



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 MLPX	Filter element 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 [dm³]

Filter series	Length	Connection nom. dia. [DN]	Weights [kg]	Volumes [dm ³]
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
MLPX 631	10	225	280	516	720	788	2467
	20	336	360	797	1438	1568	2575
MLPC 851	20	1613	2050	2204	3034	3307	3832
	30	2003	2504	2571	3611	3720	3948
	40	2204	2641	2860	3832	3832	3948
MLPX 633	20	1013	1086	2459	4697	5193	9574
MLPX 634	20	1344	1440	3183	5719	6227	10122
MLPX 635	20	1679	1798	3967	7081	7699	12383

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

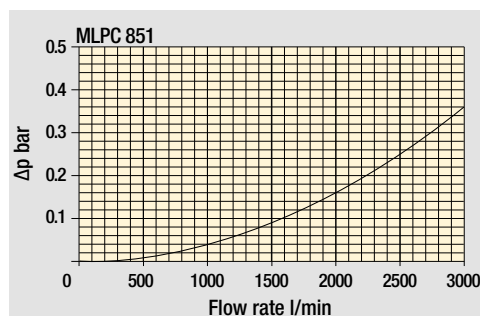
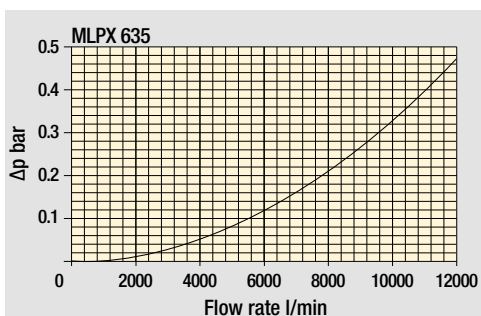
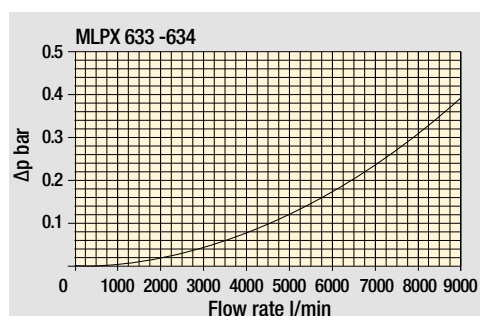
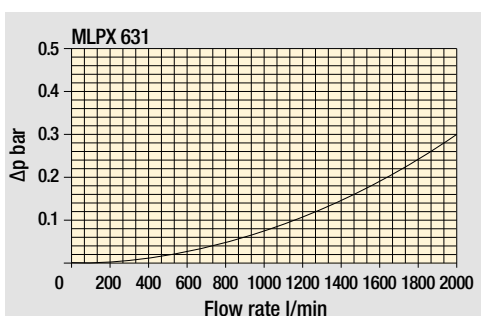
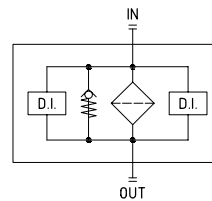
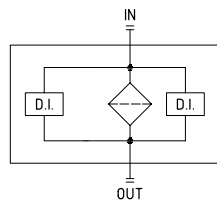
The reference fluid has a kinematic viscosity of 30 mm²/s (cSt) and a density of 0.86 kg/dm³.

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

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
MLPX 631-633-634-635	-	-	•
MLPC 851	•	•	-

Hydraulic diagram



Pressure drop

Filter housings
Δp 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.

MLPX MLPX631 - MLPX633 - MLPX634 - MLPX635

Designation & Ordering code

COMPLETE FILTER

Series MLPX	Filter featuring MYCLEAN Filter Element	Example :	MLPX	633	20	A0010	D	A	35	FD125	0	6T	NN	P01	NN	
Filter size	Nr. of elements LPX 630															
MLPX 631	1															
MLPX 633	3															
MLPX 634	4															
MLPX 635	5															
Length	Filter size															
	631	633	634	635												
10	•	-	-	-												
20	•	•	•	•												
Filtration rating (filter media)																
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														
Element Δp																
D	10 bar															
Seals																
A	NBR															
Bypass																
35	With bypass 3.5 bar															
Connections					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	-	-	-	-	-	•									
Additional connections																
0	Without additional connections															
Connections for clogging indicators																
6T	With both side indicator connection, with metal plugs															
Additional features																
NN	Without additional features															
Execution																
P01	Standard catalogue item															
Certificates																
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

