

MPHC series

Maximum working pressure up to 1 MPa (10 bar) - Flow rate up to 3500 l/min



Description

Technical data

Return filter

Maximum working pressure up to 1 MPa (10 bar)

Flow rate up to 3500 l/min

MPHC is a range of return filters for protection of the reservoir against the system contamination. They are directly fixed to the reservoir, in immersed or semi-immersed position.

The use of the diffuser is recommended, to place the filter output always immersed into the fluid to avoid aeration or foam generation into the reservoir.

The filtration from inside to outside allows a cleaner filter element replacement, the dirty remains into the filter element.

Available features:

- Female threaded connections up to 1 1/2" and flanged connections up to 4", for a maximum flow rate of 3500 l/min
- Multiple connections, to connect several return lines or drains
- 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 reservoir
- Bypass valve, to relieve excessive pressure drop across the filter media
- Magnetic filter, to hold the ferrous particles
- 2, 3, 4 or 8 fixing holes for installation, to suit a variety of reservoir surfaces
- Flat Seal to suit a variety of reservoir surfaces
- Oil dipstick, to easily check the level of the fluid into the reservoir (separate item)
- Diffuser, to reduce the risk of aeration, foaming and noise
- Filler plug, to fill cleaned fluid into the tank without an additional plug
- Integrated breather filter, to clean the air that moves into the reservoir as result of the oil level fluctuation (MPH110/114)
- Integrated breather filter with pressurization valve, to clean the air that moves into the reservoir as result of the oil level fluctuation and to guarantee the pressurization into the reservoir (MPH110/114)
- Visual, electrical and electronic clogging indicators

Common applications:

Heavy duty industrial equipment

Filter housing materials

- Head: Aluminium: MPHC 110-114-116-120-250
Anodized Aluminium: MPHC 630-850
Painted Aluminium: MPHC 660
- Cover: Polyamide: MPHC 110-114-116-120
Aluminium: MPHC 250
Anodized Aluminium: MPHC 630
Painted Aluminium: MPHC 660
Steel: MPHC 850
- Insert assembly: Polyamide: MPHC 110-114-116-120
Aluminium: MPHC 250-630-660-850
- Diffuser: Stainless Steel
- Valve: Phosphatized Steel

Pressure

- Test pressure: 1.5 MPa (15 bar)
- Min. Burst pressure: 3 MPa (30 bar)
- Pulse pressure fatigue test: 1 000 000 cycles with pressure from 0 to 1 MPa (10 bar)

Bypass valve

- Opening pressure 0.175 MPa (1.75 bar) ±10%
- Opening pressure 0.25 MPa (2.5 bar) ±10%, except for MPHC 850

Filter element features

Filter MPHC		Filter element MRC	
Δp Element type			
Element media	Construction	Δp Series	Δp
A - Microfiber	Standard	D	10 bar
M - Wire mesh	Standard	D	10 bar
P - Paper	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 or W
- Optional FPM series V or Z

Temperature

From -25 °C to +110 °C

Note

MPHC filters are provided for vertical mounting

Weights [kg] and volumes [dm³]

Filter series	Weights [kg]						Volumes [dm³]					
	Length	10	20	30	40	50	Length	10	20	30	40	50
MPHC 110		1.60	1.70	1.80	2.20	2.60		1.60	1.70	1.80	2.20	2.60
MPHC 114		1.60	1.70	1.80	2.20	2.60		1.60	1.70	1.80	2.20	2.60
MPHC 116		1.60	1.70	1.80	2.20	2.60		1.60	1.70	1.80	2.20	2.60
MPHC 120		1.60	1.70	1.80	2.20	2.60		1.60	1.70	1.80	2.20	2.60
MPHC 250		3.60	3.90	4.20	5.60	-		4.40	4.40	5.40	8.00	-
MPHC 630		6.50	7.00	7.40	8.50	10.50		7.30	9.00	11.00	13.00	19.20
MPHC 660		-	-	-	11.50	14.00		-	-	-	14.60	21.00
MPHC 850		32.00	35.00	38.00	42.00	-		13.00	16.50	21.00	25.00	-

Flow rates [l/min]

