

LMP 950-951 series

Maximum working pressure up to 3 MPa (30 bar) - Flow rate up to 2400 l/min



LMP 950-951 GENERAL INFORMATION

Description

Technical data

Low & Medium Pressure filters

Maximum working pressure up to 3 MPa (30 bar)
Flow rate up to 2400 l/min

LMP950 is a range of low pressure filter with large filtration surface mainly suitable for lubrication, off-line filtration of the reservoirs and filtration equipment.

They are directly connected to the lines of the system through the hydraulic fittings.

Available features:

- Flanged connections up to 4", for a maximum flow rate of 2400 l/min
- In line or 90° connections, to meet any type of application
- Base-mounting design, for ease of the replacement of the filter element
- Fine filtration rating, to get a good cleanliness level into the system
- Water removal elements, to remove the free water from the hydraulic fluid. For further information, see the Contamination Management document and the dedicate leaflet.
- Bypass valve, to relieve excessive pressure drop across the filter media
- Vent ports, to avoid air trapped into the filter going into the system
- Drain ports, to remove the fluid from the housing prior the maintenance work
- Visual, electrical and electronic differential clogging indicators

Common applications:

- Off-line filtration of reservoirs
- Filtration systems
- Lubrication systems

Filter housing materials

- Head: Anodized Aluminium
- Housing: Anodized Aluminium
- Bypass valve: Anodized Aluminium

Pressure

- Test pressure: 4,5 MPa (45 bar)
- Burst pressure: 12 MPa (120 bar)
- Pulse pressure fatigue test: 1 000 000 cycles with pressure from 0 to 3 MPa (30 bar)

Bypass valve

- Opening pressure 350 kPa (3.5 bar) ±10%
- Other opening pressures on request.

Δp element type

- Microfibre filter elements - series N: 20 bar
- Fluid flow through the filter element from OUT to IN

Seals

- Standard NBR series A
- Optional FPM series V

Temperature

From -25 °C to +110 °C

Connections

LMP 950: In-line Inlet/Outlet
 LMP 951: 90° Inlet/Outlet

Note

LMP 950 - 951 filters are provided for vertical mounting

Weights [kg] and volumes [dm³]

Filter series	Weights [kg]			Volumes [dm ³]		
	Length	2	3	Length	2	3
LMP 950-951		25.1	33.5		15	28

GENERAL INFORMATION LMP 950-951

Flow rates [l/min]

Filter series	Length	Filter element design - N Series					
		A03	A06	A10	A16	A25	M25 M60 M90
LMP 950	2	613	756	953	1219	1515	2170
	3	1148	1219	1502	1713	1808	2293
LMP 951	2	635	789	1007	1308	1649	2420
	3	1226	1308	1634	1881	1993	2566

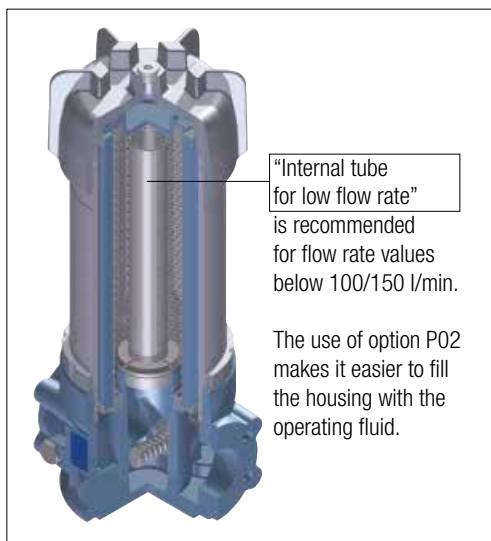
Maximum flow rate for a complete low and medium pressure filter with a pressure drop $\Delta p = 0.7$ bar.

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

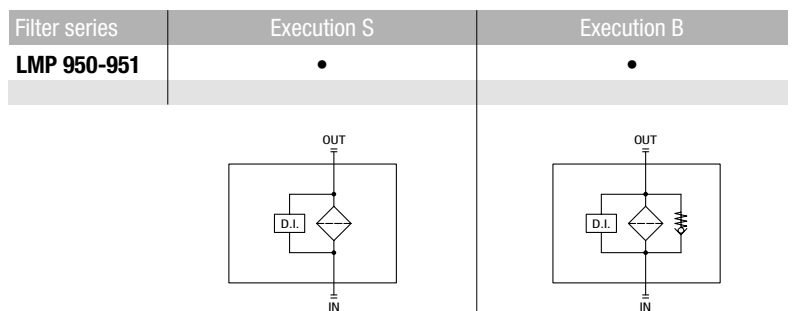
For different pressure drop or fluid viscosity we recommend to use our selection software available on www.mpfiltri.com.

