

Parallel Filter Pi 320

Operating pressure 250 bar, Nominal size 250, 500 and 650

1. Features

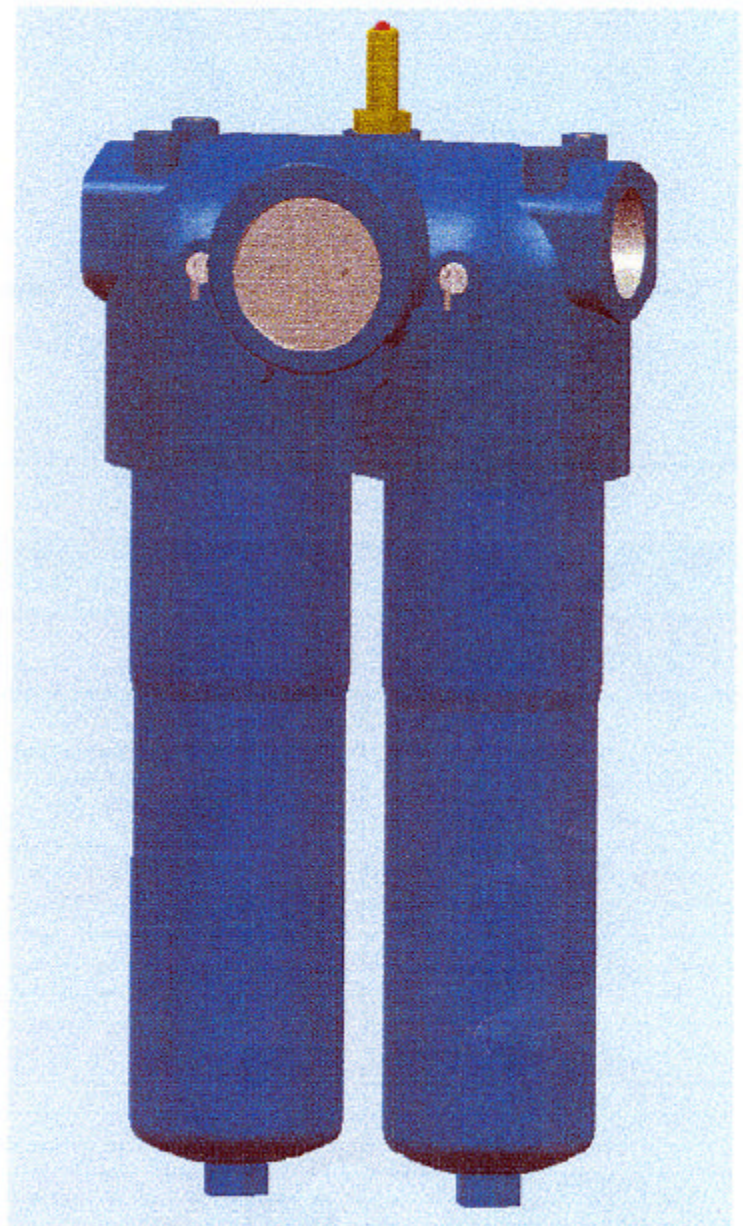
Efficient filters for modern hydraulic systems

- Modular design
- Minimal pressure loss
- Compact design
- Visual / electrical / electronic differential pressure indication
- Threaded ports

Quality filters, easy to service

- Highly efficient Sm-x filter elements
- B-rated elements per ISO 4572
- Large dirt holding capacity and high differential pressure stability providing optimal element service life

World - wide sales



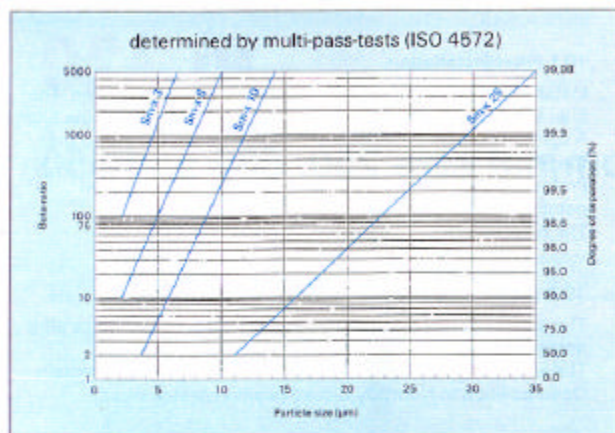
Subject to technical alteration without prior notice!

