

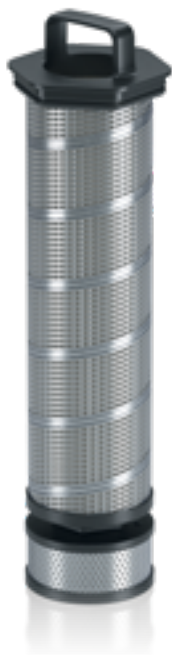


THE **X** CONCEPT FOR OUR FILTERS

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 13500 l/min



MLPX - MLPC GENERAL INFORMATION

Description

High capacity industrial filters - simplex type

Maximum working pressure up to 1.6 MPa (16 bar)

Flow rate up to 13500 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 13500 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

Technical data

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) $\pm 10\%$ (MLPX series)
0.175 MPa (1.75 bar) $\pm 10\%$ (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
Please see ordering code tables to check element Δp series availability based on filter features.			
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

Flow rates [l/min]

Filter element design - D Series							
Filter series	Length	A0003	A0006	A0010	A0025	A0040	M0060 M0090 M0250
MLPX 631	10	501	555	1140	1783	1927	2575
	20	935	1035	1718	2364	2467	2808
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	2914	3252	5782	8583	9062	10707
MLPX 634	20	3731	4128	6810	9314	9708	11014
MLPX 635	20	4644	5133	8406	11418	11889	13445

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

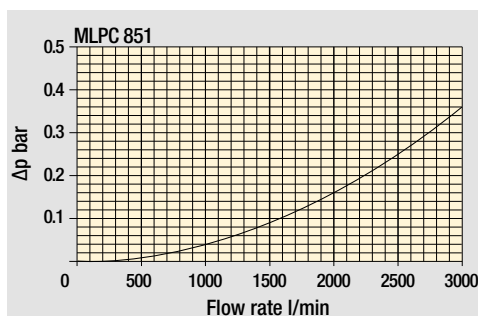
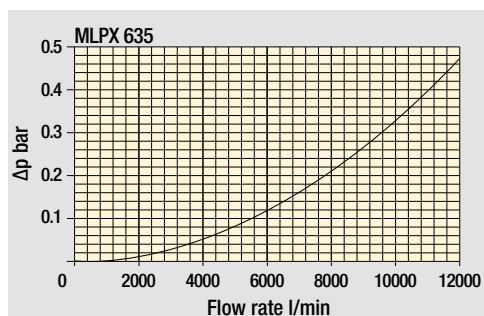
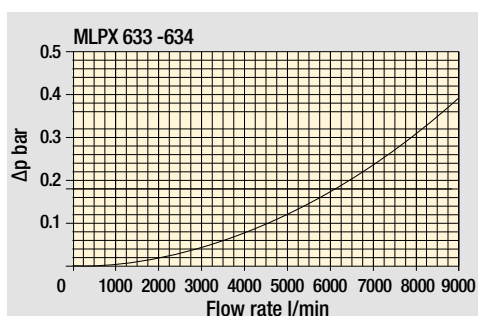
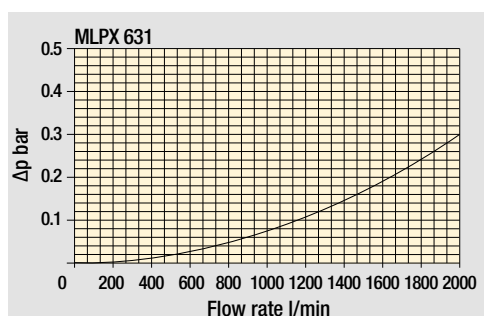
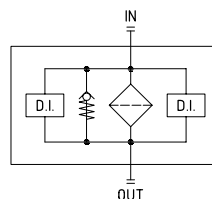
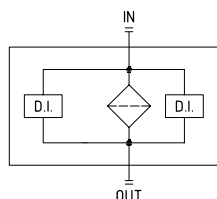
The reference fluid has a kinematic viscosity of 30 mm²/s (cSt) and a density of 0.86 kg/dm³.

