



Low-Pressure filter

Pi 150

Operating pressure 10 (25) bar, Nominal size up to 630

1. Features

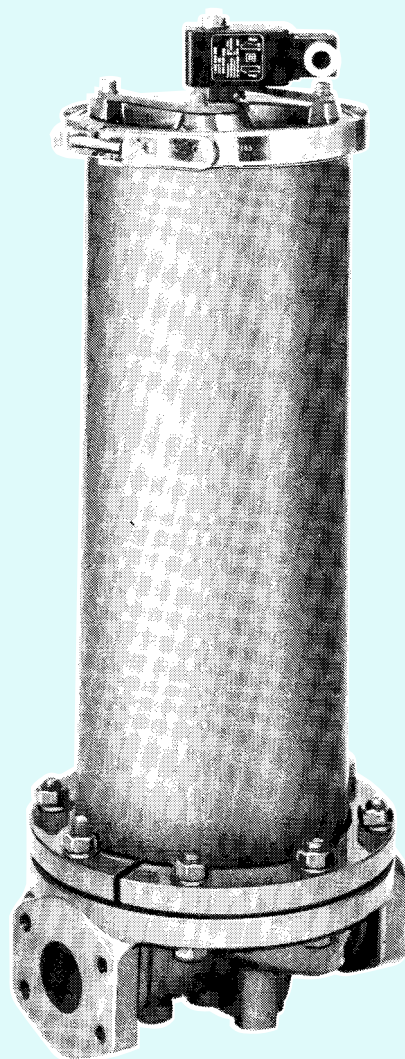
Efficient filters for modern hydraulic systems

- Modular design
- Minimal pressure loss
- Compact design
- Visual / electrical / electronic differential pressure indication
- Threaded or SAE 4 bolt flange ports

Quality filters, easy to service

- Highly efficient Mic- or Sm-x-filter elements
- β -rated elements per ISO 4572
- Large dirt holding capacity and high differential pressure stability providing optimal element service life
- 100% bubble-point tested elements

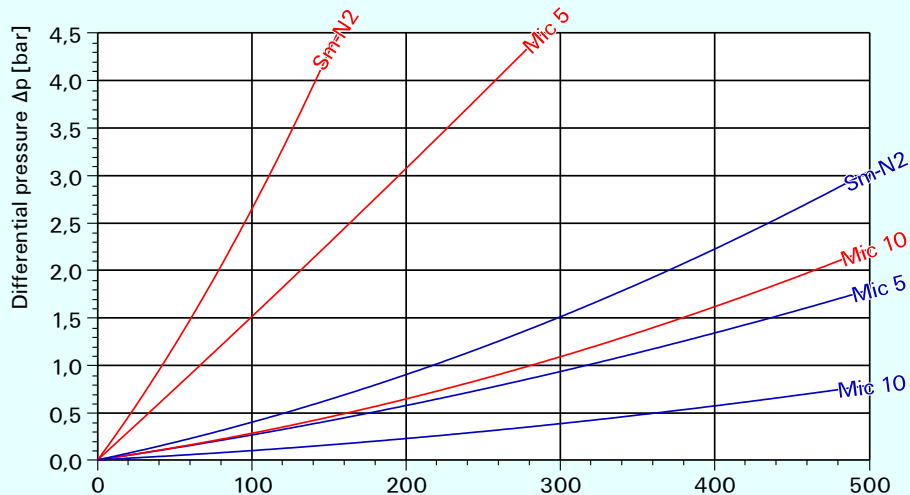
World-wide sales



2. Flow rate / pressure drop curve compl. filter

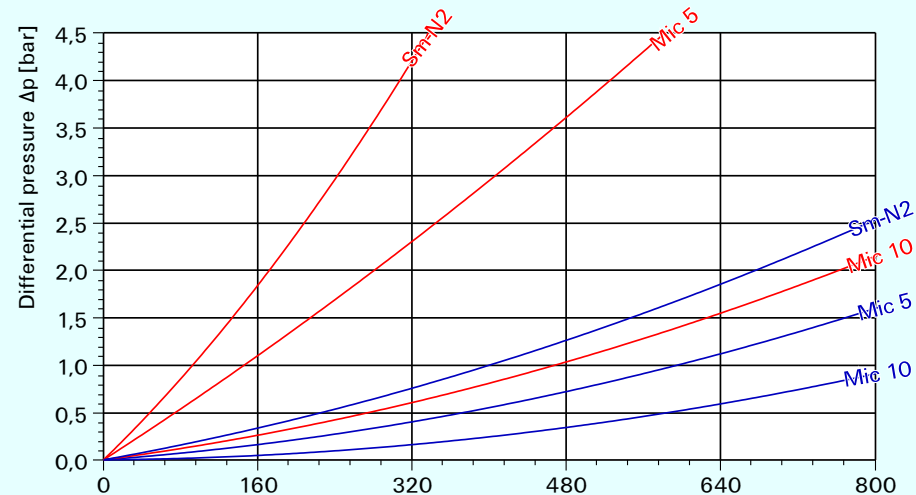
190 mm²/s (25 °E)
33 mm²/s (4,5 °E)

