29	30	34	36	41	37	42
	0	27	30	29	32	35	39	43	47	44	49
	1	30	32	31	34	39	42	48	52	50	55
	2	32	34	34	36	42	45	53	57	55	60
3	-2	20	23	21	24	24	28	27	32	28	33
	-1	22	25	24	27	28	32	33	38	34	39
	0	25	28	27	30	33	36	40	44	41	46
	1	28	31	30	32	37	40	46	50	48	52
	2	30	33	32	35	40	43	50	54	53	57
3.5	-2	18	21	19	22	22	25	25	29	25	30
	-1	21	24	22	25	26	30	30	35	31	36
	0	24	26	25	28	31	34	38	42	39	43
	1	27	29	28	31	35	38	44	47	46	49
	2	29	31	31	33	38	41	48	52	51	54
4	-2	17	20	18	21	20	24	22	27	23	27
	-1	20	22	21	23	24	28	28	33	29	34
	0	23	25	24	27	29	32	36	40	37	41
	1	25	28	27	29	34	37	42	45	44	48
	2	28	30	29	32	37	40	47	50	49	53
4.5	-2	16	18	16	19	19	22	21	25	21	25
	-1	19	21	19	22	23	26	27	31	28	32
	0	22	24	23	25	28	31	34	38	36	39
	1	25	27	26	28	32	35	40	44	42	46
	2	27	29	28	31	36	39	45	49	48	51

(-) Uphill

(+) Downhill

(Continued from page 4)

TORNADO - DRIPPER

Black Nozzle - **12** lph

Emitter Spacing (m)	Slope (%)	Pipe Diameter in mm (OD/ID)									
		16/13.2		16/13.6		17.8/15.2		20/17		20/17.4	
		7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%
5	-2	15	17	15	18	17	21	19	23	20	24
	-1	18	20	19	21	22	25	25	29	26	30
	0	21	23	22	24	27	30	33	36	34	38
	1	24	26	25	27	31	34	39	42	41	44
	2	26	28	28	30	35	37	44	47	46	50
5.5	-2	14	17	15	17	16	19	18	22	18	22
	-1	17	19	18	20	21	24	24	28	25	29
	0	20	22	21	24	26	29	32	35	33	37
	1	23	25	24	27	31	33	38	41	40	43
	2	25	27	27	29	34	37	43	46	45	48
6	-2	13	16	14	16	15	18	17	21	17	21
	-1	16	18	17	19	20	23	23	27	23	27
	0	19	22	21	23	25	28	31	34	32	35
	1	22	24	24	26	30	32	37	40	39	42
	2	25	27	26	28	33	36	42	45	44	47
6.5	-2	13	15	13	16	15	18	16	19	16	20
	-1	16	18	16	19	19	22	22	25	22	26
	0	19	21	20	22	24	27	30	33	31	34
	1	22	24	23	25	29	31	36	39	38	41
	2	24	26	26	28	33	35	42	44	44	46

(-) Uphill

(+) Downhill

TORNADO - DRIPPER

Blue Nozzle - 15 lph

Maximum No. of Emitters per Lateral

(Max. Flow Rate Variation - 7.5% or 10%)

Emitter Spacing (m)	Slope (%)	Pipe Diameter in mm (OD/ID)									
		16/13.2		16/13.6		17.8/15.2		20/17		20/17.4	
		7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%
2	-2	23	26	24	28	28	32	33	38	34	39
	-1	25	28	27	30	32	36	38	43	39	44
	0	28	30	29	32	35	39	43	48	45	50
	1	30	32	31	34	39	42	48	52	50	54
	2	31	34	33	36	41	45	52	56	54	58
2.5	-2	21	24	22	25	25	29	29	34	30	35
	-1	23	26	24	27	29	32	34	39	35	40
	0	25	28	27	29	33	36	40	44	41	46
	1	27	30	29	32	36	39	45	48	47	51
	2	29	32	31	34	39	42	48	52	51	54
3	-2	19	22	20	23	23	26	26	31	27	31
	-1	21	24	22	25	26	30	31	35	32	37
	0	24	26	25	27	30	34	37	41	39	43
	1	26	28	27	30	34	37	42	46	44	48
	2	28	30	29	32	37	40	46	50	48	52
3.5	-2	18	20	18	21	21	24	24	28	24	29
	-1	20	22	21	23	25	28	29	33	30	34
	0	22	25	23	26	29	32	35	39	36	40
	1	25	27	26	28	32	35	40	43	42	45
	2	26	29	28	30	35	38	44	47	46	50
4	-2	16	19	17	20	19	23	22	26	22	27
	-1	19	21	20	22	23	26	27	31	28	32
	0	21	23	22	25	27	30	33	37	35	38
	1	23	26	25	27	31	34	39	42	40	44
	2	25	27	27	29	34	36	43	46	45	48
4.5	-2	15	18	16	18	18	21	20	24	21	25
	-1	18	20	18	21	22	25	26	29	26	30
	0	20	22	21	24	26	29	32	35	33	37
	1	23	25	24	26	30	32	37	40	39	42
	2	25	26	26	28	33	35	41	44	44	47

(-) Uphill

(+) Downhill

(Continued from page 6)

TORNADO - DRIPPER

Blue Nozzle - **15** lph

Emitter Spacing (m)	Slope (%)	Pipe Diameter in mm (OD/ID)									
		16/13.2		16/13.6		17.8/15.2		20/17		20/17.4	
		7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%
5	-2	14	17	15	17	17	20	19	23	19	23
	-1	17	19	18	20	21	24	24	28	25	29
	0	19	21	21	23	25	28	31	34	32	35
	1	22	24	23	25	29	31	36	39	38	41
	2	24	26	25	27	32	34	40	43	42	45
5.5	-2	14	16	14	16	16	19	18	21	18	22
	-1	16	18	17	19	20	22	23	26	24	27
	0	19	21	20	22	24	27	30	33	31	34
	1	21	23	23	24	28	30	35	38	37	40
	2	23	25	25	27	31	33	39	42	41	44
6	-2	13	15	13	16	15	18	17	20	17	20
	-1	15	17	16	18	19	22	22	25	23	26
	0	18	20	19	21	23	26	29	32	30	33
	1	21	22	22	24	27	30	34	37	36	39
	2	23	24	24	26	30	33	39	41	41	43
6.5	-2	12	14	13	15	14	17	16	19	16	19
	-1	15	17	15	18	18	21	21	24	22	25
	0	18	19	19	21	23	25	28	31	29	32
	1	20	22	21	23	27	29	33	36	35	38
	2	22	24	24	25	30	32	38	40	40	42

(-) Uphill

(+) Downhill

TORNADO - DRIPPER**Green Nozzle - 22 lph**

Maximum No. of Emitters per Lateral

(Max. Flow Rate Variation - 7.5% or 10%)

Emitter Spacing (m)	Slope (%)	Pipe Diameter in mm (OD/ID)									
		16/13.2		16/13.6		17.8/15.2		20/17		20/17.4	
		7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%
2	-2	19	22	20	23	24	27	28	32	29	33
	-1	21	23	22	24	26	29	31	35	32	37
	0	22	25	23	26	28	32	35	39	36	40
	1	23	26	25	27	31	34	38	42	39	44
	2	25	27	26	29	32	36	40	44	42	46
2.5	-2	17	20	18	21	21	25	25	29	25	30
	-1	19	21	20	22	24	27	28	32	29	33
	0	20	23	21	24	26	29	32	36	33	37
	1	22	24	23	25	28	31	35	39	37	40
	2	23	25	24	27	30	33	38	41	40	43
3	-2	16	18	16	19	19	22	22	26	23	27
	-1	17	20	18	21	22	25	26	30	27	31
	0	19	21	20	22	24	27	30	33	31	35
	1	20	23	22	24	27	29	33	36	35	38
	2	22	24	23	25	29	31	36	39	38	41
3.5	-2	15	17	15	18	18	21	20	24	21	25
	-1	16	18	17	19	20	23	24	28	25	29
	0	18	20	19	21	23	26	28	31	29	33
	1	19	21	20	23	25	28	32	35	33	36
	2	21	23	22	24	27	30	34	37	36	39
4	-2	14	16	14	17	16	19	19	22	19	23
	-1	15	17	16	18	19	22	23	26	23	27
	0	17	19	18	20	22	24	27	30	28	31
	1	18	20	20	22	24	27	30	33	32	35
	2	20	22	21	23	26	29	33	36	35	38
4.5	-2	13	15	13	16	15	18	18	21	18	22
	-1	14	16	15	17	18	21	21	25	22	25
	0	16	18	17	19	21	23	25	29	27	30
	1	18	20	19	21	23	26	29	32	31	37
	2	19	21	20	22	26	28	32	35	34	38

(-) Uphill

(+) Downhill

(Continued from page 8)

TORNADO - DRIPPER

Green Nozzle - **22** lph

Emitter Spacing (m)	Slope (%)	Pipe Diameter in mm (OD/ID)									
		16/13.2		16/13.6		17.8/15.2		20/17		20/17.4	
		7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%
5	-2	12	14	13	15	15	17	16	20	17	24
	-1	14	16	14	16	17	20	20	23	21	29
	0	15	17	16	18	20	22	24	27	26	32
	1	17	19	18	20	23	25	28	31	30	36
	2	19	20	20	22	25	27	31	34	33	37
5.5	-2	11	13	12	14	14	16	16	19	16	23
	-1	13	15	14	16	16	19	19	22	20	28
	0	15	17	16	18	19	22	24	26	25	32
	1	17	18	18	19	22	24	27	30	29	35
	2	18	20	19	21	24	26	31	33	32	36
6	-2	11	13	11	13	13	16	15	18	15	22
	-1	13	14	13	15	16	18	18	21	19	27
	0	14	16	15	17	19	21	23	26	24	31
	1	16	18	17	19	21	24	27	29	28	34
	2	18	19	19	20	24	26	30	32	31	35
6.5	-2	10	12	11	13	12	15	14	17	14	21
	-1	12	14	13	15	15	17	18	21	18	26
	0	14	16	15	17	18	20	22	25	23	30
	1	16	17	17	18	21	23	26	29	27	33
	2	17	19	18	20	23	25	29	32	31	34

(-) Uphill

(+) Downhill

TORNADO - DRIPPER**Red Nozzle - 27 lph**

Maximum No. of Emitters per Lateral

(Max. Flow Rate Variation - 7.5% or 10%)

Emitter Spacing (m)	Slope (%)	Pipe Diameter in mm (OD/ID)									
		16/13.2		16/13.6		17.8/15.2		20/17		20/17.4	
		7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%
2	-2	18	20	19	21	22	25	26	29	27	30
	-1	19	21	20	22	24	27	29	32	30	33
	0	20	22	21	23	26	28	31	35	33	36
	1	21	23	22	24	27	30	34	37	35	39
	2	22	24	23	25	29	31	36	39	38	41
2.5	-2	16	18	17	19	20	22	23	26	24	27
	-1	17	19	18	20	22	24	26	29	27	30
	0	18	20	19	21	24	26	29	32	30	33
	1	19	21	21	23	25	28	32	34	33	36
	2	20	22	22	24	27	29	34	37	35	38
3	-2	15	17	15	17	18	21	21	24	22	25
	-1	16	18	17	19	20	22	24	27	25	28
	0	17	19	18	20	22	24	27	30	28	31
	1	18	20	19	21	24	26	30	32	31	34
	2	19	21	21	22	26	28	32	35	34	36
3.5	-2	14	15	14	16	17	19	19	22	20	23
	-1	15	17	16	17	19	21	22	25	23	26
	0	16	19	17	19	21	23	25	28	27	29
	1	17	20	18	20	23	25	28	31	30	32
	2	18	21	20	21	24	26	31	33	32	35
4	-2	13	15	13	15	15	18	18	21	18	21
	-1	14	16	15	16	18	20	21	24	22	24
	0	15	18	16	18	20	22	24	27	25	28
	1	17	19	18	19	22	24	27	29	28	31
	2	18	20	19	20	23	25	30	32	31	33
4.5	-2	12	14	12	14	15	17	17	19	17	20
	-1	13	16	14	16	17	19	20	22	20	23
	0	15	17	15	17	19	21	23	26	24	27
	1	16	18	17	18	21	23	26	28	27	30
	2	17	20	18	20	23	25	29	31	30	32

(-) Uphill

(+) Downhill

(Continued from page 10)

TORNADO - DRIPPER

Red Nozzle - **27** lph

Emitter Spacing (m)	Slope (%)	Pipe Diameter in mm (OD/ID)									
		16/13.2		16/13.6		17.8/15.2		20/17		20/17.4	
		7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%
5	-2	11	14	12	14	14	16	16	18	16	19
	-1	13	15	13	15	16	18	19	21	19	22
	0	14	16	15	16	18	20	22	25	23	26
	1	15	18	16	18	20	22	25	27	26	29
	2	16	19	18	19	22	24	28	30	29	31
5.5	-2	11	13	11	13	13	15	15	17	15	18
	-1	12	14	13	14	15	17	18	20	19	21
	0	13	15	14	16	17	19	21	24	22	25
	1	15	16	16	17	20	21	25	27	26	28
	2	16	17	17	18	21	23	27	29	28	30
6	-2	10	12	11	12	12	14	14	17	14	17
	-1	12	13	12	14	14	16	17	19	18	20
	0	13	14	14	15	17	19	21	23	22	24
	1	14	16	15	17	19	21	24	26	25	27
	2	16	17	17	18	21	23	26	28	28	30
6.5	-2	10	11	10	12	12	14	13	16	14	16
	-1	11	13	12	13	14	16	16	19	17	19
	0	13	14	13	15	16	18	20	22	21	23
	1	14	15	15	16	19	20	23	25	24	26
	2	15	16	16	18	20	22	26	28	27	29

(-) Uphill

(+) Downhill

“TORNADO”

RAY JET

Non - Clogging Stream Sprayer

MAIN FETURES

- * Nozzle designed for even distribution of water.
- * Vortex mechanism operating pressure.
- * No mist under regular operating pressure
- * Ray pattern: 360°, 300°, or 180°
360° - 12 spoke and 8 spoke
300° - 10 spoke
180° - 8 spoke



**Conic
connection**

ADDITIONAL FEATURE

- * Anti-frost protection accessory with T-90 and T-180 pattern limiters

OPERATING RANGE

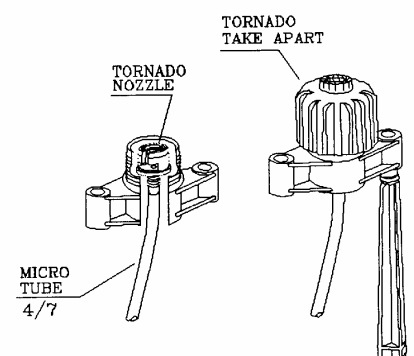
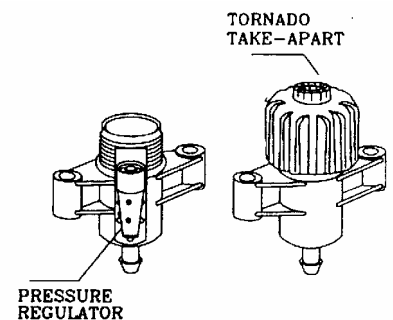
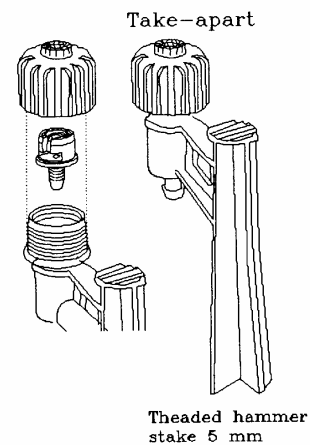
- * Working pressure range 1.0 - 2.5 bar.
- * Nominal flow rate 25,34,55 and 70 l/h at 1.5 bar.

MODELS AND TYPES

- * Conic Press-fit connection
- * Threaded connection
- * Color-coded nozzles for flow rate identification.



**Threaded
connection**



TORNADO RAY JET FLOW RATE DATA

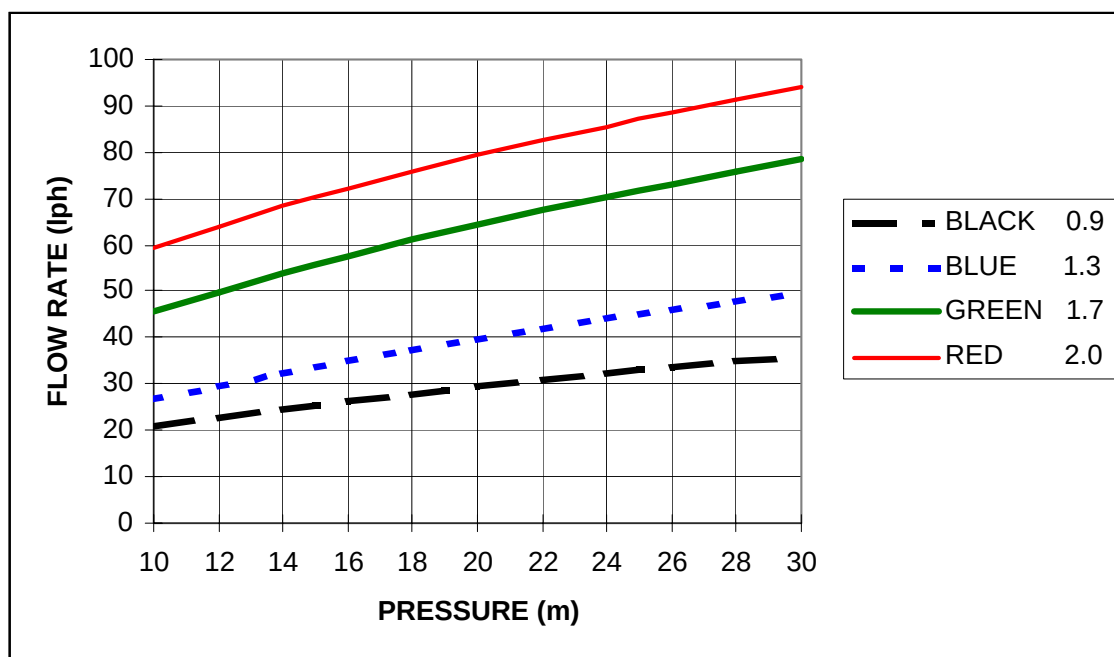
NOZZLE		Q=AxH^B **		%DH	FLOW RATE (LPH) AT PRESSURE										
COLOR	(mm)	A	B	***	10m	12m	14m	16m	18m	20m	22m	24m	26m	28m	30m
BLACK	(0.9)	6.506	0.505	20.7	20.8	22.8	24.7	26.4	28.0	29.5	31.0	32.4	33.7	35.0	36.2
BLUE	(1.3)	7.417	0.561	18.5	27.0	29.9	32.6	35.1	37.5	39.8	42.0	44.1	46.1	48.1	50.0
GREEN	(1.7)	14.408	0.499	21.0	45.5	49.8	53.8	57.5	61.0	64.2	67.4	70.4	73.2	76.0	78.6
RED	(2.0)	22.739	0.417	25.6	59.4	64.1	68.3	72.3	75.9	79.3	82.5	85.6	88.5	91.3	93.9

NOTE: TESTED WITHOUT MICRO-TUBE.

** Q=LPH H=m.

*** %DH - MAXIMUM ALLOWABLE HEAD LOSS DIFFERENCE.
ALONG A LATERAL (AS PERCENT OF THE WORKING PRESSURE).
TO KEEP FLOW RATE DIFFERENCE $\leq 10\%$
OF WORKING FLOW RATE.

Performance Chart
Working pressure range – 10-25m.

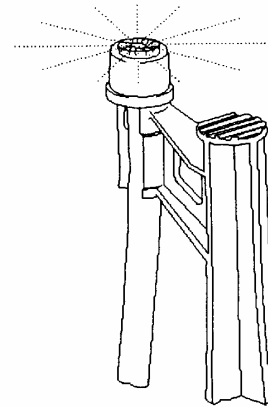


TORNADO RAY-JET 12 SPOKES (STANDARD)

WETTING RADIUS DATA (m)

ON STANDARD STAKE - 25 cm. HEIGHT

WORKING PRESSURE (m)	NOZZLE CODE			
	BLACK	BLUE	GREEN	RED
15	1.2	1.6	1.8	2.1
20	1.25	1.7	2.0	2.4
25	1.4	1.9	2.3	2.6

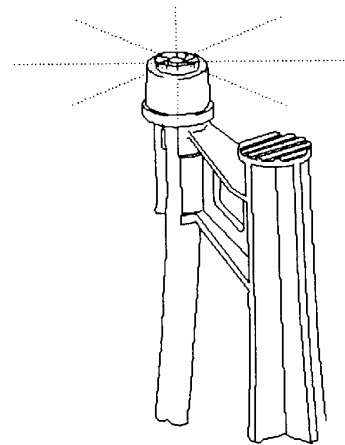


TORNADO RAY-JET 8 SPOKES (DISTANCE)

WETTING RADIUS DATA (m)

ON STANDARD STAKE - 25 cm. HEIGHT

WORKING PRESSURE (m)	NOZZLE CODE			
	BLACK	BLUE	GREEN	RED
15	1.8	2.3	2.9	3.2
20	2.3	2.6	3.4	3.6
25	2.5	3.0	3.7	3.8



TORNADO RAY JET

Nozzle code Ø (mm)	Pressure (Bar)	Discharge Lph)	Pattern Wetting Radius (m')			
			360	300	180	T-90
Black	1.0	21	1.0	1.2	1.3	
0.9	1.5	25	1.2	1.6	1.8	
	2.0	30	1.25	1.8	2.0	
	2.5	33	1.4	1.9	2.1	
Blue	1.0	27	1.1	1.4	1.5	1.2
1.3	1.5	34	1.6	1.9	2.1	1.5
	2.0	40	1.7	2.1	2.5	1.8
	2.5	45	1.9	2.2	2.6	2.0
Green	1.0	46	1.6	1.7	2.3	1.5
1.7	1.5	55	1.8	2.1	2.8	1.8
	2.0	65	2.0	2.5	3.0	2.3
	2.5	72	2.3	2.7	3.3	2.5
Red	1.0	60	2.0	2.3	2.8	
2.0	1.5	70	2.1	3	3.3	
	2.0	80	2.4	3.2	3.4	
	2.5	87	2.6	3.3	3.5	

TORNADO RAY-JET)

WETTING RANGE LIMITER

ON STANDARD STAKE - 25 cm. HEIGHT

DISTRIBUTION DETAILS AT 1.5 bar

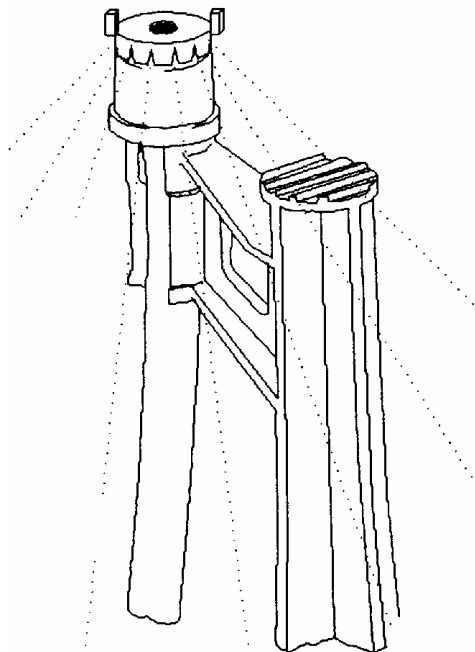
Nozzle Color	Flow Rate (Lph)	Sprinkling Radius Cm		
		* 20 cm ** Upright	80 cm Inverted	60 cm Inverted
Black	25	36	120	130
Blue	34	42	140	160
Green	55	48	200	200
Red	70	50	200	220

* - Height Above Ground

** - Emitter Position:

Normal = Upright

Upside-Down = Inverted



“TORNADO”

RAY - JET

Hammer Stake or “METEOR”

With **PRESSURE REGULATOR - 1.5 bar**

Nozzle Color (mm)	Flow Rate (lph) at Pressure									
	5m	10m	12m	15m	18m	20m	25m	30m	35m	40m
Black (0.9)	15.5	22.5	23.5	24	24.5	24.5	25	26	26.5	27
Blue (1.3)	24	31.5	33.5	35	35.5	36	37	37.5	38	38.5
Green (1.7)	47	50.5	52.5	54	55.5	56	57	58.5	59	59
Red (2.0)	42	58	63	66	68	69	70	70	72	72

Flexible Tube 4/7

“TORNADO”

RAY - JET

Hammer Stake or “METEOR”

With **PRESSURE REGULATOR - 2.0 bar**

Nozzle Color (mm)	Flow Rate (lph) at Pressure									
	5m	10m	15m	18m	20m	22m	25m	30m	35m	40m
Black (0.9)	16	24	28.5	31	32.5	33	34	34.5	35	35.5
Blue (1.3)	22.5	30.5	37	40	41	42	42.5	43	43.5	44.5
Green (1.7)	34	47	56.5	61	63	64	65	66	67	67
Red (2.0)	43	59.5	72	77	79	80	81.5	83	85	86

Flexible Tube 4/7

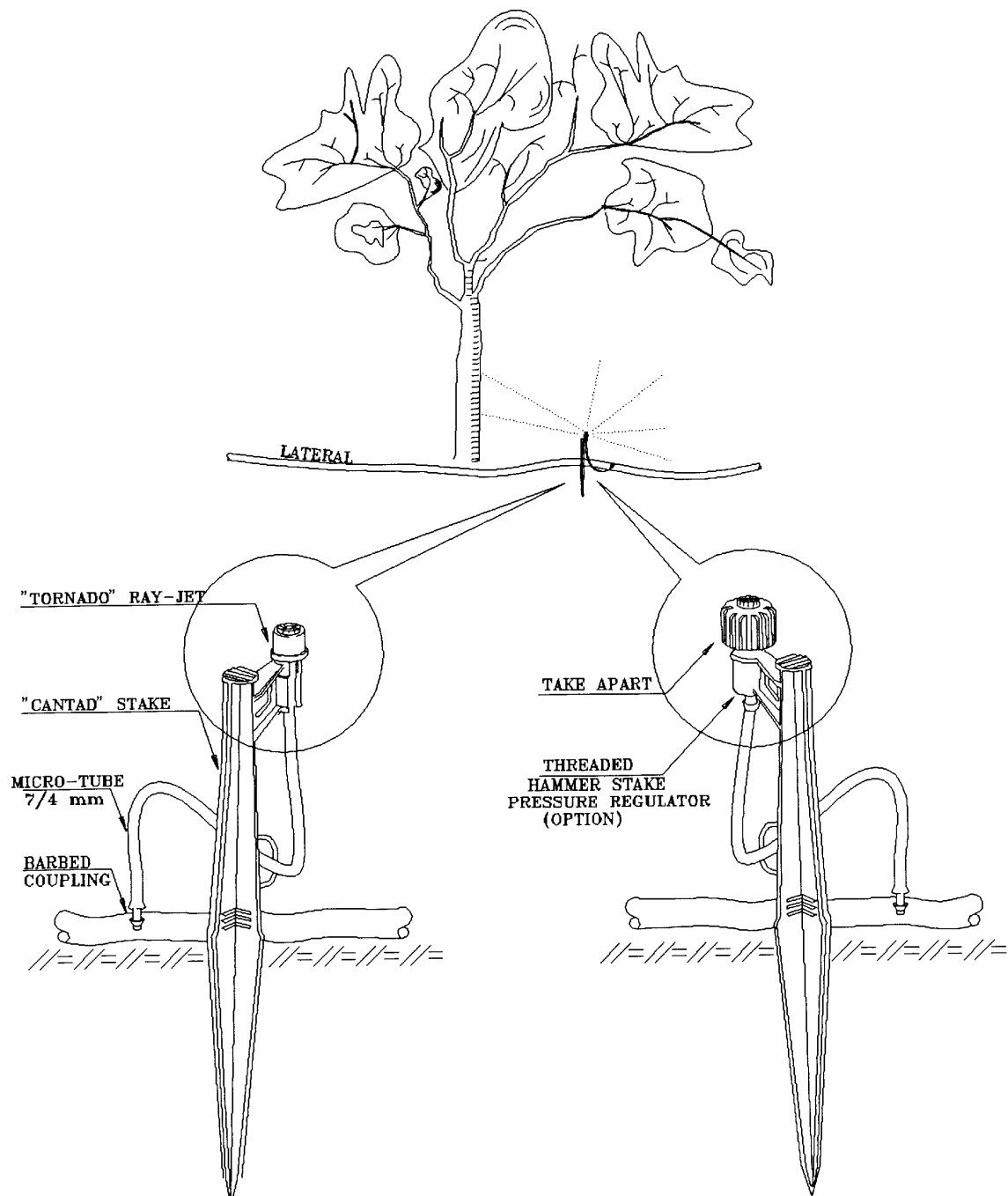
ORCHARDS & PLANTATIONS

(MATURE/BIG TREE)

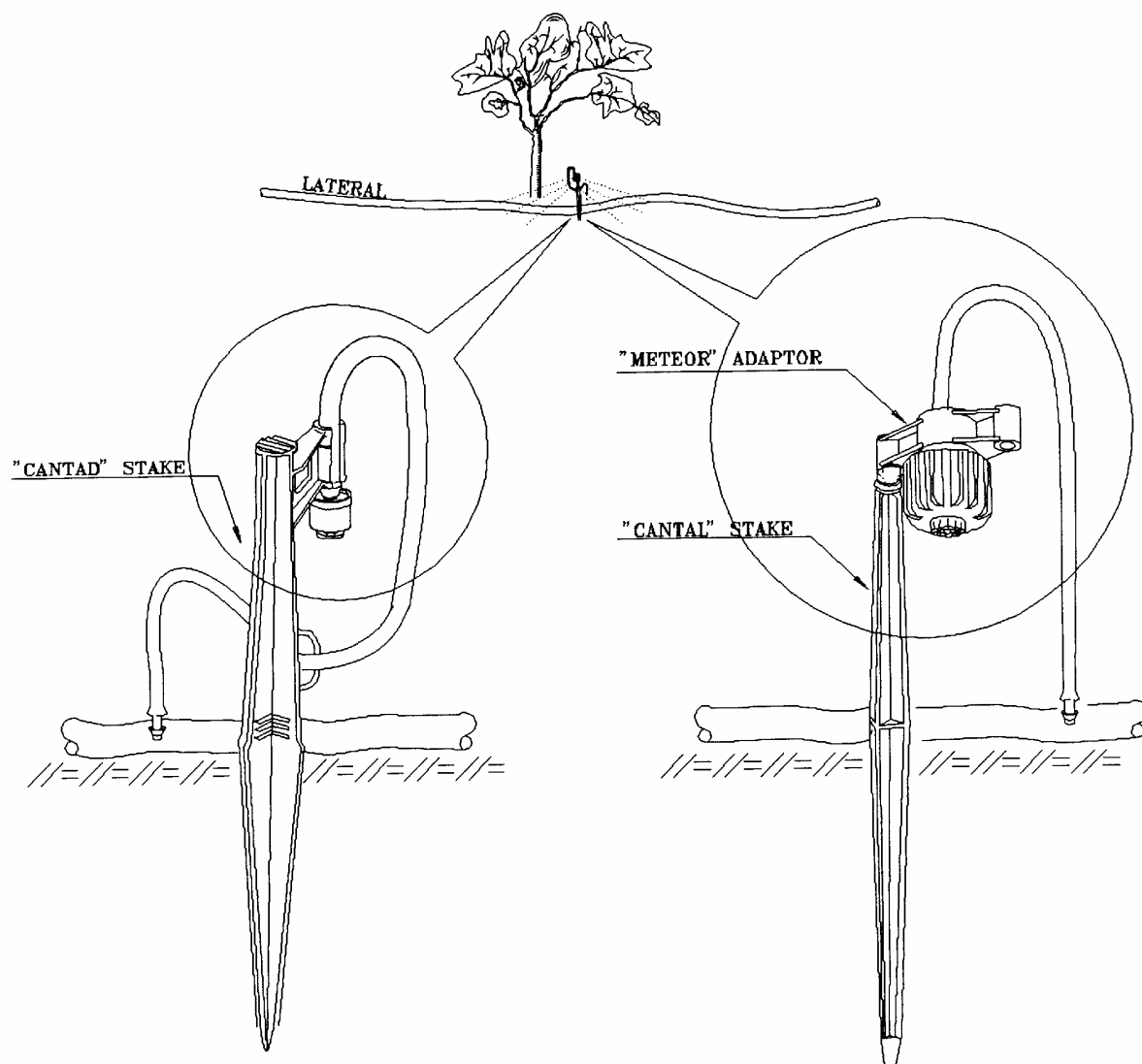
“TORNADO”

RAY-JET

UPRIGHT POSITION



ORCHARDS & PLANTATIONS
(YONG/SMALL TREE)
"TORNADO"
RAY-JET
INVERTED POSITION



TORNADO - RAY JET**Black Nozzle - 25 lph**

Maximum No. of Emitters per Lateral

(Max. Flow Rate Variation - 7.5% or 10%)

Emitter Spacing (m)	Slope (%)	Pipe Diameter in mm (OD/ID)									
		16/13.2		16/13.6		17.8/15.2		20/17		20/17.4	
		7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%
2	-2	20	22	21	23	24	28	29	33	30	34
	-1	21	23	22	25	26	30	32	36	33	37
	0	22	24	23	26	28	32	34	38	36	40
	1	23	26	24	27	30	33	37	41	39	43
	2	24	26	25	28	32	35	39	43	41	45
2.5	-2	18	20	19	21	22	25	26	30	27	31
	-1	19	21	20	22	24	27	29	33	30	34
	0	20	23	21	24	26	29	32	35	33	37
	1	21	24	23	25	28	31	34	38	36	40
	2	22	25	24	26	29	32	37	40	38	42
3	-2	16	19	17	20	20	23	24	27	24	28
	-1	17	20	18	21	22	25	26	30	27	31
	0	19	21	20	22	24	27	30	33	31	34
	1	20	22	21	23	26	29	32	36	34	37
	2	21	23	22	25	28	30	35	38	36	40
3.5	-2	15	17	16	18	19	22	22	25	22	26
	-1	16	19	17	20	21	23	25	28	26	29
	0	18	20	19	21	23	26	28	31	29	33
	1	19	21	20	22	25	27	31	34	32	35
	2	20	22	21	23	27	29	33	36	35	38
4	-2	14	16	15	17	17	20	20	24	21	24
	-1	15	18	16	18	19	22	23	27	24	28
	0	17	19	18	20	22	24	27	30	28	31
	1	18	20	19	21	24	26	30	32	31	34
	2	19	21	20	22	25	28	32	35	33	36
4.5	-2	13	15	14	16	16	19	19	22	19	23
	-1	15	17	15	18	18	21	22	25	23	26
	0	16	18	17	19	21	23	25	28	26	30
	1	17	19	18	20	23	25	28	31	30	33
	2	19	20	20	22	25	27	31	34	32	35

(-) Uphill

(+) Downhill

(Continued from page 9)

TORNADO - RAY JET

Black Nozzle - **25 lph**

Emitter Spacing (m)	Slope (%)	Pipe Diameter in mm (OD/ID)									
		16/13.2		16/13.6		17.8/15.2		20/17		20/17.4	
		7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%
5	-2	13	15	13	15	15	18	18	21	18	22
	-1	14	16	15	17	18	20	21	24	22	25
	0	15	17	16	18	20	22	24	27	25	28
	1	17	19	18	20	22	24	28	30	29	32
	2	18	20	19	21	24	26	30	33	31	34
5.5	-2	12	14	13	15	15	17	17	20	17	21
	-1	13	15	14	16	17	19	20	23	21	24
	0	15	17	16	18	19	22	24	26	25	27
	1	16	18	17	19	21	24	27	29	28	31
	2	17	19	19	20	23	25	29	32	31	33
6	-2	12	13	12	14	14	16	16	19	16	20
	-1	13	15	14	15	16	19	19	22	20	23
	0	14	16	15	17	19	21	23	25	24	27
	1	16	17	17	18	21	23	26	29	27	30
	2	17	19	18	20	23	25	29	31	30	33
6.5	-2	11	13	11	13	13	16	15	18	16	19
	-1	12	14	13	15	16	18	18	21	19	22
	0	14	16	15	16	18	20	22	25	23	26
	1	15	17	16	18	20	22	25	28	27	29
	2	17	18	18	19	22	24	28	30	29	32

(-) Uphill

(+) Downhill

TORNADO - RAY JET**Blue Nozzle - 34 lph**

Maximum No. of Emitters per Lateral

(Max. Flow Rate Variation - 7.5% or 10%)

Emitter Spacing (m)	Slope (%)	Pipe Diameter in mm (OD/ID)									
		16/13.2		16/13.6		17.8/15.2		20/17		20/17.4	
		7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%
2	-2	16	18	16	19	20	23	23	27	24	28
	-1	16	19	17	20	21	24	25	29	26	30
	0	17	19	18	20	22	25	27	31	28	32
	1	18	20	19	21	24	26	29	32	30	34
	2	19	21	20	22	25	27	31	34	32	35
2.5	-2	14	16	15	17	18	20	21	24	22	25
	-1	15	17	16	18	19	22	23	26	24	27
	0	16	18	17	19	21	23	25	28	26	29
	1	17	19	18	20	22	24	27	30	28	31
	2	17	19	19	20	23	25	29	32	30	33
3	-2	13	15	14	16	16	19	19	22	20	23
	-1	14	16	15	17	18	20	21	24	22	25
	0	15	17	16	18	19	21	23	26	24	27
	1	16	17	17	18	21	23	25	28	27	29
	2	16	18	17	19	22	24	27	30	28	31
3.5	-2	12	14	13	15	15	17	18	21	18	21
	-1	13	15	14	16	17	19	20	23	21	24
	0	14	16	15	17	18	20	22	25	23	26
	1	15	16	16	17	19	22	24	27	25	28
	2	16	17	17	18	21	23	26	28	27	30
4	-2	11	13	12	14	14	16	17	19	17	20
	-1	12	14	13	15	16	18	19	21	19	22
	0	13	15	14	16	17	19	21	24	22	25
	1	14	16	15	17	19	21	23	26	24	27
	2	15	16	16	18	20	22	25	27	26	29
4.5	-2	11	12	11	13	13	15	16	18	16	19
	-1	12	13	12	14	15	17	18	20	18	21
	0	13	14	13	15	16	18	20	23	21	23
	1	14	15	14	16	18	20	22	25	23	26
	2	14	16	15	17	19	21	24	26	25	28

(-) Uphill

(+) Downhill

(Continued from page 11)

TORNADO - RAY JET
Blue Nozzle - **34 lph**

Emitter Spacing (m)	Slope (%)	Pipe Diameter in mm (OD/ID)									
		16/13.2		16/13.6		17.8/15.2		20/17		20/17.4	
		7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%
5	-2	10	12	11	12	13	15	15	17	15	18
	-1	11	13	12	13	14	16	17	19	17	20
	0	12	14	13	14	16	18	19	22	20	23
	1	13	15	14	15	17	19	22	24	23	25
	2	14	15	15	16	19	20	23	25	25	27
5.5	-2	10	11	10	12	12	14	14	16	14	17
	-1	11	12	11	13	13	15	16	19	17	19
	0	12	13	12	14	15	17	19	21	19	22
	1	13	14	13	15	17	19	21	23	22	24
	2	14	15	14	16	18	20	23	25	24	26
6	-2	9	11	10	11	11	13	13	16	14	16
	-1	10	12	11	12	13	15	15	18	16	18
	0	11	13	12	13	15	16	18	20	19	21
	1	12	14	13	14	16	18	20	22	21	23
	2	13	14	14	15	18	19	22	24	23	25
6.5	-2	9	10	9	11	11	13	13	15	13	15
	-1	10	11	10	12	12	14	15	17	15	18
	0	11	12	12	13	14	16	17	20	18	20
	1	12	13	13	14	16	18	20	22	21	23
	2	13	14	14	15	17	19	22	24	23	25

(-) Uphill

(+) Downhill

TORNADO - RAY JET**Green Nozzle - 55 lph**

Maximum No. of Emitters per Lateral

(Max. Flow Rate Variation - 7.5% or 10%)

Emitter Spacing (m)	Slope (%)	Pipe Diameter in mm (OD/ID)									
		16/13.2		16/13.6		17.8/15.2		20/17		20/17.4	
		7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%
2	-2	12	14	13	15	16	18	19	21	20	22
	-1	13	14	13	15	16	18	20	22	21	23
	0	13	15	14	15	17	19	21	23	22	24
	1	14	15	14	16	18	19	22	24	23	25
	2	14	15	15	16	18	20	23	25	24	26
2.5	-2	11	13	12	13	14	16	17	19	18	20
	-1	12	13	12	14	15	17	18	20	19	21
	0	12	13	13	14	16	17	19	21	20	22
	1	12	14	13	15	16	18	20	22	21	23
	2	13	14	14	15	17	19	21	23	22	24
3	-2	10	12	11	12	13	15	16	18	16	18
	-1	11	12	11	13	14	15	17	19	17	19
	0	11	12	12	13	15	16	18	20	19	21
	1	12	13	12	14	15	17	19	21	20	22
	2	12	13	13	14	16	17	20	22	21	23
3.5	-2	10	11	10	11	12	14	15	16	15	17
	-1	10	11	11	12	13	14	16	18	16	18
	0	11	12	11	12	14	15	17	19	18	19
	1	11	12	12	13	14	16	18	20	19	21
	2	11	13	12	13	15	17	19	21	20	22
4	-2	9	10	10	11	11	13	14	15	14	16
	-1	10	11	10	11	12	14	15	17	15	17
	0	10	11	11	12	13	14	16	18	17	18
	1	10	12	11	12	14	15	17	19	18	20
	2	11	12	12	13	14	16	18	20	19	21
4.5	-2	9	10	9	10	11	12	13	15	13	15
	-1	9	10	10	11	12	13	14	16	15	16
	0	10	11	10	11	12	14	15	17	16	18
	1	10	11	11	12	13	15	16	18	17	19
	2	10	11	11	12	14	15	17	19	18	20

(-) Uphill

(+) Downhill

(Continued from page 13)

TORNADO - RAY JET
Green Nozzle - **55** lph

Emitter Spacing (m)	Slope (%)	Pipe Diameter in mm (OD/ID)									
		16/13.2		16/13.6		17.8/15.2		20/17		20/17.4	
		7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%
5	-2	8	9	9	10	10	12	12	14	13	14
	-1	9	10	9	10	11	12	13	15	14	16
	0	9	10	10	11	12	13	15	16	15	17
	1	10	11	10	11	13	14	16	17	17	18
	2	10	11	11	12	13	15	17	18	18	19
5.5	-2	8	9	8	9	10	11	12	13	12	14
	-1	8	9	9	10	11	12	13	14	13	15
	0	9	10	9	10	11	13	14	16	15	16
	1	9	10	10	11	12	14	15	17	16	18
	2	10	11	10	11	13	14	16	18	17	19
6	-2	7	8	8	9	9	11	11	13	12	13
	-1	8	9	8	9	10	11	12	14	13	14
	0	8	9	9	10	11	12	14	15	14	16
	1	9	10	10	11	12	13	15	16	16	17
	2	10	10	10	11	13	14	16	17	17	18
6.5	-2	7	8	8	9	9	10	11	12	11	13
	-1	8	9	8	9	10	11	12	13	12	14
	0	8	9	9	10	11	12	13	15	14	15
	1	9	10	9	10	12	13	15	16	15	17
	2	9	10	10	11	12	13	16	17	16	18

(-) Uphill

(+) Downhill

TORNADO - RAY JET**Red Nozzle - 70 lph**

Maximum No. of Emitters per Lateral

(Max. Flow Rate Variation - 7.5% or 10%)

Emitter Spacing (m)	Slope (%)	Pipe Diameter in mm (OD/ID)									
		16/13.2		16/13.6		17.8/15.2		20/17		20/17.4	
		7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%
2	-2	11	13	12	14	15	17	18	20	18	21
	-1	12	13	12	14	15	17	18	21	19	22
	0	12	14	13	14	16	18	19	21	20	22
	1	12	14	13	15	16	18	20	22	21	23
	2	13	14	13	15	17	18	21	23	22	24
2.5	-2	10	12	11	12	13	15	16	18	17	19
	-1	11	12	11	13	14	16	17	19	18	20
	0	11	12	12	13	14	16	18	20	18	21
	1	11	13	12	13	15	17	18	20	19	21
	2	12	13	12	14	15	17	19	21	20	22
3	-2	10	11	10	12	12	14	15	17	15	18
	-1	10	11	11	12	13	14	16	18	16	18
	0	10	12	11	12	13	15	16	18	17	19
	1	11	12	11	13	14	15	17	19	18	20
	2	11	12	12	13	14	16	18	20	19	21
3.5	-2	9	10	10	11	12	13	14	16	14	16
	-1	9	11	10	11	12	14	15	17	15	17
	0	10	11	10	11	13	14	16	17	16	18
	1	10	11	11	12	13	15	16	18	17	19
	2	10	11	11	12	14	15	17	19	18	20
4	-2	9	10	9	10	11	12	13	15	14	15
	-1	9	10	9	11	11	13	14	16	14	16
	0	9	10	10	11	12	13	15	16	15	17
	1	10	11	10	11	13	14	16	17	16	18
	2	10	11	10	12	13	14	16	18	17	19
4.5	-2	8	9	9	10	10	12	12	14	13	15
	-1	8	9	9	10	11	12	13	15	14	16
	0	9	10	9	10	11	13	14	16	15	16
	1	9	10	10	11	12	13	15	17	16	17
	2	9	10	10	11	13	14	16	17	16	18

(Continued from page 15)

TORNADO - RAY JET
Red Nozzle - 70 lph

Emitter Spacing (m)	Slope (%)	Pipe Diameter in mm (OD/ID)									
		16/13.2		16/13.6		17.8/15.2		20/17		20/17.4	
		7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%
5	-2	8	9	8	9	10	11	12	13	12	14
	-1	8	9	8	10	10	12	13	14	13	15
	0	8	9	9	10	11	12	14	15	14	16
	1	9	10	9	10	12	13	14	16	15	17
	2	9	10	10	11	12	13	15	17	16	17
5.5	-2	7	8	8	9	9	11	11	13	12	13
	-1	8	9	8	9	10	11	12	14	13	14
	0	8	9	9	10	11	12	13	15	14	15
	1	8	9	9	10	11	12	14	15	15	16
	2	9	10	9	10	12	13	15	16	15	17
6	-2	7	8	7	9	9	10	11	12	11	13
	-1	7	8	8	9	10	11	12	13	12	14
	0	8	9	8	9	10	11	13	14	13	15
	1	8	9	9	10	11	12	13	15	14	16
	2	9	9	9	10	11	13	14	16	15	16
6.5	-2	7	8	7	8	9	10	10	12	11	12
	-1	7	8	8	9	9	10	11	13	12	13
	0	8	8	8	9	10	11	12	14	13	14
	1	8	9	8	9	11	12	13	15	14	15
	2	8	9	9	10	11	12	14	15	15	16

(-) Uphill

(+) Downhill

“JET+”
Ray - Jet Sprayer
Integral Anti-Ant Device

MAIN FEATURES

- * No moving parts
- * Wide range of color-coded, nozzles for different flow rates (see table).
- * Integral anti-ant device.
- * Range limited available for young plants. Wetting Radius upto 0.5m.
- * Long, low angle jet streams.
- * Available in variety of distribution patterns. 360° (Black).
300° (Orange).
180° (Red).
- * 3/8” threaded and conical connection.

Working pressure range:
0.5 to 3.5 atm.

5 Colors coded nozzles:
See performance chart.

* ..



JET+

Nozzle code Ø(mm)	Pressure (Bar)	Discharge (Lph)	Pattern Wetting Radius (m')		
			360	300	180
Black (0.85)	1.5	35	2.2		
	2.0	40	2.3	2.4	2.4
	2.5	43	2.5		
	3.0	47	2.5		
Blue (1.0)	1.5	44	2.6		
	2.0	51	2.7	2.8	2.9
	2.5	56	2.8		
	3.0	61	2.8		
Dark Blue (1.1)	1.5	55	2.8		
	2.0	63	2.9	3.2	3.5
	2.5	70	3.0		
	3.0	77	3.1		
Green (1.2)	1.5	64	3.3		
	2.0	74	3.5	3.4	3.8
	2.5	83	3.6		
	3.0	91	3.9		
Red (1.4)	1.5	90	4.1		
	2.0	104	4.3	4.3	4.5
	2.5	115	4.6		
	3.0	126	4.9		

25 cm above ground

Range Limitter; Limit the Wetting Radius to one m'

“JET+”

Ray - Jet Sprayer

Integral Anti-Ant Device

FLOW RATE DATA

TYPE		Q=AxH^B **		%DH	FLOW RATE (LPH) AT PRESSURE						
COLOR	(mm)	A	B	***	10m	15m	20m	25m	30m	35m	40m
BLACK	(0.8)	11.16	0.4132	25.9	29.7	35.1	39.5	43.3	46.7	49.8	52.6
BLUE	(1.0)	12.7864	0.4587	23	36.8	44.3	50.5	56.0	60.9	65.3	69.4
GREEN	(1.2)	15.7554	0.5157	20	51.7	63.7	73.9	82.9	91.0	98.6	105.6
RED	(1.4)	24.2567	0.4845	21.7	74.0	90.1	103.6	115.4	126.0	135.8	144.9
WHITE	(1.6)	30.0681	0.4984	21	94.7	116.0	133.8	149.6	163.8	176.9	189.0
VIOLET	(1.8)	35.647	0.529	19.7	120.5	149.3	173.9	195.7	215.5	233.8	250.9
YELLOW	(2.0)	49.9256	0.4847	21.7	152.4	185.5	213.3	237.6	259.6	279.7	298.4
BROWN	(2.2)	58.6621	0.4972	21	184.3	225.5	260.2	290.7	318.3	343.6	367.2
ORANGE	(2.4)	57.1814	0.5578	18.6	206.6	259.0	304.1	344.4	381.2	415.5	447.6

NOTE: TESTED WITHOUT MICRO-TUBE.

** Q=LPH H=m.

*** %DH - MAXIMUM ALLOWABLE HEAD LOSS DIFFERENCE.
ALONG A LATERAL (AS PERCENT OF THE WORKING PRESSURE).
TO KEEP FLOW RATE DIFFERENCE $\leq 10\%$
OF WORKING FLOW RATE.

For Maximum Lateral Length See Rondo Tables.

J.F.R.

Flow - Regulated Ray-Jet Sprayer

MAIN FEATURES

- * No moving parts.
- * Wide range of colour-coded, flow-regulated nozzles giving excellent, uniform flow rate.(see table)
- * Integral anti-ant device.
 - * Range limiter available for young plants. Wetting Radius upto 0.5m.
- * Low angle jet streams
 - * Available in variety of distribution patterns. 360° (Black).
300° (Orange).
180° (Red).
- * 3/8" threaded connection.

Working pressure range:
1.5 to 3.5 atm



J. F.R.

Flow - Regulated Ray-Jet

FLOW RATE DATA

TYPE COLOR (LPH)	FLOW RATE (LPH) AT PRESSURE										
	5 m	8 m	10 m	12.5 m	15 m	17.5 m	20 m	25 m	30 m	35 m	40 m
BLACK (20)	11.5	16	19	19.8	20.2	20	19.4	20	20.3	20	19.9
BLUE (30)	19	24	26.5	29	31.2	31.3	31.4	31	30.3	30.3	30.3
DARK BLUE (41)	25.4	33	36.2	40.4	43.1	42.1	42.1	41	41.7	41.6	41
GREEN (53)	37	38.3	43.6	48.1	51.5	52.9	52.9	51.3	52.1	51.8	51.1
RED (70)	41	52	56.4	61.8	66.4	71.4	71.4	70.2	71	72	72

Nozzle code Ø (mm)	Discharge (Lph)	Pattern Wetting Radius (m')		
		360	300	180
Black	20	1.6	1.8	2.0
Blue	30	2.0	2.1	2.4
Dark Blue	41	2.0	2.2	2.5
Green	53	2.2	2.6	2.8
Red	70	2.8	3.0	3.2
Gray	95	soon available		

Nozzle Height: **25 cm above ground**

Range Limiter; Limit the Wetting Radius to one m'

J. F.R

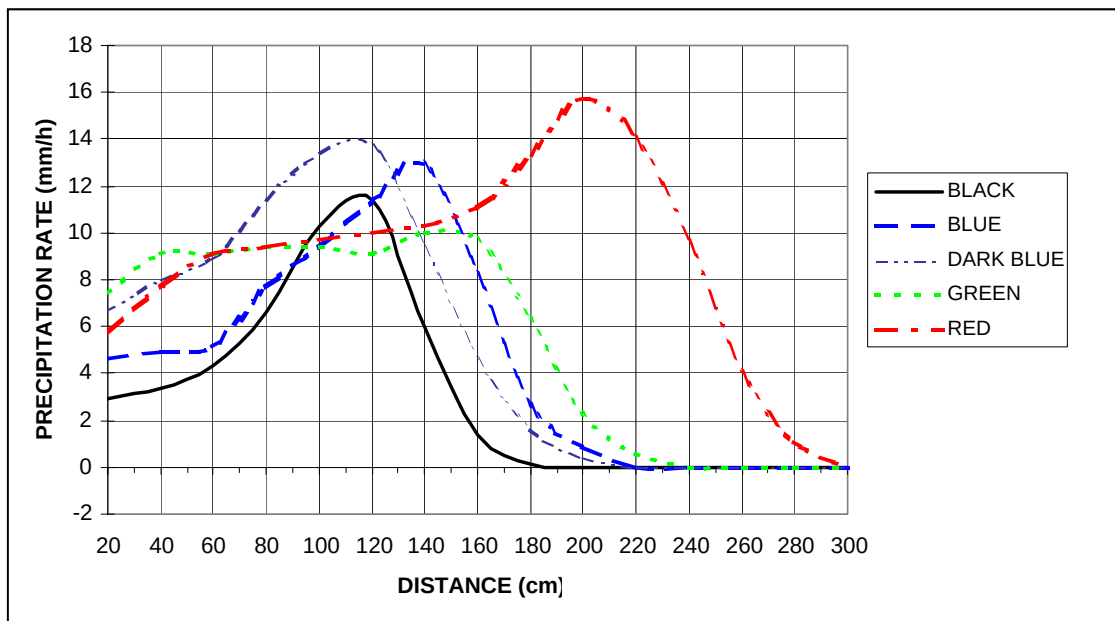
Flow - Regulated Ray-Jet

PRECIPITATION RATE DATA

PRECIPITATION RATE DATA (mm/h)

	NOZZLE				
DISTANCE cm	BLACK	BLUE	DARK BLUE	GREEN	RED
20.0	2.9	4.6	6.7	7.4	5.7
40.0	3.4	4.9	8.0	9.1	7.7
60.0	4.3	5.1	8.9	9.1	9.1
80.0	6.6	7.7	11.4	9.4	9.4
100.0	10.3	9.4	13.4	9.4	9.7
120.0	11.4	11.4	13.7	9.1	10.0
140.0	6.0	12.9	9.4	10.0	10.3
160.0	1.4	8.3	4.6	9.7	11.1
180.0	0.1	2.6	1.6	6.3	13.4
200.0	0.0	0.9	0.4	2.3	15.7
220.0	0.0	0.0	0.0	0.6	14.0
240.0	0.0	0.0	0.0	0.0	9.7
260.0	0.0	0.0	0.0	0.0	4.0
280.0	0.0	0.0	0.0	0.0	1.1
300.0	0.0	0.0	0.0	0.0	0.0

Performance Chart



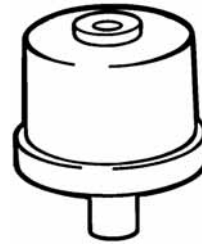
For Maximum Lateral Length See R.F.R Tables. (EC)

“TORNADO”
MIST SPRAYER
None-Clogging Mini Sprinkler

MAIN FEATURE

- * Without a bridge, ensuring uninterrupted mist application
- * Vortex mechanism prevents clogging
- * Average droplet size: 0.15 mm

Conic connection

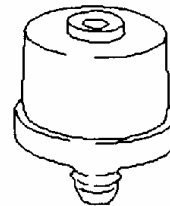


ADDITIONAL FEATURE

- * Available with protective cover accessory

OPERATING FEATURE

- * Working pressure range 2.5- 3.5 bar.
- * Nominal flow rate: 22,27,38 and 45 l/h at 3.0 bar.



