



THE X CONCEPT FOR OUR FILTERS

Designed and manufactured in compliance with the PED regulation (Europe only), our components feature practical solutions such as the filter element with handle, designed to simplify replacement. The positioning of the filter element has been engineered to ensure stability in its housing and sealing integrity, even during transport.

MLPX series

with MYCLEAN LPX Filter Element



- **Protects the machine from improper use of non-original products.**
- **Safety of constant quality protection & reliability**

With exclusive filter element you are sure that only MP Filtri filter elements can be used, ensuring the best cleaning level of the oil due to the use of originals filter elements.

The products identified as MLPX are protected by:

- Italian Patent n° 102014902261205
- Canadian Patent n° 2,937,258
- European Patent n° 3 124 092 B1
- US Patent n° 20170030384 A1

Protect the performance of your system with MYclean.

Quality and efficiency are fundamental for MP Filtri:

this exclusive new filter element possesses polygon shape geometry and specific seal that ensures only original spare parts can be used - ensuring correct operation and higher system reliability.

# MLPX / MLPC series

Maximum working pressure up to 1.6 MPa (16 bar) - Flow rate up to 12000 l/min



## Description

## Technical data

### High capacity industrial filters - simplex type

**Maximum working pressure up to 1.6 MPa (16 bar)**

**Flow rate up to 12000 l/min**

MLPX / MLPC is a range of low pressure simplex filters with large filtration surface mainly suitable for high capacity applications in industrial lubrication systems.

Multiple filter elements can be fitted in parallel into the housing to reduce the pressure drop caused by the filter media and to increase the dust holding capacity of the filter.

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

#### Available features:

- Flanged connections EN 1092-1 up to DN200 (MLPX) - DN100 (MLPC), for a maximum flow rate of 12000 l/min
- Base-mounting design for ease of the replacement of the filter elements
- Single filter elements
- In to Out filtration, to reduce the risk of residual contamination going into the system during the maintenance works
- Fine filtration rating, to get a good cleanliness level into the system
- 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 works
- Visual, electrical and electronic differential pressure clogging indicators
- MYclean interface connection for the filter element, to protect the product against non-original spare parts (only for MLPX series)

#### Common applications:

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

### Filter housing materials

- Body and cover: blue-painted carbon steel
- Fasteners: galvanized steel
- Indicator block, plugs: phosphatized steel
- Nameplate: plastic

### Pressure

- Test pressure: 2.4 MPa (24 bar)
- Min. Burst pressure: 4.8 MPa (48 bar)
- Pulse pressure fatigue test: 1 000 000 cycles with pressure from 0 to 1.6 MPa (16 bar)

All MLPX and MLPC filters are 100% pressure-tested

### Bypass valve

- Opening pressure:  
0.35 MPa (3.5 bar) ±10% (MLPX series)  
0.175 MPa (1.75 bar) ±10% (MLPC series)

### Filter element features

Filter	Filter element		
MLPX	LPX		
MLPC	MRC		
Δp Element type			
Element media	Construction	Δp Series	Δp
A - Microfiber	Standard	D	10 bar
M - Wire mesh	Standard	D	10 bar
<i>Please see ordering code tables to check element Δp series availability based on filter features.</i>			
Flow direction through the filter element:			
From IN to OUT			

### Seals

- Standard NBR series A

### Temperature

From -10 °C to +100 °C

### Note

MLPX and MLPC filters are equipped with slotted mounting brackets, designed to be bolted to the foundation.