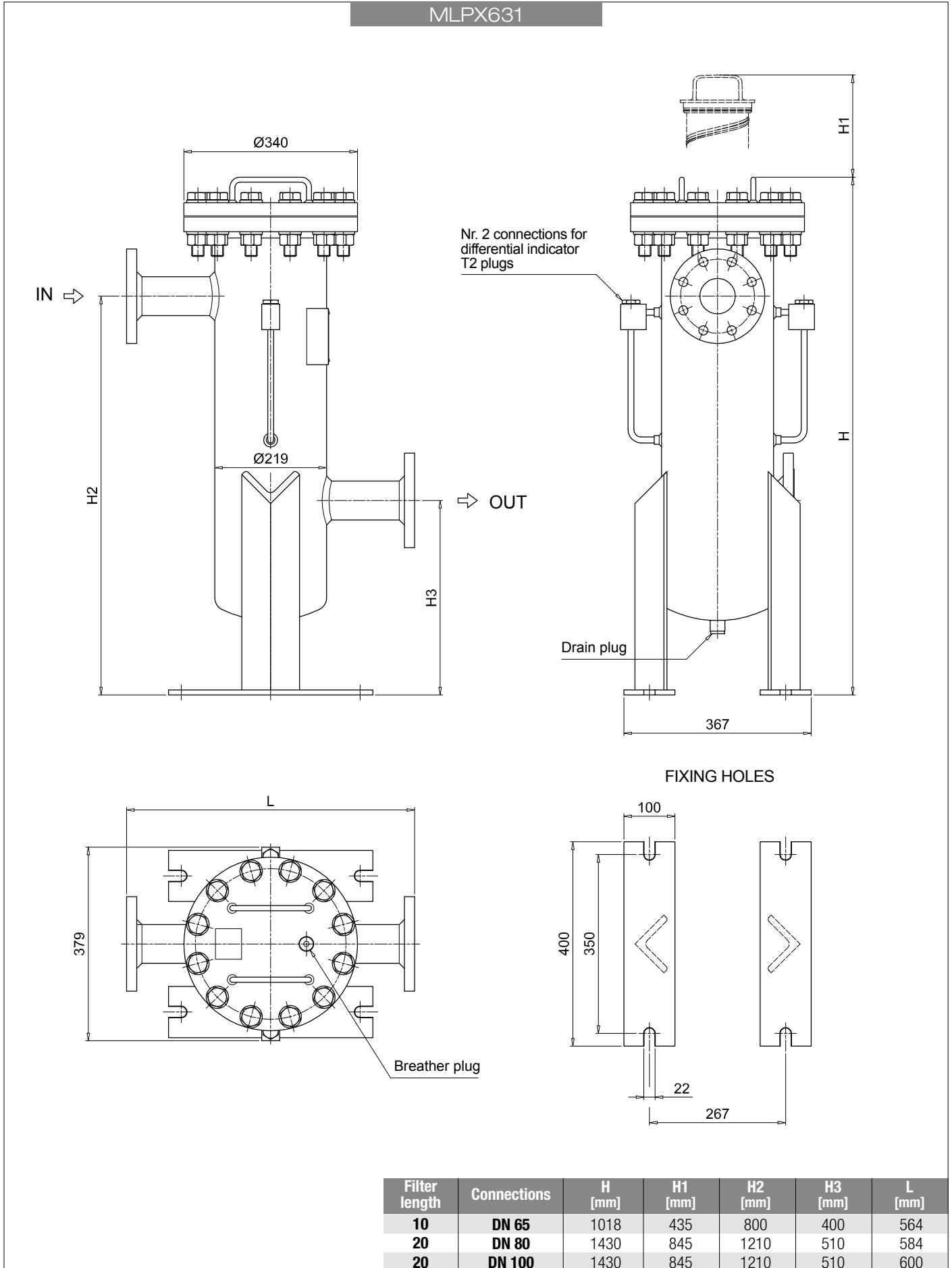
PLUGS

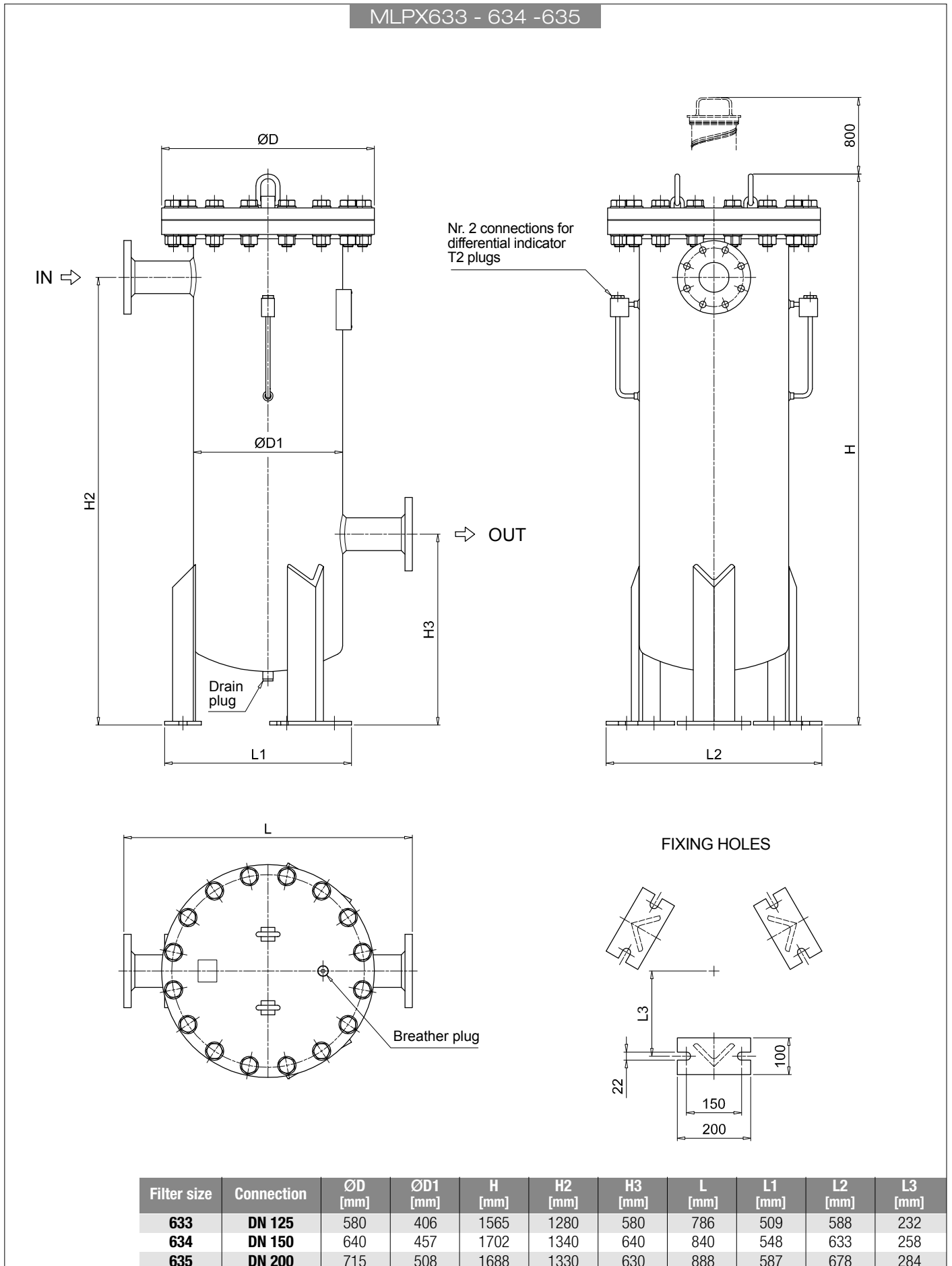
See page 807

T2	Plug
----	------

FILTER ELEMENT

Series	Config. example:	LPX	630	20	A0010	D	A	35	NN	P01	NN
LPX Filter element with MYCLEAN feature											
Element size											
630											
Element length											
10 20 											
Filtration rating (filter media)											
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
Element Δp											
D 10 bar											
Seals											
A NBR											
Bypass											
35 With bypass 3.5 bar											
Addictional features											
NN Without addictional features											
Execution											
P01 Standard catalogue item											
Certificates											
NN None											





Designation & Ordering code

COMPLETE FILTER

Series MLPC	Example :	MLPC	851	20	A0010	D	A	17	FD100	0	6T	NN	P01	NN	
Filter size 851	Nr. of elements MRC 850	1													
Length 20 30 40															
Filtration rating (filter media)															
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													
Element Δp D	10 bar														
Seals A	NBR														
Bypass 00 17	Without bypass With bypass 1.75 bar														
Connections FD080 FD100	Flange EN 1092-1 / 01A / DN 80 / PN 16 Flange EN 1092-1 / 01A / DN 100 / PN 16														
Additional connections 0	Without additional connections														
Connections for clogging indicators 6T	With both side indicator connection, with metal plugs														
Additional features NN	Without additional features														
Execution P01	Standard catalogue item														
Certificates 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