Threaded connection

MODELS AND TYPES

- *Conic Press-fit connection10/32”
threaded connection

“TORNADO”

MIST SPRAYER

FLOW RATA DATA

NOZZIE COLOR (mm)	Q=AxH^B *		%DH ***	FLOW RATE (LPH) AT PRESSURE								
	A	B		20m	22m	24m	25m	26m	28m	30m	32m	35m
BLACK (0.9)	3.6540	0.524	20	17.6	18.5	19.3	19.7	20.1	20.9	21.7	22.5	23.5
BLUE (1.3)	4.7660	0.504	20.8	20.2	21.2	22.2	22.6	23.1	23.9	24.8	25.6	26.8
GREEN (1.7)	6.4770	0.521	20	30.8	32.4	33.9	34.6	35.4	36.8	38.1	39.4	41.3
RED (2.0)	8.9130	0.477	22.1	37.2	38.9	40.6	41.4	42.2	43.7	45.1	46.6	48.6

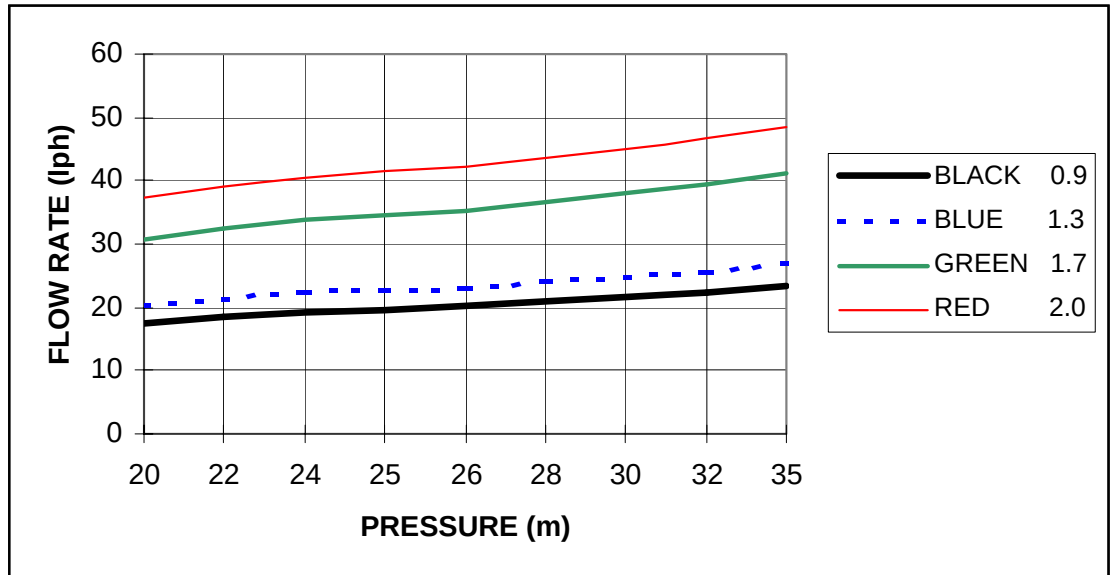
NOTE: TESTED WITHOUT MICRO-TUBE

** Q=LPH H=m.

*** %DH - MAXIMUM ALLOWABLE HEAD LOSS DIFFERENCE.
ALONG A LATERAL (AS PERCENT OF THE WORKING PRESSURE).
TO KEEP FLOW RATE DIFFERENCE $\leq 10\%$
OF WORKING FLOW RATE.

PERFORMANCE CHART

WORKING PRESSURE RANGE 25-35m.



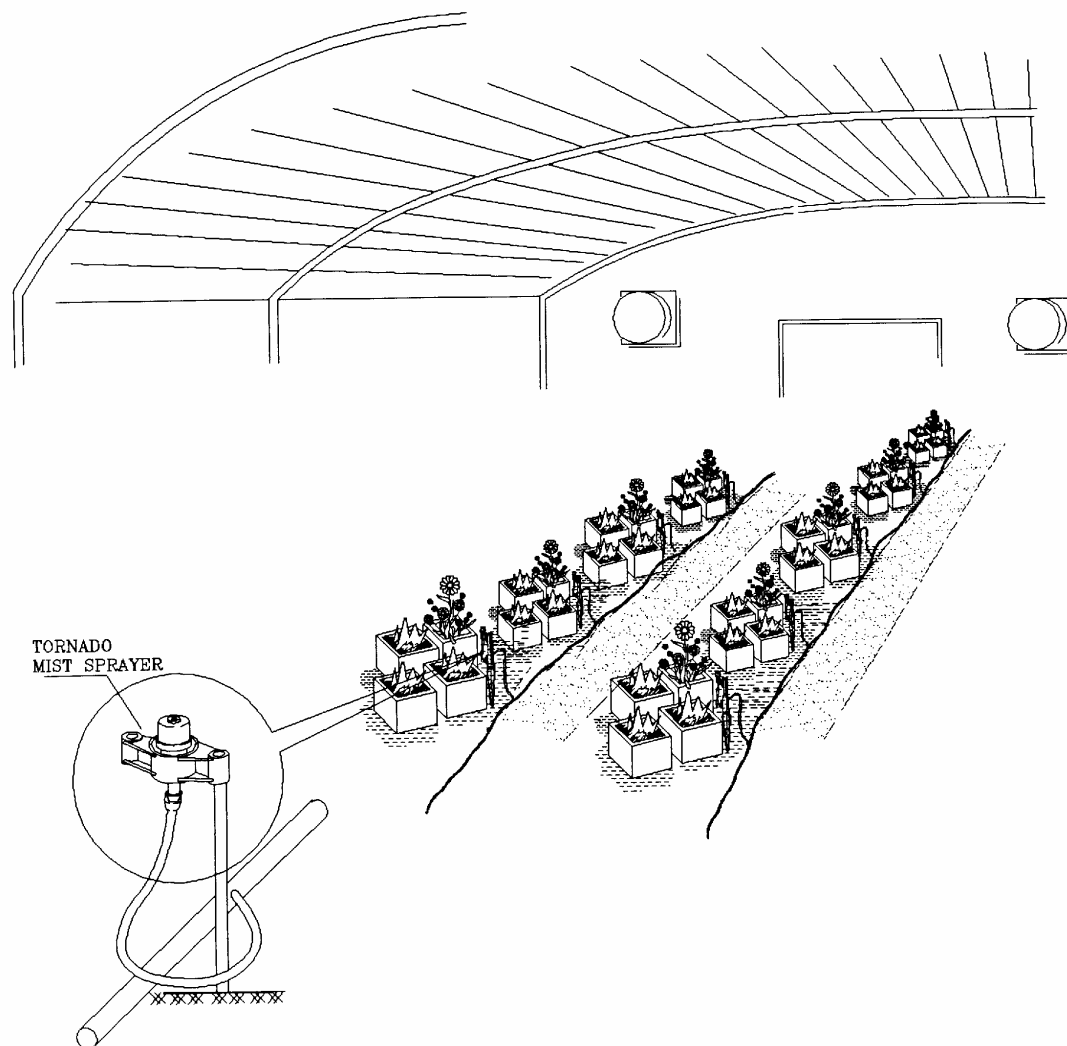
TORNADO - MIST SPRAYER

VOLUMETRIC & AVERAGE WETTING DIAMETER DATA

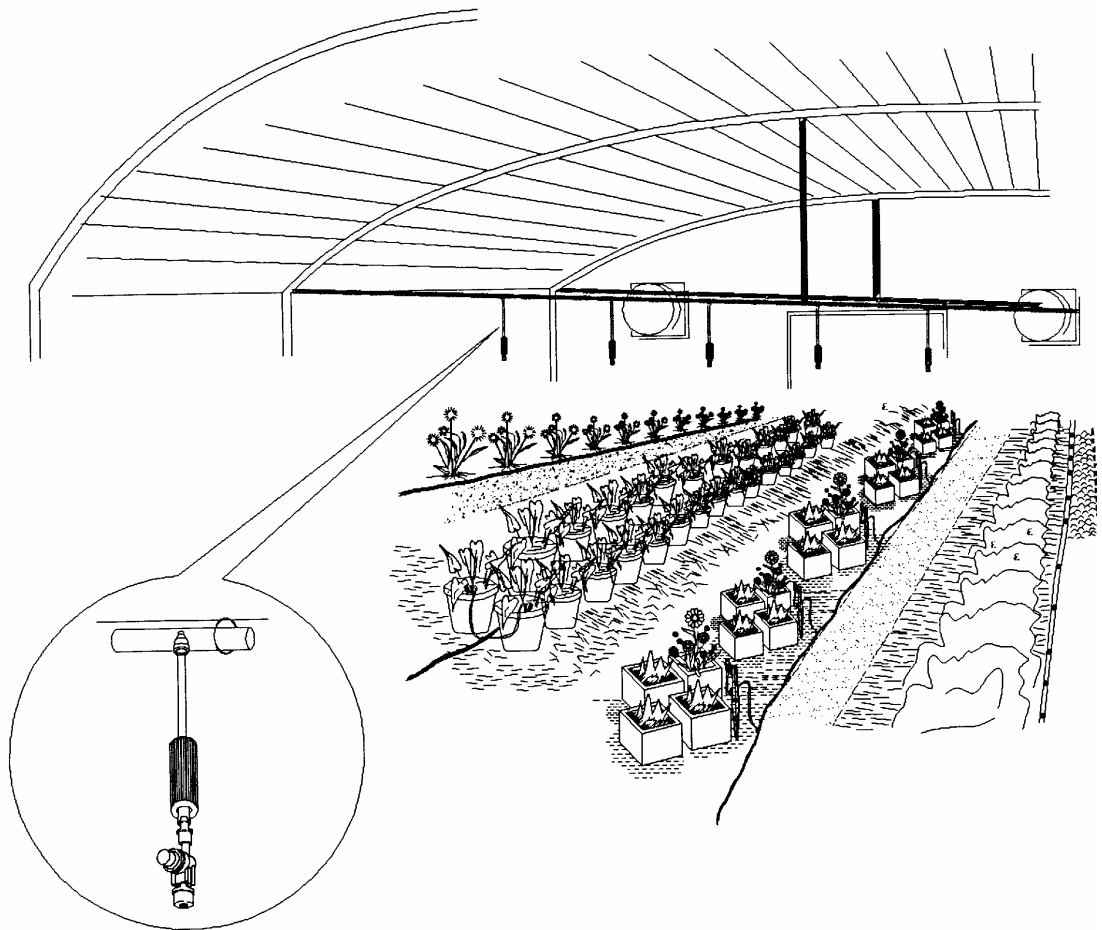
COLOR CODE	NOMINAL PRESSURE (bar)	NOMINAL FLOW (L/H)	DROP * SIZE (UM)	DIAMETER (mt.)
BLACK	3	22	165	2.3
BLUE	3	25	130	2.1
GREEN	3	38	145	1.9
RED	3	45	135	1.7

* - Volumetric diameter

GREENHOUSE
"TORNADO"
MIST SPRAYER
UPRIGHT POSITION



GREENHOUSE
MIST/FOG GENERATION
"TORNADO" MIST SPRAYER
INVERTED POSITION



TORNADO MIST SPRAYER

Christiansen Uniformity Coef. (Cu) %

Nozzle Height - **100 cm Upright**

Spacing (m)	Working Pressure (m)	Nozzle Code / CU(%)			
		Black 21.7 lph	Blue 26.5 lph	Green 38.1 lph	Red 45.1 lph
0.7x0.7	25	100	99	97	97
	30	99	98	96	97
0.75x0.75	25	99	98	96	96
	30	99	97	95	96
0.8x0.8	25	99	98	96	96
	30	99	97	95	96
0.9x0.9	25	100	99	98	98
	30	99	99	97	98
1x1	25	99	98	97	97
	30	100	98	94	96
1.1x1.1	25	98	97	91	92
	30	98	95	87	91
1.2x1.2	25	100	93	86	86
	30	98	91	81	85
1.25x1. 25	25	99	92	83	84
	30	96	88	74	81
1.3x1.3	25	99	89	79	80
	30	95	86	70	77
1.4x1.4	25	98	84	71	72
	30	92	79	60	68
1.5x1.5	25	95	78	63	64
	30	88	72	52	60

*Coefficient Of Uniformity (standards)

-Overlapping sprinklers standard equal to or greater than 84%

-Single sprinkler- no standard established. uniformity
increases with the value.

TORNADO MIST SPRAYER

Christiansen Uniformity Coef. (Cu) %

Nozzle Height - **100 cm Inverted**

Spacing (m)	Working Pressure (m)	Nozzle Code / CU(%)			
		Black 21.7 lph	Blue 26.5 lph	Green 38.1 lph	Red 45.1 lph
0.7x0.7	25	99	99	97	97
	30	99	97	96	96
0.75x0.75	25	98	98	97	97
	30	98	97	96	96
0.8x0.8	25	97	97	97	96
	30	96	97	96	96
0.9x0.9	25	96	96	98	98
	30	97	98	97	98
1x1	25	95	94	97	97
	30	96	98	95	95
1.1x1.1	25	95	95	93	93
	30	95	93	89	89
1.2x1.2	25	96	95	87	87
	30	92	87	84	82
1.25x1. 25	25	95	94	84	84
	30	90	83	79	78
1.3x1.3	25	92	90	80	80
	30	86	79	75	74
1.4x1.4	25	85	83	71	72
	30	79	71	67	64
1.5x1.5	25	78	76	62	63
	30	71	62	59	56

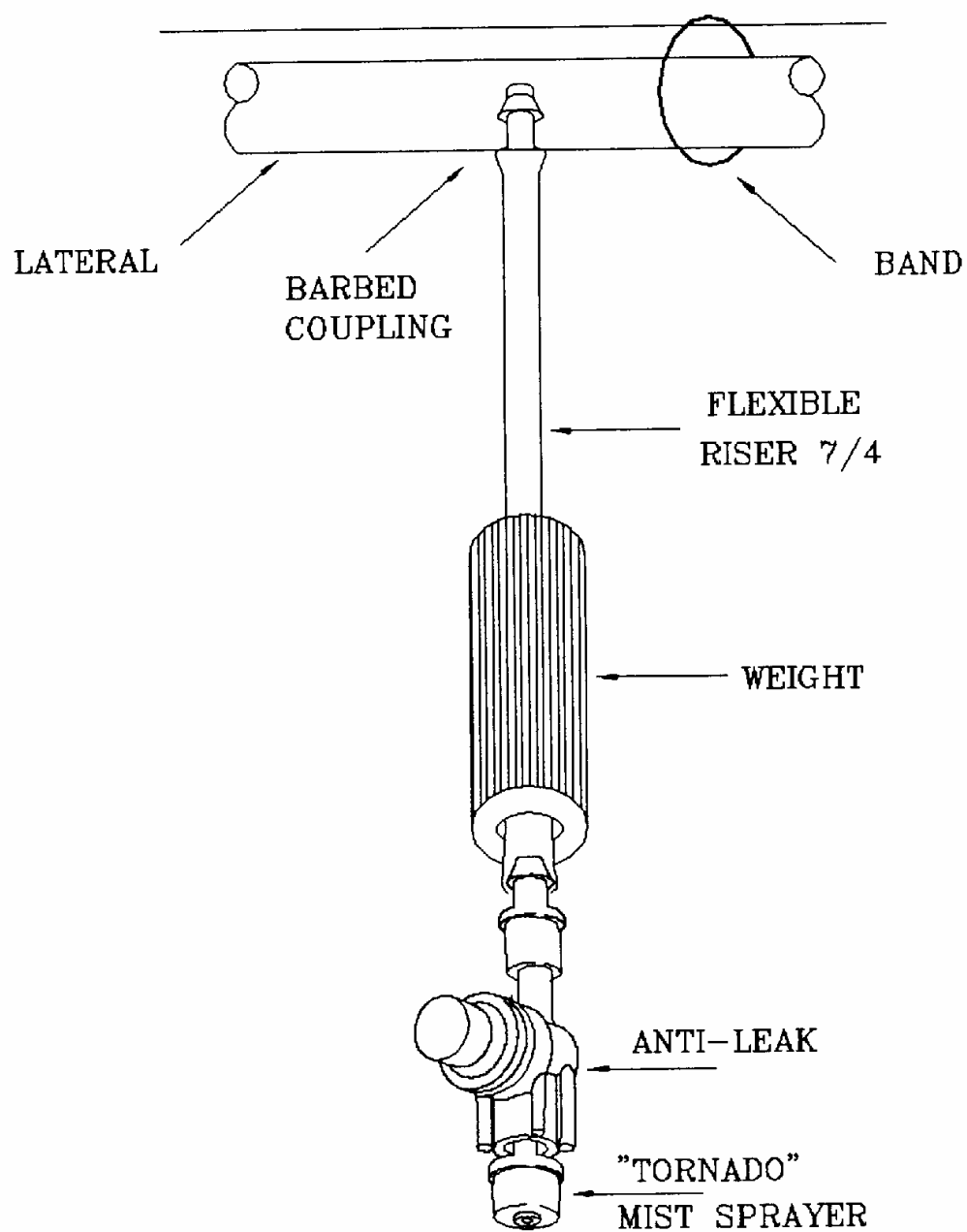
*Coefficient Of Uniformity (standards)

-Overlapping sprinklers standard equal to or greater than 84%

-Single sprinkler- no standard established. uniformity
increases with the value.

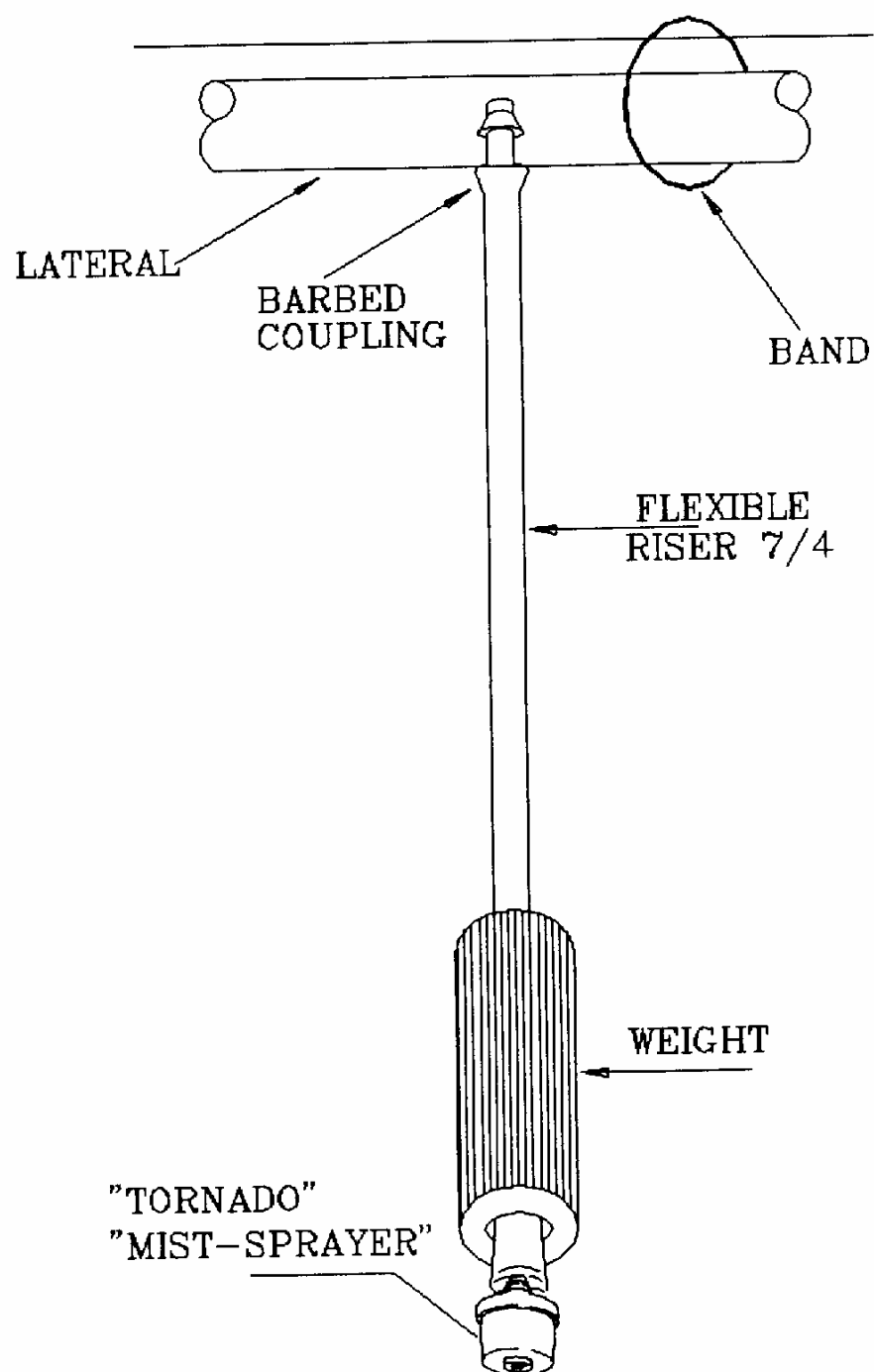
"TORNADO" MIST SPRAYER

INVERTED POSITION



"TORNADO" MIST SPRAYER

INVERTED POSITION



TORNADO - MIST SPRAYER**Black Nozzle - 22 lph**

Maximum No of Emitters Per Lateral

(Max. Flow Rate Variation - 7.5% or 10%)

Emitter Spacing (m)	Slope (%)	Pipe Diameter in mm (OD/ID)									
		16/13.2		16/13.6		17.8/15.2		20/17		20/17.4	
		7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%
0.5	-1	25	28	27	30	32	36	39	43	40	45
	0	26	29	27	30	33	37	40	45	42	47
	1	27	29	28	31	34	38	42	46	43	48
0.7	-1	31	34	32	36	39	44	48	53	49	55
	0	32	35	34	37	41	46	50	55	52	57
	1	33	36	34	39	42	47	52	57	54	60
0.9	-1	36	41	38	42	46	51	55	62	57	64
	0	37	41	40	43	48	53	58	65	60	68
	1	39	42	41	45	50	55	61	68	64	70
1	-1	38	43	41	45	49	54	59	66	61	68
	0	40	44	42	47	51	57	62	69	65	72
	1	41	45	43	48	53	59	65	72	68	75
1.2	-1	43	48	45	50	54	61	65	73	67	76
	0	44	49	47	53	58	64	70	77	72	80
	1	47	52	49	54	60	66	73	82	77	85
1.4	-1	46	53	49	55	59	67	71	80	74	84
	0	49	55	52	57	63	70	77	85	80	88
	1	52	56	55	60	66	73	81	90	85	94
1.5	-1	50	56	51	57	62	69	74	84	77	87
	0	51	57	54	60	66	74	80	89	84	93
	1	54	59	57	63	69	77	86	95	89	98

(-) Uphill

(+) Downhill

TORNADO - MIST SPRAYER

Blue Nozzle - 25 lph

Maximum No of Emitters Per Lateral

(Max. Flow Rate Variation - 7.5% or 10%)

Emitter Spacing (m)	Slope (%)	Pipe Diameter in mm (OD/ID)									
		16/13.2		16/13.6		17.8/15.2		20/17		20/17.4	
		7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%
0.5	-1	23	25	24	26	29	32	35	38	36	40
	0	23	25	24	27	30	32	36	39	38	41
	1	24	26	25	27	30	33	37	40	39	42
0.7	-1	27	30	29	32	35	39	43	47	44	48
	0	28	31	30	33	36	40	44	48	46	50
	1	29	32	31	34	37	41	46	50	48	52
0.9	-1	32	35	34	37	41	45	50	55	51	57
	0	33	36	35	39	42	47	52	57	54	59
	1	34	37	36	40	44	48	54	59	57	61
1	-1	34	38	36	40	44	48	53	58	55	60
	0	35	39	37	41	45	50	55	61	58	63
	1	37	40	39	42	47	51	58	63	60	66
1.2	-1	38	42	41	44	49	54	59	65	61	67
	0	40	43	42	46	52	55	62	68	65	71
	1	41	44	43	47	53	58	65	71	68	74
1.4	-1	42	46	45	49	53	59	64	71	67	74
	0	43	48	46	50	56	62	69	74	71	78
	1	45	49	48	52	59	64	73	78	76	81
1.5	-1	44	48	47	51	56	62	68	74	69	77
	0	45	50	48	53	59	65	72	78	75	81
	1	48	51	50	54	62	68	75	83	80	86

(-) Uphill

(+) Downhill

TORNADO - MIST SPRAYER**Green Nozzle - 38 lph**

Maximum No of Emitters Per Lateral

(Max. Flow Rate Variation - 7.5% or 10%)

Emitter Spacing (m)	Slope (%)	Pipe Diameter in mm (OD/ID)									
		16/13.2		16/13.6		17.8/15.2		20/17		20/17.4	
		7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%
0.5	-1	18	20	19	21	23	25	28	31	29	32
	0	18	20	19	21	23	26	28	31	30	32
	1	19	20	20	21	24	26	29	32	30	33
0.7	-1	22	24	23	25	28	31	34	37	35	39
	0	22	25	23	26	29	32	35	39	36	40
	1	22	25	24	27	29	32	36	39	37	41
0.9	-1	25	28	27	30	32	36	40	43	41	45
	0	26	29	27	31	33	37	41	45	42	47
	1	27	29	28	31	34	38	42	46	44	48
1	-1	27	30	28	32	34	38	42	46	43	48
	0	28	31	29	32	36	39	43	48	45	50
	1	28	31	30	33	37	40	45	49	47	52
1.2	-1	30	34	31	35	38	43	47	52	48	54
	0	31	35	32	36	40	44	49	54	50	56
	1	32	35	34	37	41	46	50	55	53	58
1.4	-1	34	36	35	39	42	48	50	57	53	59
	0	34	38	36	39	43	49	53	59	56	62
	1	35	39	38	41	46	50	56	62	59	64
1.5	-1	35	39	36	41	44	50	53	59	56	62
	0	36	39	38	42	47	51	56	62	59	65
	1	38	41	39	44	48	53	59	65	62	68

(-) Uphill

(+) Downhill

TORNADO - MIST SPRAYER**Red Nozzle - 45 lph**

Maximum No of Emitters Per Lateral

(Max. Flow Rate Variation - 7.5% or 10%)

Emitter Spacing (m)	Slope (%)	Pipe Diameter in mm (OD/ID)									
		16/13.2		16/13.6		17.8/15.2		20/17		20/17.4	
		7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%
0.5	-1	16	19	17	20	21	25	25	30	26	31
	0	17	20	18	21	21	25	26	30	27	32
	1	17	20	18	21	22	25	26	31	28	32
0.7	-1	20	24	21	25	25	30	31	36	32	38
	0	20	24	22	25	26	31	32	37	33	39
	1	20	24	22	25	27	31	33	38	34	40
0.9	-1	23	27	24	29	30	35	36	42	38	44
	0	23	28	25	30	31	36	37	43	39	45
	1	24	28	25	30	32	37	39	45	40	47
1	-1	25	29	26	31	32	37	38	45	40	47
	0	25	30	27	31	33	38	40	47	41	49
	1	26	30	27	32	33	39	41	48	43	50
1.2	-1	28	32	29	35	35	42	43	50	44	53
	0	29	34	30	35	36	43	44	53	47	54
	1	29	34	31	36	37	44	46	54	48	56
1.4	-1	31	36	32	38	39	46	48	56	49	57
	0	31	36	32	39	41	48	49	57	50	60
	1	32	38	34	39	42	49	50	59	53	62
1.5	-1	32	38	33	39	41	48	50	59	51	60
	0	33	39	35	41	42	50	51	60	54	63
	1	33	39	36	42	44	51	53	62	56	65

(-) Uphill

(+) Downhill

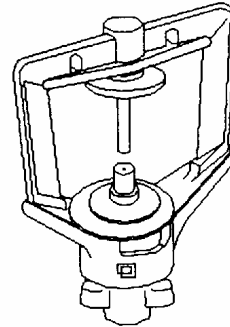
“RONDO”

MIST SPRAYER

Medium - Range Mist Sprayer

MAIN FEATURES

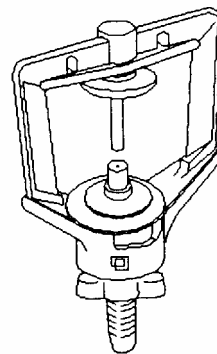
- * Average droplet size: 0.15mm
- * Suitable for Inverted & Upright assembly
- * Double Bridge - violet color



Conic connection

OPERATING RANGE

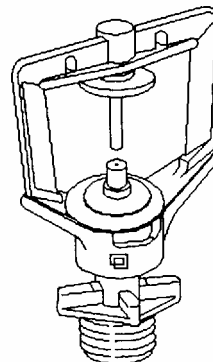
- * Working pressure range
2.5 - 3.5 bar
- * Nominal flow rate: 47, 61
and 91 l/h at 3.0 bar.



Threaded connection 10/32"

MODELS AND TYPES

- * Conic Press - fit connection
- * 10/32" Threaded connection
- * 3/8" Threaded connection
- * Color-coded nozzles for
flow rate identification.



Threaded connection 3/8"

“RONDO”

MIST SPRAYER

FLOW RATE DATA

NOZZIE COLOR (mm)	Q=AxH^B *		%DH ***	FLOW RATE (LPH) AT PRESSURE						
	A	B		10m	15m	20m	25m	30m	35m	40m
BLACK (0.8)	11.16	0.413	25.9	29.7	35.1	39.5	43.3	46.7	49.8	52.6
BLUE (1.0)	12.786	0.458	23	36.8	44.3	50.5	56.0	60.9	65.3	69.4
GREEN (1.2)	15.755	0.515	20	51.7	63.7	73.9	82.9	91.0	98.6	105.6

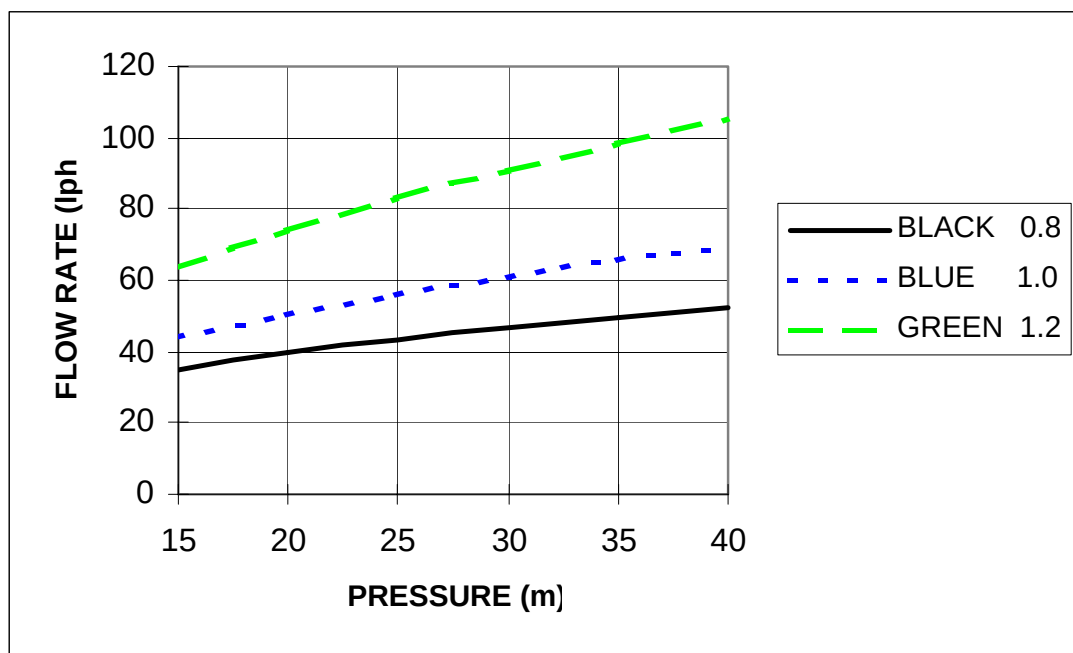
NOTE: TESTED WITHOUT MICRO-TUBE

** Q=LPH H=m.

*** %DH - MAXIMUM ALLOWABLE HEAD LOSS DIFFERENCE.
ALONG A LATERAL (AS PERCENT OF THE WORKING PRESSURE).
TO KEEP FLOW RATE DIFFERENCE $\leq 10\%$
OF WORKING FLOW RATE.

PERFORMANCE CHART

WORKING PRESSURE RANGE 15-30m.



"RONDO" - MIST SPRAYER

VOLUMETRIC & AVERAGE WETTING DIAMETER DATA

NOZZLE HEIGHT - 100 & 200 cm.

COLOR CODE	NOMINAL PRESSURE (bar)	NOMINAL FLOW (L/H)	DROP* SIZE (UM)	DIAMETER (mt.)
BLACK	3.0	47	165	2-2.4
BLUE	3.0	61	130	2-2.4
GREEN	3.0	91	145	2.5-2.8

* - Volumetric diameter

"RONDO" MIST SPRAYER

CHRISTIANSEN UNIFORMITY COEF. (CU) %

WORKING PRESSURE - **30m.**

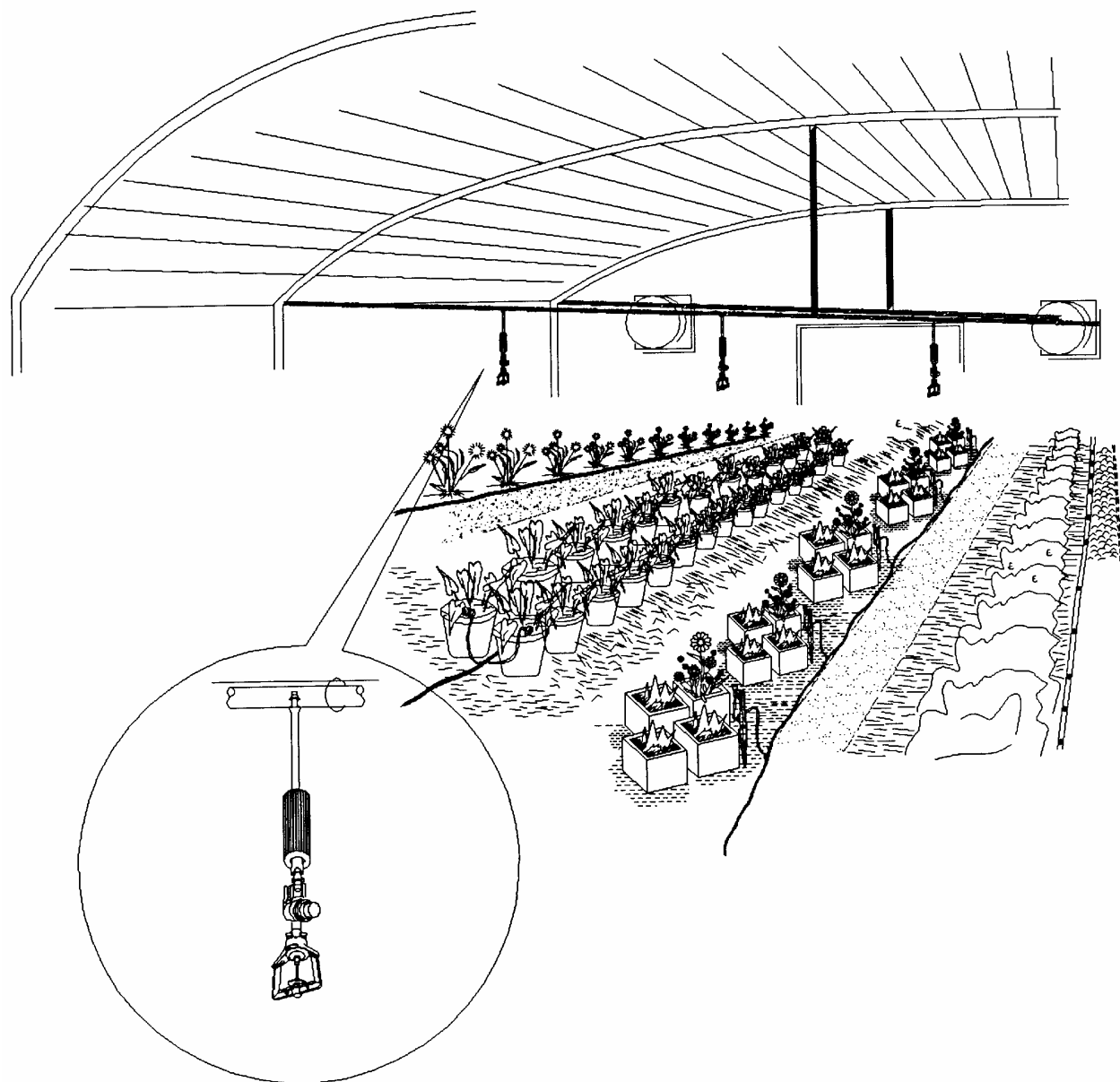
NOZZLE HEIGHT - **100 cm INVERTED**

Spacing (m)	Nozzle Code / CU(%)		
	Black 47 lph	Blue 61 lph	Green 91 lph
0.5x0.5	94	93	98
0.7x0.7	94	93	95
0.75x0.75	94	93	96
0.8x0.8	92	91	94
0.9x0.9	86	82	92
1x1	83	77	93
1.1x1.1	84	75	85
1.2x1.2	82	70	81
1.3x1.3	83	69	80
1.4x1.4	83	75	81
1.5x1.5	79	74	78

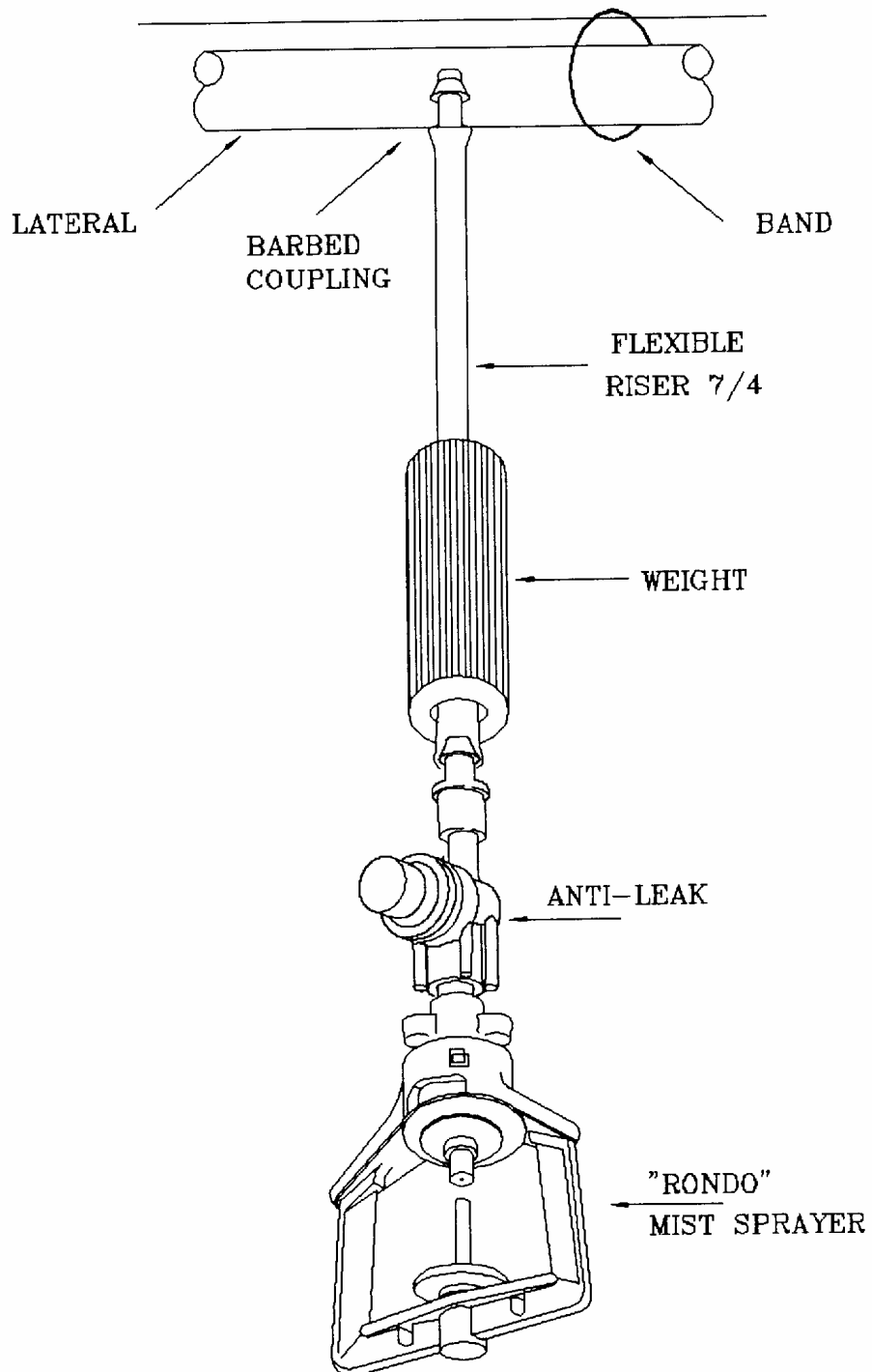
* Coefficient Of Uniformity (standards) -

- Overlapping sprinklers standard equal to or greater than 84%
- Single sprinkler - no standard established. uniformity increases with the value.

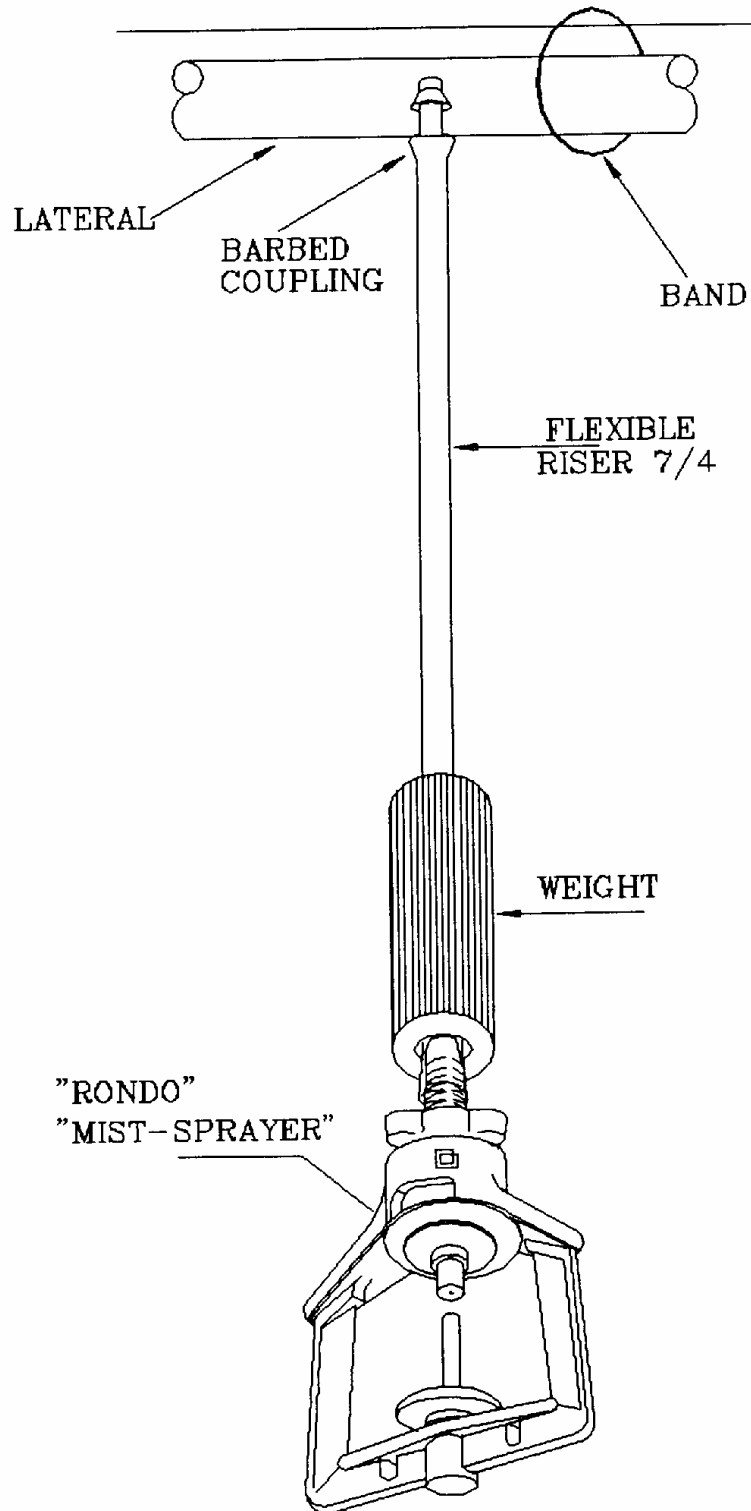
GREENHOUSE
MIST/FOG GENERATION
“RONDO MIST SPRAYER”
INVERTED POSITION



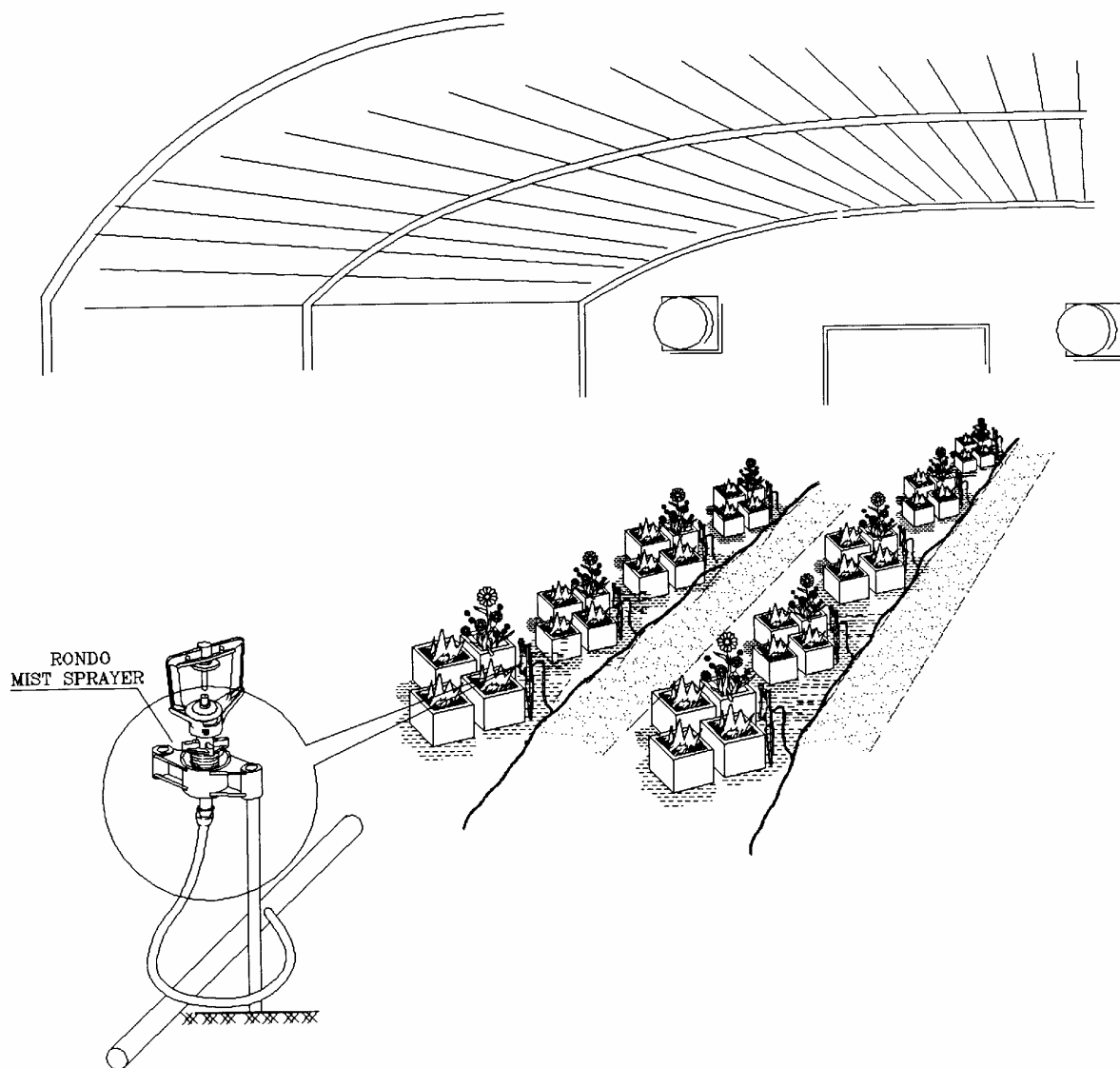
"RONDO" MIST - SPRAYER
INVERTED POSITION



"RONDO" MIST - SPRAYER
INVERTED POSITION



GREENHOUSE
"RONDO"
MIST SPRAYER
UPRIGHT POSITION



RONDO - MIST SPRAYER

Black Nozzle - 47 lph

Maximum No. of Emitters per Lateral

(Max. Flow Rate Variation - 7.5% or 10%)

Emitter Spacing (m)	Slope (%)	Pipe Diameter in mm (OD/ID)									
		16/13.2		16/13.6		17.8/15.2		20/17		20/17.4	
		7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%
0.5	-1	32	36	34	38	41	46	50	55	52	58
	0	33	36	34	38	42	46	51	56	53	59
	1	33	36	35	38	43	47	52	57	54	60
0.7	-1	28	31	30	33	36	40	44	49	46	51
	0	29	32	30	34	37	41	45	50	47	52
	1	29	32	31	34	38	42	46	51	48	53
0.9	-1	26	28	27	30	33	36	40	44	42	46
	0	26	29	28	31	34	37	41	45	43	47
	1	27	29	28	31	34	38	42	46	44	48
1	-1	25	27	26	29	32	35	38	42	40	44
	0	25	28	27	29	32	36	39	44	41	45
	1	26	28	27	30	33	37	41	45	43	47
1.2	-1	23	25	24	27	29	33	36	40	37	41
	0	23	26	25	27	30	33	37	41	38	42
	1	24	26	25	28	31	34	38	42	40	44
1.4	-1	22	24	23	25	28	31	34	37	35	39
	0	22	25	23	26	29	32	35	38	36	40
	1	23	25	24	26	29	32	36	40	38	41
1.5	-1	21	23	22	25	27	30	33	36	34	38
	0	22	24	23	25	28	31	34	38	35	39
	1	22	24	23	26	29	32	35	39	37	40

(-) Uphill

(+) Downhill

RONDO - MIST SPRAYERBlue Nozzle - **61** lph

Maximum No. of Emitters per Lateral

(Max. Flow Rate Variation - 7.5% or 10%)

Emitter Spacing (m)	Slope (%)	Pipe Diameter in mm (OD/ID)									
		16/13.2		16/13.6		17.8/15.2		20/17		20/17.4	
		7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%
0.5	-1	26	29	28	31	34	38	41	46	43	47
	0	27	30	28	31	34	38	42	46	44	48
	1	27	30	29	31	35	38	43	47	44	49
0.7	-1	23	26	24	27	30	33	36	40	38	42
	0	24	26	25	27	30	34	37	41	38	43
	1	24	26	25	28	31	34	38	42	39	43
0.9	-1	21	23	22	25	27	30	33	36	34	38
	0	21	24	23	25	28	30	34	37	35	39
	1	22	24	23	25	28	31	35	38	36	40
1	-1	20	22	21	24	26	29	31	35	33	36
	0	21	23	22	24	26	29	32	36	34	37
	1	21	23	22	24	27	30	33	37	35	38
1.2	-1	19	21	20	22	24	27	29	33	30	34
	0	19	21	20	22	25	27	30	33	31	35
	1	20	22	21	23	25	28	31	34	32	36
1.4	-1	18	20	19	21	23	25	28	31	29	32
	0	18	20	19	21	23	26	28	32	30	33
	1	18	20	20	22	24	26	29	32	31	34
1.5	-1	17	19	18	20	22	25	27	30	28	31
	0	18	20	19	21	23	25	28	31	29	32
	1	18	20	19	21	23	26	29	32	30	33

(-) Uphill

(+) Downhill

RONDO - MIST SPRAYER

Green Nozzle - **91** lph

Maximum No. of Emitters per Lateral

(Max. Flow Rate Variation - 7.5% or 10%)

Emitter Spacing (m)	Slope (%)	Pipe Diameter in mm (OD/ID)									
		16/13.2		16/13.6		17.8/15.2		20/17		20/17.4	
		7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%
0.5	-1	19	21	20	23	25	27	30	33	31	35
	0	19	22	21	23	25	28	31	34	32	35
	1	20	22	21	23	25	28	31	34	32	36
0.7	-1	17	19	18	20	22	24	26	29	28	31
	0	17	19	18	20	22	24	27	30	28	31
	1	17	19	18	20	22	25	28	30	29	32
0.9	-1	15	17	16	18	20	22	24	27	25	28
	0	16	17	16	18	20	22	25	27	26	28
	1	16	17	17	18	20	23	25	28	26	29
1	-1	15	16	15	17	19	21	23	26	24	27
	0	15	17	16	17	19	21	24	26	25	27
	1	15	17	16	18	20	22	24	27	25	28
1.2	-1	14	15	14	16	18	20	21	24	22	25
	0	14	15	15	16	18	20	22	24	23	25
	1	14	16	15	17	18	20	23	25	24	26
1.4	-1	13	14	14	15	17	18	20	22	21	23
	0	13	15	14	15	17	19	21	23	22	24
	1	13	15	14	16	17	19	21	24	22	25
1.5	-1	12	14	13	15	16	18	20	22	20	23
	0	13	14	13	15	17	18	20	22	21	23
	1	13	14	14	15	17	19	21	23	22	24

(-) Uphill

(+) Downhill

FOGGER LOW FLOW (FLF)

The **FLF** is equipped with an integral no-drain mini – valve.

Designed with a vortex nozzle, the **FLF** provides a turbulent flow, minimizing clogging hazards.

MAIN FEATURES:

- * Easy to disassemble and assemble for maintenance purposes.
- * Available with one or four fogging nozzles.

APPLICATION MODES:

- * Single nozzle in vertical position suitable for germination or rooting irrigation, humidity control in greenhouses.
- * Four nozzle assembly: Spraying mist in four horizontal directions for climate control in greenhouses and poultry houses.

MATERIALS:

- * Body is manufactured from PBT + Glass Reinforced (GR). Excellent resistance to U.V. radiation and mechanical stress and chemicals that are commonly used in agriculture.

Diaphragm from silicon rubber.

SPECIFICATION:

Nozzle sizes: 0.8 mm & 0.55 mm.

Emission rate at 3 bar: 10 lph & 5 LPH..

