

Jain Turbo Slim® - TE

Beyond The Best



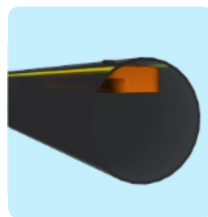
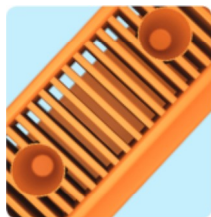
Features & Benefits

Innovative Cascade Labyrinth
Hydrodynamically designed tooth structure helps to create double flow regime viz. central curving flow and turbulent cyclone in the dripper. This helps in continuous flushing of particles.



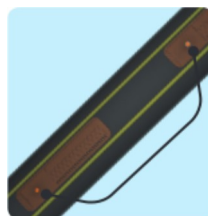
Prevention of sand suction
Weir structure to prevent entry of sand particles in flow path

Three Dimensional Inlet Filter
Unique 3-D filtration surface (having length, width and depth) enable clog free operation even under high clog risk conditions.



Light Weight and Compact
Light weight and compact dripper welds perfectly to thin wall thickness of the tubing without leaving stress marks.

Marked with two parallel yellow stripes 'Twin-Line®'
Symbol of quality. It also helps to ensure upright positioning of the dripper.



Quality Come First
Each batch is tested for stringent quality parameter. Conforming to international standard ISO 9261.

Laser drilled outlet hole
Precision laser drilled outlet gives uniform and clear opening.



Freight Saver
Longer coil lengths reduces the volume and saves freight and storage cost.

Drip Tape

Jain Turbo Slim® - TE

Additional Features

Manufactured from special grade virgin plastic material

Makes the tubing durable and gives best environmental stress crack resistance (ESCR).

Manufactured with most modern, state-of-the-art equipment.

It's computerised continuous online quality control monitors emitter spacing and precision in outlet drilling. Thus ensures reliable quality and consistent performance.

Excellent CV_m, manufacturer's coefficient of variation

Maintains close dimensional tolerances to ensure best field emission uniformity.

Applications

- Jain Turbo Excel is ideal for irrigation of closely spaced row crops like sugarcane, potato, cotton, banana, strawberry, lettuce, cabbage, tomatoes, chillies, pepper, melons, cucumber, horticulture, vegetables and spices.
- Recommended to use in greenhouses and nurseries.
- Suitable for surface as well as sub surface installations.

Specifications

Discharge

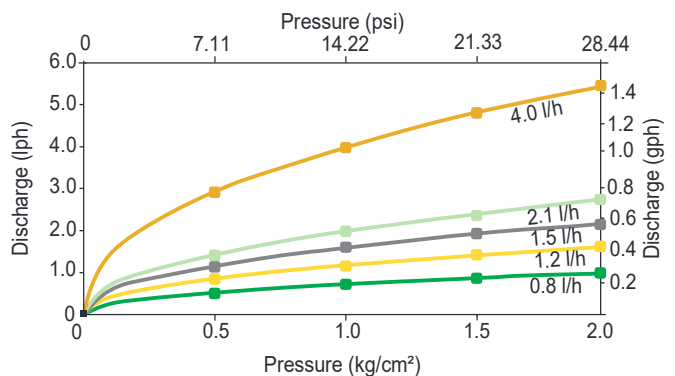
Discharge, lph		Discharge, gph	
1.0 kg/cm ²	0.7 kg/cm ²	15 psi	10 psi
0.8	0.68	0.21	0.18
1.3	1.02	0.32	0.27
1.5	1.27	0.40	0.34
2.1	1.78	0.55	0.47
4.0	3.39	1.06	0.90

- Sizes : 12, 16, 17, 18, 19, 22 and 25mm nominal diameter as per Metric Standard.
1/2", 5/8", 7/8", 9/8", 1-3/8" nominal diameter as per US standard.
- Wall Thickness : 6, 8, 10, 12, 13, 15, 18, 20, 24 mil (0.15, 0.2, 0.25, 0.30, 0.32, 0.38, 0.45, 0.50, 0.63 mm) Any other wall thickness can be supplied on demand.
- Emitter Spacing : Standard emitter spacing - 15, 20, 30, 40, 50, 60, 75, 90, 100, 120 and 150 cm. Other emitter spacing and group spacing can be supplied on demand.

Operating Specifications

- Nominal operating pressure 0.7 kg/cm² for wall thickness up to 10 mil, 1.0 kg/cm² for wall thickness more than 10 mil.
- Recommended to use specially designed Tape Lock fittings.
- Minimum 100 micron filtration recommended. Actual quality of filtration can be decided by quality of source water.
- Always keep the dripper in upright position to minimise blockage due to sedimentation and precipitation.
- For subsurface application, install vacuum breaker valves on the submain as well as on the collective drain to avoid soil suction during system shutdown.

