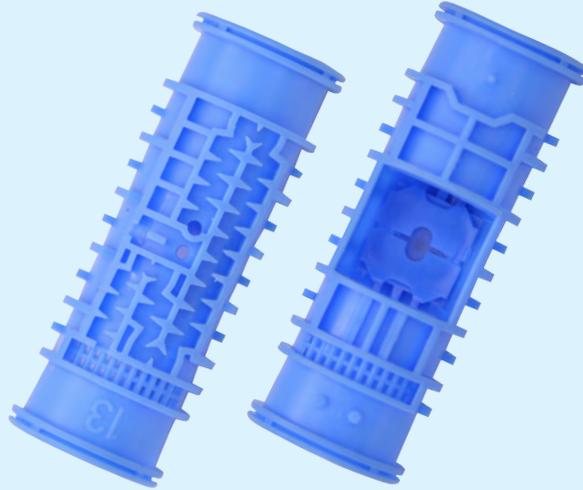
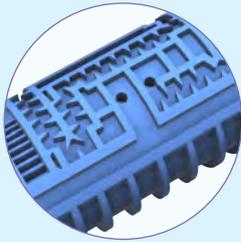


Turboline PC[®] Emitter



Features & Benefits



Integral, Cylindrical, Pressure Compensating Dripline

State-of-the-art cylindrical PC (Pressure Compensating) dripper ensures highest durability and excellent performance.



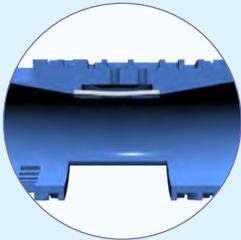
Precision Pressure Compensation

Injection moulded silicone diaphragm ensures precision in pressure compensation helps to maintain high discharge uniformity with diverse water qualities, chemicals and fertilizers.



Individual Double Filter

Individual double filter and flushing mechanism for maximal clog resistance and self-cleaning.



Dynamic Self Cleaning mechanism

Dynamic movement of diaphragm retracts dynamically to throw away particles which are blocking the emitter.



Facility for Multiple Outlet Holes

Facility for multiple outlets which breaks vacuum, prevents sand suction.



Options Available for various sizes as well as discharge rates

16 mm & 20 mm sizes available with different flowrates to fulfil the market demand.

Turboline PC® Emitter

Other Important Features

Manufactured from Special Grade Virgin Plastic Material

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

Excellent C_vm, manufacturer's coefficient of variation

Maintains close dimensional tolerances to ensure best field emission uniformity.

Wide Pressure Compensating Range

Pressure regulation starts as low as 0.5 kg/cm² to as high as 4 kg/cm² pressure.

Longer Lateral Lengths

Can run for longer lengths without compromising the uniformity.

Applications

- Ideal for irrigation of closely spaced row crops like sugarcane, cotton, banana, strawberry, floriculture, vegetables and spices.
- Suitable for surface as well as sub-surface irrigation.
- Recommended for undulating terrain & steep slopes and where longer lateral running length is necessary.
- Open field application to maintain high field application efficiency.
- Suitable for low operating pressure/ Gravity feed irrigation system.

Specifications

- **Nominal Discharges** : Turboline PC 16 mm: 1.1, 1.6, 2.2 and 3.5 lph for tubing wall thickness as per pressure class 2.
Turboline PC 20 mm: 0.9, 1.6, 2.2 and 3.8 lph for tubing wall thickness as per pressure class 1.
- **Sizes** : Standard sizes of 16 and 20 mm nominal diameter.
- **Pressure Compensating Range** : 0.5 to 4 kg/cm² (7 to 71 psi).

Operating Specifications

- Maintain the operating pressure within the pressure regulating range.
- Filtration recommendation 130 micron or less. Actual quality of filtration can be decided by quality of source water. Please refer to our "Maintenance Manual" for further details.
- For subsurface application, install vacuum breaker valves on the submain as well as on the collective drain to avoid soil suction during system shutdown.



Turboline PC® Emitter

Technical Specifications - Emitter Technical Specifications for Emitter - Metric

Nominal Discharge lph @ (1kg/cm ²)	Emitter exponent x	Flow coefficient k	Coeff. of mfg. variation, CVm	Flow path dimensions (mm)			Inlet filter area (mm ²)
				Length	Width	Depth	
16 mm							
1.1	0	1.1	2.5	60	0.70	0.98	14.08
1.6	0	1.6	2.5	60	0.78	1.08	14.08
2.2	0	2.2	1.5	60	0.80	1.10	14.08
3.5	0	3.5	4.0	60	1.04	1.32	14.08
20 mm							
0.9	0	0.9	2.5	110	0.74	1.10	7.29
1.6	0	1.6	2.5	87	1.04	1.10	9.20
2.2	0	2.2	3.0	87	1.04	1.30	11.00
3.8	0	3.8	3.0	128	1.00	1.20	14.40

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

Note: Above table prepared with tubing 16 mm (wall thickness 0.7 to 0.9 mm) and 20 mm (wall thickness 0.5 to 0.6 mm) and tested under standard test conditions.