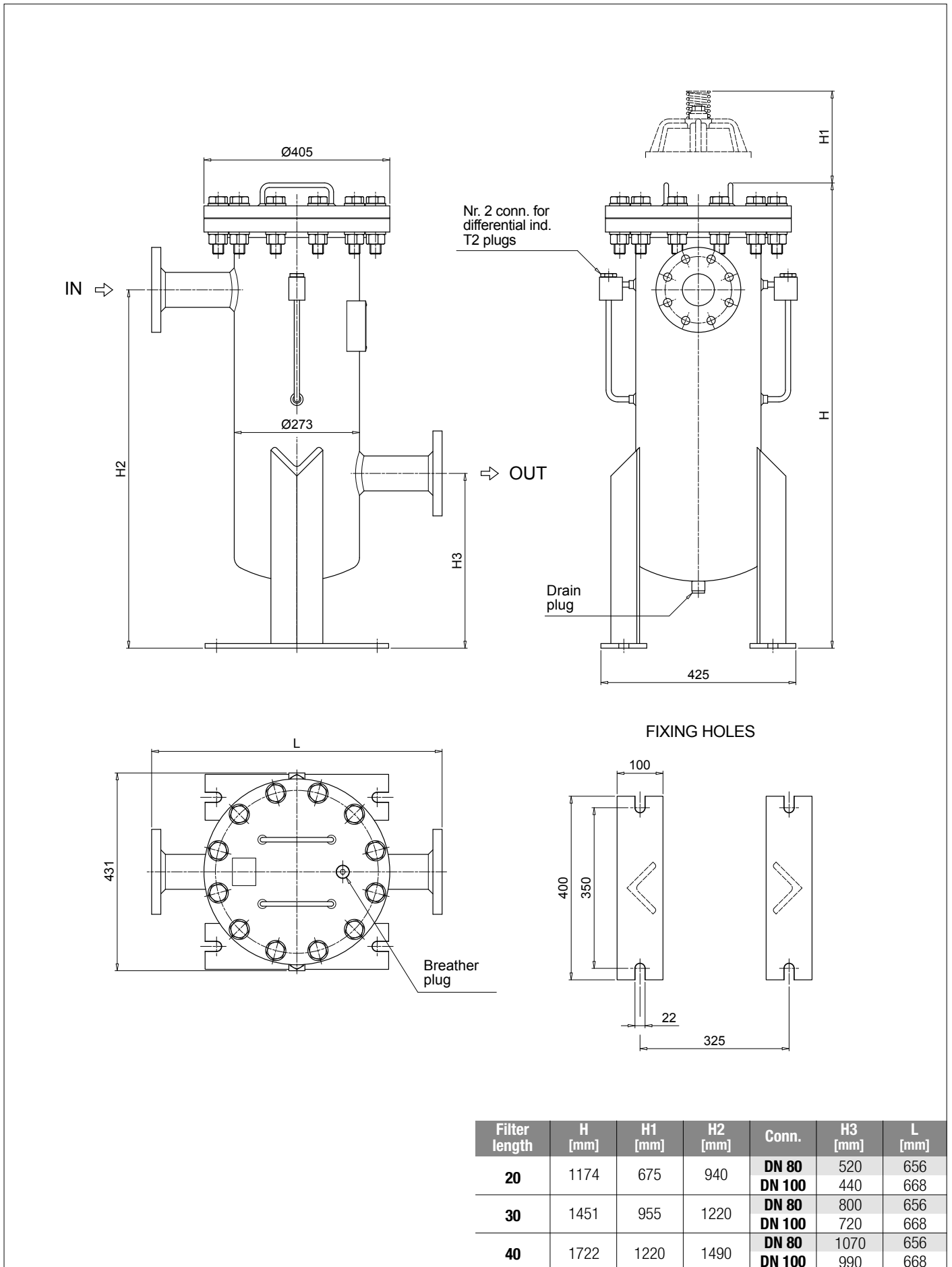
DTA	Electronic differential pressure indicator
DTI	I-O Link electronic differential pressure indicator
DVA	Visual differential pressure indicator
DVM	Visual differential pressure indicator

