STR & MPA - MPM series

Flow rate up to 1000 l/min

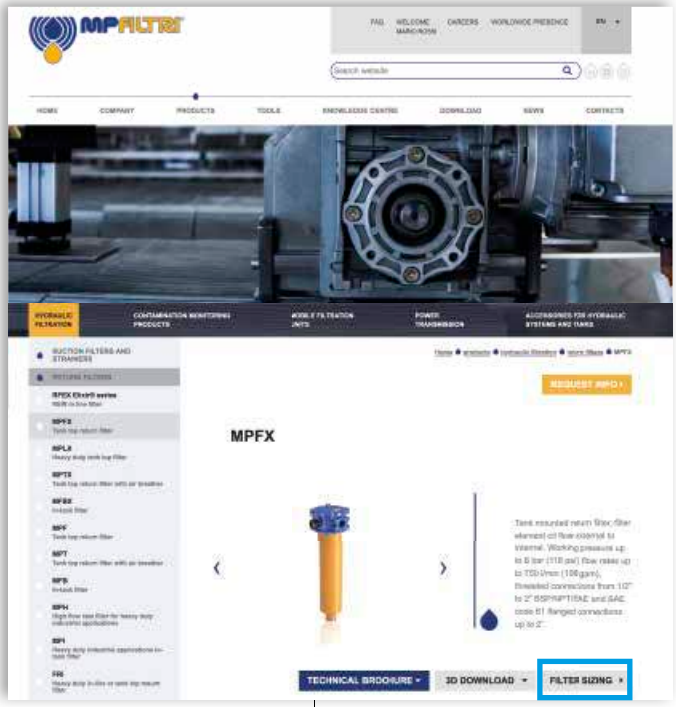
TYPICAL FILTER SIZING Selection Software

Step 1

Select “FILTER SIZING SOFTWARE” after login

OR

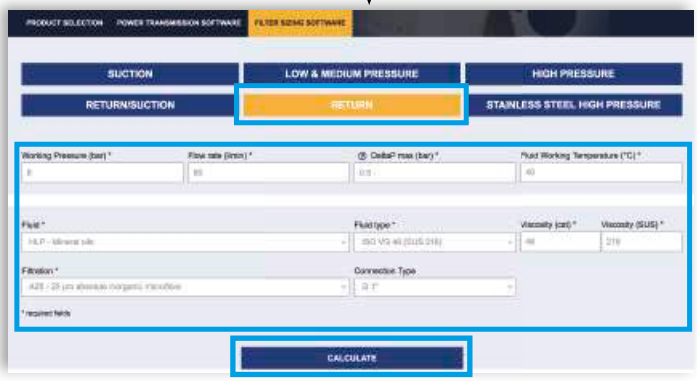
Select “FILTER SIZING” after login from a product page

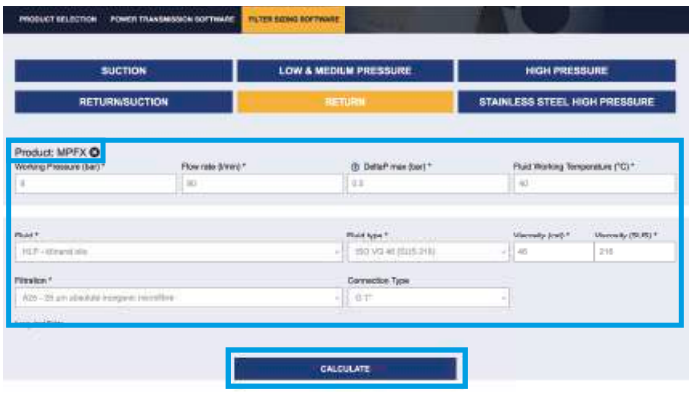


Choose the type of filter family.
Enter the main data for sizing the filter
then push CALCULATE.

