

Metal filters

Amiad



Thanks to the choice of various filter elements and filtration levels, the metal fine filter from Amiad can be used in a wide variety of filtration applications. The filters are also easy to install and maintain. Fine filters can be employed either as main filters or as subsequent filters (e.g. behind a media filter).

The filter housings are made as standard from polyester-coated steel. As with the plastic filters, the filter housings can be equipped with (see also general information sheet 'Filtration'):

- ✓ Woven stainless steel wire mesh screens
- ✓ Perforated stainless steel cylinders

Since 2017, the HD-Polyethylene disc elements (up to 4"S) are no longer available.

The metal filters bear the code 'C' (Compact) and 'S' (Super). The 'C' versions have a compact screen length, the 'S' versions have an extra-large screen surface area and therefore need to be cleaned less often.

APPLICATION

Amiad metal filters are suitable for irrigation systems, cooling water systems and industrial filtration processes. The large effective filter surface area and the high quality of the filter screens make Amiad filters unique.

CHARACTERISTICS

- ✓ Coated steel filter housing
- ✓ Replaceable filter elements for a wide range of capacities, filtration levels and applications
- ✓ Large effective filter surface area
- ✓ Easy to open for maintenance without the use of tools
- ✓ CE approved

TECHNICAL DATA

Diameter	: 2" - 8"
Capacity	: 25 - 300 m³/h
Max. working pressure	: 10 bar (at 20°C)
Max. temperature	: 60°C (with decreasing max. pressure)
Filtration levels	: 50 - 3000 micron
Resistance	: see charts
Material	: polyester-coated steel (housing, cover 2" - 4") : SMC polyester (cover 6" - 8") : Nitrile rubber (seals) : Stainless steel 316 (filter screen) : Polycarbonate (wire mesh screen construction) : HP polyethylene (grooved disc)
Colour	: RAL 5010 (blue)
Option	: Brushaway or Scanaway (see information sheet)

Technical specifications

Model designation		2"	2"	3"	3"	4"-C	4"-S	6"-C	8"
Connection	type	threaded	flanged	threaded	flanged	flanged	flanged	flanged	flanged
Max. filtration capacity	m ³ /h	25	25	40	40	70	80	160	300
Screen area	cm ²	465	465	930	930	930	1392	2740	5720
Disc area	cm ²	790	790	1700	1700	1700	-	-	-
Weight with screen	kg	7,3	10,5	13,6	16,6	25	27,5	56	65
Weight with disc	kg	8,1	11,3	15,2	18,2	26,5	-	-	-
Sizes	mm	See drawings (Note: Dimensions may differ, consult the drawing supplied with the filter)							

Available filtration levels

Colour	Orange	Black	Yellow	Red	Purple	White	Brown	Blue	Green	Grey	-	-	-
Micron	50	80	100	130	180	200	250	300	500	800	1500	2500	3500
Mesh	300	200	155	120	80	75	60	50	30	20	10	6	4
2" - 4"-C	▲	▲	▲	▲		▲		▲	▲	●	●	●	●
4"-S - 8"	▲	▲	▲	▲		▲		▲	▲	●	●	●	●

▲ Filter screen

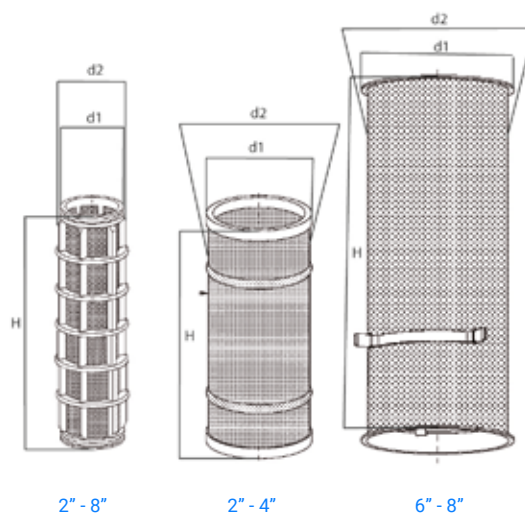
● Perforated stainless steel cylinder

Dimensions of filter elements

Metal	Screen cylinder*			Disc element			Perforated plate **		
	ø (mm)		H (mm)	ø (mm)		H (mm)	ø (mm)		H (mm)
	d1	d2		d1	d2		d1	d2	
2"	109	109	250	108	130	254	108	100	250
3" 4"-C	109	109	496	108	130	490	108	100	495
4"-S	109	109	744	-	-	-	108	100	743
6"-C	215	200	510	-	-	-	215	200	505
8"	152	149	1005	-	-	-	152	149	1005

