STRC & MPAC series

Flow rate up to 1000 l/min

Description

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

Technical data

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

STRC
Without bypass

STRC
With bypass

MPAC
Without additional features

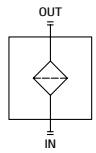
MPAC
With magnetic filter

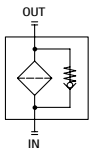
Flow rates [l/min]

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
	2”	480
	3”	995

Maximum flow rate for a complete suction filter with a pressure drop Δp = 0.08 bar.
The reference fluid has a kinematic viscosity of 30 mm^2/s (cSt) and a density of 0.86 kg/dm^3.
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	•	-

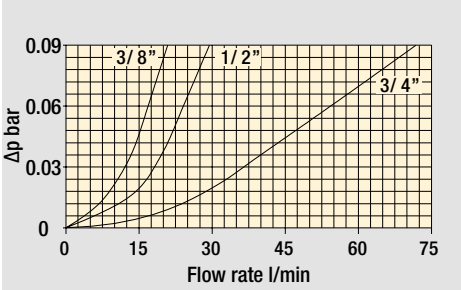


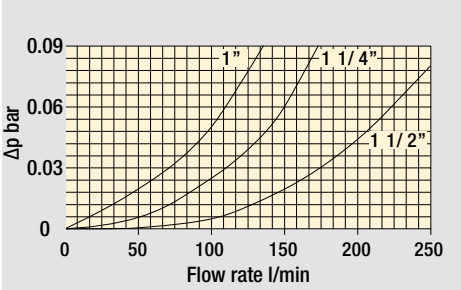


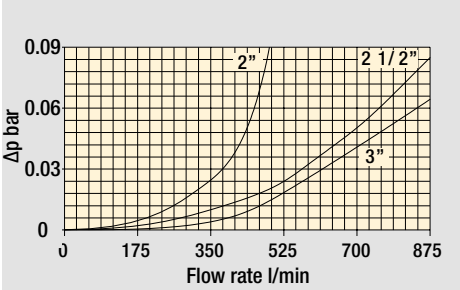
Hydraulic symbols

Pressure drop

Filters pressure drop Δp in function of connection type







The curves are plotted using mineral oil with density of 0.86 kg/dm^3 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

STRC

Designation & Ordering code

COMPLETE FILTER

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

Series

STRC

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	**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

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

0N Without connection

Additional features

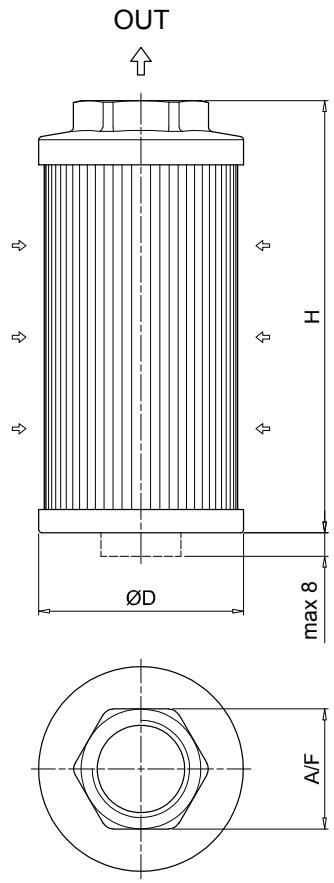
NN Without additional features

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		0.24
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		0.58
140	130	10	1 1/2" 2"	160		0.70
		20	2"	262		0.94
		30	2 1/2" 3"	272	101	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

MPAC

Designation & Ordering code

COMPLETE FILTER

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

Series

MPAC

Size

050
070
100
140

Length

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

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

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	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

0N Without connection

Additional features

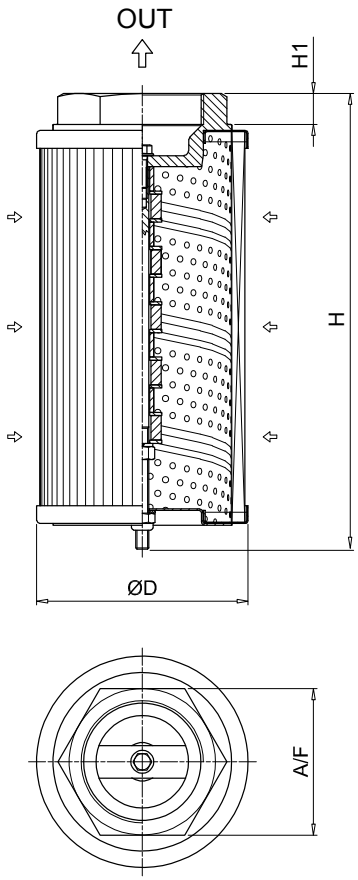
NN Without additional features
MA With magnetic filter