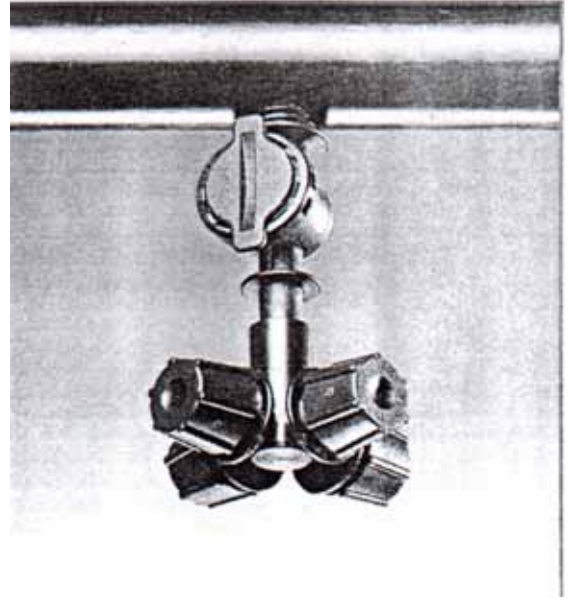
Droplet size: 70-100 microns

Working pressure range: 2.5-3.5 bar.

Wetting pattern from 2 m height with single nozzle (vertical spray): 70 cm diameter.

Recommended filtration: 120 mesh.

- * Available with three different inlet configurations:
 - Barbed inlet fits into 4/7-5/8 mm tubes.
 - Male conical inlet.
 - Threaded 3/8” inlet for direct connection to PVC pipes.



FOGGER LOW FLOW (FLF)

FLOW RATE DATA

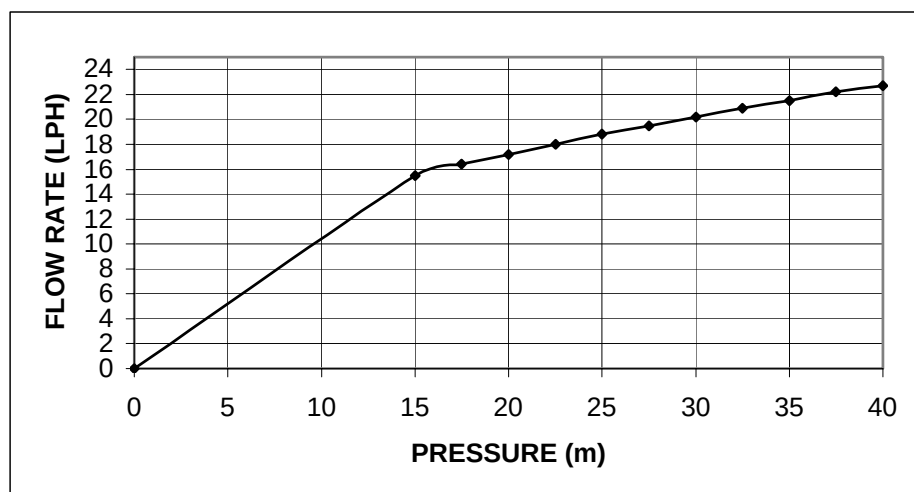
4 Nozzles x “5 LPH”

Q=A _x H ^B *		%DH **	FLOW RATE (LPH) VS PRESSURE (m)										
A	B		15	17.5	20	22.5	25	27.5	30	32.5	35	37.5	40
5.316	0.393	27.5	15.5	16.4	17.2	18.0	18.8	19.5	20.2	20.9	21.5	22.2	22.7

* - Q= LPH H=m.

** - %DH - MAXIMUM ALLOWABLE HEAD LOSS DIFFERENCE
ALONG A LATERAL (AS PERCENT OF THE WORKING PRESSURE)
TO KEEP FLOW RATE DIFFERENCES ≤ 10%
OF WORKING FLOW RATE.

Performance Chart



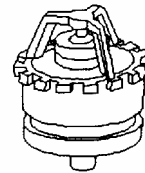
"TORNADO"

MINI SPRINKLER

Non-Clogging Mini Sprinkler

MAIN FEATURES

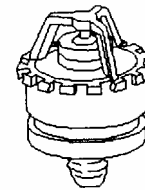
- * Flexi-bridge for even distribution of water
- * Vortex mechanism prevents clogging
- * No mist under regular operating pressure
- * Anti-ant spinner
- * Suited for upside-down installation



Conic connection

OPERATING RANGE

- * Working pressure range
1.5 - 2.5bar
- * Nominal flow rate: 33,43,75,100
and 115 l/h at 2.0 bar.



Thraded connection

MODELS AND TYPES

- * Conic Press-fit connection
- * 10/32" Threaded connection
- * Colour coded nozzles for
flow rate identification

“TORNADO”

MINI SPRINKLER

FLOW RATE DATA

NOZZIE COLOR (mm)	Q=A _x H ^A B ^B **		%DH ***	FLOW RATE (LPH) AT PRESSURE										
	A	B		10m	12m	14m	16m	18m	20m	22m	24m	26m	28m	30m
BLACK (0.9)	8.60	0.458	23.1	24.7	26.8	28.8	30.6	32.3	33.9	35.4	36.9	38.2	39.6	40.8
BLUE (1.3)	11.027	0.458	23.2	31.5	34.2	36.7	39.0	41.2	43.2	45.1	47.0	48.7	50.4	52.0
GREEN (1.7)	20.304	0.442	24	56.2	60.9	65.2	69.2	72.8	76.3	79.6	82.7	85.7	88.6	91.3
RED (2.0)	21.199	0.517	20.2	69.7	76.6	83.0	88.9	94.5	99.8	104.8	109.8	114.3	118.7	123.0
WHITE (2.0)	26.017	0.495	21.2	81.3	89.0	96.1	102.6	108.8	114.6	120.2	125.4	130.5	135.4	140.1

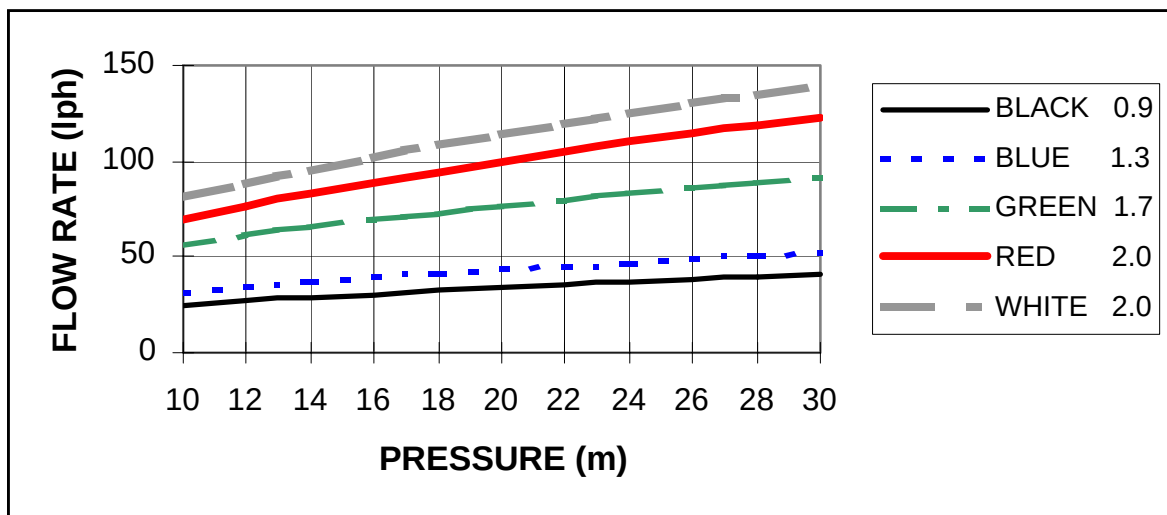
NOTE: TESTED WITHOUT MICRO-TUBE

** Q=LPH H=m.

*** %DH - MAXIMUM ALLOWABLE HEAD LOSS DIFFERENCE.
ALONG A LATERAL (AS PERCENT OF THE WORKING PRESSURE).
TO KEEP FLOW RATE DIFFERENCE $\leq 10\%$
OF WORKING FLOW RATE.

PERFORMANCE CHART

WORKING PRESSURE RANGE 15-25m.



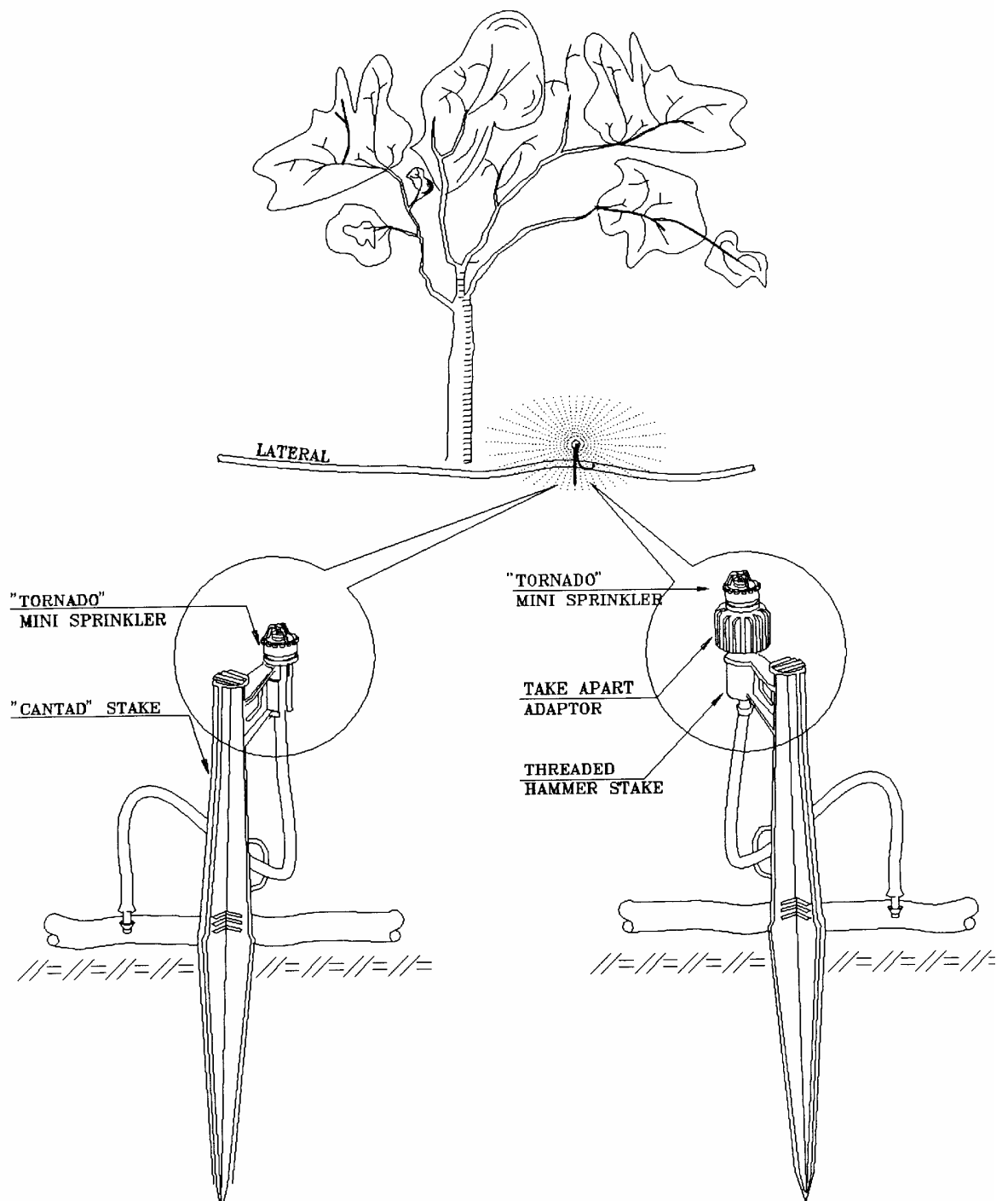
ORCHARDS & PLANTATION

(MATURE/BIG TREE)

"TORNADO"

MINI SPRINKLER

UPRIGHT POSITION



TORNADO MINI SPRINKLER

EA 3-

TORNADO - MINI SPRINKLER

Wetting Radius Data (m)

on Standard Stake - 25 cm. UPRIGHT

Nozzle code Ø (mm)	Pressure (Bar)	Discharge (Lph)	Wetting Radius (m') *
Black (0.9)	1.5	30	1.4
	2.0	33	1.6
	2.5	38	1.8
Blue (1.3)	1.5	38	1.5
	2.0	43	1.7
	2.5	48	1.9
Green (1.7)	1.5	67	1.6
	2.0	75	2.0
	2.5	84	2.2
Red (2.0)	1.5	86	2.0
	2.0	100	2.3
	2.5	112	2.4
White (2.0)	1.5	100	2.2
	2.0	115	2.5
	2.5	128	2.6

TORNADO - MINI SPRINKLER**Black Nozzle - 33 lph**

Maximum No. of Emitters per Lateral

(Max. Flow Rate Variation - 7.5% or 10%)

Emitter Spacing (m)	Slope (%)	Pipe Diameter in mm (OD/ID)									
		16/13.2		16/13.6		17.8/15.2		20/17		20/17.4	
		7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%
2	-2	19	21	20	22	24	27	28	32	29	33
	-1	20	22	21	23	25	28	30	34	32	35
	0	21	23	22	24	27	30	33	36	34	38
	1	22	24	23	25	28	31	35	38	36	40
	2	23	25	24	26	30	32	37	40	38	42
2.5	-2	17	19	18	20	21	24	25	29	26	30
	-1	18	20	19	21	23	26	28	31	29	32
	0	19	21	20	22	25	27	30	33	31	35
	1	20	22	21	23	26	29	32	35	34	37
	2	21	23	22	24	28	30	34	37	36	39
3	-2	16	18	17	19	20	22	23	27	24	27
	-1	17	19	18	20	21	24	26	29	27	30
	0	18	20	19	21	23	25	28	31	29	32
	1	19	21	20	22	25	27	30	33	32	35
	2	20	22	21	23	26	28	32	35	34	37
3.5	-2	15	17	15	17	18	21	22	25	22	25
	-1	16	18	17	19	20	22	24	27	25	28
	0	17	19	18	20	22	24	27	29	28	31
	1	18	20	19	21	23	26	29	32	30	33
	2	19	20	20	22	25	27	31	34	32	35
4	-2	14	16	14	16	17	20	20	23	21	24
	-1	15	17	16	18	19	21	23	25	23	26
	0	16	18	17	19	21	23	25	28	26	29
	1	17	19	18	20	22	24	28	30	29	32
	2	18	20	19	21	24	26	30	32	31	34
4.5	-2	13	15	14	16	16	18	19	22	19	22
	-1	14	16	15	17	18	20	21	24	22	25
	0	15	17	16	18	20	22	24	27	25	28
	1	16	18	17	19	21	23	27	29	28	30
	2	17	19	18	20	23	25	29	31	30	33

(-) Uphill

(+) Downhill

(Continued from page 5)

TORNADO - MINI SPRINKLER

Black Nozzle - 33 lph

Emitter Spacing (m)	Slope (%)	Pipe Diameter in mm (OD/ID)									
		16/13.2		16/13.6		17.8/15.2		20/17		20/17.4	
		7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%
5	-2	12	14	13	15	15	18	18	21	18	21
	-1	13	15	14	16	17	19	20	23	21	24
	0	15	16	15	17	19	21	23	26	24	27
	1	16	17	17	18	21	23	26	28	27	29
	2	17	18	18	19	22	24	28	30	29	32
5.5	-2	12	13	12	14	15	17	17	20	17	20
	-1	13	15	14	15	16	18	19	22	20	23
	0	14	16	15	17	18	20	22	25	23	26
	1	15	17	16	18	20	22	25	27	26	29
	2	16	18	17	19	22	23	27	29	28	31
6	-2	11	13	12	14	14	16	16	19	17	19
	-1	12	14	13	15	16	18	19	21	19	22
	0	14	15	14	16	18	20	22	24	23	25
	1	15	16	16	17	20	21	24	26	25	28
	2	16	17	17	18	21	23	26	29	28	30
6.5	-2	11	12	11	13	13	15	15	18	16	18
	-1	12	14	13	14	15	17	18	20	19	21
	0	13	15	14	16	17	19	21	23	22	24
	1	14	16	15	17	19	21	24	26	25	27
	2	15	17	16	18	21	22	26	28	27	29

(-) Uphill

(+) Downhill

TORNADO - MINI SPRINKLER**Blue Nozzle - 43 lph**

Maximum No. of Emitters per Lateral

(Max. Flow Rate Variation - 7.5% or 10%)

Emitter Spacing (m)	Slope (%)	Pipe Diameter in mm (OD/ID)									
		16/13.2		16/13.6		17.8/15.2		20/17		20/17.4	
		7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%
2	-2	16	18	17	19	21	23	25	28	26	29
	-1	17	19	18	20	22	24	26	29	27	31
	0	18	20	19	21	23	25	28	31	29	32
	1	18	20	19	21	24	26	30	32	31	34
	2	19	21	20	22	25	27	31	34	32	35
2.5	-2	15	17	16	18	19	21	22	25	23	26
	-1	16	17	16	18	20	22	24	27	25	28
	0	16	18	17	19	21	23	26	28	27	30
	1	17	19	18	20	22	24	27	30	29	31
	2	18	19	19	20	23	25	29	31	30	33
3	-2	14	15	14	16	17	19	20	23	21	24
	-1	14	16	15	17	18	21	22	25	23	26
	0	15	17	16	18	20	22	24	27	25	28
	1	16	18	17	18	21	23	26	28	27	29
	2	17	18	18	19	22	24	27	30	28	31
3.5	-2	13	14	13	15	16	18	19	22	20	22
	-1	13	15	14	16	17	19	21	23	22	24
	0	14	16	15	17	18	20	23	25	24	26
	1	15	17	16	18	20	22	24	27	26	28
	2	16	17	17	18	21	23	26	28	27	29
4	-2	12	14	13	14	15	17	18	20	18	21
	-1	13	14	13	15	16	18	20	22	20	23
	0	14	15	14	16	18	19	22	24	22	25
	1	14	16	15	17	19	21	23	26	24	27
	2	15	16	16	17	20	22	25	27	26	28
4.5	-2	11	13	12	13	14	16	17	19	17	20
	-1	12	14	13	14	15	17	19	21	19	22
	0	13	14	14	15	17	19	21	23	21	24
	1	14	15	15	16	18	20	22	25	23	26
	2	14	16	15	17	19	21	24	26	25	27

(-) Uphill

(+) Downhill

(Continued from page 7)

TORNADO - MINI SPRINKLER

Blue Nozzle - 43 lph

Emitter Spacing (m)	Slope (%)	Pipe Diameter in mm (OD/ID)									
		16/13.2		16/13.6		17.8/15.2		20/17		20/17.4	
		7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%
5	-2	11	12	11	13	13	15	16	18	16	19
	-1	12	13	12	14	15	17	18	20	18	21
	0	12	14	13	15	16	18	20	22	21	23
	1	13	15	14	15	17	19	22	24	23	25
	2	14	15	15	16	19	20	23	25	24	26
5.5	-2	10	12	11	12	13	15	15	17	15	18
	-1	11	12	12	13	14	16	17	19	18	20
	0	12	13	13	14	16	17	19	21	20	22
	1	13	14	14	15	17	18	21	23	22	24
	2	14	15	14	16	18	20	23	24	24	26
6	-2	10	11	10	12	12	14	14	16	15	17
	-1	11	12	11	13	14	15	16	18	17	19
	0	12	13	12	14	15	17	18	20	19	21
	1	12	14	13	14	16	18	20	22	21	23
	2	13	14	14	15	18	19	22	24	23	25
6.5	-2	10	11	10	11	12	13	14	16	14	16
	-1	10	12	11	12	13	15	16	18	16	18
	0	11	12	12	13	15	16	18	20	19	21
	1	12	13	13	14	16	17	20	22	21	23
	2	13	14	14	15	17	19	22	23	23	24

(-) Uphill

(+) Downhill

TORNADO - MINI SPRINKLER**Green Nozzle - 75 lph**

Maximum No. of Emitters per Lateral

(Max. Flow Rate Variation - 7.5% or 10%)

Emitter Spacing (m)	Slope (%)	Pipe Diameter in mm (OD/ID)									
		16/13.2		16/13.6		17.8/15.2		20/17		20/17.4	
		7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%
2	-2	12	13	12	14	15	17	18	20	18	21
	-1	12	13	13	14	15	17	19	21	19	22
	0	12	14	13	14	16	18	19	22	20	22
	1	12	14	13	15	16	18	20	22	21	23
	2	13	14	14	15	17	19	21	23	22	24
2.5	-2	10	12	11	12	13	15	16	18	17	19
	-1	11	12	11	13	14	16	17	19	18	20
	0	11	12	12	13	14	16	18	20	19	21
	1	11	13	12	14	15	17	19	21	19	21
	2	12	13	13	14	16	17	19	21	20	22
3	-2	10	11	10	12	12	14	15	17	15	18
	-1	10	11	11	12	13	15	16	18	16	18
	0	10	12	11	12	13	15	17	18	17	19
	1	11	12	11	13	14	16	17	19	18	20
	2	11	12	12	13	15	16	18	20	19	21
3.5	-2	9	10	10	11	12	13	14	16	14	16
	-1	9	11	10	11	12	14	15	17	15	17
	0	10	11	10	12	13	14	16	17	16	18
	1	10	11	11	12	13	15	16	18	17	19
	2	10	12	11	12	14	15	17	19	18	20
4	-2	9	10	9	10	11	12	13	15	14	15
	-1	9	10	9	11	11	13	14	16	14	16
	0	9	10	10	11	12	13	15	17	15	17
	1	10	11	10	11	13	14	16	17	16	18
	2	10	11	11	12	13	15	17	18	17	19
4.5	-2	8	9	9	10	10	12	12	14	13	15
	-1	8	10	9	10	11	12	13	15	14	16
	0	9	10	9	10	12	13	14	16	15	16
	1	9	10	10	11	12	13	15	17	16	17
	2	10	11	10	11	13	14	16	17	17	18

(-) Uphill

(+) Downhill

(Continued from page 9)

TORNADO - MINI SPRINKLER

Green Nozzle - 75 lph

Emitter Spacing (m)	Slope (%)	Pipe Diameter in mm (OD/ID)									
		16/13.2		16/13.6		17.8/15.2		20/17		20/17.4	
		7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%
5	-2	8	9	8	9	10	11	12	13	12	14
	-1	8	9	9	10	10	12	13	14	13	15
	0	8	9	9	10	11	12	14	15	14	16
	1	9	10	9	10	12	13	15	16	15	17
	2	9	10	10	11	12	13	15	17	16	18
5.5	-2	7	8	8	9	9	11	11	13	12	13
	-1	8	9	8	9	10	11	12	14	13	14
	0	8	9	9	10	11	12	13	15	14	15
	1	9	9	9	10	11	13	14	16	15	16
	2	9	10	9	10	12	13	15	16	16	17
6	-2	7	8	7	8	9	10	11	12	11	13
	-1	7	8	8	9	10	11	12	13	12	14
	0	8	9	8	9	10	11	13	14	13	15
	1	8	9	9	10	11	12	14	15	14	16
	2	9	10	9	10	12	13	15	16	15	17
6.5	-2	7	8	7	8	9	10	10	12	11	12
	-1	7	8	8	9	9	10	11	13	12	13
	0	8	9	8	9	10	11	12	14	13	14
	1	8	9	9	9	11	12	13	15	14	15
	2	8	9	9	10	11	12	14	15	15	16

(-) Uphill

(+) Downhill

TORNADO - MINI SPRINKLER**Red Nozzle - 100 lph**

Maximum No. of Emitters per Lateral

(Max. Flow Rate Variation - 7.5% or 10%)

Emitter Spacing (m)	Slope (%)	Pipe Diameter in mm (OD/ID)									
		16/13.2		16/13.6		17.8/15.2		20/17		20/17.4	
		7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%
2	-2	9	10	9	11	12	13	14	16	15	17
	-1	9	10	10	11	12	14	15	17	15	17
	0	9	11	10	11	12	14	15	17	16	18
	1	10	11	10	12	13	14	16	18	16	18
	2	10	11	11	12	13	15	16	18	17	19
2.5	-2	8	9	9	10	10	12	13	15	13	15
	-1	8	10	9	10	11	12	13	15	14	16
	0	9	10	9	10	11	13	14	16	15	16
	1	9	10	9	11	12	13	15	16	15	17
	2	9	10	10	11	12	13	15	17	16	18
3	-2	8	9	8	9	10	11	12	13	12	14
	-1	8	9	8	9	10	11	12	14	13	15
	0	8	9	9	10	11	12	13	15	14	15
	1	8	9	9	10	11	12	14	15	14	16
	2	9	10	9	10	11	13	14	16	15	16
3.5	-2	7	8	7	9	9	10	11	13	11	13
	-1	7	8	8	9	9	11	12	13	12	14
	0	8	9	8	9	10	11	12	14	13	14
	1	8	9	8	9	10	12	13	14	13	15
	2	8	9	9	10	11	12	13	15	14	16
4	-2	7	8	7	8	8	10	10	12	11	12
	-1	7	8	7	8	9	10	11	12	11	13
	0	7	8	8	9	9	11	12	13	12	14
	1	7	8	8	9	10	11	12	14	13	14
	2	8	9	8	9	10	11	13	14	13	15
4.5	-2	6	7	7	8	8	9	10	11	10	12
	-1	7	7	7	8	8	10	10	12	11	12
	0	7	8	7	8	9	10	11	12	12	13
	1	7	8	8	8	9	11	12	13	12	14
	2	7	8	8	9	10	11	12	14	13	14

(-) Uphill

(+) Downhill

(Continued from page 11)

TORNADO - MINI SPRINKLER

Red Nozzle - 100 lph

Emitter Spacing (m)	Slope (%)	Pipe Diameter in mm (OD/ID)									
		16/13.2		16/13.6		17.8/15.2		20/17		20/17.4	
		7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%
5	-2	6	7	6	7	8	9	9	11	10	11
	-1	6	7	7	8	8	9	10	11	10	12
	0	7	7	7	8	9	10	11	12	11	12
	1	7	8	7	8	9	10	11	13	12	13
	2	7	8	8	8	9	11	12	13	13	14
5.5	-2	6	7	6	7	7	8	9	10	9	11
	-1	6	7	6	7	8	9	9	11	10	11
	0	6	7	7	8	8	9	10	12	11	12
	1	7	7	7	8	9	10	11	12	11	13
	2	7	8	7	8	9	10	12	13	12	13
6	-2	5	6	6	7	7	8	8	10	9	10
	-1	6	7	6	7	7	9	9	10	9	11
	0	6	7	6	7	8	9	10	11	10	12
	1	6	7	7	8	8	9	11	12	11	12
	2	7	7	7	8	9	10	11	12	12	13
6.5	-2	5	6	6	6	7	8	8	9	8	10
	-1	6	6	6	7	7	8	9	10	9	10
	0	6	7	6	7	8	9	10	11	10	11
	1	6	7	7	7	8	9	10	11	11	12
	2	6	7	7	8	9	10	11	12	11	13

(-) Uphill

(+) Downhill

TORNADO - MINI SPRINKLER**White Nozzle - 115 lph**

Maximum No. of Emitters per Lateral

(Max. Flow Rate Variation - 7.5% or 10%)

Emitter Spacing (m)	Slope (%)	Pipe Diameter in mm (OD/ID)									
		16/13.2		16/13.6		17.8/15.2		20/17		20/17.4	
		7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%
2	-2	8	9	9	10	11	12	13	15	14	15
	-1	9	10	9	10	11	12	14	15	14	16
	0	9	10	9	10	11	13	14	16	15	16
	1	9	10	10	11	12	13	15	16	15	17
	2	9	10	10	11	12	13	15	17	16	17
2.5	-2	8	9	8	9	10	11	12	13	12	14
	-1	8	9	8	9	10	11	12	14	13	14
	0	8	9	9	9	10	12	13	14	14	15
	1	8	9	9	10	11	12	13	15	14	16
	2	8	9	9	10	11	12	14	15	15	16
3	-2	7	8	7	8	9	10	11	12	11	13
	-1	7	8	8	9	9	11	12	13	12	13
	0	7	8	8	9	10	11	12	13	13	14
	1	8	8	8	9	10	11	13	14	13	15
	2	8	9	8	9	10	12	13	14	14	15
3.5	-2	7	7	7	8	8	10	10	12	11	12
	-1	7	8	7	8	9	10	11	12	11	13
	0	7	8	7	8	9	10	11	13	12	13
	1	7	8	8	8	10	11	12	13	12	14
	2	7	8	8	9	10	11	12	14	13	14
4	-2	6	7	7	7	8	9	10	11	10	11
	-1	6	7	7	8	8	9	10	11	11	12
	0	7	7	7	8	9	10	11	12	11	12
	1	7	8	7	8	9	10	11	12	12	13
	2	7	8	8	8	9	10	12	13	12	14
4.5	-2	6	7	6	7	8	9	9	10	10	11
	-1	6	7	6	7	8	9	10	11	10	11
	0	6	7	7	7	8	9	10	11	11	12
	1	7	7	7	8	9	10	11	12	11	13
	2	7	7	7	8	9	10	11	12	12	13

(-) Uphill

(+) Downhill

(Continued from page 13)

TORNADO - MINI SPRINKLER

White Nozzle - 115 lph

Emitter Spacing (m)	Slope (%)	Pipe Diameter in mm (OD/ID)									
		16/13.2		16/13.6		17.8/15.2		20/17		20/17.4	
		7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%
5	-2	6	6	6	7	7	8	9	10	9	10
	-1	6	7	6	7	8	8	9	10	10	11
	0	6	7	6	7	8	9	10	11	10	11
	1	6	7	7	7	8	9	10	12	11	12
	2	6	7	7	8	9	10	11	12	11	13
5.5	-2	5	6	6	6	7	8	8	9	9	10
	-1	6	6	6	7	7	8	9	10	9	10
	0	6	6	6	7	8	9	9	11	10	11
	1	6	7	6	7	8	9	10	11	11	12
	2	6	7	7	7	8	9	11	12	11	12
6	-2	5	6	5	6	7	7	8	9	8	9
	-1	5	6	6	6	7	8	9	10	9	10
	0	6	6	6	7	7	8	9	10	10	11
	1	6	6	6	7	8	9	10	11	10	11
	2	6	7	6	7	8	9	10	11	11	12
6.5	-2	5	6	5	6	6	7	8	9	8	9
	-1	5	6	5	6	7	8	8	9	9	10
	0	5	6	6	6	7	8	9	10	9	10
	1	6	6	6	7	8	8	9	10	10	11
	2	6	7	6	7	8	9	10	11	11	12

(-) Uphill

(+) Downhill

"RONDO"

Medium - Range Mini Sprinkler

MAIN FEATURES

- * Moderate to high wetting range
- * Moderate irrigation flow rate
- * Uniformed water distribution
- * Effective under conditions of poor water quality.
- * Suitable for upside-down assembly.
- * Spinners-colour coded for different applications:
Black - standard.
Blue - for upside - down flat stream.
Violet - for flat stream.
Green - for upside - down convex stream.

ADDITIONAL FEATURES

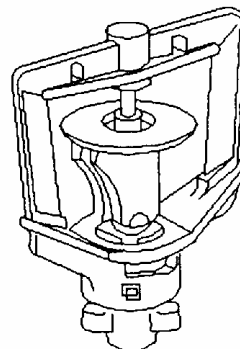
- * Anti - ant adapter - insect proof accessory.
- * Deflectors - for ray patterns 2x30°, 90°, and 180°
(See Rondo angle stream)

OPERATING RANGE

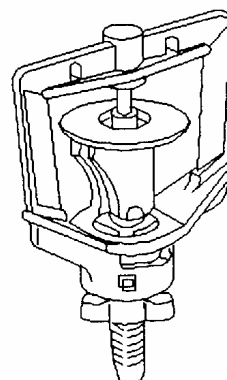
- * Working pressure range
1.5 - 3.0 bar.
- * Nominal flow rate:
39, 50, 75, 100, 135, 175,
215, 290, and 300 l/h at 2.0 bar

MODELS AND TYPES

- * Conic Press-fit connection.
- * Threaded connection.
- * Colour coded nozzles for flow rate identification.



Conic connection



10/32" Threaded connection



3/8" Threaded Connection

“RONDO”
MINI SPRINKLER
FLOW RATE DATA

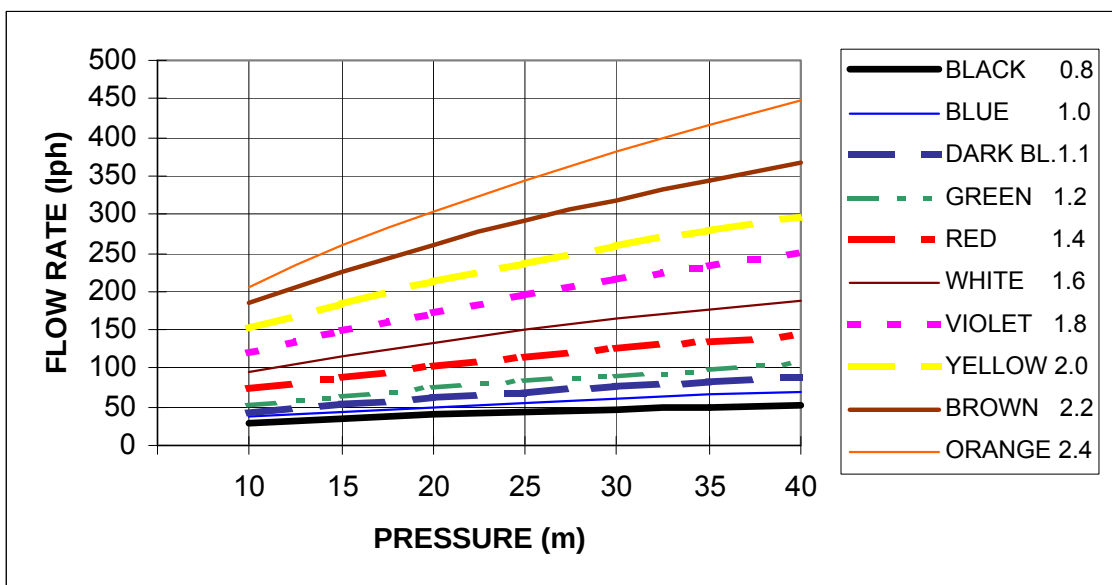
NOZZLE COLOR (mm)	Q=A _x H ^A B ^B **		%DH ***	FLOW RATE (LPH) AT PRESSURE						
	A	B		10m	15m	20m	25m	30m	35m	40m
BLACK (0.8)	11.6	0.4132	25.9	29.7	35.1	39.5	43.3	46.7	49.8	52.6
BLUE (1.0)	12.7864	0.4587	23	36.8	44.3	50.5	56.0	60.9	65.3	69.4
DARK BL.(1.1)	14.347	0.492	21.3	44.4	54.6	62.6	70.1	76.7	82.8	88.6
GREEN (1.2)	15.7554	0.5157	20	51.7	63.7	73.9	82.9	91.0	98.6	105.6
RED (1.4)	24.2567	0.4845	21.7	74.0	90.1	103.6	115.4	126.0	135.8	144.9
WHITE (1.6)	30.0681	0.4984	21	94.7	116.0	133.8	149.6	163.8	176.9	189.0
VIOLET (1.8)	35.647	0.529	19.7	120.5	149.3	173.9	195.7	215.5	233.8	250.9
YELLOW (2.0)	49.9256	0.4847	21.7	152.4	185.5	213.3	237.6	259.6	279.7	298.4
BROWN (2.2)	58.6621	0.4972	21	184.3	225.5	260.2	290.7	318.3	343.6	367.2
ORANGE (2.4)	57.1814	0.5578	18.6	206.6	259.0	304.1	344.4	381.2	415.5	447.6

NOTE: TESTED WITHOUT MICRO-TUBE

** - Q=LPH H=m.

*** - %DH - MAXIMUM ALLOWABLE HEAD LOSS DIFFERENCE
ALONG A LATERAL (AS PERCENT OF THE WORKING
PRESSURE) TO KEEP FLOW RATE DIFFERENCES ≤ 10%
OF WORKING FLOW RATE.

PERFORMANCE CHART
Working Pressure Range 15-30m.



RONDO - MINI SPRINKLER

Nozzle code φ(mm)	Pressure (Bar)	Discharge (Lph)	Wetting Radius of spinners & patterns (m')						
			Black *	Violet *	Green **	Blue **	180° *	90° *	2*30° *
Black (0.85)	1.5	35	3.0	2.0	4.0	3.5	1.0	2.0	2.0
	2.0	40	3.0	2.2	4.3	3.5	1.1	2.3	2.2
	2.5	43	3.0	2.3	4.3	3.5	1.2	2.4	2.3
	3.0	47	3.0	2.3	4.3	3.5			
Blue (1.0)	1.5	44	3.3	2.3	4.0	3.5	1.1	2.4	2.2
	2.0	51	3.3	2.3	4.3	3.8	1.2	2.5	2.3
	2.5	56	3.8	2.5	4.3	3.8	1.5	2.6	2.5
	3.0	61	3.8	2.5	4.5	3.8			
Dark Blue (1.1)	1.5	55	3.5	2.5	4.0	3.5	1.3	2.6	2.2
	2.0	63	3.5	2.6	4.3	3.8	1.4	2.7	2.3
	2.5	70	3.5	2.7	4.3	3.8	1.6	2.8	2.5
	3.0	77	3.5	2.5	4.3	3.8			
Green (1.2)	1.5	64	4.3	2.5	4.8	4.0	1.5	2.8	2.2
	2.0	74	4.3	2.8	4.8	4.0	1.6	2.9	2.3
	2.5	83	4.3	2.8	5.0	4.0	1.9	2.9	2.5
	3.0	91	4.3	2.8	4.8	4.0			
Red (1.4)	1.5	90	4.3	3.5	5.0	4.0	2.0	3.0	2.5
	2.0	104	4.5	3.8	5.3	4.3	2.0	3.1	2.6
	2.5	115	4.5	3.8	5.3	4.3	2.1	3.1	2.7
	3.0	126	4.5	3.8	5.3	4.3			
White (1.6)	1.5	116	4.5	3.5	5.3	4.3	2.3	3.4	2.5
	2.0	134	4.5	3.8	5.5	4.5	2.4	3.5	2.5
	2.5	150	4.5	4.0	5.5	4.5	2.4	3.5	2.7
	3.0	164	4.5	4.0	5.5	4.5			
Violet (1.8)	1.5	149	4.5	4.0	5.5	4.5	2.4	3.6	2.6
	2.0	174	5.0	4.0	5.8	4.8	2.6	3.7	2.7
	2.5	196	5.0	4.0	5.8	4.8	2.7	3.9	2.8
	3.0	216	5.3	4.0	5.8	4.8			
Yellow (2.0)	1.5	186	5.3	4.0	5.5	4.8	2.6	3.8	2.7
	2.0	213	5.5	4.3	5.8	4.8	2.8	3.9	3.0
	2.5	238	5.5	4.3	5.8	5.0	2.9	4.1	3.0
	3.0	260	5.8	4.3	5.8	4.8			
Brown (2.2)	1.5	226	5.5	4.3	5.8	4.8	2.8	3.9	2.8
	2.0	260	5.8	4.5	5.8	4.8	3.0	4.2	3.1
	2.5	291	5.8	4.8	5.8	5.0	3.1	4.6	3.2
	3.0	318	6.0	4.8	5.8	4.8			
Orange (2.4)	1.5	259	5.5	4.5	5.5	4.8	3.1	4.0	3.0
	2.0	304	5.8	4.8	5.8	4.8	3.3	4.6	3.2
	2.5	344	5.8	4.8	5.8	5.0	3.4	5.1	3.3
	3.0	381	6.0	4.8	5.5	5.0			

Spinner
Type

Spinner code	Position	Stream type
Black	Upright	Convex
Violet	Upright	Flat
Green	Inverted	Convex
Blue	Inverted	Flat

Nozzle * 25 cm above ground
height: ** 200 cm above ground

"RONDO" MINI SPRINKLER

WITH" METEOR" **PRESSURE REGULATOR - 2 bar**

FLOW RATE TABLE

Nozzle Code	Flow Rate (lph) at pressure (m)									
	5m	10m	15m	17.5m	20m	22.5m	25m	30m	35m	40m
BLACK*	20	29	35	38	40	40	42	43	43	43
BLUE*	27	37	44	47	49	50	51	52	53	54
GREEN*	36	51	63	68	69	72	72	73	75	76
RED*	50	70	85	92	100	98	100	100	102	104
WHITE**	67	91	112	122	129	132	135	139	141	143
VIOLET**	83	118	146	157	166	169	172	175	180	184
YELLOW***	98	140	174	187	201	206	210	214	220	224
BROWN***	118	167	208	223	239	250	254	260	266	272
ORANGE***	134	188	237	254	271	286	294	300	307	312

"RONDO" MINI SPRINKLER

WITH" METEOR" **PRESSURE REGULATOR - 2.5bar**

FLOW RATE TABLE

Nozzle Code	Flow Rate (lph) at pressure (m)									
	5m	10m	15m	20m	22.5m	25m	27m	30m	35m	40m
BLACK*	20	30	37	41	43	44	44	45	46	46
BLUE*	28	38	44	50	52	54	56	57	58	58
GREEN*	36	52	62	72	75	77	79	80	81	82
RED*	49	68	83	97	101	102	104	107	109	110
WHITE**	64	92	114	131	140	145	147	150	155	158
VIOLET**	82	116	144	166	177	186	191	193	198	204
YELLOW***	97	140	174	202	214	226	233	236	240	246
BROWN***	118	167	208	240	255	268	280	287	292	297
ORANGE***	134	192	237	273	290	307	322	332	340	346

* FLEXIBLE TUBE 4/7

** FLEXIBLE TUBE 5/8

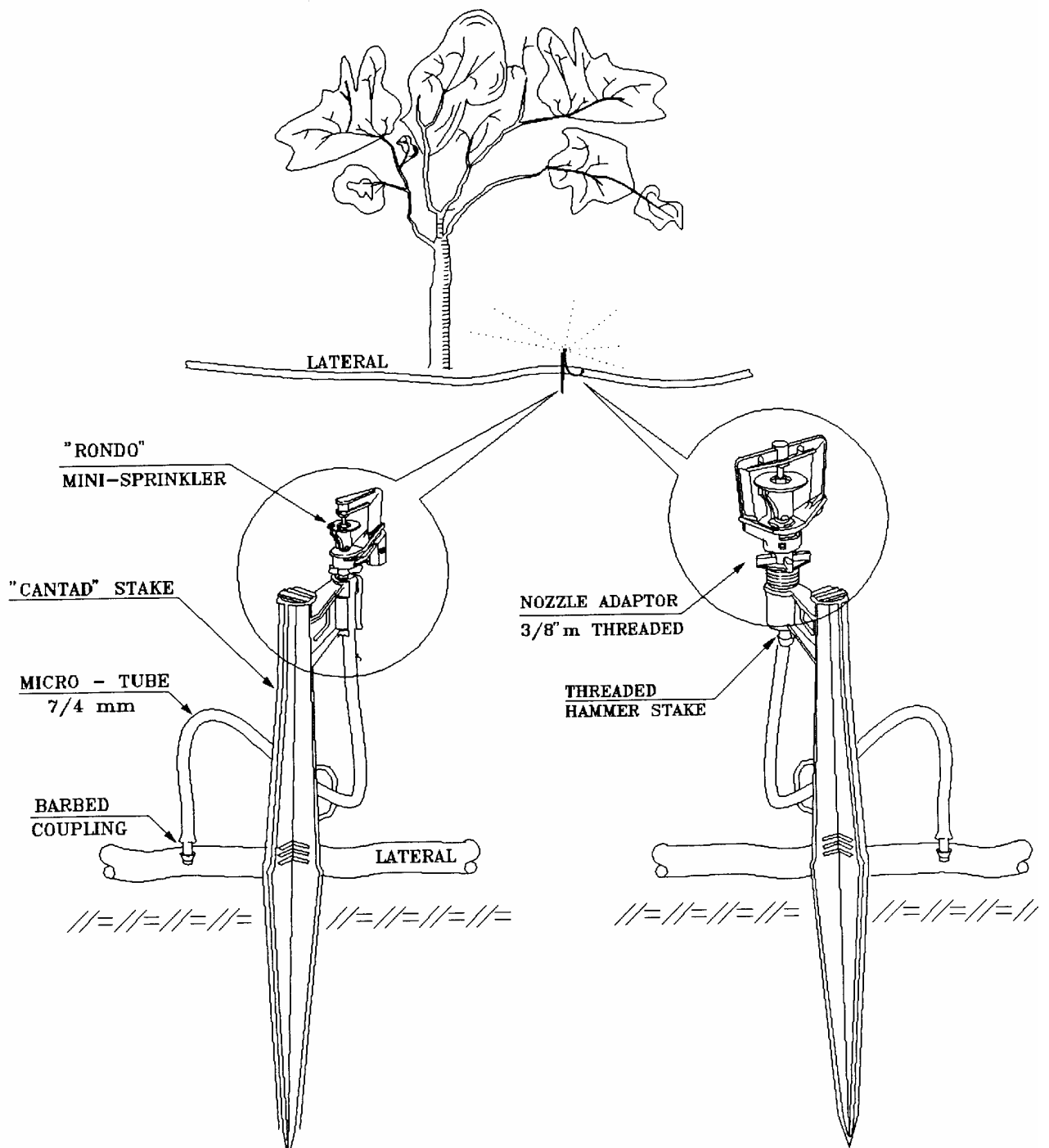
*** FLEXIBLE TUBE 10/14 OR 9/13

ORCHARDS & PLANTATION

"RONDO"

MINI-SPRINKLER

UPRIGHT POSITION



RONDO "BLACK" SWIVEL

CHRISTIANSEN UNIFORMITY COEF .(CU) % CHART

BASEPRESSURE -2.0 bar

UPRIGHT POSITION

NOZZLE HEIGHT - **25** cm

Square Spacing (m)	Nozzle code / CU(%)								
	Black 39 lph	Blue 50 lph	Green 75 lph	Red 100 lph	White 135 lph	Violet 175 lph	Yellow 215 lph	Brown 260 lph	Orange 300 lph
2x2	95	96	98	99	100	99	98	98	98
2.5x2.5	94	88	96	97	98	98	97	97	97
3x3	87	95	87	94	94	93	94	94	95
3.5x3.5	84	82	92	80	86	87	91	92	94
4x4	84	75	89	83	92	82	87	92	92
4.5x4.5	81	72	79	86	89	89	91	94	95
5x5		67	83	76	82	84	89	90	91
5.5x5.5		68	83	72	83	80	86	90	90
6x6			78	77	86	82	88	92	91
6.5x6.5				79	84	84	90	92	92
7x7				72	79	79	89	87	91
7.5x7.5				64	75	72	81	82	87
8x8						68	75	76	82

* Coefficient of Uniformity (standards)

-Overlapping sprinklers standard equal to or greater than 84%

-Single sprinkler- no standard established. Uniformity

Increases with the value.

RONDO MINI - SPRINKLER

BLACK NOZZLE - 39 LPH

BLACK SWIVEL

CHRISTIANSEN UNIFORMITY COEF. (CU) % CHART

BASEPRESSURE -2.0 bar

UPRIGHT POSITION

NOZZLE HEIGHT - **25** cm

Spacing Between Emitters (m)	Spacing between laterals (m) / CU(%)								
	2	2.5	3	3.5	4	4.5	5	5.5	6
2	95	95	91	88	90	94	88	78	*69*
2.5	95	94	91	87	89	92	87	78	*69*
3	91	91	87	85	88	88	84	*75*	*67*
3.5	88	87	85	84	85	84	81	*72*	*64*
4	90	89	88	85	84	83	*80*	*75*	*67*
4.5	94	92	88	84	83	*81*	*82*	*77*	*67*
5	88	87	84	81	*80*	*82*	*81*	*74*	*65*
5.5	78	78	*75*	*72*	*75*	*77*	*74*	*68*	*62*
6	*69*	*69*	*67*	*64*	*67*	*67*	*65*	*62*	*56*

☐ WARNING - Insufficient EMISSION in part's of Field!!! (Less then 1 mm/h)

* Coefficient of Uniformity (standards)

-Overlapping sprinklers standard equal to or greater than 84%

-Single sprinkler- no standard established. Uniformity

Increases with the value.

RONDO MINI - SPRINKLER

BLUE NOZZLE - 50 LPH

BLACK SWIVEL

CHRISTIANSEN UNIFORMITY COEF. (CU) % CHART

BASEPRESSURE -2.0 bar

UPRIGHT POSITION

NOZZLE HEIGHT - **25** cm

Spacing Between Emitters (m)	Spacing between laterals (m) / CU(%)												
	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8
2	96	91	96	86	76	74	78	85	91	92	84	*73*	*65*
2.5	91	88	91	88	80	78	81	85	86	85	78	*70*	*62*
3	96	91	95	88	80	78	81	84	87	84	*77*	*69*	*62*
3.5	86	88	88	82	77	78	81	85	87	79	*74*	*66*	*59*
4	76	80	80	77	75	76	75	75	74	*70*	*66*	*61*	*55*
4.5	74	78	78	78	76	72	69	69	68	*68*	*65*	*59*	*54*
5	78	81	81	81	75	69	67	67	*67*	*69*	*66*	*60*	*54*
5.5	85	85	84	85	75	69	67	*68*	*69*	*70*	*67*	*62*	*55*
6	91	86	87	87	74	68	*67*	*69*	*70*	*72*	*69*	*62*	*54*
6.5	92	85	84	79	*70*	*68*	*69*	*70*	*72*	*72*	*68*	*59*	*51*
7	84	78	*77*	*74*	*66*	*65*	*66*	*67*	*69*	*68*	*63*	*56*	*47*
7.5	*73*	*70*	*69*	*66*	*61*	*59*	*60*	*62*	*62*	*59*	*56*	*47*	*38*
8	*65*	*62*	*62*	*59*	*55*	*54*	*54*	*55*	*54*	*51*	*47*	*38*	*32*

☐ WARNING - Insufficient EMISSION in part's of Field!!! (Less then 1 mm/h)

* Coefficient of Uniformity (standards)

-Overlapping sprinklers standard equal to or greater than 84%

-Single sprinkler- no standard established. Uniformity

Increases with the value.

RONDO MINI - SPRINKLER

GREEN NOZZLE - 75 LPH

BLACK SWIVEL

CHRISTIANSEN UNIFORMITY COEF. (CU) % CHART

BASEPRESSURE -2.0 bar

UPRIGHT POSITION

NOZZLE HEIGHT - **25** cm

Spacing Between Emitters (m)	Spacing between laterals (m) / CU(%)												
	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8
2	98	97	88	92	95	84	80	80	81	85	90	90	88
2.5	97	96	91	93	92	85	84	85	88	90	91	87	78
3	88	91	87	89	90	87	85	85	84	85	83	79	*74*
3.5	92	93	89	92	92	86	82	81	81	83	83	81	*75*
4	95	92	90	92	89	82	82	84	86	86	85	80	*73*
4.5	84	85	87	86	82	79	80	84	84	81	79	*75*	*69*
5	80	84	85	82	82	80	83	85	83	79	*75*	*73*	*69*
5.5	80	85	85	81	84	84	85	83	81	*76*	*74*	*73*	*71*
6	81	88	84	81	86	84	83	81	78	*75*	*74*	*75*	*72*
6.5	85	90	85	83	86	81	79	*76*	*75*	*73*	*74*	*74*	*72*
7	90	91	83	83	85	79	*75*	*74*	*74*	*74*	*74*	*74*	*72*
7.5	92	87	79	81	80	*75*	*73*	*73*	*75*	*74*	*74*	*75*	*69*
8	88	78	*74*	*75*	*73*	*69*	*69*	*71*	*72*	*72*	*72*	*69*	*66*

☐ WARNING - Insufficient EMISSION in part's of Field!!! (Less then 1 mm/h)

* Coefficient of Uniformity (standards)

-Overlapping sprinklers standard equal to or greater than 84%

-Single sprinkler- no standard established. Uniformity

Increases with the value.

RONDO MINI - SPRINKLER

RED NOZZLE - 100 LPH

BLACK SWIVEL

CHRISTIANSEN UNIFORMITY COEF. (CU) % CHART

BASEPRESSURE -2.0 bar

UPRIGHT POSITION

NOZZLE HEIGHT - **25** cm

Spacing Between Emitters (m)	Spacing between laterals (m) / CU(%)												
	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8
2	99	96	95	78	78	90	86	83	80	78	75	76	78
2.5	96	97	92	85	87	95	85	80	78	78	78	80	83
3	95	92	94	88	87	88	82	82	84	84	82	83	83
3.5	78	85	88	80	81	85	83	84	83	77	77	75	74
4	78	87	87	81	83	86	83	79	73	72	72	72	72
4.5	90	95	88	85	86	86	81	76	74	76	78	76	75
5	86	85	82	83	83	81	76	74	74	76	78	75	73
5.5	83	80	82	84	79	76	74	72	74	78	77	74	*71*
6	80	78	84	83	73	74	74	74	77	79	76	73	*69*
6.5	78	78	84	77	72	76	76	78	79	79	76	*71*	*68*
7	75	78	82	77	72	78	78	77	76	76	*72*	*68*	*66*
7.5	76	80	83	75	72	76	75	74	73	*71*	*68*	*64*	*63*
8	78	83	83	74	72	75	73	*71*	*69*	*68*	*66*	*63*	*61*

☐ WARNING - Insufficient EMISSION in part's of Field!!! (Less then 1 mm/h)

* Coefficient of Uniformity (standards)

-Overlapping sprinklers standard equal to or greater than 84%

-Single sprinkler- no standard established. Uniformity

Increases with the value.

RONDO MINI - SPRINKLER

WHITE NOZZLE - 135 LPH

BLACK SWIVEL

CHRISTIANSEN UNIFORMITY COEF. (CU) % CHART

BASEPRESSURE -2.0 bar

UPRIGHT POSITION

NOZZLE HEIGHT - **25** cm

Spacing Between Emitters (m)	Spacing between laterals (m) / CU(%)												
	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8
2	100	99	94	85	88	97	89	85	83	83	84	86	88
2.5	99	98	94	90	94	97	88	84	84	85	87	90	91
3	94	94	94	91	92	93	88	87	88	90	90	89	86
3.5	85	90	91	86	89	91	88	88	86	83	84	81	81
4	88	94	92	89	92	92	87	84	81	82	82	82	82
4.5	97	97	93	91	92	89	85	84	84	85	86	86	84
5	89	88	88	88	87	85	82	82	83	86	86	84	81
5.5	85	84	87	88	84	84	82	83	85	86	85	82	*77*
6	83	84	88	86	81	84	83	85	86	86	83	79	*76*
6.5	83	85	90	83	82	85	86	86	86	84	81	*77*	*75*
7	84	87	90	84	82	86	86	85	83	81	*79*	*76*	*75*
7.5	86	90	89	81	82	86	84	82	79	*77*	*76*	*75*	*75*
8	88	91	86	81	82	84	81	*77*	*76*	*75*	*75*	*75*	*74*

☐ WARNING - Insufficient EMISSION in part's of Field!!! (Less then 1 mm/h)

* Coefficient of Uniformity (standards)

-Overlapping sprinklers standard equal to or greater than 84%

-Single sprinkler- no standard established. Uniformity

Increases with the value.

