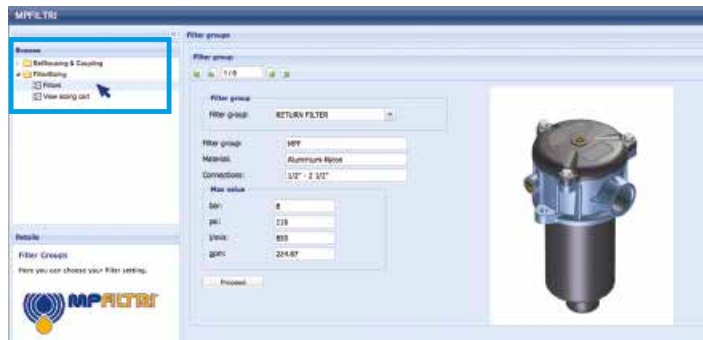


LDP & LDD series

Filter element according to DIN 24550

Maximum working pressure up to 6 MPa (60 bar) - Flow rate up to 330 l/min

Step 1 Select "FILTERS"



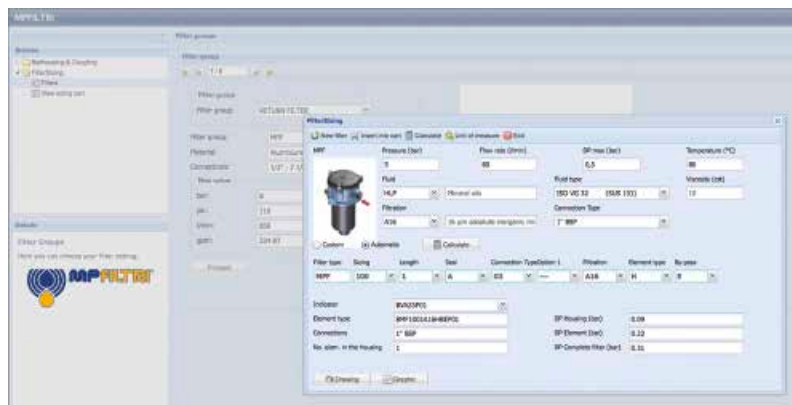
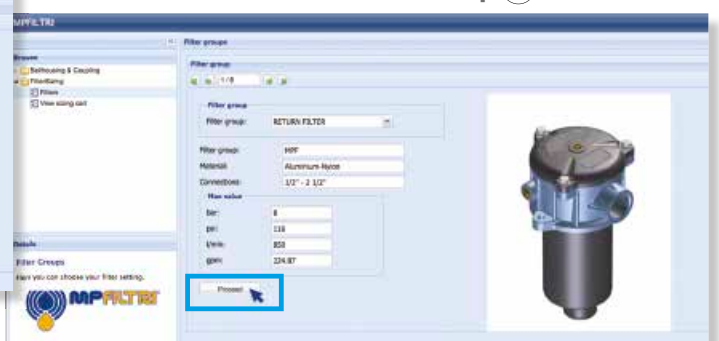
Step 2 Choose filter group (Return Filter, Pressure Filter, etc.)



Step 3 Choose filter type (MPF, MPT, etc.) in function of the max working pressure and the max flow rate



Step 4 Push "PROCEED"



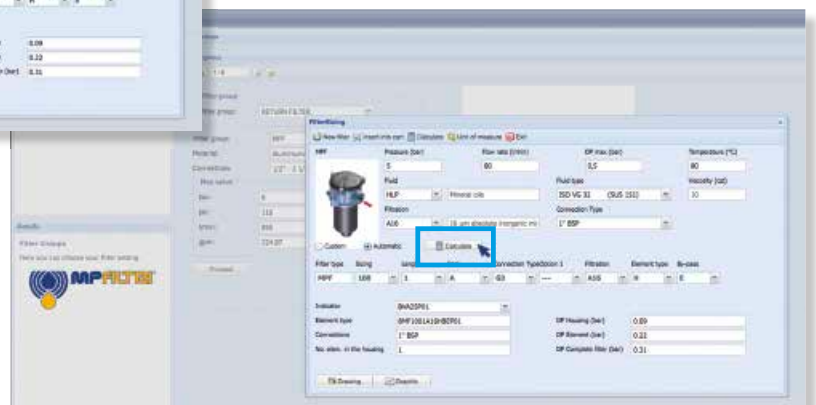
Step 5

Insert all application data to calculate the filter size following the sequence:

- working pressure
- working flow rate
- working pressure drop
- working temperature
- fluid material and fluid type
- filtration media
- connection type

Step 6

Push "CALCULATE" to have result; in case of any mistake, the system will advice which parameter is out of range to allow to modify/adjust the selection



Step 7

Download PDF Datasheet "Report.aspx" pushing the button "Drawing"

LDP & LDD GENERAL INFORMATION

Filter element according to DIN 24550

Descriptions

Low & Medium Pressure filters

Maximum working pressure up to 6 MPa (60 bar)

Flow rate up to 330 l/min

LDP is a range of versatile low pressure filter for transmission, protection of sensitive components in low pressure hydraulic systems and filtration of the coolant into the machine tools.

They are also suitable for the off-line filtration of small reservoirs.

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

Available features:

- Female threaded connections up to 1 1/2", for a maximum return flow rate of 330 l/min
- Filter element designed in accordance with DIN 24550 regulation
- 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
- Visual, electrical and electronic differential clogging indicators

Common applications:

Delivery lines, in low pressure industrial equipment or mobile machines

LDD is a range of versatile low pressure duplex filter with integrated changeover function to allow the filter element replacement without the system shut-down.

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

Available features:

- Female threaded connections up to 1 1/2" and flanged connections up to 1 1/2", for a maximum flow rate of 330 l/min
- Filter element designed in accordance with DIN 24550 regulation
- 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.
- Balancing valve integrated in the changeover lever, to equalize the housing pressure before the switch
- 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
- Optional sampling ports, to get samples of fluid or to connect additional instrument to the system
- Visual, electrical and electronic differential clogging indicators

Common applications:

- Systems where shut-down causes high costs
- Systems where shut-down causes safety issues

Technical data

Filter housing materials

- Head: Aluminium
- Bowl: Cathaphoretic Painted Steel
- Bypass valve: AISI 304 - Nylon

Pressure

- Test pressure: 9 MPa (90 bar)
- Burst pressure: 21 MPa (210 bar)
- Pulse pressure fatigue test: 1 000 000 cycles with pressure from 0 to 6 MPa (60 bar)

Bypass valve

- Opening pressure 350 kPa (3.5 bar) $\pm 10\%$
- 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

Inlet/Outlet In-Line

Note

LDP - LDD filters are provided for vertical mounting



Weights [kg] and volumes [dm³]

Filter series	Weights [kg]	Volumes [dm ³]
LDP 016	2.0	1.2
LDP 025	3.0	1.6
LDP 040	5.0	2.2
LDD 016	9.3	3.6
LDD 025	9.5	4.1
LDD 040	11.3	4.8

Filter series	Filter element design - N Series										
	A03	A06	A10	A16	A25	M25	M60	M90	M250	P10	P25
LDP 016	83	91	178	198	222	350	353	358	359	295	309
LDP 025	124	134	227	245	265	357	358	358	359	319	330
LDP 040	173	191	274	284	311	359	360	361	362	332	337
LDD 016	68	73	120	130	140	189	190	192	192	169	174
LDD 025	93	98	142	149	157	191	192	192	192	178	181
LDD 040	118	126	161	165	175	192	192	193	193	182	184

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.