MAHLE



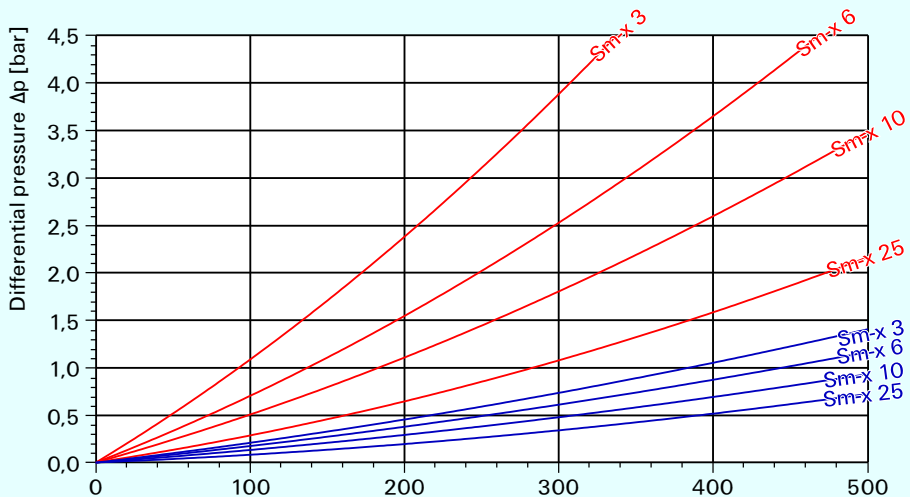
Pi 1535 Mic 852760

MAHLE



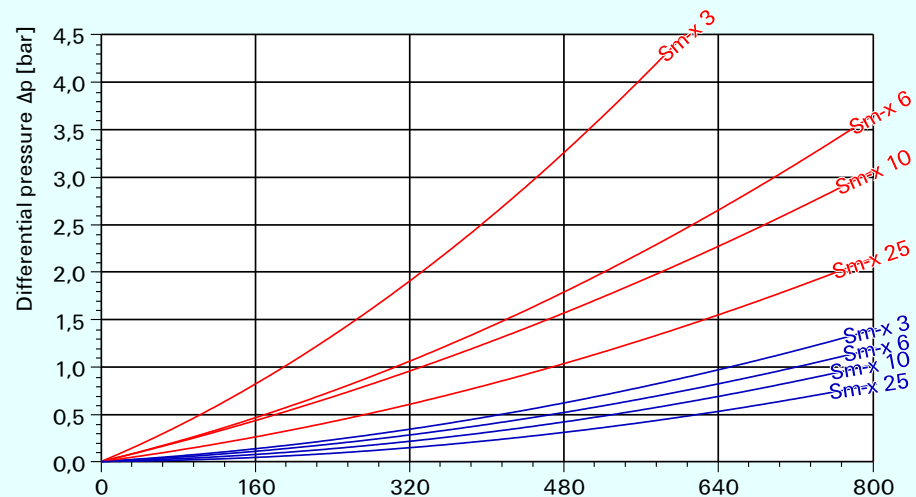
Pi 1560 Mic 852761

MAHLE



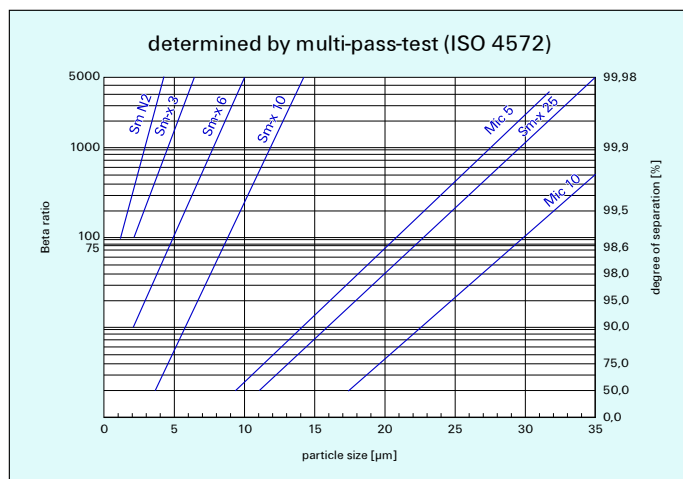
Pi 1535 Sm-x 852760

MAHLE



Pi 1560 Sm-x 852761

3. Separation characteristics



4. Filter performance data

tested according to ISO 4572 (multi-pass-test)