## Weights [kg] and volumes [dm<sup>3</sup>]

Filter series	Length	Connection nom. dia. [DN]	Weights [kg]	Volumes [dm <sup>3</sup> ]
MLPX 631	10	65	90	26
	20	80	100	42
	20	100	115	43
MLPC 851	20	80	79	48
	20	100	82	50
	30	80	81	63
	30	100	84	65
	40	80	83	76
	40	100	86	78
MLPX 633	20	125	265	153
MLPX 634	20	150	345	215
MLPX 635	20	200	425	270

# GENERAL INFORMATION MLPX - MLPC

Flow rates [l/min]

Filter series	Length	Filter element design - D Series					
		A0003	A0006	A0010	A0025	A0040	M0060 M0090 M0250
<b>MLPX 631</b>	<b>10</b>	225	280	516	720	788	2467
	<b>20</b>	336	360	797	1438	1568	2575
<b>MLPC 851</b>	<b>20</b>	1613	2050	2204	3034	3307	3832
	<b>30</b>	2003	2504	2571	3611	3720	3948
	<b>40</b>	2204	2641	2860	3832	3832	3948
<b>MLPX 633</b>	<b>20</b>	1013	1086	2459	4697	5193	9574
<b>MLPX 634</b>	<b>20</b>	1344	1440	3183	5719	6227	10122
<b>MLPX 635</b>	<b>20</b>	1679	1798	3967	7081	7699	12383

### Maximum flow rate for a complete delivery filter with a pressure drop $\Delta p = 0.7$ bar.

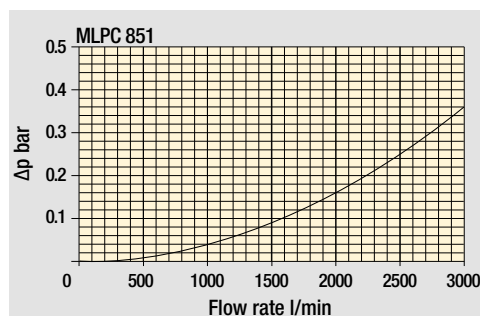
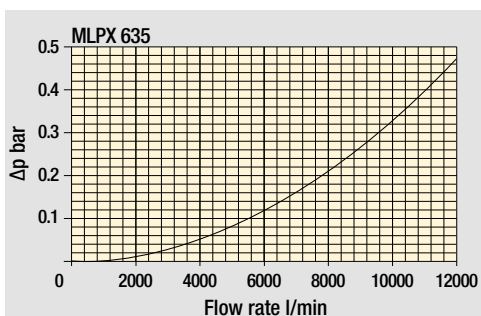
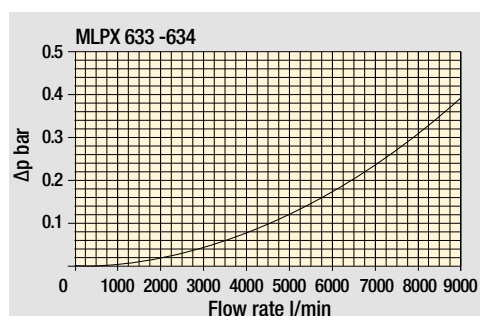
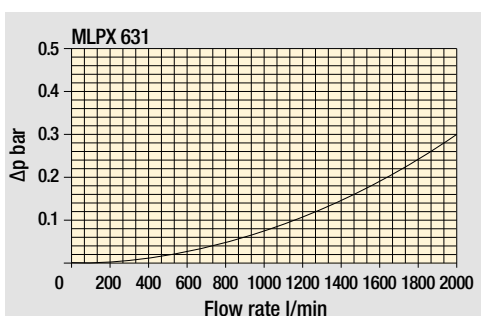
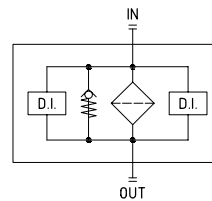
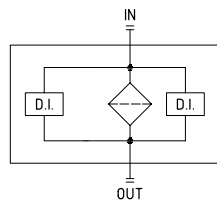
The reference fluid has a kinematic viscosity of 30 mm<sup>2</sup>/s (cSt) and a density of 0.86 kg/dm<sup>3</sup>.

For different pressure drop or fluid viscosity we recommend to use our selection software available on [www.mpfiltri.com](http://www.mpfiltri.com).

Please, contact our Sales Department for further additional information.