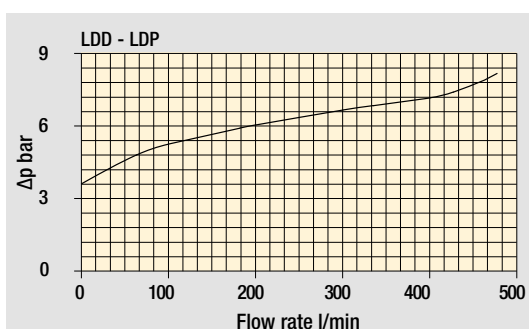
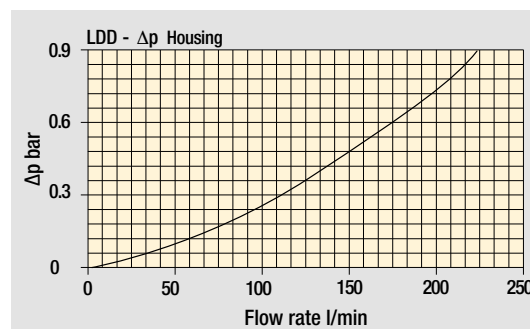
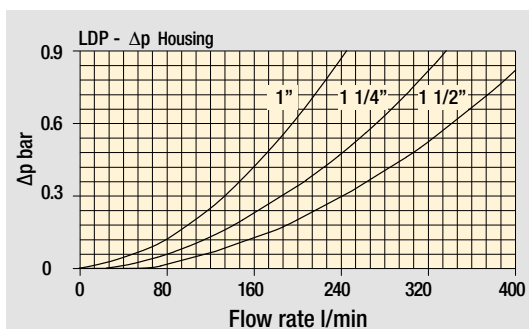
Hydraulic symbols

Filter series	Execution S	Execution B	Execution S	Execution B
LDP 016	•	•		
LDP 025	•	•		
LDP 040	•	•		
LDD 016			•	•
LDD 025			•	•
LDD 040			•	•

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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.