RONDO MINI - SPRINKLER

VIOLET NOZZLE - 175 LPH

BLACK SWIVEL

CHRISTIANSEN UNIFORMITY COEF. (CU) % CHART

BASEPRESSURE -2.0 bar

UPRIGHT POSITION

NOZZLE HEIGHT - **25** cm

Spacing Between Emitters (m)	Spacing between laterals (m) / CU(%)												
	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8
2	99	99	96	84	77	85	94	92	87	82	79	77	77
2.5	99	98	94	86	83	91	96	90	85	81	80	80	83
3	96	94	93	89	87	93	94	89	86	85	85	86	86
3.5	84	86	89	87	84	88	89	88	87	84	84	82	80
4	77	83	87	84	82	86	87	85	81	77	76	76	75
4.5	85	91	93	88	86	89	87	82	78	76	77	77	79
5	94	96	94	89	87	87	84	81	79	79	80	81	81
5.5	92	90	89	88	85	82	81	80	80	81	82	83	80
6	87	85	86	87	81	78	79	80	82	84	84	82	79
6.5	82	81	85	84	77	76	79	81	84	84	83	79	74
7	79	80	85	84	76	77	80	82	84	83	79	76	*72*
7.5	77	80	86	82	76	77	81	83	82	79	76	*72*	*69*
8	77	83	86	80	75	79	81	80	79	74	*72*	*69*	*68*

☐ WARNING - Insufficient EMISSION in part's of Field!!! (Less then 1 mm/h)

* Coefficient of Uniformity (standards)

-Overlapping sprinklers standard equal to or greater than 84%

-Single sprinkler- no standard established. Uniformity

Increases with the value.

RONDO MINI - SPRINKLER

YELLOW NOZZLE - 215 LPH

BLACK SWIVEL

CHRISTIANSEN UNIFORMITY COEF. (CU) % CHART

BASEPRESSURE -2.0 bar

UPRIGHT POSITION

NOZZLE HEIGHT - **25** cm

Spacing Between Emitters (m)	Spacing between laterals (m) / CU(%)														
	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9
2	98	98	97	90	84	88	95	97	96	92	89	86	83	82	81
2.5	98	97	95	91	88	92	97	96	93	91	89	88	86	85	82
3	97	95	94	92	90	94	97	94	93	91	91	90	87	84	80
3.5	90	91	92	91	89	91	92	92	92	91	90	87	83	81	75
4	84	88	90	89	87	89	90	90	89	86	85	83	80	77	74
4.5	88	92	94	91	89	91	91	88	86	84	84	82	81	79	75
5	95	97	97	92	90	91	89	87	86	86	85	84	83	80	76
5.5	97	96	94	92	90	88	87	86	87	86	86	86	84	80	75
6	96	93	93	92	89	86	86	87	88	88	88	87	84	79	73
6.5	92	91	91	91	86	84	86	86	88	90	90	87	82	77	*73*
7	89	89	91	90	85	84	85	86	88	90	89	85	80	*76*	*72*
7.5	86	88	90	87	83	82	84	86	87	87	85	81	*77*	*74*	*71*
8	83	86	87	83	80	81	83	84	84	82	80	*77*	*75*	*72*	*71*
8.5	82	85	84	81	77	79	80	80	79	77	*76*	*74*	*72*	*71*	*70*
9	81	82	80	75	74	75	76	75	73	*73*	*72*	*71*	*71*	*70*	*68*

☐ WARNING - Insufficient EMISSION in part's of Field!!! (Less then 1 mm/h)

* Coefficient of Uniformity (standards)

-Overlapping sprinklers standard equal to or greater than 84%

-Single sprinkler- no standard established. Uniformity

Increases with the value.

RONDO MINI - SPRINKLER

BROWN NOZZLE - 260 LPH

BLACK SWIVEL

CHRISTIANSEN UNIFORMITY COEF. (CU) % CHART

BASEPRESSURE -2.0 bar

UPRIGHT POSITION

NOZZLE HEIGHT - **25** cm

Spacing Between Emitters (m)	Spacing between laterals (m) / CU(%)												
	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8
2	98	98	96	91	90	96	98	95	94	92	91	89	86
2.5	98	97	95	92	93	97	96	94	93	92	92	90	87
3	96	95	94	93	94	96	95	94	93	93	92	90	85
3.5	91	92	93	92	92	94	94	93	93	92	90	86	82
4	90	93	94	92	92	94	93	92	90	89	88	85	81
4.5	96	97	96	94	94	94	91	90	89	89	89	86	82
5	98	96	95	94	93	91	90	90	90	90	89	86	82
5.5	95	94	94	93	92	90	90	90	91	91	89	86	81
6	94	93	93	93	90	89	90	91	92	92	90	86	81
6.5	92	92	93	92	89	89	90	91	92	92	90	85	80
7	91	92	92	90	88	89	89	89	90	90	87	84	*80*
7.5	89	90	90	86	85	86	86	86	86	85	84	*82*	*78*
8	86	87	85	82	81	82	82	81	81	80	*80*	*78*	*76*

☐ WARNING - Insufficient EMISSION in part's of Field!!! (Less then 1 mm/h)

* Coefficient of Uniformity (standards)

-Overlapping sprinklers standard equal to or greater than 84%

-Single sprinkler- no standard established. Uniformity

Increases with the value.

RONDO MINI - SPRINKLER

ORANGE NOZZLE - 300 LPH

BLACK SWIVEL

CHRISTIANSEN UNIFORMITY COEF. (CU) % CHART

BASE PRESSURE -2.0 bar

UPRIGHT POSITION

NOZZLE HEIGHT - **25** cm

Spacing Between Emitters (m)	Spacing between laterals (m) / CU(%)														
	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9
2	98	98	97	94	91	94	98	95	93	92	92	92	89	87	83
2.5	98	97	96	94	92	95	97	94	92	92	92	92	91	87	82
3	97	96	95	94	94	96	96	94	93	92	93	93	91	86	80
3.5	94	94	94	94	94	95	95	94	93	93	93	92	87	83	76
4	91	92	94	94	92	94	95	93	92	91	91	89	86	81	76
4.5	94	95	96	95	94	95	94	91	90	90	90	89	86	82	77
5	98	97	96	95	95	94	91	91	90	91	91	90	87	82	76
5.5	95	94	94	94	93	91	91	90	91	91	91	90	86	81	76
6	93	92	93	93	92	90	90	91	91	92	92	90	86	81	75
6.5	92	92	92	93	91	90	91	91	92	92	92	90	86	80	*76*
7	92	92	93	93	91	90	91	91	92	92	91	89	85	80	*76*
7.5	92	92	93	92	89	89	90	90	90	90	89	87	*84*	*80*	*75*
8	89	91	91	87	86	86	87	86	86	86	85	*84*	*82*	*78*	*74*
8.5	87	87	86	83	81	82	82	81	81	80	80	*80*	*78*	*76*	*73*
9	83	82	80	76	76	77	76	76	75	*76*	*76*	*75*	*74*	*73*	*70*

☐ WARNING - Insufficient EMISSION in part's of Field!!! (Less then 1 mm/h)

* Coefficient of Uniformity (standards)

-Overlapping sprinklers standard equal to or greater than 84%

-Single sprinkler- no standard established. Uniformity

Increases with the value.

RONDO "BLACK" SWIVEL

CHRISTIANSEN UNIFORMITY COEF. (CU) % CHART

BASEPRESSURE -2.0 bar

UPRIGHT POSITION

NOZZLE HEIGHT - **80** cm

Square Spacing (m)	Nozzle code / CU(%)								
	Black 39 lph	Blue 50 lph	Green 75 lph	Red 100 lph	White 135 lph	Violet 175 lph	Yellow 215 lph	Brown 260 lph	Orange 300 lph
2x2	95	99	98 0	100 0	99 0	99	97	96	95
2.5x2.5	95	95	97 0	98 0	99 0	99	97	96	95
3x3	90	85	90 0	95 0	94 0	95	94	94	94
3.5x3.5	87	90	80 0	83 0	89 0	92	92	93	93
4x4	87	88	89 0	85 0	82 0	84	88	90	91
4.5x4.5	84	78	83 0	89 0	90 0	89	90	91	92
5x5	81	81	76 0	81 0	86 0	89	92	92	92
5.5x5.5		81	80 0	81 0	80 0	83	87	88	88
6x6		75	82 0	84 0	82 0	82	86	87	87
6.5x6.5			74 0	85 0	85 0	85	88	88	88
7x7			68 0	79 0	83 0	86	90	90	90
7.5x7.5				70 0	76 0	79	86	87	87
8x8					69 0	73	80	82	83

* ☐ * WARNING - Insufficient EMISSION in part's of Field!!! (Less then 1 mm/h)

* Coefficient of Uniformity (standards)

-Overlapping sprinklers standard equal to or greater than 84%

-Single sprinkler- no standard established. Uniformity

Increases with the value.

RONDO MINI - SPRINKLER

BLACK NOZZLE - 39 LPH

BLACK SWIVEL

CHRISTIANSEN UNIFORMITY COEF. (CU) % CHART

BASEPRESSURE -2.0 bar

UPRIGHT POSITION

NOZZLE HEIGHT - **80** cm

Spacing Between Emitters (m)	Spacing between laterals (m) / CU(%)												
	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8
2	95	94	92	89	91	93	90	81	*73*	*64*	*56*	*47*	*40*
2.5	94	95	93	88	90	90	88	80	*72*	*63*	*54*	*46*	*39*
3	92	93	90	87	90	90	87	*78*	*70*	*61*	*53*	*46*	*39*
3.5	89	88	87	87	89	87	83	*75*	*67*	*60*	*53*	*47*	*40*
4	91	90	90	89	87	86	*82*	*76*	*70*	*62*	*55*	*47*	*41*
4.5	93	90	90	87	86	*84*	*82*	*78*	*72*	*63*	*55*	*46*	*39*
5	90	88	87	83	*82*	*82*	*81*	*78*	*72*	*62*	*52*	*44*	*37*
5.5	81	80	*78*	*75*	*76*	*78*	*78*	*75*	*68*	*58*	*50*	*42*	*33*
6	*73*	*72*	*70*	*67*	*70*	*72*	*72*	*68*	*62*	*52*	*45*	*37*	*29*
6.5	*64*	*63*	*61*	*60*	*62*	*63*	*62*	*58*	*52*	*44*	*36*	*27*	*20*
7	*56*	*54*	*53*	*53*	*55*	*55*	*52*	*50*	*45*	*36*	*28*	*22*	*15*
7.5	*47*	*46*	*46*	*47*	*47*	*46*	*44*	*42*	*37*	*27*	*22*	*14*	*7*
8	*40*	*39*	*39*	*40*	*41*	*39*	*37*	*33*	*29*	*20*	*15*	*7*	*3*

☐ WARNING - Insufficient EMISSION in part's of Field!!! (Less then 1 mm/h)

* Coefficient of Uniformity (standards)

-Overlapping sprinklers standard equal to or greater than 84%

-Single sprinkler- no standard established. Uniformity

Increases with the value.

RONDO MINI - SPRINKLER

BLUE NOZZLE - 50 LPH

BLACK SWIVEL

CHRISTIANSEN UNIFORMITY COEF. (CU) % CHART

BASEPRESSURE -2.0 bar

UPRIGHT POSITION

NOZZLE HEIGHT - **80** cm

Spacing Between Emitters (m)	Spacing between laterals (m) / CU(%)														
	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9
2	99	97	86	91	94	84	79	79	79	84	89	93	88	*80*	*71*
2.5	97	95	90	92	91	85	84	85	87	89	91	87	*77*	*71*	*66*
3	86	90	85	86	89	86	85	83	81	81	80	78	*73*	*68*	*62*
3.5	91	92	86	90	91	84	80	78	78	80	*81*	*79*	*74*	*67*	*61*
4	94	91	89	91	88	80	80	82	83	*84*	*82*	*79*	*72*	*65*	*59*
4.5	84	85	86	84	80	78	79	82	83	*80*	*77*	*74*	*69*	*63*	*58*
5	79	84	85	80	82	79	81	83	81	*77*	*74*	*72*	*69*	*64*	*59*
5.5	79	85	83	78	83	82	83	81	*77*	*75*	*73*	*72*	*71*	*65*	*60*
6	79	87	81	78	*84*	83	81	*77*	*75*	*73*	*72*	*72*	*71*	*65*	*60*
6.5	84	89	81	80	*82*	*80*	*77*	*75*	*73*	*72*	*71*	*72*	*70*	*64*	*59*
7	89	91	80	*81*	*79*	*77*	*74*	*73*	*72*	*71*	*71*	*72*	*70*	*64*	*58*
7.5	93	87	78	*79*	*72*	*74*	*72*	*72*	*72*	*72*	*72*	*72*	*68*	*62*	*55*
8	88	*77*	*73*	*74*	*65*	*69*	*69*	*71*	*71*	*70*	*70*	*68*	*65*	*56*	*49*
8.5	*80*	*71*	*68*	*67*	*59*	*63*	*64*	*65*	*65*	*64*	*64*	*62*	*56*	*50*	*43*
9	*71*	*66*	*62*	*61*	*41*	*58*	*59*	*60*	*60*	*59*	*58*	*55*	*49*	*43*	*37*

□ WARNING - Insufficient EMISSION in part's of Field!!! (Less then 1 mm/h)

* Coefficient of Uniformity (standards)

-Overlapping sprinklers standard equal to or greater than 84%

-Single sprinkler- no standard established. Uniformity

Increases with the value.

RONDO MINI - SPRINKLER

GREEN NOZZLE - 75 LPH

BLACK SWIVEL

CHRISTIANSEN UNIFORMITY COEF. (CU) % CHART

BASEPRESSURE -2.0 bar

UPRIGHT POSITION

NOZZLE HEIGHT - **80** cm

Spacing Between Emitters (m)	Spacing between laterals (m) / CU(%)														
	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9
2	98	99	88	78	85	93	86	80	76	73	74	80	85	89	87
2.5	99	97	91	85	92	94	85	81	80	79	82	85	89	89	*84*
3	88	91	90	85	88	88	85	85	85	84	84	85	83	81	*77*
3.5	78	85	85	80	84	86	84	82	78	74	75	74	75	74	*69*
4	85	92	88	84	89	87	81	76	74	75	75	75	*77*	*75*	*71*
4.5	93	94	88	86	87	83	79	78	77	79	79	*78*	*77*	*75*	*71*
5	86	85	85	84	81	79	76	77	78	80	*78*	*77*	*75*	*72*	*69*
5.5	80	81	85	82	76	78	77	80	82	81	*78*	*76*	*72*	*71*	*68*
6	76	80	85	78	74	77	78	82	82	*78*	*75*	*71*	*70*	*69*	*67*
6.5	73	79	84	74	75	79	80	81	*78*	*74*	*71*	*67*	*67*	*67*	*66*
7	74	82	84	75	75	79	*78*	*78*	*75*	*71*	*68*	*65*	*65*	*66*	*65*
7.5	80	85	85	74	75	*78*	*77*	*76*	*71*	*67*	*65*	*64*	*65*	*66*	*64*
8	85	89	83	75	*77*	*77*	*75*	*72*	*70*	*67*	*65*	*65*	*65*	*66*	*65*
8.5	89	89	81	74	*75*	*75*	*72*	*71*	*69*	*67*	*66*	*66*	*66*	*66*	*64*
9	87	*84*	*77*	*69*	*71*	*71*	*69*	*68*	*67*	*66*	*65*	*64*	*65*	*64*	*62*

☐ WARNING - Insufficient EMISSION in part's of Field!!! (Less then 1 mm/h)

* Coefficient of Uniformity (standards)

-Overlapping sprinklers standard equal to or greater than 84%

-Single sprinkler- no standard established. Uniformity

Increases with the value.

RONDO MINI - SPRINKLER

RED NOZZLE - 100 LPH

BLACK SWIVEL

CHRISTIANSEN UNIFORMITY COEF. (CU) % CHART

BASEPRESSURE -2.0 bar

UPRIGHT POSITION

NOZZLE HEIGHT - **80** cm

Spacing Between Emitters (m)	Spacing between laterals (m) / CU(%)														
	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9
2	100	98	95	82	81	91	90	90	88	85	81	80	80	83	85
2.5	98	98	94	87	88	96	91	88	86	86	85	84	85	87	84
3	85	94	95	89	89	92	88	88	89	89	87	86	85	83	79
3.5	82	87	89	83	83	88	87	88	88	82	81	78	76	77	71
4	81	88	89	83	85	89	87	84	79	77	77	75	75	76	*72*
4.5	91	96	92	88	89	89	85	81	79	80	80	79	78	76	*72*
5	90	91	88	87	87	85	81	80	80	81	81	79	77	*74*	*71*
5.5	90	88	88	88	84	81	80	81	82	84	82	79	*76*	*73*	*70*
6	88	86	89	88	79	79	80	82	84	86	83	79	*75*	*72*	*69*
6.5	85	86	89	82	77	80	81	84	86	85	83	*77*	*73*	*71*	*69*
7	81	85	87	81	77	80	81	82	83	83	*79*	*74*	*72*	*69*	*68*
7.5	80	84	86	78	75	79	79	79	79	*77*	*74*	*70*	*67*	*67*	*66*
8	80	85	85	76	75	78	77	*76*	*75*	*73*	*72*	*67*	*66*	*64*	*64*
8.5	83	87	83	77	76	76	*74*	*73*	*72*	*71*	*69*	*67*	*64*	*64*	*63*
9	85	84	79	71	*72*	*72*	*71*	*70*	*69*	*69*	*68*	*66*	*64*	*63*	*63*

☐ WARNING - Insufficient EMISSION in part's of Field!!! (Less then 1 mm/h)

* Coefficient of Uniformity (standards)

-Overlapping sprinklers standard equal to or greater than 84%

-Single sprinkler- no standard established. Uniformity

Increases with the value.

RONDO MINI - SPRINKLER

WHITE NOZZLE - 135 LPH

BLACK SWIVEL

CHRISTIANSEN UNIFORMITY COEF. (CU) % CHART

BASEPRESSURE -2.0 bar

UPRIGHT POSITION

NOZZLE HEIGHT - **80** cm

Spacing Between Emitters (m)	Spacing between laterals (m) / CU(%)														
	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9
2	99	99	98	87	78	84	93	92	88	84	81	79	77	79	84
2.5	99	99	96	88	83	90	96	91	85	82	81	81	84	86	89
3	98	96	94	91	87	93	94	89	86	85	86	87	86	88	89
3.5	87	88	91	89	85	88	90	88	88	87	86	84	82	85	80
4	78	83	87	85	82	86	87	86	84	80	78	78	77	76	77
4.5	84	90	93	88	86	90	89	84	80	78	77	78	78	78	79
5	93	96	94	90	87	89	86	82	81	80	80	81	81	81	81
5.5	92	91	89	88	86	84	82	80	81	81	81	83	81	80	78
6	88	85	86	88	84	80	81	81	82	83	84	84	80	78	74
6.5	84	82	85	87	80	78	80	81	83	85	85	83	78	75	*72*
7	81	81	86	86	78	77	80	81	84	85	83	80	75	*73*	*71*
7.5	79	81	87	84	78	78	81	83	84	83	80	76	*71*	*71*	*70*
8	77	84	86	82	77	78	81	81	80	78	75	*71*	*69*	*69*	*69*
8.5	79	86	88	85	76	78	81	80	78	75	*73*	*71*	*69*	*68*	*69*
9	84	89	89	80	77	79	81	78	74	*72*	*71*	*70*	*69*	*69*	*69*

☐ WARNING - Insufficient EMISSION in part's of Field!!! (Less then 1 mm/h)

* Coefficient of Uniformity (standards)

-Overlapping sprinklers standard equal to or greater than 84%

-Single sprinkler- no standard established. Uniformity

Increases with the value.

RONDO MINI - SPRINKLER

VIOLET NOZZLE - 175 LPH

BLACK SWIVEL

CHRISTIANSEN UNIFORMITY COEF. (CU) % CHART

BASEPRESSURE -2.0 bar

UPRIGHT POSITION

NOZZLE HEIGHT - **80** cm

Spacing Between Emitters (m)	Spacing between laterals (m) / CU(%)														
	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9
2	99	99	99	91	81	82	93	95	90	85	82	80	79	80	83
2.5	99	99	97	91	84	87	96	94	88	84	81	81	82	84	87
3	99	97	95	91	88	91	97	93	88	85	84	85	86	88	90
3.5	91	91	91	92	88	90	93	91	88	88	87	86	86	88	84
4	81	84	88	88	84	86	89	88	87	84	83	82	80	79	79
4.5	82	87	91	90	86	89	91	87	83	80	78	77	78	79	80
5	93	96	97	93	89	91	89	85	82	80	80	81	82	84	84
5.5	95	94	93	91	88	87	85	83	82	81	81	83	85	85	84
6	90	88	88	88	87	83	82	82	82	83	84	86	86	83	78
6.5	85	84	85	88	84	80	80	81	83	85	86	86	82	79	*75*
7	82	81	84	87	83	78	80	81	84	86	86	83	79	76	*73*
7.5	80	81	85	86	82	77	81	83	86	86	83	79	*75*	*74*	*72*
8	79	82	86	86	80	78	82	85	86	82	79	*75*	*73*	*72*	*71*
8.5	80	84	88	88	79	79	84	85	83	79	76	*74*	*72*	*71*	*71*
9	83	87	90	84	79	80	84	84	78	*75*	*73*	*72*	*71*	*71*	*73*

☐ WARNING - Insufficient EMISSION in part's of Field!!! (Less then 1 mm/h)

* Coefficient of Uniformity (standards)

-Overlapping sprinklers standard equal to or greater than 84%

-Single sprinkler- no standard established. Uniformity

Increases with the value.

RONDO MINI - SPRINKLER

YELLOW NOZZLE - 215 LPH

BLACK SWIVEL

CHRISTIANSEN UNIFORMITY COEF .(CU) % CHART

BASEPRESSURE -2.0 bar

UPRIGHT POSITION

NOZZLE HEIGHT - **80** cm

Spacing Between Emitters (m)	Spacing between laterals (m) / CU(%)																
	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10
2	97	97	97	93	85	84	92	97	96	91	88	85	84	83	84	83	83
2.5	97	97	96	92	87	88	95	97	93	89	87	86	86	87	87	86	83
3	97	96	94	92	90	91	97	95	92	89	88	88	89	89	88	85	81
3.5	93	92	92	92	90	91	94	93	91	91	90	90	89	89	84	80	76
4	85	87	90	90	88	88	91	90	90	89	88	87	85	83	80	77	73
4.5	84	88	91	91	88	90	92	91	88	85	84	83	82	81	81	78	74
5	92	95	97	94	91	92	92	89	86	85	84	84	84	85	83	80	75
5.5	97	97	95	93	90	91	89	87	85	85	85	86	86	86	84	79	*73 *
6	96	93	92	91	90	88	86	85	86	86	87	87	87	86	81	76	*71 *
6.5	91	89	89	91	89	85	85	85	86	88	89	89	87	84	79	*75 *	*71 *
7	88	87	88	90	88	84	84	85	87	89	90	89	85	82	*78 *	*74 *	*71 *
7.5	85	86	88	90	87	83	84	86	87	89	89	86	82	80	*77 *	*74 *	*71 *
8	84	86	89	89	85	82	84	86	87	87	85	82	*80 *	*78 *	*76 *	*74 *	*72 *
8.5	83	87	89	89	83	81	85	86	86	74	82	80	*78 *	*76 *	*75 *	*73 *	*72 *
9	84	87	88	84	80	81	83	84	81	79	*78 *	*77 *	*76 *	*75 *	*74 *	*73 *	*72 *
9.5	83	86	85	80	77	78	80	79	76	*75 *	*74 *	*74 *	*74 *	*73 *	*73 *	*73 *	*72 *
10	83	83	81	76	73	74	75	*73 *	*71 *	*71 *	*71 *	*71 *	*72 *	*72 *	*72 *	*72 *	*71 *

* ☐ * WARNING - Insufficient EMISSION in part's of Field!!! (Less then 1 mm/h)

* Coefficient of Uniformity (standards)

-Overlapping sprinklers standard equal to or greater than 84%

-Single sprinkler- no standard established. Uniformity

Increases with the value.

RONDO MINI - SPRINKLER

BROWN NOZZLE - 260 LPH

BLACK SWIVEL

CHRISTIANSEN UNIFORMITY COEF. (CU) % CHART

BASEPRESSURE -2.0 bar

UPRIGHT POSITION

NOZZLE HEIGHT - **80** cm

Spacing Between Emitters (m)	Spacing between laterals (m) / CU(%)																
	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10
2	96	96	96	93	87	87	94	97	95	91	88	87	86	86	86	85	83
2.5	96	96	95	93	89	90	96	96	92	89	87	87	88	86	88	87	83
3	96	95	94	93	91	93	97	95	92	89	88	89	90	91	89	84	80
3.5	93	93	93	93	92	93	95	93	91	91	90	91	90	90	85	80	76
4	87	89	91	92	90	90	92	91	90	89	89	89	87	85	82	78	74
4.5	87	90	93	93	90	91	93	91	89	87	86	85	85	84	82	79	74
5	94	96	97	95	92	93	92	89	87	86	86	86	86	87	84	80	75
5.5	97	96	95	93	91	91	89	88	86	87	87	87	88	87	84	79	73
6	95	92	92	91	90	89	87	86	87	87	88	89	88	86	82	77	*72 *
6.5	91	89	89	91	89	87	86	87	87	88	89	90	88	85	80	76	*71 *
7	88	87	88	90	89	86	86	87	88	89	90	89	86	83	79	*75 *	*72 *
7.5	87	87	89	91	89	85	86	87	89	90	89	87	84	82	*79 *	*75 *	*73 *
8	86	88	90	90	87	85	86	88	88	88	86	84	82	*80 *	*78 *	*76 *	*73 *
8.5	86	89	91	90	85	84	87	87	86	85	83	82	*80 *	*79 *	*78 *	*75 *	*73 *
9	86	88	89	85	82	82	84	84	82	80	79	*79 *	*78 *	*78 *	*76 *	*75 *	*73 *
9.5	85	87	84	80	78	79	80	79	77	76	*75 *	*75 *	*76 *	*75 *	*75 *	*74 *	*72 *
10	83	83	80	76	74	74	75	73	*72 *	*71 *	*72 *	*73 *	*73 *	*73 *	*73 *	*72 *	*70 *

* ☐ * WARNING - Insufficient EMISSION in part's of Field!!! (Less then 1 mm/h)

* Coefficient of Uniformity (standards)

-Overlapping sprinklers standard equal to or greater than 84%

-Single sprinkler- no standard established. Uniformity

Increases with the value.

RONDO MINI - SPRINKLER

ORANGE NOZZLE - 300 LPH

BLACK SWIVEL

CHRISTIANSEN UNIFORMITY COEF .(CU) % CHART

BASEPRESSURE -2.0 bar

UPRIGHT POSITION

NOZZLE HEIGHT - **80** cm

Spacing Between Emitters (m)	Spacing between laterals (m) / CU(%)																
	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10
2	95	95	96	94	89	88	94	97	94	90	88	87	87	87	87	86	83
2.5	95	95	95	93	90	91	96	95	91	89	87	87	88	89	89	86	82
3	96	95	94	93	92	93	96	94	91	89	88	89	90	91	89	84	79
3.5	94	93	93	93	92	93	95	93	91	90	90	91	91	91	85	80	75
4	89	90	92	92	91	91	93	92	91	90	89	90	88	86	83	79	74
4.5	88	91	93	93	91	92	93	91	89	88	87	87	87	85	83	79	74
5	94	96	96	95	93	93	92	89	88	87	87	87	88	87	84	80	75
5.5	97	95	94	93	92	91	89	88	87	87	87	88	89	87	84	78	73
6	94	91	91	91	91	89	88	87	87	87	88	90	88	86	81	77	*72 *
6.5	90	89	89	90	90	88	87	87	87	88	89	90	88	85	80	76	*71 *
7	88	87	88	90	89	87	87	87	88	89	90	89	87	83	80	*76 *	*72 *
7.5	87	87	89	91	90	87	87	88	90	90	89	87	84	82	*80 *	*76 *	*73 *
8	87	88	90	91	88	87	88	89	88	88	87	84	83	*82 *	*80 *	*77 *	*74 *
8.5	87	89	91	91	86	85	87	87	86	85	83	82	*82 *	*81 *	*79 *	*76 *	*73 *
9	87	89	89	85	83	83	84	84	81	80	80	*80 *	*80 *	*79 *	*78 *	*75 *	*72 *
9.5	86	86	84	80	79	79	80	78	77	76	*76 *	*76 *	*77 *	*76 *	*75 *	*73 *	*71 *
10	83	82	79	75	74	74	75	73	*72 *	*71 *	*72 *	*73 *	*74 *	*73 *	*72 *	*71 *	*70 *

* ☐ * WARNING - Insufficient EMISSION in part's of Field!!! (Less then 1 mm/h)

* Coefficient of Uniformity (standards)

-Overlapping sprinklers standard equal to or greater than 84%

-Single sprinkler- no standard established. Uniformity

Increases with the value.

RONDO "VIOLET" SWIVEL

CHRISTIANSEN UNIFORMITY COEF .(CU) % CHART

BASEPRESSURE -2.0 bar

UPRIGHT POSITION

NOZZLE HEIGHT - **25** cm

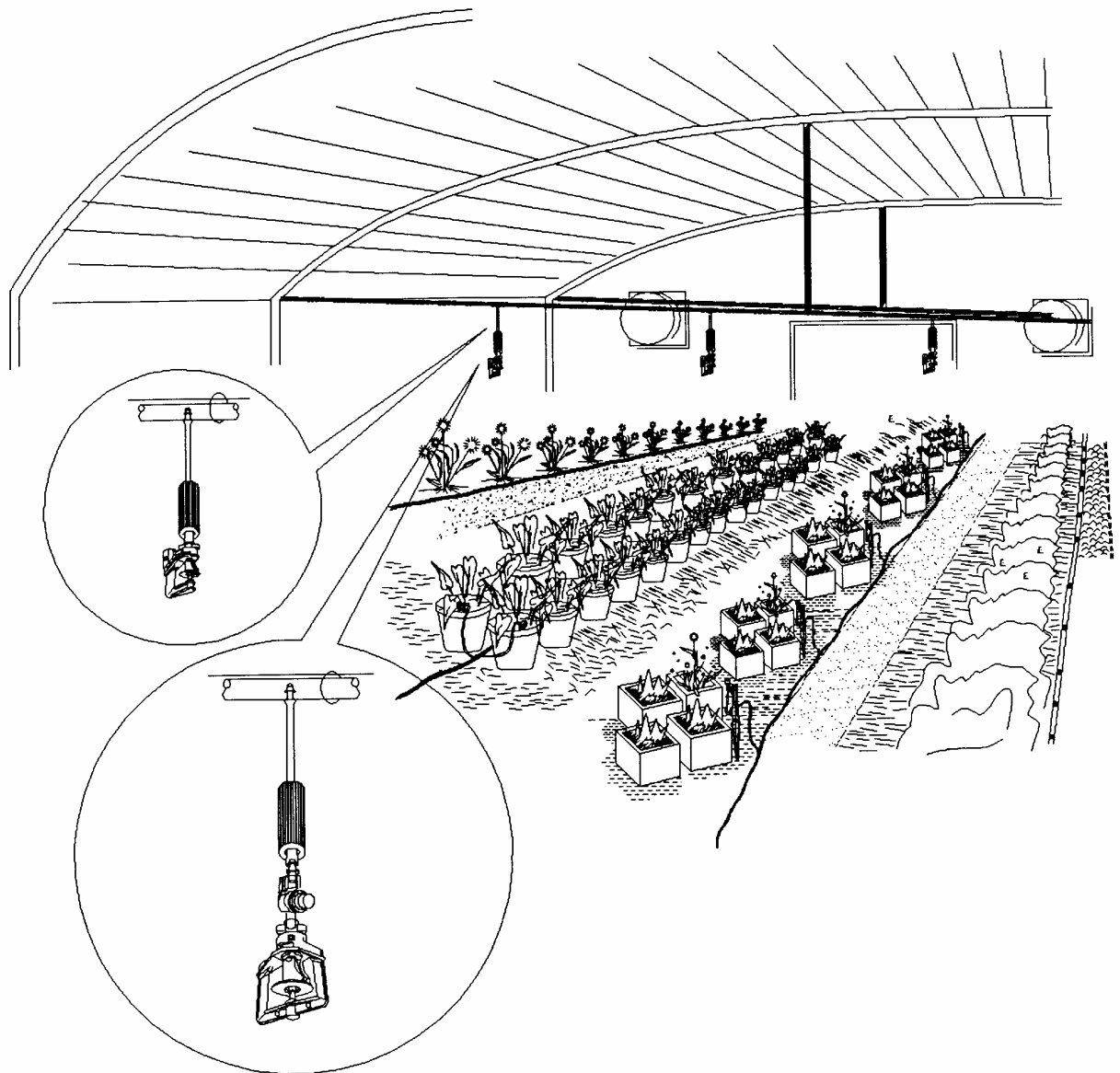
Square Spacing (m)	Nozzle code / CU(%)								
	Black 39 lph	Blue 50 lph	Green 75 lph	Red 100 lph	White 135 lph	Violet 175 lph	Yellow 215 lph	Brown 260 lph	Orange 300 lph
2x2	95	94	98	99	97				
2.5x2.5	88	93	92	94	93				
3x3	89	79	91	94	97				
3.5x3.5	89	76	84	87	89				
4x4	81	76	88	91	91				
4.5x4.5		76	84	90	93				
5x5			79	84	84				
5.5x5.5					77				
6x6									

* Coefficient of Uniformity (standards)

-Overlapping sprinklers standard equal to or greater than 84%

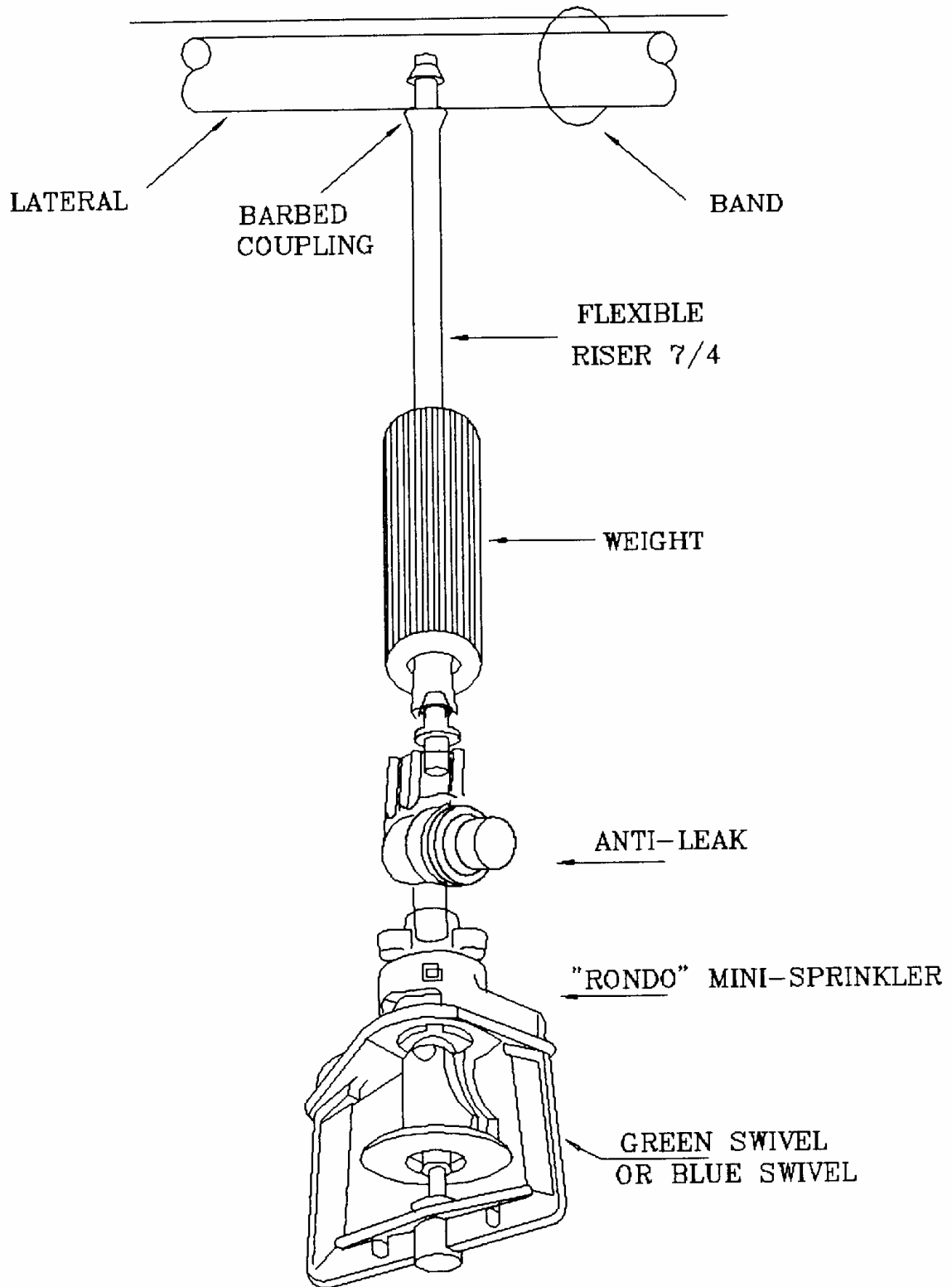
-Single sprinkler- no standard established. Uniformity
Increases with the value.

GREENHOUSE
“RONDO MINI SPRINKLER”
INVERTED POSITION

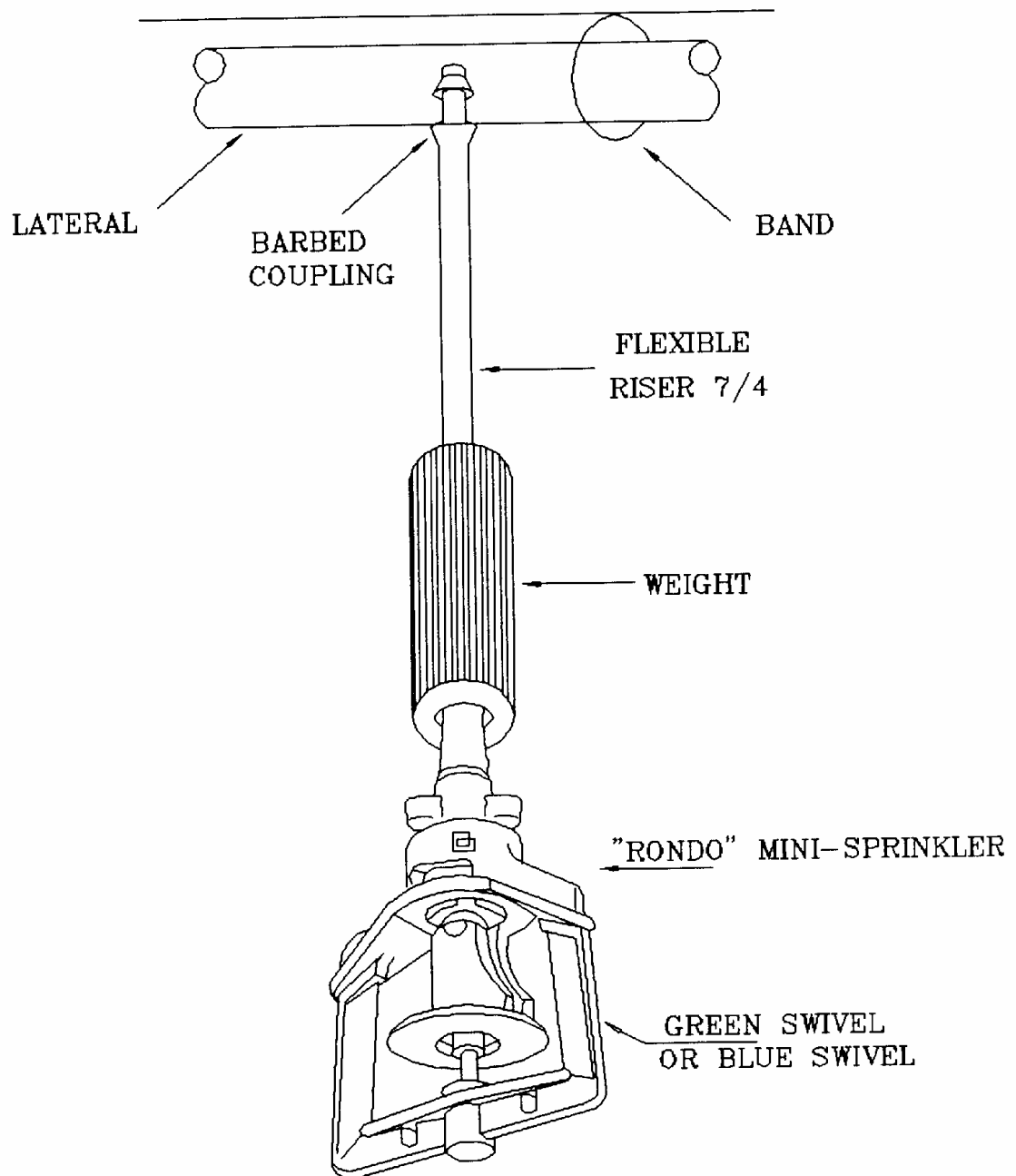


"RONDO" MINI SPRINKLER

INVERTED POSITION



**"RONDO" MINI SPRINKLER
INVERTED POSITION
WITHOUT ANTI-LEAK**



RONDO "BLUE" SWIVEL

CHRISTIANSSEN UNIFORMITY COEF .(CU) % CHART

BASE PRESSURE -2.0 bar

INVERTED POSITION

NOZZLE HEIGHT - **100** cm

Square Spacing (m)	Nozzle code / CU(%)								
	Black 39 lph	Blue 50 lph	Green 75 lph	Red 100 lph	White 135 lph	Violet 175 lph	Yellow 215 lph	Brown 260 lph	Orange 300 lph
2x2	93	93	97	97	98				
2.5x2.5	88	96	92	89	90				
3x3	81	82	90	92	96				
3.5x3.5	81	80	80	81	90				
4x4	77	77	83	85	90				
4.5x4.5		74	79	82	95				
5x5			78	79	84				
5.5x5.5					76				
6x6									

- * Coefficient of Uniformity (standards)
 - Overlapping sprinklers standard equal to or greater than 84%
 - Single sprinkler- no standard established. Uniformity
Increases with the value.

RONDO "GREEN" SWIVEL

CHRISTIANSEN UNIFORMITY COEF. (CU) % CHART

BASE PRESSURE -2.0 bar

INVERTED POSITION

NOZZLE HEIGHT - **100** cm

Square Spacing (m)	Nozzle code / CU(%)								
	Black 39 lph	Blue 50 lph	Green 75 lph	Red 100 lph	White 135 lph	Violet 175 lph	Yellow 215 lph	Brown 260 lph	Orange 300 lph
2x2	95	99	99	98	96	98	98	98	98
2.5x2.5	94	99	96	98	97	99	98	97	97
3x3	91	94	99	97	92	98	97	95	96
3.5x3.5	90	89	91	97	97	94	93	89	91
4x4	81	92	87	94	91	94	97	95	96
4.5x4.5	82	91	87	97	91	96	92	89	92
5x5	81	85	89	95	93	93	88	83	88
5.5x5.5			87	86	87	93	88	83	90
6x6			82	78	81	92	90	83	93
6.5x6.5						87	89	80	89
7x7						80	85	78	83
7.5x7.5							83	77	80
8x8									

* Coefficient of Uniformity (standards)

-Overlapping sprinklers standard equal to or greater than 84%

-Single sprinkler- no standard established. Uniformity

Increases with the value.

RONDO "GREEN" SWIVEL

CHRISTIANSEN UNIFORMITY COEF .(CU) % CHART

BASE PRESSURE -2.0 bar

INVERTED POSITION

NOZZLE HEIGHT - **200** cm

Square Spacing (m)	Nozzle code / CU(%)								
	Black 39 lph	Blue 50 lph	Green 75 lph	Red 100 lph	White 135 lph	Violet 175 lph	Yellow 215 lph	Brown 260 lph	Orange 300 lph
2x2	98	99	99	98	98	100	98	100	100
2.5x2.5	98	98	97	98	98	98	99	98	99
3x3	97	95	97	97	95	96	96	94	96
3.5x3.5	93	95	97	97	93	94	93	92	93
4x4	95	96	94	97	95	92	90	90	91
4.5x4.5	94	93	93	96	92	93	93	94	96
5x5	89	93	95	95	90	93	91	92	92
5.5x5.5	79	90	92	91	90	91	89	88	89
6x6		83	86	85	87	91	89	88	90
6.5x6.5				78	80	90	89	90	93
7x7				71	73	86	87	89	90
7.5x7.5				62		80	80	86	85
8x8						74	73	81	82

* Coefficient of Uniformity (standards)

-Overlapping sprinklers standard equal to or greater than 84%

-Single sprinkler- no standard established. Uniformity

Increases with the value.

RONDO MINI - SPRINKLER

BLACK NOZZLE - 39 LPH

GREEN SWIVEL

CHRISTIANSEN UNIFORMITY COEF. (CU) % CHART

BASE PRESSURE -2.0 bar

UPRIGHT POSITION

NOZZLE HEIGHT - **200** cm

Spacing Between Emitters (m)	Spacing between laterals (m) / CU(%)														
	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9
2	98	98	97	95	96	97	95	87	79	70	*62*	*55*	*48*	*42*	*36*
2.5	98	98	98	96	95	97	93	85	77	68	*60*	*53*	*46*	*40*	*35*
3	97	98	97	95	95	97	93	85	76	*67*	*60*	*53*	*46*	*40*	*34*
3.5	95	96	95	93	94	95	92	85	76	*67*	*60*	*53*	*46*	*40*	*34*
4	96	95	95	94	95	95	91	84	*76*	*68*	*60*	*53*	*47*	*40*	*34*
4.5	97	97	97	95	95	94	91	84	*76*	*68*	*60*	*53*	*46*	*40*	*35*
5	95	93	93	92	91	91	89	*83*	*76*	*67*	*59*	*52*	*46*	*40*	*34*
5.5	87	85	85	85	84	84	*83*	*79*	*73*	*65*	*58*	*52*	*45*	*39*	*33*
6	79	77	76	76	*76*	*76*	*76*	*73*	*69*	*62*	*56*	*49*	*43*	*37*	*30*
6.5	70	68	*67*	*67*	*68*	*68*	*67*	*65*	*62*	*57*	*52*	*44*	*38*	*33*	*28*
7	*62*	*60*	*60*	*60*	*60*	*60*	*59*	*58*	*56*	*52*	*45*	*40*	*34*	*29*	*24*
7.5	*55*	*53*	*53*	*53*	*53*	*53*	*52*	*52*	*49*	*44*	*40*	*34*	*28*	*25*	*20*
8	*48*	*46*	*46*	*46*	*47*	*46*	*46*	*45*	*43*	*38*	*34*	*28*	*24*	*18*	*13*
8.5	*42*	*40*	*40*	*40*	*40*	*40*	*40*	*39*	*37*	*33*	*29*	*25*	*18*	*15*	*9*
9	*36*	*35*	*34*	*34*	*34*	*35*	*34*	*33*	*30*	*28*	*24*	*20*	*13*	*9*	*5*

□ WARNING - Insufficient EMISSION in part's of Field!!! (Less then 1 mm/h)

* Coefficient of Uniformity (standards)

-Overlapping sprinklers standard equal to or greater than 84%

-Single sprinkler- no standard established. Uniformity

Increases with the value.

RONDO MINI - SPRINKLER

BLUE NOZZLE - 50 LPH

GREEN SWIVEL

CHRISTIANSEN UNIFORMITY COEF. (CU) % CHART

BASEPRESSURE -2.0 bar

UPRIGHT POSITION

NOZZLE HEIGHT - **200** cm

Spacing Between Emitters (m)	Spacing between laterals (m) / CU(%)														
	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9
2	99	99	96	96	98	96	98	96	91	84	77	70	64	*59*	*53*
2.5	99	98	97	97	97	96	97	95	89	83	75	68	*61*	*56*	*51*
3	96	97	95	95	96	95	96	93	87	80	73	66	*59*	*54*	*49*
3.5	96	97	95	95	96	95	94	91	86	79	73	66	*60*	*54*	*49*
4	98	97	96	96	96	94	94	91	86	80	73	*66*	*60*	*54*	*49*
4.5	96	96	95	95	94	93	92	90	87	80	73	*67*	*60*	*54*	*49*
5	98	97	96	94	94	92	93	91	87	80	*73*	*67*	*60*	*54*	*49*
5.5	96	95	93	91	91	90	91	90	86	*80*	*73*	*66*	*60*	*54*	*49*
6	91	89	87	86	86	87	87	86	83	*78*	*72*	*65*	*59*	*54*	*49*
6.5	84	83	80	79	80	80	80	*80*	*78*	*75*	*69*	*64*	*58*	*53*	*49*
7	77	75	73	73	73	73	*73*	*73*	*72*	*69*	*65*	*62*	*57*	*53*	*48*
7.5	70	68	66	66	*66*	*67*	*67*	*66*	*65*	*64*	*62*	*59*	*55*	*51*	*46*
8	64	*61*	*59*	*60*	*60*	*60*	*60*	*60*	*59*	*58*	*57*	*55*	*51*	*45*	*40*
8.5	*59*	*56*	*54*	*54*	*54*	*54*	*54*	*54*	*54*	*53*	*53*	*51*	*45*	*41*	*36*
9	*53*	*51*	*49*	*49*	*49*	*49*	*49*	*49*	*49*	*49*	*48*	*46*	*40*	*36*	*31*

□ WARNING - Insufficient EMISSION in part's of Field!!! (Less then 1 mm/h)

* Coefficient of Uniformity (standards)

-Overlapping sprinklers standard equal to or greater than 84%

-Single sprinkler- no standard established. Uniformity

Increases with the value.

RONDO MINI - SPRINKLER

GREEN NOZZLE - 75 LPH

GREEN SWIVEL

CHRISTIANSEN UNIFORMITY COEF. (CU) % CHART

BASEPRESSURE -2.0 bar

UPRIGHT POSITION

NOZZLE HEIGHT - **200** cm

Spacing Between Emitters (m)	Spacing between laterals (m) / CU(%)														
	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9
2	99	97	97	99	95	94	96	97	93	87	79	72	65	*59*	*52*
2.5	97	97	97	97	95	94	97	95	91	85	77	70	*63*	*56*	*50*
3	97	97	97	97	96	95	96	95	90	83	76	69	*62*	*55*	*49*
3.5	99	97	97	97	96	94	96	95	90	82	75	68	*61*	*55*	*49*
4	95	95	96	96	94	93	95	94	89	82	75	*68*	*61*	*54*	*49*
4.5	94	94	95	94	93	93	94	93	89	82	*74*	*68*	*62*	*55*	*49*
5	96	97	96	96	95	94	95	94	89	82	*75*	*69*	*62*	*55*	*49*
5.5	97	95	95	95	94	93	94	92	88	*83*	*76*	*69*	*62*	*55*	*49*
6	93	91	90	90	89	89	89	88	*86*	*81*	*75*	*68*	*61*	*54*	*48*
6.5	87	85	83	82	82	82	82	*83*	*81*	*78*	*73*	*66*	*59*	*52*	*47*
7	79	77	76	75	75	*74*	*75*	*76*	*75*	*73*	*68*	*64*	*57*	*50*	*45*
7.5	72	70	69	68	*68*	*68*	*69*	*69*	*68*	*66*	*64*	*59*	*52*	*47*	*41*
8	65	*63*	*62*	*61*	*61*	*62*	*62*	*62*	*61*	*59*	*57*	*52*	*47*	*40*	*35*
8.5	*59*	*56*	*55*	*55*	*54*	*55*	*55*	*55*	*54*	*52*	*50*	*47*	*40*	*36*	*31*
9	*52*	*50*	*49*	*49*	*49*	*49*	*49*	*49*	*48*	*47*	*45*	*41*	*35*	*31*	*27*

□ WARNING - Insufficient EMISSION in part's of Field!!! (Less then 1 mm/h)

* Coefficient of Uniformity (standards)

-Overlapping sprinklers standard equal to or greater than 84%

-Single sprinkler- no standard established. Uniformity

Increases with the value.

RONDO MINI - SPRINKLER

RED NOZZLE - 100 LPH

GREEN SWIVEL

CHRISTIANSEN UNIFORMITY COEF. (CU) % CHART

BASEPRESSURE -2.0 bar

UPRIGHT POSITION

NOZZLE HEIGHT - **200** cm

Spacing Between Emitters (m)	Spacing between laterals (m) / CU(%)														
	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9
2	98	98	98	97	97	98	97	95	91	85	78	71	66	60	*54*
2.5	98	98	98	97	97	98	97	95	91	84	78	71	65	59	*54*
3	98	98	97	98	97	98	96	94	90	83	77	70	64	58	*53*
3.5	97	97	98	97	97	97	96	94	89	83	76	69	63	*57*	*52*
4	97	97	97	97	97	96	95	93	88	82	76	69	63	*57*	*52*
4.5	98	98	98	97	96	96	95	93	88	82	76	69	*63*	*57*	*51*
5	97	97	96	96	95	95	95	93	88	83	76	69	*63*	*57*	*52*
5.5	95	95	94	94	93	93	93	91	87	82	76	69	*63*	*57*	*52*
6	91	91	90	89	88	88	88	87	85	81	75	*69*	*63*	*57*	*51*
6.5	85	84	83	83	82	82	83	82	81	78	*74*	*68*	*62*	*56*	*50*
7	78	78	77	76	76	76	76	76	75	*74*	*71*	*66*	*60*	*54*	*49*
7.5	71	71	70	69	69	69	69	69	*69*	*68*	*66*	*62*	*56*	*52*	*47*
8	66	65	64	63	63	*63*	*63*	*63*	*63*	*62*	*60*	*56*	*52*	*46*	*41*
8.5	60	59	58	*57*	*57*	*57*	*57*	*57*	*57*	*56*	*54*	*52*	*46*	*42*	*38*
9	*54*	*54*	*53*	*52*	*52*	*51*	*52*	*52*	*51*	*50*	*49*	*47*	*41*	*38*	*34*

□ WARNING - Insufficient EMISSION in part's of Field!!! (Less then 1 mm/h)

* Coefficient of Uniformity (standards)

-Overlapping sprinklers standard equal to or greater than 84%

-Single sprinkler- no standard established. Uniformity

Increases with the value.

RONDO MINI - SPRINKLER

WHITE NOZZLE - 135 LPH

GREEN SWIVEL

CHRISTIANSEN UNIFORMITY COEF. (CU) % CHART

BASEPRESSURE -2.0 bar

UPRIGHT POSITION

NOZZLE HEIGHT - **200** cm

Spacing Between Emitters (m)	Spacing between laterals (m) / CU(%)														
	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9
2	98	98	95	93	95	96	96	96	93	88	82	75	70	65	*59*
2.5	98	98	96	95	96	97	96	96	93	87	81	74	68	63	*58*
3	95	96	95	94	94	94	95	94	91	86	79	72	66	61	*56*
3.5	93	95	94	93	94	94	94	92	89	84	78	71	65	60	*55*
4	95	96	94	94	95	94	92	91	88	84	78	71	65	60	*55*
4.5	96	97	94	94	94	92	91	91	88	84	78	72	66	*60*	*55*
5	96	96	95	94	92	91	90	90	88	84	79	72	*66*	*60*	*55*
5.5	96	96	94	92	91	91	90	90	89	84	79	72	*66*	*60*	*55*
6	93	93	91	89	88	88	88	89	87	83	78	71	*66*	*60*	*55*
6.5	88	87	86	84	84	84	84	84	83	80	76	*70*	*65*	*60*	*55*
7	82	81	79	78	78	78	79	79	78	76	*73*	*69*	*65*	*59*	*54*
7.5	75	74	72	71	71	72	72	72	*71*	*70*	*69*	*66*	*61*	*57*	*53*
8	70	68	66	65	65	*66*	*66*	*66*	*66*	*65*	*65*	*61*	*58*	*54*	*50*
8.5	65	63	61	60	*60*	*60*	*60*	*60*	*60*	*60*	*59*	*57*	*54*	*51*	*46*
9	*59*	*58*	*56*	*55*	*55*	*55*	*55*	*55*	*55*	*55*	*54*	*53*	*50*	*46*	*42*

□ WARNING - Insufficient EMISSION in part's of Field!!! (Less then 1 mm/h)

* Coefficient of Uniformity (standards)

-Overlapping sprinklers standard equal to or greater than 84%

-Single sprinkler- no standard established. Uniformity

Increases with the value.