Performance Graph- Jain Turbo Slim - TE



Jain Turbo Slim® - TE

Technical Specifications for Emitter - Metric

Emitter Discharge lph @1kg/cm ²	Emitter Exponent x	Flow Coeff icient k	Coeff. of mfg. Variation, CVm	Flow Path Dimensions, mm			Inlet Filter Area mm ²	Size of Filter Openings mm x mm
				Length	Width	Depth		
0.8	0.46	0.8	2	16.5	0.47	0.40	3.00	0.30 x 0.40
1.3	0.46	1.2	2	16.1	0.62	0.64	3.44	0.27 x 0.51
1.5	0.46	1.5	2	17.1	0.68	0.75	5.35	0.33 x 0.60
2.1	0.47	2.1	2.5	17.4	0.80	0.84	6.28	0.31 x 0.75
4.0	0.47	4.0	2.5	18.0	1.04	1.05	5.52	0.30 x 0.60

Flow equation $q = kH^x$, q = Discharge, lph, H = Pressure head, kg/cm², x = Emitter exponent

Technical Specifications for Emitter - US

Emitter Discharge gph @ 14.2 psi	Emitter Exponent x	Flow Coeff icient k	Coeff. of mfg. Variation, CVm	Flow Path Dimensions, inch			Inlet Filter Area sq. inch	Size of Filter Openings inch x inch
				Length	Width	Depth		
0.21	0.46	0.062	2	0.65	0.018	0.016	0.005	0.016x0.012
0.32	0.46	0.094	2	0.63	0.024	0.025	0.005	0.020x0.011
0.40	0.46	0.117	2	0.67	0.027	0.029	0.008	0.023x0.013
0.55	0.47	0.164	2.5	0.68	0.031	0.033	0.010	0.029x0.012
1.06	0.47	0.312	2.5	0.70	0.041	0.041	0.008	0.024x0.013

Flow equation $q = kH^x$, q = Discharge, gph, H = Pressure head, psi, x = Emitter exponent

COIL LENGTHS

Emitter spacing		Nominal Diameter of 16 mm, 17 mm and 5/8"															
		6 mil		8 mil		10 mil		12 mil		15 mil		18 mil		20 mil		24 mil	
cm	inch	m	ft.	m	ft.	m	ft.	m	ft.	m	ft.	m	ft.	m	ft.	m	ft.
15	6	2100	6888	2100	6888	2000	6560	1700	5576	1350	4428	1000	3280	900	2952	500	1640
20	8	2300	7544	2300	7544	2100	6888	1800	5904	1400	4592	1050	3444	950	3116	550	1804
24	10	2500	8200	2500	8200	2150	7052	1850	6068	1450	4756	1100	3608	1000	3280	600	1968
30+	12+	2700	8856	2500	8200	2250	7380	1900	6232	1500	4920	1150	3772	1000	3280	600	1968
Emitter spacing		Nominal Diameter of 7/8"															
		6 mil		8 mil		10 mil		12 mil		15 mil		18 mil		20 mil		24 mil	
cm	inch	m	ft.	m	ft.	m	ft.	m	ft.	m	ft.	m	ft.	m	ft.	m	ft.
15	6	1300	4264	1100	3608	800	2624	900	2552	750	2460	650	2132	600	1968	350	1148
20	8	1500	4920	1300	4264	1000	3280	1000	3280	800	2624	700	2296	650	2132	350	1148
24	10	1600	5248	1400	4592	1100	3608	1050	3444	850	2788	750	2460	700	2296	400	1312
30+	12+	1800	5904	1500	4920	1200	3936	1100	3608	900	2952	800	2624	700	2296	450	1476

Note : 1 mil = 1/1000th part of an inch = 0.0254 mm

* Coil lengths are for coil size 560 x 280 mm (22" x 11"). Other coil sizes such as 350x160 mm (13.8" x 6.3") and 350x280 mm (22" x 6.3") are also available. Please contact for coil lengths of Jain Turbo Excel 12, 18, 19, 22, 25 mm and 1/2", 9/8", 1-3/8".

Ordering Specifications

TE	XXX	XX	XXX	XX	XXXX	N
	Inside diameter	Discharge in lph x 10	Dripper Spacing in cm	Wall thickness in mil	Standard Coil Length in meter	N - Non pressure compensating
11.8-12mm						
15.9-16mm						
16.1-17mm						
18-18mm						
19-19mm						
20-20mm						
22.2-23mm						
58-5/8"						
98-9/8"						
78-7/8"						
138-1-3/8"						

Example : TE15916030062300N - This code refers to Jain Turbo Slim TE - Thin Wall of 15.9 mm inside diameter having nominal discharge of 1.6 lph, emitter spaced at 30 cm, wall thickness of 6 mil (0.15mm), standard coil length of 2300 m non pressure compensating driptape.