2. Flow rate / pressure drop curve compl. filter

190 mm²/s (25 ° E)
33 mm²/s (4,5 ° E)

Pressure drop curves upon request

3. Separation characteristics



4. Filter performance data

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

Sm-x elements
with Δp 20 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 7 bar differential pressure

Sm-x vst elements
with Δp 210 bar

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

at 16 bar differential pressure

Example for ordering filters:

1. Housing design with $\dot{V} = 500$ l/min, electrical indicator
type-no. **Pi 3250 - 015**

+ 2. filter element Sm-x vst 3
type-no. **Pi 2215**

7. Order numbers

7.1 Housing Design

Type number	Nominal size (NG)	① with bypass valve and visual indicator	② with bypass valve and electrical indicator	③ with visual indicator	④ with electrical indicator
Pi 3225 - 012	250				
Pi 3225 - 013					
Pi 3225 - 014					
Pi 3225 - 015					
Pi 3250 - 012	500				
Pi 3250 - 013					
Pi 3250 - 014					
Pi 3250 - 015					
Pi 3265 - 012	650				
Pi 3265 - 013					
Pi 3265 - 014					
Pi 3265 - 015					

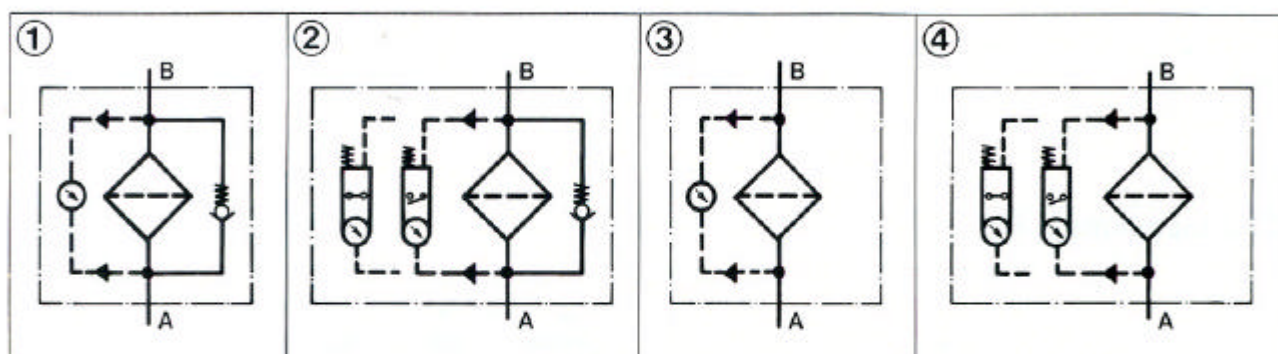
When filter with non bypass configuration is selected, the collapse pressure of the element may not be exceeded.

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 3968.2	Hydraulic-filters: Evaluation of pressure drop versus flow
ISO 4572	Hydraulic-filter elements: Testing of filter performance (multi-pass-test)