RONDO MINI - SPRINKLER

VIOLET NOZZLE - 175 LPH

GREEN SWIVEL

CHRISTIANSEN UNIFORMITY COEF. (CU) % CHART

BASEPRESSURE -2.0 bar

UPRIGHT POSITION

NOZZLE HEIGHT - **200** cm

Spacing Between Emitters (m)	Spacing between laterals (m) / CU(%)														
	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9
2	100	99	97	94	91	92	95	96	96	94	89	84	79	74	70
2.5	99	98	97	94	92	94	96	97	97	94	90	85	80	75	70
3	97	97	96	94	93	95	97	97	96	94	89	84	79	74	69
3.5	94	94	94	94	93	94	95	95	94	92	88	83	77	73	67
4	91	92	93	93	92	93	93	93	92	90	87	82	77	72	67
4.5	92	94	95	94	93	93	93	92	91	90	87	82	77	72	67
5	95	96	97	95	93	93	93	92	91	90	87	82	77	72	67
5.5	96	97	97	95	93	92	92	91	91	90	87	83	77	72	67
6	96	97	96	94	92	91	91	91	91	90	87	83	78	72	67
6.5	94	94	94	92	90	90	90	90	90	90	87	82	77	72	*67*
7	89	90	89	88	87	87	87	87	88	87	86	82	77	*72*	*67*
7.5	84	85	84	83	82	82	82	83	83	82	82	80	*76*	*72*	*67*
8	79	80	79	77	77	77	77	77	78	77	77	*76*	*74*	*70*	*65*
8.5	74	75	74	73	72	72	72	72	72	72	*72*	*72*	*70*	*67*	*63*
9	70	70	69	67	67	67	67	67	67	*67*	*67*	*67*	*65*	*63*	*60*

☐ WARNING - Insufficient EMISSION in part's of Field!!! (Less then 1 mm/h)

* Coefficient of Uniformity (standards)

-Overlapping sprinklers standard equal to or greater than 84%

-Single sprinkler- no standard established. Uniformity

Increases with the value.

RONDO MINI - SPRINKLER

YELLOW NOZZLE - 215 LPH

GREEN SWIVEL

CHRISTIANSEN UNIFORMITY COEF. (CU) % CHART

BASEPRESSURE -2.0 bar

UPRIGHT POSITION

NOZZLE HEIGHT - **200** cm

Spacing Between Emitters (m)	Spacing between laterals (m) / CU(%)														
	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9
2	98	98	97	92	88	91	95	96	96	95	92	87	82	78	74
2.5	98	99	97	93	91	94	97	96	96	94	92	87	83	79	74
3	97	97	96	94	93	95	96	96	95	94	92	87	83	78	73
3.5	92	93	94	93	91	93	94	94	94	92	90	85	79	75	69
4	88	91	93	91	90	92	92	91	90	89	87	83	78	73	68
4.5	91	94	95	93	92	93	92	90	89	89	86	82	79	74	69
5	95	97	96	94	92	92	91	90	89	88	86	83	79	74	69
5.5	96	96	96	94	91	90	90	89	89	88	86	83	79	74	69
6	96	96	95	94	90	89	89	89	89	89	87	84	79	74	69
6.5	95	94	94	92	89	89	88	88	89	89	88	85	79	74	*69*
7	92	92	92	90	87	86	86	86	87	88	87	83	78	*74*	*69*
7.5	87	87	87	85	83	82	83	83	84	85	83	80	*76*	*73*	*68*
8	82	83	83	79	78	79	79	79	79	79	78	*76*	*73*	*68*	*64*
8.5	78	79	78	75	73	74	74	74	74	74	*74*	*73*	*68*	*65*	*62*
9	74	74	73	69	68	69	69	69	69	*69*	*69*	*68*	*64*	*62*	*61*

☐ WARNING - Insufficient EMISSION in part's of Field!!! (Less then 1 mm/h)

* Coefficient of Uniformity (standards)

-Overlapping sprinklers standard equal to or greater than 84%

-Single sprinkler- no standard established. Uniformity

Increases with the value.

RONDO MINI - SPRINKLER

BROWN NOZZLE - 260 LPH

GREEN SWIVEL

CHRISTIANSEN UNIFORMITY COEF .(CU) % CHART

BASEPRESSURE -2.0 bar

UPRIGHT POSITION

NOZZLE HEIGHT - **200** cm

Spacing Between Emitters (m)	Spacing between laterals (m) / CU(%)														
	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9
2	100	99	97	91	88	90	98	96	91	88	87	87	87	88	90
2.5	99	98	96	92	90	93	98	95	90	88	87	88	89	91	92
3	97	96	94	93	91	95	97	94	91	89	89	90	90	92	91
3.5	91	92	93	92	91	93	94	93	92	90	90	90	90	91	86
4	88	90	91	91	90	92	93	92	89	88	87	88	87	86	84
4.5	90	93	95	93	92	94	95	91	88	87	87	87	87	86	85
5	98	98	97	94	93	95	92	90	88	87	88	88	88	89	87
5.5	96	95	94	93	92	91	90	88	88	88	89	90	90	88	85
6	91	90	91	92	89	88	88	88	88	89	90	91	89	87	82
6.5	88	88	89	90	88	87	87	88	89	90	91	89	87	84	80
7	87	87	89	90	87	87	88	89	90	91	89	88	85	83	80
7.5	87	88	90	90	88	87	88	90	91	89	88	86	82	81	80
8	87	89	90	90	87	87	88	90	89	87	85	82	81	80	*79*
8.5	88	91	92	91	86	86	89	88	87	84	83	81	80	*80*	*80*
9	90	92	91	86	84	85	87	85	82	80	80	80	*79*	*80*	*80*

☐ WARNING - Insufficient EMISSION in part's of Field!!! (Less then 1 mm/h)

* Coefficient of Uniformity (standards)

-Overlapping sprinklers standard equal to or greater than 84%

-Single sprinkler- no standard established. Uniformity

Increases with the value.

RONDO MINI - SPRINKLER

ORANGE NOZZLE - 300 LPH

GREEN SWIVEL

CHRISTIANSEN UNIFORMITY COEF. (CU) % CHART

BASEPRESSURE -2.0 bar

UPRIGHT POSITION

NOZZLE HEIGHT - **200** cm

Spacing Between Emitters (m)	Spacing between laterals (m) / CU(%)														
	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9
2	100	100	97	92	90	94	99	93	90	88	88	90	90	90	90
2.5	100	99	97	93	92	97	97	92	89	89	89	91	92	92	89
3	97	97	96	94	93	97	96	92	91	91	92	93	92	91	86
3.5	92	93	94	93	92	94	94	93	92	92	92	91	89	87	81
4	90	92	93	92	91	94	94	92	90	89	89	89	87	85	81
4.5	94	97	97	94	94	96	94	91	89	89	89	89	88	86	82
5	99	97	96	94	94	94	92	90	90	90	90	91	90	87	82
5.5	93	92	92	93	92	91	90	89	89	90	91	92	89	85	80
6	90	89	91	92	90	89	90	89	90	92	92	91	88	84	78
6.5	88	89	91	92	89	89	90	90	92	93	92	90	86	82	78
7	88	89	92	92	89	89	90	91	92	92	90	89	85	81	*78*
7.5	90	91	93	91	89	89	91	92	91	90	89	85	82	81	*78*
8	90	92	92	89	87	88	90	89	88	86	85	82	*82*	*80*	*79*
8.5	90	92	91	87	85	86	87	85	84	82	81	81	*80*	*80*	*79*
9	90	89	86	81	81	82	82	80	78	78	*78*	*78*	*79*	*79*	*78*

☐ WARNING - Insufficient EMISSION in part's of Field!!! (Less then 1 mm/h)

* Coefficient of Uniformity (standards)

-Overlapping sprinklers standard equal to or greater than 84%

-Single sprinkler- no standard established. Uniformity

Increases with the value.

GENERAL TABLE

Rondo Mini-Sprinkler

Maximum No. Of Emitters Per Lateral

(Max. Flow Rate Variation - 10%)

On Flat Terrain

Nozzle Code (Size mm)	Discharge (lph) *	Lateral Pipe Diameter		Emitters Spacing on lateral in m.								
		O.D.mm	I.D.mm	2	3	4	5	6	7	8	9	10
BLACK (0.8)	40	16	13.6	23	20	18	16	15	14	13	13	12
		17.8	15.2	28	24	22	20	18	17	17	16	15
		20	17.4	36	31	27	25	24	22	21	20	19
BLUE (1)	50	16	13.6	19	16	14	13	12	11	11	10	10
		17.8	15.2	23	20	18	16	15	14	13	13	12
		20	17.4	29	25	22	21	19	18	17	16	16
GREEN (1.2)	75	16	13.6	14	12	10	10	9	8	8	8	7
		17.8	15.2	17	14	13	12	11	10	10	9	9
		20	17.4	22	18	17	15	14	13	13	12	12
RED (1.4)	100	16	13.6	11	10	8	8	7	7	6	6	6
		17.8	15.2	14	12	10	10	9	8	8	8	7
		20	17.4	18	15	13	12	12	11	10	10	9
WHITE (1.6)	135	16	13.6	9	8	7	6	6	6	5	5	5
		17.8	15.2	11	10	9	8	7	7	7	6	6
		20	17.4	15	13	11	10	10	9	9	8	8
VIOLET (1.8)	175	16	13.6	8	6	6	5	5	4	4	4	4
		17.8	15.2	9	8	7	6	6	6	5	5	5
		20	17.4	12	10	9	8	8	7	7	7	6
YELLOW (2)	215	16	13.6	7	6	5	5	4	4	4	3	3
		17.8	15.2	8	7	6	6	5	5	5	4	4
		20	17.4	11	9	8	7	7	6	6	6	5
BROWN (2.2)	260	16	13.6	6	5	4	4	4	3	3	3	3
		17.8	15.2	7	6	5	5	5	4	4	4	4
		20	17.4	9	8	7	6	6	5	5	5	5
ORANGE (2.4)	300	16	13.6	5	4	4	3	3	3	3	3	2
		17.8	15.2	6	5	5	4	4	4	3	3	3
		20	17.4	8	7	6	6	5	5	5	4	4

* at 2 atm.

RONDO-MINI SPRINKLER

Black Nozzle - **40** lph

Maximum No. Of Emitters per Lateral

(Max. Flow Rate Variation - 7.5% or 10%)

Emitter Spacing (m)	Slope (%)	Pipe Diameter in mm (OD/ID)									
		16/13.2		16/13.6		17.8/15.2		20/17		20/17.4	
		7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%
2	-2	18	20	19	21	23	26	27	31	28	32
	-1	19	21	20	22	24	27	29	33	30	34
	0	20	22	21	23	25	28	31	34	32	36
	1	20	22	21	24	26	29	32	36	34	37
	2	21	23	22	24	27	30	34	37	36	39
2.5	-2	16	19	17	19	21	23	25	28	25	29
	-1	17	19	18	20	22	25	26	30	27	31
	0	18	20	19	21	23	26	28	31	30	33
	1	19	21	20	22	24	27	30	33	31	35
	2	19	21	21	23	25	28	32	35	33	36
3	-2	15	17	16	18	19	22	23	26	23	27
	-1	16	18	17	19	20	23	24	28	25	29
	0	17	19	18	20	22	24	26	29	28	31
	1	18	19	19	20	23	25	28	31	30	33
	2	18	20	19	21	24	26	30	33	31	34
3.5	-2	14	16	15	17	18	20	21	24	22	25
	-1	15	17	16	18	19	21	23	26	24	27
	0	16	18	17	19	20	23	25	28	26	29
	1	17	18	18	19	22	24	27	30	28	31
	2	17	19	18	20	23	25	29	31	30	33
4	-2	13	15	14	16	17	19	20	22	20	23
	-1	14	16	15	17	18	20	22	24	22	25
	0	15	17	16	18	19	22	24	26	25	27
	1	16	17	17	19	21	23	26	28	27	30
	2	17	18	18	19	22	24	27	30	29	31
4.5	-2	13	14	13	15	16	18	18	21	19	22
	-1	13	15	14	16	17	19	20	23	21	24
	0	14	16	15	17	19	21	23	25	24	26
	1	15	17	16	18	20	22	25	27	26	28
	2	16	18	17	19	21	23	26	29	28	30

(-) Uphill

(+) Downhill

(Continued from page 44)
RONDO-MINI SPRINKLER
Black Nozzle - 40 lph

Emitter Spacing (m)	Slope (%)	Pipe Diameter in mm (OD/ID)									
		16/13.2		16/13.6		17.8/15.2		20/17		20/17.4	
		7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%
5	-2	12	14	13	14	15	17	17	20	18	21
	-1	13	14	13	15	16	18	20	22	20	23
	0	14	15	15	16	18	20	22	24	23	25
	1	15	16	15	17	19	21	24	26	25	27
	2	15	17	16	18	20	22	26	28	27	29
5.5	-2	11	13	12	14	14	16	17	19	17	20
	-1	12	14	13	15	16	18	19	21	19	22
	0	13	15	14	16	17	19	21	23	22	24
	1	14	16	15	17	19	20	23	25	24	27
	2	15	16	16	17	20	22	25	27	26	28
6	-2	11	13	11	13	14	16	16	18	16	19
	-1	12	13	12	14	15	17	18	20	19	21
	0	13	14	14	15	17	18	20	23	21	24
	1	14	15	15	16	18	20	22	25	24	26
	2	15	16	15	17	19	21	24	26	25	28
6.5	-2	11	12	11	13	13	15	15	18	16	18
	-1	11	13	12	14	14	16	17	20	18	20
	0	12	14	13	15	16	18	20	22	21	23
	1	13	15	14	16	18	19	22	24	23	25
	2	14	16	15	16	19	21	24	26	25	27
7	-2	10	12	11	12	13	14	15	17	15	18
	-1	11	13	12	13	14	16	17	19	17	20
	0	12	13	13	14	16	17	19	21	20	22
	1	13	14	14	15	17	19	22	24	23	25
	2	14	15	15	16	19	20	23	25	25	27
7.5	-2	10	11	10	12	12	14	14	16	14	17
	-1	11	12	11	13	14	15	16	18	17	19
	0	12	13	12	14	15	17	19	21	19	22
	1	13	14	14	15	17	19	21	23	22	24
	2	14	15	15	16	18	20	23	25	24	26
8	-2	9	11	10	11	12	14	13	16	14	16
	-1	10	12	11	12	13	15	16	18	16	19
	0	11	13	12	13	15	17	18	20	19	21
	1	12	14	13	15	17	18	21	23	22	24
	2	13	15	14	16	18	19	23	24	24	26

(-) Uphill

(+) Downhill

RONDO-MINI SPRINKLER

Blue Nozzle - **50** lph

Maximum No. Of Emitters per Lateral

(Max. Flow Rate Variation - 7.5% or 10%)

Emitter Spacing (m)	Slope (%)	Pipe Diameter in mm (OD/ID)									
		16/13.2		16/13.6		17.8/15.2		20/17		20/17.4	
		7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%
2	-2	15	17	16	18	19	21	23	25	23	26
	-1	15	17	16	18	20	22	24	27	25	28
	0	16	18	17	19	21	23	25	28	26	29
	1	17	18	17	19	22	24	27	29	28	30
	2	17	19	18	20	22	24	28	30	29	32
2.5	-2	13	15	14	16	17	19	20	23	21	24
	-1	14	16	15	17	18	20	22	24	23	25
	0	15	16	15	17	19	21	23	26	24	27
	1	15	17	16	18	20	22	25	27	26	28
	2	16	17	17	18	21	23	26	28	27	29
3	-2	12	14	13	15	16	18	19	21	19	22
	-1	13	15	14	15	17	19	20	23	21	23
	0	14	15	14	16	18	20	22	24	23	25
	1	14	16	15	17	19	20	23	25	24	26
	2	15	16	16	17	19	21	24	26	25	28
3.5	-2	12	13	12	14	15	17	17	20	18	20
	-1	12	14	13	14	16	17	19	21	20	22
	0	13	14	14	15	17	18	20	23	21	24
	1	13	15	14	16	18	19	22	24	23	25
	2	14	15	15	16	19	20	23	25	24	26
4	-2	11	12	11	13	14	16	16	19	17	19
	-1	12	13	12	14	15	17	18	20	18	21
	0	12	14	13	14	16	18	19	21	20	22
	1	13	14	14	15	17	18	21	23	22	24
	2	13	15	14	16	18	19	22	24	23	25
4.5	-2	10	12	11	12	13	15	15	17	16	18
	-1	11	12	12	13	14	16	17	19	18	20
	0	12	13	12	14	15	17	19	21	19	21
	1	12	14	13	14	16	18	20	22	21	23
	2	13	14	14	15	17	19	21	23	22	24

(-) Uphill

(+) Downhill

(Continued from page 46)
RONDO-MINI SPRINKLER
Blue Nozzle - 50 lph

Emitter Spacing (m)	Slope (%)	Pipe Diameter in mm (OD/ID)									
		16/13.2		16/13.6		17.8/15.2		20/17		20/17.4	
		7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%
5	-2	10	11	10	12	12	14	15	17	15	17
	-1	10	12	11	12	13	15	16	18	17	19
	0	11	12	12	13	14	16	18	20	19	21
	1	12	13	13	14	16	17	19	21	20	22
	2	12	14	13	14	17	18	21	22	22	24
5.5	-2	9	11	10	11	12	13	14	16	14	16
	-1	10	11	11	12	13	14	15	17	16	18
	0	11	12	11	13	14	15	17	19	18	20
	1	11	13	12	13	15	17	19	21	20	21
	2	12	13	13	14	16	17	20	22	21	23
6	-2	9	10	9	11	11	13	13	15	14	16
	-1	10	11	10	11	12	14	15	17	15	17
	0	10	12	11	12	14	15	17	18	17	19
	1	11	12	12	13	15	16	18	20	19	21
	2	12	13	12	14	16	17	20	21	21	22
6.5	-2	9	10	9	10	11	12	13	15	13	15
	-1	9	11	10	11	12	13	14	16	15	17
	0	10	11	11	12	13	15	16	18	17	19
	1	11	12	11	13	14	16	18	19	19	20
	2	11	12	12	13	15	17	19	21	20	22
7	-2	8	10	9	10	10	12	12	14	13	15
	-1	9	10	10	11	12	13	14	16	14	16
	0	10	11	10	11	13	14	16	17	16	18
	1	11	12	11	12	14	15	17	19	18	20
	2	11	12	12	13	15	16	19	20	20	21
7.5	-2	8	9	8	10	10	11	12	14	12	14
	-1	9	10	9	10	11	13	13	15	14	16
	0	9	11	10	11	12	14	15	17	16	18
	1	10	11	11	12	14	15	17	19	18	20
	2	11	12	12	13	15	16	19	20	19	21
8	-2	8	9	8	9	10	11	11	13	12	14
	-1	9	10	9	10	11	12	13	15	13	15
	0	9	10	10	11	12	13	15	16	15	17
	1	10	11	11	12	13	15	17	18	18	19
	2	11	12	11	12	14	16	18	20	19	21

(-) Uphill

(+) Downhill

RONDO-MINI SPRINKLER

Green Nozzle - **63** lph

Maximum No. Of Emitters per Lateral

(Max. Flow Rate Variation - 7.5% or 10%)

Emitter Spacing (m)	Slope (%)	Pipe Diameter in mm (OD/ID)									
		16/13.2		16/13.6		17.8/15.2		20/17		20/17.4	
		7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%
2	-2	12	14	13	15	16	18	19	21	20	22
	-1	13	14	13	15	16	18	20	22	21	23
	0	13	15	14	16	17	19	21	23	22	24
	1	14	15	14	16	18	20	22	24	23	26
	2	14	16	15	17	19	21	23	26	24	26
2.5	-2	11	13	12	13	14	16	17	19	18	20
	-1	12	13	12	14	15	17	18	20	19	21
	0	12	14	13	14	16	18	19	22	20	22
	1	13	14	13	15	16	18	20	23	21	24
	2	13	14	14	15	17	19	21	23	22	25
3	-2	10	12	11	12	13	15	16	18	16	19
	-1	11	12	11	13	14	16	17	19	18	20
	0	11	13	12	13	15	16	18	20	19	21
	1	12	13	12	14	15	17	19	21	20	22
	2	12	14	13	14	16	18	20	22	21	23
3.5	-2	9	10	10	12	12	14	15	17	15	17
	-1	10	11	11	12	13	15	16	18	16	19
	0	11	12	11	13	14	15	17	19	18	20
	1	11	12	12	13	15	16	18	20	19	21
	2	12	13	12	14	15	17	19	21	20	22
4	-2	8	9	9	10	11	13	14	16	14	16
	-1	10	11	10	11	12	14	15	17	15	17
	0	10	11	11	12	13	15	16	18	17	19
	1	11	12	11	12	14	15	17	19	18	20
	2	11	12	12	13	15	16	18	20	19	21
4.5	-2	8	9	8	9	10	11	12	14	12	14
	-1	9	10	10	11	12	13	14	16	15	17
	0	10	11	10	11	13	14	15	17	16	18
	1	10	11	11	12	13	15	17	18	17	19
	2	11	12	11	12	14	15	18	19	18	20

(-) Uphill

(+) Downhill

(Continued from page 48)
RONDO-MINI SPRINKLER
Green Nozzle - 63 lph

Emitter Spacing (m)	Slope (%)	Pipe Diameter in mm (OD/ID)									
		16/13.2		16/13.6		17.8/15.2		20/17		20/17.4	
		7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%
5	-2	7	8	8	9	9	11	11	13	12	14
	-1	9	10	9	10	11	13	14	15	14	16
	0	9	10	10	11	12	13	15	17	15	17
	1	10	11	10	11	13	14	16	18	17	19
	2	10	11	11	12	14	15	17	19	18	20
5.5	-2	7	8	7	9	9	10	11	13	11	13
	-1	7	8	8	9	11	12	13	15	14	15
	0	9	10	9	10	12	13	14	16	15	17
	1	9	10	10	11	12	14	16	17	16	18
	2	10	11	11	12	13	14	17	18	17	19
6	-2	7	8	7	8	9	10	10	12	11	12
	-1	7	8	7	9	10	12	12	14	13	15
	0	9	10	9	10	11	12	14	15	14	16
	1	9	10	10	11	12	13	15	17	16	18
	2	10	11	10	11	13	14	16	18	17	18
6.5	-2	6	7	7	8	8	10	10	11	10	12
	-1	7	8	7	8	10	11	12	14	13	14
	0	8	9	9	10	11	12	13	15	14	16
	1	9	10	9	10	12	13	15	16	15	17
	2	10	10	10	11	12	14	16	17	16	18
7	-2	6	7	6	8	8	9	9	11	10	11
	-1	7	8	7	8	9	10	12	13	12	14
	0	8	9	8	10	10	12	13	14	14	15
	1	9	10	9	10	11	13	14	16	15	17
	2	9	10	10	11	12	13	15	17	16	18
7.5	-2	6	7	6	7	8	9	9	11	9	11
	-1	6	7	7	8	8	10	11	13	12	13
	0	8	9	8	9	10	11	13	14	13	15
	1	8	9	9	10	11	12	14	16	15	16
	2	9	10	9	10	12	13	15	16	16	17
8	-2	6	7	6	7	7	9	9	10	9	11
	-1	6	7	6	7	8	9	10	11	10	12
	0	8	9	8	9	10	11	12	14	13	14
	1	8	9	9	10	11	12	14	15	14	16
	2	9	10	9	10	12	13	15	16	15	17

(-) Uphill

(+) Downhill

RONDO-MINI SPRINKLER

Green Nozzle - **75** lph

Maximum No. Of Emitters per Lateral

(Max. Flow Rate Variation - 7.5% or 10%)

Emitter Spacing (m)	Slope (%)	Pipe Diameter in mm (OD/ID)									
		16/13.2		16/13.6		17.8/15.2		20/17		20/17.4	
		7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%
2	-2	11	12	12	13	14	16	17	19	17	20
	-1	11	13	12	13	15	16	18	20	18	21
	0	12	13	12	14	15	17	19	21	19	22
	1	12	13	13	14	16	17	19	21	20	22
	2	12	14	13	14	16	18	20	22	21	23
2.5	-2	10	11	10	12	13	14	15	17	16	18
	-1	10	12	11	12	13	15	16	18	17	19
	0	11	12	11	13	14	15	17	19	18	20
	1	11	12	12	13	14	16	18	20	19	21
	2	11	13	12	13	15	17	19	21	20	21
3	-2	9	10	10	11	12	13	14	16	15	17
	-1	10	11	10	11	12	14	15	17	16	17
	0	10	11	10	12	13	14	16	18	17	18
	1	10	11	11	12	14	15	17	19	18	19
	2	11	12	11	13	14	16	18	19	18	20
3.5	-2	9	10	9	10	11	12	13	15	14	15
	-1	9	10	9	11	12	13	14	16	15	16
	0	9	10	10	11	12	14	15	17	16	17
	1	10	11	10	11	13	14	16	18	17	18
	2	10	11	11	12	13	15	17	18	18	19
4	-2	8	9	8	10	10	12	12	14	13	15
	-1	8	10	9	10	11	12	13	15	14	15
	0	9	10	9	10	12	13	14	16	15	17
	1	9	10	10	11	12	14	15	17	16	18
	2	10	11	10	11	13	14	16	18	17	18
4.5	-2	8	9	8	9	10	11	12	13	12	14
	-1	8	9	8	10	10	12	13	14	13	15
	0	8	9	9	10	11	12	14	15	14	16
	1	9	10	9	10	12	13	15	16	15	17
	2	9	10	10	11	12	14	15	17	16	18

(-) Uphill

(+) Downhill

(Continued from page 50)
RONDO-MINI SPRINKLER
Green Nozzle - 75 lph

Emitter Spacing (m)	Slope (%)	Pipe Diameter in mm (OD/ID)									
		16/13.2		16/13.6		17.8/15.2		20/17		20/17.4	
		7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%
5	-2	7	8	8	9	9	11	11	13	11	13
	-1	8	9	8	9	10	11	12	14	12	14
	0	8	9	9	10	11	12	13	15	14	15
	1	9	9	9	10	11	12	14	16	15	16
	2	9	10	9	10	12	13	15	16	16	17
5.5	-2	7	8	7	8	9	10	10	12	11	12
	-1	7	8	8	9	9	11	11	13	12	14
	0	8	9	8	9	10	11	13	14	13	15
	1	8	9	9	10	11	12	14	15	14	16
	2	9	10	9	10	12	13	15	16	15	17
6	-2	7	8	7	8	8	10	10	12	10	12
	-1	7	8	7	8	9	10	11	12	11	13
	0	8	8	8	9	10	11	12	14	13	14
	1	8	9	8	9	11	12	13	15	14	15
	2	8	9	9	10	11	12	14	15	15	16
6.5	-2	6	7	7	8	8	9	10	11	10	11
	-1	7	8	7	8	9	10	11	12	11	13
	0	7	8	8	9	10	11	12	13	12	14
	1	8	9	8	9	10	11	13	14	13	15
	2	8	9	9	10	11	12	14	15	14	16
7	-2	4	6	4	7	5	8	6	9	7	10
	-1	4	7	4	7	5	8	7	10	7	11
	0	4	7	4	7	6	9	7	11	7	12
	1	4	7	5	8	6	10	7	13	8	13
	2	4	8	5	9	6	11	8	14	8	14
7.5	-2	4	6	4	6	5	8	6	9	6	9
	-1	4	6	4	7	5	8	6	10	7	10
	0	4	7	4	7	5	9	7	11	7	12
	1	4	7	4	8	6	10	7	12	8	13
	2	4	8	5	8	6	11	8	13	8	14
8	-2	4	6	4	6	5	7	6	9	6	9
	-1	4	6	4	7	5	8	6	10	7	10
	0	4	7	4	7	5	9	7	11	7	11
	1	4	7	4	8	6	10	7	12	7	13
	2	4	8	5	8	6	10	7	13	8	14

(-) Uphill

(+) Downhill

RONDO-MINI SPRINKLER

Red Nozzle - **100** lph

Maximum No. Of Emitters per Lateral

(Max. Flow Rate Variation - 7.5% or 10%)

Emitter Spacing (m)	Slope (%)	Pipe Diameter in mm (OD/ID)									
		16/13.2		16/13.6		17.8/15.2		20/17		20/17.4	
		7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%
2	-2	9	10	10	11	12	13	14	16	15	17
	-1	9	10	10	11	12	13	15	16	15	17
	0	10	11	10	11	12	14	15	17	16	18
	1	10	11	10	11	13	14	16	17	17	18
	2	10	11	11	12	13	14	16	18	17	19
2.5	-2	8	9	9	10	11	12	13	14	13	15
	-1	9	9	9	10	11	12	13	15	14	16
	0	9	10	9	10	11	13	14	16	15	16
	1	9	10	9	10	12	13	15	16	15	17
	2	9	10	10	11	12	13	15	17	16	17
3	-2	8	9	8	9	10	11	12	13	12	14
	-1	8	9	8	9	10	11	12	14	13	14
	0	8	9	9	10	11	12	13	14	14	15
	1	8	9	9	10	11	12	14	15	14	16
	2	9	9	9	10	11	12	14	16	15	16
3.5	-2	7	8	8	8	9	10	11	12	12	13
	-1	7	8	8	9	10	11	12	13	12	14
	0	8	8	8	9	10	11	12	14	13	14
	1	8	9	8	9	10	11	13	14	14	15
	2	8	9	9	9	11	12	13	15	14	15
4	-2	7	8	7	8	9	10	10	12	11	12
	-1	7	8	7	8	9	10	11	12	12	13
	0	7	8	8	8	9	10	12	13	12	13
	1	7	8	8	9	10	11	12	14	13	14
	2	8	8	8	9	10	11	13	14	13	15
4.5	-2	6	7	7	8	8	9	10	11	10	12
	-1	7	7	7	8	9	10	10	12	11	12
	0	7	8	7	8	9	10	11	12	12	13
	1	7	8	8	8	9	10	12	13	12	14
	2	7	8	8	9	10	11	12	13	13	14

(-) Uphill

(+) Downhill

(Continued from page 52)
RONDO-MINI SPRINKLER
Red Nozzle - 100 lph

Emitter Spacing (m)	Slope (%)	Pipe Diameter in mm (OD/ID)									
		16/13.2		16/13.6		17.8/15.2		20/17		20/17.4	
		7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%
5	-2	6	7	6	7	8	9	9	11	10	11
	-1	6	7	7	7	8	9	10	11	10	12
	0	7	7	7	8	9	10	11	12	11	12
	1	7	8	7	8	9	10	11	12	12	13
	2	7	8	8	8	10	10	12	13	13	14
5.5	-2	6	7	6	7	7	8	9	10	9	11
	-1	6	7	6	7	8	0	10	11	10	11
	0	6	7	7	7	8	9	10	11	11	12
	1	7	7	7	8	9	10	11	12	11	13
	2	7	8	7	8	9	10	12	13	12	13
6	-2	6	6	6	7	7	8	9	10	9	10
	-1	6	7	6	7	8	8	9	10	10	11
	0	6	7	6	7	8	9	10	11	10	12
	1	6	7	7	7	8	9	11	12	11	12
	2	7	7	7	8	9	10	11	12	12	13
6.5	-2	5	6	6	6	7	8	8	9	9	10
	-1	6	6	6	7	7	8	9	10	9	10
	0	6	7	6	7	8	9	10	11	10	11
	1	6	7	7	7	8	9	10	11	11	12
	2	6	7	7	8	9	9	11	12	11	13
7	-2	6	9	6	10	8	12	9	15	9	15
	-1	6	10	6	10	8	13	10	15	10	16
	0	6	10	7	10	8	13	10	16	11	17
	1	7	10	7	11	9	13	11	16	12	17
	2	7	10	7	11	9	14	12	17	12	18
7.5	-2	6	9	6	10	7	12	9	14	9	15
	-1	6	9	6	10	8	12	9	15	10	15
	0	6	10	7	10	8	13	10	15	11	16
	1	6	10	7	10	9	13	11	16	11	17
	2	7	10	7	11	9	13	11	17	12	17
8	-2	6	9	6	9	7	11	9	14	9	15
	-1	6	9	6	10	7	12	9	14	10	15
	0	6	9	6	10	8	12	10	15	10	16
	1	6	10	7	10	8	13	11	16	11	16
	2	7	10	7	10	9	13	11	16	12	17

(-) Uphill

(+) Downhill

RONDO-MINI SPRINKLER

White Nozzle - **135** lph

Maximum No. Of Emitters per Lateral

(Max. Flow Rate Variation - 7.5% or 10%)

Emitter Spacing (m)	Slope (%)	Pipe Diameter in mm (OD/ID)									
		16/13.2		16/13.6		17.8/15.2		20/17		20/17.4	
		7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%
2	-2	8	8	8	9	10	11	12	13	12	14
	-1	8	9	8	9	10	11	12	14	13	14
	0	8	9	8	9	10	11	13	14	13	15
	1	8	9	9	9	11	12	13	14	14	15
	2	8	9	9	10	11	12	13	15	14	15
2.5	-2	7	8	7	8	9	10	11	12	11	13
	-1	7	8	7	8	9	10	11	13	12	13
	0	7	8	8	8	9	10	12	13	12	13
	1	7	8	8	9	10	11	12	13	13	14
	2	8	8	8	9	10	11	12	14	13	14
3	-2	6	7	7	8	8	9	10	11	10	12
	-1	7	7	7	8	8	9	10	12	11	12
	0	7	7	7	8	9	10	11	12	11	13
	1	7	8	7	8	9	10	11	12	12	13
	2	7	8	7	8	9	10	12	13	12	13
3.5	-2	6	7	6	7	8	9	9	11	10	11
	-1	6	7	6	7	8	9	10	11	10	11
	0	6	7	7	7	8	9	10	11	11	12
	1	6	7	7	8	9	9	11	12	11	12
	2	7	7	7	8	9	10	11	12	12	13
4	-2	6	6	6	7	7	8	9	10	9	10
	-1	6	6	6	7	8	8	9	10	10	11
	0	6	7	6	7	8	9	10	11	10	11
	1	6	7	6	7	8	9	10	11	11	12
	2	6	7	7	7	8	9	11	12	11	12
4.5	-2	5	6	6	6	7	8	8	9	9	10
	-1	5	6	6	6	7	8	9	10	9	10
	0	6	6	6	7	7	8	9	10	10	11
	1	6	6	6	7	8	9	10	11	10	11
	2	6	7	6	7	8	9	10	11	11	12

(-) Uphill

(+) Downhill

(Continued from page 54)
RONDO-MINI SPRINKLER
White Nozzle - 135 lph

Emitter Spacing (m)	Slope (%)	Pipe Diameter in mm (OD/ID)									
		16/13.2		16/13.6		17.8/15.2		20/17		20/17.4	
		7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%
5	-2	5	6	5	6	7	7	8	9	8	9
	-1	5	6	6	6	7	8	8	9	9	10
	0	5	6	6	6	7	8	9	10	9	10
	1	6	6	6	7	7	8	9	10	10	11
	2	6	6	6	7	8	9	10	11	10	11
5.5	-2	5	5	5	6	6	7	8	9	8	9
	-1	5	6	5	6	7	7	8	9	8	9
	0	5	6	5	6	7	8	9	9	9	10
	1	5	6	6	6	7	8	9	10	9	10
	2	6	6	6	7	7	8	9	10	10	11
6	-2	5	5	5	6	6	7	7	8	8	9
	-1	5	5	5	6	6	7	8	9	8	9
	0	5	6	5	6	7	7	8	9	9	10
	1	5	6	6	6	7	8	9	10	9	10
	2	5	6	6	6	7	8	9	10	10	11
6.5	-2	4	5	5	5	6	7	7	8	7	8
	-1	5	5	5	6	6	7	7	8	8	9
	0	5	5	5	6	6	7	8	9	8	9
	1	5	6	5	6	7	7	8	9	9	10
	2	5	6	6	6	7	8	9	10	9	10
7	-2	4	5	5	5	6	6	7	8	7	8
	-1	4	5	5	5	6	7	7	8	8	8
	0	5	5	5	6	6	7	8	9	8	9
	1	5	5	5	6	7	7	8	9	9	10
	2	5	6	5	6	7	8	9	10	7	10
7.5	-2	4	5	4	5	5	6	7	7	7	8
	-1	4	5	5	5	6	6	7	8	7	8
	0	5	5	5	5	6	7	7	8	8	9
	1	5	5	5	6	6	7	8	9	8	9
	2	5	5	5	6	7	7	9	9	9	10
8	-2	4	5	4	5	5	6	6	7	7	7
	-1	4	5	4	5	6	6	7	8	7	8
	0	4	5	5	5	6	7	7	8	8	9
	1	5	5	5	5	6	7	8	9	8	9
	2	5	5	5	6	7	7	8	9	9	10

(-) Uphill

(+) Downhill

RONDO-MINI SPRINKLER

Violet Nozzle - **175** lph

Maximum No. Of Emitters per Lateral

(Max. Flow Rate Variation - 7.5% or 10%)

Emitter Spacing (m)	Slope (%)	Pipe Diameter in mm (OD/ID)									
		16/13.2		16/13.6		17.8/15.2		20/17		20/17.4	
		7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%
2	-2	6	7	7	7	8	9	10	11	10	12
	-1	6	7	7	7	8	9	10	11	11	12
	0	6	7	7	8	8	9	10	12	11	12
	1	6	7	7	8	9	10	11	12	11	12
	2	7	7	7	8	9	10	11	12	11	13
2.5	-2	6	6	6	7	7	8	9	10	9	10
	-1	6	6	6	7	7	8	9	10	10	11
	0	6	7	6	7	8	9	9	11	10	11
	1	6	7	6	7	8	9	10	11	10	11
	2	6	7	6	7	8	9	10	11	11	12
3	-2	5	6	5	6	7	8	8	9	9	10
	-1	5	6	6	6	7	8	9	10	9	10
	0	5	6	6	6	7	8	9	10	9	10
	1	5	6	6	7	7	8	9	10	10	11
	2	6	6	6	7	8	8	9	10	10	11
3.5	-2	5	5	5	6	6	7	8	9	8	9
	-1	5	6	5	6	6	7	8	9	8	9
	0	5	6	5	6	7	7	8	9	9	10
	1	5	6	5	6	7	8	9	10	9	10
	2	5	6	6	6	7	8	9	10	9	10
4	-2	5	5	5	5	6	7	7	8	8	9
	-1	5	5	5	6	6	7	8	8	8	9
	0	5	5	5	6	6	7	8	9	8	9
	1	5	5	5	6	7	7	8	9	9	10
	2	5	6	5	6	7	7	9	9	9	10
4.5	-2	4	5	5	5	6	6	7	8	7	8
	-1	4	5	5	5	6	7	7	8	7	8
	0	5	5	5	5	6	7	7	8	8	9
	1	5	5	5	6	6	7	8	9	8	9
	2	5	5	5	6	6	7	8	9	9	9

(-) Uphill

(+) Downhill

(Continued from page 56)
RONDO-MINI SPRINKLER
Violet Nozzle - 175 lph

Emitter Spacing (m)	Slope (%)	Pipe Diameter in mm (OD/ID)									
		16/13.2		16/13.6		17.8/15.2		20/17		20/17.4	
		7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%
5	-2	4	5	4	5	5	6	7	7	7	8
	-1	4	5	4	5	6	6	7	8	7	8
	0	4	5	5	5	6	6	7	8	7	8
	1	4	5	5	5	6	7	8	8	8	9
	2	5	5	5	5	6	7	8	9	8	9
5.5	-2	4	4	4	5	5	6	6	7	6	7
	-1	4	5	4	5	5	6	7	7	7	8
	0	4	5	4	5	6	6	7	8	7	8
	1	4	5	5	5	6	6	7	8	8	8
	2	4	5	5	5	6	7	8	8	8	9
6	-2	4	4	4	5	5	6	6	7	6	7
	-1	4	4	4	5	5	6	6	7	7	7
	0	4	5	4	5	5	6	7	7	7	8
	1	4	5	4	5	6	6	7	8	7	8
	2	4	5	5	5	6	6	7	8	8	9
6.5	-2	4	4	4	4	5	5	6	7	6	7
	-1	4	4	4	5	5	6	6	7	6	7
	0	4	4	4	5	5	6	6	7	7	8
	1	4	4	4	5	5	6	7	8	7	8
	2	4	5	4	5	6	6	7	8	7	8
7	-2	3	4	4	4	5	5	6	6	6	7
	-1	4	4	4	4	5	5	6	7	6	7
	0	4	4	4	4	5	6	6	7	7	7
	1	4	4	4	5	5	6	7	7	7	8
	2	4	4	4	5	5	6	7	8	7	8
7.5	-2	3	4	4	4	4	5	5	6	6	6
	-1	4	4	4	4	5	5	6	6	6	7
	0	4	4	4	4	5	5	6	7	6	7
	1	4	4	4	4	5	6	6	7	7	8
	2	4	4	4	5	5	6	7	8	7	8
8	-2	3	4	3	4	4	5	5	6	5	6
	-1	3	4	4	4	4	5	6	6	6	7
	0	4	4	4	4	5	5	6	7	6	7
	1	4	4	4	4	5	6	6	7	7	7
	2	4	4	4	5	5	6	7	7	7	8

(-) Uphill

(+) Downhill

RONDO-MINI SPRINKLER

Yellow Nozzle - **215** lph

Maximum No. Of Emitters per Lateral

(Max. Flow Rate Variation - 7.5% or 10%)

Emitter Spacing (m)	Slope (%)	Pipe Diameter in mm (OD/ID)									
		16/13.2		16/13.6		17.8/15.2		20/17		20/17.4	
		7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%
2	-2	6	6	6	7	7	8	9	10	9	10
	-1	6	6	6	7	7	8	9	10	10	11
	0	6	6	6	7	8	8	9	10	10	11
	1	6	6	6	7	8	8	10	11	10	11
	2	6	6	6	7	8	9	10	11	10	11
2.5	-2	5	6	5	6	7	7	8	9	8	9
	-1	5	6	5	6	7	7	8	9	9	10
	0	5	6	6	6	7	8	9	9	9	10
	1	5	6	6	6	7	8	9	10	9	10
	2	5	6	6	6	7	8	9	10	9	10
3	-2	5	5	5	6	6	7	7	8	8	9
	-1	5	5	5	6	6	7	8	9	8	9
	0	5	5	5	6	6	7	8	9	8	9
	1	5	5	5	6	6	7	8	9	9	9
	2	5	6	5	6	7	7	8	9	9	10
3.5	-2	4	5	5	5	6	6	7	8	7	8
	-1	4	5	5	5	6	6	7	8	8	8
	0	4	5	5	5	6	7	7	8	8	9
	1	5	5	5	5	6	7	8	8	8	9
	2	5	5	5	6	6	7	8	9	8	9
4	-2	4	5	4	5	5	6	7	7	7	8
	-1	4	5	4	5	5	6	7	8	7	8
	0	4	5	5	5	6	6	7	8	7	8
	1	4	5	5	5	6	6	7	8	8	8
	2	4	5	5	5	6	7	8	8	8	9
4.5	-2	4	4	4	5	5	6	6	7	7	7
	-1	4	4	4	5	5	6	6	7	7	8
	0	4	5	4	5	5	6	7	7	7	8
	1	4	5	4	5	6	6	7	8	7	8
	2	4	5	4	5	6	6	7	8	8	8

(-) Uphill

(+) Downhill

(Continued from page 58)
RONDO-MINI SPRINKLER
Yellow Nozzle - 215 lph

Emitter Spacing (m)	Slope (%)	Pipe Diameter in mm (OD/ID)									
		16/13.2		16/13.6		17.8/15.2		20/17		20/17.4	
		7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%
5	-2	4	4	4	4	5	5	6	7	6	7
	-1	4	4	4	4	5	6	6	7	6	7
	0	4	4	4	5	5	6	6	7	7	7
	1	4	4	4	5	5	6	7	7	7	8
	2	4	4	4	5	5	6	7	8	7	8
5.5	-2	4	4	4	4	5	5	6	6	6	7
	-1	4	4	4	4	5	5	6	7	6	7
	0	4	4	4	4	5	5	6	7	6	7
	1	4	4	4	4	5	6	6	7	7	7
	2	4	4	4	5	5	6	7	7	7	8
6	-2	3	4	4	4	4	5	5	6	6	6
	-1	3	4	4	4	5	5	6	6	6	7
	0	4	4	4	4	5	5	6	7	6	7
	1	4	4	4	4	5	5	6	7	6	7
	2	4	4	4	4	5	6	6	7	7	7
6.5	-2	3	4	3	4	4	5	5	6	5	6
	-1	3	4	4	4	4	5	5	6	6	6
	0	3	4	4	4	5	5	6	6	6	7
	1	4	4	4	4	5	5	6	7	6	7
	2	4	4	4	4	5	5	6	7	7	7
7	-2	3	4	3	4	4	5	5	6	5	6
	-1	3	4	3	4	4	5	5	6	6	6
	0	3	4	4	4	4	5	6	6	6	6
	1	3	4	4	4	5	5	6	6	6	7
	2	3	4	4	4	5	5	6	7	6	7
7.5	-2	3	3	3	4	4	5	5	6	5	6
	-1	3	4	3	4	4	5	5	6	5	6
	0	3	4	3	4	4	5	5	6	6	6
	1	3	4	4	4	4	5	6	6	6	7
	2	3	4	4	4	5	5	6	7	6	7
8	-2	3	3	3	4	4	4	5	5	5	6
	-1	3	3	3	4	4	5	5	6	5	6
	0	3	4	3	4	4	5	5	6	6	6
	1	3	4	3	4	4	5	6	6	6	6
	2	3	4	4	4	5	5	6	6	6	7

(-) Uphill

(+) Downhill

RONDO-MINI SPRINKLER

Brown Nozzle - **260** lph

Maximum No. Of Emitters per Lateral

(Max. Flow Rate Variation - 7.5% or 10%)

Emitter Spacing (m)	Slope (%)	Pipe Diameter in mm (OD/ID)									
		16/13.2		16/13.6		17.8/15.2		20/17		20/17.4	
		7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%
2	-2	5	5	5	6	6	7	8	9	8	9
	-1	5	5	5	6	6	7	8	9	8	9
	0	5	5	5	6	6	7	8	9	8	9
	1	5	5	5	6	7	7	8	9	9	9
	2	5	6	5	6	7	7	8	9	9	10
2.5	-2	4	5	5	5	6	6	7	8	7	8
	-1	4	5	5	5	6	6	7	8	7	8
	0	4	5	5	5	6	7	7	8	8	9
	1	4	5	5	5	6	7	7	8	8	9
	2	5	5	5	5	6	7	8	8	8	9
3	-2	4	4	4	5	5	6	6	7	7	8
	-1	4	5	4	5	5	6	7	7	7	8
	0	4	5	4	5	5	6	7	8	7	8
	1	4	5	4	5	6	6	7	8	7	8
	2	4	5	4	5	6	6	7	8	7	8
3.5	-2	4	4	4	4	5	5	6	7	6	7
	-1	4	4	4	4	5	6	6	7	6	7
	0	4	4	4	5	5	6	6	7	7	7
	1	4	4	4	5	5	6	7	7	7	8
	2	4	4	4	5	5	6	7	7	7	8
4	-2	3	4	4	4	5	5	6	6	6	7
	-1	4	4	4	4	5	5	6	7	6	7
	0	4	4	4	4	5	5	6	7	6	7
	1	4	4	4	4	5	5	6	7	6	7
	2	4	4	4	4	5	6	6	7	7	7
4.5	-2	3	4	3	4	4	5	5	6	6	6
	-1	3	4	4	4	4	5	6	6	6	7
	0	3	4	4	4	5	5	6	6	6	7
	1	3	4	4	4	5	5	6	7	6	7
	2	4	4	4	4	5	5	6	7	6	7

(-) Uphill

(+) Downhill

(Continued from page 60)
RONDO-MINI SPRINKLER
Brown Nozzle - 260 lph

Emitter Spacing (m)	Slope (%)	Pipe Diameter in mm (OD/ID)									
		16/13.2		16/13.6		17.8/15.2		20/17		20/17.4	
		7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%
5	-2	3	4	3	4	4	5	5	6	5	6
	-1	3	4	3	4	4	5	5	6	6	6
	0	3	4	3	4	4	5	5	6	6	6
	1	3	4	4	4	4	5	6	6	6	7
	2	3	4	4	4	5	5	6	6	6	7
5.5	-2	3	3	3	4	4	4	5	6	5	6
	-1	3	3	3	4	4	5	5	6	5	6
	0	3	4	3	4	4	5	5	6	6	6
	1	3	4	3	4	4	5	5	6	6	6
	2	3	4	3	4	4	5	6	6	6	7
6	-2	3	3	3	3	4	4	5	5	5	6
	-1	3	3	3	4	4	4	5	5	5	6
	0	3	3	3	4	4	5	5	6	5	6
	1	3	3	3	4	4	5	5	6	6	6
	2	3	4	3	4	4	5	5	6	6	6
6.5	-2	3	3	3	3	4	4	5	5	5	5
	-1	3	3	3	3	4	4	5	5	5	6
	0	3	3	3	3	4	4	5	5	5	6
	1	3	3	3	4	4	4	5	6	5	6
	2	3	3	3	4	4	5	5	6	6	6
7	-2	3	3	3	3	4	4	4	5	5	5
	-1	3	3	3	3	4	4	5	5	5	5
	0	3	3	3	3	4	4	5	5	5	6
	1	3	3	3	3	4	4	5	6	5	6
	2	3	3	3	4	4	4	5	6	5	6
7.5	-2	3	3	3	3	4	4	4	5	4	5
	-1	3	3	3	3	4	4	4	5	5	5
	0	3	3	3	3	4	4	5	5	5	5
	1	3	3	3	3	4	4	5	5	5	6
	2	3	3	3	3	4	4	5	6	5	6
8	-2	3	3	3	3	4	4	4	5	4	5
	-1	3	3	3	3	4	4	4	5	4	5
	0	3	3	3	3	4	4	4	5	5	5
	1	3	3	3	3	4	4	5	5	5	5
	2	3	3	3	3	4	4	5	5	5	6

(-) Uphill

(+) Downhill

RONDO-MINI SPRINKLER

Orange Nozzle - **300** lph

Maximum No. Of Emitters per Lateral

(Max. Flow Rate Variation - 7.5% or 10%)

Emitter Spacing (m)	Slope (%)	Pipe Diameter in mm (OD/ID)									
		16/13.2		16/13.6		17.8/15.2		20/17		20/17.4	
		7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%
2	-2	4	5	4	5	5	6	7	7	7	8
	-1	4	5	4	5	5	6	7	8	7	8
	0	4	5	4	5	5	6	7	8	7	8
	1	4	5	4	5	6	6	7	8	7	8
	2	4	5	4	5	6	6	7	8	7	8
2.5	-2	4	4	4	4	5	5	6	7	6	7
	-1	4	4	4	4	5	6	6	7	6	7
	0	4	4	4	5	5	6	6	7	6	7
	1	4	4	4	5	5	6	6	7	7	7
	2	4	4	4	5	5	6	6	7	7	8
3	-2	3	4	4	4	4	5	5	6	6	7
	-1	3	4	4	4	5	5	6	6	6	7
	0	3	4	4	4	5	5	6	7	6	7
	1	3	4	4	4	5	5	6	7	6	7
	2	4	4	4	4	5	5	6	7	6	7
3.5	-2	3	4	3	4	4	5	5	6	5	6
	-1	3	4	3	4	4	5	5	6	5	6
	0	3	4	3	4	4	5	5	6	6	6
	1	3	4	3	4	4	5	6	6	6	7
	2	3	4	4	4	4	5	6	6	6	7
4	-2	3	3	3	4	4	4	5	6	5	6
	-1	3	3	3	4	4	5	5	6	5	6
	0	3	3	3	4	4	5	5	6	5	6
	1	3	3	3	4	4	5	5	6	5	6
	2	3	4	3	4	4	5	5	6	6	6
4.5	-2	3	3	3	3	4	4	5	5	5	5
	-1	3	3	3	3	4	4	5	5	5	6
	0	3	3	3	3	4	4	5	6	5	6
	1	3	3	3	4	4	4	5	6	5	6
	2	3	3	3	4	4	5	5	6	5	6

(-) Uphill

(+) Downhill

(Continued from page 62)
RONDO-MINI SPRINKLER
Orange Nozzle - 300 lph

Emitter Spacing (m)	Slope (%)	Pipe Diameter in mm (OD/ID)									
		16/13.2		16/13.6		17.8/15.2		20/17		20/17.4	
		7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%
5	-2	3	3	3	3	3	4	4	5	5	5
	-1	3	3	3	3	4	4	4	5	5	5
	0	3	3	3	3	4	4	5	5	5	6
	1	3	3	3	3	4	4	5	5	5	6
	2	3	3	3	3	4	4	5	6	5	6
5.5	-2	3	3	3	3	3	4	4	5	4	5
	-1	3	3	3	3	3	4	4	5	5	5
	0	3	3	3	3	4	4	4	5	5	5
	1	3	3	3	3	4	4	5	5	5	5
	2	3	3	3	3	4	4	5	5	5	6
6	-2	2	3	3	3	3	4	4	5	4	5
	-1	2	3	3	3	3	4	4	5	4	5
	0	3	3	3	3	3	4	4	5	4	5
	1	3	3	3	3	3	4	4	5	5	5
	2	3	3	3	3	4	4	5	5	5	5
6.5	-2	2	3	2	3	3	4	4	4	4	5
	-1	2	3	3	3	3	4	4	5	4	5
	0	2	3	3	3	3	4	4	5	4	5
	1	2	3	3	3	3	4	4	5	5	5
	2	3	3	3	3	3	4	4	5	5	5
7	-2	2	3	2	3	3	4	4	4	4	5
	-1	2	3	3	3	3	4	4	5	4	5
	0	2	3	3	3	3	4	4	5	4	5
	1	2	3	3	3	3	4	4	5	5	5
	2	3	3	3	3	3	4	4	5	5	5
7.5	-2	2	3	2	3	3	3	4	4	4	4
	-1	2	3	2	3	3	3	4	4	4	5
	0	2	3	2	3	3	4	4	5	4	5
	1	2	3	3	3	3	4	4	5	4	5
	2	2	3	3	3	3	4	4	5	5	5
8	-2	2	3	2	3	3	3	4	4	4	4
	-1	2	3	2	3	3	3	4	4	4	4
	0	2	3	2	3	3	3	4	4	4	5
	1	2	3	2	3	3	4	4	5	4	5
	2	2	3	3	3	3	4	4	5	4	5

(-) Uphill

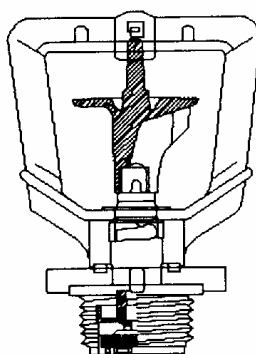
(+) Downhill

R.F.R. - RONDO FLOW REGULATED

Medium - Range Mini Sprinkler

MAIN FEATURES

- * Moderate to high wetting range
- * Moderate irrigation flow rate
- * Uniformed water distribution
- * Effective under conditions of poor water quality.
- * Suitable for upside-down assembly.
- * Spinners-colour coded for different applications:
Gray - for upright
Red - for inverted

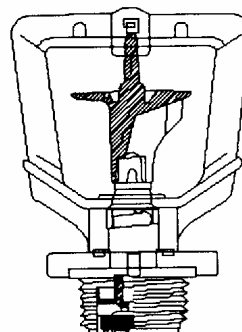


ADDITIONAL FEATURES

- * Anti - ant adapter - insect proof accessory.
- * Deflectors - for ray patterns 2x30°, 90°, and 180°
(See Rondo angle stream)

OPERATING RANGE

- * Working pressure range
1.5 - 3.0 bar.
- * Nominal flow rate:
20 l/h - Black nozzle
30 l/h - Blue nozzle
41 l/h - Dark Blue nozzle
53 l/h - Green nozzle
70 l/h - Red nozzle



MODELS AND TYPES

- * 3/8" Threaded connection.
- * Color coded nozzles for flow rate identification.