Sm-x-Elements
with Δp 10 bar

Sm-x 3 $\beta_3 \geq 75$
Sm-x 6 $\beta_6 \geq 75$
Sm-x 10 $\beta_{10} \geq 75$
Sm-x 25 $\beta_{25} \geq 75$

at 5 bar differential pressure

The filter element 852 760 Sm N2 is an element with a very large dirt holding capacity, especially for bypass filtration.

Example for ordering filters:

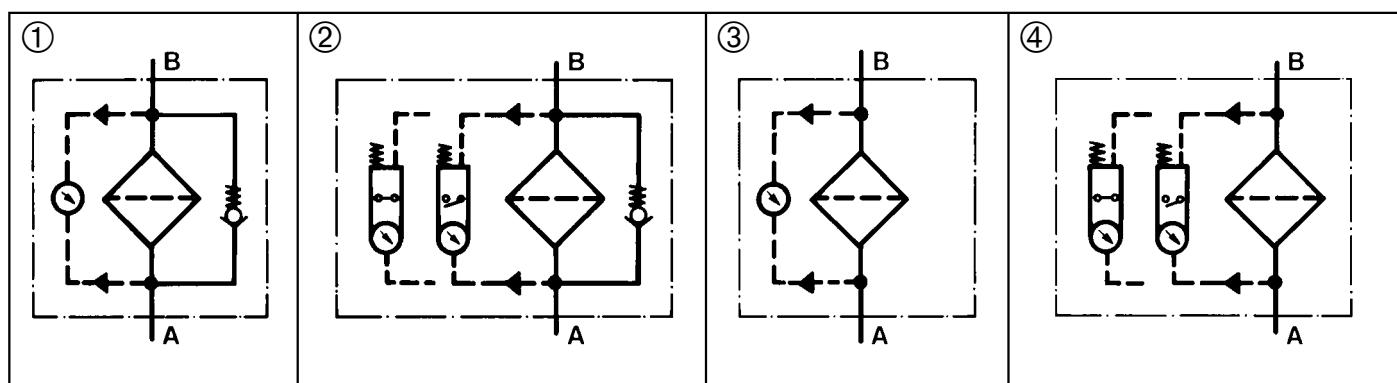
1. Housing design
V= 400 l/min, bypass, electrical indication, nominal pressure 10 bar
Type-no. **Pi 1535/10-058** · Order-no. **777.463.1**
+ 2. Filter element
Sm-x 10
Type-no. **852 760 Sm-x 10** · Order-no. **777.442.5**

5. Test regulations

MAHLE filter elements are manufactured respectively, tested in accordance with the following international standards:

No.	Designation
ISO 2941	Hydraulic-filter elements: Verification of burst resistance
ISO 2942	Hydraulic-filter elements: Determination of fabrication integrity
ISO 2943	Hydraulic-filter elements: Verification of material compatibility with hydraulic fluids
ISO 3723	Hydraulic-filter elements: Method for testing end-cap load
ISO 3724	Hydraulic-filter elements: Verification of flow fatigue characteristics
ISO 39682	Hydraulic-filters: Evaluation of pressure drop versus flow
ISO 4572	Hydraulic-filter elements: Testing of filter performance (multi-pass-test)

6. Symbols



7. Part Numbers

7.1 Housing design								7.2 Filter elements* () = filter surface [] = order number							
Order-number	Type number	Nominal pressure [bar]	Nominal size NG [l/min]	① with bypass valve with visual indicator	② with bypass valve with electrical indicator	③ with visual indicator	④ with electrical indicator		Mic 5 Δp 5 bar	Mic 10 Δp 5 bar	Sm N2 Δp 10 bar	Sm-x 3 Δp 10 bar	Sm-x 6 Δp 10 bar	Sm-x 10 Δp 10 bar	Sm-x 25 Δp 10 bar
		10	400					}	(23800 cm²)	(23800 cm²)	(15900 cm²)	(14500 cm²)	(14500 cm²)	(14500 cm²)	(14500 cm²)
777.464.9	Pi 1535/10–057														
777.463.1	Pi 1535/10–058														
780.490.9	Pi 1535/10–068														
780.491.7	Pi 1535/10–069														
795.598.2	Pi 1535/25–057			25											
790.789.2	Pi 1535/25–058														
		10	630					}	(47600 cm²)	(47600 cm²)	(31800 cm²)	(29000 cm²)	(29000 cm²)	(29000 cm²)	(29000 cm²)
777.462.3	Pi 1560/10–057														
777.461.5	Pi 1560/10–058														
780.494.1	Pi 1560/10–068														
780.495.8	Pi 1560/10–069														
795.599.0	Pi 1560/25–057			25											
797.071.8	Pi 1560/25–058														