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.

Execution P02

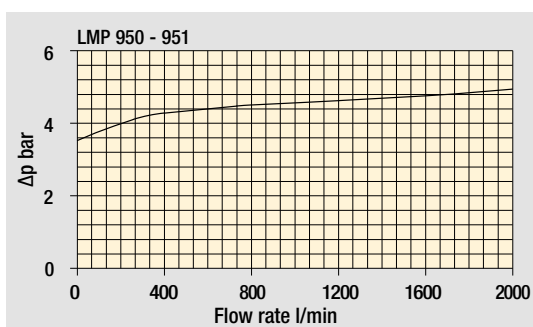
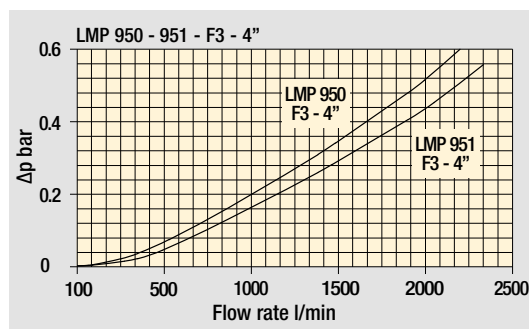
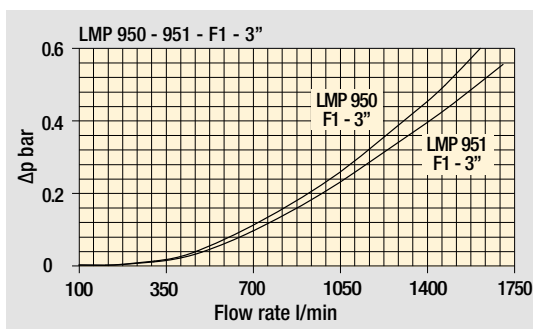


Hydraulic symbols



Pressure drop

Filter housings Δp pressure drop



Bypass valve pressure drop

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

LMP 950-951

Designation & Ordering code

COMPLETE FILTER

Series and size LMP950 LMP951	Configuration example: LMP951 2 B A F2 A10 N P01								
Length 2 3									
Bypass valve S Without bypass B With bypass 3.5 bar									
Seals and treatments A NBR V FPM									
Connections F1 3" SAE 3000 psi/M F2 3" SAE 3000 psi/UNC F3 4" SAE 3000 psi/M F4 4" SAE 3000 psi/UNC									
Filtration rating (filter media) A03 Inorganic microfiber 3 µm M25 Wire mesh 25 µm A06 Inorganic microfiber 6 µm M60 Wire mesh 60 µm A10 Inorganic microfiber 10 µm M90 Wire mesh 90 µm A16 Inorganic microfiber 16 µm A25 Inorganic microfiber 25 µm WA025 Water absorber inorganic microfiber 25 µm									
	<table border="1"> <tr> <th>Element Δp</th> <th>Execution</th> </tr> <tr> <td>N 20 bar</td> <td>P01 MP Filtri standard</td> </tr> <tr> <td></td> <td>P02 With internal tube for low flow rate</td> </tr> <tr> <td></td> <td>Pxx Customized</td> </tr> </table>	Element Δp	Execution	N 20 bar	P01 MP Filtri standard		P02 With internal tube for low flow rate		Pxx Customized
Element Δp	Execution								
N 20 bar	P01 MP Filtri standard								
	P02 With internal tube for low flow rate								
	Pxx Customized								

FILTER ELEMENT

Element series and size CU950	Configuration example: CU950 2 A10 A N P01						
Element length 2 3							
Filtration rating (filter media) A03 Inorganic microfiber 3 µm M25 Wire mesh 25 µm A06 Inorganic microfiber 6 µm M60 Wire mesh 60 µm A10 Inorganic microfiber 10 µm M90 Wire mesh 90 µm A16 Inorganic microfiber 16 µm A25 Inorganic microfiber 25 µm WA025 Water absorber inorganic microfiber 25 µm							
Seals A NBR V FPM							
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Element Δp	Execution						
N 20 bar	P01 MP Filtri standard						
	Pxx Customized						