Filter series	00 - without bypass	17 - with bypass 1.75 bar	35 - with bypass 3.5 bar
<b>MLPX 631-633-634-635</b>	-	-	•
<b>MLPC 851</b>	•	•	-

Hydraulic diagram



Pressure drop


Filter housings  
Δp pressure drop

The curves are plotted using mineral oil with density of 0.86 kg/dm<sup>3</sup> in compliance with ISO 3968.  $\Delta p$  varies proportionally with density.

# MLPX MLPX631 - MLPX633 - MLPX634 - MLPX635

## Designation & Ordering code

### COMPLETE FILTER

<b>Series</b> MLPX	Filter featuring  Filter Element	Example :	MLPX	633	20	A0010	D	A	35	FD125	0	6T	NN	P01	NN	
<b>Filter size</b>	Nr. of elements LPX 630															
MLPX 631	1															
MLPX 633	3															
MLPX 634	4															
MLPX 635	5															
<b>Length</b>	Filter size															
	631	633	634	635												
10	•	-	-	-												
20	•	•	•	•												
<b>Filtration rating (filter media)</b>																
A0003	Inorganic microfiber	3 µm														
A0006	Inorganic microfiber	6 µm														
A0010	Inorganic microfiber	10 µm														
A0025	Inorganic microfiber	25 µm														
A0040	Inorganic microfiber	40 µm														
M0060	Wire mesh	60 µm														
M0090	Wire mesh	90 µm														
M0250	Wire mesh	250 µm														
<b>Element Δp</b>																
D	10 bar															
<b>Seals</b>																
A	NBR															
<b>Bypass</b>																
35	With bypass 3.5 bar															
<b>Connections</b>					631	633	634	635	← size							
	10	20	20	20	20	20	20	← length								
FD065	Flange EN 1092-1 / 01A / DN 65 / PN 16	•	-	-	-	-	-	-								
FD080	Flange EN 1092-1 / 01A / DN 80 / PN 16	-	•	-	-	-	-	-								
FD100	Flange EN 1092-1 / 01A / DN 100 / PN 16	-	•	-	-	-	-	-								
FD125	Flange EN 1092-1 / 01A / DN 125 / PN 16	-	-	•	-	-	-	-								
FD150	Flange EN 1092-1 / 01A / DN 150 / PN 16	-	-	-	•	-	-	-								
FD200	Flange EN 1092-1 / 01A / DN 200 / PN 16	-	-	-	-	-	•	-								
<b>Additional connections</b>																
0	Without additional connections															
<b>Connections for clogging indicators</b>																
6T	With both side indicator connection, with metal plugs															
<b>Additional features</b>																
NN	Without additional features															
<b>Execution</b>																
P01	Standard catalogue item															
<b>Certificates</b>																
NN	None															

### CLOGGING INDICATORS

See page 785

DEA	Electrical differential pressure indicator
DEM	Electrical differential pressure indicator
DLA	Electrical / visual differential pressure indicator
DLE	Electrical / visual differential pressure indicator

DTA	Electronic differential pressure indicator
DTI	I-O Link electronic differential pressure indicator
DVA	Visual differential pressure indicator
DVM	Visual differential pressure indicator