PLUGS

See page 807

T2	Plug
-----------	------

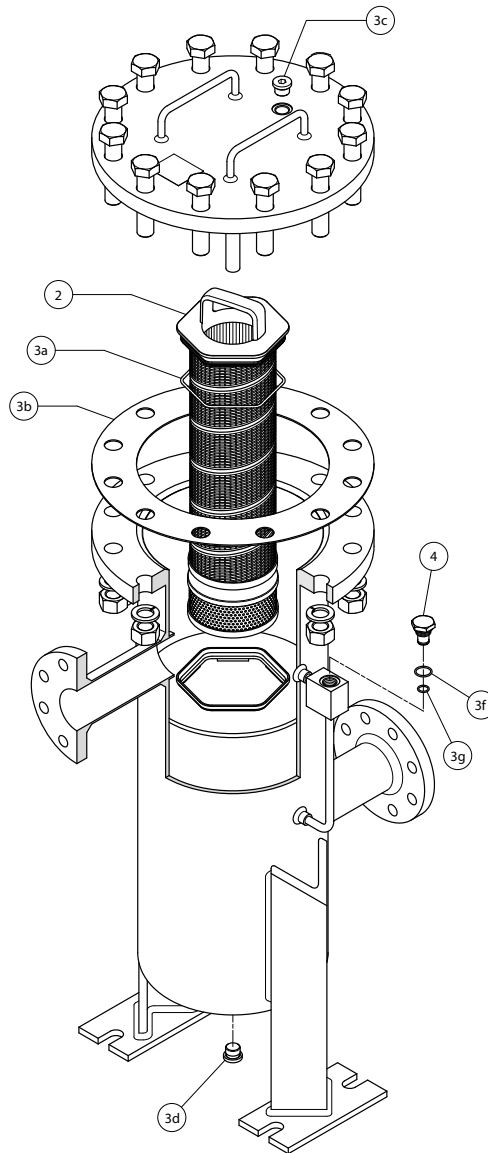
FILTER ELEMENT	
Element series and size MRC	Config. example: MRC 850 20 A0010 D A 00 NN P01 NN
Element size 850	
Element length 20 30 40	
Filtration rating (filter media)	
A0003 Inorganic microfiber 3 µm	
A0006 Inorganic microfiber 6 µm	
A0010 Inorganic microfiber 10 µm	
A0025 Inorganic microfiber 25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



MLPX SPARE PARTS

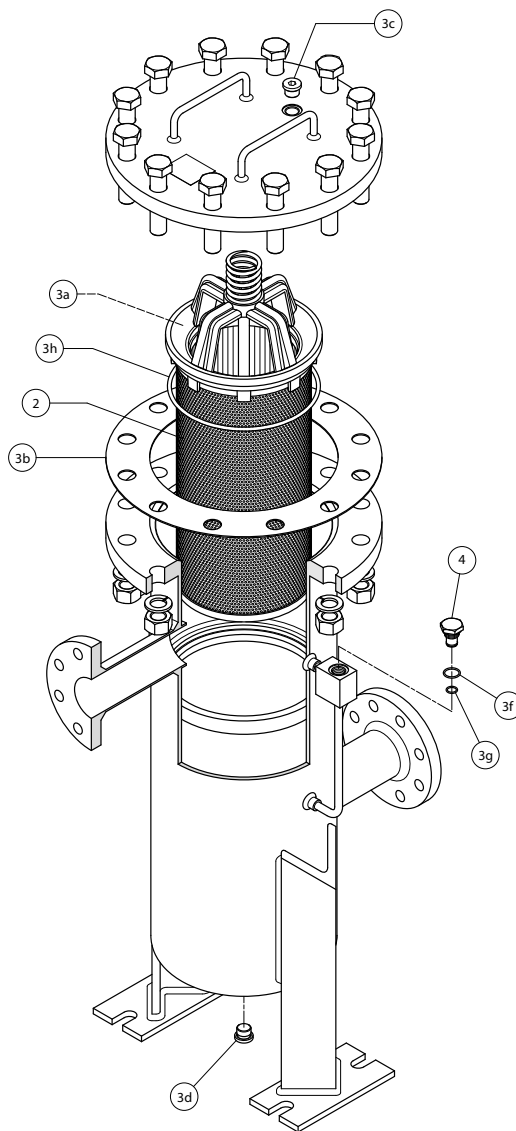
Order number for spare parts

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
MLPC851	See order table	AK021000786	T2H