CLOGGING INDICATORS

See page 726

DEA Electrical differential pressure indicator	DLE Electrical / visual differential pressure indicator
DEM Electrical differential pressure indicator	DTA Electronic differential pressure indicator
DEU Electrical differential pressure indicator	DVA Visual differential pressure indicator
DLA Electrical / visual differential pressure indicator	DVM Visual differential pressure indicator

PLUGS

See page 747

T2 Plug

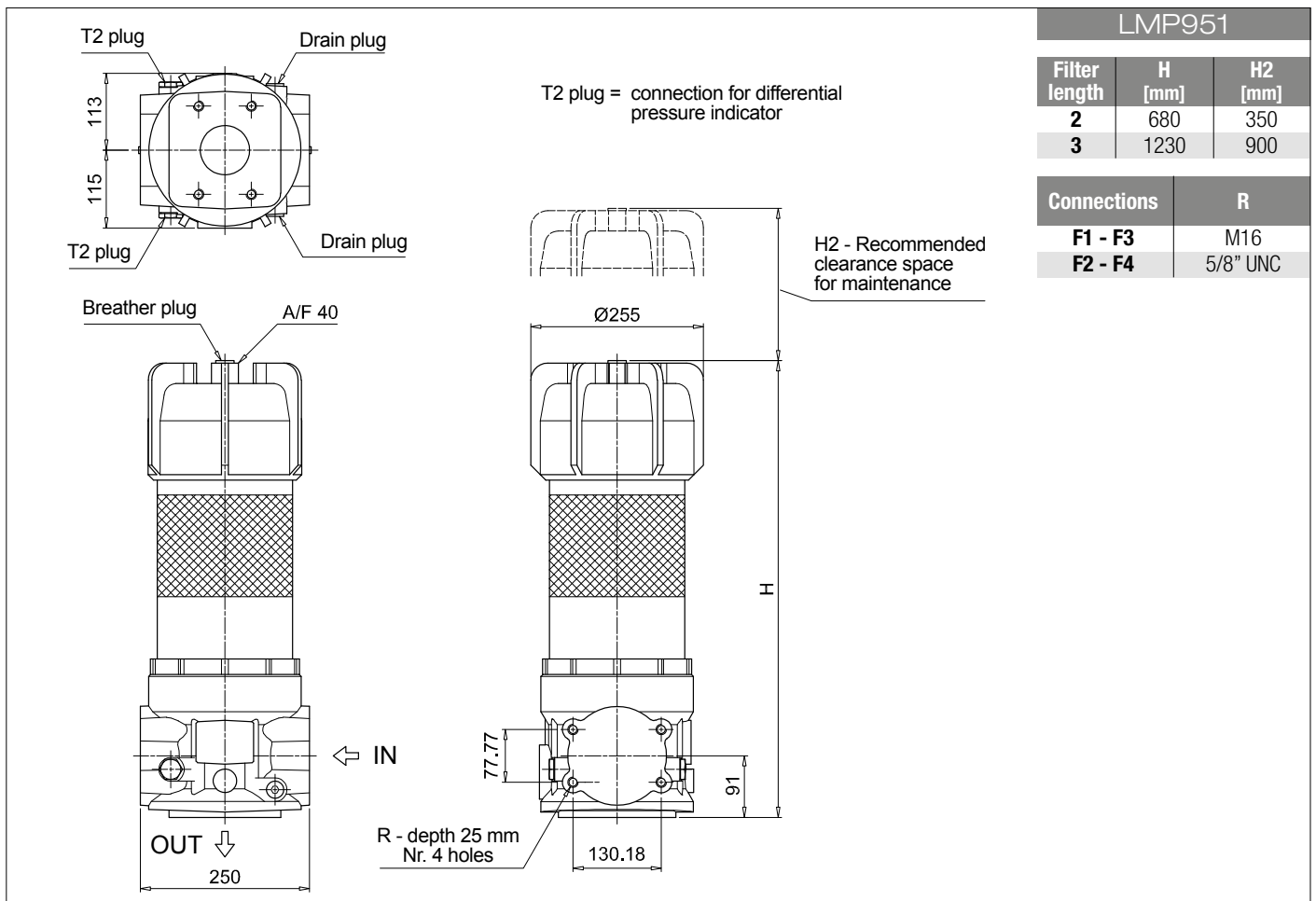
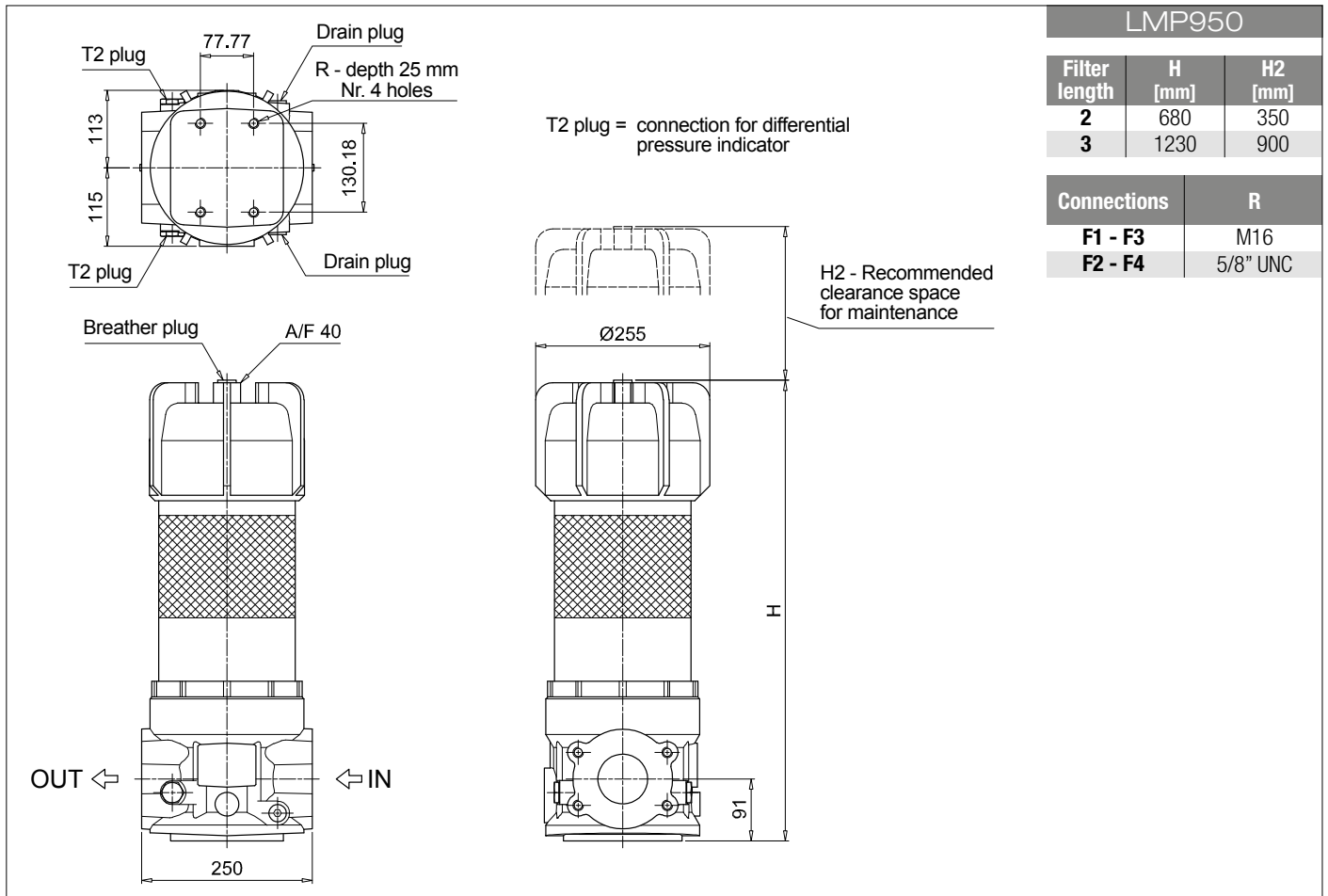
ACCESSORIES