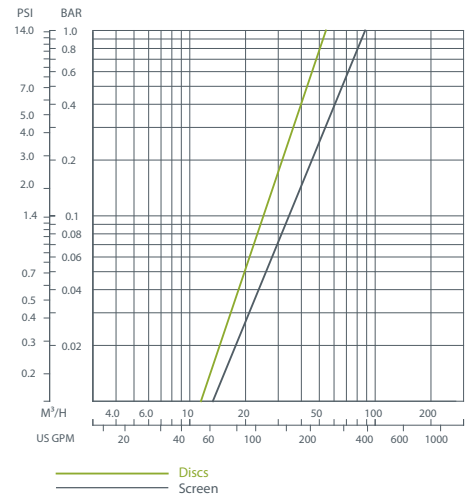
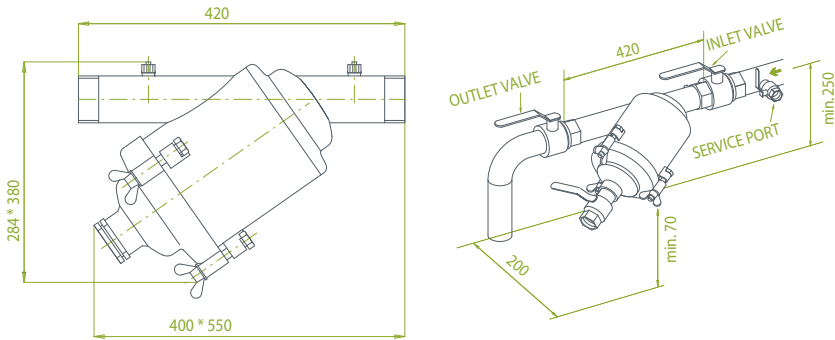
*: Polyester-stainless steel cylinder

** : Stainless steel cylinder

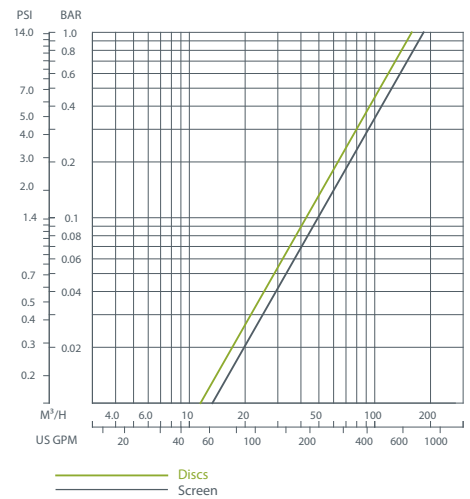
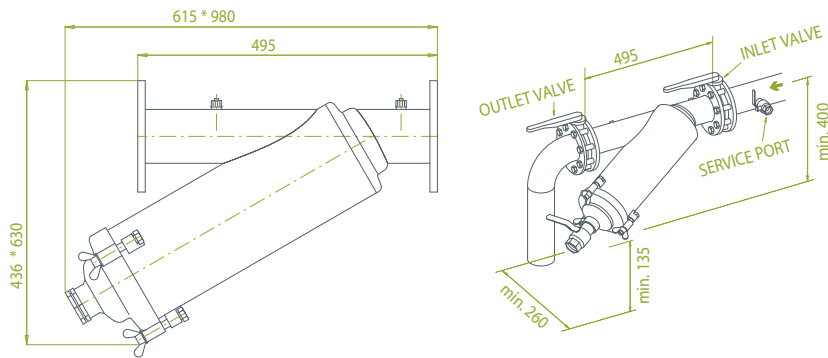