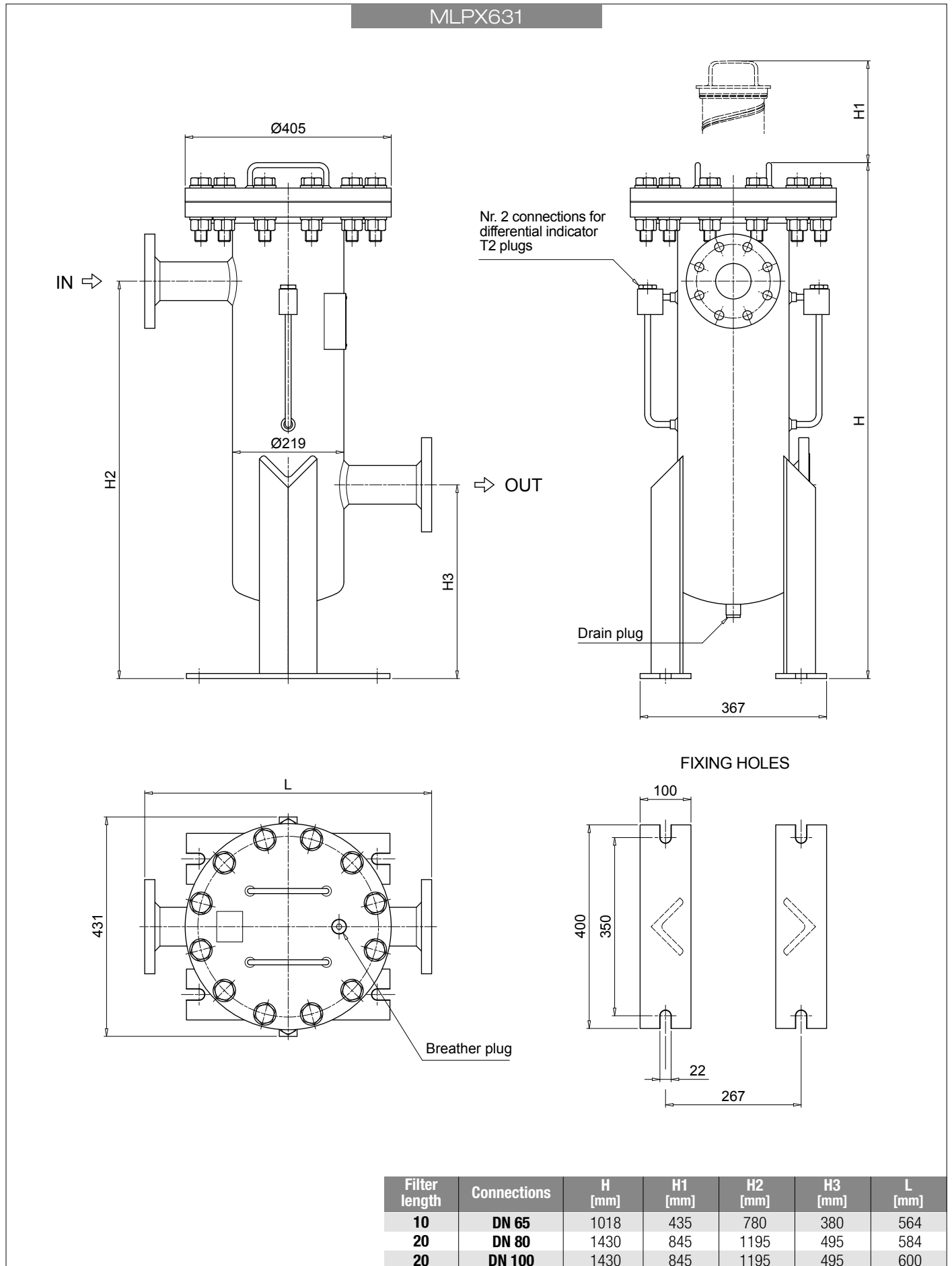
### PLUGS

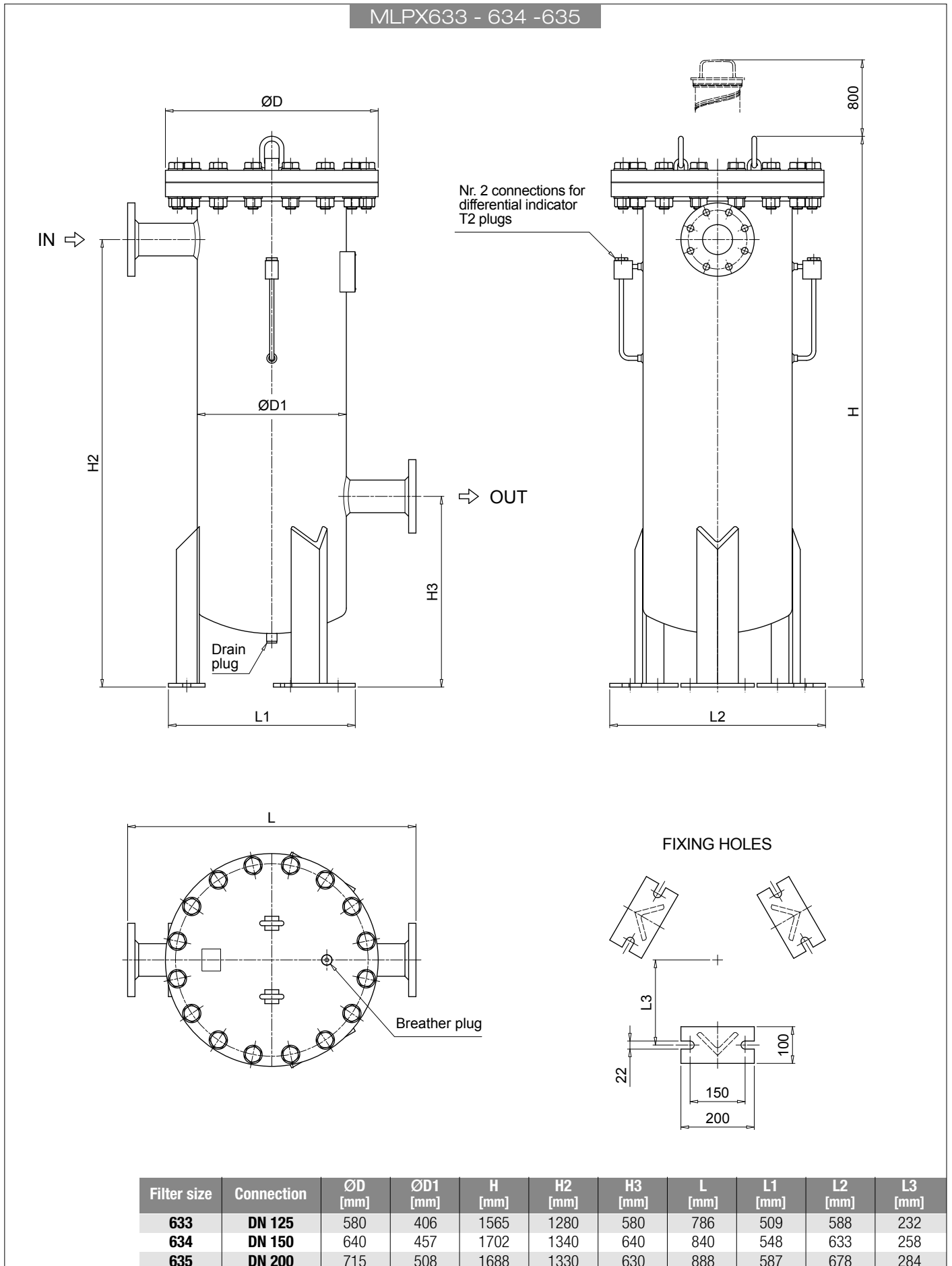
See page 807

T2	Plug
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### FILTER ELEMENT

Series	Config. example: LPX 630 20 A0010 D A 35 NN P01 NN											
<b>LPX</b> Filter element with <b>MYCLEAN</b> feature												
<b>Element size</b> 630												
<b>Element length</b> 10   20												
<b>Filtration rating (filter media)</b>												
<b>A0003</b> Inorganic microfiber 3 µm												
<b>A0006</b> Inorganic microfiber 6 µm												
<b>A0010</b> Inorganic microfiber 10 µm												
<b>A0025</b> Inorganic microfiber 25 µm												
<b>A0040</b> Inorganic microfiber 40 µm												
<b>M0060</b> Wire mesh 60 µm												
<b>M0090</b> Wire mesh 90 µm												
<b>M0250</b> Wire mesh 250 µm												
<b>Element Δp</b> D 10 bar												
<b>Seals</b> A NBR												
<b>Bypass</b> 35 With bypass 3.5 bar												
<b>Addictional features</b> NN Without addicitional features												
<b>Execution</b> P01 Standard catalogue item												
<b>Certificates</b> NN None												