Filter series	Length	Filter element design - D series					Filter element design - D series		
		A0003	A0006	A0010	A0016	A0025	M0025 M0060 M0090	P0010	P0025
MPHC 110-114 116-120	1	26	29	72	79	107	282	164	190
	2	43	46	112	114	161	318	164	190
	3	64	72	132	156	178	324	219	251
	4	90	99	184	198	216	324	266	302
	5	117	128	201	219	244	324	282	318
MPHC 250	1	93	102	210	251	315	1093	339	383
	2	124	151	327	412	421	1122	460	514
	3	189	221	418	445	500	1137	544	616
	4	261	304	592	670	766	1166	832	923
MPHC 630	1	160	200	369	423	518	1894	565	632
	2	240	257	571	611	1045	1929	1137	1285
	3	330	374	745	788	1308	1938	1416	1577
	4	374	403	887	1010	1348	1956	1448	1612
	5	625	698	1210	1257	1723	2121	1839	1929
MPHC 660	4	370	399	903	1042	1460	2376	1596	1830
	5	624	699	1282	1343	1997	2663	2182	2331
MPHC 850	1	775	1041	1246	1568	2242	3311	2371	2625
	2	1176	1522	1682	1747	2449	3378	2684	2886
	3	1490	1914	1995	2014	3035	3405	3144	3220
	4	1668	2088	2305	2363	3169	3517	3272	3378

Maximum flow rate for a complete return filter with a pressure drop $\Delta p = 0.5$ 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.mpfiltre.com.

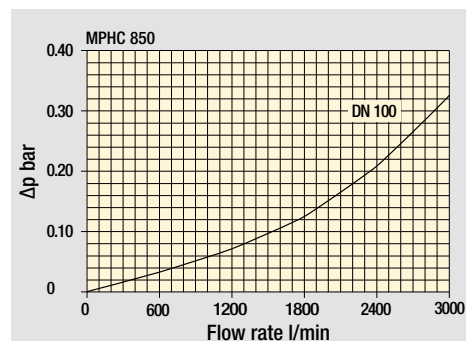
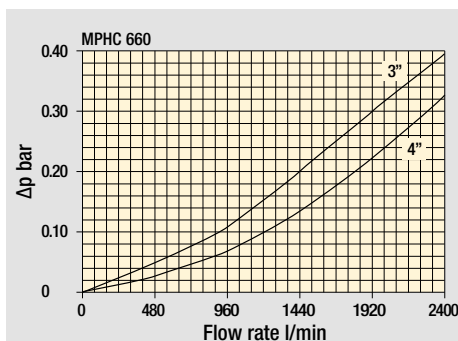
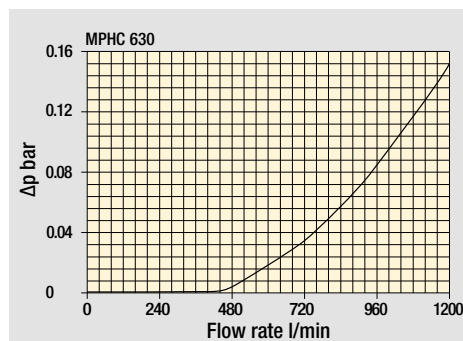
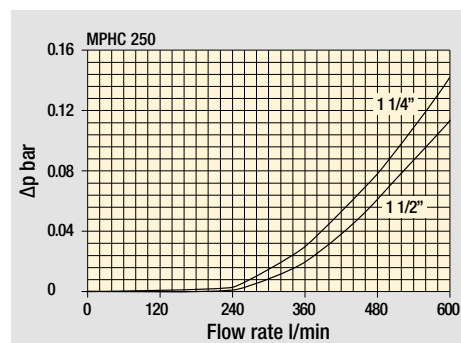
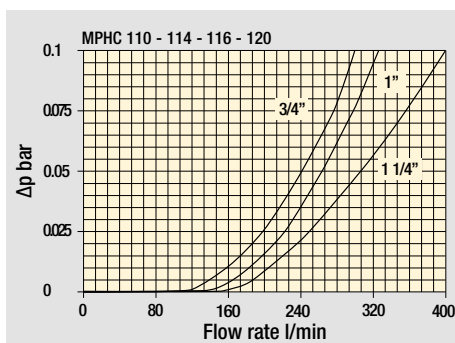
You can also calculate the right size using the formulas present on the FILTER SIZING paragraph at the beginning of the full catalogue or at the beginning of the filter family brochure. Please, contact our Sales Department for further additional information.

