

STRC & MPAC series

Flow rate up to 1000 l/min



Description

Technical data

Suction filters

Flow rate up to 1000 l/min

STRC

STRC is a range of suction strainers for protection of the downstream pump against the coarse contamination.

They are placed below the oil level directly connected to the suction line of the pump.

Available features:

- Female threaded connections up to 3", for a maximum flow rate of 1000 l/min
- Bypass valve, to relieve excessive pressure drop across the filter media

Common application:

- Mobile machines (Construction and Agriculture machines)
- Industrial equipment

MPAC

MPAC is a range of suction strainers for protection of the downstream pump against the coarse contamination.

They are placed below the minimum oil level, directly connected to the suction line of the pump.

The robust design allows the use of these filters in any heavy duty application.

Available features:

- Female threaded connections up to 3", for a maximum flow rate of 1000 l/min
- Magnetic filter (MPAC), to hold the ferrous particles

Common application:

Industrial equipment

STRC materials

- 1 - Connection: Polyamide, GF reinforced
- 2 - Core tube: Tinned steel
- 3 - Wire mesh
- 4 - End cap: Polyamide, GF reinforced
- 5 - Bypass valve: Polyamide, GF reinforced - Steel

MPAC materials

- 1 - Connection: Aluminium
- 2 - Magnetic filter
- 3 - Tie rod: Galvanized steel
- 4 - End cap: Galvanized steel
- 5 - Core tube: Galvanized steel
- 6 - Filter media: Wire mesh
- 7 - Bottom: Galvanized steel
- 8 - Washer: Galvanized steel
- 9 - Self-locking nut: Galvanized steel - Polyamide

Bypass valve

Opening pressure 30 kPa (0.3 bar)

Elements

Fluid flow through the filter element from OUT to IN.

Temperature

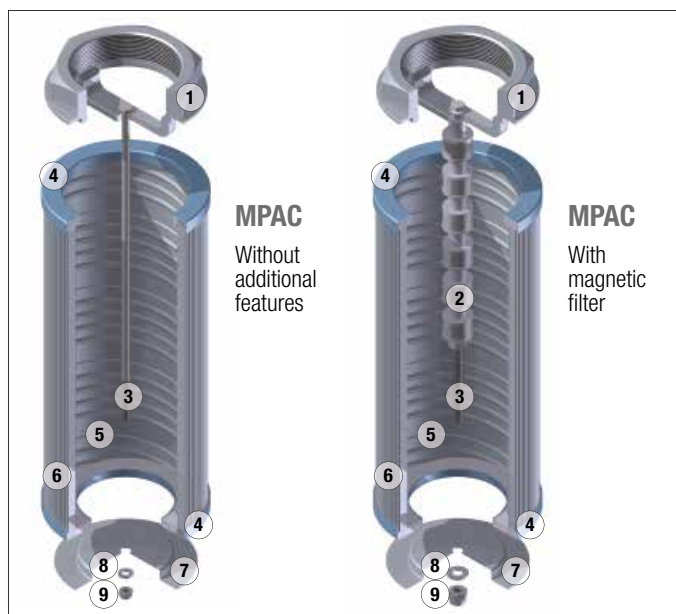
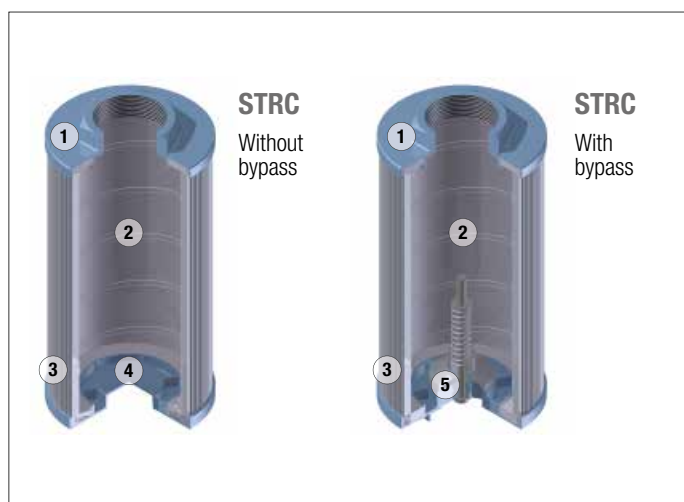
From -25 °C to +110 °C

Quantity

Series and size	pcs/pack
STRC 045 - 050	12
STRC 065 - 070 - 086 - 100	6
STRC 140 - 150	1
MPAC 050	12
MPAC 070 - 100	6
MPAC 140	1

Weights [kg]

Filter series	
STRC	see page 37
MPAC	see page 39



Flow rates [l/min]

Filter series	Thread	l/min
STRC & MPAC	3/8"	19
	1/2"	28
	3/4"	67
	1"	126
	1 1/4"	167
	1 1/2"	258
	2"	480
	2 1/2"	854
	3"	995

Maximum flow rate for a complete suction filter with a pressure drop $\Delta p = 0.08$ bar.