Jain Turbo Slim® - TE

TECHNICAL DATA FOR TUBING - METRIC

Nominal Dia	Wall thickness	Inside dia.	Outside Dia	Maximum operating pressure	Maximum Flushing Pressure	
mm	mil	mm	mm	kg/cm ²	kg/cm ²	
Jain Turbo Slim® - TE 12 mm Nominal Diameter						
12	6	0.15	11.8	12.1	1.1	1.7
12	8	0.20	11.8	12.2	1.5	2.3
12	10	0.25	11.8	12.3	1.8	2.7
12	12	0.30	11.8	12.4	2.2	3.3
12	15	0.38	11.8	12.6	2.7	4.1
12	18	0.45	11.8	12.7	3.3	5.0
12	20	0.50	11.8	12.8	3.6	5.4
12	24	0.60	11.8	13.0	4.5	6.8
Jain Turbo Slim® - TE 16 mm Nominal Diameter						
16	6	0.15	15.9	16.2	0.8	1.2
16	8	0.20	15.9	16.3	1.1	1.7
16	10	0.25	15.9	16.4	1.4	2.1
16	12	0.30	15.9	16.5	1.6	2.4
16	15	0.38	15.9	16.7	2	3.0
16	18	0.45	15.9	16.8	2.4	3.6
16	20	0.50	15.9	16.9	2.7	4.1
16	24	0.60	15.9	17.1	3.4	5.1
Jain Turbo Slim® - TE 17 mm Nominal Diameter						
17	6	0.15	16.1	16.4	0.8	1.2
17	8	0.20	16.1	16.5	1.1	1.7
17	10	0.25	16.1	16.6	1.4	2.1
17	12	0.30	16.1	16.7	1.6	2.4
17	15	0.38	16.1	16.9	2	3.0
17	18	0.45	16.1	17.0	2.4	3.6
17	20	0.50	16.1	17.1	2.7	4.1
17	24	0.60	16.1	17.3	3.4	5.1
Jain Turbo Slim® - TE 22 mm Nominal Diameter						
22	6	0.15	22.2	22.50	0.6	0.9
22	8	0.20	22.2	22.80	0.8	1.2
22	10	0.25	22.2	22.70	1.0	1.5
22	12	0.30	22.2	22.80	1.2	1.8
22	15	0.38	22.2	22.96	1.5	2.3
22	18	0.45	22.2	23.10	1.8	2.7
22	20	0.50	22.2	23.20	2.0	3.0
22	24	0.60	22.2	23.40	2.4	3.6

Note: 1 mil = 1/1000th part of an inch = 0.0254 mm.

TECHNICAL SPECIFICATIONS FOR TUBING - US

Nominal dia.	Wall thickness	Inside dia.	Outside dia.	Maximum operating pressure	Maximum Flushing Pressure	
inch	mil	mm	inch	inch	psi	psi
Jain Turbo Slim® - TE 5/8" Nominal Diameter						
5/8	6	0.15	0.625	0.637	11	17
5/8	8	0.20	0.625	0.641	15	23
5/8	10	0.25	0.625	0.645	20	30
5/8	12	0.30	0.625	0.649	22	34
5/8	15	0.38	0.625	0.655	28	43
5/8	18	0.45	0.625	0.661	34	51
5/8	20	0.50	0.625	0.665	38	58
5/8	24	0.60	0.625	0.675	48	73
Jain Turbo Slim® - TE 7/8" Nominal Diameter						
7/8	6	0.15	0.875	0.887	8	13
7/8	8	0.20	0.875	0.891	11	17
7/8	10	0.25	0.875	0.895	14	21
7/8	12	0.30	0.875	0.899	17	26
7/8	15	0.38	0.875	0.905	21	32
7/8	18	0.45	0.875	0.911	25	38
7/8	20	0.50	0.875	0.915	28	43
7/8	24	0.60	0.875	0.925	34	51
Jain Turbo Slim® - TE 9/8" Nominal Diameter						
9/8	6	0.15	1.125	1.137	7	10
9/8	8	0.20	1.125	1.141	9	12
9/8	10	0.25	1.125	1.145	11	15
9/8	12	0.30	1.125	1.149	13	20
9/8	15	0.38	1.125	1.155	16	24
9/8	18	0.45	1.125	1.160	20	29
9/8	20	0.50	1.125	1.164	22	33
9/8	24	0.60	1.125	1.174	27	41
Jain Turbo Slim® - TE 1-3/8" Nominal Diameter						
1-3/8	6	0.15	1.375	1.887	5	9
1-3/8	8	0.20	1.375	1.391	7	11
1-3/8	10	0.25	1.375	1.395	8	13
1-3/8	12	0.30	1.375	1.399	10	15
1-3/8	15	0.38	1.375	1.405	12	19
1-3/8	18	0.45	1.375	1.410	15	23
1-3/8	20	0.50	1.375	4.414	17	26
1-3/8	24	0.60	1.375	1.422	21	32

Note: 1 mil = 1/1000th part of an inch = 0.0254 mm.