FLOW REGULATOR



DIAPHRAGM



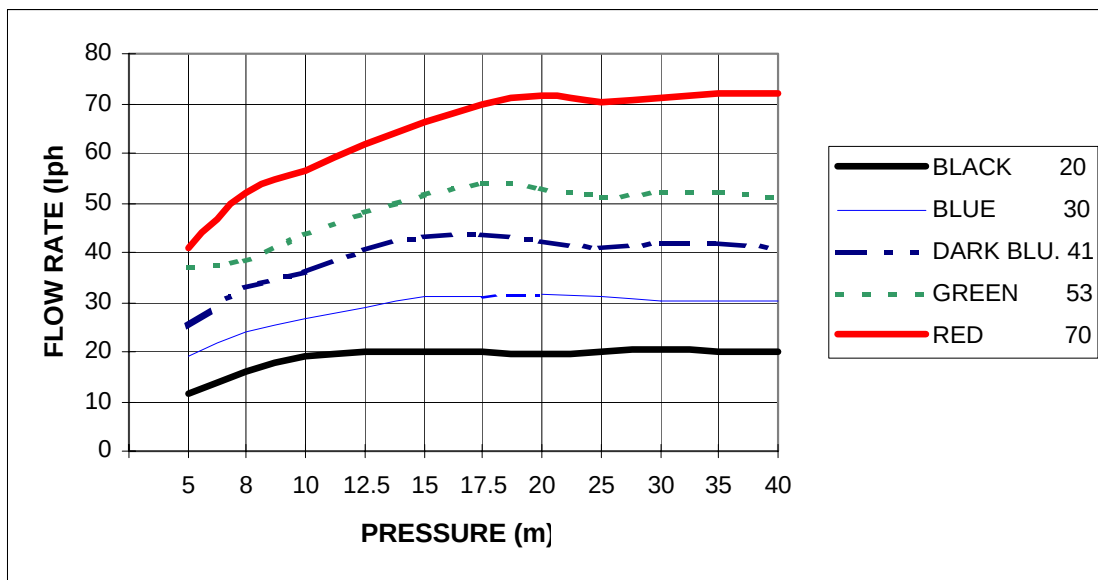
R.F.R

RONDO FLOW REGULATED

TYPE COLOR (LPH)	FLOW RATE (LPH) AT PRESSURE										
	5m	8m	10m	12.5m	15m	17.5m	20m	25m	30m	35m	40m
BLACK (20)	11.5	16	19	19.8	20.2	20	19.4	20	20.3	20	19.9
BLUE (30)	19	24	26.5	29	31.2	31.3	31.4	31	30.3	30.3	30.3
DARK BLUE (41)	25.4	33	36.2	40.4	43.1	43.5	42.1	41	41.7	41.6	41
GREEN (53)	37	38.3	43.6	48.1	51.5	53.7	52.9	51.3	52.1	51.8	51.1
RED (70)	41	52	56.4	61.8	66.4	69.7	71.4	70.2	71	72	72

Performance Chart

Working Pressure Range 15-35m



Nozzle code Ø (mm)	Discharge (Lph)	Wetting Radius of spinners (m')	
		Gray*	Red**
Black	20	2.3	2.1
Blue	30	2.8	2.1
Dark Blue	41	3.0	2.5
Green	53	3.3	2.6
Red	70	3.5	2.9
Gray	95	soon available	

**Spinner
Type**

Spinner code	Position
Gray	Upright
Red	Upside down

* 25 cm above ground

** 50 cm above ground

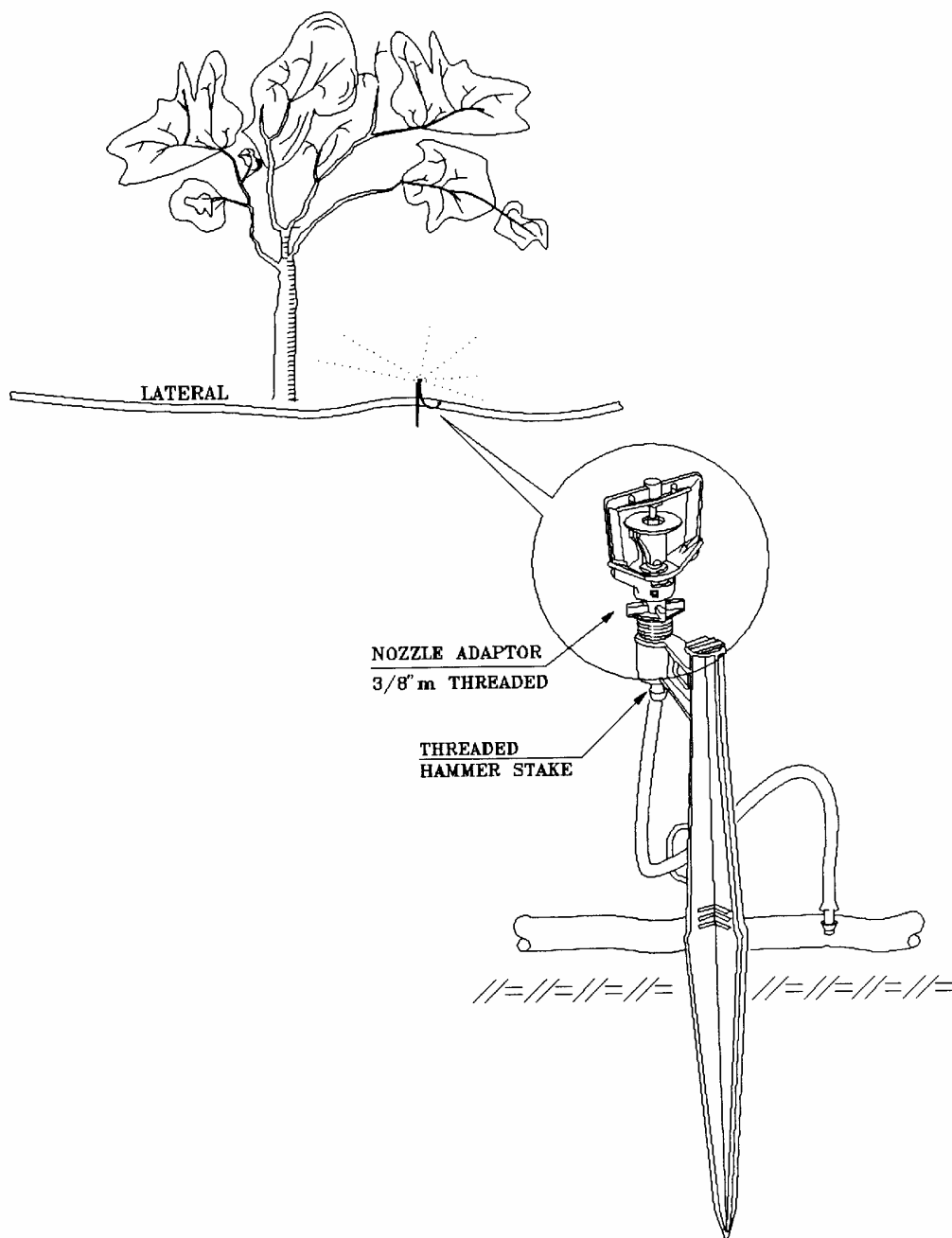
R.F.R -RONDO FLOW REGULATED

WETTING RADIUS DATA (m)

ON STANDARD STAKE - 25 cm. HIGHT

WORKING PRESSURE - 2.0 BAR

ORCHARDS & PLANTATION
R.F.R
RONDO FLOW REGULATED
MINI-SPRINKLER
UPRIGHT POSITION



R.F.R.-RONDO FLOW REGULATED

BLACK NOZZLE - **20** LPH

GRAY SWIVEL

CHRISTIANSEN UNIFORMITY COEF. (CU)% CHART

BASE PRESSURE-2.0bar

UPRIGHT POSITION

NOZZLE HEIGHT - **25**cm

Spacing Between Emitters (m')	Spacing between laterals (m')						
	2	2.5	3	3.5	4	4.5	5
2	88	83	71	*59*	*47*	*37*	*28*
2.5	83	80	70	*58*	*47*	*37*	*28*
3	71	70	*67*	*56*	*46*	*36*	*26*
3.5	*59*	*58*	*56*	*49*	*39*	*30*	*23*
4	*47*	*47*	*46*	*39*	*31*	*24*	*18*
4.5	*37*	*37*	*36*	*30*	*24*	*17*	*10*
5	*28*	*28*	*26*	*23*	*18*	*10*	*2*

☐ WARNING - Insufficient EMISSION in part's of Field!!! (Less then 1 mm/h)

* Coefficient of Uniformity (standards)

-Overlapping sprinklers standard equal to or greater than 84%

-Single sprinkler- no standard established. Uniformity

Increases with the value.

R.F.R.-RONDO FLOW REGULATED

BLUE NOZZLE - **30** LPH

GRAY SWIVEL

CHRISTIANSEN UNIFORMITY COEF. (CU)% CHART

BASE PRESSURE-2.0bar

UPRIGHT POSITION

NOZZLE HEIGHT - **25**cm

Spacing Between Emitters (m')	Spacing between laterals (m')						
	2	2.5	3	3.5	4	4.5	5
2	96	87	88	92	87	*73*	*60*
2.5	87	83	85	85	80	*70*	*59*
3	88	85	81	81	*78*	*71*	*61*
3.5	92	85	81	*80*	*81*	*74*	*60*
4	87	80	*78*	*81*	*80*	*70*	*57*
4.5	*73*	*70*	*71*	*74*	*70*	*63*	*48*
5	*60*	*59*	*61*	*60*	*57*	*48*	*36*

☐ WARNING - Insufficient EMISSION in part's of Field!!! (Less then 1 mm/h)

* Coefficient of Uniformity (standards)

-Overlapping sprinklers standard equal to or greater than 84%

-Single sprinkler- no standard established. Uniformity

Increases with the value.

R.F.R.-RONDO FLOW REGULATED

DARK BLUE NOZZLE-**41** LPH

GRAY SWIVEL

CHRISTIANSEN UNIFORMITY COEF. (CU)% CHART

BASE PRESSURE-2.0bar

UPRIGHT POSITION

NOZZLE HEIGHT - **25**cm

Spacing Between Emitters (m')	Spacing between laterals (m')								
	2	2.5	3	3.5	4	4.5	5	5.5	6
2	98	95	92	88	92	94	87	78	*71*
2.5	95	92	93	91	91	90	84	76	*68*
3	92	93	93	89	89	90	85	*77*	*69*
3.5	88	91	89	86	85	87	83	*76*	*68*
4	92	91	89	85	86	90	*83*	*75*	*67*
4.5	94	90	90	87	90	*88*	*81*	*73*	*67*
5	87	84	85	83	*83*	*81*	*76*	*71*	*67*
5.5	78	76	*77*	*76*	*75*	*73*	*71*	*69*	*66*
6	*71*	*68*	*69*	*68*	*67*	*67*	*67*	*66*	*64*

☐ WARNING - Insufficient EMISSION in part's of Field!!! (Less then 1 mm/h)

* Coefficient of Uniformity (standards)

-Overlapping sprinklers standard equal to or greater than 84%

-Single sprinkler- no standard established. Uniformity

Increases with the value.

R.F.R.-RONDO FLOW REGULATED

RED NOZZLE - **70** LPH

GRAY SWIVEL

CHRISTIANSEN UNIFORMITY COEF. (CU)% CHART

BASE PRESSURE-2.0bar

UPRIGHT POSITION

NOZZLE HEIGHT - **25**cm

Spacing Between Emitters (m')	Spacing between laterals (m')								
	2	2.5	3	3.5	4	4.5	5	5.5	6
2	97	94	95	92	82	80	83	88	91
2.5	94	92	90	90	84	84	86	88	86
3	95	90	91	91	85	81	82	85	85
3.5	92	90	91	89	82	82	85	89	87
4	82	84	85	82	79	80	82	83	78
4.5	80	84	81	82	80	80	80	78	75
5	83	86	82	85	82	80	79	77	75
5.5	88	88	85	89	83	78	77	*77*	*77*
6	91	86	85	87	78	75	75	*77*	*77*

☐ WARNING - Insufficient EMISSION in part's of Field!!! (Less then 1 mm/h)

* Coefficient of Uniformity (standards)

-Overlapping sprinklers standard equal to or greater than 84%

-Single sprinkler- no standard established. Uniformity

Increases with the value.

R.F.R.-RONDO FLOW REGULATED

BLUE NOZZLE - **30** LPH

BLUE SWIVEL

CHRISTIANSEN UNIFORMITY COEF. (CU)% CHART

BASE PRESSURE-2.0bar

INVERTED POSITION

NOZZLE HEIGHT - **100** cm

Spacing Between Emitters (m')	Spacing between laterals (m')								
	2	2.5	3	3.5	4	4.5	5	5.5	6
2	88	79	68	68	73	77	*68*	*60*	*51*
2.5	79	72	68	*68*	71	75	*66*	*59*	*48*
3	68	68	*64*	*57*	*57*	*59*	*51*	*44*	*37*
3.5	68	*68*	*57*	*51*	*50*	*52*	*46*	*40*	*34*
4	73	71	*57*	*50*	*48*	*50*	*48*	*42*	*36*
4.5	77	75	*59*	*52*	*50*	*53*	*52*	*44*	*36*
5	*68*	*66*	*51*	*46*	*48*	*52*	*49*	*41*	*34*
5.5	*60*	*59*	*44*	*40*	*42*	*44*	*41*	*32*	*25*
6	*51*	*48*	*37*	*34*	*36*	*36*	*34*	*25*	*19*

□ WARNING - Insufficient EMISSION in part's of Field!!! (Less then 1 mm/h)

* Coefficient of Uniformity (standards)

-Overlapping sprinklers standard equal to or greater than 84%

-Single sprinkler- no standard established. Uniformity

Increases with the value.

R.F.R.-RONDO FLOW REGULATED

DARK BLUE NOZZLE-**41** LPH

BLUE SWIVEL

CHRISTIANSEN UNIFORMITY COEF. (CU)% CHART

BASE PRESSURE-2.0bar

INVERTED POSITION

NOZZLE HEIGHT - **100**cm

Spacing Between Emitters (m')	Spacing between laterals (m')								
	2	2.5	3	3.5	4	4.5	5	5.5	6
2	88	89	81	74	77	82	85	*78*	*70*
2.5	89	91	78	72	75	83	85	*77*	*68*
3	81	78	*71*	*69*	*75*	*74*	*71*	*66*	*59*
3.5	74	72	*69*	*69*	*64*	*63*	*61*	*61*	*54*
4	77	75	*75*	*64*	*59*	*58*	*61*	*61*	*54*
4.5	82	83	*74*	*63*	*58*	*60*	*66*	*64*	*55*
5	85	85	*71*	*61*	*61*	*66*	*68*	*63*	*54*
5.5	*78*	*77*	*66*	*61*	*61*	*64*	*63*	*58*	*49*
6	*70*	*68*	*59*	*54*	*54*	*55*	*54*	*49*	*42*

☐ WARNING - Insufficient EMISSION in part's of Field!!! (Less then 1 mm/h)

* Coefficient of Uniformity (standards)

-Overlapping sprinklers standard equal to or greater than 84%

-Single sprinkler- no standard established. Uniformity

Increases with the value.

R.F.R.-RONDO FLOW REGULATED

RED NOZZLE-**70** LPH

BLUE SWIVEL

CHRISTIANSEN UNIFORMITY COEF. (CU)% CHART

BASE PRESSURE-2.0bar

INVERTED POSITION

NOZZLE HEIGHT - **100**cm

Spacing Between Emitters (m')	Spacing between laterals (m')								
	2	2.5	3	3.5	4	4.5	5	5.5	6
2	91	87	89	76	72	74	79	83	86
2.5	87	79	86	77	72	70	71	75	74
3	89	86	84	74	68	73	77	77	76
3.5	76	77	74	66	69	73	69	69	*68*
4	72	72	68	69	70	65	59	*58*	*59*
4.5	74	70	73	73	65	58	55	*56*	*58*
5	79	71	77	69	59	55	*54*	*56*	*59*
5.5	83	75	77	69	*58*	*56*	*56*	*59*	*62*
6	86	74	76	*68*	*59*	*58*	*59*	*62*	*63*

☐ WARNING - Insufficient EMISSION in part's of Field!!! (Less then 1 mm/h)

* Coefficient of Uniformity (standards)

-Overlapping sprinklers standard equal to or greater than 84%

-Single sprinkler- no standard established. Uniformity

Increases with the value.

R.F.R.-“RONDO” FLOW REGULATED

20 lph - BLACK NOZZLE

Maximum No. Of Emitters Per Lateral

Pipe Diameter - **16/13.2** (OD/ID)

Inlet Pressure (m')	Slope %	Emitter spacing (m')												
		2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8
16	0	19	17	16	15	15	14	14	13	13	12	12	12	11
	2	24	22	21	20	20	19	19	18	18	18	17	17	17
	4	27	25	25	24	23	23	22	22	21	21	21	21	20
	6	29	28	27	27	26	26	25	25	24	24	24	24	24
18	0	28	26	24	23	22	21	20	20	19	18	18	17	17
	2	32	30	28	27	26	25	24	24	23	23	22	22	21
	4	35	32	31	30	29	28	27	27	26	26	25	25	25
	6	37	35	34	32	31	31	30	29	29	29	28	28	28
20	0	34	31	29	28	26	25	24	24	23	22	22	21	21
	2	37	35	33	31	30	29	28	27	27	26	25	25	24
	4	40	37	35	34	33	32	31	30	29	29	28	28	27
	6	42	39	38	36	35	34	33	33	32	32	31	31	30
22	0	38	35	33	31	30	29	28	27	26	25	24	24	23
	2	41	38	36	35	33	32	31	30	29	29	28	27	27
	4	44	41	39	37	36	35	34	33	32	31	31	30	30
	6	46	43	41	39	38	37	36	35	35	34	33	33	32
24	0	42	39	36	34	33	31	30	29	28	27	27	26	25
	2	45	42	39	37	36	35	33	32	32	31	30	29	29
	4	47	44	42	40	38	37	36	35	34	33	33	32	32
	6	49	46	44	42	41	39	38	37	37	36	35	35	34
26	0	45	42	39	37	35	34	32	31	30	29	29	28	27
	2	48	44	42	40	38	37	35	34	34	33	32	31	31
	4	50	47	44	42	41	39	38	37	36	35	35	34	33
	6	52	49	46	44	43	41	40	39	38	38	37	36	36
28	0	48	44	41	39	37	36	34	33	32	31	30	30	29
	2	51	47	44	42	40	39	37	36	35	34	34	33	32
	4	53	49	46	44	43	41	40	39	38	37	36	36	35
	6	55	51	48	46	45	43	42	41	40	39	39	38	37

Slope - Flat & downhill

For Uphill Inlet pressure including flat slope + difference level.

(Continued from page 12)

R.F.R.-“RONDO” FLOW REGULATED

20 lph - BLACK NOZZLE

Maximum No. Of Emitters Per Lateral

Pipe Diameter - **16/13.2** (OD/ID)

Inlet Pressure (m')	Slope %	Emitter spacing (m')												
		2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8
30	0	51	47	44	41	39	38	36	35	34	33	32	31	31
	2	53	49	46	44	42	41	39	38	37	36	35	34	34
	4	55	51	48	46	44	43	42	40	39	38	38	37	36
	6	57	53	50	48	46	45	44	43	42	41	40	39	39
32	0	53	49	46	43	41	39	38	37	36	35	34	33	32
	2	55	51	48	46	44	42	41	40	38	37	37	36	35
	4	57	53	50	48	46	44	43	42	41	40	39	38	38
	6	59	55	52	50	48	47	45	44	43	42	41	41	40
35	0	56	52	49	46	44	42	40	39	38	37	36	35	34
	2	58	54	51	48	46	44	43	42	40	39	38	38	37
	4	60	56	53	50	48	47	45	44	43	42	41	40	39
	6	62	58	55	52	50	49	47	46	45	44	43	42	42

Slope - Flat & downhill

For Uphill Inlet pressure including flat slope + difference level.

R.F.R.-“RONDO” FLOW REGULATED

20 lph - BLACK NOZZLE

Maximum No. Of Emitters Per Lateral

Pipe Diameter - **16/13.6** (OD/ID)

Inlet Pressure (m')	Slope %	Emitter spacing (m')												
		2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8
16	0	20	18	17	16	15	15	14	14	13	13	13	12	12
	2	25	24	23	22	21	20	20	20	19	19	18	18	18
	4	28	27	26	25	25	24	24	23	23	23	22	22	22
	6	32	30	29	28	28	27	27	26	26	26	26	25	25
18	0	30	27	26	24	23	22	21	21	20	19	19	18	18
	2	34	32	30	29	28	27	26	25	25	24	24	23	23
	4	37	35	33	32	31	30	29	29	28	27	27	27	26
	6	39	37	36	34	34	33	32	31	31	30	30	30	29
20	0	36	33	31	29	28	27	26	25	24	23	23	22	22
	2	39	37	35	33	32	31	30	29	28	27	27	26	26
	4	42	39	37	36	35	34	33	32	31	31	30	30	29
	6	44	42	40	39	37	36	36	35	34	34	33	33	32
22	0	40	37	35	33	31	30	29	28	27	26	26	25	24
	2	44	41	38	37	35	34	33	32	31	30	30	29	28
	4	46	43	41	39	38	37	36	35	34	33	33	32	32
	6	49	46	44	42	40	39	38	37	37	36	36	35	34
24	0	44	41	38	36	34	33	32	31	30	29	28	27	27
	2	47	44	41	39	38	36	35	34	33	33	32	31	31
	4	50	46	44	42	41	39	38	37	36	35	35	34	34
	6	52	49	46	45	43	42	41	40	39	38	38	37	36
26	0	48	44	41	39	37	35	34	33	32	31	30	29	29
	2	50	47	44	42	40	39	38	36	35	35	34	33	32
	4	53	49	47	45	43	41	40	39	38	37	37	36	35
	6	55	52	49	47	45	44	43	42	41	40	39	39	38
28	0	51	47	44	41	39	38	36	35	34	33	32	31	31
	2	53	50	47	44	42	41	40	38	37	36	36	35	34
	4	56	52	49	47	45	43	42	41	40	39	38	38	37
	6	58	54	51	49	47	46	45	44	43	42	41	40	40

Slope - Flat & downhill

For Uphill Inlet pressure including flat slope + difference level.

(Continued from page 14)

R.F.R.-“RONDO” FLOW REGULATED

20 lph - BLACK NOZZLE

Maximum No. Of Emitters Per Lateral

Pipe Diameter - **16/13.6** (OD/ID)

Inlet Pressure (m')	Slope %	Emitter spacing (m')												
		2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8
30	0	53	49	46	43	41	40	38	37	36	35	34	33	32
	2	56	52	49	46	44	43	41	40	39	38	37	36	36
	4	58	54	51	49	47	45	44	43	42	41	40	39	38
	6	60	56	53	51	49	48	46	45	44	43	42	42	41
32	0	56	51	48	46	43	42	40	39	37	36	35	35	34
	2	58	54	51	48	46	45	43	42	41	40	39	38	37
	4	60	56	53	51	49	47	46	44	43	42	41	41	40
	6	63	58	55	53	51	49	48	47	46	45	44	43	42
35	0	59	55	51	48	46	44	42	41	40	39	38	37	36
	2	62	54	54	51	49	47	45	44	43	42	41	40	39
	4	64	59	56	53	51	49	48	47	45	44	43	42	42
	6	66	61	58	55	53	52	50	49	48	47	46	45	44

Slope - Flat & downhill

For Uphill Inlet pressure including flat slope + difference level.

R.F.R.-“RONDO” FLOW REGULATED

20 lph - BLACK NOZZLE

Maximum No. Of Emitters Per Lateral

Pipe Diameter - **17.8/15.2** (OD/ID)

Inlet Pressure (m')	Slope %	Emitter spacing (m')												
		2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8
16	0	24	22	21	20	19	18	17	17	16	16	15	15	15
	2	31	30	28	27	27	26	25	25	24	24	23	23	23
	4	36	35	33	32	32	31	30	30	30	29	29	28	28
	6	40	39	38	37	36	35	35	34	34	34	33	33	33
18	0	36	33	31	29	28	27	26	25	24	23	23	22	22
	2	42	39	37	35	34	33	31	31	31	30	29	29	29
	4	46	43	41	40	39	38	37	36	35	35	34	34	33
	6	49	47	45	44	43	42	41	40	40	39	39	38	38
20	0	43	40	37	35	34	32	31	30	29	28	27	27	26
	2	48	45	43	41	39	38	37	36	35	34	34	33	32
	4	52	49	47	45	43	42	41	40	39	39	38	38	37
	6	56	53	50	49	47	46	45	44	43	43	42	42	41
22	0	49	45	42	40	38	36	35	34	33	32	31	30	30
	2	53	50	47	45	43	42	40	39	38	37	37	36	35
	4	57	54	51	49	47	46	45	44	43	42	41	40	40
	6	60	57	55	52	51	50	48	47	46	46	45	44	44
24	0	54	49	46	44	42	40	38	37	36	35	34	33	32
	2	58	54	51	49	47	45	44	42	41	40	39	39	38
	4	61	58	55	52	50	49	48	46	45	44	44	43	42
	6	65	61	58	56	54	52	51	50	49	48	47	47	46
26	0	58	53	50	47	45	43	41	40	39	38	37	36	35
	2	62	57	54	52	50	48	46	45	44	43	42	41	40
	4	65	61	58	55	53	52	50	49	48	47	46	45	44
	6	68	64	61	59	57	55	54	52	51	50	50	49	48
28	0	61	57	53	50	48	46	44	42	41	40	39	38	37
	2	65	61	57	54	52	50	49	47	46	45	44	43	42
	4	69	64	61	58	56	54	52	51	50	49	48	47	46
	6	72	67	64	61	59	57	56	55	53	52	51	51	50

Slope - Flat & downhill

For Uphill Inlet pressure including flat slope + difference level.

(Continued from page 16)

R.F.R - “RONDO FLOW REGULATED

R.F.R.-“RONDO” FLOW REGULATED

20 lph - BLACK NOZZLE

Maximum No. Of Emitters Per Lateral

Pipe Diameter - **17.8/15.2** (OD/ID)

Inlet Pressure (m')	Slope %	Emitter spacing (m')												
		2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8
30	0	65	60	56	53	50	48	46	45	43	42	41	40	39
	2	68	64	60	57	55	53	51	49	48	47	46	45	44
	4	72	67	63	60	58	56	55	53	52	51	50	49	48
	6	74	70	66	64	61	60	58	57	55	54	53	52	52
32	0	68	62	58	55	53	50	48	47	45	44	43	42	41
	2	71	66	62	59	57	55	53	51	50	49	48	47	46
	4	74	69	66	63	60	58	56	55	54	52	51	50	50
	6	77	72	69	66	63	62	60	58	57	56	55	54	53
35	0	72	66	62	59	56	53	51	50	48	47	45	44	43
	2	75	70	66	62	60	58	56	54	52	51	50	49	48
	4	78	73	69	66	63	61	59	58	56	55	54	53	52
	6	81	76	72	69	66	64	62	61	59	58	57	56	55

Slope - Flat & downhill

For Uphill Inlet pressure including flat slope + difference level.

R.F.R.-“RONDO” FLOW REGULATED

20 lph - BLACK NOZZLE

Maximum No. Of Emitters Per Lateral

Pipe Diameter - **20/17** (OD/ID)

Inlet Pressure (m')	Slope %	Emitter spacing (m')												
		2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8
16	0	29	27	25	24	23	22	21	20	20	19	19	18	18
	2	39	37	36	35	34	33	32	31	31	31	30	30	29
	4	46	44	43	41	41	40	39	39	38	38	37	37	37
	6	52	50	49	48	47	46	45	45	44	44	44	43	43
18	0	44	40	38	36	34	33	31	30	29	28	28	27	26
	2	51	48	46	44	43	41	40	39	39	38	37	37	36
	4	58	54	52	50	49	48	47	46	45	45	44	43	43
	6	63	60	58	56	55	53	53	52	51	50	50	49	49
20	0	53	48	45	43	41	39	38	36	35	34	33	33	32
	2	60	56	53	51	49	47	46	45	44	43	42	41	41
	4	65	61	59	56	55	53	52	51	50	49	48	48	47
	6	70	67	64	62	60	59	57	56	55	55	54	53	53
22	0	59	55	51	48	46	44	43	41	40	39	38	37	36
	2	66	62	58	56	54	52	50	49	48	47	46	45	44
	4	71	67	64	61	59	58	56	55	54	53	52	51	50
	6	76	72	69	66	64	63	61	60	59	58	57	57	56
24	0	65	60	56	53	51	48	47	45	44	42	41	40	39
	2	71	66	63	60	58	56	54	52	51	50	49	48	47
	4	76	72	68	65	63	61	60	58	57	56	55	54	53
	6	81	76	73	70	68	66	65	63	62	61	60	59	59
26	0	70	65	60	57	54	52	50	48	47	46	44	43	42
	2	76	71	67	64	61	59	57	56	54	53	52	51	50
	4	81	76	72	69	66	64	63	61	60	59	58	57	56
	6	85	80	77	74	71	69	68	66	65	64	63	62	61
28	0	74	69	64	61	58	55	53	52	50	48	47	46	45
	2	80	74	70	67	64	62	60	58	57	56	54	53	52
	4	85	79	75	72	69	67	65	64	62	61	60	59	58
	6	89	84	80	77	74	72	70	69	67	66	65	64	63

Slope - Flat & downhill

For Uphill Inlet pressure including flat slope + difference level.

(Continued from page 18)

R.F.R - “RONDO FLOW REGULATED

R.F.R.-“RONDO” FLOW REGULATED

20 lph - BLACK NOZZLE

Maximum No. Of Emitters Per Lateral

Pipe Diameter - **20/17** (OD/ID)

Inlet Pressure (m')	Slope %	Emitter spacing (m')												
		2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8
30	0	78	72	68	64	61	58	56	54	53	51	50	48	47
	2	84	78	73	70	67	65	63	61	59	58	57	55	54
	4	88	83	78	75	72	70	68	66	65	63	62	61	60
	6	93	87	83	80	77	75	73	71	70	68	67	66	65
32	0	82	76	71	67	64	61	59	57	55	53	52	51	50
	2	87	81	76	73	70	67	65	63	62	60	59	58	56
	4	92	86	81	78	75	72	70	68	67	66	64	63	62
	6	96	90	86	82	79	77	75	73	72	70	69	68	67
35	0	87	80	75	71	68	65	62	60	58	57	55	54	53
	2	92	86	81	77	73	71	68	66	65	63	62	60	59
	4	96	90	85	81	78	76	73	72	70	68	67	66	65
	6	100	94	89	86	83	80	78	76	75	73	72	71	70

Slope - Flat & downhill

For Uphill Inlet pressure including flat slope + difference level.

R.F.R.-“RONDO” FLOW REGULATED

20 lph - BLACK NOZZLE

Maximum No. Of Emitters Per Lateral

Pipe Diameter - **20/17.4** (OD/ID)

Inlet Pressure (m')	Slope %	Emitter spacing (m')												
		2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8
16	0	30	28	26	25	24	23	22	21	20	20	19	19	18
	2	41	39	37	36	35	34	34	33	33	32	32	31	31
	4	49	46	45	44	43	42	41	41	40	40	39	39	39
	6	55	52	51	50	49	49	48	47	47	46	46	46	45
18	0	45	42	39	37	35	34	33	31	30	30	29	28	27
	2	54	51	48	46	45	43	42	41	41	40	39	38	38
	4	60	57	55	53	52	50	49	48	48	47	46	46	45
	6	66	63	61	59	57	56	55	54	54	53	53	52	51
20	0	55	50	47	45	43	41	39	38	37	36	35	34	33
	2	62	58	55	53	51	49	48	47	46	45	44	43	43
	4	68	64	62	59	57	56	55	54	53	52	51	50	50
	6	73	70	67	65	63	62	60	59	58	58	57	56	56
22	0	62	57	53	50	48	46	44	43	41	40	39	38	37
	2	69	64	61	58	56	54	53	51	50	49	48	47	46
	4	75	70	67	64	62	60	59	58	56	55	55	54	53
	6	79	75	72	70	68	66	65	63	62	61	60	60	59
24	0	68	62	58	55	53	50	49	47	45	44	43	42	41
	2	74	69	66	63	60	58	56	55	54	52	51	50	49
	4	80	75	71	68	66	64	62	61	60	59	58	57	56
	6	85	80	76	74	71	70	68	67	65	64	63	62	62
26	0	73	67	63	59	57	54	52	50	49	47	46	45	44
	2	79	74	70	66	64	62	60	58	57	55	54	53	52
	4	84	79	75	72	70	68	66	64	63	62	60	59	59
	6	89	84	80	77	75	73	71	69	68	67	66	65	64
28	0	77	71	67	63	60	58	56	54	52	50	49	48	47
	2	83	78	73	70	67	65	63	61	59	58	57	56	55
	4	89	83	79	75	73	71	69	67	65	64	63	62	61
	6	93	88	84	80	78	76	74	72	71	69	68	67	66

Slope - Flat & downhill

For Uphill Inlet pressure including flat slope + difference level.

(Continued from page 20)

R.F.R.-“RONDO” FLOW REGULATED

20 lph - BLACK NOZZLE

Maximum No. Of Emitters Per Lateral

Pipe Diameter - **20/17.4** (OD/ID)

Inlet Pressure (m')	Slope %	Emitter spacing (m')												
		2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8
30	0	82	75	70	67	63	61	58	56	55	53	52	50	49
	2	87	81	77	73	70	68	65	64	62	60	59	58	57
	4	92	86	82	78	76	73	71	69	68	66	65	64	63
	6	97	91	87	83	81	78	76	75	73	72	71	69	68
32	0	85	79	74	70	66	64	61	59	57	56	54	53	52
	2	91	85	80	76	73	70	68	66	64	63	61	60	59
	4	96	90	85	81	78	76	74	72	70	69	67	66	65
	6	100	94	90	86	83	81	79	77	75	74	73	74	70
35	0	91	84	78	74	70	67	65	63	61	59	57	56	55
	2	96	89	84	80	77	74	71	69	68	66	64	63	62
	4	101	94	89	85	82	79	77	75	73	72	70	69	68
	6	105	98	94	90	87	84	82	80	78	77	75	74	73

Slope - Flat & downhill

For Uphill Inlet pressure including flat slope + difference level.

R.F.R.-“RONDO” FLOW REGULATED

30 lph - BLUE NOZZLE

Maximum No. Of Emitters Per Lateral

Pipe Diameter - **16/13.2** (OD/ID)

Inlet Pressure (m')	Slope %	Emitter spacing (m')												
		2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8
16	0	15	13	13	12	11	11	10	10	10	10	9	9	9
	2	18	17	16	15	15	14	14	14	13	13	13	13	12
	4	20	19	18	17	17	16	16	16	15	15	15	15	15
	6	21	20	20	19	19	19	18	18	17	17	17	17	17
18	0	22	20	19	18	17	16	16	15	15	14	14	13	13
	2	24	22	21	20	19	19	18	18	17	17	17	16	16
	4	26	24	23	22	21	21	20	20	19	19	19	18	18
	6	27	26	25	24	23	22	22	21	21	21	20	20	20
20	0	26	24	23	21	20	20	19	18	18	17	17	16	16
	2	28	26	25	24	23	22	21	21	20	19	19	19	18
	4	30	28	26	25	24	24	23	22	22	21	21	21	20
	6	31	29	28	27	26	25	24	24	23	23	23	22	22
22	0	30	27	26	24	23	22	21	21	20	19	19	18	18
	2	31	29	28	26	25	24	23	23	22	22	21	21	20
	4	33	31	29	28	27	26	25	24	24	23	23	22	22
	6	34	32	30	29	28	27	27	26	25	25	24	24	24
24	0	32	30	28	27	25	24	23	22	22	21	21	20	20
	2	34	32	30	28	27	26	25	25	24	23	23	22	22
	4	36	33	31	30	29	28	27	26	26	25	24	24	24
	6	37	34	33	31	30	29	28	28	27	26	26	26	25
26	0	35	32	30	29	27	26	25	24	23	23	22	22	21
	2	37	34	32	30	29	28	27	26	25	25	24	24	23
	4	38	35	33	32	30	29	29	28	27	26	26	25	25
	6	39	37	35	33	32	31	30	29	28	28	27	27	26
28	0	37	34	32	30	29	28	27	26	25	24	24	23	22
	2	39	36	34	32	31	29	28	28	27	26	25	25	24
	4	40	37	35	33	32	31	30	29	28	28	27	27	26
	6	41	38	36	35	33	32	31	31	30	29	29	28	28

Slope - Flat & downhill

For Uphill Inlet pressure including flat slope + difference level.

(Continued from page 22)

R.F.R - “RONDO FLOW REGULATED

R.F.R.-“RONDO” FLOW REGULATED

30 lph - BLUE NOZZLE

Maximum No. Of Emitters Per Lateral

Pipe Diameter - **16/13.2** (OD/ID)

Inlet Pressure (m')	Slope %	Emitter spacing (m')												
		2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8
30	0	9	36	34	32	30	29	28	27	26	25	25	24	24
	2	1	38	35	34	32	31	30	29	28	27	27	26	26
	4	2	39	37	35	33	32	31	30	30	29	28	28	27
	6	3	40	38	36	35	34	33	32	31	30	30	29	29
32	0	1	38	35	33	32	30	29	28	27	27	26	25	25
	2	2	39	37	35	33	32	31	30	29	28	28	27	27
	4	4	40	38	36	35	34	33	32	31	30	29	29	28
	6	5	42	39	38	36	35	34	33	32	31	31	30	30
35	0	3	40	37	35	34	32	31	30	29	28	28	27	26
	2	5	41	39	37	35	34	33	32	31	30	29	29	28
	4	6	43	40	38	37	35	34	33	32	31	31	30	30
	6	7	44	41	39	38	37	35	34	34	33	32	32	31

Slope - Flat & downhill

For Uphill Inlet pressure including flat slope + difference level.

R.F.R.-“RONDO” FLOW REGULATED

30 lph - BLUE NOZZLE

Maximum No. Of Emitters Per Lateral

Pipe Diameter - **16/13.6** (OD/ID)

Inlet Pressure (m')	Slope %	Emitter spacing (m')												
		2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8
16	0	15	14	13	13	12	11	11	11	10	10	10	10	9
	2	19	18	17	16	16	15	15	14	14	14	14	13	13
	4	21	20	19	18	18	17	17	17	16	16	16	16	16
	6	23	22	21	20	20	19	19	19	19	18	18	18	18
18	0	23	21	20	19	18	17	16	16	15	15	15	14	14
	2	25	24	22	21	21	20	19	19	18	18	18	17	17
	4	27	26	24	23	23	22	21	21	20	20	20	19	19
	6	29	27	26	25	24	24	23	23	22	22	22	21	21
20	0	28	25	24	23	21	21	20	19	19	18	18	17	17
	2	30	28	26	25	24	23	22	22	21	21	20	20	19
	4	32	29	28	27	26	25	24	24	23	23	22	22	21
	6	33	31	30	28	27	27	26	25	25	24	24	24	23
22	0	31	29	27	25	24	23	22	22	21	20	20	19	19
	2	33	31	29	28	27	26	25	24	23	23	22	22	21
	4	35	32	31	29	28	27	27	26	25	25	24	24	23
	6	36	34	32	31	30	29	28	28	27	26	26	26	25
24	0	34	32	30	28	27	25	25	24	23	22	22	21	21
	2	36	33	32	30	29	28	27	26	25	25	24	23	23
	4	38	35	33	32	30	29	28	28	27	26	26	25	25
	6	39	36	35	33	32	31	30	29	29	28	28	27	27
26	0	37	34	32	30	29	27	26	25	25	24	23	23	22
	2	39	36	34	32	31	29	28	28	27	26	26	25	25
	4	40	37	35	34	32	31	30	29	29	28	27	27	26
	6	41	39	37	35	34	33	32	31	30	30	29	29	28
28	0	39	36	34	32	30	29	28	27	26	25	25	24	24
	2	41	38	36	34	32	31	30	29	28	28	27	26	26
	4	42	39	37	35	34	33	32	31	30	29	29	28	28
	6	44	41	38	37	35	34	33	32	32	31	30	30	29

Slope - Flat & downhill

For Uphill Inlet pressure including flat slope + difference level.

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R.F.R - “RONDO FLOW REGULATED

EC 24

R.F.R.-“RONDO” FLOW REGULATED

30 lph - BLUE NOZZLE

Maximum No. Of Emitters Per Lateral

Pipe Diameter - **16/13.6** (OD/ID)

Inlet Pressure (m')	Slope %	Emitter spacing (m')												
		2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8
30	0	41	38	36	34	32	31	30	29	28	27	26	25	25
	2	43	40	37	35	34	33	31	30	30	29	28	28	27
	4	44	41	39	37	35	34	33	32	31	31	30	29	29
	6	45	42	40	38	37	36	35	34	33	32	31	31	30
32	0	43	40	37	35	34	32	31	30	29	28	27	27	26
	2	45	41	39	37	35	34	33	32	31	30	29	29	28
	4	46	43	40	38	37	36	34	33	33	32	31	30	30
	6	47	44	42	40	38	37	36	35	34	33	33	32	31
35	0	46	42	39	37	36	34	33	32	31	30	29	28	28
	2	47	44	41	39	37	36	35	33	33	32	31	30	30
	4	49	45	42	40	39	37	36	35	34	33	33	32	31
	6	50	46	44	42	40	39	38	37	36	35	34	33	33

Slope - Flat & downhill

For Uphill Inlet pressure including flat slope + difference level.

R.F.R.-“RONDO” FLOW REGULATED

30 lph - BLUE NOZZLE

Maximum No. Of Emitters Per Lateral

Pipe Diameter - **17.8/15.2** (OD/ID)

Inlet Pressure (m')	Slope %	Emitter spacing (m')												
		2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8
16	0	19	17	16	15	15	14	13	13	13	12	12	12	11
	2	23	22	21	20	19	19	18	18	18	17	17	17	17
	4	26	25	24	23	23	22	22	21	21	21	21	20	20
	6	29	28	27	26	25	25	25	24	24	24	23	23	23
18	0	28	26	24	23	22	21	20	19	19	18	18	17	17
	2	31	29	28	26	26	25	24	23	23	22	22	21	21
	4	34	32	31	29	28	28	27	26	26	25	25	25	24
	6	36	34	33	32	31	30	30	29	28	28	28	27	27
20	0	33	31	29	27	26	25	24	23	22	22	21	21	20
	2	37	34	32	31	29	28	28	27	26	26	25	25	24
	4	39	37	35	33	32	31	30	30	29	28	28	27	27
	6	41	39	37	36	35	34	33	32	31	31	30	30	30
22	0	38	35	33	31	29	28	27	26	25	25	24	23	23
	2	41	38	36	34	33	31	30	30	29	28	28	27	26
	4	43	40	38	36	35	34	33	32	32	31	30	30	29
	6	45	42	40	39	37	36	35	35	34	33	33	32	32
24	0	41	38	36	34	32	31	30	29	28	27	26	26	25
	2	44	41	39	37	35	34	33	32	31	30	30	29	28
	4	46	43	41	39	38	36	35	34	34	33	32	32	31
	6	48	45	43	41	40	39	38	37	36	35	35	34	34
26	0	45	41	38	36	35	33	32	31	30	29	28	28	27
	2	47	44	41	39	38	36	35	34	33	32	31	31	30
	4	49	46	43	41	40	39	37	36	36	35	34	33	33
	6	51	48	45	44	42	41	40	39	38	37	36	36	35
28	0	47	44	41	39	37	35	34	33	32	31	30	29	29
	2	50	46	44	41	40	38	37	36	35	34	33	32	32
	4	52	48	46	44	42	40	39	38	37	36	36	35	34
	6	54	50	48	46	44	43	41	40	39	39	38	37	37

Slope - Flat & downhill

For Uphill Inlet pressure including flat slope + difference level.

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R.F.R - “RONDO FLOW REGULATED

EC 26

R.F.R.-“RONDO” FLOW REGULATED

30 lph - BLUE NOZZLE

Maximum No. Of Emitters Per Lateral

Pipe Diameter - **17.8/15.2** (OD/ID)

Inlet Pressure (m')	Slope %	Emitter spacing (m')												
		2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8
30	0	50	46	43	41	39	37	36	35	33	33	32	31	30
	2	52	48	46	43	41	40	39	37	36	35	35	34	33
	4	54	50	48	45	44	42	41	40	39	38	37	36	36
	6	56	52	50	48	46	44	43	42	41	40	39	39	38
32	0	52	48	45	43	41	39	37	36	35	34	33	32	32
	2	55	51	48	45	43	42	40	39	38	37	36	35	35
	4	56	52	50	47	45	44	42	41	40	39	38	38	37
	6	58	54	51	49	47	46	44	43	42	41	41	40	39
35	0	55	51	48	45	43	41	40	38	37	36	35	34	33
	2	58	53	50	48	46	44	42	41	40	39	38	37	36
	4	59	55	52	50	48	46	44	43	42	41	40	39	39
	6	61	57	54	52	50	48	47	45	44	43	42	42	41

Slope - Flat & downhill

For Uphill Inlet pressure including flat slope + difference level.

R.F.R.-“RONDO” FLOW REGULATED

30 lph - BLUE NOZZLE

Maximum No. Of Emitters Per Lateral

Pipe Diameter - **20/17** (OD/ID)

Inlet Pressure (m')	Slope %	Emitter spacing (m')												
		2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8
16	0	23	21	20	18	18	17	16	16	15	15	14	14	14
	2	29	27	26	25	25	24	23	23	22	22	22	21	21
	4	33	32	31	30	29	28	28	27	27	27	26	26	26
	6	37	36	34	34	33	32	32	32	31	31	30	30	30
18	0	34	31	29	28	26	25	24	23	23	22	21	21	20
	2	39	36	34	33	32	31	30	29	28	28	27	27	26
	4	42	40	38	37	36	35	34	33	33	32	32	31	31
	6	46	43	42	40	39	38	38	37	36	36	35	35	35
20	0	41	37	35	33	32	30	29	28	27	26	26	25	25
	2	45	42	40	38	36	35	34	33	33	32	31	31	30
	4	48	46	43	42	40	39	38	37	36	36	35	35	34
	6	51	49	47	45	44	43	42	41	40	39	39	38	38
22	0	46	42	40	37	36	34	33	32	31	30	29	28	28
	2	50	47	44	42	40	39	38	37	36	35	34	33	33
	4	53	50	47	45	44	43	41	40	40	39	38	37	37
	6	56	53	50	49	47	46	45	44	43	42	41	41	40
24	0	50	46	43	41	39	37	36	35	34	33	32	31	30
	2	54	50	48	45	43	42	41	39	38	37	37	36	35
	4	57	54	51	49	47	45	44	43	42	41	40	40	39
	6	60	57	54	52	50	49	47	46	45	45	44	43	43
26	0	54	50	47	44	42	40	39	37	36	35	34	33	33
	2	58	54	51	48	46	45	43	42	41	40	39	38	37
	4	61	57	54	51	50	48	47	45	44	43	43	42	41
	6	63	60	57	54	53	51	50	49	47	47	46	45	44
28	0	57	53	50	47	45	43	41	40	39	37	36	36	35
	2	61	57	53	51	49	47	45	44	43	42	41	40	39
	4	64	60	56	54	52	50	49	47	46	45	44	44	43
	6	66	62	59	57	55	53	52	51	49	48	48	47	46

Slope - Flat & downhill

For Uphill Inlet pressure including flat slope + difference level.

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R.F.R - “RONDO FLOW REGULATED

EC 28

R.F.R.-“RONDO” FLOW REGULATED

30 lph - BLUE NOZZLE

Maximum No. Of Emitters Per Lateral

Pipe Diameter - **20/17** (OD/ID)

Inlet Pressure (m')	Slope %	Emitter spacing (m')												
		2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8
30	0	61	56	52	49	47	45	43	42	41	39	38	37	37
	2	64	59	56	53	51	49	47	46	45	44	43	42	41
	4	67	62	59	56	54	52	51	49	48	47	46	45	45
	6	69	65	62	59	57	55	54	52	51	50	49	48	48
32	0	63	58	55	52	49	47	45	44	43	41	40	39	38
	2	67	62	58	55	53	51	49	48	47	45	44	43	43
	4	69	65	61	58	56	54	53	51	50	49	48	47	46
	6	72	67	64	61	59	57	56	54	53	52	51	50	49
35	0	67	62	58	55	52	50	48	47	45	44	43	42	41
	2	70	65	61	58	56	54	52	50	49	48	47	46	45
	4	73	68	64	61	59	57	55	54	52	51	50	49	48
	6	75	71	67	64	62	60	58	56	55	54	53	52	51

Slope - Flat & downhill

For Uphill Inlet pressure including flat slope + difference level.

R.F.R.-“RONDO” FLOW REGULATED

30 lph - BLUE NOZZLE

Maximum No. Of Emitters Per Lateral

Pipe Diameter - **20/17.4** (OD/ID)

Inlet Pressure (m')	Slope %	Emitter spacing (m')												
		2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8
16	0	24	22	20	19	18	18	17	16	16	15	15	15	14
	2	30	29	27	27	26	25	24	24	24	23	23	22	22
	4	35	33	32	31	31	30	29	29	29	28	28	28	27
	6	39	37	36	36	35	34	34	33	33	32	32	32	32
18	0	35	32	30	29	27	26	25	24	24	23	22	22	21
	2	40	38	36	34	33	32	31	31	30	29	29	28	28
	4	45	42	40	39	38	37	36	35	34	34	33	33	32
	6	48	46	44	43	41	40	40	39	38	38	37	37	37
20	0	42	39	36	34	33	31	30	29	28	28	27	26	26
	2	47	44	41	40	38	37	36	35	34	33	33	32	31
	4	51	48	45	44	42	41	40	39	38	38	37	36	36
	6	54	51	49	47	46	45	44	43	42	41	41	40	40
22	0	48	44	41	39	37	36	34	33	32	31	30	30	29
	2	52	49	46	44	42	41	39	38	37	37	36	65	64
	4	56	52	50	48	46	45	43	42	41	41	40	39	39
	6	59	55	53	51	49	48	47	46	45	44	44	43	42
24	0	52	48	45	43	41	39	38	36	35	34	33	32	32
	2	56	53	50	47	45	44	42	41	40	39	38	38	37
	4	60	56	53	51	49	48	46	45	44	43	42	42	41
	6	63	59	56	54	52	51	50	49	48	47	46	45	45
26	0	56	52	49	46	44	42	40	39	38	37	36	35	34
	2	60	56	53	50	48	46	45	44	43	42	41	40	39
	4	63	59	56	54	52	50	49	47	46	45	45	44	43
	6	66	62	59	57	55	53	52	51	50	49	48	47	47
28	0	60	55	52	49	47	45	43	41	40	39	38	37	36
	2	64	59	56	53	51	49	47	46	45	44	43	42	41
	4	67	62	59	56	54	53	51	50	49	47	47	46	45
	6	70	65	62	60	57	56	54	53	52	51	50	49	48

Slope - Flat & downhill

For Uphill Inlet pressure including flat slope + difference level.

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R.F.R - “RONDO FLOW REGULATED

R.F.R.-“RONDO” FLOW REGULATED

30 lph - BLUE NOZZLE

Maximum No. Of Emitters Per Lateral

Pipe Diameter - **20/17.4** (OD/ID)

Inlet Pressure (m')	Slope %	Emitter spacing (m')												
		2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8
30	0	63	58	54	51	49	47	45	44	42	41	40	39	38
	2	67	62	58	55	53	51	49	48	47	46	45	44	43
	4	70	65	62	59	57	55	53	52	50	49	48	47	47
	6	72	68	65	62	60	58	56	55	54	53	52	51	50
32	0	66	61	57	54	51	49	47	46	44	43	42	41	40
	2	69	64	61	58	55	53	51	50	49	47	46	45	44
	4	72	68	64	61	59	57	55	53	52	51	50	49	48
	6	75	70	67	64	62	60	58	57	55	54	53	52	52
35	0	70	65	60	57	54	52	50	48	47	46	44	43	42
	2	73	68	64	61	58	56	54	52	51	50	49	48	47
	4	76	71	67	64	62	59	58	56	55	53	52	51	50
	6	79	74	70	67	64	62	61	59	58	57	56	55	54

Slope - Flat & downhill

For Uphill Inlet pressure including flat slope + difference level.

R.F.R.-“RONDO” FLOW REGULATED

41 lph - DARK BLUE NOZZLE

Maximum No. Of Emitters Per Lateral

Pipe Diameter - **16/13.2** (OD/ID)

Inlet Pressure (m')	Slope %	Emitter spacing (m')												
		2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8
16	0	12	11	10	10	9	9	9	8	8	8	8	7	7
	2	14	13	12	12	12	11	11	11	11	10	10	10	10
	4	16	15	14	14	13	13	13	12	12	12	12	12	11
	6	17	16	15	15	14	14	14	14	13	13	13	13	13
18	0	18	16	15	15	14	13	13	12	12	12	11	11	11
	2	19	18	17	16	16	15	15	14	14	13	13	13	13
	4	21	19	18	18	17	16	16	16	15	15	15	14	14
	6	22	20	19	19	18	18	17	17	16	16	16	16	15
20	0	22	20	19	18	17	16	15	15	14	14	14	13	13
	2	23	21	20	19	18	18	17	17	16	16	15	15	15
	4	24	22	21	20	19	19	18	18	17	17	17	16	16
	6	25	23	22	21	21	20	19	19	18	18	18	18	17
22	0	24	22	21	20	19	18	17	17	16	16	15	15	15
	2	25	24	22	21	20	20	19	18	18	17	17	17	16
	4	27	25	23	22	21	21	20	19	19	19	18	18	18
	6	27	26	24	23	22	22	21	21	20	20	19	19	19
24	0	27	25	23	22	21	20	19	18	18	17	17	16	16
	2	28	26	24	23	22	21	20	20	19	19	18	18	18
	4	29	27	25	24	23	22	22	21	20	20	20	19	19
	6	30	28	26	25	24	23	23	22	21	21	21	20	20
26	0	29	26	25	23	22	21	21	20	19	19	18	18	17
	2	30	28	26	25	24	23	22	21	21	20	20	19	19
	4	31	28	27	26	25	24	23	22	22	21	21	20	20
	6	31	29	28	27	26	25	24	23	23	22	22	21	21
28	0	30	28	26	25	24	23	22	21	20	20	19	19	18
	2	31	29	27	26	25	24	23	22	22	21	21	20	20
	4	32	30	28	27	26	25	24	23	23	22	22	21	21
	6	33	31	29	28	27	26	25	24	24	23	23	22	22

Slope - Flat & downhill

For Uphill Inlet pressure including flat slope + difference level.

