## Automatic self cleaning filter systems VTO series

The self cleaning filter systems VTO series are suitable to treat water with high loads of suspended solids, without the need to remove the filter element. The rotating cleaning system has a number of suction points which keep the filter element constantly clean. The high cleaning efficiency allows to minimize the back wash cleaning cycles and the reduction of water losses.



G

D

В

SERIES

VT040

1850

620

360

605

VT030

1455

450

290

515

DIMENSIONAL DATA

VT020

1285

400

290

515

VT010

1130

300

290

515

А

в

С

D

#### **CHARACTERISTICS**

- Cleaning cycle without interruption of forward flow
- Minimum water consumption during back wash
- High filtration surface
- 100% AISI 316 stainless steel construction
- Completely automated operation
- Complete access to internal parts and ease of disassembly
- Compact construction
- Possibility of parallel installation for increased flow rates

#### **OPERATING PRINCIPLE**

<u>Forward flow</u>: filtration is performed in separate chambers. The prefiltration chamber holds a steel basket (A) where water flows inside to outside, and retains coarse particles which could damage internal parts. The final chamber holds both a cartridge (B) where water flows outside to inside and a telescopic back wash scanner ©.

<u>Regeneration</u>: a differential pressure gauge detects the pressure differential on the filter, and upon reaching a set value, sends a signal to the control unit (D) which starts the back wash cycle. This begins by connecting to the discharge, through the valve (E) the scanner which, pressurized by the filter pressure, generates the suction flow of the retained contaminant; everything happens without interrupting the forward flow.

The scanner inspects completely the cartridge surface through a rotating translation motion activated by an hydraulic turbine (F) or an electric motor (H) and an hydraulic piston (G). The back wash cycle time varies between 15 and 30 seconds.



#### MAIN APPLICATIONS

Water from: Industrial processes: wells, rivers, process, cooling tower, waste treatment plants, etc. chemical, power generation, food & beverage, pharmaceutical cosmetics, electronics, paper mills, irrigation systems etc.

VTO40D

1850

620

360

605

VT050

2050

670

400

625





Hydraulic turbine

# Automatic self cleaning filter systems VTO series

#### **PRODUCT SPECIFICATION**

Max. operating pressure (PS) 10 bar @ 40 °C The filters shown are suitable for the filtration of liquids with surface tension (TS), at the max. acceptable temperature, < 0.5 bar above atmospheric pressure. The housings will not have the CE stamp and the CE Certificate of Conformity, as they fall within the rules of art. 3, par. 3 of the Directive 97/23/CE PED. For pressures above stated values please contact ASCO Filtri.

Construction materials Body: Filter element : Sealing gaskets.

AISI 316L AISI 304 EPDM Finishing: picked Scanner: AISI 304

#### **TECHNICAL DATA**

	TYPE								
	VT010	VT020	VT030	VT040	VTO40D	VT050			
FILTR. SURFACE [cm <sup>2</sup> ]	1500	2200	3000	4000	5400	6800			
FLOW RATE min/max [m <sup>3</sup> /h]	10/80	12 / 130	15 / 150	20 / 230	25 / 400	25 / 400			
CONNECTIONS IN/OUT	2" - 3" - 4"	3" - 4"	3" - 4" - 6"	4" - 6" - 8"	6" - 8"	6" - 8" - 10"			
AUTOMATIC DRAINAGE	1½"	11/2"	11/2"	2"	2"	2"			
PRESSUREmin/max	2/10	2/10	2/10	2/10	2/10	2/10			
WEIGHT [kg]	28	45	60	85	105	135			

#### **BACKWASH OPERATING SYSTEM**

Scanner rotation

Hydraulic turbine with reducer of 12 V d.c. electric motor with reducer

Scanner longitudinal motion

Hydraulic piston

Discharge valve

Automatic hydraulic valve with polypropylene body

Control panel

Electronic unit with : 220-50Hz stabilized feeder and differential pressure gauge In/out pressure control

Two static manometers with glycerine filling

ORDERING INFORMATION												
VT0	40	-	S	W	4		-	06		М	-	001
	SIZE		FILTER ELEMENTS	HUOSING MATERIAL		MOTOR TYPE		CONN	IECT	IONS		INTERNAL CODE
	10		S Standard	W 304	Т	Hydraulic turbine		02 2"	т	Gas-m		See table
	20		D Extended		Е	Electric motor		03 3"	F	Flanged		
	30							04 4"				
	40							06 6"				
	50							08 8"				
								10 10"				

# **SÍ** FILTRI

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