

m-swipe is a screen filter with a manually-operated Brush cleaning system which allows the operator to easily clean the filtering screen in a matter of seconds without opening the cover.

m-swipe's vessel and cleaning system are completely made of stainless steel supplemented with Nylon Brushes which makes the filter very robust and low-maintenance.

m-swipe is ideal to treat water loaded with non-colloidal suspended solids and is usually implemented in well-water, canals, rivers and industrial applications; it is available in 2 different constructive shapes, Y and L, in order to adapt to different installation layouts.

The wide array of filter screens, supplied with a PES or Stainless Steel AISI 316 filtering mesh, allows the user to choose between various filtration degrees, ranging from 3000µm to 80µm.

m-swipe is supplied complete of pressure gauges and emptying valves.

FILTRATION PROCESS

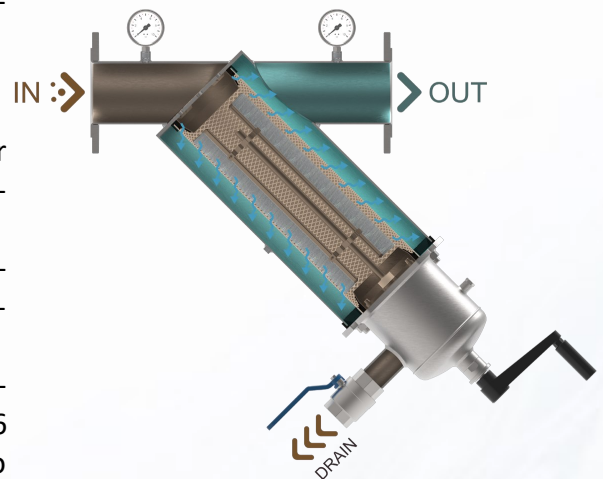
To-be-treated raw liquid enters the filter through the inlet connection (IN), suspended solids are retained inside the filtering element and purified liquid flow out of the outlet connection (OUT).

CLEANING

The continuous build-up of solids, trapped inside the filter mesh, creates a differential pressure between inlet and outlet that can be read on the filter's manometers.

Cleaning of the filtering element must be performed manually when the differential pressure between the inlet and outlet manometers exceeds the indicative value of 0,8-1 bar.

To perform the cleaning, it is sufficient to open the drain valve (DRAIN) and rotate the handle clockwise performing 5-6 full rotations; The drain valve can now be closed again. To perform deeper cleaning (if necessary), during the discharge and rotation phase, it is advised to completely or partially close the filter's outlet valve (OUT).



TECHNICAL SPECIFICATION

	MATERIAL		DESIGN DATA
Filter housing	Stainless steel AISI 304 - AISI 316L	Flow rate	Up to 400 m ³ /h
Gasket	EPDM*	Design pressure [bar]	PN 10
Drain/Vent valve	Nickel-plated Brass - AISI 316L	Max Temperature [°C]	100
Pressure Gauges	Stainless steel AISI 304 - AISI 316L	Salinity [TDS]	<10.000 ppm
Surface finish	Microshot Peening and Passivation	pH range	3-9
		Design Code	PED 68/2014/EU

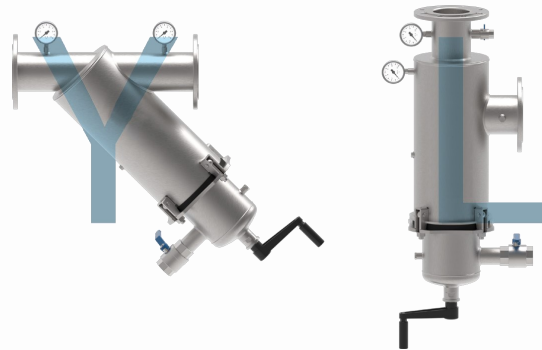
* Certified for the following European Drinking Water regulations: UBA, DVGW-standard W-270, WRAS och ACS.

