Y AND HCY SERIES HYDROCYCLONES (SAND SEPARATORS)

F03-HYDRO-FT-001

Product data sheet · Metal and automatic filters

Steel hydrocyclones from 1/2" to 6", for separating sand and heavy particles from water before filtration. Flow rates from 2 to 150 m³/h, working pressure up to 8 bar.



Painted steel hydrocyclones



Stainless steel construction (on request)

Technical data

Body	S235JR steel (stainless steel AISI 304 or 316 on request)
Seals	NBR
Surface treatment	Pickling, phosphating and polyester powder coating (epoxy coating suitable for drinking water on request)
Maximum working pressure	8 bar
Connections	BSP male threaded (NPT on request), DIN 2576 PN10 flanges (ANSI on request), grooved on request
Purge outlet	1/2" female threaded (1/2" to 1" 1/2), 1" male threaded (2" to 4"), 2" male threaded (6")

Description

Y and HCY series hydrocyclones separate large quantities of sand and other solid particles heavier than water from the water. Depending on the conditions (flow rate, particle density, etc.), separation efficiency can exceed 90%.

The raw water enters the hydrocyclone tangentially. Centrifugal force presses the particles against the wall: they spiral down to the collection chamber at the bottom. The water, freed of heavy particles, rises through the centre to the outlet at the top.

Specifications by model

Code	Inlet / outlet	Connection	Min. flow rate (m³/h)	Max. flow rate (m³/h)	PN (bar)
05-06-025	1/2"	TM	2	3	8
05-06-034	3/4"	TM	3	5	8
05-06-100	1"	TM	5	12	8
05-06-150	1" 1/2	TM	10	16	8
05-06-205	2"	TM, G	15	25	8
05-06-255	2" 1/2	TM, G	20	35	8
05-06-305	3"	TM, G	30	50	8
05-06-400	4"	TM, G, F	50	80	8
05-06-500	5"	F	100	150	8
05-06-600	6"	F	100	150	8

Connection: TM = BSP male threaded, F = DIN 2576 PN10 flanges, G = grooved (on request). Other standards and sizes on request.

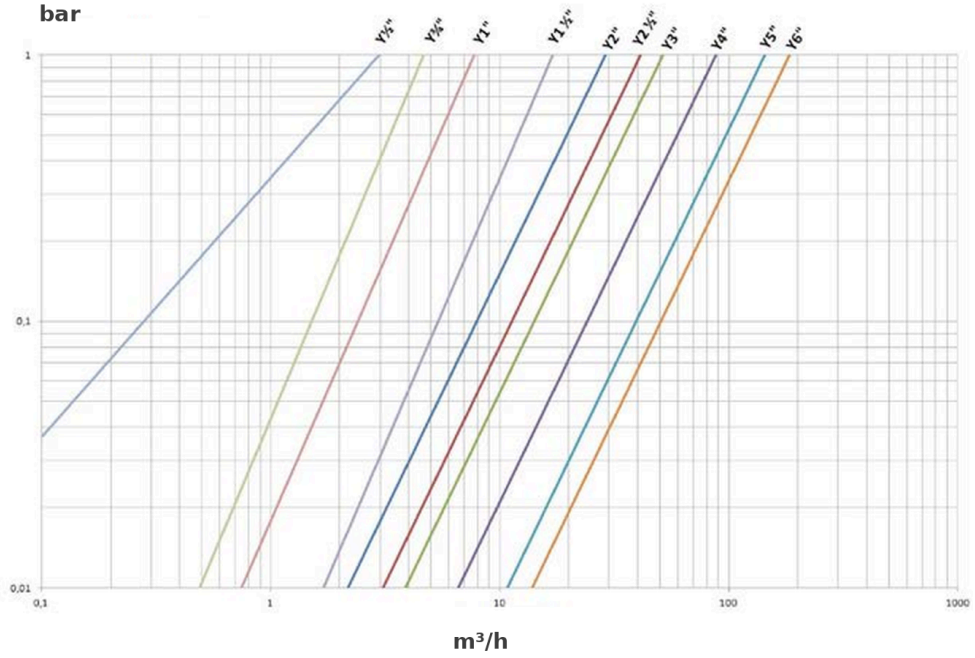
Other versions (on request)

Code	Inlet / outlet	Connection
05-06-401	4"	TM × F

Applications

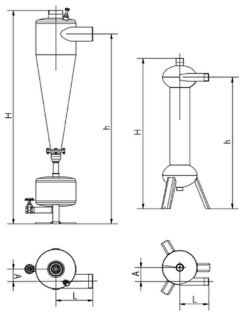
The hydrocyclone is used as a pre-filter, upstream of a sand filter, screen filter or disc filter. It retains most of the heavy particles and limits clogging of the downstream filtration, which then stops the finer and lighter particles.

Performance



Pressure loss (bar) according to flow rate (m³/h), in clear water

Dimensions



Dimensions H, h, L and A

Dimensions and weight

Code	Inlet / outlet	L (mm)	H (mm)	h (mm)	A (mm)	Weight (kg)
05-06-025	1/2"	125	530	440	55	5.2
05-06-034	3/4"	125	660	580	62	6.8
05-06-100	1"	125	665	580	62	8.7
05-06-150	1" 1/2	140	880	790	50	9.2
05-06-205	2"	230	1355	1205	95	25.0
05-06-255	2" 1/2	230	1355	1205	84	25.5
05-06-305	3"	230	1355	1205	78	26.0
05-06-400	4"	295	1480	1270	102	38.0
05-06-500	5"	560	2025	1675	200	112.0
05-06-600	6"	560	2025	1675	200	115.0

H is the recommended minimum installation height.

Installation

Install the hydrocyclone vertically.

Maintenance

The particles accumulate in the collection chamber. Remove them by opening the drain valve, mounted in series. This purge can be automated with a hydraulic valve.

Related documents : F03-HYDRO-VE-001

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