Maximum Running Length for Turbo Slim® TE

J Turbo Slim TE 12 mm (11.8 mm ID) with minimum operating pressure 0.7 kg/cm²

Dripper Spacing	Slope, %	15 cm	20 cm	30 cm	40 cm	50 cm	60 cm	75 cm	90 cm	100 cm
		Length,m								
0.8 lph										
10 % discharge variation	2	49.5	56.4	65.8	72.4	76.5	79.8	82.5	84.6	85.0
	1	57.0	67.2	83.2	96.8	107.5	116.4	126.8	135.0	139.0
	0	64.8	78.8	102.7	126.0	146.5	166.8	192.8	216.9	232.0
	-1	72.6	90.2	121.6	154.4	185.0	216.0	257.3	297.9	325.0
	-2	80.0	101.0	139.3	179.6	218.5	256.8	309.8	123.3	117.0
7.5 % discharge variation	2	42.3	47.6	54.4	58.8	61.5	63.0	64.5	65.7	66.0
	1	50.2	58.8	72.1	82.8	91.0	97.8	105.0	110.7	114.0
	0	58.6	71.4	92.8	114.0	132.5	150.6	174.0	196.2	210.0
	-1	67.0	83.8	113.5	144.8	174.5	204.0	244.5	284.4	310.0
	-2	75.2	95.4	132.7	172.0	210.0	98.4	85.5	81.9	81.0
1.3 lph										
10 % discharge variation	2	38.8	45.2	54.4	61.6	67.0	70.8	75.0	78.3	80.0
	1	42.9	51.0	64.0	75.6	85.5	94.2	104.3	112.5	117.0
	0	46.9	57.2	74.5	91.2	106.5	120.6	139.5	156.6	168.0
	-1	51.1	63.2	84.7	106.4	127.0	147.0	174.8	200.7	218.0
	-2	55.0	69.0	94.3	120.4	145.5	171.0	204.8	238.5	260.0
7.5 % discharge variation	2	33.7	38.8	46.0	51.2	55.0	57.6	60.8	62.1	63.0
	1	38.1	45.2	56.2	66.0	74.0	80.4	88.5	94.5	98.0
	0	42.6	51.8	67.3	82.4	96.0	109.2	126.0	142.2	152.0
	-1	46.9	58.2	78.4	99.2	118.5	138.0	164.3	189.9	207.0
	-2	51.3	64.6	88.9	114.4	139.0	163.2	197.3	229.5	98.0
1.5 lph										
10 % discharge variation	2	34.2	39.8	48.4	55.2	60.5	65.4	69.8	73.8	76.0
	1	37.2	44.0	55.6	65.6	74.0	82.2	92.3	99.9	106.0
	0	40.2	48.4	63.1	76.4	88.5	101.4	117.8	132.3	143.0
	-1	43.2	52.8	70.3	87.2	103.0	120.0	142.5	163.8	180.0
	-2	46.2	57.0	77.5	97.2	116.5	136.8	165.0	191.7	211.0
7.5 % discharge variation	2	29.8	34.4	41.5	46.8	50.5	54.0	57.0	59.4	61.0
	1	33.1	39.0	49.0	57.2	64.5	71.4	78.8	85.5	90.0
	0	36.4	43.8	57.1	69.2	80.0	91.8	106.5	119.7	129.0
	-1	39.6	48.6	64.9	80.8	96.0	111.6	133.5	153.9	169.0
	-2	42.9	53.2	72.7	91.6	110.5	130.2	157.5	183.6	203.0
2.1 lph										
10 % discharge variation	2	29.8	35.0	43.3	50.0	55.0	60.0	64.5	68.4	71.0
	1	32.1	38.0	48.4	57.6	65.5	72.6	81.0	89.1	94.0
	0	34.2	41.2	54.1	66.0	76.5	87.0	99.8	112.5	121.0
	-1	36.4	44.4	59.2	74.0	87.0	100.8	117.8	135.0	147.0
	-2	38.5	47.6	64.6	81.6	97.5	113.4	135.0	155.7	171.0
7.5 % discharge variation	2	26.2	30.6	37.3	42.8	46.5	49.8	53.3	56.7	58.0
	1	28.6	33.8	43.0	50.8	57.5	63.6	70.5	76.5	81.0
	0	30.9	37.4	48.7	59.6	69.0	78.6	90.0	101.7	109.0
	-1	33.3	40.8	54.7	68.4	81.0	93.6	110.3	126.9	138.0
	-2	35.7	44.2	60.4	76.4	92.0	107.4	128.3	148.5	163.0
4.0 lph										
10 % discharge variation	2	19.5	23.2	29.2	34.4	39.0	43.2	48.0	52.2	55.0
	1	20.4	24.4	31.3	37.2	43.0	48.0	54.8	60.3	65.0
	0	21.2	25.6	33.4	40.4	47.0	53.4	61.5	70.2	75.0
	-1	22.1	26.8	35.2	43.6	51.0	58.8	69.0	79.2	86.0
	-2	23.0	28.0	37.3	46.4	55.5	64.2	75.8	87.3	95.0
7.5 % discharge variation	2	17.4	20.4	25.6	30.0	33.5	37.2	41.3	44.1	46.0
	1	18.3	21.8	28.0	33.2	38.0	42.6	48.0	53.1	57.0
	0	19.2	23.0	30.1	36.4	42.5	48.6	55.5	63.0	68.0
	-1	20.1	24.4	32.2	40.0	47.0	54.0	63.8	72.9	79.0
	-2	21.0	25.8	34.6	43.2	51.5	60.0	71.3	81.9	90.0

