

Product Fact Sheet





FILTRATION - SILVERLINE SERIES

WINNOW™
FILTRATION

WINNOWN FILTRATION SILVERLINE SERIES

MANUAL CLEAN FILTERS	PAGE 5
MINI BASKET FILTERS	PAGE 6
BASKET FILTERS	PAGE 8
NW BAG FILTERS	PAGE 10
SIMPLEX FILTERS	PAGE 12
VORTEX SEPARATORS	PAGE 15
VORTEX FILTERS	PAGE 16
VACUUM TECHNOLOGY	PAGE 19
VACUUM FILTERS	PAGE 20
ROTOR FILTERS	PAGE 22
ROTOR HP FILTERS	PAGE 24
VTO FILTERS	PAGE 26
BRUSH TECHNOLOGY	PAGE 29
BRUSH FILTERS	PAGE 30
TURBONET FILTERS	PAGE 32
HYDRO-JET TECHNOLOGY	PAGE 35
ACQUASPEED FILTERS	PAGE 36
RAPIDJET FILTERS	PAGE 38
AUTOJET FILTERS	PAGE 40
BIG MATIC FILTERS	PAGE 42

FILTERS CLEANING TECHNOLOGY



BRUSH TECHNOLOGY

Winnow™ Brush Technology uses a series of rotating brushes and water flow to scrape and flush-out suspended solids during the cleaning process. Brush technology is typically used in applications where there is a high content of suspended solids or sticky particles are present. Typical applications are wastewater, sewage, mining, dam water, food processors, and other industrial applications.

VACUUM TECHNOLOGY

Winnow™ Vacuum Technology uses rotating suction heads that suck suspended solids from the screen during the cleaning process. Vacuum technology is typically used for applications such as irrigation, HVAC, food & beverage, pulp & paper, desalination and other water treatment industries.

HYDRO-JET TECHNOLOGY

Winnow™ Hydro-Jet Technology uses rotating, high pressure water jets that lift suspended solids from the screen during the cleaning process. And flush the suspended solids out the drain. Hydro-Jet technology can be used in lower pressure inflow applications, and is typically used in industrial industries such as petrochemical, electrical, pharmaceutical, automotive, plastics, marine and wastewater.

AUTOMATIC CLEANING SYSTEM

Winnow™ Automatic Cleaning Systems provide clients with an efficient, effective, peace of mind cleaning system that does not require human commitment and labour cost. Winnow™ Automatic Cleaning Systems have both pressure and time sensors that activate the cleaning process, and can be pre-set to match a particular requirement. Winnow™ Automatic Cleaning Systems also help to keep the filter at maximum effectiveness and flow through production applications. Some models can also maintain permeate flow whilst carrying out the cleaning process.

SEMI-AUTOMATIC CLEANING SYSTEM

Winnow™ Semi-Automatic Cleaning Systems provide clients with an efficient, effective and easy-to-use cleaning system that requires minimal human commitment and labour costs. Winnow™ Semi-Automatic Cleaning Systems do not require removal of filter housing covers or mechanical parts. Regular cleaning of the filter helps to keep the filter at maximum effectiveness and flow throughout production applications. Some models can also maintain permeate flow whilst carrying out the cleaning process.

MANUAL CLEAN FILTERS

Winnow™ Manual Clean filters provide clients with Winnow™ filtering technology - whilst minimising capital investment. Typically, Winnow™ Manual filters are cleaned by removing the filter element, and washed down by hosing or pressure cleaning procedure. Winnow™ Manual filters are designed with minimal mechanical parts, and simple step-by-step procedures are followed for quick and easy removal of the filtering elements.

INDUSTRY APPLICATIONS



BAG FILTRATION

Winnow™ Bag filtration uses a polyester bag that collects suspended solids on the internal surface, and allows filtered water to flow through polyester filter material to the external surrounds of the filter bag. Winnow™ Bag filters are typically used in food & Beverage, chemical, irrigation, water treatment, electronics, and other manufacturing industries. Winnow™ Bag filters finer than most screen or disk type filters and are available in a wide range of filtration - ranging from 1 to 200 microns.

MEDIA FILTRATION

Winnow™ Media filtration removes particles from water and wastewater to just 3-5 microns in size. Winnow™ Media Filters use a rare natural mineral media that is highly processed and graded. When a pressure difference passes a pre-set value, the media filter is automatically backwashed by a backwash pump - which draws water from the treated water supply, and the dirty backwash water typically going back to the initial treatment processes, water source, or to a drain point.

VORTEX SEPARATION

Winnow™ Vortex separators can work continuously, and do not require a filtering element or mechanical parts. Winnow™ Vortex separators have been specially designed to speed up the main flow at the entry of the filter itself. In order to create a descending water vortex inside the housing. The progressive acceleration within the specially formed internal cone, creates the centrifugal force needed for the best separation of undesired solids. The filtered water re-emerges centrally through the outlet, whilst the separated solids drop in the tank underneath a deflector and are drained outside periodically. Optional automatic drain valves are available on some models. Vortex separators are typically used in applications where there are high levels of sand, pebbles and grit in industries such as mining, irrigation, desalination and other water and wastewater applications.

HYDRAULIC TURBINE COMPATIBILITY

Selected Winnow™ filters are available with an optional Winnow™ Hydraulic turbine which spins and produces the energy to operate the automatic cleaning system. Winnow™ Hydraulic turbine filters do not require an electricity connection and are intrinsically safe for petrochemical, oil and gas applications. Winnow™ Hydraulic Turbines are also ideal for agricultural and irrigation industries where power availability may be remote or unavailable.

CONTINUOUS PERMEATE FLOW

Winnow™ Continuous Permeate Flow filters have been designed to carry out cleaning procedures without stopping the permeate flow. These filters are ideal for applications where production cannot be interrupted and is highly dependent on permeate flows.

MANUAL CLEAN FILTERS



Winnow™ Manual Clean filters provide clients with Winnow™ filtering technology - whilst minimising capital investment. Typically, Winnow™ Manual filters are cleaned by removing the filter element, and washed down by hosing or pressure cleaning procedure. Winnow™ Manual filters are designed with minimal mechanical parts, and simple step-by-step procedures are followed for quick and easy removal of the filtering elements.

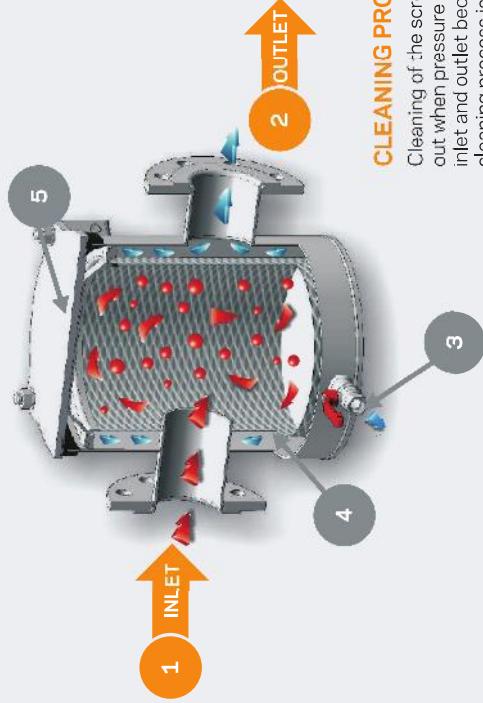
MINI BASKET

MINI BASKET FILTERS

Winnow™ MINI BASKET is a manual cleaning screen filter with a 304 or 316 stainless steel body and a 316 stainless steel inner basket screen. MINI BASKET filter screens filter down to 3500µm. The filter is provided with a manual drain valve. Winnow™ MINI BASKET filter covers are easy to access for cleaning, and have minimal mechanical parts for easy maintenance. Winnow™ MINI BASKET filters are typically used for pump protection and coarse filtration applications.

FILTERING PROCESS

Water enters the filter through the inlet connection (1), flows through the filter screen element (4) from inside towards the outside, and the filtered water flows through the outlet connection (2). Suspended solids are retained on the internal surface of the filter element. The filter has a drain valve (3) at the base of the unit for cleaning and maintenance procedures.



CLEANING PROCESS

Cleaning of the screen filter element is carried out when pressure difference between the inlet and outlet becomes apparent. The cleaning process is carried out by releasing the pressure, opening the cover (5) and removing the screen filter element (4). Typically, the screen is cleaned by hosing or pressure washing procedures.

TECHNICAL DATA

MODEL	Screen Area		Maximum Flow Rate		Connections		Dimensions					Weight (kg)	
	(cm ²)	(in ²)	(m ³ /h)	(US gpm)	In/Out (in-mm)	Drain (in-mm)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)		X (mm)
WMBK 80	1900	295	130	572	80	½"	433	273	357	156	156	400	23
WMBK 100	1900	295	210	924	100	½"	433	273	357	156	156	400	26
WMBK 125	1900	295	300	1.320	125	½"	433	273	357	156	156	400	28
WMBK 150	1900	295	380	1.672	150	½"	433	273	357	156	156	400	32

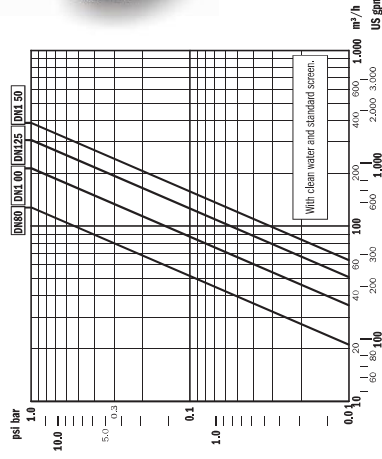
Flow rates are referred to filters with basket from 3500 µm and water with temperature of 20 °C and NTU < 1.

FILTER ELEMENTS

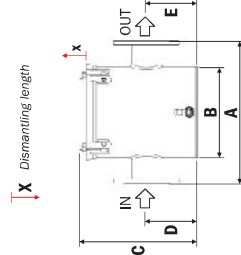
AVAILABLE FILTER ELEMENTS

Model body	Height (mm)	Internal (mm)
Basket 316 3500	290	218

PRESSURE LOSS



DIMENSIONS



FEATURES

Filtration range
3500 µm
Maximum working pressure
60 bar (870 psi)
Fluid maximum temperature
60°C (140°F)
Salinity & Acidity
< 10000 ppm TDS
9-3 (ph)
ISO PN16/10
Surface finishing
etching

MATERIALS

Filter housing
Stainless Steel
304 / 316
Screen support
Stainless Steel 316
Screen
Stainless Steel 316
Seals
Epdm
Optional 316 Stainless Steel,
Duplex and Titanium Models also
available on request.

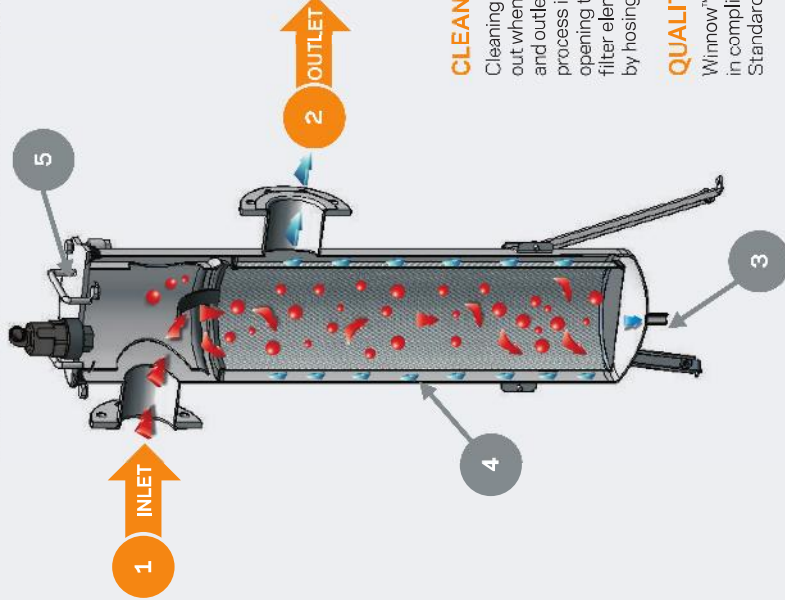
BASKET

BASKET FILTERS

Winnow™ BASKET is a manual cleaning screen filter with a 304 or 316 stainless steel body and a 316 stainless steel inner basket screen. Basket filter screens are available from 110µm to 5000µm filtration. The filter is provided with a support frame, manual drain valve, manual vent valve and pressure gauges. Winnow™ BASKET filter covers are easy to access for cleaning, and have minimal mechanical parts for easy maintenance.

