

TerTech

TWISTERFIL

Cyclonic Separator



TWISTERFIL



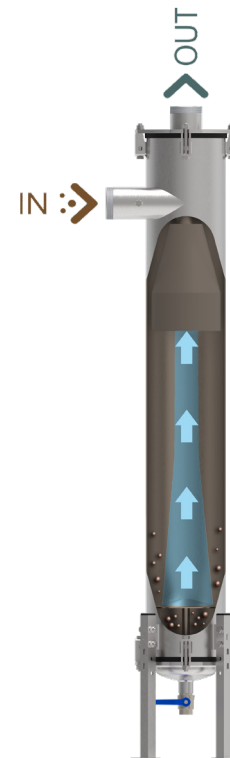
TWISTERFIL filters are stainless steel hydrocyclonic separators. Thanks to their structure they transform the inlet flow into a whirlpool that separates sands and solids (with greater specific weight than water $SW \geq 1$) from raw water. They have an extremely high removal efficiency, reaching 99% for solids above $75\mu\text{m}$ while maintaining a 65% for $50\mu\text{m}$ particles.

TWISTERFIL filters work continuously and have no moving parts, a feature which makes them durable and extremely convenient as they essentially require no maintenance. They have inspectable covers. The bottom one is equipped with a waste storage tank that can be drained with a manual valve (included in the supply) or automated with the appropriate automatic Drain Valve Kit (**DVKIT**)

FILTERING PROCESS

Raw liquid enters the filter from the inlet connection (IN) triggering the downward whirlpool, which is additionally accelerated by a PVC cone, increasing the centrifugal force which separates suspended solids

Filtered water meets the inferior deflector and ascending through the center it is conveyed towards the outlet (OUT), whereas suspended solids slide along vessel's walls towards the waste storage tank to be later discharged through the drain valve (DRAIN).



TECHNICAL SPECIFICATIONS

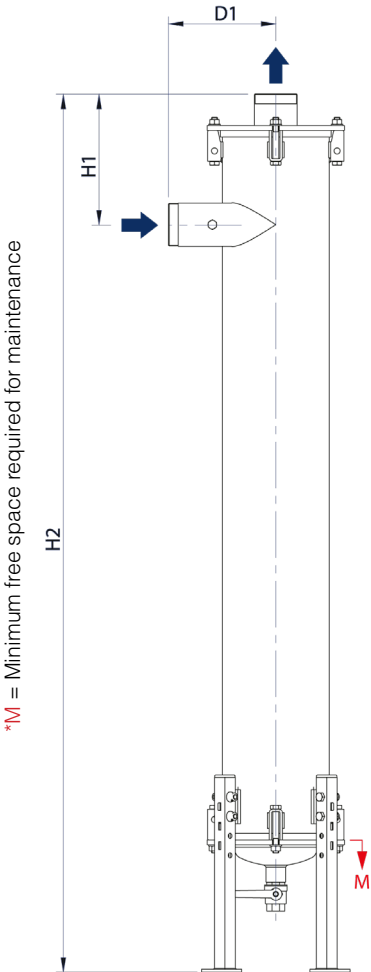
Design Data

Flow rate	Up to 190 m ³ /h
Design Pressure (bar)	PN 10
Max Temperature (°C)	60
Salinity	< 10.000 ppm
pH range	3-9
Design Code	PED 68/2014/EU

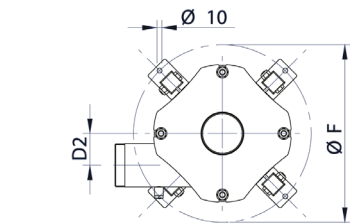
Materials

Filter Housing	Stainless Steel AISI 304 - AISI 316L
Gaskets	EPDM*
Drain	Nickel-plated Brass - AISI 316L
Pressure Gauges	Stainless Steel AISI 304 - AISI 316L
Surface finishing	Microshot Peening and Passivation

*Certified to comply to the following European Drinking Water regulations: UBA, DVGW standard W-270, WRAS and ACS