LDP Filter element according to DIN 24550

Designation & Ordering code

COMPLETE FILTER

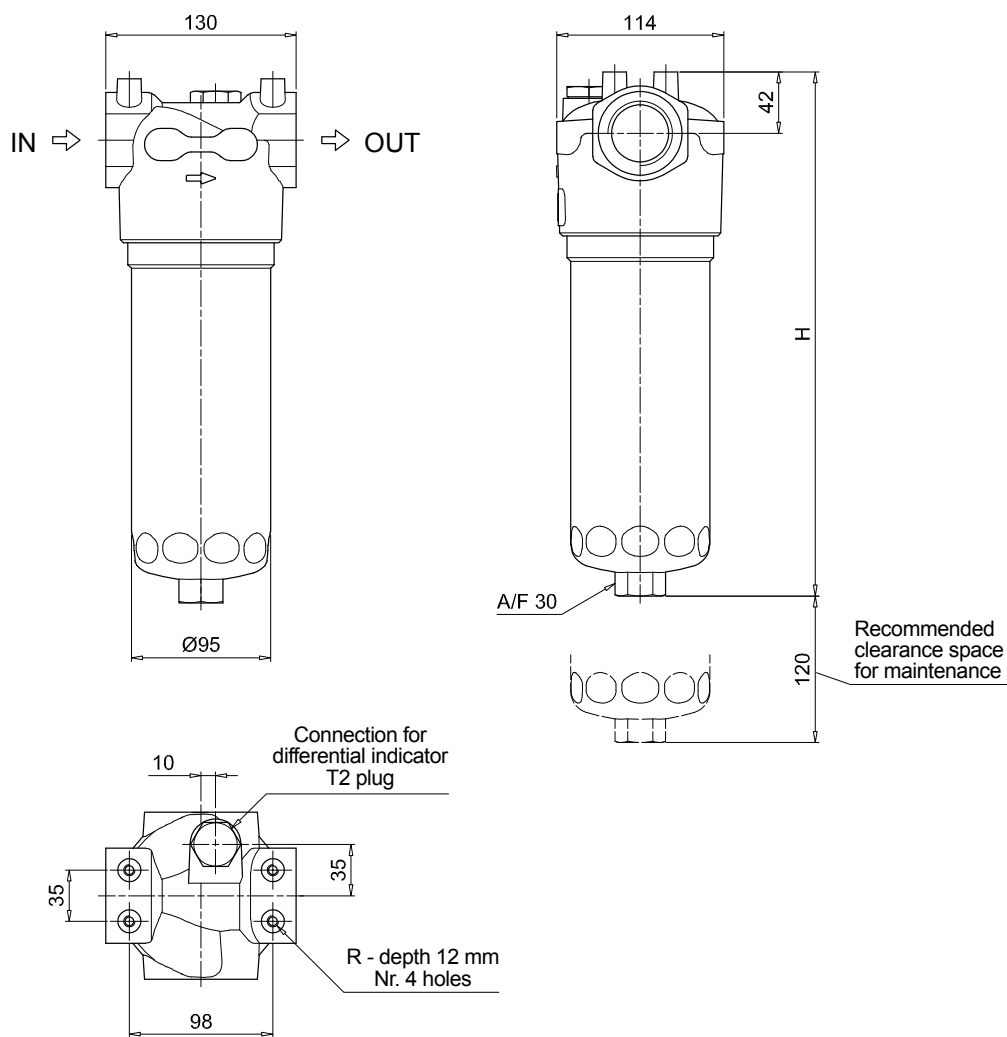
Series		Configuration example:										LDP	025	B	A	D	6	A10	N	P01				
LDP																								
Size																								
016		Element according to DIN 24550 - T3 DN160																						
025		Element according to DIN 24550 - T3 DN250																						
040		Element according to DIN 24550 - T3 DN400																						
Bypass valve																								
S		Without bypass																						
B		3.5 bar																						
																		Filtration rating						
Seals and treatments																		Axx	Mxx	Pxx				
A		NBR																						
V		FPM																						
W		NBR compatible with fluids HFA-HFB-HFC																						
Connections																								
A		G 1"																						
F		1 1/2" NPT																						
B		G 1 1/4"																						
G		SAE 16 - 1 5/16" - 12 UN																						
C		G 1 1/2"																						
H		SAE 20 - 1 5/8" - 12 UN																						
D		1" NPT																						
I		SAE 24 - 1 7/8" - 12 UN																						
E		1 1/4" NPT																						
Connection for differential indicator																								
6		With plugged connection																						
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																						
P10		Resin impregnated paper 10 µm																						
A25		Inorganic microfiber 25 µm																						
P25		Resin impregnated paper 25 µm																						
WA025 Water absorber inorganic microfiber 25 µm																								
Element Δp												Execution												
N												20 bar												
P01												MP Filtri standard												
Pxx												Customized												

FILTER ELEMENT

Element series		Configuration example:			DN	025	A10	A	N	P01
DN										
Element size										
016		Element according to DIN 24550 - T3 DN160								
025		Element according to DIN 24550 - T3 DN250								
040		Element according to DIN 24550 - T3 DN400								
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		P10		Resin impregnated paper 10 µm				
A25		Inorganic microfiber 25 µm		P25		Resin impregnated paper 25 µm				
WA025		Water absorber inorganic microfiber 25 µm								
Seals		Filtration rating								
		Axx	Mxx	Pxx						
A NBR		•	•	•						
V FPM		•	•	•						
W NBR compatible with fluids HFA-HFB-HFC		•	•							
Element Δp		Execution								
N 20 bar		P01 MP Filtri standard								
		Pxx Customized								

ACCESSORIES

Differential indicators	page			page
DEA Electrical differential indicator	445	DTA Electronic differential indicator		448
DEM Electrical differential indicator	445-446	DVA Visual differential indicator		448
DLA Electrical / visual differential indicator	446-447	DVM Visual differential indicator		448
DLE Electrical / visual differential indicator	447			
Additional features	page			
T2 Plug	449			