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R.F.R - “RONDO FLOW REGULATED

R.F.R.-“RONDO” FLOW REGULATED

41 lph - DARK BLUE NOZZLE

Maximum No. Of Emitters Per Lateral

Pipe Diameter - **16/13.2** (OD/ID)

Inlet Pressure (m')	Slope %	Emitter spacing (m')												
		2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8
30	0	30	30	28	26	25	24	23	22	22	21	20	20	19
	2	33	31	29	27	26	25	24	23	23	22	22	21	21
	4	34	31	30	28	27	26	25	24	24	23	23	22	22
	6	35	32	31	29	28	27	26	25	25	24	24	23	23
32	0	34	31	29	27	26	25	24	23	23	22	21	21	20
	2	34	32	30	28	27	26	25	24	24	23	23	22	22
	4	35	33	31	29	28	27	26	25	25	24	24	23	23
	6	36	34	32	30	29	28	27	26	26	25	25	24	24
35	0	36	33	31	29	28	27	26	25	24	23	23	22	22
	2	36	34	32	30	29	28	27	26	25	24	24	23	23
	4	37	35	33	31	30	29	28	27	26	25	25	24	24
	6	38	35	33	32	31	29	29	28	27	26	26	25	25

Slope - Flat & downhill

For Uphill Inlet pressure including flat slope + difference level.

R.F.R.-“RONDO” FLOW REGULATED

41 lph - DARK BLUE NOZZLE

Maximum No. Of Emitters Per Lateral

Pipe Diameter - **16/13.6** (OD/ID)

Inlet Pressure (m')	Slope %	Emitter spacing (m')												
		2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8
16	0	13	12	11	10	10	9	9	9	8	8	8	8	8
	2	15	14	13	13	12	12	12	11	11	11	11	11	10
	4	17	16	15	14	14	14	13	13	13	13	12	12	12
	6	18	17	16	16	15	15	15	14	14	14	14	14	14
18	0	19	17	16	15	15	14	13	13	13	12	12	12	11
	2	20	19	18	17	17	16	16	15	15	14	14	14	14
	4	22	20	19	19	18	17	17	17	16	16	16	15	15
	6	23	22	21	20	19	19	18	18	18	17	17	17	16
20	0	23	21	20	18	18	17	16	16	15	15	14	14	14
	2	24	22	21	20	19	19	18	17	17	17	16	16	16
	4	25	24	22	21	21	20	19	19	18	18	18	17	17
	6	26	25	24	23	22	21	21	20	20	19	19	19	18
22	0	26	24	22	21	20	19	18	18	17	17	16	16	15
	2	27	25	24	22	21	21	20	19	19	18	18	18	17
	4	28	26	25	24	23	22	21	21	20	20	19	19	19
	6	29	27	26	25	24	23	22	22	21	21	21	20	20
24	0	28	26	24	23	22	21	20	19	19	18	18	17	17
	2	29	27	26	24	23	22	22	21	20	20	19	19	19
	4	30	28	27	25	24	24	23	22	22	21	21	20	20
	6	31	29	28	27	26	25	24	23	23	22	22	22	21
26	0	30	28	26	25	23	22	22	21	20	20	19	19	18
	2	31	29	27	26	25	24	23	22	22	21	21	20	20
	4	32	30	28	27	26	25	24	24	23	22	22	21	21
	6	33	31	29	28	27	26	25	25	24	24	23	23	22
28	0	32	30	28	26	25	24	23	22	22	21	20	20	19
	2	33	31	29	27	26	25	24	24	23	21	22	21	21
	4	34	32	30	29	27	26	25	25	24	24	23	23	22
	6	35	33	31	30	28	27	27	26	25	25	24	24	23

Slope - Flat & downhill

For Uphill Inlet pressure including flat slope + difference level.

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R.F.R.-“RONDO” FLOW REGULATED

41 lph - DARK BLUE NOZZLE

Maximum No. Of Emitters Per Lateral

Pipe Diameter - **16/13.6** (OD/ID)

Inlet Pressure (m')	Slope %	Emitter spacing (m')												
		2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8
30	0	34	31	29	28	26	25	24	23	23	22	21	21	20
	2	35	32	30	29	28	26	26	25	24	23	23	22	22
	4	36	33	31	30	29	28	27	26	25	25	24	24	23
	6	37	34	32	31	30	29	28	27	26	26	25	25	24
32	0	35	33	30	29	27	26	25	24	24	23	22	22	21
	2	36	34	32	30	29	28	27	26	25	24	24	23	23
	4	37	35	33	31	30	29	28	27	26	26	25	24	24
	6	38	36	34	32	31	30	29	28	27	27	26	26	25
35	0	37	35	32	31	29	28	27	26	25	24	24	23	23
	2	38	36	33	32	30	29	28	27	26	26	25	25	24
	4	39	37	34	33	31	30	29	28	28	27	26	26	25
	6	40	37	35	34	32	31	30	29	29	28	27	27	26

Slope - Flat & downhill

For Uphill Inlet pressure including flat slope + difference level.

R.F.R.-“RONDO” FLOW REGULATED

41 lph - DARK BLUE NOZZLE

Maximum No. Of Emitters Per Lateral

Pipe Diameter - **17.8/15.2** (OD/ID)

Inlet Pressure (m')	Slope %	Emitter spacing (m')												
		2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8
16	0	15	14	13	12	12	11	11	11	10	10	10	9	9
	2	18	17	17	16	15	15	14	14	14	14	13	13	13
	4	21	20	19	18	18	17	17	17	16	16	16	16	15
	6	23	21	21	20	20	19	19	19	18	18	18	18	18
18	0	23	21	20	19	18	17	16	16	15	15	14	14	14
	2	25	24	22	21	20	20	19	19	18	18	17	17	17
	4	27	25	24	23	22	22	21	21	20	20	20	19	19
	6	29	27	26	25	24	24	23	23	22	22	21	21	21
20	0	27	25	24	22	21	20	20	19	18	18	17	17	17
	2	30	28	26	25	24	23	22	22	21	20	20	20	19
	4	31	29	28	27	26	25	24	23	23	23	22	22	21
	6	33	31	29	28	27	26	26	25	25	24	24	24	23
22	0	31	29	27	25	24	23	22	21	21	20	20	19	19
	2	33	31	29	27	26	25	25	24	23	23	22	22	21
	4	35	32	31	29	28	27	26	26	25	25	24	24	23
	6	36	34	32	31	30	29	28	27	27	26	26	25	25
24	0	34	31	29	28	26	25	24	24	23	22	22	21	21
	2	36	33	31	30	28	27	26	26	25	24	24	23	23
	4	37	35	33	31	30	29	28	28	27	26	26	25	25
	6	39	36	34	33	32	31	30	29	28	28	27	27	27
26	0	37	34	32	30	28	27	26	25	25	24	23	23	22
	2	38	36	33	32	30	29	28	27	27	26	25	25	24
	4	40	37	35	33	32	31	30	29	28	28	27	27	26
	6	41	38	36	35	34	32	32	31	30	29	29	28	28
28	0	39	36	34	32	30	29	28	27	26	25	25	24	23
	2	40	38	35	34	32	31	30	29	28	27	27	26	26
	4	42	39	37	35	34	32	31	31	30	29	29	28	27
	6	43	40	38	37	35	34	33	32	31	31	30	30	29

Slope - Flat & downhill

For Uphill Inlet pressure including flat slope + difference level.

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R.F.R - “RONDO FLOW REGULATED

R.F.R.-“RONDO” FLOW REGULATED

41 lph - DARK BLUE NOZZLE

Maximum No. Of Emitters Per Lateral

Pipe Diameter - **17.8/15.2** (OD/ID)

Inlet Pressure (m')	Slope %	Emitter spacing (m')												
		2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8
30	0	30	38	35	33	32	30	29	28	27	27	26	25	25
	2	42	39	37	35	34	32	31	30	29	29	28	27	27
	4	44	41	39	37	35	34	33	32	31	30	30	29	29
	6	45	42	40	38	37	35	34	33	33	32	31	31	30
32	0	43	39	37	35	33	32	31	30	29	28	27	26	26
	2	44	41	39	37	35	34	33	32	31	30	29	28	28
	4	46	42	40	38	37	35	34	33	32	32	31	30	30
	6	47	44	41	40	38	37	36	35	34	33	32	32	31
35	0	45	42	39	37	35	34	33	31	30	30	29	28	27
	2	47	43	41	39	37	36	34	33	32	31	31	30	29
	4	48	45	42	40	38	37	36	35	34	33	32	32	31
	6	49	46	43	41	40	38	37	36	35	35	34	33	33

Slope - Flat & downhill

For Uphill Inlet pressure including flat slope + difference level.

R.F.R.-“RONDO” FLOW REGULATED

41 lph - DARK BLUE NOZZLE

Maximum No. Of Emitters Per Lateral

Pipe Diameter - **20/17** (OD/ID)

Inlet Pressure (m')	Slope %	Emitter spacing (m')												
		2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8
16	0	19	17	16	15	14	14	13	13	12	12	12	11	11
	2	23	22	21	20	19	19	18	18	18	17	17	17	16
	4	26	25	24	23	23	22	22	21	21	21	20	20	20
	6	29	27	27	26	25	25	24	24	24	23	23	23	23
18	0	28	25	24	23	21	21	20	19	19	18	18	17	17
	2	31	29	28	26	25	25	24	23	23	22	22	21	21
	4	34	32	30	29	28	27	27	26	26	25	25	24	24
	6	36	34	33	32	31	30	29	29	28	28	27	27	27
20	0	33	31	29	27	26	25	24	23	22	22	21	21	20
	2	36	34	32	30	29	28	27	27	26	25	25	24	24
	4	39	36	35	33	32	31	30	29	29	28	28	27	27
	6	41	39	37	35	34	33	33	32	31	31	30	30	29
22	0	38	35	32	31	29	28	27	26	25	25	24	23	23
	2	40	38	36	34	32	31	30	29	29	28	27	27	26
	4	43	40	38	36	35	34	33	32	31	31	30	30	29
	6	45	42	40	39	37	36	35	34	34	33	33	32	32
24	0	41	38	36	34	32	31	30	29	28	27	26	25	25
	2	44	41	38	37	35	34	33	32	31	30	29	29	28
	4	46	43	41	39	37	36	35	34	33	33	32	31	31
	6	48	45	43	41	40	38	37	37	36	35	34	34	33
26	0	44	41	38	36	34	33	32	31	30	29	28	27	27
	2	47	43	41	39	37	36	35	34	33	32	31	31	30
	4	49	46	43	41	40	38	37	36	35	35	34	33	33
	6	51	48	45	43	42	40	39	38	38	37	36	36	35
28	0	47	43	41	38	37	35	34	33	32	31	30	29	28
	2	50	46	43	41	39	38	37	36	35	34	33	32	32
	4	52	48	45	43	42	40	39	38	37	36	35	35	34
	6	53	50	47	45	44	42	41	40	39	38	38	37	36

Slope - Flat & downhill

For Uphill Inlet pressure including flat slope + difference level.

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R.F.R.-“RONDO” FLOW REGULATED

41 lph - DARK BLUE NOZZLE

Maximum No. Of Emitters Per Lateral

Pipe Diameter - **20/17** (OD/ID)

Inlet Pressure (m')	Slope %	Emitter spacing (m')												
		2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8
30	0	50	46	43	40	39	37	36	34	33	32	31	31	30
	2	52	48	45	43	41	40	38	37	36	35	34	34	33
	4	54	50	47	45	43	42	41	39	39	38	37	36	35
	6	56	52	49	47	45	44	43	42	41	40	39	38	38
32	0	52	48	45	42	40	39	37	36	35	34	33	32	31
	2	54	50	47	45	43	41	40	39	38	37	36	35	34
	4	56	52	49	47	45	44	42	41	40	39	38	37	37
	6	58	54	51	49	47	46	44	43	42	41	40	40	39
35	0	55	51	48	45	43	41	39	38	37	36	35	34	33
	2	57	53	50	47	45	44	42	41	40	39	38	37	36
	4	59	55	52	49	47	46	44	43	42	41	40	39	38
	6	61	57	54	51	49	48	46	45	44	43	42	41	41

Slope - Flat & downhill

For Uphill Inlet pressure including flat slope + difference level.

R.F.R.-“RONDO” FLOW REGULATED

41 lph - DARK BLUE NOZZLE

Maximum No. Of Emitters Per Lateral

Pipe Diameter - **20/17.4** (OD/ID)

Inlet Pressure (m')	Slope %	Emitter spacing (m')												
		2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8
16	0	19	18	17	16	15	14	14	13	13	13	12	12	12
	2	24	23	22	21	20	20	19	19	18	18	18	18	17
	4	28	26	25	24	24	23	23	22	22	22	21	21	21
	6	30	29	28	27	27	26	26	25	25	25	25	24	24
18	0	29	27	25	23	22	21	21	20	19	19	18	18	17
	2	32	30	29	28	27	26	25	24	24	23	23	22	22
	4	35	33	32	31	30	29	28	27	27	26	26	26	25
	6	38	36	34	33	32	31	31	30	30	29	29	29	28
20	0	35	32	30	28	27	26	25	24	23	23	22	21	21
	2	38	35	33	32	31	30	29	28	27	27	26	26	25
	4	41	38	36	35	33	33	32	31	30	30	29	29	28
	6	43	40	39	37	36	35	34	33	33	32	32	31	31
22	0	39	36	34	32	30	29	28	27	26	26	25	24	24
	2	42	39	37	35	34	33	32	31	30	29	29	28	28
	4	45	42	40	38	37	35	34	34	33	32	32	31	30
	6	47	44	42	40	39	38	37	36	35	35	34	34	33
24	0	43	40	37	35	33	32	31	30	29	28	27	27	26
	2	46	43	40	38	37	35	34	33	32	31	31	30	30
	4	48	45	43	41	39	38	37	36	35	34	34	33	32
	6	50	47	45	43	42	40	39	38	37	37	36	36	35
26	0	46	43	40	38	36	34	33	32	31	30	29	29	28
	2	49	45	43	41	39	37	36	35	34	33	33	32	31
	4	51	48	45	43	41	40	39	38	37	36	35	35	34
	6	53	50	47	45	44	42	41	40	39	39	38	37	37
28	0	49	45	42	40	38	37	35	34	33	32	31	30	30
	2	52	48	45	43	41	40	38	37	36	35	34	34	33
	4	54	50	47	45	44	42	41	40	39	38	37	36	36
	6	56	52	50	47	46	44	43	42	41	40	39	39	38

Slope - Flat & downhill

For Uphill Inlet pressure including flat slope + difference level.

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R.F.R.-“RONDO” FLOW REGULATED

41 lph - DARK BLUE NOZZLE

Maximum No. Of Emitters Per Lateral

Pipe Diameter - **20/17.4** (OD/ID)

Inlet Pressure (m')	Slope %	Emitter spacing (m')												
		2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8
30	0	52	48	45	42	40	38	37	36	35	34	33	32	31
	2	54	50	47	45	43	41	40	39	38	37	36	35	34
	4	56	52	50	47	45	44	42	41	40	39	39	38	37
	6	58	54	52	49	48	46	45	44	43	42	41	40	40
32	0	54	50	47	44	42	40	39	37	36	35	34	33	33
	2	56	52	49	47	45	43	42	40	39	38	37	37	36
	4	59	55	51	49	47	45	44	43	42	41	40	39	38
	6	60	56	54	51	49	48	46	45	44	43	42	42	41
35	0	57	53	50	47	45	43	41	40	38	37	36	35	35
	2	60	55	52	49	47	45	44	43	41	40	39	38	38
	4	62	57	54	52	50	48	46	45	44	43	42	41	40
	6	63	59	56	54	52	50	48	47	46	45	44	43	43

Slope - Flat & downhill

For Uphill Inlet pressure including flat slope + difference level.

R.F.R.-“RONDO” FLOW REGULATED

53 lph - GREEN NOZZLE

Maximum No. Of Emitters Per Lateral

Pipe Diameter - **16/13.2** (OD/ID)

Inlet Pressure (m')	Slope %	Emitter spacing (m')												
		2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8
16	0	10	9	9	8	8	8	7	7	7	7	6	6	6
	2	12	11	10	10	9	9	9	9	9	8	8	8	8
	4	13	12	12	11	11	11	10	10	10	10	10	9	9
	6	14	13	13	12	12	11	11	11	11	11	11	10	10
18	0	15	14	13	12	12	11	11	11	10	10	10	9	9
	2	16	15	14	14	13	13	12	12	12	11	11	11	11
	4	17	16	15	15	14	14	13	13	13	12	12	12	12
	6	18	17	16	15	15	14	14	14	13	13	13	13	13
20	0	18	17	16	15	14	14	13	13	12	12	12	11	11
	2	19	18	17	16	15	15	14	14	13	13	13	13	12
	4	20	19	18	17	16	16	15	15	14	14	14	14	13
	6	21	20	18	18	17	16	16	16	15	15	15	14	14
22	0	21	19	18	17	16	15	15	14	14	13	13	13	12
	2	21	20	19	18	17	16	16	15	15	15	14	14	14
	4	22	21	20	19	18	17	17	16	16	15	15	15	15
	6	23	22	20	19	19	18	18	17	17	16	16	16	15
24	0	23	21	20	18	18	17	16	16	15	15	14	14	14
	2	23	22	20	19	19	18	17	17	16	16	15	15	15
	4	24	22	21	20	19	19	18	18	17	17	16	16	16
	6	25	23	22	21	20	19	19	18	18	17	17	17	17
26	0	24	22	21	20	19	18	17	17	16	16	15	15	15
	2	25	23	22	21	20	19	18	18	17	17	16	16	16
	4	26	24	23	22	21	20	19	19	18	18	17	17	17
	6	26	25	23	22	21	21	20	19	19	18	18	18	17
28	0	26	24	22	21	20	19	19	18	17	17	16	16	16
	2	27	25	23	22	21	20	19	19	18	18	17	17	17
	4	27	25	24	23	22	21	20	20	19	19	18	18	17
	6	28	26	24	23	22	22	21	20	20	19	19	19	18

Slope - Flat & downhill

For Uphill Inlet pressure including flat slope + difference level.

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R.F.R.-“RONDO” FLOW REGULATED

53 lph - GREEN NOZZLE

Maximum No. Of Emitters Per Lateral

Pipe Diameter - **16/13.2** (OD/ID)

Inlet Pressure (m')	Slope %	Emitter spacing (m')												
		2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8
30	0	27	25	24	22	21	20	20	19	18	18	17	17	16
	2	28	26	24	23	22	21	20	20	19	19	18	18	17
	4	29	27	25	24	23	22	21	21	20	19	19	19	18
	6	29	27	26	24	23	23	22	21	21	20	20	19	19
32	0	29	26	25	23	22	21	20	20	19	19	18	18	17
	2	29	27	25	24	23	22	21	21	20	19	19	19	18
	4	30	28	26	25	24	23	22	21	21	20	20	19	19
	6	30	28	27	25	24	23	23	22	21	21	21	20	20
35	0	30	28	26	25	24	23	22	21	20	20	19	19	18
	2	31	29	27	25	24	23	22	22	21	21	20	20	19
	4	32	29	27	26	25	24	23	23	22	21	21	20	20
	6	32	30	28	27	26	25	24	23	23	22	22	21	21

Slope - Flat & downhill

For Uphill Inlet pressure including flat slope + difference level.

R.F.R.-“RONDO” FLOW REGULATED

53 lph - GREEN NOZZLE

Maximum No. Of Emitters Per Lateral

Pipe Diameter - **16/13.6** (OD/ID)

Inlet Pressure (m')	Slope %	Emitter spacing (m')												
		2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8
16	0	11	10	9	9	8	8	8	7	7	7	7	7	7
	2	12	11	11	10	10	10	10	9	9	9	9	9	9
	4	14	13	12	12	11	11	11	11	10	10	10	10	10
	6	15	14	13	13	13	12	12	12	12	11	11	11	11
18	0	16	15	14	13	12	12	11	11	11	10	10	10	10
	2	17	16	15	14	14	13	13	13	12	12	12	11	11
	4	18	17	16	15	15	14	14	14	13	13	13	13	12
	6	19	18	17	16	16	15	15	15	14	14	14	14	13
20	0	19	18	17	16	15	14	14	13	13	13	12	12	12
	2	20	19	18	17	16	16	15	15	14	14	14	13	13
	4	21	20	19	18	17	17	16	16	15	15	15	14	14
	6	22	21	20	19	18	18	17	17	16	16	16	15	15
22	0	22	20	19	18	17	16	16	15	15	14	14	13	13
	2	23	21	20	19	18	17	17	16	16	15	15	15	14
	4	24	22	21	20	19	18	18	17	17	16	16	16	15
	6	24	23	22	21	20	19	19	18	18	17	17	17	16
24	0	24	22	21	19	19	18	17	16	16	16	15	15	14
	2	25	23	22	20	20	19	18	18	17	17	16	16	16
	4	26	24	22	21	20	20	19	19	18	18	17	17	17
	6	26	24	23	22	21	21	20	19	19	19	18	18	17
26	0	26	24	22	21	20	19	18	18	17	17	16	16	15
	2	26	24	23	22	21	20	19	19	18	18	17	17	17
	4	27	25	24	23	22	21	20	20	19	19	18	18	18
	6	28	26	25	23	23	22	21	21	20	20	19	19	18
28	0	27	25	23	22	21	20	20	19	18	18	17	17	16
	2	28	26	24	23	22	21	21	20	19	19	18	18	18
	4	29	27	25	24	23	22	21	21	20	20	19	19	18
	6	29	27	26	25	24	23	22	22	21	21	20	20	19

Slope - Flat & downhill

For Uphill Inlet pressure including flat slope + difference level.

(Continued from page 44)

R.F.R.-“RONDO” FLOW REGULATED

53 lph - GREEN NOZZLE

Maximum No. Of Emitters Per Lateral

Pipe Diameter - **16/13.6** (OD/ID)

Inlet Pressure (m')	Slope %	Emitter spacing (m')												
		2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8
30	0	29	26	25	23	22	21	21	20	19	19	18	18	17
	2	29	27	26	24	23	22	22	21	20	20	19	19	18
	4	30	28	26	25	24	23	22	22	21	21	20	20	19
	6	31	29	27	26	25	24	23	22	22	21	21	21	20
32	0	30	28	26	24	23	22	22	21	20	20	19	19	18
	2	31	28	27	25	24	23	22	22	21	21	20	20	19
	4	31	29	27	26	25	24	23	23	22	21	21	20	20
	6	32	30	28	27	26	25	24	23	23	22	22	21	21
35	0	32	29	27	26	25	24	23	22	21	21	20	20	19
	2	33	30	28	27	26	25	24	23	22	22	21	21	20
	4	33	31	29	28	26	25	24	24	23	23	22	22	21
	6	34	31	30	28	27	26	25	24	24	23	23	22	22

Slope - Flat & downhill

For Uphill Inlet pressure including flat slope + difference level.

R.F.R.-“RONDO” FLOW REGULATED

53 lph - GREEN NOZZLE

Maximum No. Of Emitters Per Lateral

Pipe Diameter - **17.8/15.2** (OD/ID)

Inlet Pressure (m')	Slope %	Emitter spacing (m')												
		2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8
16	0	13	12	11	11	10	10	9	9	9	8	8	8	8
	2	15	14	14	13	13	12	12	12	11	11	11	11	11
	4	17	16	16	15	15	14	14	14	13	13	13	13	13
	6	19	18	17	16	16	16	15	15	15	15	15	14	14
18	0	19	18	17	16	15	14	14	13	13	13	12	12	12
	2	21	20	19	18	17	17	16	16	15	15	15	14	14
	4	23	21	20	19	19	18	17	17	17	16	16	16	16
	6	24	22	21	21	20	19	19	18	18	18	18	17	17
20	0	23	21	20	19	18	17	17	16	16	15	15	14	14
	2	25	23	22	21	20	19	19	18	18	17	17	16	16
	4	26	24	23	22	21	21	20	19	19	19	18	18	18
	6	27	26	24	23	23	22	21	21	20	20	20	19	19
22	0	26	24	23	21	20	20	19	18	18	17	17	16	16
	2	28	26	24	23	22	21	21	20	19	19	19	18	18
	4	29	27	26	24	23	23	22	21	21	20	20	20	19
	6	30	28	27	26	25	24	23	23	22	22	21	21	21
24	0	29	27	25	24	22	21	21	20	19	19	18	18	17
	2	30	28	26	25	24	23	22	22	21	20	20	20	19
	4	31	29	28	26	25	24	24	23	22	22	21	21	21
	6	32	30	29	27	26	26	25	24	24	23	23	22	22
26	0	31	29	27	25	24	23	22	21	21	20	20	19	19
	2	32	30	28	27	23	25	24	23	22	22	21	21	20
	4	33	31	29	28	27	26	25	24	24	23	23	22	22
	6	34	32	30	29	28	27	26	25	25	24	24	23	23
28	0	33	30	28	27	26	25	24	23	22	21	21	20	20
	2	34	32	30	28	27	26	25	24	24	23	22	22	22
	4	35	33	31	29	28	27	26	26	25	24	21	23	23
	6	36	34	32	30	29	28	27	27	26	25	25	24	24

Slope - Flat & downhill

For Uphill Inlet pressure including flat slope + difference level.

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R.F.R.-“RONDO” FLOW REGULATED

53 lph - GREEN NOZZLE

Maximum No. Of Emitters Per Lateral

Pipe Diameter - **17.8/15.2** (OD/ID)

Inlet Pressure (m')	Slope %	Emitter spacing (m')												
		2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8
30	0	35	32	30	28	27	26	25	24	23	23	22	21	21
	2	36	33	31	30	28	27	26	25	25	24	24	23	23
	4	37	34	32	31	29	28	27	27	26	25	25	24	24
	6	38	35	33	32	31	29	29	28	27	27	26	25	25
32	0	36	34	31	30	28	27	26	25	24	24	23	22	22
	2	37	35	33	31	30	28	27	27	26	25	25	24	23
	4	38	36	34	32	31	30	29	28	27	26	26	25	25
	6	39	37	35	33	32	31	30	29	28	27	27	26	26
35	0	39	36	33	31	30	29	28	27	26	25	24	24	23
	2	40	37	34	33	31	30	29	28	27	27	26	25	25
	4	41	38	35	34	32	31	30	29	28	28	27	26	26
	6	41	39	36	35	33	32	31	30	29	29	28	28	27

Slope - Flat & downhill

For Uphill Inlet pressure including flat slope + difference level.

R.F.R.-“RONDO” FLOW REGULATED

53 lph - GREEN NOZZLE

Maximum No. Of Emitters Per Lateral

Pipe Diameter - **20/17** (OD/ID)

Inlet Pressure (m')	Slope %	Emitter spacing (m')												
		2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8
16	0	16	15	14	13	12	12	11	11	11	10	10	10	10
	2	19	18	17	16	16	16	15	15	14	14	14	14	13
	4	21	20	19	19	18	18	18	17	17	17	16	16	16
	6	23	22	22	21	20	20	20	19	19	19	19	19	18
18	0	23	22	20	19	18	17	17	16	16	15	15	15	14
	2	26	24	23	22	21	20	20	19	19	18	18	18	17
	4	28	26	25	24	23	23	22	21	21	21	20	20	20
	6	30	28	27	29	25	25	26	23	23	23	22	22	22
20	0	28	26	24	23	22	21	20	20	19	18	18	17	17
	2	31	28	27	26	25	24	23	22	22	21	21	20	20
	4	32	30	29	27	27	26	25	24	24	23	23	22	22
	6	34	32	30	29	28	27	27	26	26	25	25	24	24
22	0	32	29	28	26	25	24	23	22	21	21	20	20	19
	2	34	32	30	28	27	26	25	25	24	23	23	22	22
	4	36	33	32	30	29	28	27	27	26	25	25	24	24
	6	37	35	33	32	31	30	29	28	28	27	27	26	26
24	0	35	32	30	29	27	26	25	24	23	23	22	22	21
	2	37	34	32	31	29	28	27	27	26	25	25	24	24
	4	38	36	34	32	31	30	29	28	28	27	27	26	26
	6	40	37	36	34	33	32	31	30	29	29	28	28	27
26	0	38	35	32	31	29	28	27	26	25	25	24	23	23
	2	39	37	35	33	31	30	29	28	28	27	26	26	25
	4	41	38	36	34	33	32	31	30	29	29	28	28	27
	6	42	40	38	36	35	34	33	32	31	30	30	29	29
28	0	40	37	35	33	31	30	29	28	27	26	25	25	24
	2	42	39	36	35	33	32	31	30	29	28	28	27	26
	4	43	40	38	36	35	34	33	32	31	30	29	29	28
	6	45	42	39	38	36	35	34	33	32	32	31	31	30

Slope - Flat & downhill

For Uphill Inlet pressure including flat slope + difference level.

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R.F.R.-“RONDO” FLOW REGULATED

53 lph - GREEN NOZZLE

Maximum No. Of Emitters Per Lateral

Pipe Diameter - **20/17** (OD/ID)

Inlet Pressure (m')	Slope %	Emitter spacing (m')												
		2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8
30	0	42	39	36	34	33	31	30	29	28	27	27	26	25
	2	44	41	38	36	35	33	32	31	30	30	29	28	28
	4	45	42	40	38	36	35	34	33	32	31	31	30	30
	6	47	44	41	39	38	37	36	35	34	33	32	32	31
32	0	44	41	38	36	34	33	32	31	30	29	28	27	27
	2	46	42	40	38	36	35	34	33	32	31	30	29	29
	4	47	44	41	39	38	36	35	34	33	33	32	31	31
	6	48	45	43	41	39	38	37	36	35	34	33	33	32
35	0	47	43	40	38	36	35	34	32	31	30	30	29	28
	2	48	45	42	40	37	37	35	34	33	32	32	31	30
	4	50	46	44	41	40	38	37	36	35	34	33	33	32
	6	51	48	45	43	41	40	39	37	37	36	35	34	34

Slope - Flat & downhill

For Uphill Inlet pressure including flat slope + difference level.

R.F.R.-“RONDO” FLOW REGULATED

53 lph - GREEN NOZZLE

Maximum No. Of Emitters Per Lateral

Pipe Diameter - **20/17.4** (OD/ID)

Inlet Pressure (m')	Slope %	Emitter spacing (m')												
		2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8
16	0	16	15	14	13	13	12	12	11	11	11	10	10	10
	2	20	19	18	17	17	16	16	15	15	15	15	14	14
	4	22	21	20	20	19	19	18	18	18	18	17	17	17
	6	25	24	23	22	22	21	21	20	20	20	20	19	19
18	0	24	23	21	20	19	18	18	17	16	16	16	15	15
	2	27	25	24	23	22	21	21	20	20	19	19	18	18
	4	29	28	26	25	24	24	23	23	22	22	21	21	21
	6	31	29	28	27	26	26	25	25	24	24	23	23	23
20	0	29	27	25	24	23	22	21	20	20	19	19	18	18
	2	32	30	28	27	26	25	24	23	23	22	22	21	21
	4	34	32	30	29	28	27	26	25	25	24	24	24	23
	6	36	33	32	31	30	29	28	27	27	26	26	26	25
22	0	33	31	29	27	26	25	24	23	22	22	21	21	20
	2	35	33	31	30	28	27	26	26	25	24	24	23	23
	4	37	35	33	32	30	29	29	28	27	27	26	26	25
	6	39	37	35	33	32	31	30	30	29	29	28	28	27
24	0	36	34	31	30	28	27	26	25	24	24	23	23	22
	2	39	36	34	32	31	30	29	28	27	26	26	25	25
	4	40	38	36	34	33	32	31	30	29	28	28	27	27
	6	42	39	37	36	34	33	32	32	31	30	30	29	29
26	0	39	36	34	32	30	29	28	27	26	26	25	24	24
	2	41	38	36	34	33	31	30	30	29	28	27	27	26
	4	43	40	38	36	35	33	32	32	31	30	29	29	28
	6	44	41	39	38	36	35	34	33	33	32	31	31	30
28	0	42	38	36	34	32	31	30	29	28	27	26	26	25
	2	44	40	38	36	35	33	32	31	30	30	29	28	28
	4	45	42	40	38	36	35	34	33	32	31	31	30	30
	6	47	44	41	39	38	37	36	35	34	33	33	32	32

Slope - Flat & downhill

For Uphill Inlet pressure including flat slope + difference level.

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R.F.R.-“RONDO” FLOW REGULATED

53 lph - GREEN NOZZLE

Maximum No. Of Emitters Per Lateral

Pipe Diameter - **20/17.4** (OD/ID)

Inlet Pressure (m')	Slope %	Emitter spacing (m')												
		2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8
30	0	44	40	38	36	34	33	31	30	29	29	28	27	27
	2	46	42	40	38	36	35	34	33	32	31	30	30	29
	4	47	44	41	40	38	37	35	34	34	33	32	31	31
	6	49	45	43	41	40	38	37	36	35	35	34	33	33
32	0	46	42	40	37	36	34	33	32	31	30	29	28	28
	2	48	44	42	39	38	36	35	34	33	32	31	31	30
	4	49	46	43	41	39	38	37	36	35	34	33	33	32
	6	51	47	45	43	41	40	38	37	37	36	35	34	34
35	0	49	45	42	40	38	36	35	34	33	32	31	30	29
	2	50	47	44	42	40	38	37	36	35	34	33	32	32
	4	52	48	45	43	41	40	39	38	37	36	35	34	34
	6	53	50	47	45	43	42	40	39	38	37	37	36	35

Slope - Flat & downhill

For Uphill Inlet pressure including flat slope + difference level.

R.F.R.-“RONDO” FLOW REGULATED

70 lph - RED NOZZLE

Maximum No. Of Emitters Per Lateral

Pipe Diameter - **16/13.2** (OD/ID)

Inlet Pressure (m')	Slope %	Emitter spacing (m')												
		2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8
16	0	9	8	7	7	7	6	6	6	6	6	5	5	5
	2	9	9	8	8	8	7	7	7	7	7	7	7	6
	4	10	10	9	9	9	8	8	8	8	8	8	8	7
	6	11	11	10	10	10	9	9	9	9	9	8	8	8
18	0	13	12	11	10	10	9	9	9	9	8	8	8	8
	2	13	12	12	11	11	10	10	10	9	9	9	9	9
	4	14	13	13	12	12	11	11	11	10	10	10	10	10
	6	15	14	13	13	12	12	11	11	11	11	11	10	10
20	0	15	14	13	13	12	11	11	11	10	10	10	9	9
	2	16	15	14	13	13	12	12	11	11	11	11	10	10
	4	17	15	15	14	13	13	12	12	12	12	11	11	11
	6	17	16	15	15	14	13	13	13	12	12	12	12	12
22	0	17	16	15	14	13	13	12	12	12	11	11	11	10
	2	18	17	16	15	14	14	13	13	12	12	12	11	11
	4	18	17	16	15	15	14	14	13	13	13	12	12	12
	6	19	18	17	16	15	15	14	14	14	13	13	13	13
24	0	19	17	16	15	15	14	14	13	13	12	12	12	11
	2	19	18	17	16	15	15	14	14	13	13	13	12	12
	4	20	19	18	17	16	15	15	14	14	14	13	13	13
	6	21	19	18	17	17	16	15	15	15	14	14	14	13
26	0	20	19	18	17	16	15	15	14	14	13	13	13	12
	2	21	19	18	17	16	16	15	15	14	14	14	13	13
	4	21	20	19	18	17	16	16	15	15	15	14	14	14
	6	22	20	19	18	17	16	16	16	15	16	15	15	14
28	0	22	20	19	18	17	16	16	15	15	14	14	13	13
	2	22	20	19	18	17	17	16	16	15	15	14	14	14
	4	23	21	20	19	18	17	17	16	16	15	15	15	14
	6	23	22	20	19	19	18	17	17	16	16	16	15	15

Slope - Flat & downhill

For Uphill Inlet pressure including flat slope + difference level.

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R.F.R.-“RONDO” FLOW REGULATED

70 lph - RED NOZZLE

Maximum No. Of Emitters Per Lateral

Pipe Diameter - **16/13.2** (OD/ID)

Inlet Pressure (m')	Slope %	Emitter spacing (m')												
		2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8
30	0	23	21	20	19	18	17	16	16	15	15	14	14	14
	2	23	22	20	19	18	18	17	16	16	16	15	15	14
	4	24	22	21	20	19	18	18	17	17	16	16	15	15
	6	24	23	21	20	19	19	18	18	17	17	16	16	16
32	0	24	22	21	19	19	18	17	17	16	16	15	15	14
	2	24	23	21	20	19	18	18	17	17	16	16	15	15
	4	25	23	22	21	20	19	18	18	17	17	16	16	16
	6	25	23	22	21	20	19	19	18	18	17	17	17	16
35	0	25	23	22	21	20	19	18	18	17	17	16	16	15
	2	26	24	22	21	20	19	19	18	18	18	17	16	16
	4	26	24	23	22	21	20	19	19	18	18	17	17	17
	6	27	25	23	22	21	20	20	19	19	18	18	17	17

Slope - Flat & downhill

For Uphill Inlet pressure including flat slope + difference level.

R.F.R.-“RONDO” FLOW REGULATED

70 lph - RED NOZZLE

Maximum No. Of Emitters Per Lateral

Pipe Diameter - **16/13.6** (OD/ID)

Inlet Pressure (m')	Slope %	Emitter spacing (m')												
		2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8
16	0	9	8	8	7	7	7	6	6	6	6	6	6	5
	2	10	9	9	8	8	8	8	8	7	7	7	7	7
	4	11	10	10	10	9	9	9	9	8	8	8	8	8
	6	12	11	11	10	10	10	10	9	9	9	9	9	9
18	0	13	12	12	11	10	10	10	9	9	9	9	8	8
	2	14	13	12	12	11	11	11	10	10	10	10	9	9
	4	15	14	13	13	12	12	11	11	11	11	10	10	10
	6	16	15	14	13	13	13	12	12	12	11	11	11	11
20	0	16	15	14	13	13	12	12	11	11	11	10	10	10
	2	17	16	15	14	13	13	12	12	12	11	11	11	11
	4	18	16	15	15	14	14	13	13	13	12	12	12	12
	6	18	17	16	15	15	14	14	14	13	13	13	12	12
22	0	18	17	16	15	14	14	13	13	12	12	12	11	11
	2	19	17	16	16	15	14	14	13	13	13	12	12	12
	4	19	18	17	16	16	15	15	14	14	13	13	13	13
	6	20	19	18	17	16	16	15	15	14	14	14	14	13
24	0	20	18	17	16	16	15	14	14	13	13	13	12	12
	2	21	19	18	17	16	16	15	15	14	14	13	13	13
	4	21	20	19	18	17	16	16	15	15	15	14	14	14
	6	22	20	19	18	17	17	16	16	16	15	15	15	14
26	0	21	20	19	18	17	16	15	15	14	14	14	13	13
	2	22	20	19	18	17	17	16	16	15	15	14	14	14
	4	23	21	20	19	18	17	17	16	16	15	15	15	15
	6	23	22	20	19	19	18	17	17	16	16	16	15	15
28	0	23	21	20	19	18	17	16	16	15	15	14	14	14
	2	23	22	20	19	18	18	17	16	16	16	15	15	15
	4	24	22	21	20	19	18	18	17	17	16	16	16	15
	6	24	23	21	20	20	19	18	18	17	17	17	16	16

Slope - Flat & downhill

For Uphill Inlet pressure including flat slope + difference level.

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R.F.R.-“RONDO” FLOW REGULATED

70 lph - RED NOZZLE

Maximum No. Of Emitters Per Lateral

Pipe Diameter - **16/13.6** (OD/ID)

Inlet Pressure (m')	Slope %	Emitter spacing (m')												
		2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8
30	0	24	22	21	20	19	18	17	17	16	16	15	15	15
	2	25	23	21	20	19	19	18	17	17	16	16	16	15
	4	25	23	22	21	20	19	19	18	17	17	17	16	16
	6	26	24	22	21	20	20	19	19	18	18	17	17	17
32	0	25	23	22	21	20	19	18	17	17	16	16	16	15
	2	26	24	22	21	20	19	19	18	18	17	17	16	16
	4	26	24	23	22	21	20	19	19	18	18	17	17	17
	6	27	25	23	22	21	20	20	19	19	18	18	18	17
35	0	27	25	23	22	21	20	19	18	18	17	17	17	16
	2	27	25	24	22	21	20	20	19	19	18	18	17	17
	4	28	26	24	23	22	21	20	20	19	19	18	18	17
	6	28	26	25	23	22	22	21	20	20	19	19	18	18

Slope - Flat & downhill

For Uphill Inlet pressure including flat slope + difference level.

R.F.R.-“RONDO” FLOW REGULATED

70 lph - RED NOZZLE

Maximum No. Of Emitters Per Lateral

Pipe Diameter - **17.8/15.2** (OD/ID)

Inlet Pressure (m')	Slope %	Emitter spacing (m')												
		2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8
16	0	11	10	9	9	8	8	8	8	7	7	7	7	7
	2	12	12	11	11	10	10	10	9	9	9	9	9	9
	4	14	13	13	12	12	11	11	11	11	11	10	10	10
	6	15	14	14	13	13	13	12	12	12	12	12	11	11
18	0	16	15	14	13	13	12	12	11	11	11	10	10	10
	2	17	16	15	15	14	14	13	13	12	12	12	12	11
	4	19	17	16	16	15	15	14	14	14	13	13	13	13
	6	19	18	17	17	16	16	15	15	15	14	14	14	14
20	0	20	18	17	16	15	15	14	14	13	13	12	12	12
	2	21	19	18	17	16	16	15	15	14	14	14	14	13
	4	22	20	19	18	17	17	16	16	16	15	15	15	14
	6	22	21	20	19	18	18	17	17	17	16	16	16	15
22	0	22	20	19	18	17	16	16	15	15	14	14	14	13
	2	23	21	20	19	18	18	17	17	16	16	15	15	15
	4	24	22	21	20	19	19	18	18	17	17	16	16	16
	6	25	23	22	21	20	19	19	18	18	18	17	17	17
24	0	24	22	21	20	19	18	17	17	16	16	15	15	15
	2	25	23	22	21	20	19	18	18	17	17	17	16	16
	4	26	24	23	22	21	20	19	19	18	18	18	17	17
	6	27	25	24	22	22	21	20	20	19	19	18	18	18
26	0	26	24	22	21	20	19	19	18	17	17	16	16	16
	2	27	25	23	22	21	20	20	19	19	18	18	17	17
	4	28	26	24	24	22	21	21	20	20	19	19	18	18
	6	28	26	25	24	23	22	21	21	20	20	20	19	19
28	0	28	25	24	23	21	21	20	19	19	18	18	17	17
	2	28	26	25	23	22	22	21	20	20	19	19	18	18
	4	29	27	26	24	23	22	22	21	21	20	20	19	19
	6	30	28	26	25	24	23	23	22	21	21	20	20	20

Slope - Flat & downhill

For Uphill Inlet pressure including flat slope + difference level.

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R.F.R.-“RONDO” FLOW REGULATED

70 lph - RED NOZZLE

Maximum No. Of Emitters Per Lateral

Pipe Diameter - **17.8/15.2** (OD/ID)

Inlet Pressure (m')	Slope %	Emitter spacing (m')												
		2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8
30	0	29	27	25	24	23	22	21	20	20	19	18	18	18
	2	30	28	26	25	24	23	22	21	21	20	20	19	19
	4	31	28	27	25	24	24	23	22	21	21	20	20	20
	6	31	29	28	26	25	24	24	23	22	22	21	21	20
32	0	30	28	26	25	24	23	22	21	20	20	19	19	18
	2	31	29	27	26	25	24	23	22	21	21	20	20	19
	4	32	30	28	27	25	24	24	23	22	22	21	21	20
	6	33	30	29	27	26	25	24	24	23	23	22	22	21
35	0	32	30	28	26	25	24	23	22	22	21	21	20	20
	2	33	31	29	27	26	25	24	23	23	22	22	21	21
	4	34	31	29	28	27	26	25	24	23	23	22	22	21
	6	34	32	30	29	28	27	26	25	24	24	23	23	22

Slope - Flat & downhill

For Uphill Inlet pressure including flat slope + difference level.

R.F.R.-“RONDO” FLOW REGULATED

70 lph - RED NOZZLE

Maximum No. Of Emitters Per Lateral

Pipe Diameter - **20/17** (OD/ID)

Inlet Pressure (m')	Slope %	Emitter spacing (m')												
		2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8
16	0	13	12	11	11	10	10	9	9	9	9	8	8	8
	2	16	15	14	13	13	13	12	12	12	12	11	11	11
	4	17	17	16	15	15	14	14	14	14	13	13	13	13
	6	19	18	17	17	16	16	16	15	15	15	15	15	14
18	0	20	18	17	16	15	15	14	14	13	13	12	12	12
	2	21	20	19	18	17	17	16	16	15	15	15	14	14
	4	23	22	20	20	19	18	18	17	17	17	16	16	16
	6	24	23	22	21	20	20	19	19	19	18	18	18	17
20	0	24	22	20	19	18	18	17	16	16	15	15	15	14
	2	25	23	22	21	20	20	19	18	18	17	17	17	16
	4	27	25	24	23	22	21	20	20	19	19	19	18	18
	6	28	26	25	24	23	22	22	21	21	20	20	20	19
22	0	27	25	23	22	21	20	19	19	18	17	17	17	16
	2	28	26	25	23	23	22	21	20	20	19	19	18	18
	4	29	27	26	25	24	23	22	22	21	21	20	20	20
	6	31	29	27	26	25	24	24	23	23	22	22	21	21
24	0	29	27	25	24	23	22	21	20	20	19	19	18	18
	2	31	28	27	25	24	23	23	22	21	21	20	20	20
	4	32	30	28	27	26	25	24	23	23	22	22	21	21
	6	33	31	29	28	27	26	25	25	24	24	23	23	22
26	0	32	29	27	26	25	23	23	22	21	21	20	20	19
	2	33	30	29	27	26	25	24	23	23	22	22	21	21
	4	34	32	30	28	27	26	25	25	24	24	23	23	22
	6	35	33	31	30	28	27	27	26	25	25	24	24	23
28	0	34	31	29	27	26	25	24	23	22	22	21	21	20
	2	35	32	30	29	28	26	26	25	24	23	23	22	22
	4	36	33	31	30	29	28	27	26	25	25	24	24	23
	6	37	34	33	31	30	29	28	27	27	26	25	25	25

Slope - Flat & downhill

For Uphill Inlet pressure including flat slope + difference level.

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R.F.R.-“RONDO” FLOW REGULATED

70 lph - RED NOZZLE

Maximum No. Of Emitters Per Lateral

Pipe Diameter - **20/17** (OD/ID)

Inlet Pressure (m')	Slope %	Emitter spacing (m')												
		2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8
30	0	35	33	30	29	27	26	25	24	24	23	22	22	21
	2	36	34	32	30	29	28	27	26	25	25	24	23	23
	4	38	35	33	31	30	29	28	27	26	26	25	25	24
	6	39	36	34	32	31	30	29	28	28	27	26	26	25
32	0	37	34	32	30	29	28	26	26	25	24	23	23	22
	2	38	35	33	31	30	29	28	27	26	26	25	24	24
	4	39	36	34	33	31	30	29	28	27	27	26	26	25
	6	40	37	35	34	32	31	30	29	29	28	27	27	26
35	0	39	36	34	32	30	29	28	27	26	26	25	24	24
	2	40	37	35	33	32	31	29	29	28	27	26	26	25
	4	41	38	36	34	33	32	31	30	29	28	28	27	26
	6	42	39	37	35	34	33	32	31	30	29	29	28	28

Slope - Flat & downhill

For Uphill Inlet pressure including flat slope + difference level.

R.F.R.-“RONDO” FLOW REGULATED

70 lph - RED NOZZLE

Maximum No. Of Emitters Per Lateral

Pipe Diameter - **20/17.4** (OD/ID)

Inlet Pressure (m')	Slope %	Emitter spacing (m')												
		2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8
16	0	14	13	12	11	11	10	10	10	9	9	9	9	8
	2	16	15	15	14	14	13	13	13	12	12	12	12	11
	4	18	17	17	16	15	15	15	15	14	14	14	14	14
	6	20	19	18	18	17	17	16	16	16	16	16	15	15
18	0	20	19	18	17	16	15	15	14	14	13	13	13	12
	2	22	21	20	19	18	18	17	17	16	16	15	15	15
	4	24	23	21	21	20	19	19	18	18	18	17	17	17
	6	25	24	23	22	21	21	20	20	19	19	19	19	18
20	0	25	23	21	20	19	18	18	17	17	16	16	15	15
	2	26	25	23	22	21	20	20	19	19	18	18	17	17
	4	28	26	25	24	23	22	21	21	20	20	19	19	19
	6	29	27	26	25	24	23	23	22	22	21	21	21	20
22	0	28	26	24	23	22	21	20	19	19	18	18	17	17
	2	29	27	26	25	24	23	22	21	21	20	20	19	19
	4	31	29	27	26	25	24	23	23	22	22	21	21	21
	6	32	30	28	27	26	25	25	24	24	23	23	22	22
24	0	31	28	26	25	24	23	22	21	20	20	19	19	18
	2	32	30	28	27	25	24	24	23	22	22	21	21	20
	4	33	31	29	28	27	26	25	24	24	23	23	22	22
	6	34	32	30	29	28	27	26	26	25	25	24	24	23
26	0	33	30	28	27	26	24	24	23	22	21	21	20	20
	2	34	32	30	28	27	26	25	24	24	23	23	22	22
	4	35	33	31	30	28	27	27	26	25	25	24	24	23
	6	37	34	32	31	30	29	28	27	27	26	25	25	25
28	0	35	32	30	28	27	26	25	24	23	23	22	22	21
	2	36	34	32	30	29	28	27	26	25	24	24	23	23
	4	37	35	33	31	30	29	28	27	26	26	25	25	24
	6	38	36	34	32	31	30	29	28	28	27	27	26	26

Slope - Flat & downhill

For Uphill Inlet pressure including flat slope + difference level.

(Continued from page 60)

R.F.R.-“RONDO” FLOW REGULATED

70 lph - RED NOZZLE

Maximum No. Of Emitters Per Lateral

Pipe Diameter - **20/17.4** (OD/ID)

Inlet Pressure (m')	Slope %	Emitter spacing (m')												
		2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8
30	0	37	34	32	30	29	27	26	25	25	24	23	23	22
	2	38	35	33	31	30	29	28	27	26	26	25	24	24
	4	39	36	34	33	31	30	29	28	28	27	26	26	25
	6	40	37	35	34	33	31	30	30	29	28	28	27	27
32	0	38	35	33	31	30	29	28	27	26	25	24	24	23
	2	40	37	35	33	31	30	29	28	27	27	26	25	25
	4	41	38	36	34	33	31	30	29	29	28	27	27	26
	6	42	39	37	35	34	33	32	31	30	29	29	28	28
35	0	41	38	35	33	32	30	29	28	27	27	26	25	25
	2	42	39	37	35	33	32	31	30	29	28	27	27	26
	4	43	40	38	36	34	33	32	31	30	29	29	28	28
	6	44	41	39	37	35	34	33	32	31	31	30	29	29

Slope - Flat & downhill

For Uphill Inlet pressure including flat slope + difference level.

R.F.R.-“RONDO” FLOW REGULATED

95 lph - WHITE NOZZLE

Maximum No. Of Emitters Per Lateral

Pipe Diameter - **16/13.2** (OD/ID)

Inlet Pressure (m')	Slope %	Emitter spacing (m')												
		2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8
16	0	6	5	5	5	5	4	4	4	4	4	4	4	4
	2	6	6	5	5	5	5	5	4	4	4	4	4	4
	4	8	7	7	7	6	6	6	6	6	6	6	6	6
	6	8	8	7	7	7	7	7	7	6	6	6	6	6
18	0	9	8	8	7	7	7	6	6	6	6	6	6	5
	2	9	9	8	8	7	7	7	7	6	6	6	6	6
	4	10	10	9	9	9	9	8	8	8	8	8	7	7
	6	11	10	10	10	9	9	9	9	8	8	8	8	8
20	0	11	10	9	9	9	8	8	8	7	7	7	7	7
	2	11	10	10	9	9	9	8	8	8	8	7	7	7
	4	12	12	11	11	10	10	10	9	9	9	9	9	9
	6	13	12	11	11	11	10	10	10	10	9	9	9	9
22	0	12	11	11	10	10	9	9	9	8	8	8	8	8
	2	12	12	11	11	10	10	9	9	9	9	8	8	8
	4	14	13	12	12	11	11	11	10	10	10	10	10	9
	6	14	13	13	12	12	11	11	11	11	10	10	10	10
24	0	13	13	12	11	11	10	10	10	9	9	9	9	8
	2	14	13	12	12	11	11	10	10	10	9	9	9	9
	4	15	14	13	13	12	12	12	11	11	11	11	10	10
	6	15	14	14	13	13	12	12	12	11	11	11	11	11
26	0	14	14	13	12	12	11	11	10	10	10	9	9	9
	2	15	14	13	12	12	11	11	11	10	10	10	10	9
	4	16	15	14	14	13	13	12	12	12	11	11	11	11
	6	16	15	15	14	14	13	13	12	12	12	12	11	11
28	0	15	14	14	13	12	12	11	11	11	10	10	10	10
	2	16	15	14	13	13	12	12	11	11	11	10	10	10
	4	17	16	15	15	14	14	13	13	12	12	12	12	11
	6	17	16	15	15	14	14	13	13	13	12	12	12	12

Slope - Flat & downhill

For Uphill Inlet pressure including flat slope + difference level.

(Continued from page 62)

R.F.R - “RONDO FLOW REGULATED

R.F.R.-“RONDO” FLOW REGULATED

95 lph - WHITE NOZZLE

Maximum No. Of Emitters Per Lateral

Pipe Diameter - **16/13.2** (OD/ID)

Inlet Pressure (m')	Slope %	Emitter spacing (m')												
		2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8
30	0	16	15	14	14	13	13	12	12	11	11	11	10	10
	2	17	15	15	14	13	13	12	12	12	11	11	11	11
	4	18	17	16	15	15	14	14	13	13	13	12	12	12
	6	18	17	16	16	15	14	14	14	13	13	13	13	12
32	0	17	16	15	14	14	13	13	12	12	12	11	11	11
	2	17	16	15	15	14	13	13	13	12	12	12	11	11
	4	19	17	17	16	15	15	14	14	14	13	13	13	12
	6	19	18	17	16	16	15	15	14	14	14	13	13	13
35	0	18	17	16	15	15	14	13	13	13	12	12	12	11
	2	18	17	16	15	15	14	14	13	13	13	12	12	12
	4	20	18	18	17	16	16	15	15	14	14	14	13	13
	6	20	19	18	17	16	16	15	15	15	14	14	14	13

Slope - Flat & downhill

For Uphill Inlet pressure including flat slope + difference level.

