



50 years of
Excellence



Innovative, Automatic self-cleaning screen filter, by “**Tavlit Smart Filtration**”. A polymeric, compact, robust filter. The **TIS** combines durability and user-friendly operation, offering a quick-install solution that maximizes filtration efficiency while minimizing resource consumption. Its design improvements make it an ideal choice for those seeking a reliable, low-maintenance automatic filter for their irrigation system protection. **The most cost-effective competitive filter of its kind, aimed to replace manual/semiautomatic filters or even metal “bell” automatic filters in both existing systems upgrade or in new installations**

Applications

- ✓ Agriculture - drip and micro irrigation systems
 - Primary filtration in some applications, according to the water quality and flow-rate demand
 - Backup (secondary) filter for in-field plots
 - Backup (secondary) filter for gravel filtration systems and sand separators
- ✓ Landscape and Turf irrigation. Ideal for cabinets and boxes installation requirements
- ✓ Industrial water applications as well
- ✓ Low pressures low energy applications

Features & Benefits

- ✓ Robust, built to last. Durable and reliable, PN10
- ✓ Polymeric construction materials. Corrosion-free, chemical and UV high resistance
- ✓ Compact, lightweight with small footprint
- ✓ “Plug & Play” user-friendly installation and simple operation
- ✓ Minimal maintenance and service requirements, saving time and labor costs
- ✓ Versatile installation configurations due to its modular design
- ✓ Robust screen with large effective surface area enables high Dirt Holding Capacity (DHC) and efficient filtration in various filtration grades
- ✓ Efficient Self-cleaning flushing mechanism, with low energy and water consumption, saves resources and costs
- ✓ Improved suction-scanning cleaning mechanism design: Replaceable elastic suction nozzles enable greater suction forces with extra protection of the screen and easy maintenance.
- ✓ Protected Piston operates with clean water, reliable durable operation
- ✓ Restrained, patent pending spiral movement of the suction scanner provides efficient cleaning and reduces wear and tear
- ✓ Internal flushing valve
- ✓ Continuous undisturbed irrigation during flushing process

Technical Data

General

Filter Model	2" TIS	2" L TIS	3" TIS	4" TIS
Max. Recommended Flow Rate*	20 m ³ /h (88 gpm)	30 m ³ /h (132 gpm)	50 m ³ /h (220 gpm)	80 m ³ /h (352 gpm)
Min. Min. Working Pressure During Cleaning			1.5 bar (22 psi)	
Max Working Pressure			10 bar (145 psi)	
Filtration Area	800 cm ² (124 in ²)	1200 cm ² (186 in ²)	1600 cm ² (248 in ²)	2400 cm ² (372 in ²)
Inlet/Outlet Diameter**	2" (50mm)	2" (50mm)	3" (80mm)	4" (100mm)
End Connections**	Threaded BSP / NPT	Threaded BSP / NPT	Grooved / Universal Flange	Grooved / Universal Flange
Drain Outlet			1.5" (40mm)	
Weight (empty)	12 kg (26.5lb)	13 kg (26.7lb)	15 kg (33lb)	23 kg (51lb)

* Maximum recommended flow rate in good water quality ** Other inlet/outlet options are available on request

Flushing Data (at 1.5 bar / 22 psi)

Filter Model	2" TIS	2" L TIS	3" TIS	4" TIS
Flushing Time	8-12 seconds			
Flushing Flow Rate	8.0 m ³ /h (34gpm)	8.6 m ³ /h (37gpm)	9.5 m ³ /h (41gpm)	9.9 m ³ /h (43gpm)
Drain Water Volume per Cycle	26 liters (6.9 gallons)	28 liters (7.4 gallons)	31 liters (8.2 gallons)	33 liters (8.7 gallons)

Electronics Control

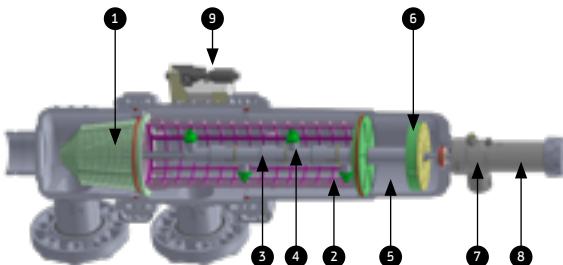
Power Supply	4 x 1.5V batteries type C
Solenoid	9-12V DC Latch
DP Switch	Integral DP sensors
Communication	BT with Smartphone app.

TIS Main Components

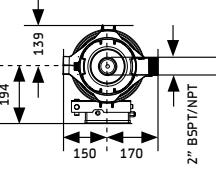
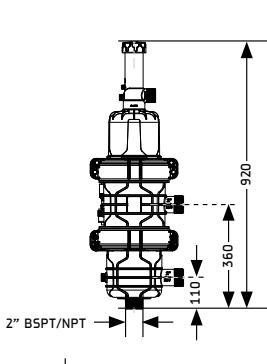
1	Coarse Screen
2	Screen element
3	Suction scanner shaft assy.
4	Suction scanner nozzles
5	Flushing chamber
6	Hydraulic turbine
7	Internal flush valve
8	Hydraulic piston
9	DC BT controller

Construction Materials

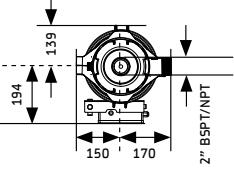
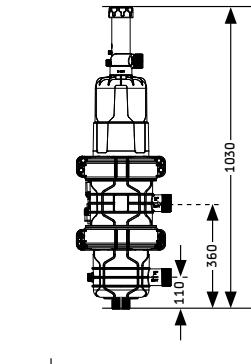
Filter Housing and Lid	RPA and RPP
Screens	Molded Weavewire, Stainless Steel 316L
Cleaning mechanism	RPP (Reinforced Polypropylene)
Drain Valve	Reinforced Polyamid
Seals	EPDM, NBR
Control Command Tubing	PE (Polyethylene)



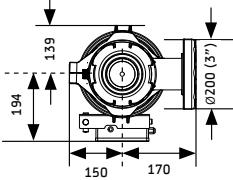
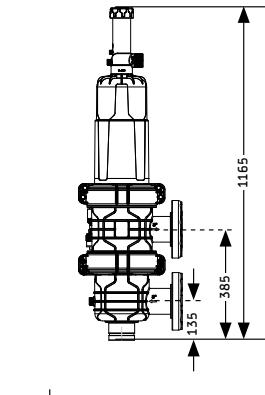
Dimensions



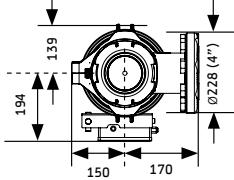
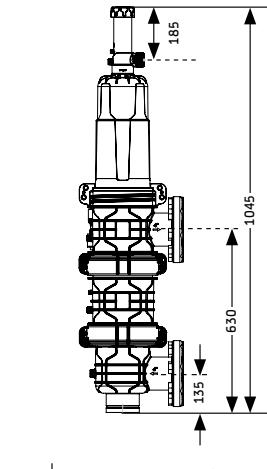
2" Compact - 800 cm²



2" - 1200 cm²



3" - 1600 cm²



4" - 2400 cm²