FILTERING PROCESS

Water enters the filter through the inlet connection (1), flows through the filter screen element (4) from inside towards the outside, and the filtered water flows through the outlet connection (2). Suspended solids are retained on the internal surface of the filter element. The filter has a drain valve (3) at the base of the unit for cleaning and maintenance procedures.



CLEANING PROCESS

Cleaning of the screen filter element is carried out when pressure difference between the inlet and outlet becomes apparent. The cleaning process is carried out by releasing the pressure, opening the cover (5) and removing the screen filter element (4). Typically, the screen is cleaned by hosing or pressure washing procedures.

QUALITY

Winnow™ BASKET filters are manufactured in compliance with ISO: 9001:2000 Quality Standards.

TECHNICAL DATA

MODEL	Screen Area		Maximum Flow Rate		Connections		Dimensions						Weight	
	(cm²)	(in²)	(m³/h)	(US gpm)	In/Out	Drain	A	B	C	D	E	F	X	
					(in-mm)	(in-mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(kg)
WCS Z 2" / 20	2200	341	40	176	2"	½"	366	206	1070	790	640	420	700	27
WCS Z 80 / 20	2200	341	80	352	80	½"	406	206	1070	790	640	435	700	32
WCS Z 80 / 35	3300	512	80	352	80	½"	470	273	1190	860	610	430	700	44
WCS Z 100 / 35	3300	512	140	616	100	½"	470	273	1190	860	610	430	700	45
WCS Z 100 / 40P	5400	837	150	660	100	½"	470	273	1470	1140	890	430	1000	57
WCS Z 150 / 40P	5400	837	300	1320	150	½"	473	273	1480	1150	900	430	1000	59
WCS Z 200 / 40P	5400	837	400	1760	200	½"	473	273	1560	1195	895	430	1000	73

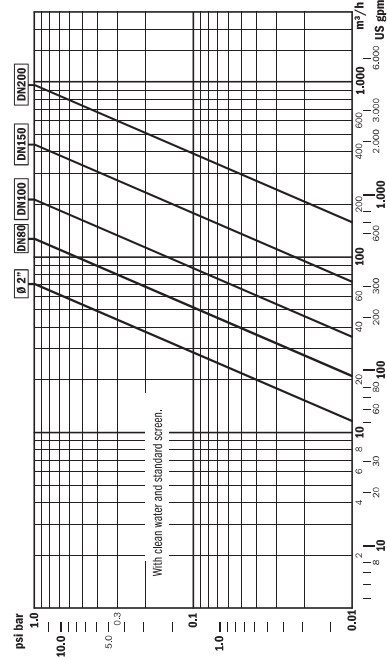
Flow rates are referred to filters with basket from 110 µm and water with temperature of 20 °C and NTU <1.

FILTER ELEMENTS

AVAILABLE FILTER ELEMENTS

Basket 316	Model body	Height	Internal
110 µm, 200 µm, 400 µm, 1000 µm, 2000 µm, 3500 µm, 5000 µm	KC/20	540	145
	KC/35	580	218
	KC/40P	880	218

PRESSURE LOSS



FEATURES

- Filtration range: 110 µm - 5000 µm
- Maximum working pressure: 10 bar (145 psi)
- Fluid maximum temperature: 60°C (140°F)
- Salinity & Acidity: <10000 ppm TDS
- End connections: ISO PN16/10 - BSP, ANSI150 - NPT
- Surface finishing: etching
- Seals: Epdm
- Optional 316 Stainless Steel, Duplex and Titanium Models also available on request.

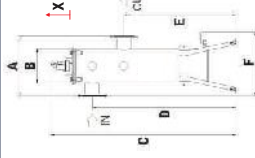
MATERIALS

- Filter housing: Stainless Steel 304 / 316
- Screen support: Stainless Steel 316
- Screen: Stainless Steel 316
- Seals: Epdm
- Optional 316 Stainless Steel, Duplex and Titanium Models also available on request.

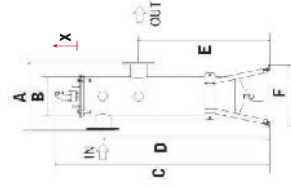
DIMENSIONS

X Disassembling length

2200cm² Screen models



3300/5400cm² Screen models

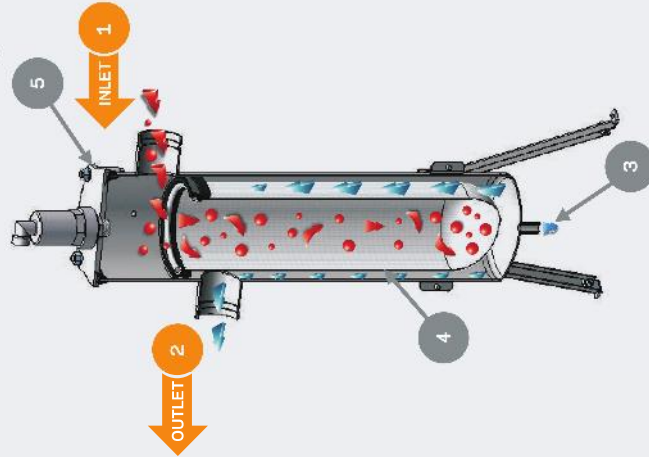


NW BAG FILTERS

Winnow™ NW BAG is a manual cleaning filter with a 304 or 316 stainless steel body incorporating a polyester filter bag. Filtration bags range between 1 to 200µm. The filter is provided with a support frame, manual drain valve, manual vent valve and pressure gauges as standard equipment. Winnow™ NW BAG filter covers are easy to access for cleaning, and have minimal mechanical parts for easy maintenance.

FILTERING PROCESS

Water enters the filter through the inlet connection (1), flows through the filter bag (4) from inside towards the outside, and the filtered water flows through the outlet connection (2). Suspended solids are retained on the internal surface of the filter bag (4).



MATERIALS

Filter housing	Stainless Steel 304 / 316
Screen support	Stainless Steel 316
Screen	316 Stainless Steel / Polyester
Seals	Epdm
Optional 316 Stainless Steel, Duplex and Titanium Models also available on request.	

FEATURES

Filtration range	1 µm – 200 µm
Maximum working pressure	60 bar (870 psi)
Fluid maximum temperature	60°C (140°F)
Salinity & acidity	< 10000 ppm TDS PH 9-3
End connections	VICTAULIC / BSP ANSI 150 / NPT
Surface finishing	etching

REPLACING FILTER BAGS

Filter Bags must be cleaned or replaced when pressure difference between the inlet and outlet becomes apparent. Cleaning or replacement of the filter bags is carried out by stopping both the inlet (1) and outlet (2) flow, releasing the pressure at the drain valve (3), opening the cover (5) and removing the filter bag (4). Typically, the filter bag is cleaned by hosing or pressure cleaning procedures, or replaced as required.

TECHNICAL DATA

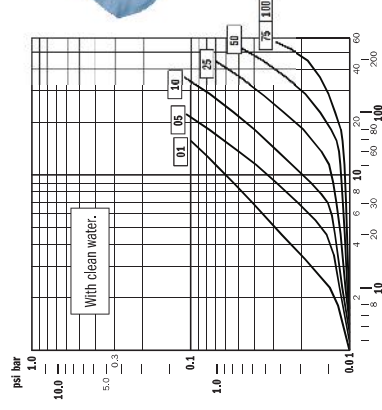
MODEL	Connections		Dimensions							Bag Height (mm)	Weight (kg)
	In/Out (in-mm)	Drain (in-mm)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	X (mm)		
WNW S 2"	2"	½"	380	219	949	655	495	360	500	430	18
WNW S 2"1/2	2½"	½"	380	219	949	655	495	360	500	430	18
WNW S 3"	3"	½"	380	219	949	655	495	360	500	430	18
WNW D 2"	2"	½"	380	219	1334	1040	880	360	700	810	22
WNW D 2"1/2	2½"	½"	380	219	1334	1040	880	360	700	810	22
WNW D 3"	3"	½"	380	219	1334	1040	880	360	700	810	22

FILTER BAG ELEMENTS

MODEL	Filtration degree (µm)	MODEL S		MODEL D	
		Height (mm)	Flow rate (m³/h)	Height (mm)	Flow rate (m³/h)
WBAG PET - 01	1	430	8	810	16
WBAG PET - 05	5	430	12	810	22
WBAG PET - 10	10	430	19	810	36
WBAG PET - 25	25	430	24	810	45
WBAG PET - 50	50	430	27	810	51
WBAG PET - 80	80	430	29	810	53
WBAG PET - 100	100	430	33	810	62
WBAG PET - 200	200	430	38	810	70

Flow rates are referred to water with temperature of 20 °C and NTU < 1

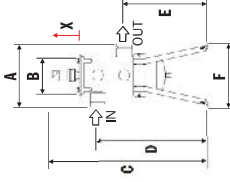
PRESSURE LOSS



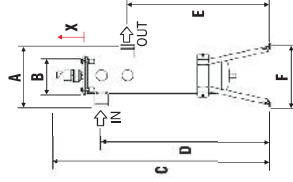
DIMENSIONS

X Demanting length

WNW S Models



WNW D Models



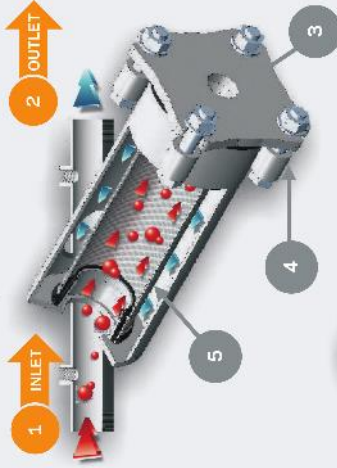
SIMPLEX FILTERS

Winnow™ SIMPLEX is a manual cleaning screen filter with a 304 or 316 stainless steel body. The internal filter element consists of a 316 stainless steel tubular screen, and some models also incorporate a polyester mesh screen for finer filtration. Filtration ranges between 25 and 2000µm. SIMPLEX filters are provided with a manual drain valve and pressure gauges as standard equipment.



FILTERING PROCESS

Water enters the filter through the inlet connection (1), flows through the filter screen element (5) from inside towards the outside, and the filtered water flows through the outlet connection (2). Suspended solids are retained on the internal surface of the filter element. The filter has a drain valve at the base of the unit for cleaning and maintenance procedures.



CLEANING PROCESS

Cleaning of the screen filter element is carried out when pressure difference between the inlet and outlet becomes apparent. The cleaning process is carried out by releasing the pressure, opening the cover (3) and removing the screen filter element (5). Typically, the screen is cleaned by hosing or pressure washing procedures. Double and Triple layer filter screens can also be separated if required.

FEATURES

- Filtration range 25 - 2000 µm
- Maximum working pressure 100 bar (1450 psi)
- Fluid maximum temperature 60°C (140°F)
- Salinity & Acidity < 10000 ppm TDS
- End connections ISO PN16/10 - BSP
- Surface finishing ANSI150 - NPT etching

MATERIALS

- Filter housing Stainless Steel 304 / 316
- Screen support Stainless Steel 316
- Seals 316 Stainless Steel / Polypropylene
- Optional 316 Stainless Steel, Duplex and Titanium Models also available on request.