The reference fluid has a kinematic viscosity of 30 mm²/s (cSt) and a density of 0.86 kg/dm³.

For different pressure drop or fluid viscosity we recommend to use our selection software available on www.mpfiltri.com.

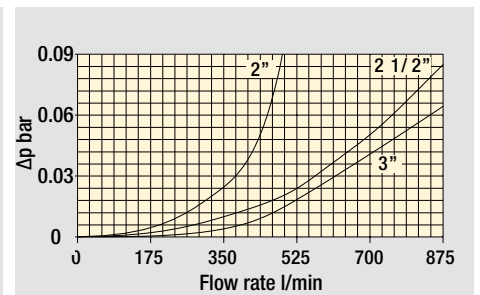
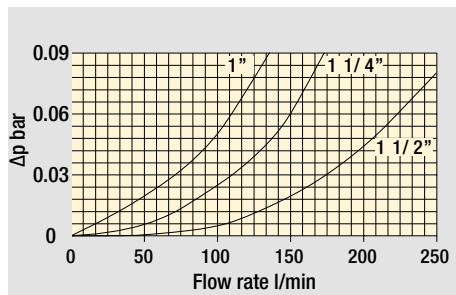
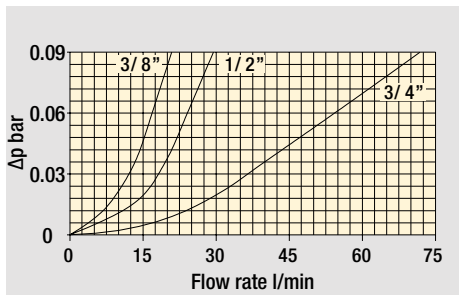
You can also calculate the right size using the formulas present on the FILTER SIZING paragraph at the beginning of the full catalogue or at the beginning of the filter family brochure. Please, contact our Sales Department for further additional information.

Filter series	00 - without bypass	03 - with bypass
STRC	•	•
MPAC	•	-

Hydraulic symbols

Pressure drop

Filters pressure drop Δp in function of connection type



The curves are plotted using mineral oil with density of 0.86 kg/dm³ in compliance with ISO 3968. Δp varies proportionally with density.

Maximum total pressure drop (Δp max) allowed by a new and clean filter

Filter family	Δp max	
Suction	0.08 bar	1.15 psi

COMPLETE FILTER

Series	Example 1:	STRC	045	10	M0060	A	N	03	FG038	0	ON	NN	P01	NN
STRC	Example 2:	STRC	100	20	M0250	A	N	00	FN200	0	ON	NN	P01	NN

Size	
045	086
050	100
065	140
070	150

Length	Size:	045	050	065	070	086	100	140	150
10		•	•	•	•	•	•	•	•
20		-	-	•	•	•	•	•	•
30		-	-	-	-	•	-	•	•
40		-	-	-	-	-	-	•	-

Filtration rating (filter media)	
M0025	Wire mesh 25 µm
M0060	Wire mesh 60 µm
M0090	Wire mesh 90 µm
M0250	Wire mesh 250 µm

Element Δp	
A	1 bar

Seals and treatments	
N	Without seals

Bypass	
00	Without bypass
03	With bypass 30 kPa (0.3 bar)

Connection type	
FG	Thread ISO 1179-2 (GAS)
FN	Thread ANSI/ASME B 1.20.1 (NPT)

Nominal thread																			
	Size:	045	050	065	070	086	100	140	150										
	Length	10	10	10	20	10	20	10	20	30	10	20	10	20	30	40	10	20	30
038	3/8"	•	•	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
012	1/2"	•	•	•	-	•	•	-	-	-	-	-	-	-	-	-	-	-	-
034	3/4"	-	-	•	•	•	•	-	-	-	-	-	-	-	-	-	-	-	-
100	1"	-	-	-	•	-	•	-	-	-	-	-	-	-	-	-	-	-	-
114	1 1/4"	-	-	-	-	-	-	-	-	•	•	-	-	-	-	-	-	-	-
112	1 1/2"	-	-	-	-	-	-	•	•	•	•	•	-	-	-	-	-	-	-
200	2"	-	-	-	-	-	-	•	•	•	•	•	•	-	-	-	•	-	-
212	2 1/2"	-	-	-	-	-	-	-	-	-	-	-	-	-	•	-	-	•	-
300	3"	-	-	-	-	-	-	-	-	-	-	-	-	-	•	•	-	•	•