19/07/2000

R.F.R.-"RONDO" FLOW REGULATED

95 lph - WHITE NOZZLE

Maximum No. Of Emitters Per Lateral

Pipe Diameter - **16/13.6** (OD/ID)

Inlet Pressure (m')	Slope %	Emitter spacing (m')												
		2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8
16	0	6	6	5	5	5	5	4	4	4	4	4	4	4
	2	8	7	7	7	6	6	6	6	6	6	5	5	5
	4	8	8	7	7	7	7	7	6	6	6	6	6	6
	6	8	8	8	8	7	7	7	7	7	7	7	7	7
18	0	9	9	8	8	7	7	7	7	6	6	6	6	6
	2	11	10	10	9	9	9	8	8	8	8	8	7	7
	4	11	11	10	10	9	9	9	9	8	8	8	8	8
	6	11	11	10	10	10	10	9	9	9	9	9	8	8
20	0	11	11	10	9	9	9	8	8	8	8	7	7	7
	2	13	12	11	11	10	10	10	10	9	9	9	9	8
	4	13	12	12	11	11	11	10	10	10	10	9	9	9
	6	13	13	12	12	11	11	11	10	10	10	10	10	10
22	0	13	12	11	11	10	10	9	9	9	9	8	8	8
	2	14	13	13	12	12	11	11	11	10	10	10	10	9
	4	15	14	13	13	12	12	11	11	11	11	10	10	10
	6	15	14	13	13	12	12	12	11	11	11	11	11	10
24	0	14	13	12	12	11	11	10	10	10	10	9	9	9
	2	16	15	14	13	13	12	12	12	11	11	11	10	10
	4	16	15	14	14	13	13	12	12	12	11	11	11	11
	6	16	15	15	14	13	13	13	12	12	12	12	11	11
26	0	15	14	13	13	12	12	11	11	11	10	10	10	10
	2	17	16	15	14	14	13	13	12	12	12	11	11	11
	4	17	16	15	15	14	14	13	13	12	12	12	12	11
	6	17	16	15	15	14	14	13	13	13	13	12	12	12
28	0	16	15	14	14	13	13	12	12	11	11	11	10	10
	2	18	17	16	15	14	14	13	13	13	12	12	12	12
	4	18	17	16	15	15	14	14	13	13	13	13	12	12
	6	18	17	16	16	15	15	14	14	14	13	13	13	12

Slope - Flat & downhill

For Uphill Inlet pressure including flat slope + difference level.

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R.F.R - "RONDO FLOW REGULATED

R.F.R.-“RONDO” FLOW REGULATED

95 lph - WHITE NOZZLE

Maximum No. Of Emitters Per Lateral

Pipe Diameter - **16/13.6** (OD/ID)

Inlet Pressure (m')	Slope %	Emitter spacing (m')												
		2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8
30	0	17	16	15	14	14	13	13	12	12	12	11	11	11
	2	19	17	16	16	15	15	14	14	13	13	13	12	12
	4	19	18	17	16	15	15	15	14	14	13	13	13	13
	6	19	18	17	16	16	15	15	14	14	14	14	13	13
32	0	18	17	16	15	14	14	13	13	13	12	12	12	11
	2	19	18	17	16	16	15	15	14	14	14	13	13	13
	4	20	18	18	17	16	16	15	15	14	14	14	13	13
	6	20	19	18	17	16	16	15	15	15	14	14	14	14
35	0	19	18	17	16	15	15	14	14	13	13	13	12	12
	2	20	19	18	17	17	16	16	15	15	14	14	14	13
	4	21	20	19	18	17	16	16	16	15	15	14	14	14
	6	21	20	19	18	17	17	16	16	15	15	15	14	14

Slope - Flat & downhill

For Uphill Inlet pressure including flat slope + difference level.

19/07/2000

R.F.R.-“RONDO” FLOW REGULATED

95 lph - WHITE NOZZLE

Maximum No. Of Emitters Per Lateral

Pipe Diameter - **17.8/15.2** (OD/ID)

Inlet Pressure (m')	Slope %	Emitter spacing (m')												
		2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8
16	0	8	7	7	6	6	6	5	5	5	5	5	5	5
	2	9	9	8	8	8	8	7	7	7	7	7	7	7
	4	10	10	9	9	9	8	8	8	8	8	8	8	8
	6	11	10	10	10	9	9	9	9	9	9	9	8	8
18	0	12	11	10	10	9	9	8	8	8	8	7	7	7
	2	13	12	12	11	11	11	10	10	10	9	9	9	9
	4	14	13	12	12	12	11	11	11	10	10	10	10	10
	6	14	14	13	13	12	12	12	11	11	11	11	11	11
20	0	14	13	12	12	11	11	10	10	10	9	9	9	9
	2	16	15	14	13	13	12	12	12	11	11	11	11	10
	4	16	15	15	14	13	13	13	12	12	12	12	11	11
	6	17	16	15	15	14	14	13	13	13	13	12	12	12
22	0	16	15	14	13	13	12	12	11	11	11	10	10	10
	2	17	16	16	15	14	14	13	13	13	12	12	12	12
	4	18	17	16	15	15	14	14	14	13	13	13	13	12
	6	18	17	17	16	15	15	15	14	14	14	13	13	13
24	0	18	16	15	15	14	13	13	12	12	12	11	11	11
	2	19	18	17	16	16	15	15	14	14	13	13	13	13
	4	20	18	17	17	16	16	15	15	14	14	14	14	13
	6	20	19	18	17	17	16	16	15	15	15	14	14	14
26	0	19	18	17	16	15	14	14	13	13	13	12	12	12
	2	20	19	18	17	17	16	16	15	15	14	14	14	13
	4	21	20	19	18	17	17	16	16	15	15	15	14	14
	6	21	20	19	18	18	17	17	16	16	16	15	15	15
28	0	20	19	18	17	16	15	15	14	14	14	13	13	13
	2	22	20	19	18	18	17	16	16	16	15	15	15	14
	4	22	21	20	19	18	18	17	17	16	16	15	15	15
	6	22	21	20	19	19	18	18	17	17	16	16	16	15

Slope - Flat & downhill

For Uphill Inlet pressure including flat slope + difference level.

(Continued from page 66)

R.F.R - “RONDO FLOW REGULATED

R.F.R.-“RONDO” FLOW REGULATED

95 lph - WHITE NOZZLE

Maximum No. Of Emitters Per Lateral

Pipe Diameter - **17.8/15.2** (OD/ID)

Inlet Pressure (m')	Slope %	Emitter spacing (m')												
		2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8
30	0	21	20	19	18	17	16	16	15	15	14	14	14	13
	2	23	21	20	19	19	18	17	17	16	16	16	15	15
	4	23	22	21	20	19	18	18	17	17	17	16	16	16
	6	24	22	21	20	20	19	18	18	17	17	17	16	16
32	0	22	21	20	19	18	17	16	16	15	15	15	14	14
	2	24	22	21	20	19	19	18	18	17	17	16	16	16
	4	24	23	22	21	20	19	19	18	18	17	17	16	16
	6	24	23	22	21	20	20	19	19	18	18	17	17	17
35	0	24	22	21	20	19	18	18	17	16	16	16	15	15
	2	25	24	22	21	20	20	19	19	18	18	17	17	16
	4	25	24	23	22	21	20	20	19	19	18	18	17	17
	6	26	24	23	22	21	21	20	20	19	19	18	18	18

Slope - Flat & downhill

For Uphill Inlet pressure including flat slope + difference level.

19/07/2000

R.F.R.-"RONDO" FLOW REGULATED

95 lph - WHITE NOZZLE

Maximum No. Of Emitters Per Lateral

Pipe Diameter - **20/17** (OD/ID)

Inlet Pressure (m')	Slope %	Emitter spacing (m')												
		2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8
16	0	9	9	8	8	7	7	7	7	6	6	6	6	6
	2	12	11	10	10	10	9	9	9	9	9	9	8	8
	4	13	12	12	11	11	11	10	10	10	10	10	10	10
	6	13	13	13	12	12	12	12	11	11	11	11	11	11
18	0	14	13	12	12	11	11	10	10	10	9	9	9	9
	2	16	15	15	14	13	13	13	12	12	12	12	11	11
	4	17	16	16	15	14	14	14	13	13	13	13	12	12
	6	18	17	16	16	15	15	15	14	14	14	14	13	13
20	0	17	16	15	14	14	13	13	12	12	12	11	11	11
	2	19	18	17	16	16	15	15	14	14	14	13	13	13
	4	20	19	18	17	17	16	16	15	15	15	14	14	14
	6	21	20	19	18	18	17	17	16	16	16	15	15	15
22	0	20	18	17	16	16	15	14	14	14	13	13	12	12
	2	22	20	19	18	18	17	16	16	16	15	15	15	14
	4	22	21	20	19	18	18	17	17	17	16	16	16	15
	6	23	22	21	20	19	19	18	18	17	17	17	17	16
24	0	22	20	19	18	17	17	16	15	15	14	14	14	13
	2	23	22	21	20	19	18	18	17	17	17	16	16	16
	4	24	23	22	21	20	19	19	18	18	17	17	17	16
	6	25	23	22	21	21	20	20	19	19	18	18	18	17
26	0	23	22	20	19	19	18	17	17	16	16	15	15	14
	2	25	24	22	21	20	20	19	19	18	18	17	17	17
	4	26	24	23	22	21	21	20	19	19	19	18	18	17
	6	26	25	24	23	22	21	21	20	20	19	19	19	18
28	0	25	23	22	21	20	19	18	18	17	17	16	16	15
	2	27	25	24	23	22	21	20	20	19	19	18	18	17
	4	27	26	24	23	22	22	21	20	20	20	19	19	18
	6	28	26	25	24	23	22	22	21	21	20	20	20	19

Slope - Flat & downhill

For Uphill Inlet pressure including flat slope + difference level.

(Continued from page 68)

R.F.R - "RONDO FLOW REGULATED

R.F.R.-“RONDO” FLOW REGULATED

95 lph - WHITE NOZZLE

Maximum No. Of Emitters Per Lateral

Pipe Diameter - **20/17** (OD/ID)

Inlet Pressure (m')	Slope %	Emitter spacing (m')												
		2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8
30	0	26	24	23	22	21	20	19	19	18	18	17	17	16
	2	28	26	25	24	23	22	21	21	20	20	19	19	18
	4	28	27	25	24	23	23	22	21	21	20	20	20	19
	6	29	27	26	25	24	23	23	22	22	21	21	20	20
32	0	27	26	24	23	22	21	20	20	19	18	18	18	17
	2	29	27	26	25	24	23	22	21	21	20	20	19	19
	4	30	28	27	25	24	24	23	22	22	21	21	20	20
	6	30	29	27	26	25	24	24	23	22	22	22	21	21
35	0	29	27	26	24	23	22	22	21	20	20	19	19	18
	2	31	29	27	26	25	24	23	23	22	22	21	21	20
	4	31	29	28	27	26	25	24	23	23	22	22	21	21
	6	32	30	29	27	26	26	25	24	24	23	23	22	22

Slope - Flat & downhill

For Uphill Inlet pressure including flat slope + difference level.

19/07/2000

R.F.R.-"RONDO" FLOW REGULATED

95 lph - WHITE NOZZLE

Maximum No. Of Emitters Per Lateral

Pipe Diameter - **20/17.4** (OD/ID)

Inlet Pressure (m')	Slope %	Emitter spacing (m')												
		2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8
16	0	10	9	9	8	8	7	7	7	7	6	6	6	6
	2	12	11	11	11	10	10	10	9	9	9	9	9	9
	4	13	13	12	12	11	11	11	11	11	10	10	10	10
	6	14	14	13	13	13	12	12	12	12	12	12	11	11
18	0	15	14	13	12	12	11	11	11	10	10	10	9	9
	2	17	16	15	15	14	14	13	13	13	12	12	12	12
	4	18	17	16	16	15	15	14	14	14	13	13	13	13
	6	19	18	17	17	16	16	15	15	15	15	14	14	14
20	0	18	17	16	15	14	14	13	13	12	12	12	11	11
	2	20	19	18	17	16	16	15	15	15	14	14	14	13
	4	21	20	19	18	17	17	17	16	16	15	15	15	15
	6	22	21	20	19	18	18	17	17	17	16	16	16	16
22	0	21	19	18	17	16	16	15	15	14	14	13	13	13
	2	22	21	20	19	18	18	17	17	16	16	16	15	15
	4	23	22	21	20	19	19	18	18	17	17	17	16	16
	6	24	23	22	21	20	20	19	19	18	18	18	17	17
24	0	23	21	20	19	18	17	17	16	16	15	15	14	14
	2	24	23	22	21	20	19	19	18	18	17	17	17	16
	4	25	24	23	22	21	20	20	19	19	18	18	18	17
	6	26	24	23	22	22	21	20	20	20	19	19	19	18
26	0	24	23	21	20	19	19	18	17	17	16	16	15	15
	2	26	25	23	22	21	21	20	19	19	18	18	18	17
	4	27	25	24	23	22	21	21	20	20	19	19	19	18
	6	28	26	25	24	23	22	22	21	21	20	20	20	19
28	0	26	24	23	22	21	20	19	18	18	17	17	17	16
	2	28	26	25	24	23	22	21	20	20	19	19	19	18
	4	28	27	25	24	23	23	22	21	21	20	20	20	19
	6	29	27	26	25	24	23	23	22	22	21	21	20	20

Slope - Flat & downhill

For Uphill Inlet pressure including flat slope + difference level.

(Continued from page 70)

R.F.R - "RONDO FLOW REGULATED

EC 70

R.F.R.-“RONDO” FLOW REGULATED

95 lph - WHITE NOZZLE

Maximum No. Of Emitters Per Lateral

Pipe Diameter - **20/17.4** (OD/ID)

Inlet Pressure (m')	Slope %	Emitter spacing (m')												
		2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8
30	0	27	26	24	23	22	21	20	20	19	18	18	17	17
	2	29	27	26	25	24	23	22	21	21	20	20	19	19
	4	30	28	27	25	24	24	23	22	22	21	21	20	20
	6	30	29	27	26	25	24	24	23	23	22	22	21	21
32	0	29	27	25	24	23	22	21	20	20	19	19	18	18
	2	30	28	27	26	25	24	23	22	22	21	21	20	20
	4	31	29	28	27	26	25	24	23	23	22	22	21	21
	6	32	30	28	27	26	25	25	24	23	23	23	22	22
35	0	30	28	27	25	24	23	22	22	21	20	20	19	19
	2	32	30	29	27	26	25	24	24	23	22	22	21	21
	4	33	31	29	28	27	26	25	24	24	23	23	22	22
	6	33	31	30	29	28	27	26	25	25	24	24	23	23

Slope - Flat & downhill

For Uphill Inlet pressure including flat slope + difference level.

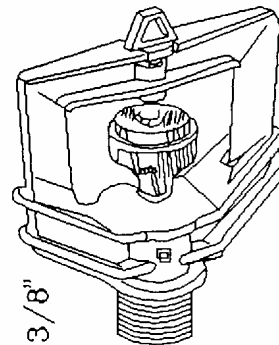
19/07/2000

"RONDO XL"

Midi - Sprinkler

MAIN FEATURES

- * Double bridge design for XL spinner
- * Built-in patented Speed Regulator Device (SRD).
- * Single long jet of water for large diameter wetting pattern.
- * Large wetting pattern allows wide spacing of sprinklers.



ADDITIONAL FEATURES

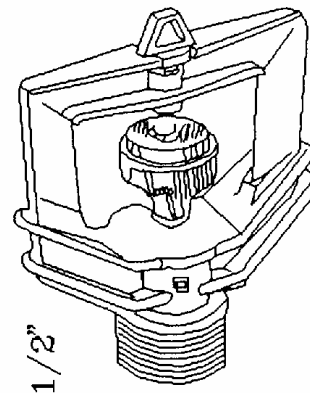
- * Versatile design allows interchangeable model combinations with spinners from Rondo Mini-sprinkler.

OPERATING RANGE

- * Working pressure range 2.0-3.5bar.
- * Nominal flow rate at:
bar.
XL 135, 170, 210, 260,
305, 367 l/h.

MODELS AND TYPES

- * 3/8" Threaded connection.
- * 1/2" Threaded connection.
- * XL Black: standard.
- * Colour coded nozzles for flow rate identification.



“RONDO-XL”
MIDI SPRINKLER
FLOW RATE DATA

NOZZLE COLOR (mm)	Q=A $\times$ H ^A B **		%DH	FLOW RATE (LPH) AT PRESSURE						
	A	B	***	10 m	15 m	20 m	25 m	30 m	35 m	40 m
WHITE (1.6)	30.8589	0.4918	21.5	94	117	134	150	165	178	190
VIOLET (1.8)	41.202	0.477	22.2	122	149	171	191	209	226	241
YELLOW (2.0)	50.1894	0.4807	21.9	150	183	212	235	258	278	297
BROWN (2.2)	63.5234	0.4712	22.4	185	225	259	290	315	341	365
ORANGE (2.4)	73.3716	0.4768	22.1	217	265	305	341	373	401	427
GREY (2.6)	82.5585	0.4977	21.5	259	317	367	410	449	485	518

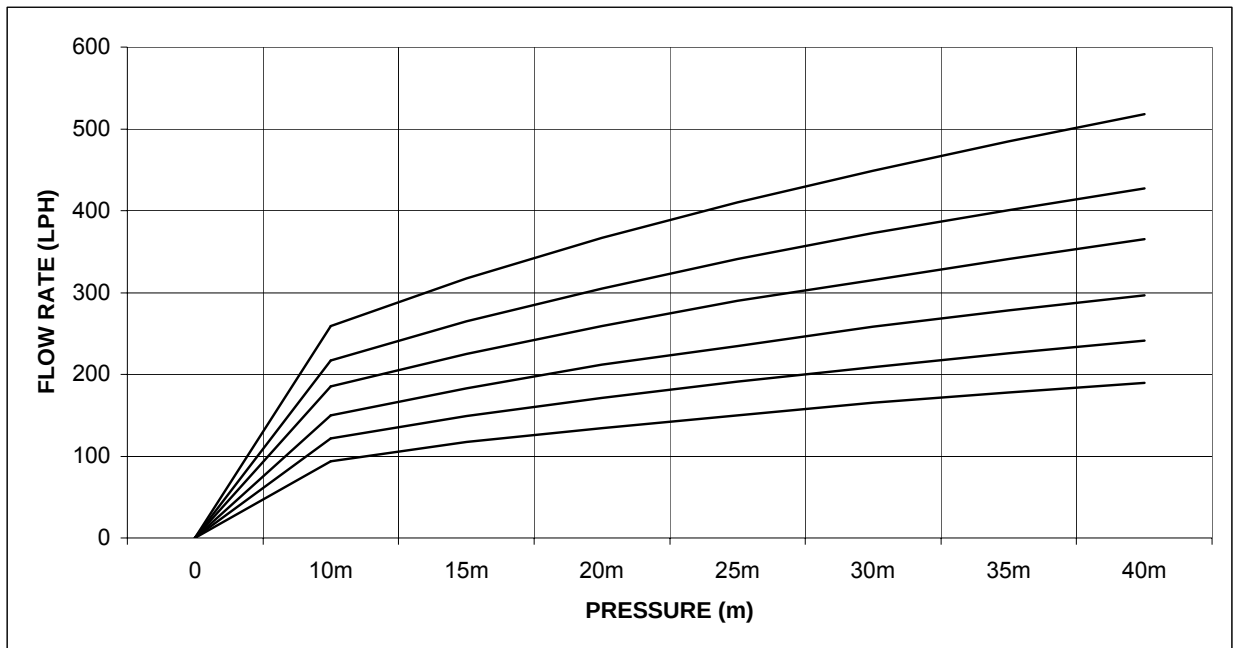
NOTE: TESTED WITHOUT MICRO-TUBE

** - Q=LPH H=m.

*** - %DH - MAXIMUM ALLOWABLE HEAD LOSS DIFFERENCE
 ALONG A LATERAL (AS PERCENT OF THE WORKING
 PRESSURE) TO KEEP FLOW RATE DIFFERENCES $\leq$ 10%
 OF WORKING FLOW RATE.

PERFORMANCE CHART

Working Pressure Range 20-35m.



RONDO XL - MIDI SPRINKLER

Nozzle code Ø (mm)	Pressure (Bar)	Discharge (Lph)	Wetting Radius (m')
			Black spinner
White 1.6	1.5	117	*6.5 \ 7.0**
	2.0	135	6.8 \ 7.3
	2.5	150	7.0 \ 7.5
	3.0	165	7.0 \ 7.5
Violet 1.8	1.5	149	6.5 \ 7.0
	2.0	170	6.8 \ 7.5
	2.5	191	7.0 \ 7.5
	3.0	209	7.0 \ 7.5
Yellow 2	1.5	183	6.5 \ 7.0
	2.0	210	6.8 \ 7.5
	2.5	235	7.0 \ 7.5
	3.0	258	7.0 \ 7.5
Brown 2.2	1.5	225	6.5 \ 7.0
	2.0	260	6.8 \ 7.5
	2.5	290	7.0 \ 7.5
	3.0	315	7.0 \ 7.5
Orange 2.4	1.5	265	6.5 \ 7.0
	2.0	305	6.8 \ 7.5
	2.5	341	7.0 \ 7.5
	3.0	373	7.0 \ 7.5
Gray 2.6	1.5	317	6.5 \ 6.8
	2.0	367	6.8 \ 7.0
	2.5	410	7.0 \ 7.3
	3.0	449	7.0 \ 7.3

* 25 cm above ground

** 75 cm above ground

"RONDO XL"

WITH" METEOR" **PRESSURE REGULATOR - 2.0bar**

FLOW RATE TABLE

Nozzle Code	Flow Rate (lph) at pressure									
	5m	10m	15m	17.5m	20m	22.5m	25m	30m	35m	40m
WHITE**	67	91	112	122	129	132	135	139	141	143
VIOLET**	83	118	146	157	166	169	172	175	180	184
YELLOW***	98	140	174	187	201	206	210	214	220	224
BROWN***	118	167	208	223	239	250	254	260	266	272
ORANGE***	134	188	237	254	271	286	294	300	307	312
GRAY***	147	219	266	286	308	326	343	360	366	372

** FLEXIBLE TUBE 5/8

*** FLEXIBLE TUBE 10/14 OR 9/13

"RONDO XL"

WITH" METEOR" **PRESSURE REGULATOR - 2.5bar**

FLOW RATE TABLE

Nozzle Code	Flow Rate (lph) at pressure									
	5m	10m	15m	20m	22.5m	25m	27.5m	30m	35m	40m
WHITE**	64	92	114	131	140	145	147	150	155	158
VIOLET**	82	116	144	166	177	186	191	193	198	204
YELLOW***	97	140	174	202	214	226	233	236	240	246
BROWN***	118	167	208	240	255	268	280	287	292	297
ORANGE***	134	192	237	273	290	307	322	332	340	346
GRAY***	147	219	266	308	329	348	364	380	400	405

** FLEXIBLE TUBE 5/8

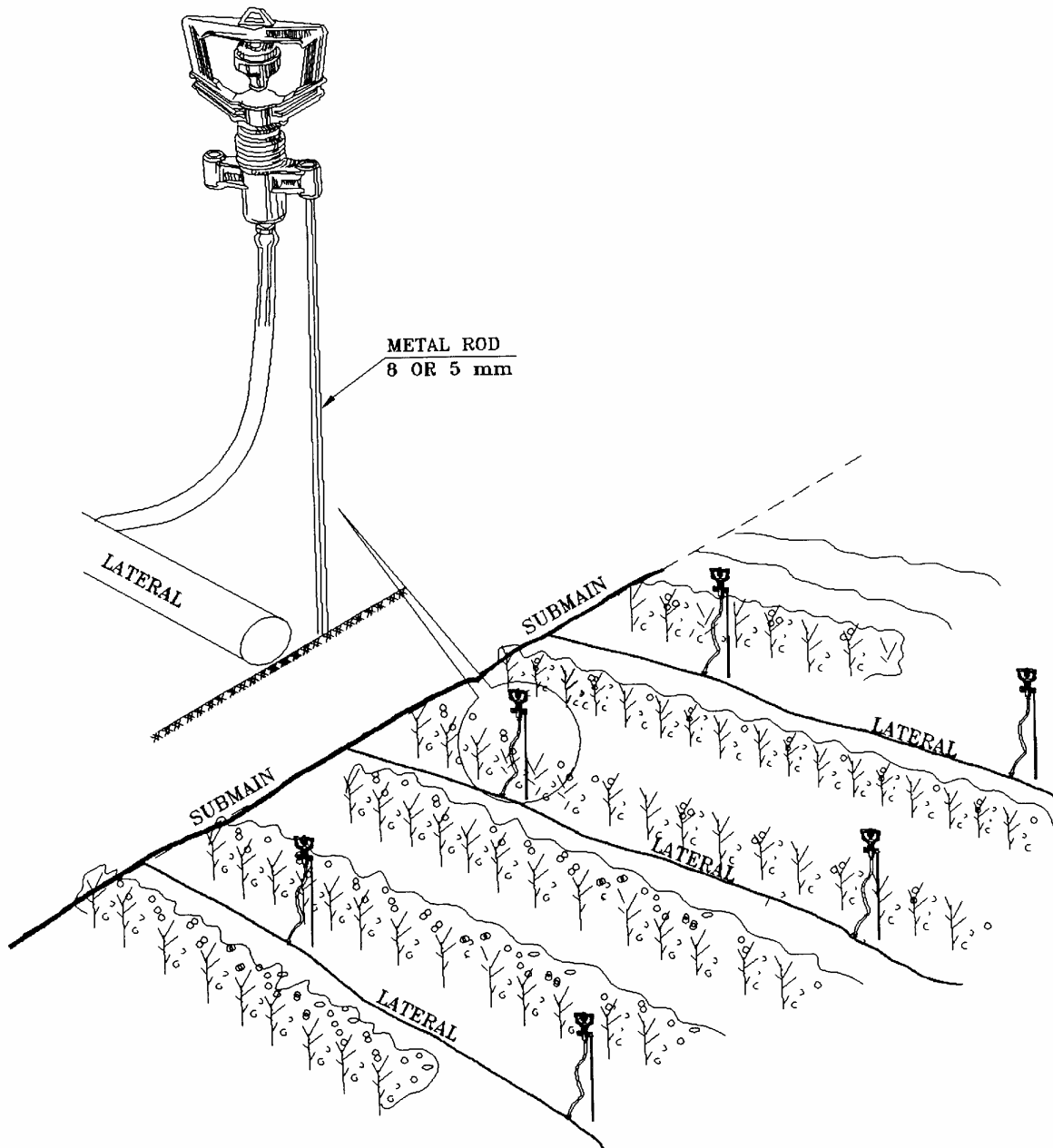
*** FLEXIBLE TUBE 10/14 OR 9/13

FILD / ROW CROPS

"RONDO-XL"

MIDI-SPRINKLER

UPRIGHT POSITION



RONDO XL

CHRISTIANSEN UNIFORMITY COEF. (CU)% CHART

PATTERN - RECTANGULAR

UPRIGHT POSITION

NOZZLE HEIGHT - **25** cm

WORKING PRESSURE - 2.0 bar

Square Spacing (m)	Nozzle code / CU(%)					
	White 135 lph	Violet 170 lph	Yellow 210 lph	Brown 260 lph	Orange 300 lph	Gray 367 lph
3x3	95	95	97	98	98	98
3.5x3.5	97	97	95	96	95	94
4x4	96	95	96	97	96	95
4.5x4.5	93	95	93	94	94	95
5x5	85	88	88	89	90	89
5.5x5.5	81	83	89	88	91	89
6x6	87	86	94	94	95	94
6.5x6.5	90	91	91	93	92	93
7x7	85	88	87	88	89	89
7.5x7.5	81	84	85	86	87	86
8x8	81	82	86	86	88	85
8.5x8.5	83	83	89	90	91	88
9x9	86	86	89	93	93	89
9.5x9.5	84	89	88	90	89	86
10x10	79	85	82	83	83	80

* Coefficient Of Uniformity (standards)

-Overlapping sprinklers standard equal to or greater than 84%

-Single sprinkler- no standard established. uniformity
increases with the value.

RONDO XL

CHRISTIANSEN UNIFORMITY COEF. (CU)% CHART

PATTERN - RECTANGULAR

UPRIGHT POSITION

NOZZLE HEIGHT - **70** cm

WORKING PRESSURE - 2.0 bar

Square Spacing (m)	Nozzle code / CU(%)					
	White 135 lph	Violet 170 lph	Yellow 210 lph	Brown 260 lph	Orange 300 lph	Gray 367 lph
3x3	98	99	99	99	99	98
3.5x3.5	95	96	97	98	99	97
4x4	95	97	98	98	98	99
4.5x4.5	93	95	95	96	95	97
5x5	90	92	91	92	91	92
5.5x5.5	83	85	89	92	90	92
6x6	82	84	92	96	93	96
6.5x6.5	88	90	93	95	95	95
7x7	88	90	90	90	91	91
7.5x7.5	83	85	87	88	89	88
8x8	80	82	87	89	89	89
8.5x8.5	80	81	88	91	91	91
9x9	83	83	90	93	94	92
9.5x9.5	85	86	92	92	93	89
10x10	87	89	88	86	87	83
10.5x10.5	79	82	81	80	81	77
11x11	72	75	76	77	77	

* Coefficient Of Uniformity (standards)

-Overlapping sprinklers standard equal to or greater than 84%

-Single sprinkler- no standard established. uniformity
increases with the value.

RONDO XL

WHITE NOZZLE - 135 LPH

CHRISTIANSEN UNIFORMITY COEF. (CU)% CHART

BASE PRESSURE - 2.0 bar

UPRIGHT POSITION

NOZZLE HEIGHT - 70 cm.

Spacing Between Emitters (m)	Spacing Between Laterals (m) / CU(%)																
	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11	11.5	12
4	95	93	89	85	87	90	94	94	91	89	89	87	86	84	85	85	84
4.5	93	93	91	87	87	90	92	92	90	89	89	88	88	87	86	85	83
5	89	91	90	86	86	87	89	88	88	88	89	89	89	86	85	84	79
5.5	85	87	86	83	82	84	86	86	86	87	87	84	82	79	78	77	76
6	87	87	86	82	82	85	86	86	87	85	81	80	78	76	75	74	73
6.5	90	90	87	84	85	88	88	87	84	81	79	78	78	76	76	75	*75 *
7	94	92	89	86	86	88	88	86	83	81	80	79	79	77	*77 *	*77 *	*77 *
7.5	94	92	88	86	86	87	86	83	81	80	80	80	79	79	*78 *	*79 *	*78 *
8	91	90	88	86	87	84	83	81	80	80	80	81	81	80	*80 *	*81 *	*80 *
8.5	89	89	88	87	85	81	81	80	80	80	81	82	82	*81 *	*82 *	*82 *	*79 *
9	89	89	89	87	81	79	80	80	80	81	83	84	84	*84 *	*83 *	*81 *	*77 *
9.5	87	88	89	84	80	78	79	80	81	82	84	85	*87 *	*85 *	*81 *	*79 *	*74 *
10	86	88	89	82	78	78	79	79	81	82	84	*87 *	*87 *	*83 *	*80 *	*76 *	*73 *
10.5	84	87	86	79	76	76	77	79	80	*81 *	*84 *	*85 *	*83 *	*79 *	*76 *	*72 *	*71 *
11	85	86	85	78	75	76	*77 *	*78 *	*80 *	*82 *	*83 *	*81 *	*80 *	*76 *	*72 *	*71 *	*69 *
11.5	85	85	84	77	74	75	*77 *	*79 *	*81 *	*82 *	*81 *	*79 *	*76 *	*72 *	*71 *	*69 *	*68 *
12	84	84	79	76	73	*75 *	*77 *	*78 *	*80 *	*79 *	*77 *	*74 *	*73 *	*71 *	*69 *	*68 *	*67 *

* Coefficient Of Uniformity (standards) -

-Overlapping sprinklers standard equal to or greater than 84%

-Single sprinkler - no standard established. uniformity increases with the value.

RONDO XL

VIOLET NOZZLE - 170 LPH

CHRISTIANSEN UNIFORMITY COEF. (CU)% CHART

BASE PRESSURE - 2.0 Bar

UPRIGHT POSITION

NOZZLE HEIGHT - **70** Cm.

Spacing Between Emitters (m)	Spacing Between Laterals (m) / CU(%)																
	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11	11.5	12
4	97	95	91	88	89	92	95	94	91	90	89	88	87	86	87	87	85
4.5	95	95	93	90	89	91	93	92	90	89	89	89	89	89	89	87	85
5	91	93	92	89	88	89	89	89	89	88	89	90	90	88	86	85	80
5.5	88	90	89	85	84	86	87	88	88	88	89	87	85	82	81	80	77
6	89	89	88	84	84	87	88	89	88	87	84	83	81	78	78	77	75
6.5	92	91	89	86	87	90	90	89	85	83	82	81	80	79	78	78	77
7	95	93	89	87	88	90	90	87	84	83	82	82	81	80	79	79	79
7.5	94	92	89	88	89	89	87	85	83	83	82	81	81	81	81	81	80
8	91	90	89	88	88	85	84	83	82	81	81	82	82	81	82	83	81
8.5	90	89	88	88	87	83	83	83	81	81	82	83	83	83	84	84	81
9	89	89	89	89	84	82	82	82	81	82	83	85	85	85	86	84	*79*
9.5	88	89	90	87	83	81	82	81	82	83	85	86	88	87	84	81	*76*
10	87	89	90	85	81	80	81	81	82	83	85	88	89	86	83	*78*	*75*
10.5	86	89	88	82	78	79	80	81	81	83	85	87	86	82	*79*	*75*	*73*
11	87	89	86	81	78	78	79	81	82	84	86	84	83	*79*	*75*	*73*	*70*
11.5	87	87	85	80	77	78	79	81	83	84	84	81	*78*	*75*	*73*	*71*	*70*
12	85	85	80	77	75	77	79	80	81	81	*79*	*76*	*75*	*73*	*70*	*70*	*68*

* Coefficient Of Uniformity (standards) -

-Overlapping sprinklers standard equal to or greater than 84%

-Single sprinkler - no standard established. uniformity increases with the value.

RONDO XL

YELLOW NOZZLE - 210 LPH

CHRISTIANSEN UNIFORMITY COEF. (CU)% CHART

BASE PRESSURE - 2.0 bar

UPRIGHT POSITION

NOZZLE HEIGHT - **70** cm.

Spacing Between Emitters (m)	Spacing Between Laterals (m) / CU(%)																
	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11	11.5	12
4	98	96	93	91	94	95	95	93	92	92	92	92	91	89	88	87	84
4.5	96	95	93	92	93	94	93	92	92	92	93	93	92	90	88	84	81
5	93	93	91	90	91	92	91	91	91	91	92	91	90	87	85	82	78
5.5	91	92	90	89	90	91	91	90	90	90	90	88	86	83	82	80	77
6	94	93	91	90	92	93	92	91	89	88	87	86	84	83	81	80	77
6.5	95	94	92	91	93	93	92	89	88	87	87	86	85	83	82	81	78
7	95	93	91	91	92	92	90	88	87	87	87	87	86	84	83	81	79
7.5	93	92	91	90	91	89	88	87	86	87	87	87	86	85	84	82	79
8	92	92	91	90	89	88	87	86	87	87	88	88	87	86	85	83	79
8.5	92	92	91	90	88	87	87	87	87	88	89	90	89	87	85	82	78
9	92	93	92	90	87	87	87	87	88	89	90	91	90	88	84	81	*77*
9.5	92	93	91	88	86	86	87	87	88	90	91	92	90	86	82	*80*	*76*
10	91	92	90	86	84	85	86	86	87	89	90	90	88	84	*81*	*78*	*75*
10.5	89	90	87	83	83	83	84	85	86	87	88	86	84	*81*	*78*	*76*	*74*
11	88	88	85	82	81	82	83	84	85	85	84	82	*81*	*78*	*76*	*74*	*72*
11.5	87	84	82	80	80	81	81	82	83	82	81	*80*	*78*	*76*	*74*	*72*	*71*
12	84	81	78	77	77	78	79	79	79	78	*77*	*76*	*75*	*74*	*72*	*71*	*69*

* Coefficient Of Uniformity (standards) -

-Overlapping sprinklers standard equal to or greater than 84%

-Single sprinkler - no standard established. uniformity increases with the value.

RONDO XL

BROWN NOZZLE - 260 LPH

CHRISTIANSEN UNIFORMITY COEF. (CU)% CHART

BASE PRESSURE - 2.0 bar

UPRIGHT POSITION

NOZZLE HEIGHT - **70** cm.

Spacing Between Emitters (m)	Spacing Between Laterals (m) / CU(%)																
	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11	11.5	12
4	98	96	94	94	96	96	93	92	92	93	94	94	93	91	88	86	83
4.5	96	96	94	93	95	94	93	92	92	93	94	94	92	90	87	83	79
5	94	94	92	92	93	93	92	92	92	92	93	92	89	86	84	81	77
5.5	94	93	92	92	94	94	93	92	91	91	91	89	87	85	83	80	77
6	96	95	93	94	96	96	94	91	90	90	90	89	87	85	83	81	78
6.5	96	94	93	94	96	95	92	90	89	90	90	89	88	86	85	82	78
7	93	93	92	93	94	92	90	89	89	89	90	89	89	87	85	82	78
7.5	92	92	92	92	91	90	89	88	88	89	90	90	89	88	85	81	77
8	92	92	92	91	90	89	89	88	89	90	91	91	90	88	84	81	*76*
8.5	93	93	92	91	90	90	89	89	90	91	92	92	90	88	83	*80*	*76*
9	94	94	93	91	90	90	90	90	91	92	93	93	90	87	82	*79*	*76*
9.5	94	94	92	89	89	89	89	90	91	92	93	92	88	85	*81*	*79*	*76*
10	93	92	89	87	87	88	89	89	90	90	90	88	86	*82*	*80*	*78*	*76*
10.5	91	90	86	85	85	86	87	88	88	88	87	85	*82*	*80*	*78*	*77*	*75*
11	88	87	84	83	83	85	85	85	84	83	82	*81*	*80*	*78*	*77*	*76*	*74*
11.5	86	93	81	80	81	82	82	81	81	*80*	*79*	*79*	*78*	*77*	*76*	*75*	*73*
12	83	79	77	77	78	78	78	77	*76*	*76*	*76*	*76*	*76*	*75*	*74*	*73*	*72*

* Coefficient Of Uniformity (standards) -

-Overlapping sprinklers standard equal to or greater than 84%

-Single sprinkler - no standard established. uniformity increases with the value.

RONDO XL

ORANGE NOZZLE - 305 LPH

CHRISTIANSEN UNIFORMITY COEF. (CU)% CHART

BASE PRESSURE - 2.0 bar

UPRIGHT POSITION

NOZZLE HEIGHT - **70** cm.

Spacing Between Emitters (m)	Spacing Between Laterals (m) / CU(%)																
	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11	11.5	12
4	98	96	93	93	95	97	96	94	94	94	95	94	93	90	88	86	83
4.5	96	95	93	92	94	95	94	94	94	94	95	94	92	90	87	83	80
5	93	93	91	91	92	93	93	93	93	93	93	92	90	87	84	82	77
5.5	93	92	91	90	92	93	92	92	92	91	91	89	87	84	82	80	77
6	95	94	92	92	93	94	94	92	91	89	88	88	86	84	82	81	77
6.5	97	95	93	93	94	95	93	90	89	89	89	88	86	85	83	82	78
7	96	94	93	92	94	93	91	90	89	89	89	88	87	86	84	82	78
7.5	94	94	93	92	92	90	90	89	88	89	89	89	88	87	85	82	78
8	94	94	93	92	91	89	89	88	89	90	91	91	89	88	85	82	77
8.5	94	94	93	91	89	89	89	89	90	91	93	93	91	88	85	81	77
9	95	95	93	91	88	89	89	89	91	93	94	94	91	88	83	80	*76*
9.5	94	94	92	89	88	88	88	89	91	93	94	93	90	86	82	*79*	*76*
10	93	92	90	87	86	86	87	88	89	91	91	90	87	84	*81*	*78*	*75*
10.5	90	90	87	84	84	85	86	87	88	88	88	86	84	*81*	*79*	*76*	*74*
11	88	87	84	82	82	83	84	85	85	85	83	82	*81*	*79*	*77*	*75*	*73*
11.5	86	83	82	80	81	82	82	82	82	81	80	*79*	*78*	*76*	*75*	*74*	*72*
12	83	80	77	77	77	78	78	78	77	77	*76*	*76*	*75*	*74*	*73*	*72*	*71*

* Coefficient Of Uniformity (standards) -

-Overlapping sprinklers standard equal to or greater than 84%

-Single sprinkler - no standard established. uniformity increases with the value.

RONDO XL

GRAY NOZZLE - 367 LPH

CHRISTIANSEN UNIFORMITY COEF. (CU)% CHART

BASE PRESSURE - 2.0 bar

UPRIGHT POSITION

NOZZLE HEIGHT - **70** cm.

Spacing Between Emitters (m)	Spacing Between Laterals (m) / CU(%)																
	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11	11.5	12
4	99	97	95	96	96	96	94	93	95	95	95	93	90	87	82	78	75
4.5	97	97	95	94	94	94	93	93	94	95	95	92	88	85	81	76	72
5	95	95	92	92	93	93	93	93	94	94	93	90	86	82	79	75	70
5.5	96	94	92	92	94	95	94	94	93	92	91	88	85	81	78	74	70
6	96	94	93	94	96	96	94	92	92	91	90	88	85	82	79	75	71
6.5	96	94	93	95	96	95	93	91	90	91	90	88	85	82	79	75	71
7	94	93	93	94	94	93	91	90	89	90	89	88	86	83	79	76	72
7.5	93	93	93	94	92	91	90	88	89	89	89	88	86	83	80	76	*72*
8	95	94	94	93	92	90	89	89	89	90	91	89	87	84	80	76	*72*
8.5	95	95	94	92	91	91	90	89	90	91	91	91	88	84	80	*75*	*71*
9	95	95	93	91	90	90	89	89	91	91	92	91	87	83	*79*	*75*	*71*
9.5	93	92	90	88	88	88	88	88	89	91	91	89	86	*82*	*78*	*74*	*70*
10	90	88	86	85	85	85	86	86	87	88	87	86	*83*	*80*	*77*	*73*	*70*
10.5	87	85	82	81	82	82	83	83	84	84	83	*82*	*80*	*77*	*74*	*71*	*68*
11	82	81	79	78	79	79	79	80	80	80	*79*	*78*	*77*	*74*	*72*	*70*	*67*
11.5	78	76	75	74	75	75	76	76	76	*75*	*75*	*74*	*73*	*71*	*70*	*68*	*66*
12	75	72	70	70	71	71	72	*72*	*72*	*71*	*71*	*70*	*70*	*68*	*67*	*66*	*64*

* Coefficient Of Uniformity (standards) -

-Overlapping sprinklers standard equal to or greater than 84%

-Single sprinkler - no standard established. uniformity increases with the value.

RONDO XL - MIDI SPRINKLER
WHITE NOZZLE - 135 LPH
MAXIMUM NO. OF EMITTERS PER LATERAL
(MAX. FLOW RATE VARIATION - 7.5% OR 10%)

Emitter Spacing (m)	Slope (%)	Pipe Diameter in mm (OD/ID)							
		20/17		25/21.2		32/27.2		40/36.6	
		7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%
4	-2	9	10	13	15	18	21	26	32
	-1	9	11	14	16	21	24	32	37
	0	10	11	15	16	23	26	39	44
	1	10	11	16	17	25	28	45	49
	2	11	12	17	18	27	30	50	54
5	-2	8	9	11	13	16	19	23	28
	-1	8	10	12	14	19	21	29	33
	0	9	10	14	15	21	24	36	40
	1	9	10	15	16	24	26	42	46
	2	10	11	15	17	26	28	47	51
6	-2	7	8	10	12	15	17	20	25
	-1	8	9	11	13	17	20	26	31
	0	8	9	13	14	20	22	34	38
	1	9	10	14	15	22	24	40	44
	2	9	10	15	16	24	26	45	48
7	-2	7	8	10	11	13	16	18	22
	-1	7	8	11	12	16	18	24	28
	0	8	9	12	13	19	21	32	36
	1	8	9	13	14	21	23	38	42
	2	9	10	14	15	23	25	43	47
8	-2	6	7	9	10	12	15	16	20
	-1	7	8	10	11	15	17	22	26
	0	7	8	11	13	18	20	30	34
	1	8	9	12	14	20	22	37	40
	2	8	9	13	15	22	24	42	45
9	-2	6	7	8	10	12	14	15	19
	-1	7	7	10	11	14	16	21	25
	0	7	8	11	12	17	19	29	32
	1	8	8	12	13	20	22	36	39
	2	8	9	13	14	22	24	41	44
10	-2	6	7	8	9	11	13	14	17
	-1	6	7	9	10	13	15	20	23
	0	7	8	10	12	16	18	28	31
	1	7	8	12	13	19	21	35	38
	2	8	9	12	14	21	23	40	43

(-) UPHILL
 (+) DOWNHILL

RONDO XL - MIDI SPRINKLER
VIOLET NOZZLE - 170 LPH
MAXIMUM NO. OF EMITTERS PER LATERAL
(MAX. FLOW RATE VARIATION - 7.5% OR 10%)

Emitter Spacing (m)	Slope (%)	Pipe Diameter in mm (OD/ID)							
		20/17		25/21.2		32/27.2		40/36.6	
		7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%
4	-2	8	9	11	13	16	19	24	29
	-1	8	9	12	13	18	20	29	33
	0	8	9	13	14	20	22	34	38
	1	9	10	13	15	22	24	38	42
	2	9	10	14	15	23	25	42	45
5	-2	7	8	10	11	15	17	21	25
	-1	7	8	11	12	16	19	26	30
	0	8	9	12	13	18	20	31	35
	1	8	9	12	14	20	22	36	39
	2	8	9	13	14	21	23	39	42
6	-2	6	7	9	11	13	15	19	23
	-1	7	8	10	11	15	17	24	27
	0	7	8	11	12	17	19	29	32
	1	7	8	12	13	19	21	34	37
	2	8	9	12	13	20	22	38	40
7	-2	6	7	9	10	12	14	17	21
	-1	6	7	9	11	14	16	22	25
	0	7	7	10	11	16	18	27	31
	1	7	8	11	12	18	20	32	35
	2	7	8	12	13	19	21	36	39
8	-2	6	6	8	9	11	13	16	19
	-1	6	7	9	10	13	15	20	24
	0	6	7	10	11	15	17	26	29
	1	7	7	10	12	17	19	31	34
	2	7	8	11	12	19	20	35	37
9	-2	5	6	8	9	11	12	14	18
	-1	6	6	8	9	12	14	19	22
	0	6	7	9	10	15	16	25	28
	1	6	7	10	11	17	18	30	33
	2	7	7	11	12	18	20	34	36
10	-2	5	6	7	8	10	12	13	16
	-1	5	6	8	9	12	14	18	21
	0	6	6	9	10	14	16	24	27
	1	6	7	10	11	16	18	29	32
	2	6	7	10	11	18	19	33	35

(-) UPHILL
 (+) DOWNHILL

RONDO XL - MIDI SPRINKLER
YELLOW NOZZLE - 210 LPH
MAXIMUM NO. OF EMITTERS PER LATERAL
(MAX. FLOW RATE VARIATION - 7.5% OR 10%)

Emitter Spacing (m)	Slope (%)	Pipe Diameter in mm (OD/ID)							
		20/17		25/21.2		32/27.2		40/36.6	
		7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%
4	-2	7	8	10	11	15	17	22	26
	-1	7	8	10	12	16	18	26	29
	0	7	8	11	12	17	19	30	33
	1	7	8	11	13	19	20	33	36
	2	8	9	12	13	20	22	36	39
5	-2	6	7	9	10	13	15	20	23
	-1	6	7	9	11	14	16	23	26
	0	7	7	10	11	16	18	27	30
	1	7	8	11	12	17	19	31	34
	2	7	8	11	12	18	20	34	36
6	-2	6	6	8	9	12	14	17	21
	-1	6	7	9	10	13	15	21	24
	0	6	7	9	10	15	17	25	28
	1	6	7	10	11	16	18	29	32
	2	7	7	10	11	17	19	32	35
7	-2	5	6	8	9	11	13	16	19
	-1	5	6	8	9	12	14	20	23
	0	6	6	9	10	14	16	24	27
	1	6	7	9	10	15	17	28	30
	2	6	7	10	11	17	18	31	33
8	-2	5	6	7	8	10	12	15	17
	-1	5	6	8	9	12	13	18	21
	0	5	6	8	9	13	15	23	25
	1	6	6	9	10	15	16	27	29
	2	6	7	10	10	16	17	30	32
9	-2	5	5	7	8	10	11	13	16
	-1	5	6	7	8	11	13	17	20
	0	5	6	8	9	13	14	22	24
	1	5	6	9	9	14	16	26	28
	2	6	6	9	10	15	17	29	31
10	-2	4	5	6	7	9	11	13	15
	-1	5	5	7	8	11	12	16	19
	0	5	6	8	8	12	14	21	23
	1	5	6	8	9	14	15	25	27
	2	5	6	9	10	15	16	28	30

(-) UPHILL
(+) DOWNHILL

RONDO XL - MIDI SPRINKLER
BROWN NOZZLE - 260 LPH
MAXIMUM NO. OF EMITTERS PER LATERAL
(MAX. FLOW RATE VARIATION - 7.5% OR 10%)

Emitter Spacing (m)	Slope (%)	Pipe Diameter in mm (OD/ID)							
		20/17		25/21.2		32/27.2		40/36.6	
		7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%
4	-2	6	7	9	10	13	15	20	24
	-1	6	7	9	10	14	16	23	26
	0	6	7	10	11	15	17	26	29
	1	6	7	10	11	16	18	29	31
	2	7	7	10	11	17	19	31	33
5	-2	5	6	8	9	12	14	18	21
	-1	6	6	8	9	13	14	21	24
	0	6	6	9	10	14	16	24	27
	1	6	7	9	10	15	16	27	29
	2	6	7	10	11	16	17	29	31
6	-2	5	6	7	8	11	12	16	19
	-1	5	6	8	9	12	13	19	22
	0	5	6	8	9	13	14	22	25
	1	5	6	9	10	14	15	25	27
	2	6	6	9	10	15	16	27	30
7	-2	5	5	7	8	10	12	15	17
	-1	5	5	7	8	11	13	18	20
	0	5	6	8	9	12	14	21	23
	1	5	6	8	9	13	15	24	26
	2	5	6	9	9	14	16	26	28
8	-2	4	5	6	7	9	11	14	16
	-1	4	5	7	8	10	12	17	19
	0	5	5	7	8	12	13	20	22
	1	5	5	8	9	13	14	23	25
	2	5	6	8	9	14	15	25	27
9	-2	4	5	6	7	9	10	13	15
	-1	4	5	6	7	10	11	16	18
	0	4	5	7	8	11	12	19	21
	1	5	5	7	8	12	13	22	24
	2	5	5	8	9	13	14	25	27
10	-2	4	4	6	6	8	10	12	14
	-1	4	5	6	7	9	11	15	17
	0	4	5	7	7	11	12	18	20
	1	4	5	7	8	12	13	22	23
	2	5	5	8	8	13	14	24	26

(-) UPHILL
 (+) DOWNHILL

RONDO XL - MIDI SPRINKLER
ORANGE NOZZLE - 305 LPH
MAXIMUM NO. OF EMITTERS PER LATERAL
(MAX. FLOW RATE VARIATION - 7.5% OR 10%)

Emitter Spacing (m)	Slope (%)	Pipe Diameter in mm (OD/ID)							
		20/17		25/21.2		32/27.2		40/36.6	
		7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%
4	-2	5	6	8	9	12	13	19	21
	-1	5	6	8	9	13	14	21	23
	0	5	6	8	9	13	15	23	26
	1	6	6	9	10	14	16	25	28
	2	6	6	9	10	15	16	27	30
5	-2	5	5	7	8	11	12	16	19
	-1	5	5	7	8	11	13	19	21
	0	5	6	8	9	12	14	21	24
	1	5	6	8	9	13	15	24	26
	2	5	6	8	9	14	15	25	28
6	-2	4	5	6	7	10	11	15	17
	-1	4	5	7	8	11	12	17	20
	0	5	5	7	8	12	13	20	22
	1	5	5	8	8	12	14	22	24
	2	5	6	8	9	13	14	24	26
7	-2	4	5	6	7	9	10	14	16
	-1	4	5	6	7	10	11	16	18
	0	4	5	7	8	11	12	19	21
	1	4	5	7	8	12	13	21	23
	2	5	5	7	8	13	14	23	25
8	-2	4	4	6	6	8	10	13	15
	-1	4	4	6	7	9	11	15	17
	0	4	5	6	7	10	11	18	20
	1	4	5	7	8	11	12	20	22
	2	4	5	7	8	12	13	22	24
9	-2	4	4	5	6	8	9	12	14
	-1	4	4	6	6	9	10	14	16
	0	4	4	6	7	10	11	17	19
	1	4	5	6	7	11	12	20	21
	2	4	5	7	8	12	13	22	23
10	-2	3	4	5	6	8	9	11	13
	-1	4	4	5	6	8	10	13	15
	0	4	4	6	7	9	11	16	18
	1	4	4	6	7	10	11	19	21
	2	4	5	7	7	11	12	21	23

(-) UPHILL
 (+) DOWNHILL

RONDO XL - MIDI SPRINKLER
GREY NOZZLE - 367 LPH
MAXIMUM NO. OF EMITTERS PER LATERAL
(MAX. FLOW RATE VARIATION - 7.5% OR 10%)

Emitter Spacing (m)	Slope (%)	Pipe Diameter in mm (OD/ID)							
		20/17		25/21.2		32/27.2		40/36.6	
		7.5%	10%	7.5%	10%	7.5%	10%	7.5%	10%
4	-2	4	4	6	7	9	10	14	17
	-1	4	5	6	7	9	11	16	18
	0	4	5	6	7	10	12	17	20
	1	4	5	6	7	11	12	19	22
	2	4	5	7	8	11	13	21	23
5	-2	3	4	5	6	8	9	12	15
	-1	4	4	5	6	9	10	14	16
	0	4	4	6	7	9	11	16	18
	1	4	4	6	7	10	11	18	20
	2	4	4	6	7	11	12	20	22
6	-2	3	4	5	6	7	9	11	13
	-1	3	4	5	6	8	9	13	15
	0	3	4	5	6	9	10	15	17
	1	3	4	6	6	9	11	17	19
	2	4	4	6	7	10	11	19	21
7	-2	3	3	4	5	7	8	10	12
	-1	3	4	5	5	7	9	12	14
	0	3	4	5	6	8	9	14	16
	1	3	4	5	6	9	10	16	18
	2	3	4	6	6	10	11	18	20
8	-2	3	3	4	5	6	7	9	11
	-1	3	3	4	5	7	8	11	13
	0	3	3	5	5	8	9	13	15
	1	3	4	5	6	8	10	16	17
	2	3	4	5	6	9	10	17	19
9	-2	3	3	4	5	6	7	9	11
	-1	3	3	4	5	7	8	10	13
	0	3	3	4	5	7	8	13	15
	1	3	3	5	5	8	9	15	17
	2	3	3	5	6	9	10	17	18
10	-2	2	3	4	4	5	7	8	10
	-1	3	3	4	5	6	7	10	12
	0	3	3	4	5	7	8	12	14
	1	3	3	5	5	8	9	15	16
	2	3	3	5	6	9	10	16	18

(-) UPHILL
 (+) DOWNHILL

UPDATED PAGES

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HYDRODRIP II		BB1-4	27.2.2001