When filter with non bypass configuration is selected, the collapse pressure of the element may not be exceeded.

*further elements available upon request

8. Specifications

Nominal pressure:	10/25 bar*
Temperature range:	-10 °C bis +120 °C (other temperature ranges on request)
Bypass valve opening pressure:	Δp 3,5 bar $\pm$ 10 %
Filter head material:	GDAI
Filter bowl material:	St (steel)
Sealing material:	NBR
Activating pressure of visual/electrical differential pressure indicator:	Δp 2,2 bar $\pm$ 10 %
Electrical data of differential pressure indicator:	
Maximum voltage:	230 V $\sim$ / =
Maximum current on contact:	2,5 A
Maximum contact load:	60 VA / 40 W
Inrush current:	70 VA
Type of protection:	IP 65 when inserted and secured
Contact:	bistable
Cable connection:	PG 11 $\varnothing$ 6-10

The electrical indicator function can be changed from the Normally Open position to the Normally Closed position or visa versa by inverting the electrical section.

With the inrush current of 70 VA the indicator can trigger small contactors or contactor relays.

Inductivity in the direct current may require the use of a signal eraser.

For further information and executions please see our leaflet "contamination indicators".

Filters compatible with standard mineral oils.

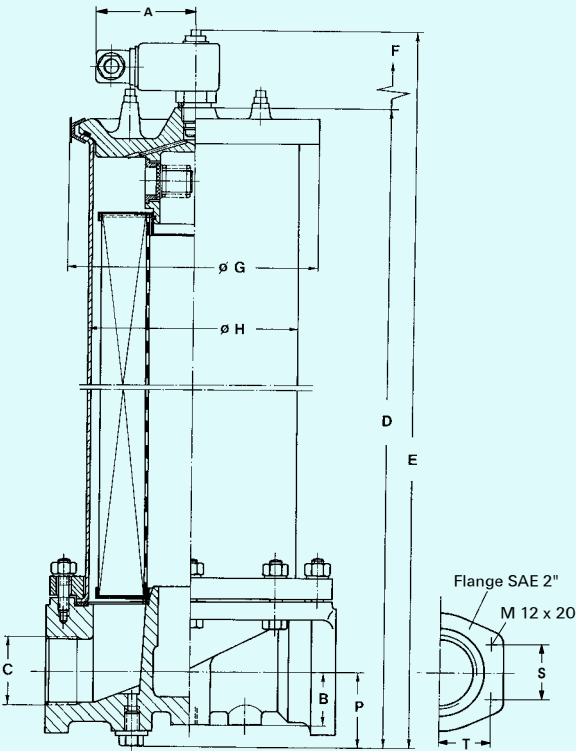
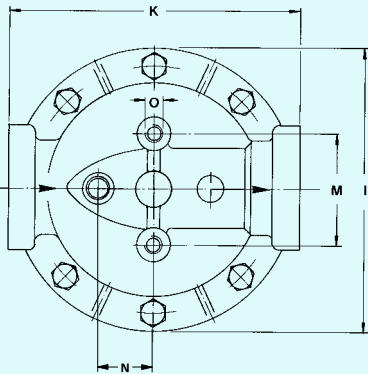
Please contact us in case of using other media.

Housings with nominal pressure 10 bar are fitted standard with an air bleeder valve, housings with nominal pressure 25 bar with a venting screw.

9. Dimensions

All dimensions (except "C" and "O") in mm

Type	Pi 1535	Pi 1560
Dimension		
A	78	78
B	42	42
C	G 1½	SAE 2"
D	607	1035
E	643	1068
F	425	850
G	190	190
H	164	164
I	225	225
K	230	230
M	90	90
N	44	44
O	M 12 x 20	M 12 x 20
P	59	59
R	45	45
S	—	42,9
T	—	77,8
Weight	17,1 kg	27,1 kg



*Standard pressure series hole pattern 3000 PSI