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											
		10	20	20	20	20										
							size									
							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

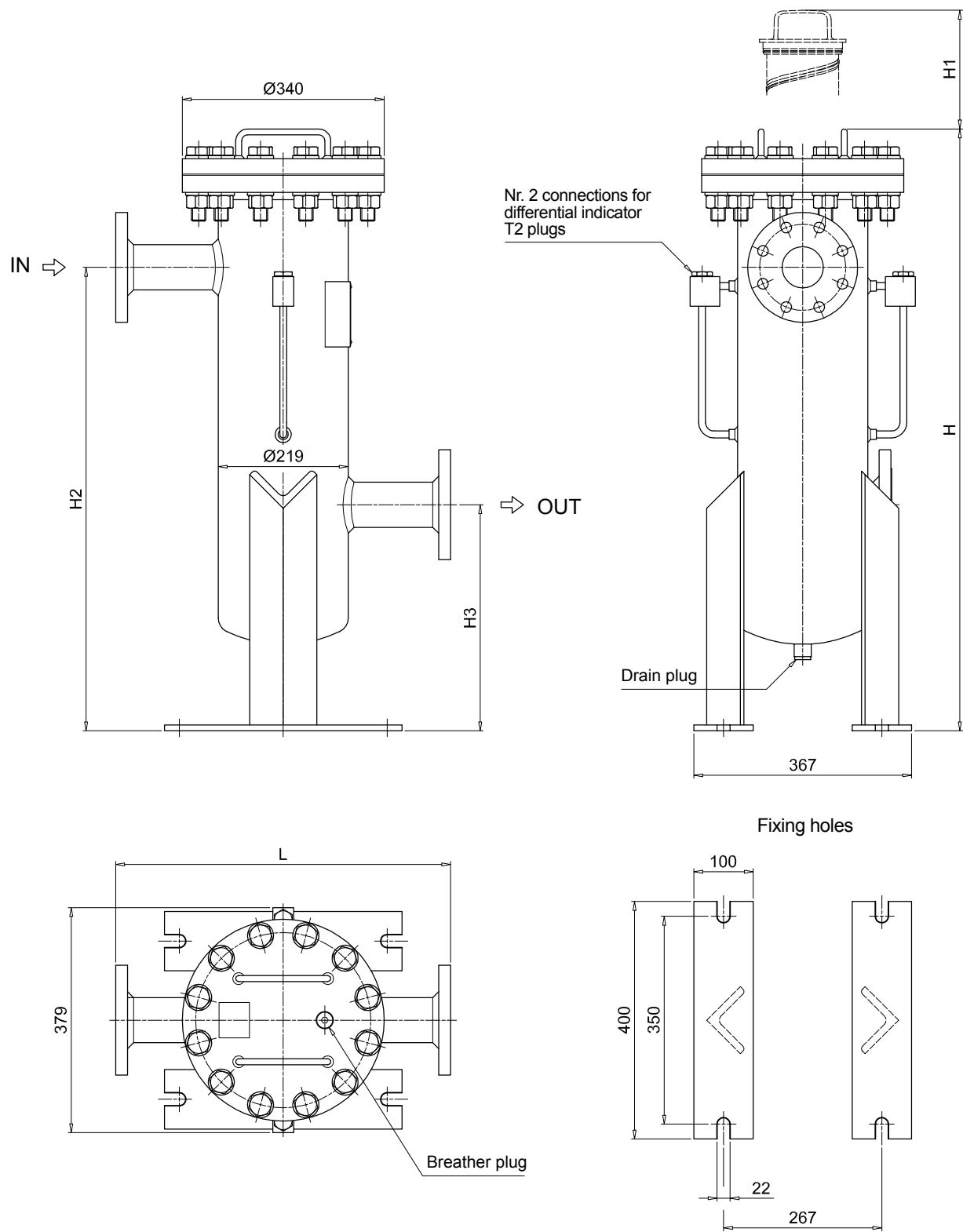
PLUGS

See page 807

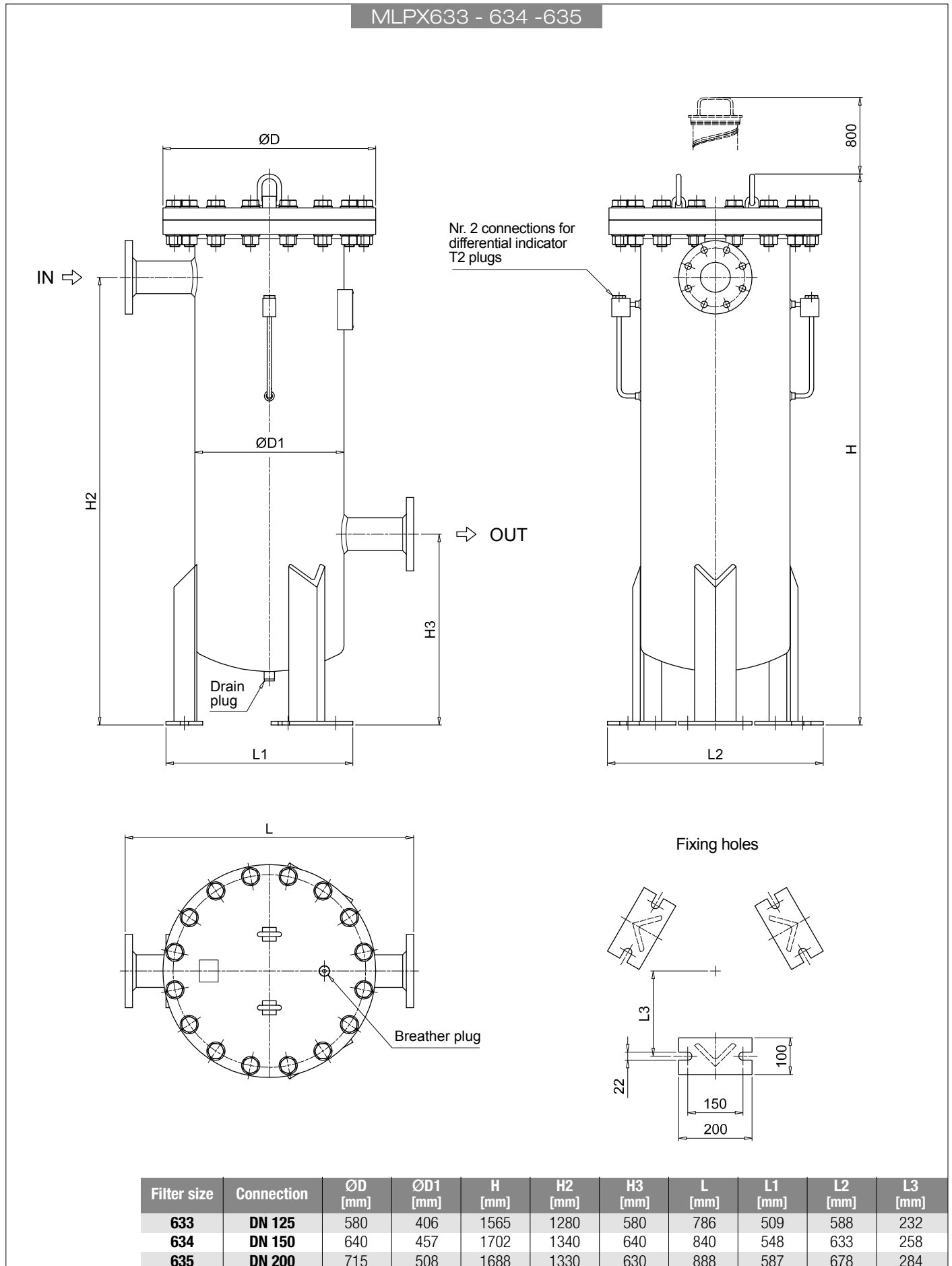
T2	Plug
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FILTER ELEMENT		
Series	Config. example: LPX 630 20 A0010 D A 35 NN P01 NN	
LPX Filter element with MYCLEAN feature		
Element size		
630		
Element length		
10 20 		
Filtration rating (filter media)		
A0003 Inorganic microfiber 3 µm		
A0006 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		

MLPX631



Filter length	Connections	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	L [mm]
10	DN 65	1018	435	800	400	564
20	DN 80	1430	845	1210	510	584
20	DN 100	1430	845	1210	510	600