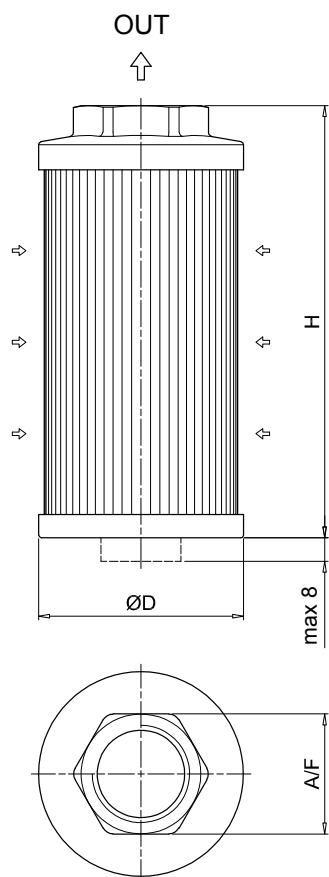
Additional connections	
0	Without additional connections

Connections for clogging indicators	
ON	Without connection

Additional features	
NN	Without additional features

Version	
P01	Standard catalogue item

Certificates	
NN	Without certificates



STRC							
Size	ØD [mm]	Length	Nominal thread		H [mm]	A / F [mm]	Weight [kg]
045	46	10	3/8"	1/2"	105	30	0.19
050	52	10	3/8"	1/2"	79		0.11
065	65	10	1/2"	3/4"	110	41	0.22
		20	3/4"	1"	144		0.24
070	70	10	1/2"	3/4"	95		0.18
		20	1/2"	3/4"	1"		141
086	86	10	1 1/2"	2"	143	69	0.33
		20	1 1/2"	2"	201		0.43
		30	1 1/2"	2"	261		0.53
100	99	10	1 1/4"	1 1/2"	137		0.47
		20	1 1/4"	1 1/2"	2"		227
140	130	10	1 1/2"	2"	160		101
		20	2"		262	0.94	
		30	2 1/2"	3"	272	1.10	
		40	3"		330	1.17	
150	150	10	2"		150	70	0.34
		20	2 1/2"		212	90	0.37
		30	3"		272	100	0.40

Designation & Ordering code

COMPLETE FILTER

Series	Example 1:	MPAC	070	10	M0060	A	N	00	FG034	0	ON	NN	P01	NN
MPAC	Example 2:	MPAC	140	30	M0250	A	N	00	FN300	0	ON	MA	P01	NN

Size
050
070
100
140

Length	Size: 050	070	100	140
10	•	•	•	•
20	-	•	•	•
30	-	-	-	•

Filtration rating (filter media)	
M0025 Wire mesh 25 µm	M0090 Wire mesh 90 µm
M0060 Wire mesh 60 µm	M0250 Wire mesh 250 µm

Element Δp
A 1 bar

Seals and treatments
N Without seals

Bypass
00 Without bypass

Connection type
FG Thread ISO 1179-2 (GAS)
FN Thread ANSI/ASME B 1.20.1 (NPT)

Nominal thread	Size: 050	070	100	140
Length	10	10	20	10
	10	20	10	20
	10	20	30	
038 3/8"	•	-	-	-
012 1/2"	•	•	-	-
034 3/4"	-	•	•	-
100 1"	-	-	•	•
114 1 1/4"	-	-	-	•
112 1 1/2"	-	-	-	•
200 2"	-	-	-	•
212 2 1/2"	-	-	-	•
300 3"	-	-	-	•

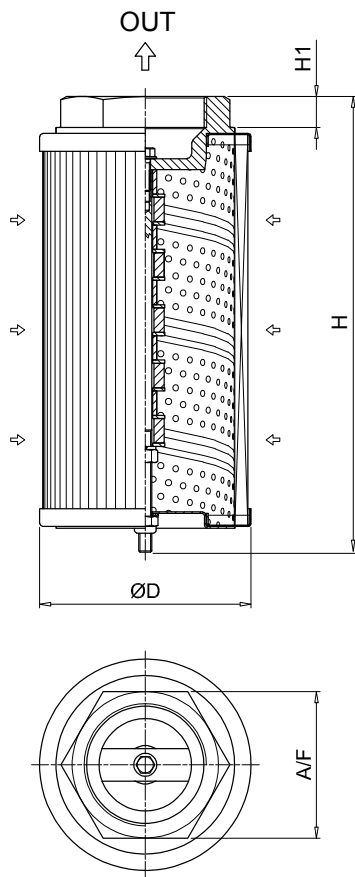
Additional connections
0 Without additional connections

Connections for clogging indicators
ON Without connection

Additional features
NN Without additional features
MA With magnetic filter

Version
P01 Standard catalogue item

Certificates
NN Without certificates



MPAC									
Size	ØD [mm]	Length	Nominal thread	H [mm]	H1 [mm]	A/F [mm]	Weight [kg]		
050	50	10	3/8"	98	16	28	0.17		
			1/2"	113			0.27		
070	70	10	3/4"	115	18	42	0.36		
		20	160	0.39					
		1"	145	0.35					
100	99	10	1 1/4"	148	20	60	0.54		
		20	239	0.63					
		1 1/2"	174	0.91					
140	136	10	2"	162	13	80	0.98		
		20	272	1.00					
		30	2 1/2"	281			20	90	1.60
			2"	322			13	80	1.67
		3"	335	22			106	1.60	