Filter series	Single IN Port	Double IN Port	Triple IN port
MPHC 110	•	•	-
MPHC 114	•	-	-
MPHC 116	•	-	-
MPHC 120	•	•	•
MPHC 250	•	•	-
MPHC 630	•	•	-
MPHC 660	•	-	-
MPHC 850	•	•	-
17 / 25 with bypass 1.75 / 2.5 bar			
00 without bypass			

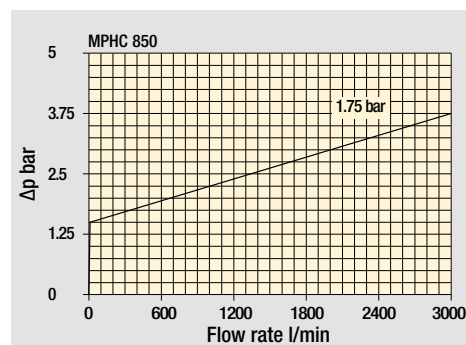
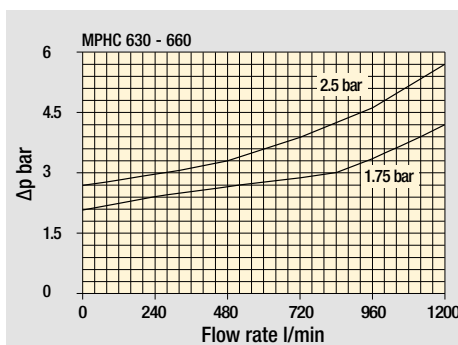
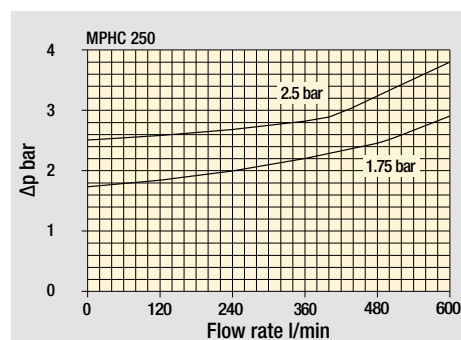
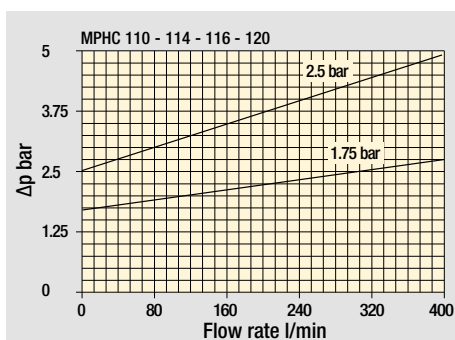
Hydraulic diagram