Note: + slope : Uphill, - slope : Downhill

Maximum Running Length for Turbo Slim® TE

J Turbo Slim TE 16 mm (15.9 mm ID) with minimum operating pressure 0.7 kg/cm²

Dripper Spacing	Slope, %	15 cm	20 cm	30 cm	40 cm	50 cm	60 cm	75 cm	90 cm	100 cm
		Length,m								
0.8 lph										
10 % discharge variation	2	67.8	73.8	80.5	83.6	85.5	87.0	87.8	88.2	89.0
	1	87.2	100.4	119.5	132.4	142.0	148.8	156.8	162.0	164.0
	0	109.2	132.4	172.9	208.4	241.0	271.2	313.5	352.8	378.0
	-1	130.8	163.8	225.7	284.0	340.5	395.4	475.5	554.4	605.0
	-2	150.5	191.6	269.5	327.6	394.0	469.8	565.5	662.4	730.0
7.5 % discharge variation	2	55.6	59.6	63.7	65.6	66.5	67.2	67.5	68.4	68.0
	1	75.3	85.6	100.0	109.2	115.5	120.0	124.5	127.8	129.0
	0	98.9	119.8	156.4	188.8	218.0	245.4	283.5	319.5	342.0
	-1	122.4	154.0	214.0	270.8	326.0	379.8	459.0	549.0	609.0
	-2	143.6	183.8	242.2	300.4	357.0	412.0	495.0	584.0	639.0
1.3 lph										
10 % discharge variation	2	56.5	63.4	72.1	77.2	80.5	82.8	84.8	86.4	87.0
	1	67.5	79.0	96.7	109.6	120.0	128.4	138.0	145.8	149.0
	0	79.2	96.0	125.5	151.2	175.0	196.8	227.3	256.5	274.0
	-1	90.8	112.8	154.0	192.0	229.0	264.6	316.5	367.2	401.0
	-2	101.6	128.4	179.2	227.2	273.5	319.2	377.8	438.0	474.0
7.5 % discharge variation	2	47.7	52.6	58.6	61.6	63.5	64.8	66.0	66.6	67.0
	1	59.1	68.6	82.9	92.8	100.5	106.2	113.3	117.9	120.0
	0	71.7	86.8	113.5	136.8	158.0	178.2	205.5	231.3	248.0
	-1	84.2	105.2	144.4	181.2	217.0	252.0	302.3	351.9	385.0
	-2	96.0	122.0	171.7	218.8	265.5	312.0	368.0	424.0	450.0
1.5 lph										
10 % discharge variation	2	52.2	59.0	68.5	74.0	78.0	80.4	83.3	84.6	86.0
	1	61.0	71.6	88.3	101.2	111.5	120.0	129.8	137.7	142.0
	0	70.2	85.0	111.1	134.0	155.0	174.0	201.8	226.8	243.0
	-1	79.2	98.2	133.6	166.0	197.5	228.0	272.3	315.0	344.0
	-2	87.8	110.6	153.7	194.4	234.0	272.4	317.3	368.8	400.0
7.5 % discharge variation	2	44.4	49.6	56.2	59.6	62.0	63.6	65.3	66.6	67.0
	1	53.5	62.4	76.3	86.4	94.0	100.2	107.3	112.5	116.0
	0	63.4	77.0	100.6	121.2	140.0	157.8	182.3	205.2	220.0
	-1	73.3	91.4	124.9	156.4	186.5	216.0	258.8	301.5	329.0
	-2	82.7	104.8	146.8	186.8	225.5	264.0	312.0	360.0	380.0
2.1 lph										
10 % discharge variation	2	45.4	52.2	61.6	68.0	72.5	76.2	79.5	81.9	83.0
	1	51.6	60.8	76.0	88.0	97.5	106.2	116.3	125.1	129.0
	0	57.7	70.0	91.6	110.4	127.5	143.4	165.8	186.3	200.0
	-1	63.9	79.0	106.9	132.4	157.0	180.6	214.5	247.5	270.0
	-2	69.9	87.6	121.0	152.4	182.5	212.4	255.8	297.9	314.0
7.5 % discharge variation	2	39.1	44.4	51.4	56.0	59.0	61.2	63.0	64.8	65.0
	1	45.4	53.4	66.1	75.6	83.5	90.0	97.5	103.5	107.0
	0	52.2	63.4	82.9	99.6	115.5	129.6	150.0	168.3	181.0
	-1	58.9	73.2	99.4	123.6	147.0	169.8	203.3	234.9	256.0
	-2	65.4	82.4	114.7	145.2	175.0	204.0	242.0	280.0	290.0
4 lph										
10 % discharge variation	2	32.8	38.4	47.8	55.2	59.5	63.6	68.3	72.0	74.0
	1	35.5	42.4	54.7	65.2	72.5	79.2	88.5	97.2	102.0
	0	38.2	46.6	61.9	76.0	86.0	96.6	111.8	126.0	135.0
	-1	40.9	50.6	68.8	86.8	99.5	114.0	135.0	154.8	168.0
	-2	43.6	54.4	75.7	96.8	112.5	129.6	155.3	180.0	196.0
7.5 % discharge variation	2	28.8	33.4	40.9	46.4	50.0	52.8	56.3	58.5	60.0
	1	31.6	37.8	48.4	57.2	63.0	69.0	76.5	82.8	86.0
	0	34.6	42.0	55.9	68.8	78.0	87.6	101.3	113.4	122.0
	-1	37.6	46.4	63.7	80.4	92.5	106.2	126.0	144.9	157.0
	-2	40.5	50.6	70.9	91.2	106.5	123.0	148.5	172.8	188.0