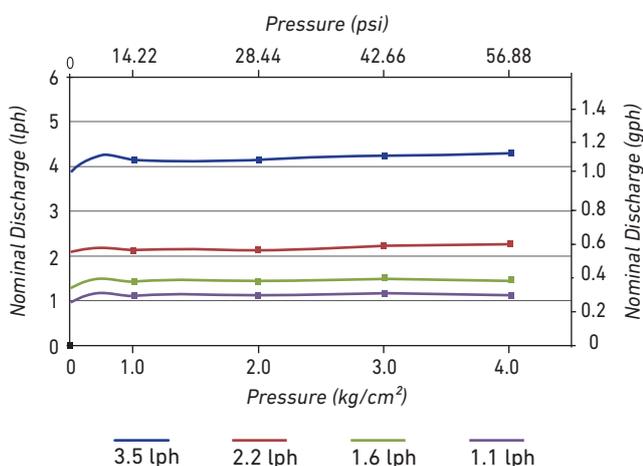
Technical Specifications for Emitter - US

Nominal Discharge gph @ 15 (psi)	Emitter exponent x	Flow coefficient k	Coeff. of mfg. variation, CVm	Flow path dimensions (inch)			Inlet filter area (sq. inch)
				Length	Width	Depth	
16 mm							
0.29	0	0.290	2.5	2.36	0.028	0.039	0.022
0.42	0	0.423	2.5	2.36	0.031	0.043	0.022
0.58	0	0.581	1.5	2.36	0.031	0.043	0.022
0.93	0	0.925	3.0	2.36	0.041	0.052	0.022
20 mm							
0.24	0	0.238	2.5	4.33	0.023	0.043	0.011
0.42	0	0.423	2.5	3.43	0.041	0.043	0.014
0.58	0	0.581	3.0	3.43	0.041	0.051	0.017
1.00	0	1.004	3.0	5.04	0.04	0.047	0.022

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

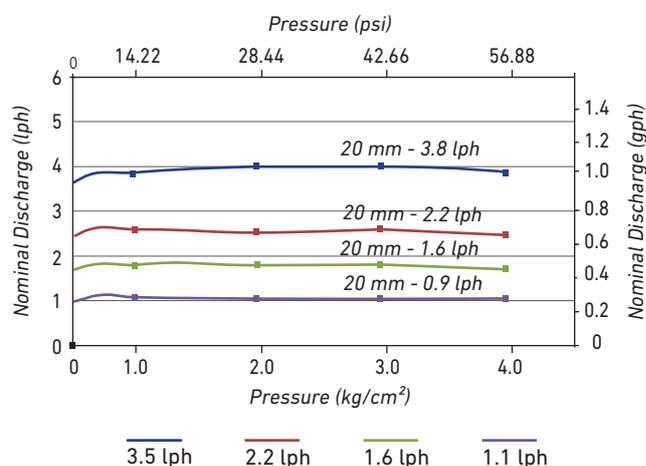
Performance Graph

Jain Turboline PC® 16mm OD (14.2mm ID)



Note: Performance graph for Jain Turboline PC® for wall thickness 0.7 to 0.9mm

Turboline PC® 20mm OD (18mm ID)



Note: Performance graph for Jain Turboline PC® for wall thickness 0.5 to 0.6 mm

Turboline PC® Emitter

Technical Specifications for Emitter with different wall thickness tube

Size	Nominal Flowrate (lph)	Nominal Flow rate as per wall thickness		
		0.5 - 0.6	0.7 - 0.9	1.0 - 1.2
12	Wall thickness (mm)			
	1.1	1.4	1.3	1.1
	1.6	2.0	2.0	1.30
	2.2	2.8	2.6	2.2
16	3.5	3.8	3.6	2.8
	Wall thickness (mm)	0.7 - 0.8	0.9 - 1.1	1.2 - 1.4
	0.9	1.1	0.9	MTO
	1.6	2.0	1.7	MTO
	2.2	2.6	1.8	MTO
16	3.8	4.3	4.0	MTO
	8.0	8.8	8.0	6.0

Note: MTO refers to Make To Order