## Designation & Ordering code

### COMPLETE FILTER

<b>Series</b> MLPC	Example :	MLPC	851	20	A0010	D	A	17	FD100	0	6T	NN	P01	NN	
<b>Filter size</b> 851	Nr. of elements MRC 850	1													
<b>Length</b> 20 30 40															
<b>Filtration rating (filter media)</b>															
A0003	Inorganic microfiber	3 µm													
A0006	Inorganic microfiber	6 µm													
A0010	Inorganic microfiber	10 µm													
A0025	Inorganic microfiber	25 µm													
A0040	Inorganic microfiber	40 µm													
M0060	Wire mesh	60 µm													
M0090	Wire mesh	90 µm													
M0250	Wire mesh	250 µm													
<b>Element Δp</b> D	10 bar														
<b>Seals</b> A	NBR														
<b>Bypass</b> 00 17	Without bypass With bypass 1.75 bar														
<b>Connections</b> FD080 FD100	Flange EN 1092-1 / 01A / DN 80 / PN 16 Flange EN 1092-1 / 01A / DN 100 / PN 16														
<b>Additional connections</b> 0	Without additional connections														
<b>Connections for clogging indicators</b> 6T	With both side indicator connection, with metal plugs														
<b>Additional features</b> NN	Without additional features														
<b>Execution</b> P01	Standard catalogue item														
<b>Certificates</b> NN	None														

### CLOGGING INDICATORS

See page 785

**DEA** Electrical differential pressure indicator  
**DEM** Electrical differential pressure indicator  
**DLA** Electrical / visual differential pressure indicator  
**DLE** Electrical / visual differential pressure indicator

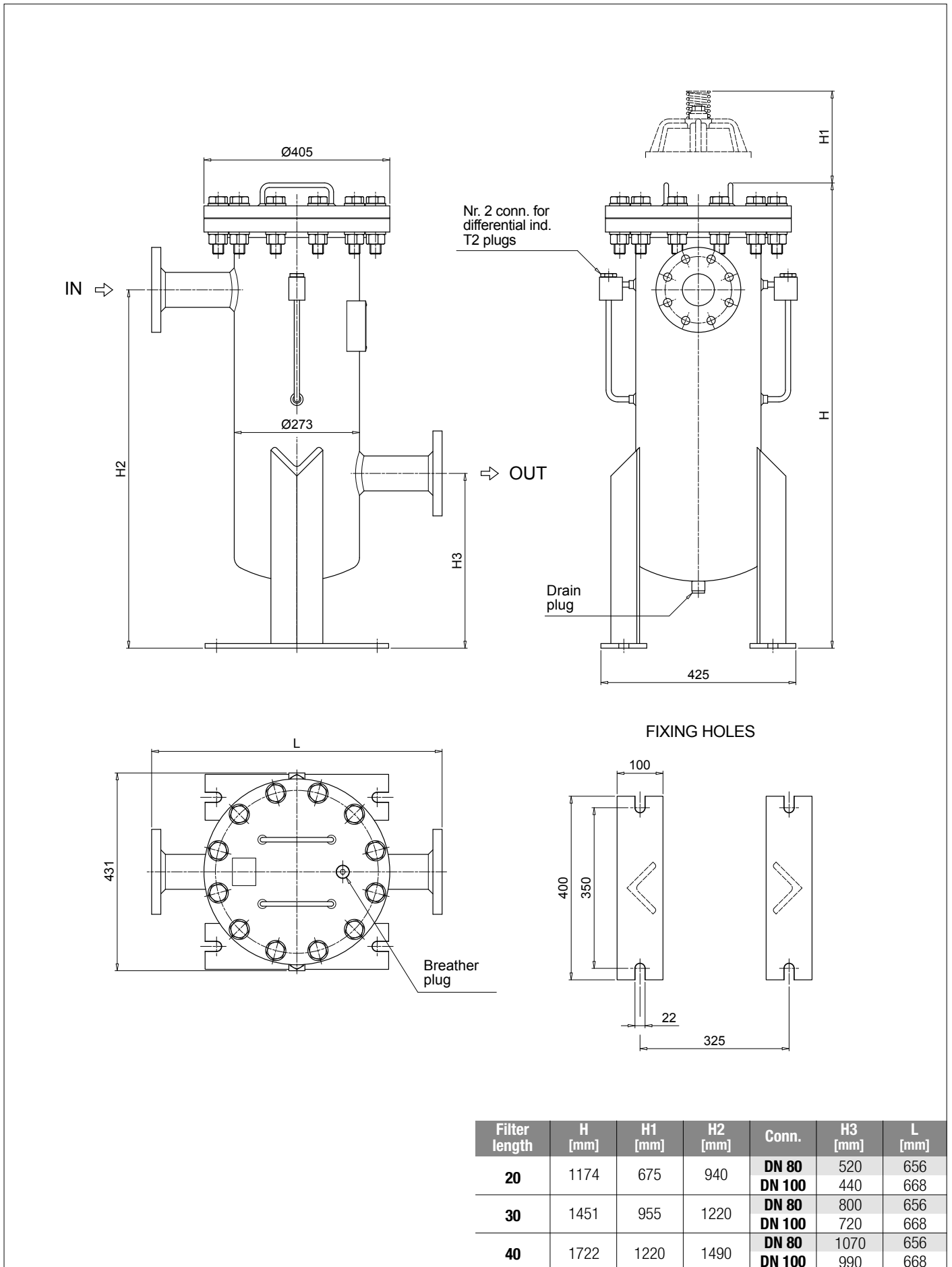
**DTA** Electronic differential pressure indicator  
**DTI** I-O Link electronic differential pressure indicator  
**DVA** Visual differential pressure indicator  
**DVM** Visual differential pressure indicator