Pressure drop

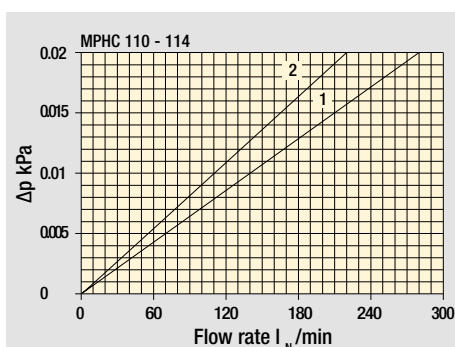
Filter housings Δp pressure drop



Bypass valve pressure drop



Air breather pressure drop



- 1 ☐ AS With air breather 10 μ m
 2 ☐ AR With anti-splash and SAP50 10 μ m

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

Designation & Ordering code

COMPLETE FILTER

Series	Example: MPHC	110	50	A0025	D	W	17	FS012	1	6T	DA	P01	NN
MPHC													
Size													
110													
Length													
10 20 30 40 50													
Filtration rating (filter media)													
A0003 Inorganic microfiber	3 µm												
A0006 Inorganic microfiber	6 µm												
A0010 Inorganic microfiber	10 µm												
A0016 Inorganic microfiber	16 µm												
A0025 Inorganic microfiber	25 µm												
M0025 Wire mesh	25 µm												
M0060 Wire mesh	60 µm												
M0090 Wire mesh	90 µm												
P0010 Resin impregnated paper	10 µm												
P0025 Resin impregnated paper	25 µm												
Element Δp													
D 10 bar													
Seals and treatments		A0xxx	M0xxx	P0xxx									
A NBR		•	•	•									
V FPM		•	•	•									
W NBR with filter and components surface treatment		•	•	-									
Z FPM with filter and components surface treatment		•	•	-									
By-pass valve													
00 Without bypass													
17 With bypass 1.75 bar													
25 With bypass 2.5 bar													
Connections													
FG034 G 3/4"	FN034 3/4" NPT	FS012 SAE 12 - 1 1/16" - 12 UN											
FG100 G 1"	FN100 1" NPT	FS016 SAE 16 - 1 5/16" - 12 UN											
FG114 G 1 1/4"	FN114 1 1/4" NPT	FS020 SAE 20 - 1 5/8" - 12 UN											
Additional connections													
1 Main connection	FG034 G 3/8"	Main connection	FN034 3/8" NPT	Main connection	FS012 SAE 6 - 9/16" 18 UNF								
	FG100		FN100		FS016								
	FN114		FN114		FS020								
2 Main connection	FG034 G 1/2"	Main connection	FN034 1/2" NPT	Main connection	FS012 SAE 8 - 3/4" 16 UNF								
	FG100		FN100		FS016								
	FN114		FN114		FS020								
Connections for clogging indicator													
6T With both side indicator connection, with metal plug													
Additional features													
Standard	With diffuser	With magnetic filter	With diffuser and magnetic filter										
NN Without air breather	DA	MA	DE										
AS With air breather 10 µm	DB	MS	DF										
AR With anti-splash air breather SAP050 10 µm	DC	MR	DG										
AP With anti-splash air breather SAP050 10 µm, press. 0.5 bar	DD	MP	DH										
Execution													
P01 Standard catalogue item													
Certificates													
NN None													

CLOGGING INDICATORS

See pages 776-777

BVA	Axial pressure gauge
BVR	Radial pressure gauge
BVP	Visual pressure indicator with automatic reset
BVQ	Visual pressure indicator with manual reset

BEA	Electrical pressure indicator
BEM	Electrical pressure indicator
BLA	Electrical / visual pressure indicator

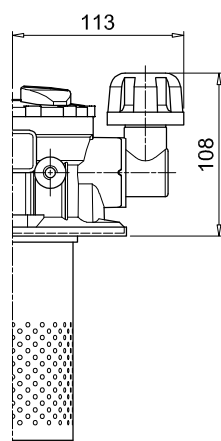
ACCESSORIES

See page 270

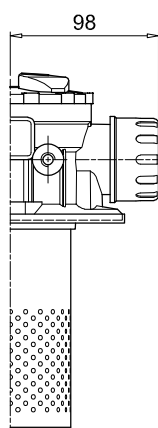
DPT	Dipstick
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FILTER ELEMENT									
Series MRC	Example: MRC 100 50 A0025 D A 00 NN P01 NN								
Size 100									
Length 10 20 30 40 50									
Filtration rating (filter media)									
A0003 Inorganic microfiber 3 µm									
A0006 Inorganic microfiber 6 µm									
A0010 Inorganic microfiber 10 µm									
A0016 Inorganic microfiber 16 µm									
A0025 Inorganic microfiber 25 µm									
M0025 Wire mesh 25 µm									
M0060 Wire mesh 60 µm									
M0090 Wire mesh 90 µm									
P0010 Resin impregnated paper 10 µm									
P0025 Resin impregnated paper 25 µm									
Element Δp D 10 bar									
Seals and treatments									
A NBR									
V FPM									
Bypass 00 Without bypass									
Additional features NN Without additional features									
Execution P01 Standard catalogue item									
Certificates NN None									

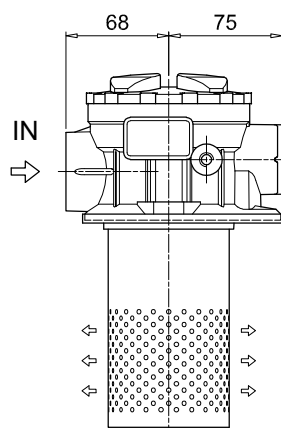
MPHC110				
with diffuser				
Connection	T	Filter length	H1 [mm]	H2 [mm]
FG034	G 1/8"	10	188	255
FG100		20	188	255
FG114		30	238	305
FN034	1/8" NPT	40	338	405
FN100		50	438	505
FN114				
FS012	1/8" NPT			
FS016				
FS020				