Step 2

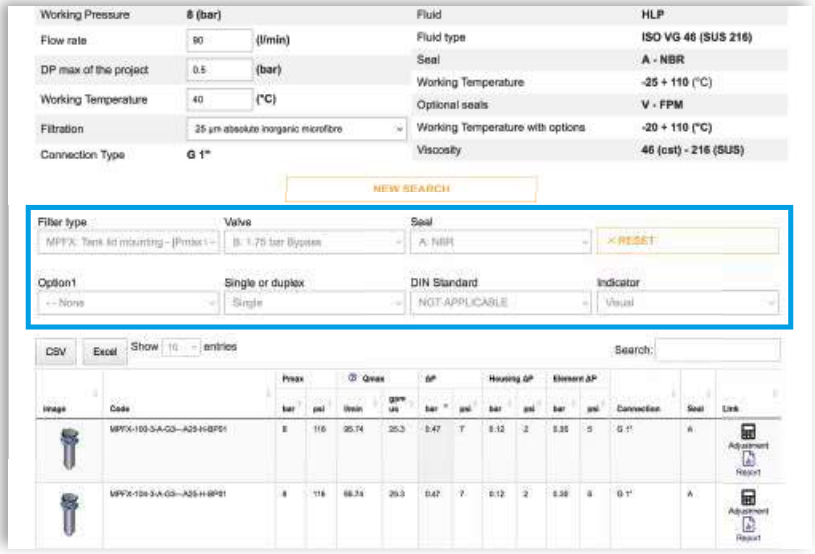
Enter the main data for sizing the filter
then push CALCULATE.





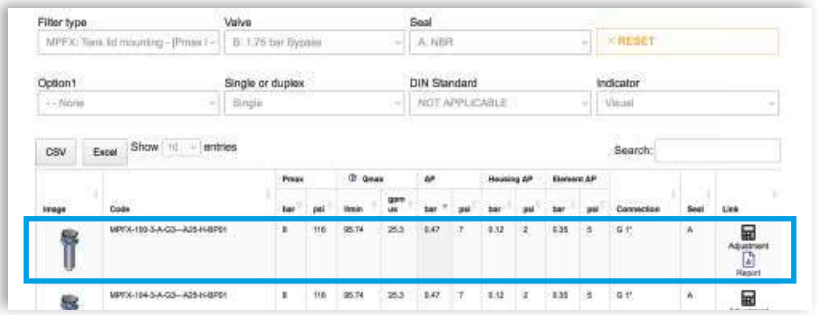
Step 3

Select the desidered options to choose the appropriate filter type for the application.



Step 4

Choose the most suitable filter from the proposed list.



Step 5

A SAVE YOUR FILTER'S REPORT

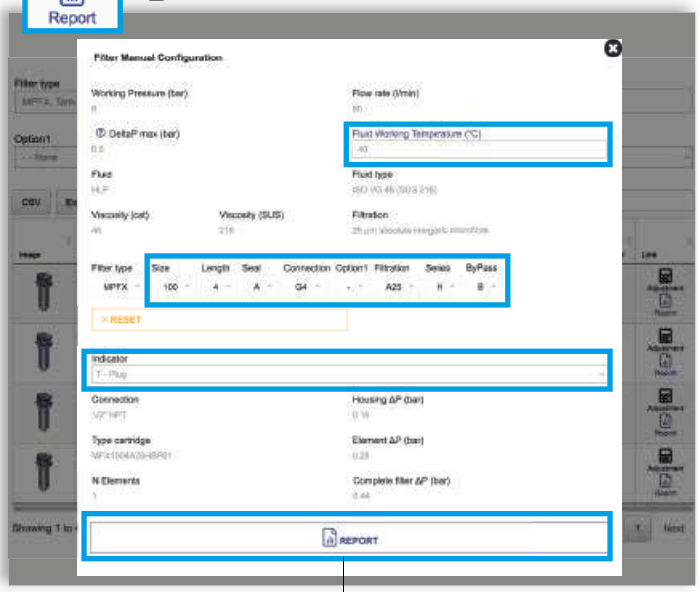
SAVE IN YOUR ARCHIVE
typing your reference data and then SAVE AS PDF