See page 472

CFA Retaining clamp

LMP 950-951

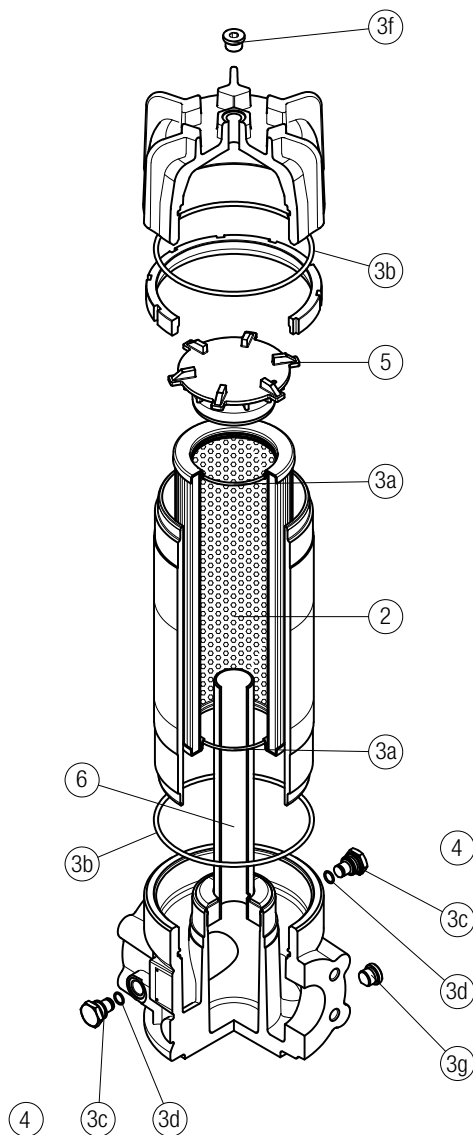
Dimensions



LMP 950-951 SPARE PARTS

Order number for spare parts

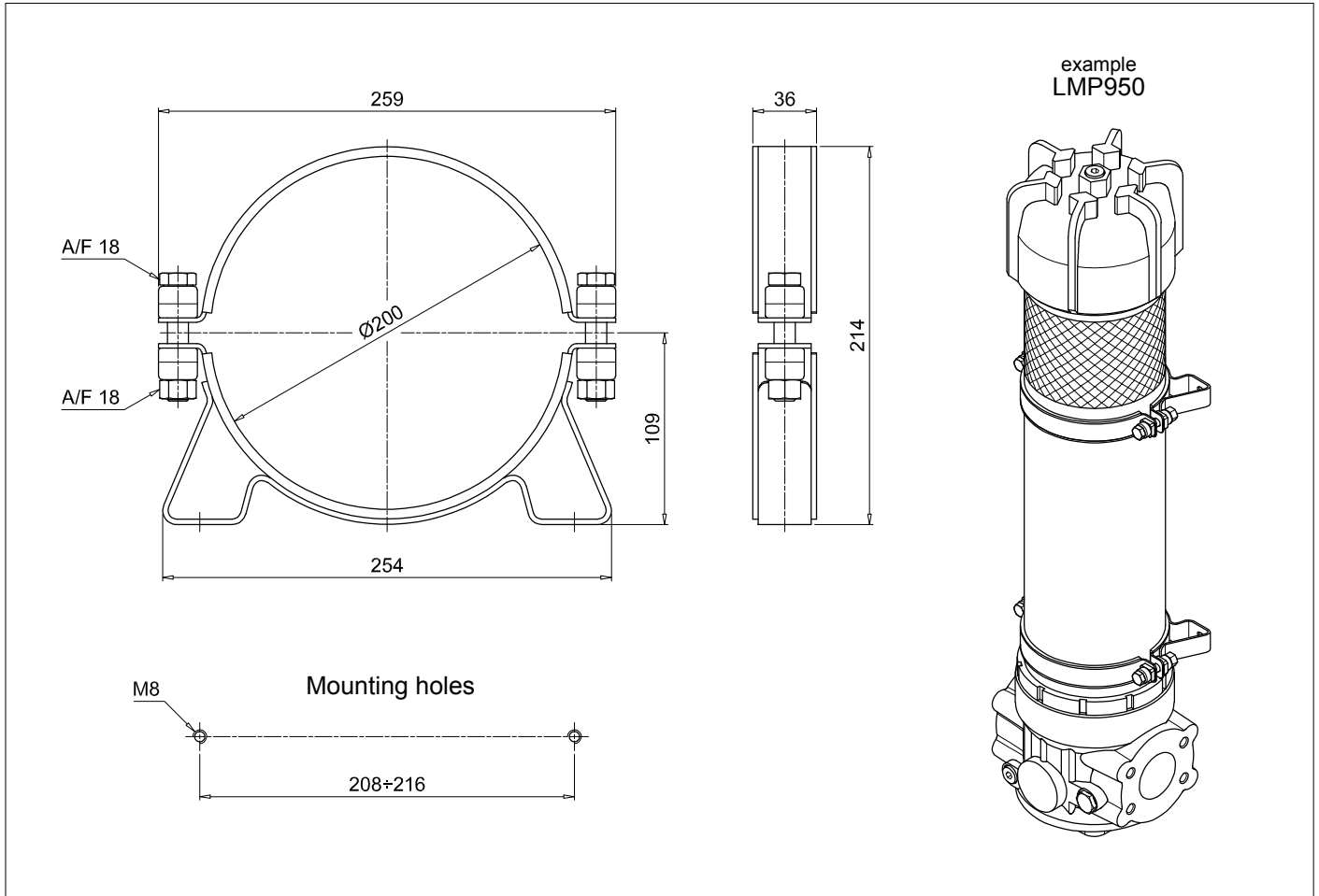
LMP 950 - 951



Item:	Q.ty: 1 pc.		Q.ty: 1 pc.		Q.ty: 2 pcs.		Q.ty: 1 pc.		Q.ty: 1 pc.	
Filter series	Filter element	Seal Kit code number		Indicator connection plug		Housing spigot		Internal tube for low flow rate, exec. PO2		
LMP 950-951 length 2-3	See order table	NBR	FPM	NBR	FPM	no bypass	with bypass	length 2	length 3	
		02050367	02050368	T2H	T2V	01044106	02001379	02025032	02025033	

Accessories

RETAINING CLAMP



Series		Configuration example:	CFA	20	M	P01
CFA	Retaining clamp					
Size						
20						
Screw						
M	Metric					
Execution						
P01	MP Filtri standard					

CLOGGING INDICATORS LOW & MEDIUM PRESS. FILTERS

Designation & Ordering code

DIFFERENTIAL PRESSURE INDICATORS

Series	Configuration example 1:	DE	M	20	H	F	50	P01	
DE Electrical differential pressure indicator	Configuration example 2:	DE	U	50	V	A	50	P01	UL
DL Electrical/Visual differential pressure indicator	Configuration example 3:	DL	E	50	V	A	71	P01	
DT Electronic differential pressure indicator	Configuration example 4:	DT	A	20	H	F	70	P01	
DV Visual differential pressure indicator	Configuration example 5:	DV	M	50	V			P01	

Type	DE	DL	DT	DV