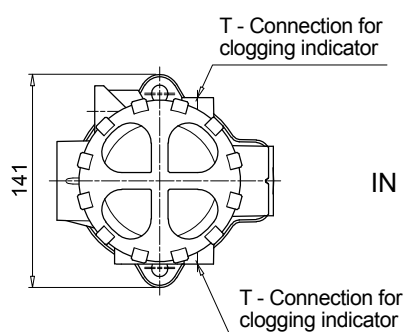
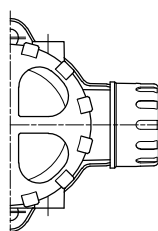
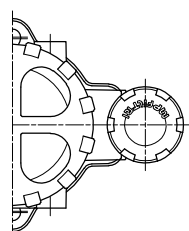
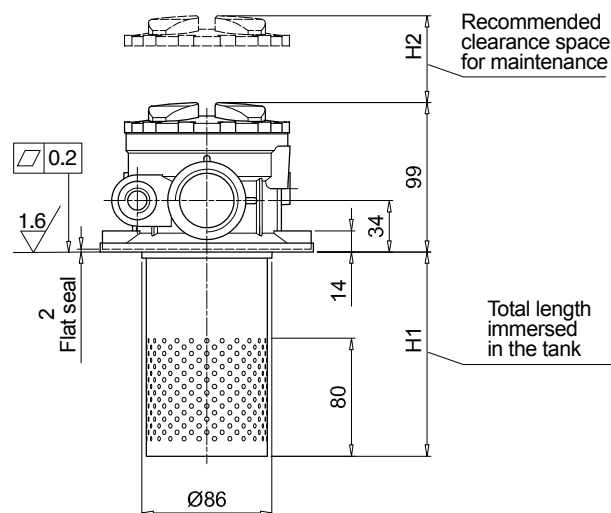
Additional features
DC / DG
DD / DH