Note: + slope : Uphill, - slope : Downhill

Maximum Running Length for Turbo Slim® TE

J Turbo Slim TE 17 mm (16.1 mm ID) with minimum Operating pressure 0.7 kg/cm²

Dripper Spacing	Slope, %	15 cm	20 cm	30 cm	40 cm	50 cm	60 cm	75 cm	90 cm	100 cm
		Length,m								
0.8 lph										
10 % discharge variation	2	68.4	74.4	80.8	84.0	86.0	87.0	87.8	89.1	89.0
	1	88.7	101.8	121.0	134.0	143.0	150.0	157.5	162.9	165.0
	0	111.6	135.2	176.8	213.2	246.5	277.2	320.3	360.9	386.0
	-1	134.1	168.0	231.7	292.0	350.0	406.2	489.0	569.7	622.0
	-2	154.5	196.8	277.3	324.0	373.0	429.2	506.5	585.3	645.0
7.5 % discharge variation	2	56.1	60.0	64.0	65.6	66.5	67.2	67.5	68.4	68.0
	1	76.4	86.8	101.2	110.0	116.5	120.6	125.3	127.8	130.0
	0	101.0	122.4	160.0	192.8	223.0	250.8	290.3	326.7	349.0
	-1	125.6	158.0	219.7	278.0	335.0	390.6	471.8	547.3	600.0
	-2	147.5	189.0	264.0	320.0	375.0	429.2	513.3	587.3	630.0
1.3 lph										
10 % discharge variation	2	57.3	64.2	73.0	78.0	81.0	83.4	85.5	86.4	87.0
	1	68.7	80.2	98.2	111.2	121.5	130.2	139.5	146.7	151.0
	0	81.0	98.2	128.2	154.4	178.5	201.0	232.5	261.9	280.0
	-1	93.0	115.6	157.9	197.2	235.0	271.8	325.5	378.0	412.0
	-2	104.3	131.8	184.0	233.6	281.5	337.4	406.3	471.6	509.0
7.5 % discharge variation	2	48.3	53.2	58.9	62.0	64.0	65.4	66.0	66.6	67.0
	1	60.1	69.6	83.8	94.0	101.5	107.4	114.0	118.8	121.0
	0	73.2	88.8	115.9	140.0	161.5	181.8	210.0	236.7	253.0
	-1	86.3	107.8	148.3	186.0	223.0	258.6	311.3	361.8	396.0
	-2	98.6	125.4	176.5	224.8	289.5	348.0	413.3	481.8	510.0
1.5 lph										
10 % discharge variation	2	50.5	57.6	67.0	75.2	78.5	81.6	84.8	87.3	88.0
	1	58.2	68.8	85.0	102.0	111.5	120.6	131.3	144.9	145.0
	0	66.3	80.6	105.1	134.4	153.0	173.4	201.8	245.7	249.0
	-1	74.3	92.4	124.6	166.4	194.5	225.6	272.3	346.5	353.0
	-2	81.8	103.4	142.6	194.4	229.5	268.8	328.5	407.9	417.0
7.5 % discharge variation	2	43.2	48.6	55.3	60.8	63.0	64.8	66.8	67.5	68.0
	1	51.3	60.2	73.6	87.2	94.5	100.8	108.8	117.9	118.0
	0	60.0	73.0	94.9	121.6	138.5	156.6	183.0	222.3	225.0
	-1	68.5	85.8	116.5	156.4	183.5	213.6	258.8	332.1	338.0
	-2	76.8	97.6	135.7	186.4	221.0	278.8	348.0	431.9	440.0
2.1 lph										
10 % discharge variation	2	46.2	53.0	63.4	68.0	74.5	78.6	81.8	83.7	85.0
	1	52.3	61.8	78.1	87.2	101.0	111.0	120.0	127.8	133.0
	0	58.6	71.0	94.3	108.4	133.0	153.0	172.5	191.7	208.0
	-1	64.9	80.2	109.9	129.2	164.0	193.8	224.3	255.6	282.0
	-2	70.9	88.8	124.6	148.0	191.5	228.6	267.8	306.9	338.0
7.5 % discharge variation	2	39.7	45.0	52.6	56.0	60.5	63.0	64.5	65.7	67.0
	1	46.3	54.4	67.9	75.2	86.5	94.2	100.5	106.2	110.0
	0	53.1	64.2	85.3	98.0	120.0	138.0	156.0	173.7	188.0
	-1	59.8	74.2	102.4	120.8	154.0	182.4	212.3	242.1	269.0
	-2	66.4	83.6	118.3	141.2	183.5	220.2	268.3	308.1	340.0
4 lph										
10 % discharge variation	2	32.8	38.4	47.2	53.6	59.0	63.0	68.3	72.0	74.0
	1	35.5	42.4	53.8	63.2	71.0	78.6	87.8	95.4	100.0
	0	38.4	46.4	60.7	73.2	84.5	95.4	110.3	123.3	132.0
	-1	41.1	50.4	67.6	82.8	97.5	111.6	132.0	151.2	164.0
	-2	43.8	54.4	73.9	92.4	110.0	127.2	152.3	176.4	192.0
7.5 % discharge variation	2	28.8	33.4	40.6	45.6	49.5	52.2	55.5	58.5	60.0
	1	31.6	37.6	47.5	55.2	62.0	67.8	75.8	81.9	86.0
	0	34.6	42.0	55.0	66.0	76.5	85.8	99.8	111.6	120.0
	-1	37.6	46.4	62.2	76.8	90.5	103.8	123.0	142.2	154.0
	-2	40.5	50.6	69.4	86.8	104.0	120.6	144.8	168.3	184.0