6. Symbols



7.2 Filter elements*

() = filter surface area [] = type number

Sm-x 3 Δp 20 bar	Sm-x 6 Δp 20 bar	Sm-x 10 Δp 20 bar	Sm-x 25 Δp 20 bar	Sm-x vst 3 Δp 210 bar	Sm-x vst 6 Δp 210 bar	Sm-x vst 10 Δp 210 bar	Sm-x vst 25 Δp 210 bar
(2350 cm ²)	(2350 cm ²)	(2350 cm ²)	(2350 cm ²)	(2010 cm ²)	(2010 cm ²)	(2010 cm ²)	(2010 cm ²)
768.016.8	795.509.9	768.035.8	768.047.3				
768.016.8	795.509.9	768.035.8	768.047.3	[Pi 2215]	[Pi 5215]	[Pi 3215]	[Pi 4215]
[Pi 2115]	[Pi 5115]	[Pi 3115]	[Pi 4115]	768.022.6	795.512.3	768.040.8	768.053.1
				768.022.6	795.512.3	768.040.8	768.053.1
(4420 cm ²)	(4420 cm ²)	(4420 cm ²)	(4420 cm ²)	(3800 cm ²)	(3800 cm ²)	(3800 cm ²)	(3800 cm ²)
768.017.6	795.510.7	768.036.6	768.048.1				
768.017.6	795.510.7	768.036.6	768.048.1	[Pi 2230]	[Pi 5230]	[Pi 3230]	[Pi 4230]
[Pi 2130]	[Pi 5130]	[Pi 3130]	[Pi 4130]	768.023.4	795.513.1	768.041.6	768.054.9
				768.023.4	795.513.1	768.041.6	768.054.9
(6540 cm ²)	(6540 cm ²)	(6540 cm ²)	(6540 cm ²)	(5600 cm ²)	(5600 cm ²)	(5600 cm ²)	(5600 cm ²)
768.018.4	795.511.5	768.037.4	768.049.9				
768.018.4	795.511.5	768.037.4	768.049.9	[Pi 2245]	[Pi 5245]	[Pi 3245]	[Pi 4245]
[Pi 2145]	[Pi 5145]	[Pi 3145]	[Pi 4145]	768.024.2	795.514.9	768.042.4	768.055.6
				768.024.2	795.514.9	768.042.4	768.055.6

*further elements upon request.

8. Specifications

Design:	line mounting filter
Operating pressure:	250 bar
Test pressure:	325 bar
Temperature range: (other temperature ranges on request)	-10 °C to +120 °C
Bypass opening pressure:	Δp 7 bar $\pm$ 10 %
Filter head material:	GGG
Filter bowl material:	St
Material of seals:	NBR / PTFE / CU
Activating pressure of visual / electrical differential pressure indicator:	Δp 5 bar $\pm$ 10 %
Electrical data of contamination 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.

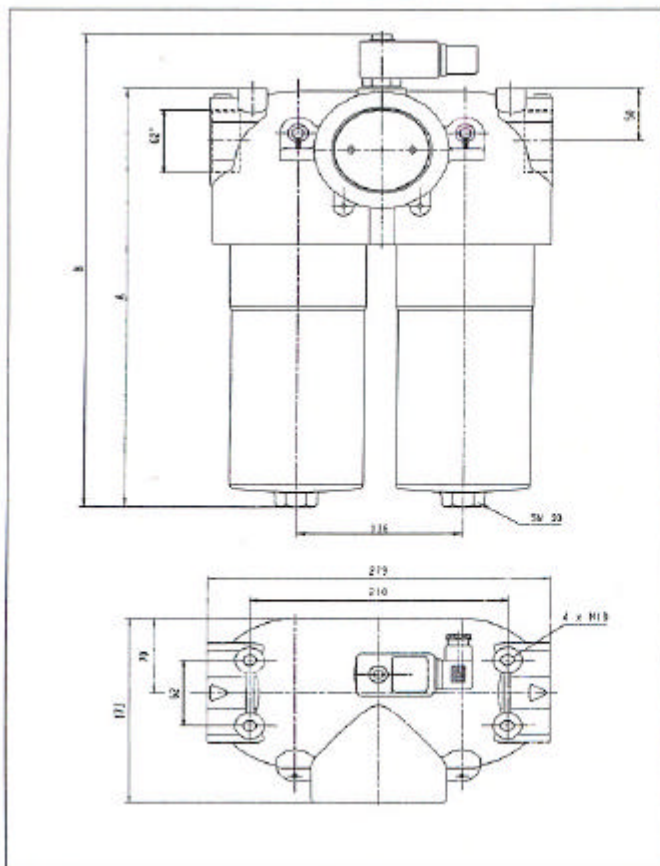
Inductivity in the direct current may require the use of a signal eraser.

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.

9. Dimensions



Type	A	B
PI 3225	300	355
PI 3250	420	475
PI 3265	535	590

All dimensions in mm

MAHLE

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