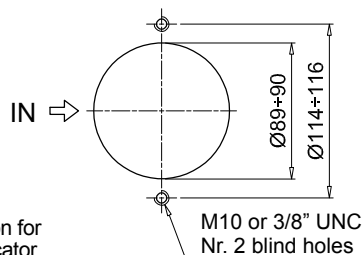
Additional features
DB / DF



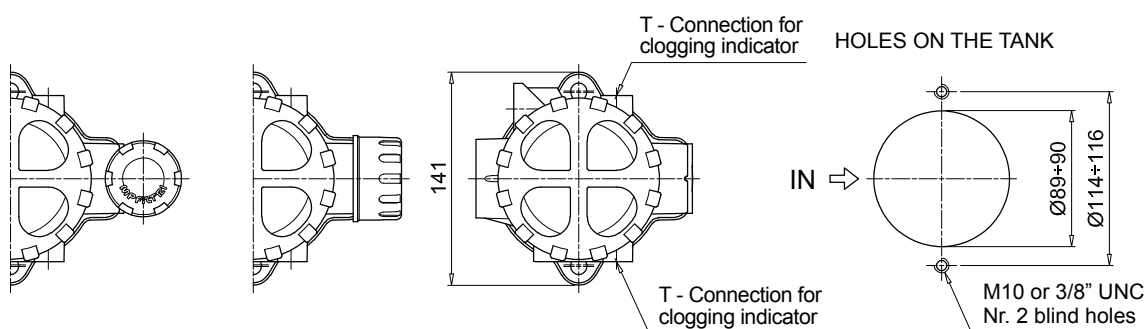
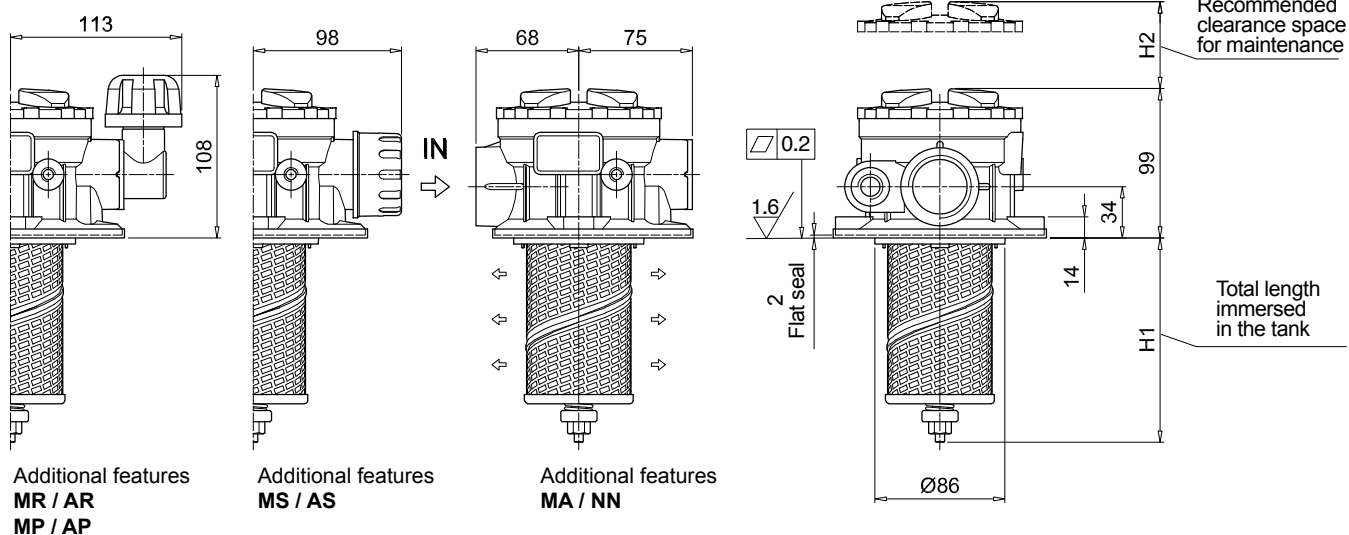
Additional features
DA / DE



HOLES ON THE TANK



MPHC110				
without diffuser				
Connection	T	Filter length	H1 [mm]	H2 [mm]
FG034	G 1/8"	10	129	190
FG100		20	173	235
FG114		30	223	285
FN034	1/8" NPT	40	323	385
FN100		50	423	485
FN114				
FS012	1/8" NPT			
FS016				
FS020				



Designation & Ordering code

COMPLETE FILTER

Series	Example: MPHC	114	50	A0025	D	W	17	FS012	0	3T	DA	P01	NN
MPHC													
Size													
114													
Length													
10 20 30 40 50													
Filtration rating (filter media)													
A0003	Inorganic microfiber	3 µm											
A0006	Inorganic microfiber	6 µm											
A0010	Inorganic microfiber	10 µm											
A0016	Inorganic microfiber	16 µm											
A0025	Inorganic microfiber	25 µm											
M0025	Wire mesh	25 µm											
M0060	Wire mesh	60 µm											
M0090	Wire mesh	90 µm											
P0010	Resin impregnated paper	10 µm											
P0025	Resin impregnated paper	25 µm											
Element Δp													
D	10 bar												
Seals and treatments													
A0xxx	M0xxx	P0xxx											
A	NBR	•	•	•									
V	FPM	•	•	•									
W	NBR with filter and components surface treatment	•	•	-									
Z	FPM with filter and components surface treatment	•	•	-									
By-pass valve													
00	Without bypass												
17	With bypass 1.75 bar												
25	With bypass 2.5 bar												
Connections													
FG034	G 3/4"	FN034	3/4" NPT	FS012	SAE 12 - 1 1/16" - 12 UN								
FG100	G 1"	FN100	1" NPT	FS016	SAE 16 - 1 5/16" - 12 UN								
FG114	G 1 1/4"	FN114	1 1/4" NPT	FS020	SAE 20 - 1 5/8" - 12 UN								
Additional connections													
0	Without additional connections												
Connections for clogging indicator													
3T	With left indicator connection, with metal plug												
Additional features													
Standard	With diffuser	With magnetic filter	With diffuser and magnetic filter										
NN	Without air breather	DA	MA	DE									
AS	With air breather 10 µm	DB	MS	DF									
AR	With anti-splash air breather SAP050 10 µm	DC	MR	DG									
AP	With anti-splash air breather SAP050 10 µm, press. 0.5 bar	DD	MP	DH									
Execution													
P01	Standard catalogue item												
Certificates													
NN	None												