Note: + slope : Uphill, - slope : Downhill

Maximum Running length for Turbo Slim® TE

J Turbo Slim TE 22 mm (22.2 mm ID) with minimum operating pressure 0.7 kg/cm²

Dripper Spacing	Slope, %	15 cm	20 cm	30 cm	40 cm	50 cm	60 cm	75 cm	90 cm	100 cm
		Length,m								
0.8 lph										
10 % discharge variation	2	82.4	85.2	87.7	88.8	89.0	89.4	90.0	90.0	90.0
	1	126.6	139.6	154.9	162.8	168.0	171.0	174.0	175.5	176.0
	0	191.7	232.4	303.7	366.4	423.5	476.4	551.3	620.1	664.0
	-1	256.1	325.2	456.1	580.4	249.5	228.6	218.3	213.3	211.0
	-2	307.9	115.8	106.9	104.4	103.5	103.2	102.8	102.6	103.0
7.5 % discharge variation	2	64.6	66.2	67.6	68.0	68.5	68.4	68.3	68.4	69.0
	1	105.2	114.0	123.7	128.4	131.0	132.6	134.3	135.0	136.0
	0	173.6	210.4	274.9	331.2	383.0	431.4	498.8	561.6	601.0
	-1	243.3	310.8	439.3	174.8	164.0	159.0	156.0	153.9	154.0
	-2	85.1	80.0	77.2	76.4	76.0	75.6	75.8	75.6	76.0
1.3 lph										
10 % discharge variation	2	77.1	81.6	85.6	87.2	88.0	88.8	89.3	90.0	90.0
	1	109.2	123.6	141.1	152.8	158.5	163.2	168.0	171.0	173.0
	0	150.0	183.8	238.3	291.6	327.5	369.0	426.0	479.7	514.0
	-1	190.2	243.2	335.2	433.2	503.0	586.2	248.3	228.6	223.0
	-2	224.6	291.6	114.7	107.6	106.0	104.4	103.5	103.5	103.0
7.5 % discharge variation	2	61.6	64.2	66.4	67.2	68.0	67.8	68.3	68.4	69.0
	1	92.4	103.0	115.0	122.4	126.0	128.4	131.3	133.2	134.0
	0	135.8	166.2	215.5	264.0	296.5	333.6	385.5	433.8	465.0
	-1	179.4	230.8	320.5	416.8	201.5	174.6	163.5	159.3	158.0
	-2	216.3	87.2	79.6	77.6	77.0	76.2	76.5	76.5	76.0
1.5 lph										
10 % discharge variation	2	72.9	78.4	83.5	85.6	87.0	88.2	88.5	89.1	89.0
	1	98.3	113.0	130.6	142.4	151.0	156.6	162.8	167.4	169.0
	0	128.4	158.2	203.2	243.6	282.0	315.6	365.3	410.4	440.0