*M = Minimum free space required for maintenance

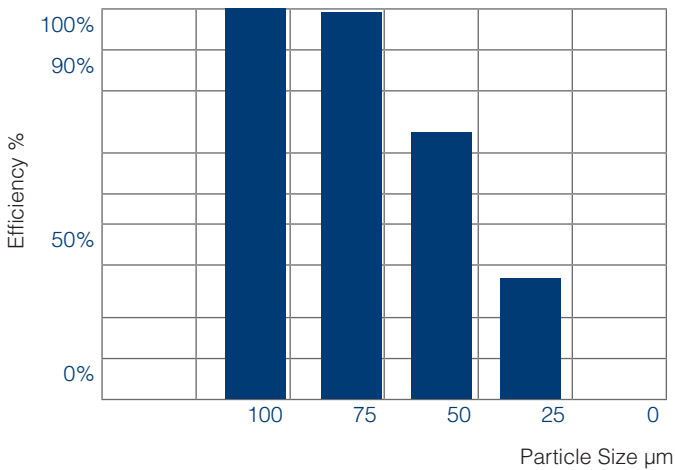


FLOW RATE & SIZE

MODEL	MIN FLOW [m ³ /h]	MAX FLOW [m ³ /h]	IN/OUT Ø	DRAIN Ø
TWFI 1"	4	9	1" BSPP	1" BSPP
TWFI 1" ½	8	18	1" ½ BSPP	1" BSPP
TWFI 2"	15	30	2" BSPP	1" BSPP
TWFI 3"	25	60	3" BSPP	1" BSPP
TWFI 100	54	105	Flanged DN100	1" ½ BSPP
TWFI 150	95	190	Flanged DN150	1" ½ BSPP

DIMENSIONS

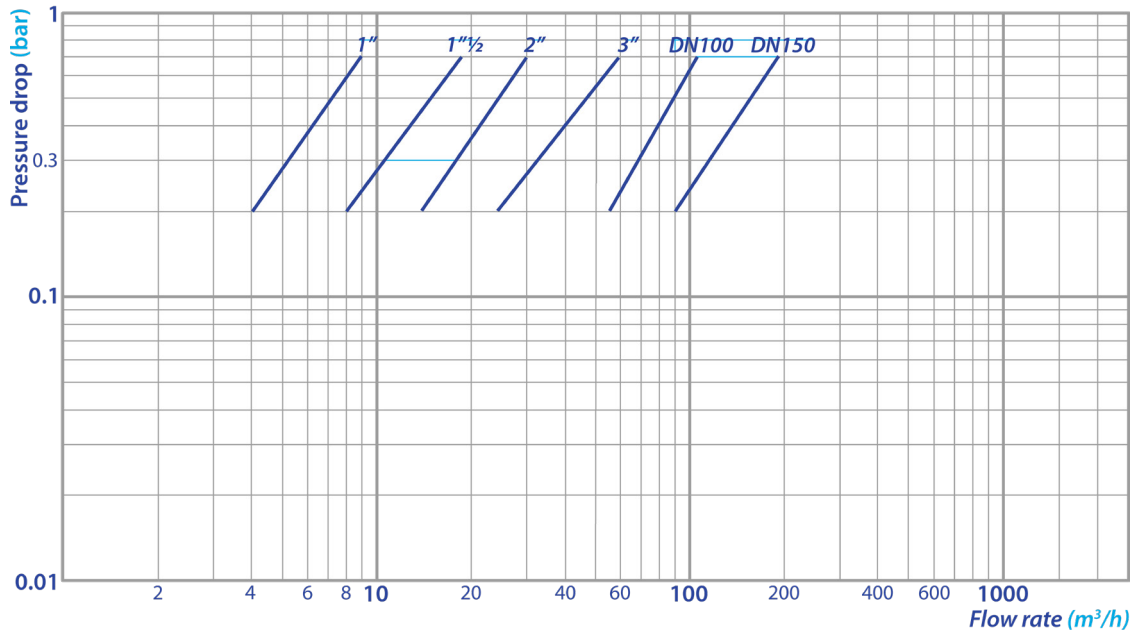
MODEL	D1 [mm]	D2 [mm]	H1 [mm]	H2 [mm]	M [mm]	ØF [mm]	WEIGHT [Kg]
TWFI 1"	120	40	144	1074	220	259	17
TWFI 1" ½	150	45	194	1298	260	285	23
TWFI 2"	190	54	204	1448	260	357	31
TWFI 3"	220	65	268	1804	260	372	52
TWFI 100	300	79	318	2114	290	456	84
TWFI 150	350	78	336	2316	330	507	105



SEPARATION EFFICIENCY

Twisterfil separates 99% of suspended solids above 75 micron while maintaining a high separation efficiency even on smaller particles on a single flow passage. In closed circuits or recirculating water, the removal efficiency of smaller particles is increased.

HEAD LOSS

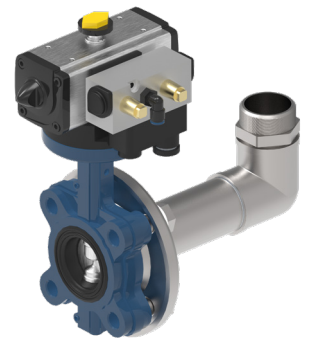


ACCESSORIES



HYDRAULIC
DVKIT

TWISTERFIL can be equipped with a 24Vdc automatic drain valve kit (DVKIT) which can be controlled by an electronic programmable control unit to automatically drain the filter. The DVKIT can be either hydraulic or pneumatic.



PNEUMATIC
DVKIT



CHRONO
KIT

TWISTERFIL can be equipped with a CHRONOKIT to control the automatic drain valves' opening and closure by adjustable time intervals.