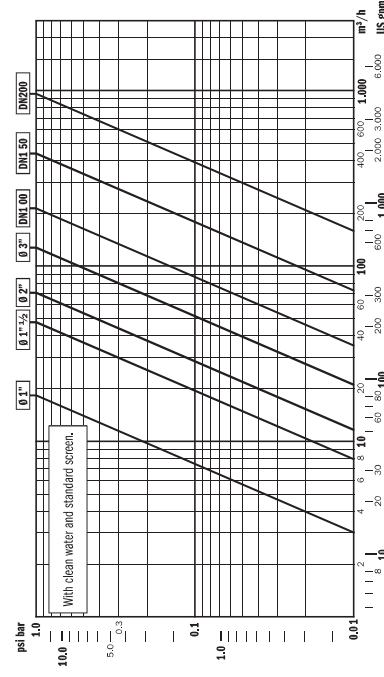


TECHNICAL DATA

MODEL	Screen Area		Maximum Flow Rate		Connections			Dimensions				Weight	
	(cm²)	(in²)	(m³/h)	(US gpm)	In/Out (in-mm)	Drain (in-mm)		A (mm)	B (mm)	C (mm)	D (mm)	X (mm)	(kg)
WSIL 2"/10A	1500	233	40	176	2"	1"		320	500	295	203	350	14
WSIL 3"/10A	1500	233	80	352	3"	1"		320	500	295	203	350	14
WSIL 100/10A	1500	233	100	440	100	1"		320	550	345	203	350	20
WSIL 3"/20	2200	341	80	352	3"	1"		320	650	295	203	500	15
WSIL 100/20	2200	341	130	572	100	1"		320	700	345	203	500	22
WSIL 100/35	3300	512	140	616	100	1"		390	705	345	235	500	30
WSIL 150/35	3300	512	250	1101	150	1"		390	705	345	235	500	36
WSIL 150/40P	5400	837	300	1321	150	1"		390	1030	345	235	800	45
WSI 2"/10A	1500	233	40	176	2"	2"		990	325	450	215	500	20
WSI 3"/10A	1500	233	80	352	3"	2"		990	325	450	215	500	20
WSI 100/10A	1500	233	100	440	100	1"		990	325	450	215	500	24
WSI 100/20	2200	341	130	572	100	1"		990	325	450	215	500	25
WSI 100/35	3300	512	140	616	100	1"		1450	390	640	245	800	57
WSI 150/35	3300	512	250	1101	150	1"		1450	390	640	245	800	59
WSI 150/40P	5400	837	300	1321	150	1"		1450	390	640	245	800	60
WSI 200/40P	5400	837	400	1760	200	1"		1450	430	640	285	800	64
WSIY 1"/5	600	93	10	44	1"	1"		430	285	280	140	300	5
WSIY 1 1/4"/5	600	93	15	66	1 1/4"	1"		430	300	275	140	300	7
WSIY 2"/10A	1500	233	40	176	2"	1"		500	360	400	225	350	14
WSIY 3"/10A	1500	233	80	352	3"	1"		520	370	450	225	350	15
WSIY 100/10A	1500	233	100	440	100	1"		565	440	550	225	350	20
WSIY 3"/20	2200	341	80	352	3"	1"		630	480	450	225	500	24
WSIY 100/20	2200	341	130	572	100	1"		670	540	550	225	500	38
WSIY 100/35	3300	512	140	616	100	1"		670	570	600	291	500	40
WSIY 150/35	3300	512	250	1101	150	1"		755	600	745	291	500	45
WSIY 150/40P	5400	837	300	1321	150	1"		960	820	745	291	800	45

Flow rates are referred to filters with filtering mesh from 120 µm and water with temperature of 20°C and NTU < 1.

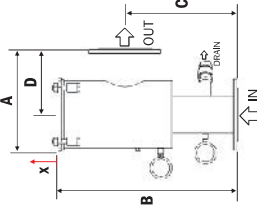
PRESSURE LOSS



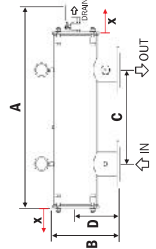
DIMENSIONS

X Dismantling length

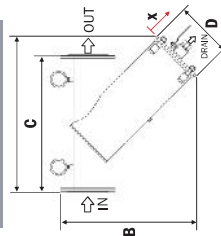
WSI L Models



WSI O Models



WSI Y Models



WINNOW™ VORTEX SEPARATORS



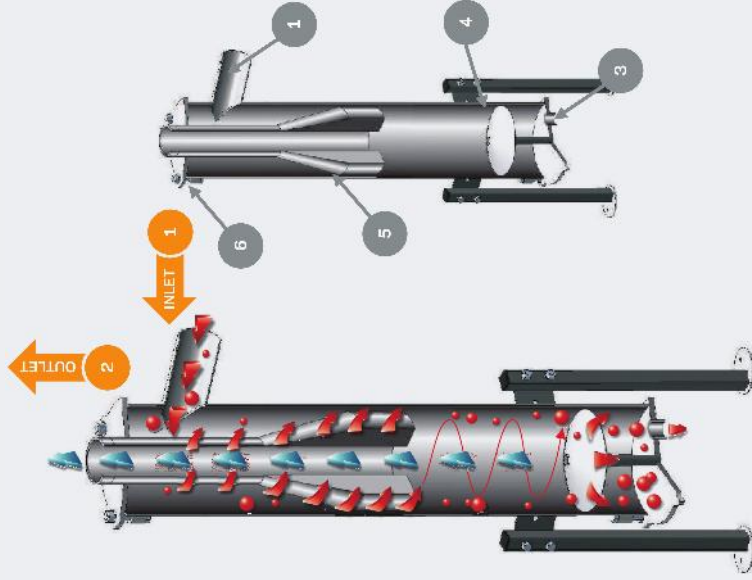
Winnow™ Vortex separators can work continuously, and do not require a filtering element or mechanical parts. Winnow™ Vortex separators have been specially designed to speed up the main flow at the entry of the filter itself, in order to create a descending water vortex inside the housing. The progressive acceleration within the specially formed internal cone, creates the centrifugal force needed for the best separation of undesired solids. The filtered water re-emerges centrally through the outlet, whilst the separated solids drop in the tank underneath a deflector and are drained outside periodically. Optional automatic drain valves are available on some models. Vortex separators are typically used in applications where there are high levels of sand, pebbles and grit in industries such as mining, irrigation, desalination and other water and wastewater applications.

VORTEX FILTERS

Winnow™ VORTEX is a centrifugal separator with a 304 or 316 stainless steel body and a manual drain at the base. It is particularly designed to treat water containing sands and/or suspended solids of a specific gravity superior to the water. The separator is capable of removing up to 99% of sands and/or suspended solids with dimensions bigger than 75µm and up to 65% with dimensions larger than 50µm. It has been designed to minimise water wastage, whilst maintaining the best separating efficiency. VORTEX separators work continuously, and do not require a filtering element or mechanical parts. VORTEX separators can be cleaned by manually opening the drain valve, or an optional automatic drain valve is available for larger applications.

SEPARATING PROCESS

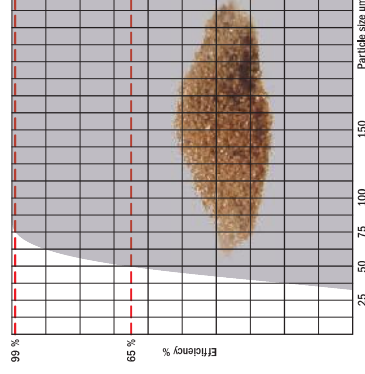
The inlet (1) has been designed to speed up the main flow at the entry of the filter itself, in order to favour a descending water vortex inside the housing (6). The progressive acceleration within the special internal cone (5), creates the centrifugal force needed for the best separation of undesired solids. The filtered water re-emerges centrally through the outlet (2), whilst the separated solids drop in the tank underneath the deflector (4) and are drained outside (3).



TECHNICAL DATA

MODEL	Minimum Flow Rate		Maximum Flow Rate		Connections		Dimensions					Weight
	(m³/h)	(US gpm)	(m³/h)	(US gpm)	In/Out	(in-mm)	A	B	C	D	E	X
							(mm)	(mm)	(mm)	(mm)	(mm)	(kg)
WX ¾"	2	9	4	18	¾"	180	525	155	110	30	220	9
WX 1"	4	18	9	40	1"	205	860	155	120	40	220	15
WX 1½"	8	35	18	79	1½"	260	1060	195	160	45	220	23
WX 2"	15	66	30	132	2"	300	1200	205	190	55	220	30
WX 3"	25	110	60	264	3"	370	1600	265	230	65	220	51
WX 100	54	238	105	462	100	470	1860	315	300	80	250	85
WX 150	95	418	190	836	150	590	2150	335	400	80	300	105
WX 150P	180	792	300	1320	150	630	2300	505	405	125	300	130

SEPARATION EFFICIENCY



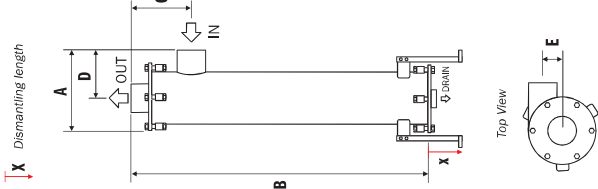
FEATURES

- Filtration range: 50 - 1000 µm
- Maximum working pressure: 100 bar (1450 psi)
- Fluid maximum temperature: 60°C (140°F)
- Salinity & Acidity: < 10000 ppm TDS
- 9-3 (pH)
- ISO PN16/10 - BSP
- ANSI150 - NPT
- etching
- End connections
- Surface finishing

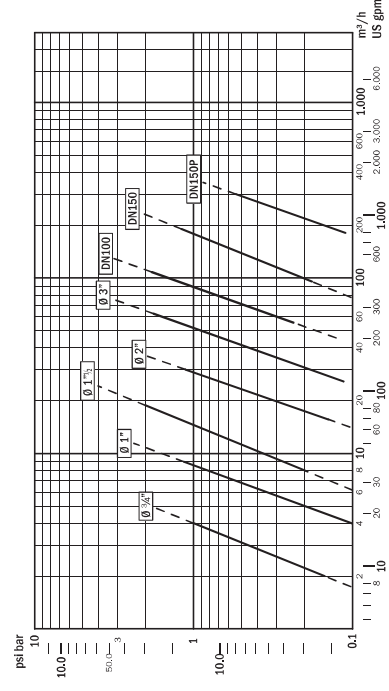
MATERIALS

- Filter housing: Stainless Steel 304 / 316
- Accelerator cone: Plastic
- Deflector: Stainless Steel 304 / 316
- Seals: Epdm
- Optional 316 Stainless Steel, Duplex and Titanium Models also available on request.

DIMENSIONS



PRESSURE LOSS



VACUUM TECHNOLOGY



WinnowTM Vacuum Technology uses rotating suction heads that suck suspended solids from the screen during the cleaning process. Vacuum technology is typically used for applications such as irrigation, HVAC, food & beverage, pulp & paper, desalination and other water treatment industries.

VACUUM FILTERS

Winnow™ VACUUM is a semi-automatic cleaning screen filter. The internal filter element is a triple layer screen - which consists of two 316 stainless steel tubular screens, and a polyester mesh screen for high quality filtration. Filtration ranges between 25 and 81.0µm. The filter screen is cleaned using a series of manually operated suction heads that are manually rotated by the external handle. The filter is supplied with a manual drain valve and pressure gauges as standard equipment. For best performance, the VACUUM needs an inlet pressure of at least 3 bars. During cleaning, this filter can continue to produce permeate water.

FILTERING PROCESS

Water enters the filter through the inlet connection (1), flows through the triple layer filter screen element (4) from inside towards the outside, and the filtered water flows through the outlet connection (2). Suspended solids are retained on the internal surface of the filter element.



FEATURES

- Filtration range 25 - 81.0 µm
- Maximum working pressure 1.00 bar (14.50 psi)
- Fluid maximum temperature 60°C (140°F)
- Salinity & Acidity < 10,000 ppm TDS
- End connections ISO PN16/10 - BSP
- Surface finishing ANSI150 - NPT etching

MATERIALS

- Filter housing Stainless Steel 304 / 316
- Screen support Stainless Steel 316
- Screen 316 Stainless Steel / Polyester
- Seals EPDM
- Optional 316 Stainless Steel, Duplex and Titanium Models also available on request.

CLEANING PROCESS

Cleaning of the screen filter element is carried out when an increased pressure difference between the inlet and outlet becomes apparent. Cleaning process requires opening of the drain valve (3) and manual rotation of the suction heads (7) by turning the handle (6) - allowing the suspended solids to be sucked from the screen and flush out the drain valve. The cleaning process for VACUUM filters does not require removal of the filter housing cover (5), and can be cleaned without stopping the permeate flow.