MLPC MLPC851

Designation & Ordering code

COMPLETE FILTER

Series	Example :	MLPC	851	20	A0010	D	A	17	FD100	0	6T	NN	P01	NN
Filter size	Nr. of elements MRC 850													
851	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	Without bypass													
17	With bypass 1.75 bar													
Connections														
FD080	Flange EN 1092-1 / 01A / DN 80 / PN 16													
FD100	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

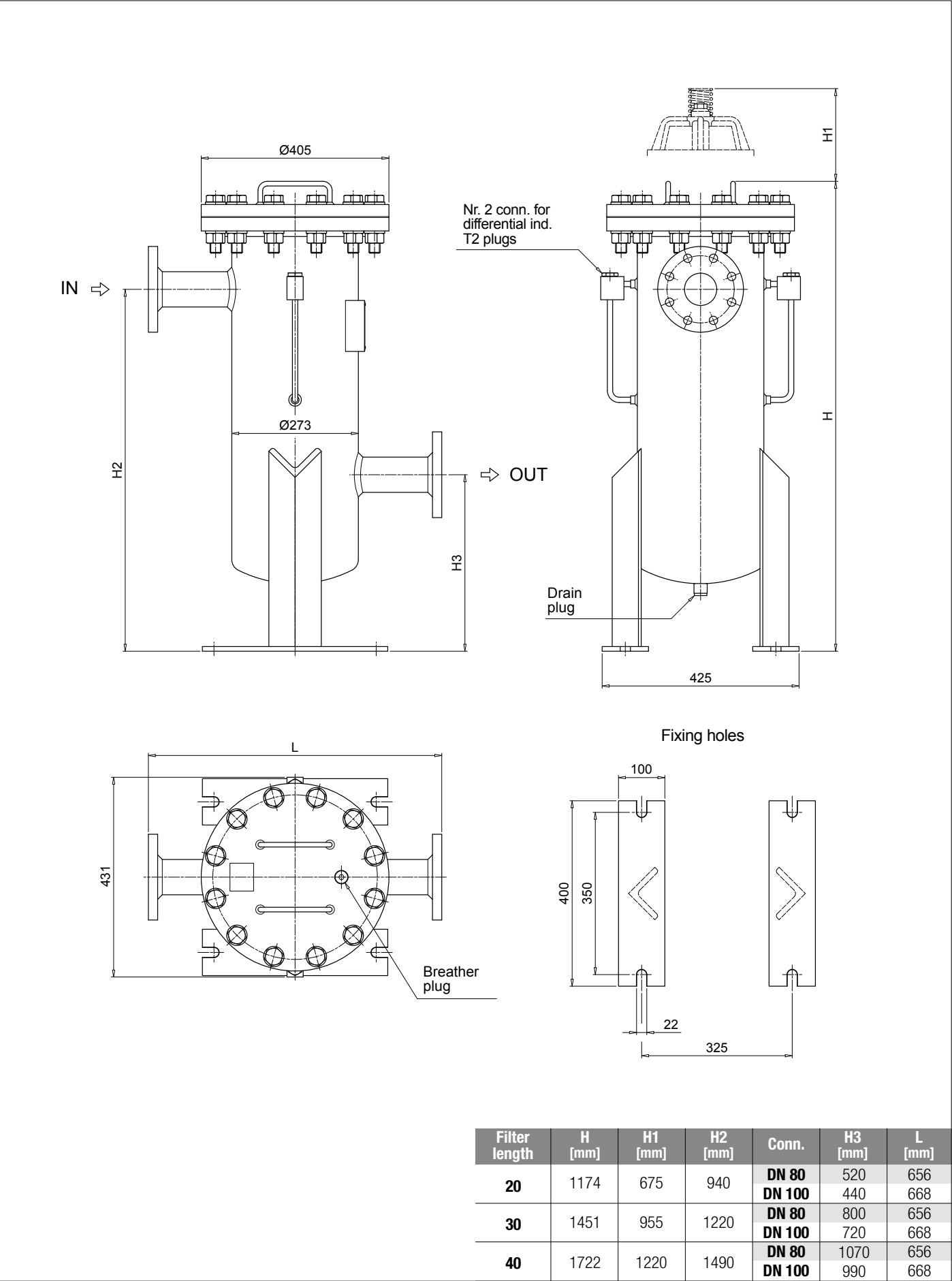
PLUGS

See page 807