TECHNICAL DRAWINGS

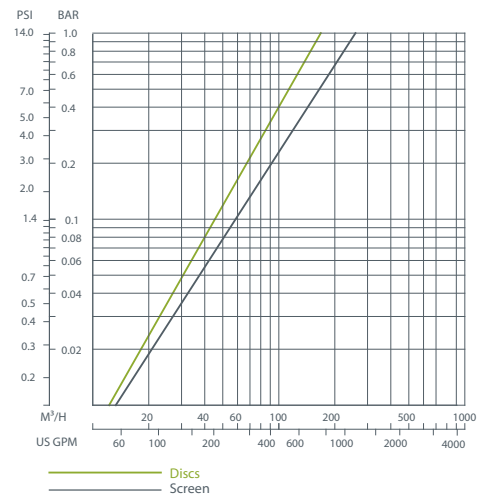
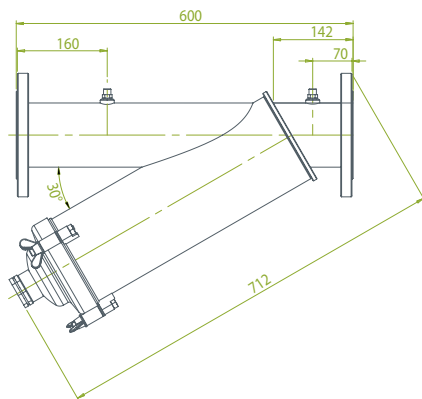
2" metal filter



3" metal filter



4"-C metal filter

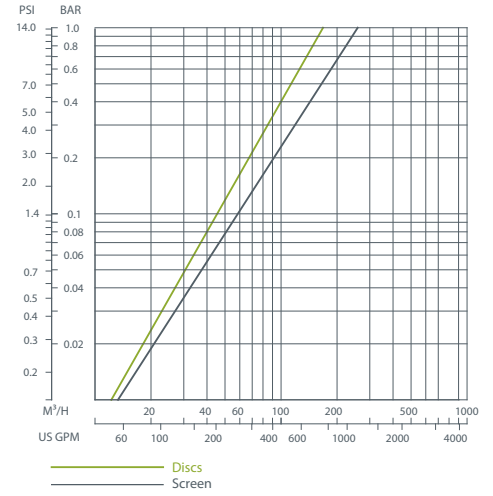
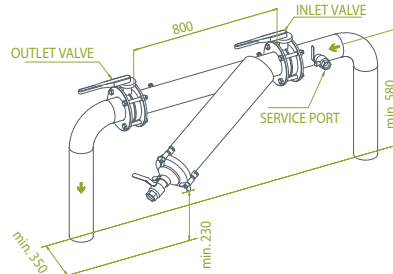
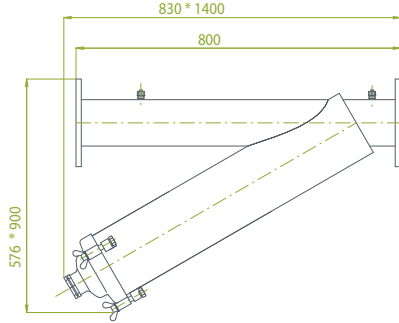


*Pressure loss (with 'clean water and 130 micron screen)