A Standard type	•	•	•	A With automatic reset
M With wired electrical connection	•	-	-	M With manual reset
U Standard type 210 bar, UL certified	•	-	-	S With automatic reset
E For high power supply	-	•	-	
S Compact version	•	-	-	

Pressure setting	DEA	DEM	DEU	DES	DLA	DLE	DTA	DVA	DVM	DVS
12 1.2 bar	•	•	-	•	•	•	•	•	•	•
20 2.0 bar	•	•	•	-	•	•	•	•	•	-
25 2.5 bar	-	-	-	-	-	-	-	-	-	•
40 4.0 bar	-	-	-	•	-	-	-	-	-	•
50 5.0 bar	•	•	•	-	•	•	•	•	•	-

Seals	DEA	DEM	DEU	DES	DL	DT	DVA	DVM	DVS
H HNBR	•	•	-	•	•	•	•	•	•
V FPM	•	•	•	-	•	•	•	•	-

Thermostat	DEA	DEM	DEU	DES	DLA	DLE	DT
A Without thermostat	•	•	•	•	•	•	-
F With thermostat	-	•	-	-	-	•	•

Electrical connections	DEA	DEM	DEU	DES	DLA	DLE	DT
10 Connection AMP Superseal series 1.5	-	•	-	•	-	-	-
20 Connection AMP Timer Junior	-	•	-	-	-	-	-
30 Connection Deutsch DT-04-2-P	-	•	-	•	-	-	-
35 Connection Deutsch DT-04-3-P	-	•	-	-	-	-	-
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	-	-	-	-	•	-	-
70 Connection IEC 61076-2-101 D (M12)	-	-	-	-	-	-	•
71 Connection IEC 61076-2-101 D (M12), black base with lamps 24 Vdc	-	-	-	-	•	-	-
80 Connection Stud #10-32 UNF	-	-	-	•	-	-	-

Option
P01 MP Filtri standard
Pxx Customized

Certifications	DEU	OTHERS
Without	-	•
UL UL certification	•	-

PLUGS

Series	Configuration example	T2	H
T2 Plug			
T4 Plug			

Seals	T2	T4
A NBR	-	•
H HNBR	•	-
V FPM	•	-