FEATURES

m-swipe-filters are manufactured with technical and constructive features suitable for industrial applications and are available in 2 different constructive shapes. Additionally, you can choose between 2 connection types: Threaded and Flanged.

m-swipes vessel is manufactured in Stainless Steel AISI 304 or in AISI 316 upon request and is available in Y and L constructive shapes. For each shape four different sizes are available: 6, 8, 18 and 30 which differ in the size of the filtering element inside them.

After the welding procedure the vessel is subjected to two surface treatments, micro-shot peening and passivation: the first provides a greater surface resistance and removes any manufacturing impurities whereas the second one reconstructs the natural passive film which constitutes the absolute stainlessness of the filter.



CONNECTIONS

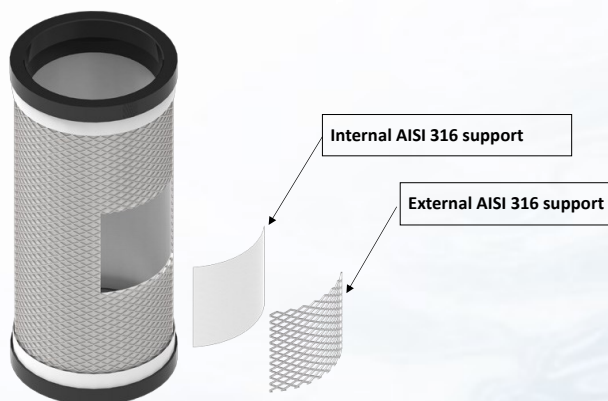
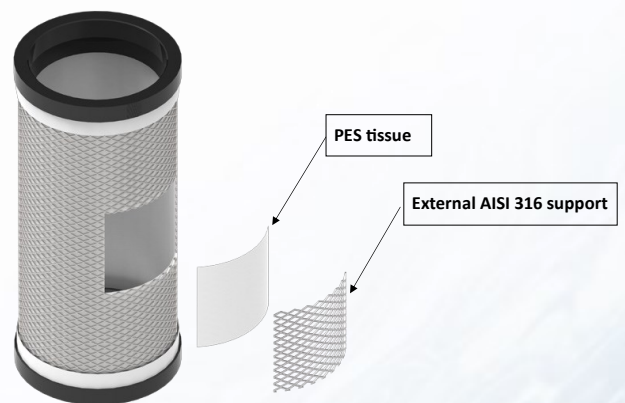


m-swipes Inlet and Outlet connections can be BSPP Threaded up to 3" and are ISO PN16 lap-joint flanged from DN80 onwards.

FILTERING ELEMENTS

PES FILTER KIT

Composed by an AISI 316 Stainless Steel cylinder within which a polyester (PES) filter tissue is inserted, its wide array of available filtering tissues and allows the customer to choose from various filtration degrees starting from 25µm up to 810µm.



2LAYER STEINLESS STEEL FILTER KIT

Composed by a double layer stainless steel AISI 316 mesh, this type of filtering element is very resistant and proves to be an extremely valid alternative to PES FILTERKIT when it comes to harsh operating conditions, especially when sharp or cutting suspended solids might be present in the liquid.

FLOW RATES

You can select the product you need by identifying the IN/OUT connections and MAX flowrate first, then choosing one of the available constructive shapes and finally the relative size of the filtering element.

IN/OUT ∅	MAX FLOW RATE*		SHAPE		FILTERING SURFACE		
	[m ³ /h]	[l/min]	Y	L	SIZE	[cm ²]	[in ²]
2" BSPP	30	500	✓	✓	6	1500	233
3" BSPP	60	1000	✓	✓			
DN80	60	1000	✓	✓			
DN100	100	1666	✓	✓			
3" BSPP	70	1166	✓	✓	8	2200	341
DN80	70	1166	✓	✓			
DN100	110	1833	✓	✓			
DN100	120	2000	✓	✓	18	3300	512
DN150	240	4000	✓	✓			
DN100	120	2000	✓	✓	30	5400	837
DN150	260	4333	✓	✓			
DN200	400	6666	-	✓			