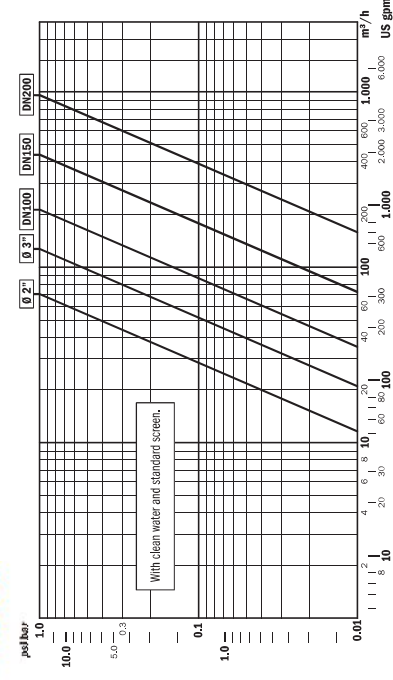


TECHNICAL DATA

MODEL	Screen Area		Maximum Flow Rate		Connections		Dimensions				Weight	
	(cm²)	(in²)	(m³/h)	(US gpm)	In/Out (in-mm)	Drain (in-mm)	A (mm)	B (mm)	C (mm)	D (mm)	X (mm)	(kg)
WVA L 2" / 10A	1500	233	40	176	2"	1 1/2"	320	750	295	203	350	17
WVA L 3" / 10A	1500	233	80	352	3"	1 1/2"	320	750	295	203	350	18
WVA L 100/10A	1500	233	100	440	100	1 1/2"	320	800	345	203	350	22
WVA L 100/20	2200	341	130	572	100	1 1/2"	320	950	345	203	500	27
WVA L 100/35	3300	512	140	616	100	1 1/2"	320	950	345	235	500	40
WVA L 150/35	3300	512	250	1,101	150	1 1/2"	320	950	345	235	500	42
WVA L 150/40P	5400	837	300	1,321	150	1 1/2"	350	1250	345	235	800	50
WVA L 200/40P	5400	837	400	1,760	200	1 1/2"	350	1250	365	235	800	55
WVA O 2" / 10A	1500	233	40	176	2"	1 1/2"	1100	360	450	215	350	27
WVA O 3" / 10A	1500	233	80	352	3"	1 1/2"	1100	360	450	215	350	27
WVA O 100/10A	1500	233	100	440	100	1 1/2"	1100	360	450	215	500	32
WVA O 100/20	2200	341	130	572	100	1 1/2"	1100	360	450	215	500	33
WVA O 100/35	3300	512	140	616	100	1 1/2"	1550	390	640	245	500	62
WVA O 150/35	3300	512	250	1,101	150	1 1/2"	1550	390	640	245	500	65
WVA O 150/40P	5400	837	300	1,321	150	1 1/2"	1550	430	640	245	800	68
WVA O 200/40P	5400	837	400	1,760	200	1 1/2"	1550	470	640	245	800	70
WVA Y 2" / 10A	1500	233	40	176	2"	1 1/2"	640	450	395	130	350	17
WVA Y 3" / 10A	1500	233	80	352	3"	1 1/2"	670	470	450	130	350	18
WVA Y 100/20	2200	341	130	572	100	1 1/2"	820	650	550	130	500	27
WVA Y 100/35	3300	512	140	616	100	1 1/2"	820	650	600	130	500	40
WVA Y 150/35	3300	512	250	1,101	150	1 1/2"	900	700	745	130	500	42
WVA Y 150/40P	5400	837	300	1,321	150	1 1/2"	1150	900	745	170	800	50

Flow rates are referred to filters with filtering mesh from 120 µm and water with temperature of 20°C and NTU < 1.

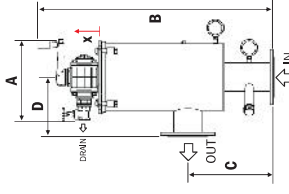
PRESSURE LOSS



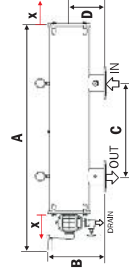
DIMENSIONS

X Dismantling length

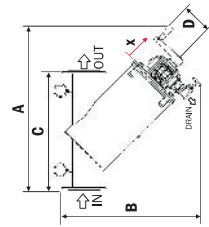
WVA L Models



WVA O Models



WVA Y Models

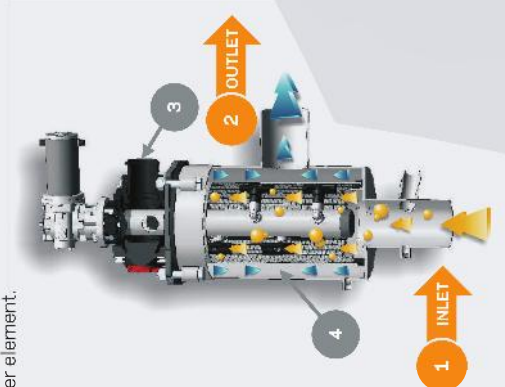


ROTOR FILTERS

Winnow™ ROTOR is an automatic self-cleaning screen filter with a 304 or 316 stainless steel body. The internal filter element is a triple layer screen – which consists of two 316 stainless steel tubular screens, and a polyester mesh screen for high quality filtration. Filtration ranges between 25 and 810µm. The filter screen is cleaned using a series of automatically operated suction heads that are rotated by a 24 Volt electric motor. The filter is supplied with the automatic controls, flow valves and pressure gauges as standard equipment. For best performance, the ROTOR needs an inlet pressure of at least 3 bars. During cleaning, this filter can continue to produce permeate water.

FILTERING PROCESS

Water enters the filter through the inlet connection (1), flows through the filter screen element (4) from inside towards the outside, and the filtered water flows through the outlet connection (2). Suspended solids are retained on the internal surface of the filter element.



CLEANING PROCESS

Cleaning of the screen filter element automatically takes place when an increased pressure difference between the inlet and outlet exceeds a given value. Cleaning processes automatically activates as rotation of the suction pads (5) by the 24 Volt electric motor (7) – allowing the suspended solids to be sucked from the screen and flushed out the drain valve. The cleaning process for ROTOR filters does not require removal of the filter housing cover (6), and can be cleaned without stopping the permeate flow.

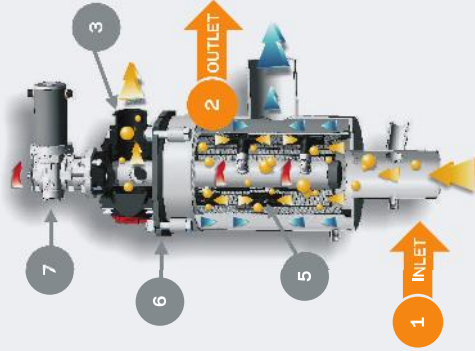


FEATURES

- Filtration range 25 - 810 µm
- Maximum working pressure 100 bar (1,450 psi)
- Fluid maximum temperature 50°C (140°F)
- Salinity & Acidity < 10000 ppm TDS
- End connections ISO PN16/10 - BSP
- Surface finishing ANSI150 - NPT

MATERIALS

- Filter housing Stainless Steel 304 / 316
- Screen support Stainless Steel 316
- Seals 316 Stainless Steel / Polyester
- Optional 316 Stainless Steel, Duplex and Titanium Models also available on request.

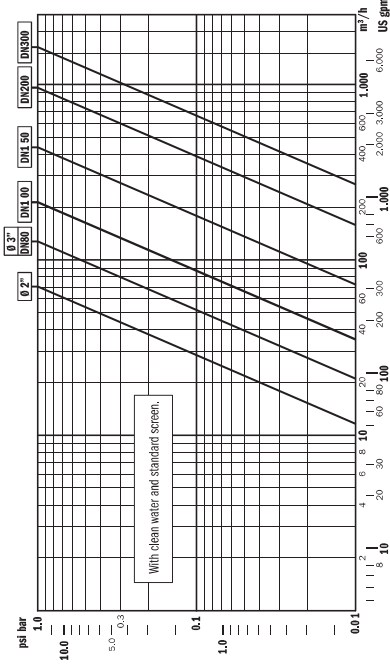


TECHNICAL DATA

MODEL	Screen Area		Maximum Flow Rate		Connections		Dimensions				Weight	
	(cm²)	(in²)	(m³/h)	(US gpm)	In/Out (in-mm)	Drain (in-mm)	A (mm)	B (mm)	C (mm)	D (mm)	X (mm)	(kg)
WROM L2 7/10A	1500	233	40	176	2"	1 1/4"	500	750	295	203	350	24
WROM L3 7/10A	1500	233	80	352	3"	1 1/4"	500	750	295	203	350	24
WROM L8 0/10A	1500	233	80	352	80	1"	500	750	295	203	350	29
WROM L1 00/10A	1500	233	100	440	100	1"	500	800	345	203	350	30
WROM L3 7/20	2200	341	80	352	3"	1"	500	890	345	203	500	27
WROM L8 0/20	2200	341	80	352	80	1"	500	890	345	203	500	30
WROM L1 00/20	2200	341	100	440	100	1"	500	890	345	203	500	33
WROM L1 00/35	3300	512	140	616	100	1"	540	950	345	235	500	41
WROM L1 50/35	3300	512	250	1100	150	1"	540	950	345	235	500	45
WROM L1 00/40P	5400	837	150	660	100	1"	540	950	345	235	500	50
WROM L1 50/40P	5400	837	300	1320	150	1"	540	1250	345	235	800	55
WROM L2 00/40P	5400	837	400	1760	200	1"	540	1250	365	235	800	59
WROM L3 00/100	10000	1550	800	3520	300	3"	670	1850	665	435	1100	140
WROM O2 7/10A	1500	233	40	176	2"	1 1/4"	1100	310	450	215	350	38
WROM O3 7/10A	1500	233	80	352	3"	1 1/4"	1100	310	450	215	350	38
WROM O8 0/10A	1500	233	80	352	80	1"	1100	310	450	215	350	43
WROM O1 00/10A	1500	233	100	440	100	1"	1100	310	450	215	350	43
WROM O3 7/20	2200	341	80	352	3"	1"	1100	310	450	215	500	39
WROM O8 0/20	2200	341	80	352	80	1"	1100	310	450	215	500	43
WROM O1 00/20	2200	341	100	440	100	1"	1100	310	450	215	500	44
WROM O1 00/35	3300	512	140	616	100	1"	1100	310	450	215	500	44
WROM O1 50/35	3300	512	250	1100	150	1"	1560	410	640	345	800	68
WROM O1 00/40P	5400	837	150	660	100	1"	1560	410	640	345	800	72
WROM O1 50/40P	5400	837	300	1320	150	1"	1560	410	640	345	800	74
WROM O2 00/40P	5400	837	400	1760	200	1"	1560	450	640	285	800	80
WROM O3 00/100	10000	1550	800	3520	300	3"	2500	700	1000	450	1100	175
WROM L2 7/10A	1500	233	40	176	2"	1 1/4"	600	700	400	165	350	23
WROM L3 7/10A	1500	233	80	352	3"	1 1/4"	620	720	450	165	350	24
WROM L8 0/10A	1500	233	80	352	80	1"	620	720	450	165	350	28
WROM L1 00/10A	1500	233	100	440	100	1"	650	740	550	165	350	30
WROM L3 7/20	2200	341	80	352	3"	1"	720	800	450	165	500	27
WROM L8 0/20	2200	341	80	352	80	1"	720	830	450	165	500	32
WROM L1 00/20	2200	341	100	440	100	1"	800	830	550	165	500	33
WROM L1 00/35	3300	512	140	616	100	1"	800	840	600	165	500	41
WROM L1 50/35	3300	512	250	1100	150	1"	840	900	745	165	500	48
WROM L1 00/40P	5400	837	150	660	100	1"	1000	1000	600	165	500	50
WROM L1 50/40P	5400	837	300	1320	150	1"	1000	1100	745	165	800	57

Flow rates are referred to filters with filtering mesh from 120 µm and water with temperature of 20 °C and NTU < 1.

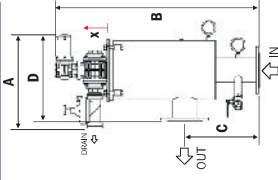
PRESSURE LOSS



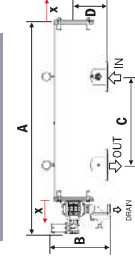
DIMENSIONS

X Dismantling length

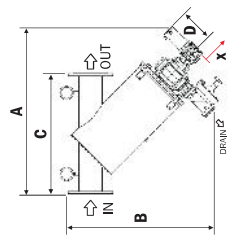
WROM L Models



WROM O Models



WROM Y Models



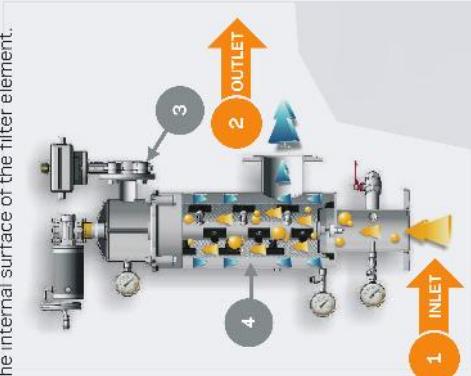
ROTOR HP FILTERS

Winnow™ ROTOR HP is an automatic self-cleaning screen filter with a 304 or 316 stainless steel body designed for extreme conditions. The internal filter element is a triple layer screen – which consists of two 316 stainless steel tubular screens, and a polyester mesh screen for high quality filtration. Filtration ranges between 25 and 810µm. The filter screen is cleaned using a series of automatically operated suction heads that are rotated by a 24 Volt electric motor. The filter is supplied with the automatic controls, flow valves and pressure gauges as standard equipment. For best performance, the ROTOR HP needs an inlet pressure of at least 3 bars.