Version

P01 Standard catalogue item

Certificates

NN Without certificates



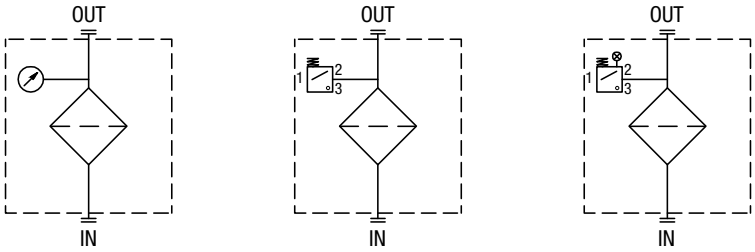
MPAC

Size	Ø D [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		115	18	42	0.36
			3/4”	160			0.39
		20					0.35
			1”	145			0.54
100	99	10		148	20	60	0.63
			1 1/4”	239			0.95
		20					0.91
			1 1/2”	174			0.98
140	136	10		162	13	80	1.00
			2”	272			1.60
		20	2 1/2”	281	20	90	1.67
		30	2”	322	13	80	1.60
			3”	335	22	106	1.93

Suitable indicator types

V ACUUM INDICATORS

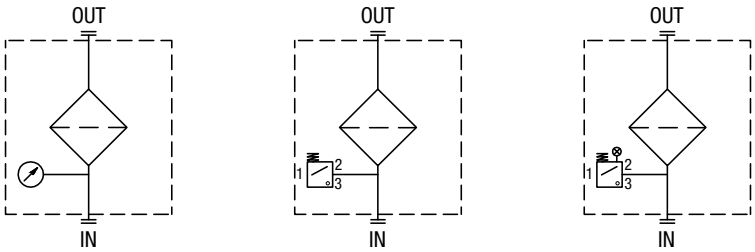
Vacuum indicators are used on the Suction line to check the efficiency of the filter element.
They measure the pressure downstream of the filter element.
Standard items are produced with R 1/4" EN 10226 connection.
Available products with R 1/8" EN 10226 to be fitted on MPS series.
Vacuum indicators are identified in the Hydraulic Filtration catalogue and in the Quick Reference Guide table by the letter "V".



Example:
V VVB20P01

B AROMETRIC (PRESSURE) INDICATORS

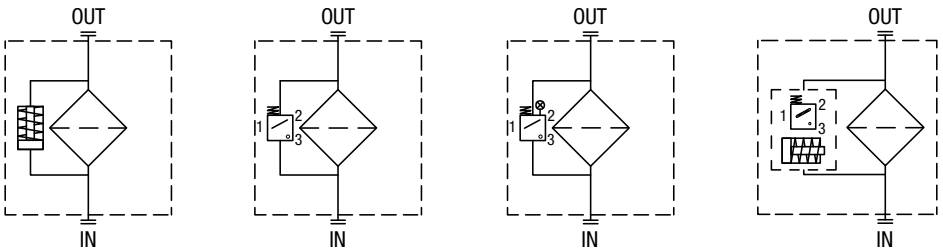
Pressure indicators are used on the Return line to check the efficiency of the filter element.
They measure the pressure upstream of the filter element.
Standard items are produced with R 1/8" EN 10226 connection.
Barometric (pressure) indicators are identified in the Hydraulic Filtration catalogue and in the Quick Reference Guide table by the letter "B"



Example:
B BVA14P01

D IFFERENTIAL PRESSURE INDICATORS

Differential pressure indicators are used on the Pressure line to check the efficiency of the filter element.
They measure the pressure upstream and downstream of the filter element (differential pressure).
Standard items are produced with special connection G 1/2" size.
Also available in Stainless Steel models.
Differential pressure indicators are identified in the Hydraulic Filtration catalogue and in the Quick Reference Guide table by the letter "D"



Example:
D DVA20xP01

Designation & Ordering code

VACUUM INDICATORS

Configuration example 1:	VE	A	21	V	A	50	P01	EX
Configuration example 2:	VL	B	21	A	A	71	P01	
Configuration example 3:	VV	R	20				P01	

Series

VE	Electrical vacuum indicator
VL	Electrical/Visual vacuum indicator
VV	Vacuum gauge

Type VE - VL

A	Connection EN 10226 - R1/4”
B	Connection EN 10226 - R1/8”

Type VV

		SF2	SFEX
A	Axial connection EN 10226 - R1/4”	•	-
B	Axial connection EN 10226 - R1/8”	-	•
R	Radial connection EN 10226 - R1/4”	•	-
S	Radial connection EN 10226 - R1/8”	-	•

Vacuum setting

		VE	VL	VV
20	-0.16 bar	-	-	•
21	-0.21 bar	•	•	-

Seals

		VEA - VLA	VEB - VLB
A	NBR	•	•
V	FPM	•	-

Thermostat

		VE	VL
A	Without	•	•

Electrical connections

		VE	VL
50	Connection EN 175301-803	•	-
51	Connection EN 175301-803, transparent base with lamps 24 Vdc	-	•
52	Connection EN 175301-803, transparent base with lamps 110 Vdc	-	•
53	Connection EN 175301-803, transparent base with lamps 230 Vac	-	•
71	Connection IEC 61076-2-101 D (M12), black base with lamps 24 Vdc	-	•

Option

P01	MP Filtri standard
Pxx	Customized

Certifications

		VEA21A	VEA21V	VEB	VL	VV
	Without	•	•	•	•	•
EX	ATEX certification	•	•	•	-	-
UL	UL certification	•	-	-	-	-