*Max flow rates are calculated based on clean water with a filtration degree of 120µm

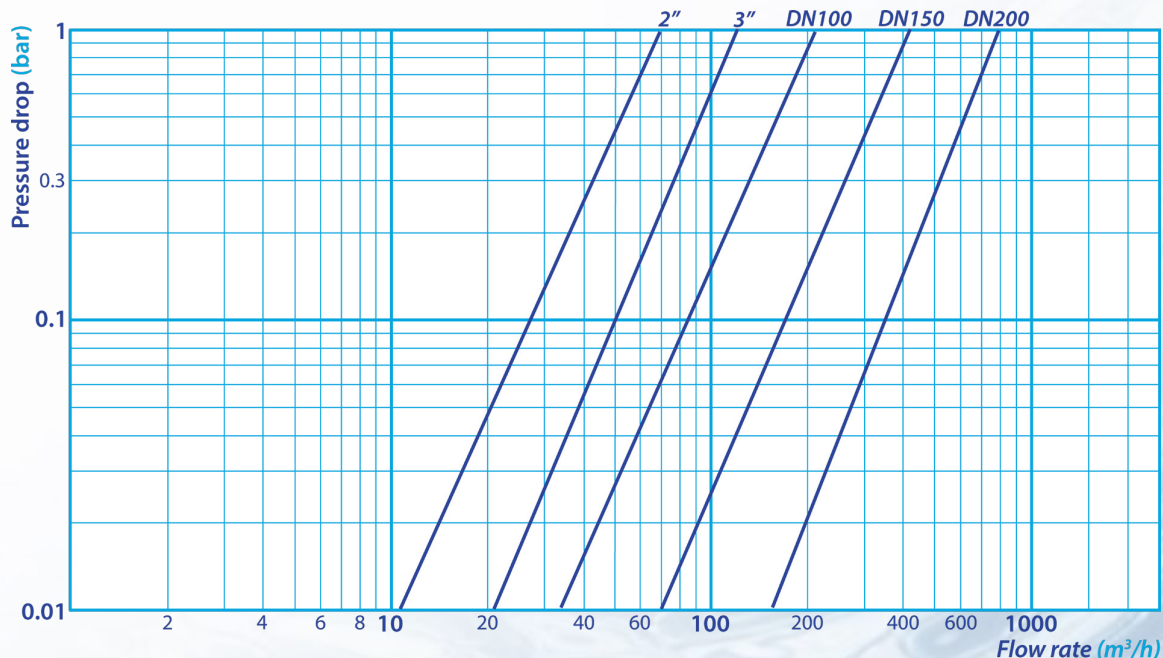
With the same IN/OUT connection and the same MAX flowrate, the larger filter will require less cleaning than the smaller one.

CLEANING CYCLE

	SIZE 6	SIZE 8	SIZE 18	SIZE 30
Min. cleaning flowrate	10 m ³ /h	15 m ³ /h	15 m ³ /h	20 m ³ /h
Min. pressure during cleaning cycle	1.5 bar	1.5 bar	1.5 bar	1.5 bar
Water consumption full cleaning cycle	55 L	84 L	84 L	110 L
Cleaning cycle's length	20-25 s	20-25 s	20-25 s	20-25 s

* For inferior flowrates and/or pressures please contact Heation AB for more information.