During cleaning, this filter can continue to produce permeate water.

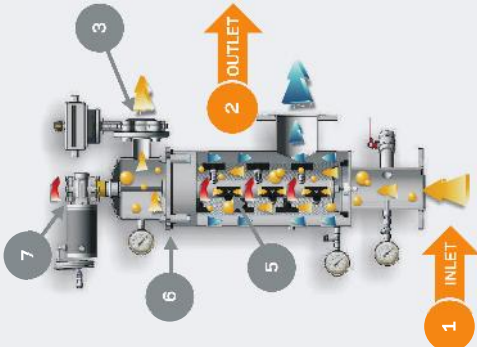
FILTERING PROCESS

Water enters the filter through the inlet connection (1), flows through the filter screen element (4) from inside towards the outside, and the filtered water flows through the outlet connection (2). Suspended solids are retained on the internal surface of the filter element.



CLEANING PROCESS

Cleaning of the screen filter element automatically takes place when an increased pressure difference between the inlet and outlet exceeds a given value. The cleaning process automatically activates as required by opening the drain valve (3) and automatic rotation of the suction heads (5) by the 24 Volt electric motor (7) - allowing the suspended solids to be sucked from the screen and flushed out the drain valve. The cleaning process for ROTOR HP filters does not require removal of the filter housing cover (6), and can be cleaned without stopping the permeate flow.



FEATURES

- Filtration range 25 - 810 µm
- Maximum working pressure 100 bar (1450 psi)
- Fluid maximum temperature 60°C (140°F)
- Salinity & Acidity < 10000 ppm TDS
- End connections 9-3 (ph)
- ISO PN16/10 - BSP
- ANSI150 - NPT
- Surface finishing etching

MATERIALS

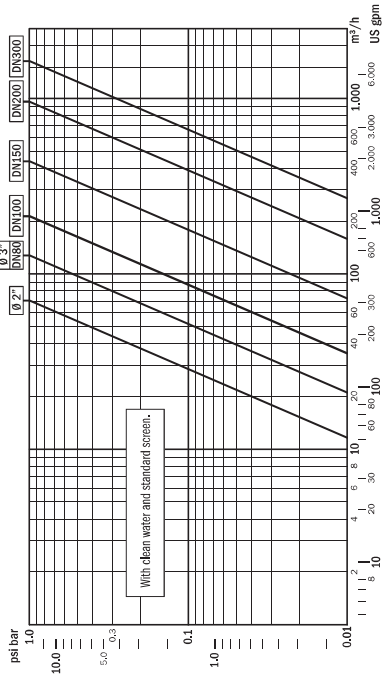
- Filter housing Stainless Steel 304 / 316
- Screen support Stainless Steel 316
- Screen 316 Stainless Steel / Polyester
- Seals Epdm
- Optional 316 Stainless Steel, Duplex and Titanium Models also available on request.

TECHNICAL DATA

MODEL	Screen Area		Maximum Flow Rate		Connections		Dimensions				Weight	
	(cm²)	(in²)	(m³/h)	(US gpm)	In/Out (in-mm)	Drain (in-mm)	A (mm)	B (mm)	C (mm)	D (mm)	X (mm)	(kg)
WRM HP L 2"/10A	1500	233	40	176	2"	40	490	800	296	203	400	27
WRM HP L 3"/10A	1500	233	80	352	3"	40	490	800	296	203	400	27
WRM HP L 80/10A	1500	233	80	352	80	40	490	800	296	203	400	32
WRM HP L 100/10A	1500	233	100	440	100	40	490	850	346	203	400	33
WRM HP L 13"/20	2200	341	80	352	3"	40	490	960	296	203	600	31
WRM HP L 80/20	2200	341	80	352	80	40	490	960	296	203	600	35
WRM HP L 100/20	2200	341	130	572	100	40	490	1010	346	203	600	36
WRM HP L 100/35	3300	512	140	616	100	50	550	1025	346	237	800	45
WRM HP L 150/35	3300	512	250	1100	150	50	550	1025	346	237	800	49
WRM HP L 100/40P	5400	837	150	660	100	50	550	1330	346	237	800	54
WRM HP L 150/40P	5400	837	300	1320	150	50	550	1330	346	237	850	68
WRM HP L 200/40P	5400	837	400	1760	200	50	550	1330	366	237	850	63
WRM HP L 300/100	10000	1550	800	3520	300	80	670	1850	665	435	1100	140
WRM HP 0 2"/10A	1500	233	40	176	2"	40	1150	440	450	213	400	41
WRM HP 0 3"/10A	1500	233	80	352	3"	40	1150	440	450	213	400	41
WRM HP 0 80/10A	1500	233	80	352	80	40	1150	440	450	213	400	45
WRM HP 0 100/10A	1500	233	100	440	100	40	1150	440	450	213	400	46
WRM HP 0 13"/20	2200	341	80	352	3"	40	1150	440	450	213	550	42
WRM HP 0 80/20	2200	341	80	352	80	40	1150	440	450	213	550	47
WRM HP 0 100/20	2200	341	130	572	100	40	1150	440	450	213	550	47
WRM HP 0 150/35	3300	512	140	616	100	50	1630	470	640	346	850	72
WRM HP 0 150/35	3300	512	250	1100	150	50	1630	470	640	346	850	76
WRM HP 0 100/40P	5400	837	150	660	100	50	1630	470	640	246	850	74
WRM HP 0 150/40P	5400	837	300	1320	150	50	1630	470	640	246	850	78
WRM HP 0 200/40P	5400	837	400	1760	200	50	1630	480	640	286	850	84
WRM HP 0 300/100	10000	1550	800	3520	300	80	2500	700	1000	450	1100	175
WRM HP Y 2"/10A	1500	233	40	176	2"	40	690	640	395	165	400	26
WRM HP Y 3"/10A	1500	233	80	352	3"	40	720	650	447	165	400	27
WRM HP Y 80/10A	1500	233	80	352	80	40	720	710	447	165	400	31
WRM HP Y 100/10A	1500	233	100	440	100	40	760	720	550	165	400	33
WRM HP Y 13"/20	2200	341	80	352	3"	40	830	760	447	165	550	31
WRM HP Y 80/20	2200	341	80	352	80	40	830	820	447	165	550	35
WRM HP Y 100/20	2200	341	130	572	100	40	870	830	550	165	550	36
WRM HP Y 150/35	3300	512	140	616	100	50	870	860	600	165	550	45
WRM HP Y 150/35	3300	512	250	1100	150	50	950	890	740	165	550	51
WRM HP Y 100/40P	5400	837	150	660	100	50	1090	1070	600	165	850	54
WRM HP Y 150/40P	5400	837	300	1320	150	50	1160	1100	745	165	850	61

Flow rates are referred to filters with filtering mesh from 120 µm and water with temperature of 20 °C and NTU < 1.

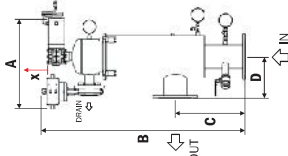
PRESSURE LOSS



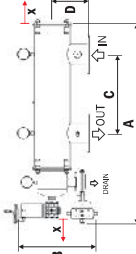
DIMENSIONS

X Dismantling length

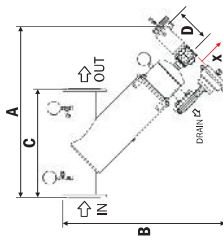
WROM HP L Models



WROM HP O Models



WROM HP Y Models

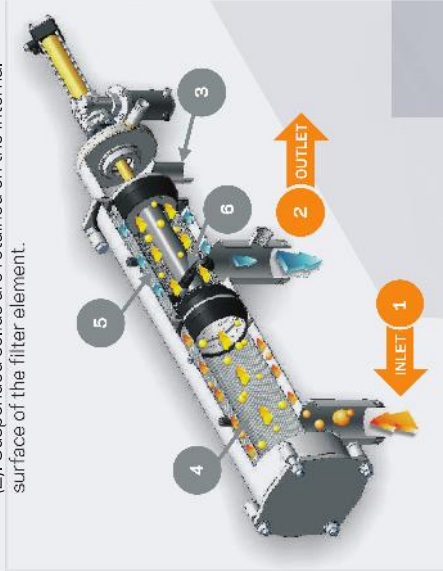


VTO FILTERS

Winnow™ VTO is an automatic self-cleaning screen filter with a 304 or 316 stainless steel body. The internal filter element is a triple layer screen - which consists of two 316 stainless steel tubular screens, and a polyester mesh screen for high quality filtration. Filtration ranges between 25 and 810µm. The filter screen is cleaned using a series of automatically operated suction heads that are rotated by a 24 Volt electric motor. The filter is supplied with the automatic controls, flow valves and pressure gauges as standard equipment. For best performance, the VTO needs an inlet pressure of at least 3 bars. During cleaning, this filter can continue to produce permeate water.

FILTERING PROCESS

Water enters the filter through the inlet connection (1), flows through the filter screen element (4) from inside towards the outside, and the filtered water flows through the outlet connection (2). Suspended solids are retained on the internal surface of the filter element.



FEATURES

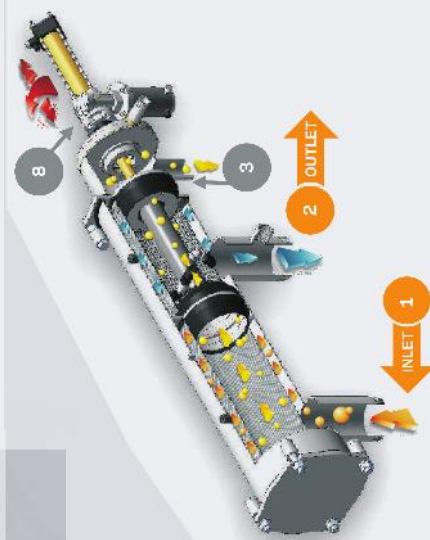
- Filtration range 25 - 810 µm
- Maximum working pressure 100 bar (1450 psi)
- Fluid maximum temperature 60°C (140°F)
- Salinity & Acidity < 10000 ppm TDS
- 9-3 pH
- End connections ISO PN16/10 - BSP
- Surface finishing ANSI150 - NPT etching

MATERIALS

- Filter housing Stainless Steel 304 / 316
- Screen support Stainless Steel 316
- Seals 316 Stainless Steel / Polyester
- Optional 316 Stainless Steel, Duplex and Titanium Models also available on request.

CLEANING PROCESS

Cleaning of the screen filter element automatically takes place when an increased pressure difference between the inlet and outlet exceeds a given value. The Cleaning process automatically activates as required by opening the drain valve (3) and automatic rotation of the suction heads (6) by the 24 Volt electric motor (8) - allowing the suspended solids to be sucked from the screen and flushed out the drain valve. The cleaning process for VTO filters does not require removal of the filter housing cover and can be cleaned without stopping the permeate flow.