A new
browser window
displays the pdf

Close the report window

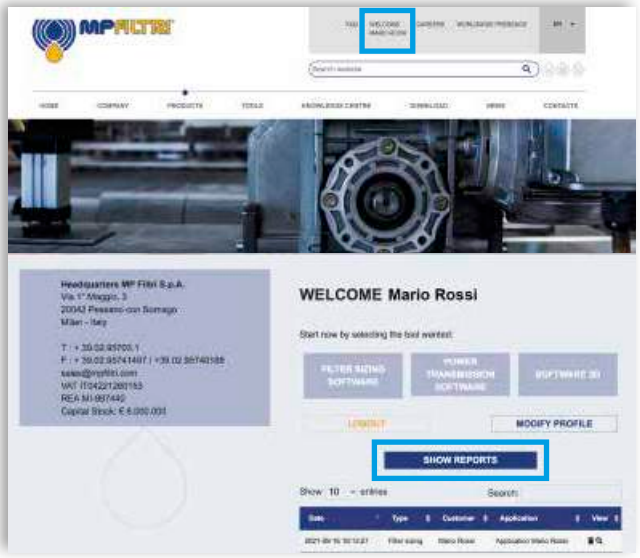
B MANUAL EDIT

It is possible to change the filter
modifying every parameter.



see **A**

By clicking your WELCOME button,
the SHOW REPORTS is displayed: select it to see your filters list.



STR & MPA-MPM GENERAL INFORMATION

Description

Suction filters

Flow rate up to 1000 l/min

STR

STR 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 875 l/min
- Bypass valve, to relieve excessive pressure drop across the filter media

Common application:
- Mobile machines (Construction and Agriculture machines)
- Industrial equipment

MPA - MPM

MPA and MPM are ranges 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 875 l/min
- Magnetic filter (MPM), to hold the ferrous particles

Common application:
Industrial equipment

Technical data

STR 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

MPA - MPM 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 - Nylon

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

Weights [kg]

Filter series	
STR	see page 35
MPA - MPM	see page 37

STR
Without bypass

STR
With bypass

MPA
Without magnetic filter

MPM
With magnetic filter

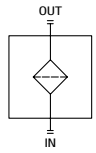
FILTER ASSEMBLY SIZING
Flow rates [l/min]

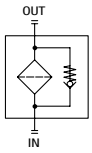
Filter series	Thread	l/min
STR & MPA - MPM	3/8”	19
	1/2”	28
	3/4”	67
	1”	126
	1 1/4”	167
	1 1/2”	258
	2”	480
	2 1/2”	854
	2”	480
	3”	995

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.

Hydraulic symbols

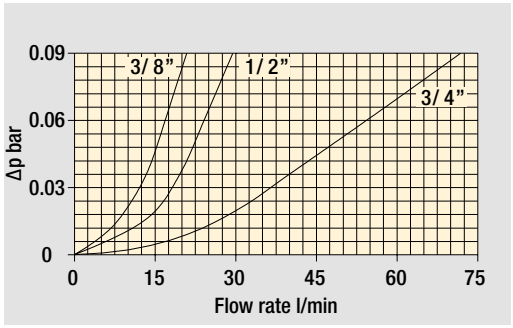
Filter series	Style S	Style B
STR	•	•
MPA - MPM	•	

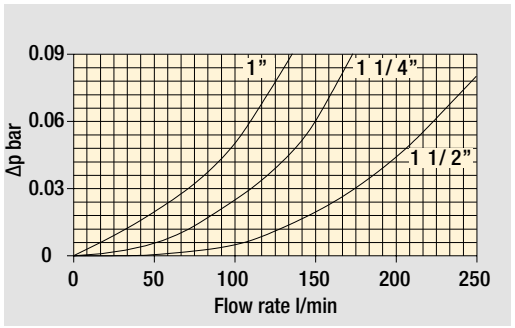


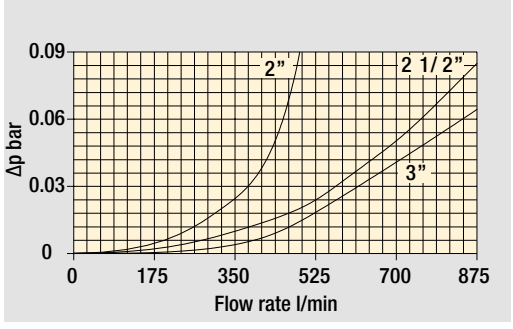


Pressure drop

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.