LDP	
Filter size	H [mm]
016	268
025	358
040	508
Connections	R
A-B-C	M8
D-E-F-G-H-I	5/16" UNC

LDD Filter element according to DIN 24550

Designation & Ordering code

COMPLETE FILTER

Series	Configuration example: LDD 025 B A C 6 A10 N P01									
LDD										
Size										
016	Element according to DIN 24550 - T3 DN160									
025	Element according to DIN 24550 - T3 DN250									
040	Element according to DIN 24550 - T3 DN400									
Bypass valve										
S Without bypass	B 3.5 bar									
Seals and treatments	Filtration rating									
A NBR	Axx	Mxx	Pxx							
V FPM	•	•	•							
W NBR compatible with fluids HFA-HFB-HFC	•	•								
Connections										
C G 1 1/2"										
F 1 1/2" NPT										
I SAE 24 - 1 7/8" - 12 UN										
L 1 1/2" SAE 3000 psi/M + G 1 1/4"										
M 1 1/2" SAE 3000 psi/UNC + 1 1/4" NPT										
N 1 1/2" SAE 3000 psi/UNC + SAE 20 - 1 5/8" UN										
Connection for differential indicator										
6 With plugged connection										
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	P10 Resin impregnated paper 10 µm									
A25 Inorganic microfiber 25 µm	P25 Resin impregnated paper 25 µm									
WA025 Water absorber inorganic microfiber 25 µm										
Element Δp	N 20 bar									
Execution	P01 MP Filtri standard									
Pxx	Customized									