### PLUGS

See page 807

**T2** Plug

FILTER ELEMENT	
Element series and size <b>MRC</b>	Config. example: <b>MRC</b> <b>850</b> <b>20</b> <b>A0010</b> <b>D</b> <b>A</b> <b>00</b> <b>NN</b> <b>P01</b> <b>NN</b>
Element size <b>850</b>	
Element length <b>20</b> <b>30</b> <b>40</b>	
Filtration rating (filter media)	
<b>A0003</b> Inorganic microfiber 3 µm	
<b>A0006</b> Inorganic microfiber 6 µm	
<b>A0010</b> Inorganic microfiber 10 µm	
<b>A0025</b> Inorganic microfiber 25 µm	
<b>A0040</b> Inorganic microfiber 40 µm	
<b>M0060</b> Wire mesh 60 µm	
<b>M0090</b> Wire mesh 90 µm	
<b>M0250</b> Wire mesh 250 µm	
Element Δp <b>D</b> 10 bar	
Seals <b>A</b> NBR	
Bypass <b>00</b> Without bypass	
Additional features <b>NN</b> Without additional features	
Execution <b>P01</b> Standard catalogue item	
Certificates <b>NN</b> None	

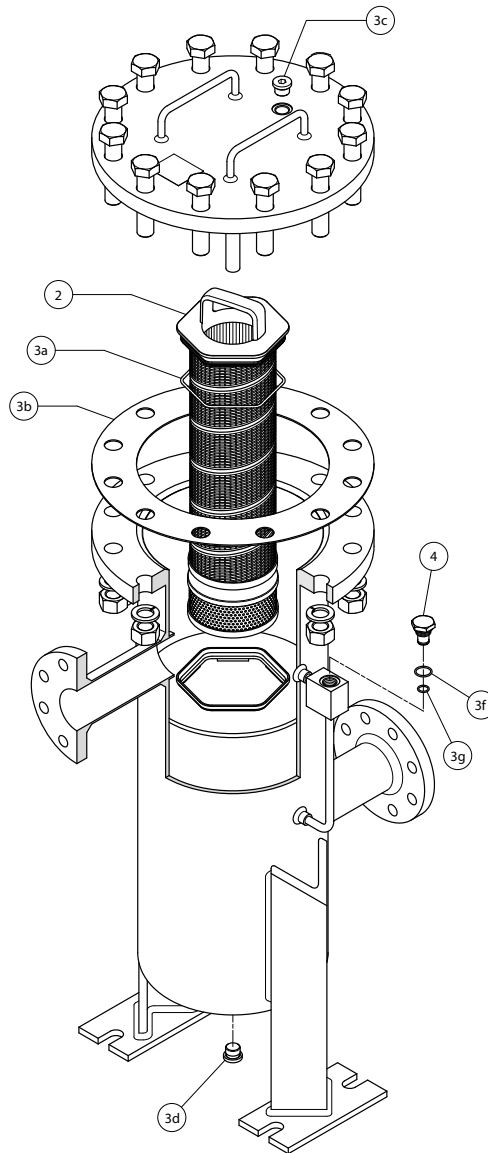




# MLPX SPARE PARTS

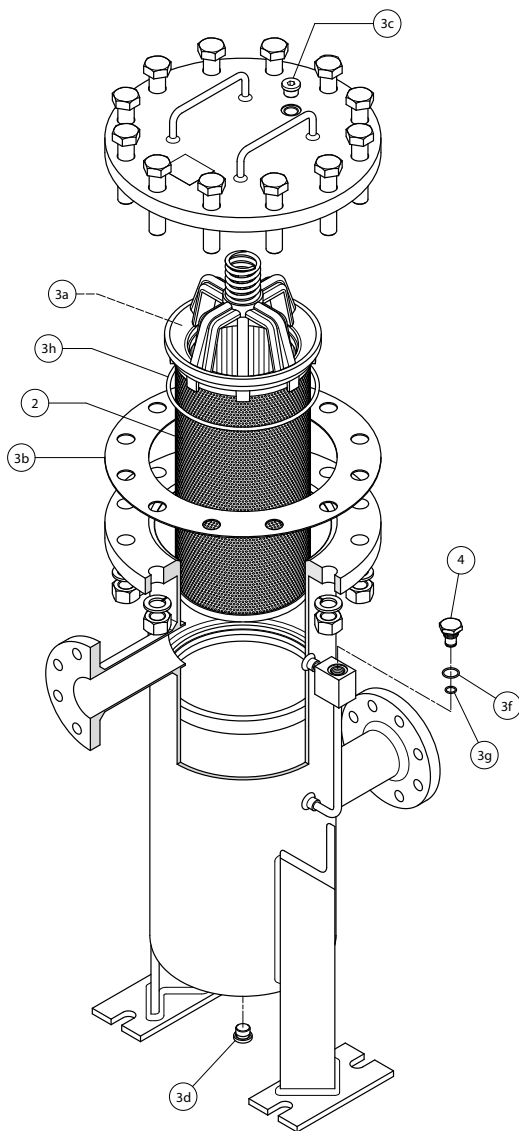
Order number for spare parts

MLPX 631 - 633 - 634 - 635



Item:	2	Q.ty: 1 pc. 3 (3a ÷ 3f)	Q.ty: 2 pcs. 4
Filter series	Filter element	Seal Kit code number NBR	Indicator connection plug NBR
MLPX631	See order table	AK021000684	T2H
MLPX633		AK021000685	T2H
MLPX634		AK021000686	T2H
MLPX635		AK021000687	T2H

## MLPC 851



Item:	Q.ty: 1 pc. ②	Q.ty: 1 pc. ③ (3a ÷ 3f)	Q.ty: 2 pcs. ④
Filter series	Filter element	Seal Kit code number NBR	Indicator connection plug NBR
<b>MLPC851</b>	See order table	AK021000786	T2H