HEAD LOSS



MODEL COMPOSITION

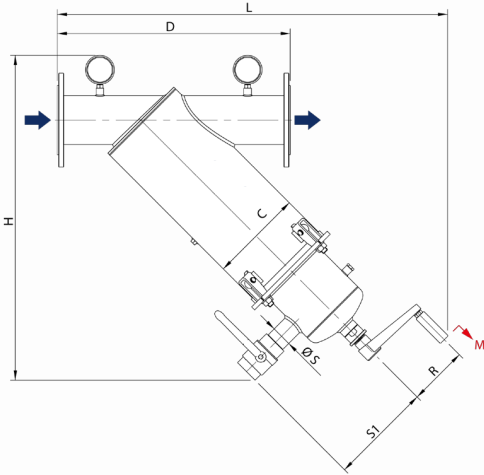
The model that identifies the filter is composed as follows:

M-SPH	2"	Y	6
FILTER ACRONYM	CONNECTION	VESSEL SHAPE	SIZE

DIMENSIONS

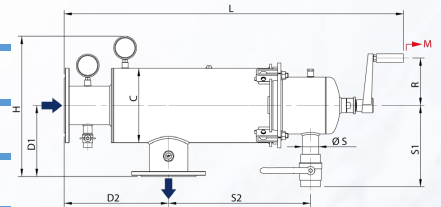
MODEL	D [mm]	L [mm]	H [mm]	C [mm]	S1 [mm]	S2 [mm]	ØS [mm]	R [mm]	M* [mm]	WEIGHT [Kg]
M-SPH 2" Y 6	412	740	600	219	240	-	1" BSPP	140	500	21
M-SPH 3" Y 6	464	765	615	219	240	-	1" BSPP	140	500	22
M-SPH 80 Y 6	487	765	615	219	240	-	1" BSPP	140	500	26
M-SPH 100 Y 6	547	807	627	219	240	-	1" BSPP	140	500	28
M-SPH 3" Y 8	464	875	748	219	240	-	1" ½ BSPP	140	700	26
M-SPH 80 Y 8	487	874	748	219	240	-	1" ½ BSPP	140	700	30
M-SPH 100 Y 8	547	916	761	219	240	-	1" ½ BSPP	140	700	32
M-SPH 100 Y 18	585	955	761	273	240	-	1" ½ BSPP	180	700	39
M-SPH 150 Y 18	660	978	788	273	240	-	1" ½ BSPP	180	700	44
M-SPH 100 Y 30	585	1171	978	273	255	-	2" BSPP	180	1000	47
M-SPH 150 Y 30	660	1194	1006	273	255	-	2" BSPP	180	1000	52

Y SHAPE



MODEL	D1 [mm]	D2 [mm]	L [mm]	H [mm]	C [mm]	S1 [mm]	S2 [mm]	ØS [mm]	R [mm]	M* [mm]	WEIGHT [Kg]
M-SPH 2" L 6	190	310	854	390	219	240	268	1" BSPP	140	500	21
M-SPH 3" L 6	190	310	854	390	219	240	268	1" BSPP	140	500	22
M-SPH 80 L 6	210	310	854	410	219	240	268	1" BSPP	140	500	27
M-SPH 100 L 6	210	310	854	410	219	240	268	1" BSPP	140	500	28
M-SPH 3" L 8	190	310	1008	390	219	240	422	1" ½ BSPP	140	700	26
M-SPH 80 L 8	210	310	1008	410	219	240	422	1" ½ BSPP	140	700	31
M-SPH 100 L 8	210	310	1008	410	219	240	422	1" ½ BSPP	140	700	32
M-SPH 100 L 18	246	350	1062	480	273	240	422	1" ½ BSPP	180	700	39
M-SPH 150 L 18	246	350	1062	480	273	240	422	1" ½ BSPP	180	1000	44
M-SPH 100 L 30	246	350	1368	480	273	255	728	2" BSPP	180	1000	47
M-SPH 150 L 30	246	350	1368	480	273	255	728	2" BSPP	180	1000	52
M-SPH 200 L 30	266	350	1368	500	273	255	728	2" BSPP	180	1000	57

L SHAPE



*M = Minimum free space required for maintenance.

ACCESSORIES



DIFFERENTIAL PRESSURE KIT

m-swipe can be equipped with a differential pressure control kit which detects the pressure difference between the filter's inlet and outlet connections. This greatly facilitates maintenance operations by measuring the degree of clogging of the filtering element and helps the operator plan its replacement.



dolphin
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