T2	Plug
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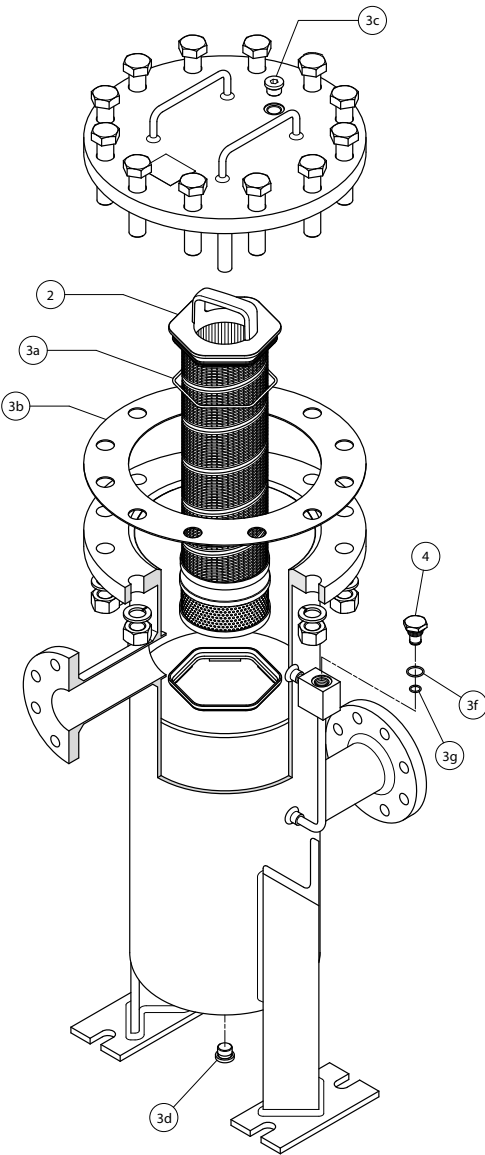
FILTER ELEMENT

Element series and size	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										
Addictional features											
NN	Without addictional features										
Execution											
P01	Standard catalogue item										
Certificates											
NN	None										



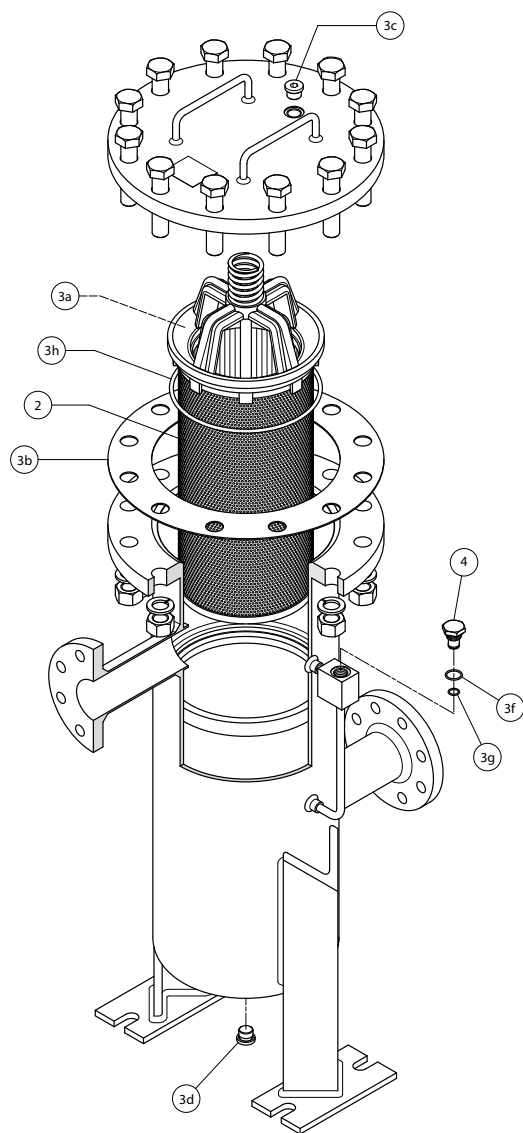
Order number for spare parts

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