STR

Designation & Ordering code

COMPLETE FILTER

Configuration example 1:	STR045	1	B	G1	M60	P01
Configuration example 2:	STR100	4	S	G2	M250	P01

Element series and size

STR045
STR050
STR065
STR070
STR086
STR100
STR140
STR150

Connection type

	STR045	STR050	STR065	STR070	STR086	STR100	STR140	STR150
1	3/8”	3/8”	1/2”	1/2”	1 1/2”	1 1/4”	1 1/2”	2”
2	1/2”	1/2”	3/4”	3/4”	2”	1 1/4”	2”	2 1/2”
3	-	-	3/4”	3/4”	1 1/2”	1 1/2”	2”	3”
4	-	-	1”	1”	2”	2”	2 1/2”	-
5	-	-	-	-	1 1/2”	1 1/2”	3”	-
6	-	-	-	1/2”	2”	-	3”	-

Valves

S	Without bypass
B	With bypass 0.3 bar

Thread type

G1	Thread GAS
G2	Thread NPT

Filtration rating (filter media)

M25	Wire mesh	25 µm
M60	Wire mesh	60 µm
M90	Wire mesh	90 µm
M250	Wire mesh	250 µm

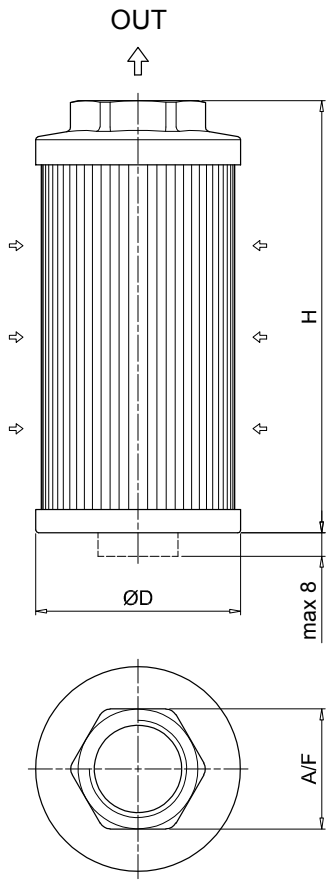
Execution

P01	MP Filtri standard
Pxx	Customized

OTHER INFORMATION

Conditions of packaging

Filter size	Pcs. per box
045	12
050	12
065	6
070	6
086	6
100	6
140	1
150	1



STR						
Filter size	Connection type	Thread	Ø D [mm]	H [mm]	A / F [mm]	Weight [kg]
045	1	3/8”	46	105	30	0.15
	2	1/2”	46	105	30	0.19
050	1	3/8”	52	79	30	0.11
	2	1/2”	52	79	30	0.11
065	1	1/2”	65	110	41	0.19
	2	3/4”	65	110	41	0.22
	3	3/4”	65	144	41	0.24
	4	1”	65	144	41	0.22
070	1	1/2”	70	95	41	0.18
	2	3/4”	70	95	41	0.17
	3	3/4”	70	141	41	0.23
	4	1”	70	141	41	0.22
	6	1/2”	70	141	41	0.24
086	1	1 1/2”	86	143	69	0.33
	2	2”	86	143	69	0.30
	3	1 1/2”	86	201	69	0.43
	4	2”	86	201	69	0.40
	5	1 1/2”	86	261	69	0.53
	6	2”	86	261	69	0.50
100	1	1 1/4”	99	137	69	0.47
	2	1 1/4”	99	227	69	0.58
	3	1 1/2”	99	227	69	0.55
	4	2”	99	227	69	0.51
	5	1 1/2”	99	137	69	0.43
140	1	1 1/2”	130	160	69	0.70
	2	2”	130	160	69	0.68
	3	2”	130	262	69	0.94
	4	2 1/2”	130	272	101	1.10
	5	3”	130	272	101	1.00
	6	3”	130	330	101	1.17
150	1	2”	150	150	70	0.34
	2	2 1/2”	150	212	90	0.37
	3	3”	150	272	100	0.40

MPA-MPM

Designation & Ordering code

COMPLETE FILTER

Configuration example 1:	MPA	030	G1	M60	P01
Configuration example 2:	MPM	430	G2	M250	P01

Element series

MPA	Without magnetic filter
MPM	With magnetic filter

Connections

012	3/8”
015	1/2”
025	1/2”
030	3/4”
045	3/4”
050	1”
075	1”
095	1 1/4”
120	1 1/4”
150	1 1/2”
180	1 1/2”
220	2”
280	2”
300	2 1/2”
380	2”
430	3”

Thread type

G1	Thread GAS
G2	Thread NPT

Filtration rating (filter media)