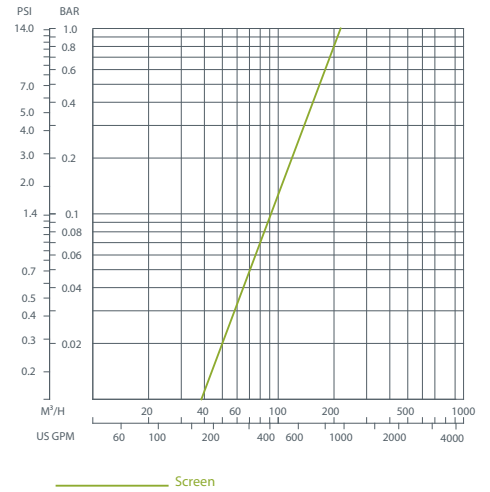
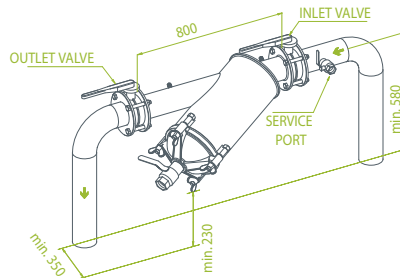
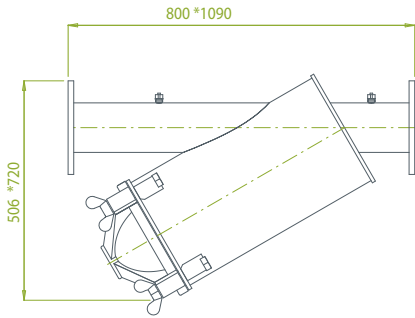
**The second dimension is the required mounting length for installation (approximately)

TECHNICAL DRAWINGS AND PRESSURE LOSS

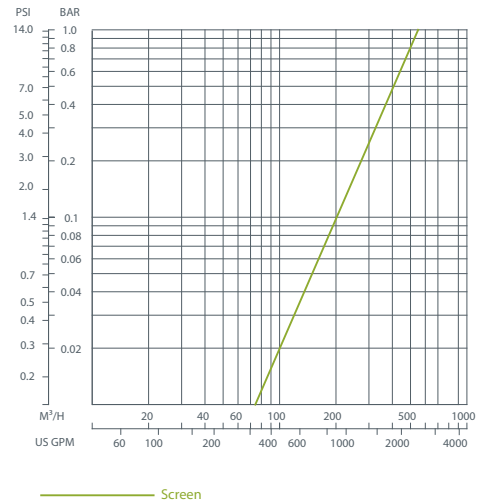
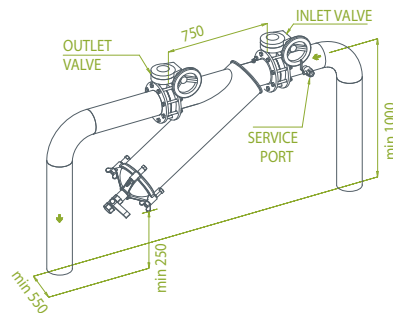
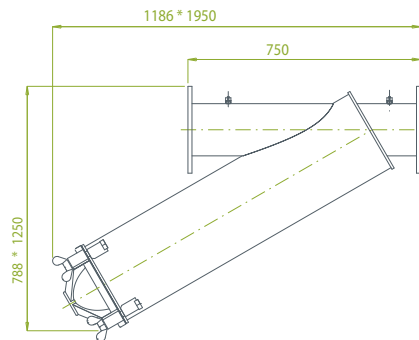
4-S" metal filter



6"-C metal filter



8" metal filter



INSTALLATION & MAINTENANCE

Installation

- ✓ Read the enclosed operating instructions and installation instructions before installation.
- ✓ Install the filters with the cover horizontal or facing downwards so that the dirty water runs out of the filter when the housing is opened.

Maintenance

- ✓ Visual inspection of the status of the filter element is simple since the filter housing has pressure measuring points which make it easy to determine the level of contamination by means of a pressure gauge.
For cleaning of the filter element, the filter cover can be easily removed without the use of tools.
- ✓ The screen elements and perforated cylinders must be cleaned under running water using a brush.
- ✓ The discs of a disc element can also be cleaned under running water. They come loose when the core is unscrewed. Allow water to flow along the edges of the discs so that they start to rotate. Screw in the disc element finger-tight after cleaning. Ensure that no contamination is trapped between the discs.
- ✓ Note that when replacing disc elements before cylinders or vice versa, the flow direction (and hence the filter) has to be reversed.
- ✓ A filter has 3 nitrile rubber seals: 2 seals in front of the filter element and 1 in front of the filter cover.