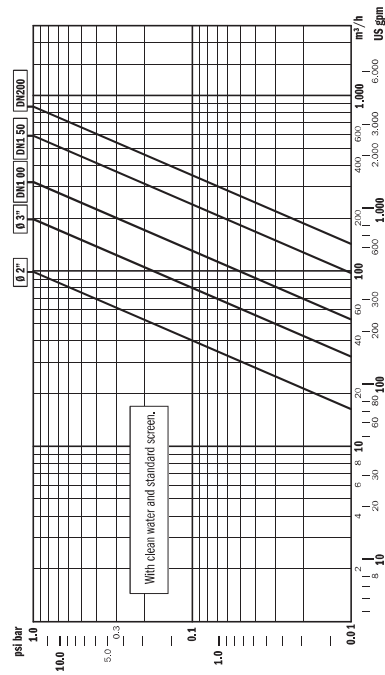


TECHNICAL DATA

MODEL	Screen Area		Maximum Flow Rate		Connections		Dimensions				Weight	
	(cm²)	(in²)	(m³/h)	(US gpm)	In/Out (in-mm)	Drain (in-mm)	A (mm)	B (mm)	C (mm)	D (mm)	X (mm)	(kg)
WWTM L 2" /10A	1500	233	40	176	2"	1 1/2"	500	1000	295	203	350	22
WWTM L 3" /10A	1500	233	80	352	3"	1 1/2"	500	1000	295	203	350	23
WWTM L 100 /10A	1500	233	100	440	100	1 1/2"	500	1050	345	203	350	33
WWTM L 100 /20	2200	341	130	572	100	1 1/2"	500	1200	345	203	500	35
WWTM L 100 /35	3300	512	140	616	100	2"	540	1200	345	235	500	50
WWTM L 150 /35	3300	512	250	1100	150	2"	540	1200	345	235	500	52
WWTM L 150 /40P	5400	837	300	1320	150	2"	540	1500	345	235	800	58
WWTM O 2" /10A	1500	233	40	176	2"	1 1/2"	1350	340	450	215	500	31
WWTM O 3" /10A	1500	233	80	352	3"	1 1/2"	1350	340	450	215	500	32
WWTM O 100 /10A	1500	233	100	440	100	1 1/2"	1350	340	450	215	500	37
WWTM O 3" /20	2200	341	80	352	3"	1 1/2"	1350	340	450	215	500	32
WWTM O 100 /20	2200	341	130	572	100	1 1/2"	1350	340	450	215	500	37
WWTM O 100 /35	3300	512	140	616	100	2"	1820	410	640	245	800	67
WWTM O 150 /35	3300	512	250	1101	150	2"	1820	410	640	245	800	68
WWTM O 150 /40P	5400	837	300	1321	150	2"	1820	410	640	245	800	69
WWTM O 200 /40P	5400	837	400	1760	200	2"	1820	450	640	285	800	72
WWTM O 200 /50	6800	1054	450	1980	200	2"	2100	450	670	285	1000	85
WWTM Y 2" /10A	1500	233	40	176	2"	1 1/2"	730	790	395	165	350	22
WWTM Y 3" /10A	1500	233	80	352	3"	1 1/2"	760	800	450	165	350	23
WWTM Y 100 /20	2200	341	130	572	100	1 1/2"	900	920	550	165	500	32
WWTM Y 100 /35	3300	512	140	616	100	2"	900	930	600	165	500	43
WWTM Y 150 /35	3300	512	250	1101	150	2"	990	950	745	165	500	47
WWTM Y 150 /40P	5400	837	300	1321	150	2"	1200	1200	745	200	800	57

Flow rates are referred to filters with filtering mesh from 120 µm and water with temperature of 20 °C and NTU < 1.

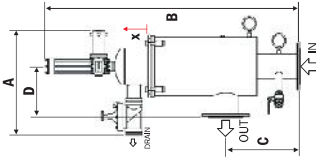
PRESSURE LOSS



DIMENSIONS

X Dismantling length

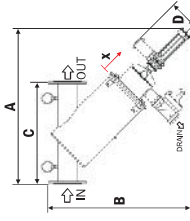
WWTM L Models



WWTM O Models



WWTM Y Models



WINNOWNTM

BRUSH TECHNOLOGY



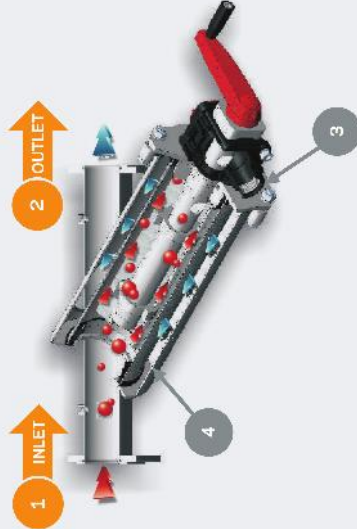
WinnowTM Brush Technology uses a series of rotating brushes and water flow to scrape and flush-out suspended solids during the cleaning process. Brush technology is typically used in applications where there is a high content of suspended solids or sticky particles are present. Typical applications are wastewater, sewage, mining, dam water, food processors, and other industrial applications.

BRUSH FILTERS

Winnow™ BRUSH is a semi-automatic cleaning screen filter with a 304 or 316 stainless steel body. The internal filter element consists of a 316 stainless steel tubular screen, and some models have a double or a triple layer screen - which also incorporates a polyester mesh screen for finer filtration. Filtration ranges between 25 and 2000µm. The filter screen is cleaned using a series of manually operated brushes that are rotated by cranking the external handle. The filter is supplied with a manual drain valve and pressure gauges as standard equipment. For best performance, the BRUSH filter needs an inlet pressure of at least 2 bars.

FILTERING PROCESS

Water enters the filter through the inlet connection (1), flows through the filter screen element (4) from inside towards the outside, and the filtered water flows through the outlet connection (2). Suspended solids are retained on the internal surface of the filter element.



CLEANING PROCESS

Cleaning of the screen filter element is carried out when an increased pressure difference between the inlet and outlet becomes apparent. Cleaning process requires stopping the downstream flow (closure of the outlet connection [2]) - this generates static pressure inside the filter housing and helps the removal of debris from the internal surface of the filter screen. Opening of the drain valve (3) and manual rotation of the brushes (5) by turning the handle (7) allows the suspended solids to dislodge from the screen and flush out the drain valve. The cleaning process for BRUSH filters does not require removal of the filter housing cover (5).



TECHNICAL DATA

MODEL	Screen Area		Maximum Flow Rate		Connections		Dimensions				Weight	
	(cm²)	(ft²)	(m³/h)	(US gpm)	In/Out	Drain	A	B	C	D	X	X
					(in-mm)	(in-mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(kg)
WBR Y 2"/10A	1500	233	40	176	2"	1 1/2"	640	470	445	130	350	17
WBR Y 3"/10A	1500	233	80	352	3"	1 1/2"	670	485	510	130	350	18
WBR Y 3"/20	2200	341	80	352	3"	1 1/2"	780	595	510	120	500	22
WBR Y 100/20	2200	341	130	572	100	1 1/2"	820	660	600	130	500	27
WBR Y 100/35	3300	512	140	616	100	1 1/2"	820	660	650	130	500	42
WBR Y 150/35	3300	512	250	1,100	150	1 1/2"	890	690	800	130	500	54
WBR Y 150/40P	5400	837	300	1,320	150	2"	1140	900	800	170	800	61

Flow rates are referred to filters with filtering mesh from 120 µm and water with temperature of 20 °C and NTU < 1.

FEATURES

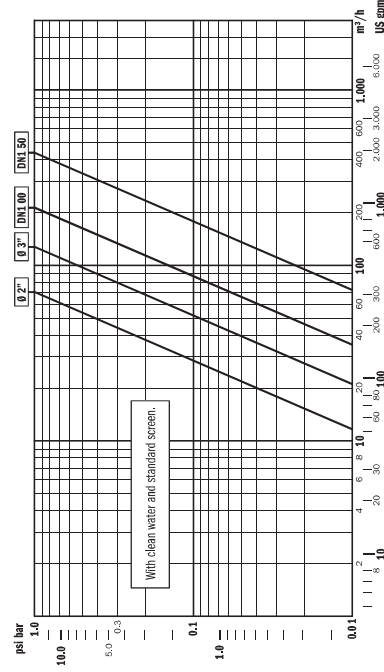
- Filtration range 25 - 2000 µm
- Maximum working pressure 100 bar (1450 psi)
- Fluid maximum temperature 60°C (140°F)
- Salinity & Acidity < 10000 ppm TDS
- 9-3 ph
- End connections ISO PN16/10 - BSP
- ANSI 50 - NPT
- Surface finishing etching



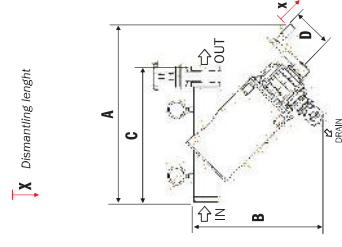
MATERIALS

- Filter housing Stainless Steel 304 / 316
- Screen support Stainless Steel 316
- Screen 316 Stainless Steel / Polyester
- Seals Epdm
- Optional 316 Stainless Steel, Duplex and Titanium Models also available on request.

PRESSURE LOSS



DIMENSIONS



TURBONET FILTERS

Winnow™ TURBONET is an automatic self-cleaning screen filter with a 304 or 316 stainless steel body. The internal filter element consists of a 316 stainless steel tubular screen, and some models have a double or a triple layer screen - which also incorporates a polyester mesh screen for finer filtration. Filtration ranges between 25 and 2000µm. The filter screen is cleaned using a series of automatically operated brushes that are rotated by a 24 Volt electric motor. The filter is supplied with the automatic controls, flow valves and pressure gauges as standard equipment. For best performance, the BRUSH needs an inlet pressure of at least 2 bars. During cleaning the outlet flow is automatically stopped.



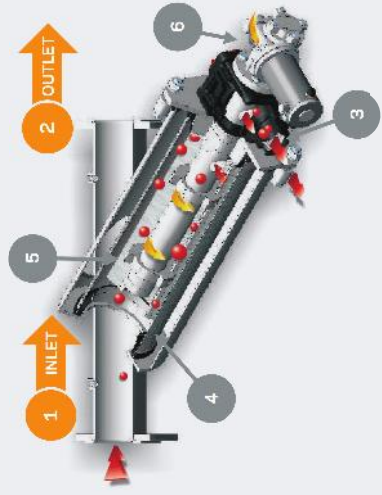
FILTERING PROCESS

Water enters the filter through the inlet connection (1), flows through the filter screen element (4) from inside towards the outside, and the filtered water flows through the outlet connection (2). Suspended solids are retained on the internal surface of the filter element.



CLEANING PROCESS

Cleaning of the screen filter element automatically takes place when an increased pressure difference between the inlet and outlet exceeds a given value. Cleaning process requires stopping the downstream flow (closure of the outlet connection [2]) - this generates static pressure inside the filter housing and helps the removal of debris from the internal surface of the filter screen. Automatic opening of the drain valve (3) and automatic rotation of the brushes (5) allows the suspended solids to dislodge from the screen and flush out the drain valve.



TECHNICAL DATA

MODEL	Screen Area		Maximum Flow Rate		Connections		Dimensions				Weight	
	(cm ²)	(ft ²)	(m ³ /h)	(US gpm)	In/Out	Drain (In-mm)	A (mm)	B (mm)	C (mm)	D (mm)	X (mm)	(kg)
WTUM Y 2"/10A	1500	233	40	176	2"	1"	450	700	550	165	350	28
WTUM Y 3"/10A	1500	233	80	352	3"	1"	500	720	660	165	350	30
WTUM Y 100/20	2200	341	130	572	100	1 1/2	650	840	850	165	500	52
WTUM Y 100/35	3300	512	140	616	100	1 1/2	710	870	900	165	500	60
WTUM Y 150/35	3300	512	250	1101	150	1 1/2	750	890	1095	165	500	90
WTUM Y 150/40P	5400	837	300	1324	150	2"	970	1100	1095	190	800	99

Flow rates are referred to filters with filtering mesh from 120 µm and water with temperature of 20°C and NTU < 1.

FEATURES

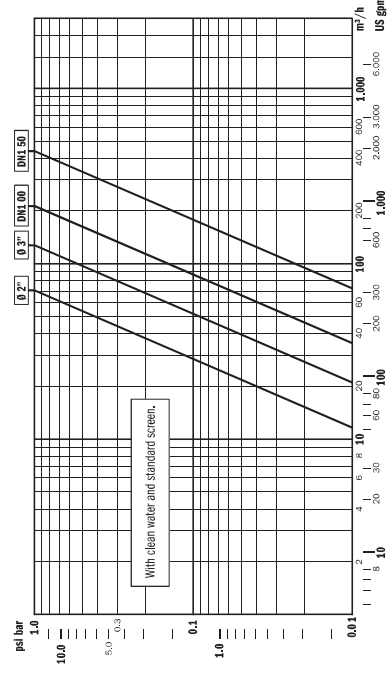
- Filtration range 25 - 2000 µm
- Maximum working pressure 100 bar (1450 psi)
- Fluid maximum temperature 60°C (140°F)
- Salinity & acidity < 10000 ppm TDS PH 9-3
- End connections ISO PN16/10 - BSP
- Surface finishing ANSI 50 - NPT etching



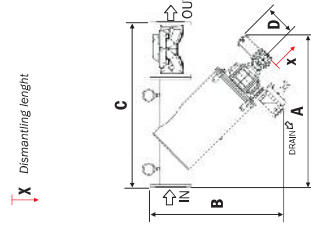
MATERIALS

- Filter housing Stainless Steel 304 / 316
- Screen support Stainless Steel 316
- Screen 316 Stainless Steel / Polyester
- Seals Epdm
- Optional 316 Stainless Steel, Duplex and Titanium Models also available on request.