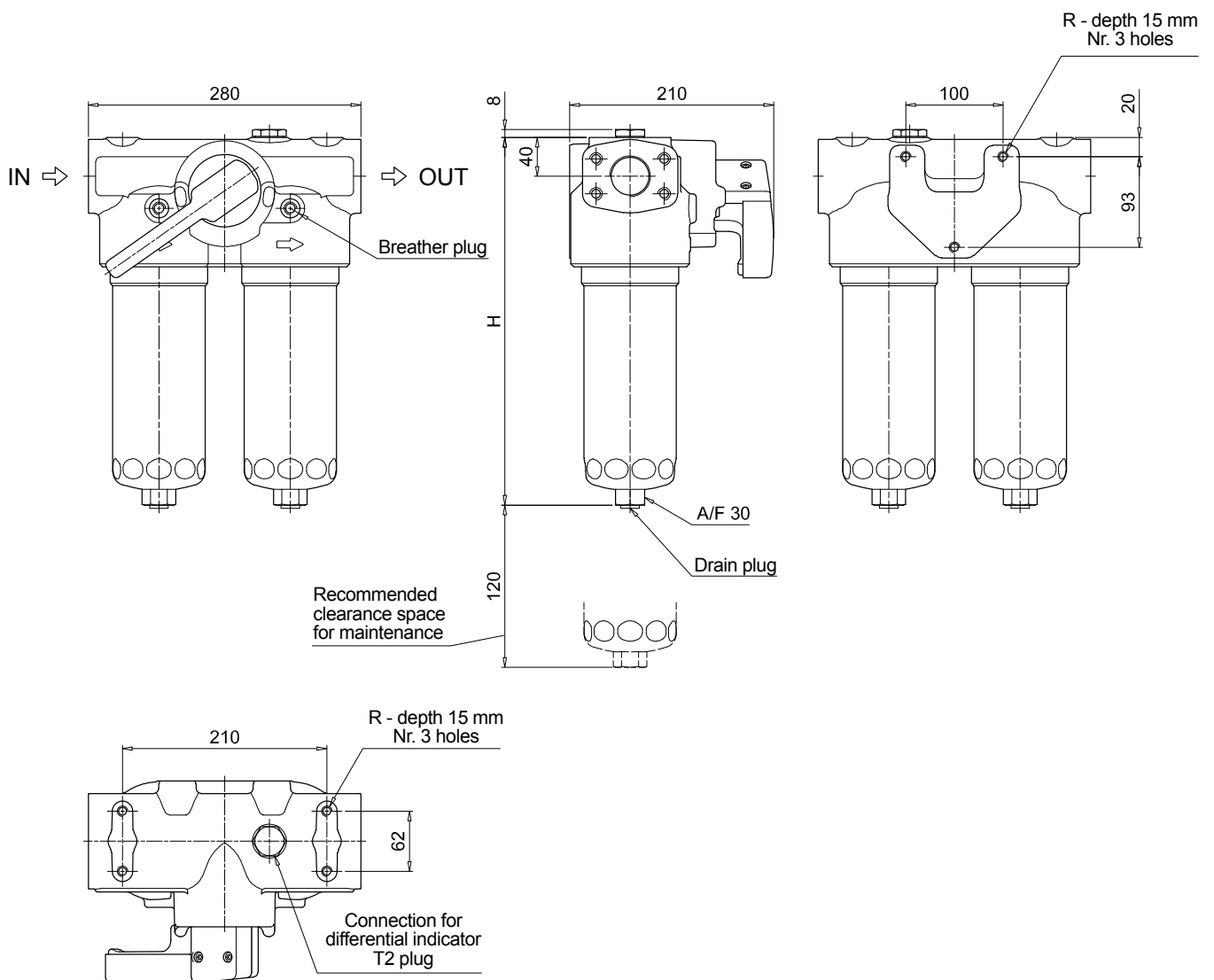
FILTER ELEMENT

Element series	Configuration example: DN 025 A10 A N P01									
DN										
Element size										
016	Element according to DIN 24550 - T3 DN160									
025	Element according to DIN 24550 - T3 DN250									
040	Element according to DIN 24550 - T3 DN400									
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	P10 Resin impregnated paper 10 µm									
A25 Inorganic microfiber 25 µm	P25 Resin impregnated paper 25 µm									
WA025 Water absorber inorganic microfiber 25 µm										
Seals	Filtration rating									
A NBR	Axx	Mxx	Pxx							
V FPM	•	•	•							
W NBR compatible with fluids HFA-HFB-HFC	•	•								
Element Δp	N 20 bar									
Execution	P01 MP Filtri standard									
Pxx	Customized									

ACCESSORIES

Differential indicators	page			page
DEA Electrical differential indicator	445	DTA Electronic differential indicator		448
DEM Electrical differential indicator	445-446	DVA Visual differential indicator		448
DLA Electrical / visual differential indicator	446-447	DVM Visual differential indicator		448
DLE Electrical / visual differential indicator	447			
Additional features	page			
T2 Plug	449			

LDD	
Filter size	H [mm]
016	293
025	383
040	533
Connections	R
C	M10
F - I	3/8" UNC
L	M10
M - N	3/8" UNC

