Turboline PC®

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

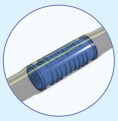
Innovative Cascade Labyrinth
Cascade labyrinth gives strong, self cleaning turbulence. Hydrodynamic dripper design ensures continuous flushing of sediments and small dirt particles.

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

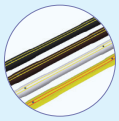
Dynamic Self Cleaning mechanism
Dynamic movement of diaphragm retracts dynamically to throw away particles which are blocking the emitter.

Multiple Outlet Holes
Precision multiple outlets breaks vacuum, prevents sand suction.

Marked with Two Parallel White Stripes 'Twin- Line®'
Symbol of quality. It also helps to ensure upright positioning of the dripper.



Stringent Quality Control
Each batch is tested for stringent quality parameter. Conforming to Indian standard IS 13488:2008 and international standard ISO 9261.



Flexibility in color selection
Black - for agriculture,
Brown - for landscape
White - for greenhouse
Purple - for reclaimed water

Technical Specifications - Tubing

Nominal Dia. (mm)	Inside Dia. (mm)	Minimum Wall Thickness(mm)				Standard Coil Length (m)
		Class-1	Class-2	Class-3	Class-4	
*16	14.2	0.5	0.7	1.0	1.3	100, 250, 400
*20	18.0	0.7	0.9	1.2	1.5	100, 250

* Dimensions are as per Indian Standard IS 13488:2008.

Technical Specifications - Emitter Technical Specifications for Emitter - Metric

Nominal Discharge (lph)	Emitter exponent	Flow coefficient	Coeff. of mfgr. variation,	Flow path dimensions (mm)			Inlet filter area (mm^2)
	x	k	CVm	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/cm^2, x = Emitter exponent

Technical Specifications for Emitter - US

Nominal Discharge (gph)	Emitter exponent	Flow coefficient	Coeff. of mfgr. variation,	Flow path dimensions (inch)			Inlet filter area ($inch^2$)
	x	k	CVm	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

Other Important 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 CVm, 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/cm^2 to as high as 4 kg/cm^2 pressure.

Longer Lateral Lengths
Can run for longer lengths without compromising the uniformity.

Rodent Deterrent option
Can also be supplied with Rodent Deterrent option (Condition apply)

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.

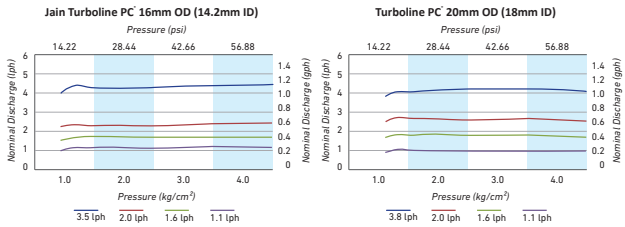
Specifications

- **Nominal Discharges :** Turboline PC 16 mm: 1.1, 1.6, 2.2 and 3.5 lph for tubing wall thickness as per pressure class2.
  Turboline PC 20 mm: 0.9, 1.6, 2.2 and 3.8 lph for tubing wall thickness as per pressure class 1.
- **Emitter Spacing :** Standard emitter spacing of 15, 20, 30, 40, 50, 60, 75, 90, 100, 120 and 150 cm. Any other emitter spacing and group spacing can be supplied on demand.
- **Sizes :** Standard sizes of 16 and 20 mm nominal diameter.
- **Pressure Compensating Range :** 0.8 to 4 kg/cm^2 (7 to 71 psi).

Operating Specifications

- Maintain the operating pressure within the pressure regulating range.
- Specially designed emitting pipe fittings are available.
- 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.

Performance Graph



Note: Performance graph for Jain Turboline PC® as per Pressure Class-2. *Note: Performance graph for Jain Turboline PC® as per Pressure Class-1.*

Technical Specifications for Emitter with different wall thickness tube

Size	Nominal Discharge (lph)	Nominal Flow rate as per wall thickness		
	Wall thickness (mm)	0.5 - 0.6	0.7 - 0.9	1.0 - 1.2
16	1.1	1.4	1.3	1.1
	1.6	2.0	2.0	1.30
	2.2	2.8	2.6	2.2
	3.5	3.8	3.6	2.8
	Wall thickness (mm)	**0.7 - 0.8**	**0.9 - 1.1**	**1.2 - 1.4**
20	0.9	1.1	0.9	MTO
	1.6	2.0	1.7	MTO
	2.2	2.6	1.8	MTO
	3.8	4.3	4.0	MTO

Note: MTO refers to Make To Order

Ordering Specifications

L	XX	XX	XXX	X	XXX	P	X
	Nominal diameter in mm	Nominal Discharge in lph x 10	Dripper Spacing in cm	Pressure Rating Class	Standard Coil Length in meter	P - Pressure compensating	Color of the tube Blank - Standard Black with 'Twin Line' B - Brown (Landscape) W - White (Greenhouse) P - Purple (Reclaimed Water)

Example : *L16400602400P - This code refers to Turboline PC option of 16mm nominal diameter having nominal discharge of 4.0 lph, emitter spaced at 60 cm, pressure rating class-2 and standard coil length of 400 m black tube with 'Twin Line'.*

Note

- *Turboline PC is manufactured with ID control and declared OD are nominal. If you have specific ID or OD requirement, please mention while ordering.*
- *Turboline PC can be supplied in any other wall thickness and pressure ratings.*
- *Turboline PC can be supplied in group spacing on request. Specify distance between drippers in the group, distance between two groups & no. of drippers in a group (minimum three drippers) as,*