PRESSURE LOSS



DIMENSIONS



HYDRO-JET TECHNOLOGY



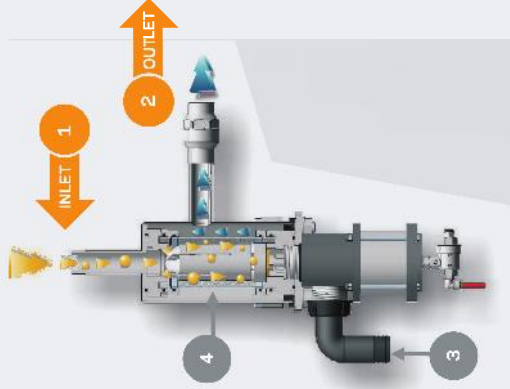
Winnow™ Hydro-Jet Technology uses rotating, high pressure water jets that lift suspended solids from the screen during the cleaning process. And flush the suspended solids out the drain. Hydro-Jet technology can be used in lower pressure inflow applications, and is typically used in industrial industries such as petrochemical, electrical, pharmaceutical, automotive, plastics, marine and wastewater.

ACQUASPEED FILTERS

Winnow™ AQUASPEED is an automatic self-cleaning screen filter with a 304 or 316 stainless steel body. AQUASPEED filters are designed for lower flow rates and incorporates of a 316 stainless steel tubular screen, and some models have a double or a triple layer screen - which also incorporates a polyester mesh screen for finer filtration. Filtration ranges between 25 and 400µm. The filter screen is cleaned using a series of automatically operated water jets that are pressurised by the incoming water pressure. The filter is supplied with the automatic controls, flow valves and pressure gauges as standard equipment. For best performance, the AQUASPEED needs an inlet pressure of at least 3 bars.

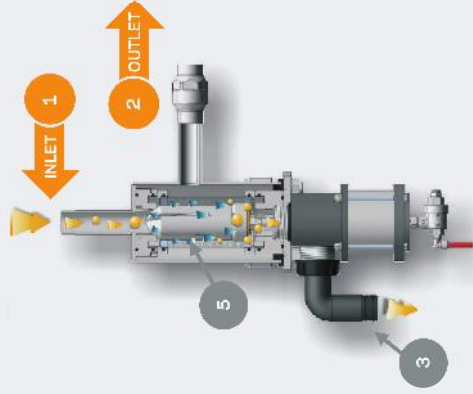
FILTERING PROCESS

Water enters the filter through the inlet connection (1), flows through the filter screen element (4) from inside towards the outside, and the filtered water flows through the outlet connection (2). Suspended solids are retained on the internal surface of the filter element.



CLEANING PROCESS

Cleaning of the screen filter element automatically takes place when an increased pressure difference between the inlet and outlet exceeds a given value. Cleaning process requires stopping the downstream flow (closure of the outlet valve (2)), automatic opening of the drain valve (3) and automatic operation of the water jets (5) that are pressurised by the incoming water pressure - allowing the suspended solids to dislodge from the screen and flush out the drain valve.



TECHNICAL DATA

MODEL	Screen Area		Maximum Flow Rate		Connections		Dimensions						Weight
	(cm²)	(in²)	(m³/h)	(US gpm)	In/Out (in/mm)	Drain (in/mm)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	X (mm)	(kg)
WAS F1 L 1"	280	43	10	44	1"	1 1/2"	365	550	185	225	125	420	15
WAS F1 L 1 1/2"	280	43	15	66	1 1/2"	1 1/2"	425	550	185	255	125	420	16
WAS F2 L 2"	530	82	40	176	2"	1 1/2"	400	580	225	275	125	455	18
WAS F1 Y 1"	280	43	10	44	1"	1 1/2"	425	495	355	---	---	420	15
WAS F1 Y 1 1/2"	280	43	15	66	1 1/2"	1 1/2"	425	520	410	---	---	420	16
WAS F2 Y 2"	530	82	40	176	2"	1 1/2"	455	555	455	---	---	455	18

Flow rates are referred to filters with filtering mesh from 120 µm and water with temperature of 20 °C and NTU < 1.

FEATURES

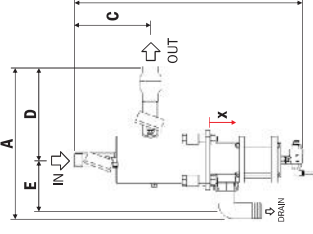
- Filtration range: 25 - 400 µm
- Maximum working pressure: 100 bar (1.450 psi)
- Fluid maximum temperature: 60°C (1.40°F)
- Salinity & Acidity: < 10000 ppm TDS
- End connections: ISO PN16/10 - BSP
- Surface finishing: ANSI1.50 - NPT etching



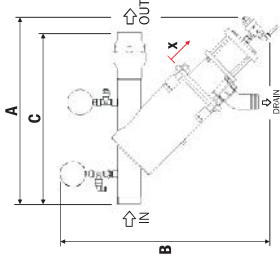
DIMENSIONS

X Dismantling length

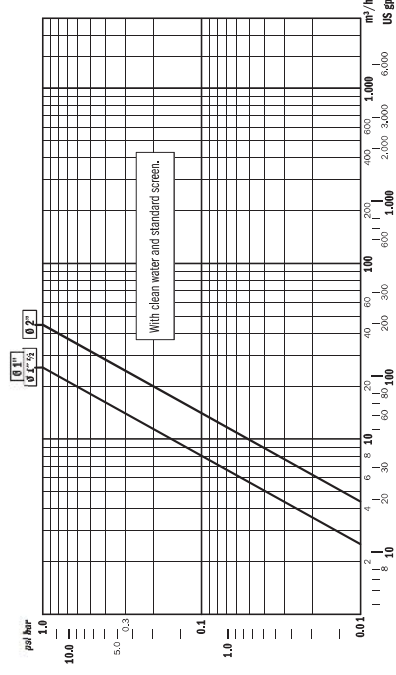
WAS F1 / F2 L Models



WAS F1 / F2 Y Models



PRESSURE LOSS



RAPIDJET

RAPIDJET FILTERS

Winnow™ RAPIDJET is a semi-automatic cleaning screen filter with a 304 or 316 stainless steel body. The internal filter element consists of a 316 stainless steel tubular screen, and some models have a double or a triple layer screen – which also incorporates a polyester mesh screen for finer filtration. Filtration ranges between 25 and 2000µm. The filter screen is cleaned using a series of water jets (fed with clean water at 4-5 bar) that are manually rotated by the external handle. The filter is supplied with a manual drain valve and pressure gauges as standard equipment. For best performance, the RAPIDJET needs an inlet pressure of at least 2 bars.

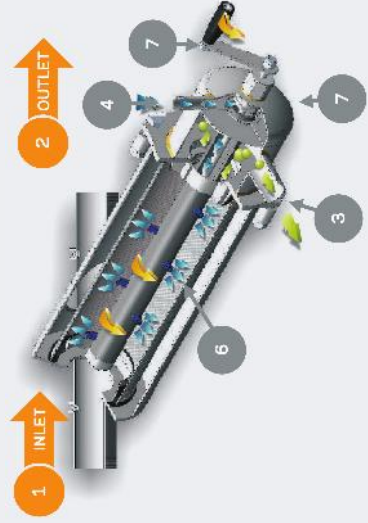
FILTERING PROCESS

Water enters the filter through the inlet connection (1), flows through the filter screen element (5) from inside towards the outside, and the filtered water flows through the outlet connection (2). Suspended solids are retained on the internal surface of the filter element.



CLEANING PROCESS

Cleaning of the screen filter element is carried out when an increased pressure difference between the inlet and outlet becomes apparent. Cleaning process requires stopping both the inlet (1) and outlet (2) flow - in order to completely empty the filter housing, opening of the drain valve (3) and manual rotation of the water jets (6) by turning the handle (7) allows the suspended solids to be dislodged from the screen and flush out the drain valve. The cleaning process for RAPIDJET filters does not require removal of the filter housing cover, and the water jets require a clean water supply at 4-5 bar (4).



TECHNICAL DATA

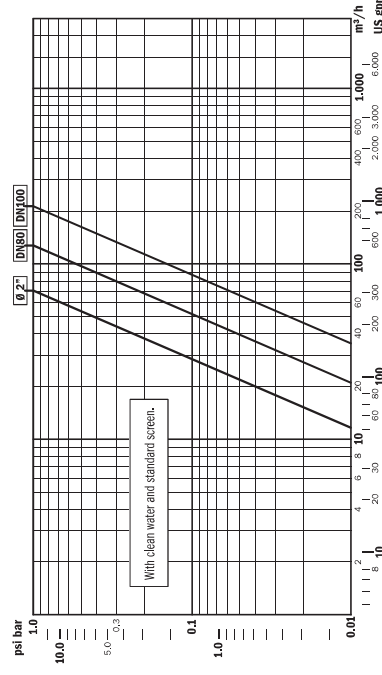
MODEL	Screen Area		Maximum Flow Rate		Connections		Dimensions					Weight
	(cm ²)	(ft ²)	(m ³ /h)	(US gpm)	In/Out (in-mm)	Drain (in-mm)	A (mm)	B (mm)	C (mm)	D (mm)	X (mm)	(kg)
WRJ L 2" /10A WRJ L 80/20 WRJ L 100/35 WRJ L 100/40P	1500	233	40	176	2"	1"	515	830	386	308	350	27
	2200	341	80	352	80	1½"	493	940	342	269	500	33
	3300	512	140	616	100	2"	587	1000	400	300	500	54
	5400	837	150	660	100	2"	587	1300	400	300	800	62
WRJ Y 2" /10A WRJ Y 80/20 WRJ Y 100/35 WRJ Y 100/40P	1500	233	40	176	2"	1½"	755	510	592	110	350	25
	2200	341	80	352	80	1½"	850	690	560	110	500	30
	3300	512	140	616	100	2"	890	720	720	110	500	54
	5400	837	150	660	100	2"	1100	940	720	110	800	62

Flow rates are referred to filters with filtering mesh from 120 µm and water with temperature of 20 °C and NTU < 1.

SUGGESTED FLOW RATES FOR 80µm, 53µm, 25µm SCREENS

WRJ L / WRJ Y MODELS	Screen Elements					
	80 µm (m³/h) (US gpm)	53 µm (m³/h) (US gpm)	25 µm (m³/h) (US gpm)	80 µm (m²/h) (US gpm)	53 µm (m²/h) (US gpm)	25 µm (m²/h) (US gpm)
2"/10A	25	110	20	88	15	66
80/20	60	264	40	176	20	88
100/35	70	308	50	220	30	132
100/40P	90	396	60	264	45	198

PRESSURE LOSS



FEATURES

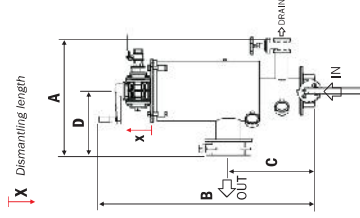
- Filtration range: 25 µm - 2000 µm
- Maximum working pressure: 10 bar (145 psi)
- Fluid maximum temperature: 60°C (140°F)
- Salinity & Acidity: < 10000 ppm TDS
- End connections: ISO PN16/10 - BSP
- Surface finishing: ANSI 50 - NPT etching

MATERIALS

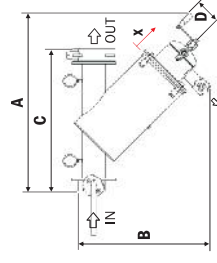
- Filter housing: Stainless Steel 304 / 316
- Screen support: Stainless Steel 316
- Screen: 316 Stainless Steel / Polyester
- Seals: Epdm
- Optional 316 Stainless Steel, Duplex and Titanium Models also available on request.

DIMENSIONS

WRJ L Models



WRJ Y Models



AUTOJET

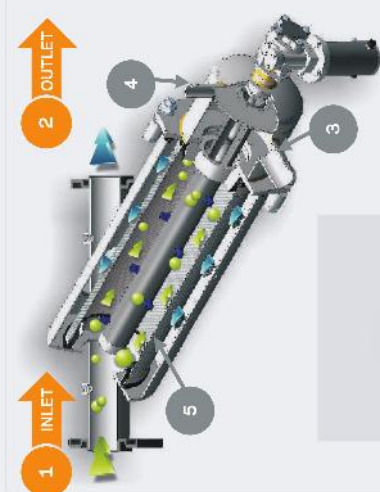
AUTOJET FILTERS

Winnow™ AUTOJET is an automatic self-cleaning screen filter with a 304 or 316 stainless steel body. The internal filter element consists of a 316 stainless steel tubular screen, and some models have a double or a triple layer screen – which also incorporates a polyester mesh screen for finer filtration. Filtration ranges between 25 and 2000µm. The filter screen is cleaned using a series of water jets (fed with clean water at 4-5 bar) that are automatically rotated by 24 volt electric motor. The filter is supplied with the automatic controls, flow valves and pressure gauges as standard equipment. For best performance, the AUTOJET needs an inlet pressure of at least 2 bars.