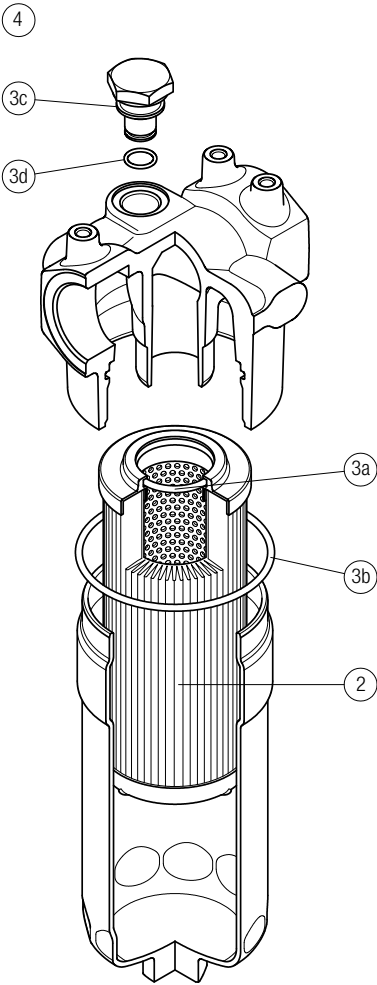


LDP SPARE PARTS

Filter element according to DIN 24550

Order number for spare parts

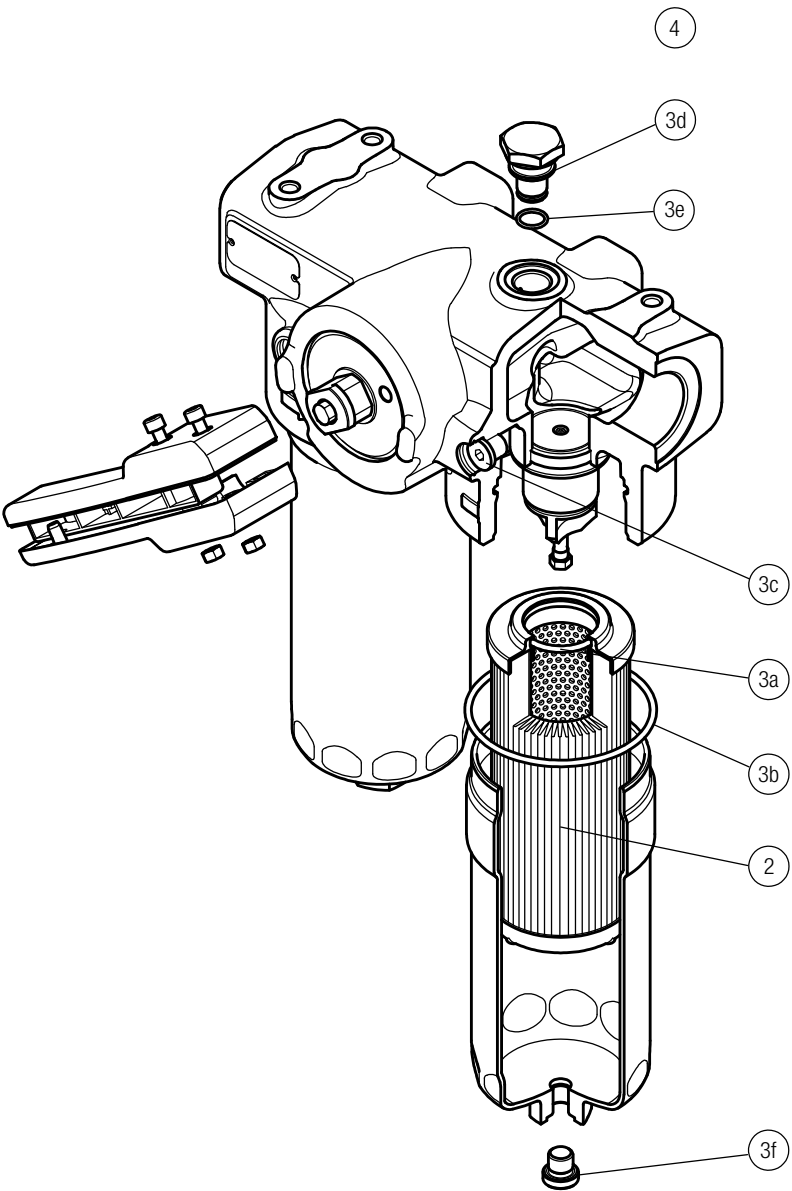
LDP



Q.ty: 1 pc.		Q.ty: 1 pc.		Q.ty: 1 pc.	
Item: 2		3 (3a ÷ 3d)		4	
Filter series	Filter element	Seal Kit code number		Indicator connection plug	
		NBR	FPM	NBR	FPM
LDP	See order table	02050435	02050436	T2H	T2V

Order number for spare parts

LDD



Item:	Q.ty: 1 pc.	Q.ty: 1 pc.	Q.ty: 2 pc.
Filter series	Filter element	Seal Kit code number	Indicator connection plug
LDD	See order table	02050671	T2H
		02050672	T2V