M25	Wire mesh 25 µm
M60	Wire mesh 60 µm
M90	Wire mesh 90 µm
M250	Wire mesh 250 µm

Execution

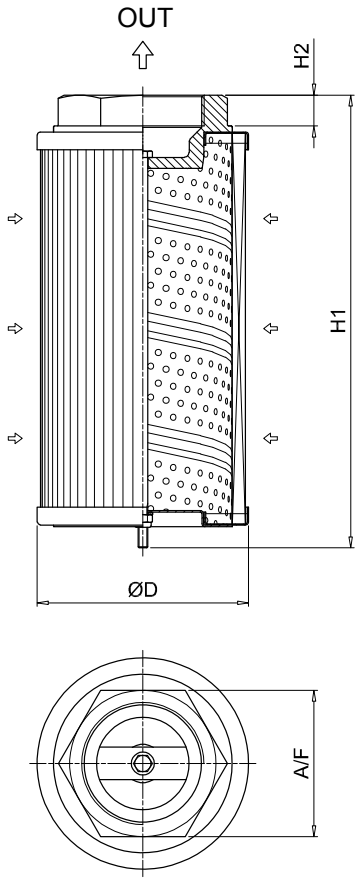
P01	MP Filtri standard
Pxx	Customized

OTHER INFORMATION

Conditions of packaging

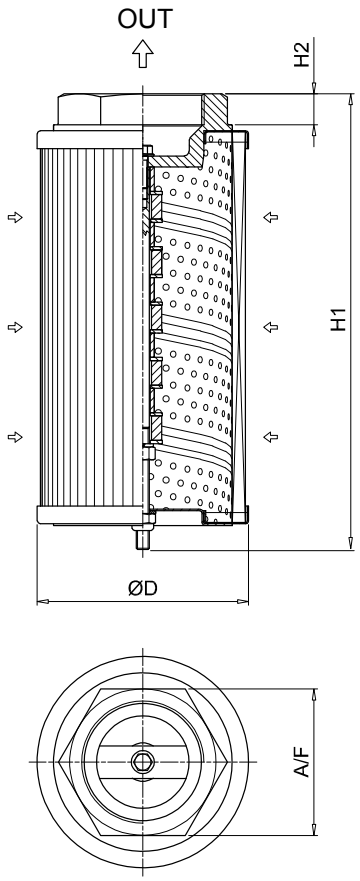
Size	Pcs. per box
012	12
015	6
025	6
030	6
045	6
050	6
075	6
095	6
120	6
150	6
180	1
220	1
280	1
300	1
380	1
430	1

Dimensions



MPA

Filter size	Thread	ØD [mm]	H1 [mm]	H2 [mm]	A/F [mm]	Weight [kg]
012	3/8”	50	98	16	28	0.17
015	1/2”	50	98	16	28	0.17
025	1/2”	70	113	16	28	0.27
030	3/4”	70	115	18	42	0.36
045	3/4”	70	160	18	42	0.39
050	1”	70	160	18	42	0.35
075	1”	99	145	18	42	0.54
095	1 1/4”	99	148	20	60	0.63
120	1 1/4”	99	239	20	60	0.95
150	1 1/2”	99	239	20	60	0.91
180	1 1/2”	130	174	20	60	0.98
220	2”	130	162	13	80	1.00
280	2”	130	272	13	80	1.60
300	2 1/2”	130	281	20	90	1.67
380	2”	130	322	13	80	1.60
430	3”	130	335	22	106	1.93



MPM

Filter size	Thread	ØD [mm]	H1 [mm]	H2 [mm]	A/F [mm]	Weight [kg]
012	3/8”	50	98	16	28	0.17
015	1/2”	50	98	16	28	0.17
025	1/2”	70	113	16	28	0.27
030	3/4”	70	115	18	42	0.36
045	3/4”	70	160	18	42	0.39
050	1”	70	160	18	42	0.35
075	1”	99	148	18	42	0.54
095	1 1/4”	99	154	20	60	0.63
120	1 1/4”	99	244	20	60	0.95
150	1 1/2”	99	244	20	60	0.91
180	1 1/2”	130	174	20	60	0.98
220	2”	130	163	13	80	1.00
280	2”	130	273	13	80	1.60
300	2 1/2”	130	282	20	90	1.67
380	2”	130	323	13	80	1.60
430	3”	130	336	22	106	1.93