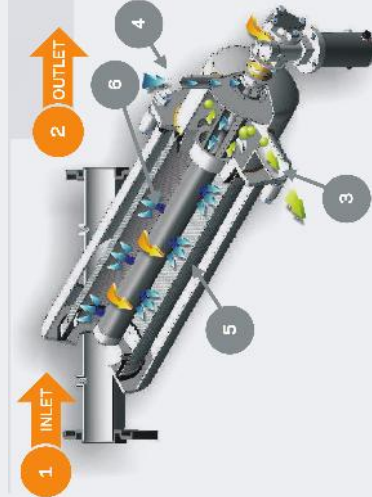
FILTERING PROCESS

Water enters the filter through the inlet connection (1), flows through the filter screen element (5) from inside towards the outside, and the filtered water flows through the outlet connection (2). Suspended solids are retained on the internal surface of the filter element.



CLEANING PROCESS

Cleaning of the screen filter element automatically takes place when an increased pressure difference between the inlet and outlet exceeds a given value. The cleaning process automatically stops both the inlet (1) and outlet (2) flow - in order to completely empty the filter housing, opens of the drain valve (3) and activates automatic operation of the water jets (6) - allowing the suspended solids to dislodge from the screen and flush out the drain valve. The cleaning process for AUTOJET filters does not require removal of the filter housing cover, and the water jets require a clean water supply at 4-5 bar (4).



TECHNICAL DATA

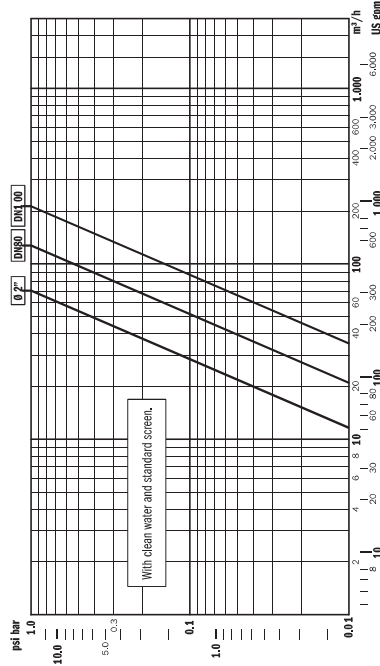
MODEL	Screen Area		Maximum Flow Rate		Connections		Dimensions				Weight	
	(cm²)	(in²)	(m³/h)	(US gpm)	In/Out (in-nm)	Drain (in-nm)	A (mm)	B (mm)	C (mm)	D (mm)	X (mm)	
WAJM L 2"/10A	1500	233	40	176	2"	1"	540	890	415	308	350	30
WAJM L 80/20	2200	341	80	352	80	1 1/2	520	1030	342	270	500	37
WAJM L 100/35	3300	512	140	616	100	1 1/2	615	1060	398	300	500	56
WAJM L 100/40P	5400	837	150	660	100	2"	615	1370	398	300	800	65
WAJM Y 2"/10A	1500	233	40	176	2"	1"	790	680	620	165	350	30
WAJM Y 80/20	2200	341	80	352	80	1 1/2	850	850	560	165	500	37
WAJM Y 100/35	3300	512	140	616	100	2"	900	960	715	165	500	56
WAJM Y 100/40P	5400	837	150	660	100	2"	1120	1170	715	190	800	65

Flow rates are referred to filters with filtering mesh from 120 µm and water with temperature of 20 °C and NTU < 1.

SUGGESTED FLOW RATES FOR 80µm, 53µm, 25µm SCREENS

WAJM L / WAJM Y MODELS	Screen Elements					
	80 µm (m³/h)	53 µm (m³/h)	53 µm (US gpm)	25 µm (m³/h)	25 µm (US gpm)	
2" / 10A	25	110	20	88	15	66
80 / 20	60	264	40	176	20	88
100 / 35	70	308	50	220	30	132
100 / 40P	90	396	60	264	45	198

PRESSURE LOSS



FEATURES

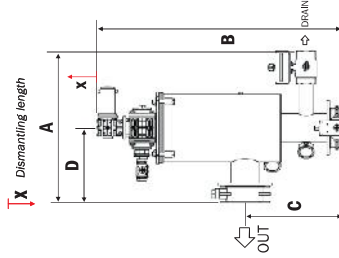
- Filtration range: 25 µm - 2000 µm
- Maximum working pressure: 10 bar (145 psi)
- Fluid maximum temperature: 60°C (140°F)
- Salinity & Acidity: < 10000 ppm TDS, 9-3 (ph)
- End connections: ISO PN16/10 - BSP, ANSI 50 - NPT
- Surface finishing: etching

MATERIALS

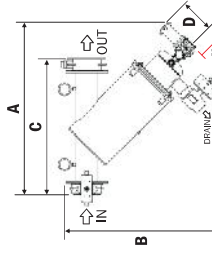
- Filter housing: Stainless Steel 304 / 316
- Screen support: Stainless Steel 316
- Screen: 316 Stainless Steel / Polyester
- Seals: Epdm
- Optional 316 Stainless Steel, Duplex and Titanium Models also available on request.

DIMENSIONS

WAJM L Models



WAJM Y Models



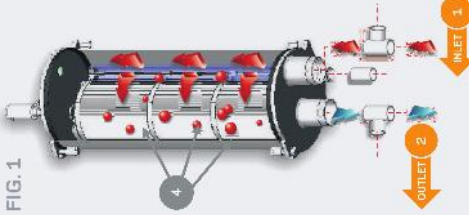
BIG MATIC FILTERS

Winnow™ BIG MATIC is a self-cleaning filter with a 316 stainless steel body and BIG MATIC polyester pleated filtration cartridges. Filtration ranges between 1 and 53µm. During the cleaning cycle the BIG MATIC cartridges are rotated and are cleaned by pressurized nozzles which are powered by clean water at 5-7 bar, from an external pressure tube. The filter is supplied with automatic controls, valves, pressure gauges and support frame as standard equipment. For best performance, the BIG MATIC filter needs an inlet pressure of at least 2 bars.

FILTERING PROCESS

Water enters into the filter from the inlet connection (1), flows into the BIG MATIC filtration cartridges (4) from the outside towards the inside, and exits from the outlet connection (2). Suspended solids are caught by the external surface of the BIG MATIC filtration cartridges (4). See drawing (FIG.1).

FIG. 1



FEATURES

- Filtration range 1 - 53 µm
- 100 bar (14.50 psi)
- 60°C (140°F)
- Fluid maximum pressure < 100000 ppm TDS
- PH 8.5-5
- Salinity & acidity
- End connections ISO PN16/10
- Surface finishing V'craulic etching

MATERIALS

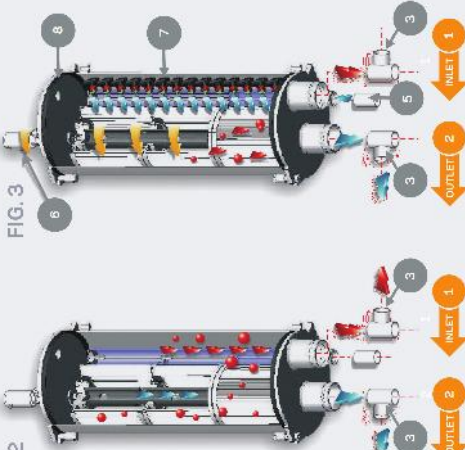
- Filter housing AISI 316
- Screen support PP (Polypropylene)
- Seals PES (Polyester) / PTFE
- Epdmi

CLEANING PROCESS

BIG MATIC filtration cartridges are automatically cleaned either by a pre-set time and/or when an increased pressure difference between the inlet and outlet exceeds a given value. The cleaning process has two stages. The first stage (FIG.2) requires stopping the downstream flow (closure of the inlet [1] & outlet valves [2]), and automatic opening of the drain valves (3) - allowing the housing to empty and some suspended solids to be flushed from the filter and out the drain valves (3). During the second phase of the cleaning cycle (FIG.3), BIG MATIC filtration cartridges (4) are automatically rotated by the 24 volt electric motor (6), and pressurized water jets (7) - fed by clean water supply (5) - automatically start-up - allowing the suspended solids that have been caught by the external surfaces to dislodge from the BIG MATIC filtration cartridges, and flush out the drain valves. The cleaning process for BIG MATIC filters do not require removal of the filter housing cover (8), and the water jets require a clean water supply at 5-7 bar (5).

FIG. 2

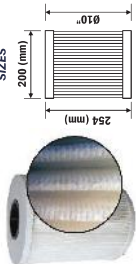
FIG. 3



TECHNICAL DATA

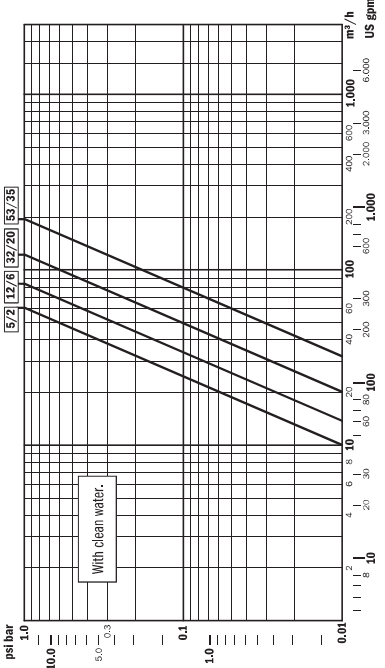
MODEL	Connections		Area								Dimensions								Weight	
	In/Out Drain (in/mm)	Cw (in/mm)	Cw (cm²)		A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	X (mm)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	X (mm)	(kg)	
WBM 110	80	1 1/2	10,000	465	745	1300	185	485	380	500	80									
WBM 120	80	1 1/2	20,000	465	745	1550	185	485	380	750	90									
WBM 130	80	1 1/2	30,000	465	745	1800	185	485	380	1000	100									
WBM 140	80	1 1/2	40,000	465	745	2050	185	485	380	1250	110									
WBM 150	80	1 1/2	50,000	465	745	2300	185	485	380	1500	120									
WBM 210	4"	2"	20,000	1085	1265	1300	185	485	380	500	210									
WBM 220	4"	2"	40,000	1085	1265	1550	185	485	380	750	230									
WBM 230	6"	2"	60,000	1085	1320	1800	185	485	380	1000	260									
WBM 240	6"	2"	80,000	1085	1320	2050	185	485	380	1250	280									
WBM 250	6"	2"	100,000	1085	1320	2300	185	485	380	1500	300									
WBM 310	4"	2"	30,000	1550	1265	1300	185	485	380	500	310									
WBM 320	6"	2"	60,000	1550	1320	1550	185	485	380	750	360									
WBM 330	6"	2"	90,000	1550	1320	1800	185	485	380	1000	390									
WBM 340	6"	2"	120,000	1550	1320	2050	185	485	380	1250	420									
WBM 350	8"	2"	150,000	1550	2370	2300	185	485	380	1500	470									
WBM 410	4"	2"	40,000	2015	1265	1300	185	485	380	500	410									
WBM 420	6"	2"	80,000	2015	1320	1550	185	485	380	750	480									
WBM 430	6"	2"	120,000	2015	1320	1800	185	485	380	1000	520									
WBM 440	8"	2"	160,000	2015	1370	2050	185	485	380	1250	590									
WBM 450	8"	2"	200,000	2015	1370	2300	185	485	380	1500	630									

FILTER ELEMENTS



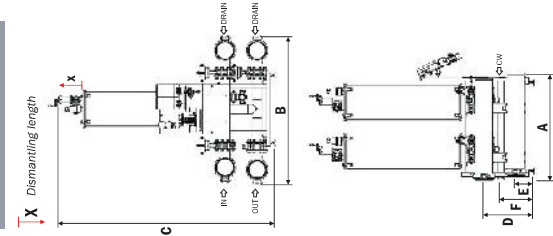
BIG MATIC filter elements can be regenerated, when extracted from the filter housing, by means of washing with appropriate cleaners.

PRESSURE LOSS



Flow rates are referred to water with temperature of 20 °C and NTU < 1.

DIMENSIONS



MOD.	PE 53/35	PE 12/6	PE 32/20	PE 5/2	PTFE 1
Finesness of Filtration	(µm)	53	32	12	5
Open Area	(%)	35	20	6	2
Maximum Flow Rate	(m³/h)	80	50	20	15
Admitted Turbidity Range	(NTU)	< 80	< 60	< 20	< 10

Product Fact Sheet



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