	-1	158.3	202.6	275.2	345.2	415.0	480.0	578.3	261.0	241.0
	-2	184.5	240.2	133.3	113.6	108.5	106.2	105.0	104.4	104.0
7.5 % discharge variation	2	58.9	62.4	65.2	66.4	67.5	67.8	68.3	68.4	68.0
	1	84.0	95.2	108.1	116.0	121.5	124.8	128.3	130.5	132.0
	0	116.3	143.0	184.0	220.8	255.0	285.6	330.0	371.7	398.0
	-1	148.5	191.4	262.0	330.4	398.5	462.6	176.3	165.6	163.0
	-2	176.9	231.8	83.2	79.2	78.0	77.4	76.5	76.5	76.0
2.1 lph										
10 % discharge variation	2	65.4	71.4	78.7	82.8	85.0	86.4	87.8	88.2	89.0
	1	82.5	95.0	113.8	129.2	138.5	145.8	153.8	159.3	162.0
	0	101.7	122.6	160.3	199.2	229.0	258.0	297.8	335.7	359.0
	-1	120.5	149.6	205.9	268.4	319.5	370.8	445.5	518.4	566.0
	-2	137.7	173.8	244.3	142.0	117.0	111.6	107.3	106.2	105.0
7.5 % discharge variation	2	54.0	58.0	62.8	65.2	66.0	66.6	67.5	67.5	68.0
	1	71.5	81.4	96.1	106.8	113.5	118.2	123.0	126.0	128.0
	0	92.0	110.8	145.0	180.0	207.0	233.4	269.3	303.3	325.0
	-1	112.5	140.4	194.5	255.2	305.0	355.2	429.0	193.5	179.0
	-2	131.1	166.4	235.6	84.0	80.5	78.6	78.0	77.4	77.0
4 lph										
10 % discharge variation	2	51.6	58.4	67.9	73.6	77.5	80.4	83.3	84.6	86.0
	1	60.1	70.6	87.4	100.0	110.0	118.8	129.0	137.7	141.0
	0	69.0	83.6	109.6	131.6	152.0	171.0	198.0	225.0	238.0
	-1	77.9	96.4	131.5	162.8	193.5	223.2	266.3	313.2	336.0
	-2	86.3	108.4	151.3	190.0	228.5	266.4	321.0	118.8	115.0
7.5 % discharge variation	2	43.9	49.0	55.9	59.6	62.0	63.6	65.3	66.6	67.0
	1	52.9	61.6	75.4	85.2	93.0	99.6	106.5	112.5	115.0
	0	62.5	75.6	99.4	119.2	137.5	154.8	179.3	203.4	216.0
	-1	72.0	89.6	123.1	152.8	182.5	211.2	253.5	298.8	321.0
	-2	81.2	102.6	144.4	182.4	220.0	94.2	84.8	81.0	80.0

Note: + slope : Uphill, - slope : Downhill