CLOGGING INDICATORS

See pages 776-777

BVA	Axial pressure gauge
BVR	Radial pressure gauge
BVP	Visual pressure indicator with automatic reset
BVQ	Visual pressure indicator with manual reset

BEA	Electrical pressure indicator
BEM	Electrical pressure indicator
BLA	Electrical / visual pressure indicator

ACCESSORIES

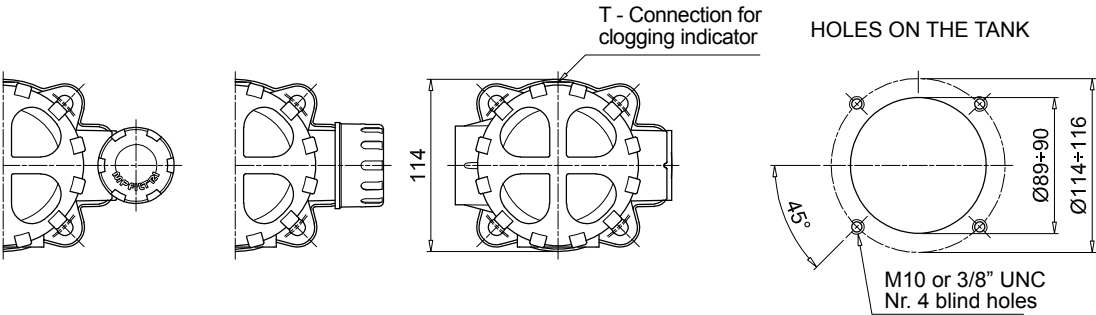
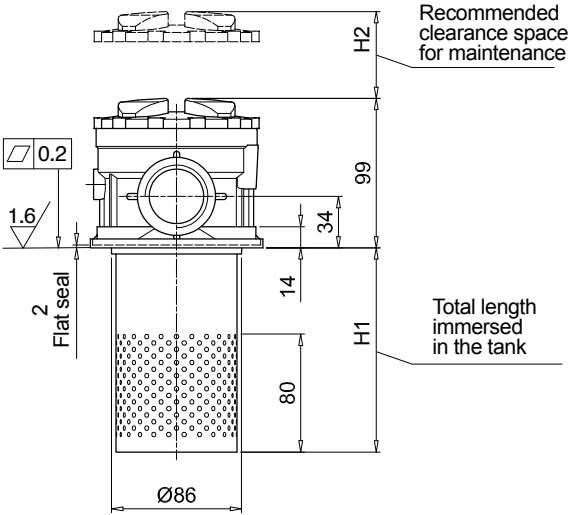
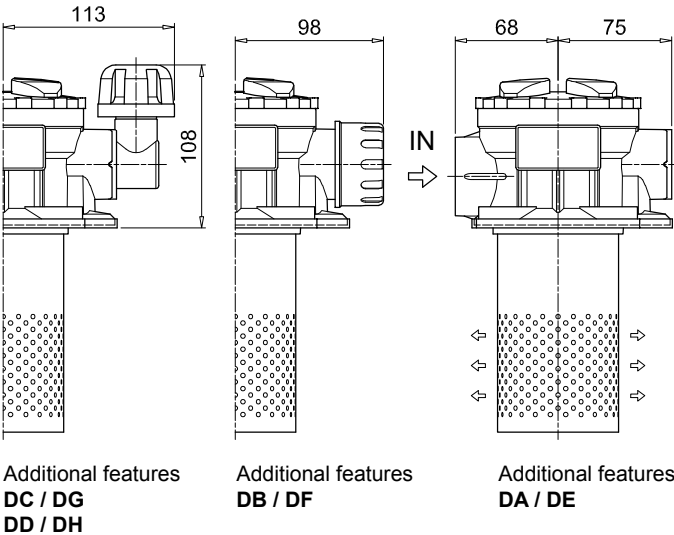
See page 270

DPT	Dipstick
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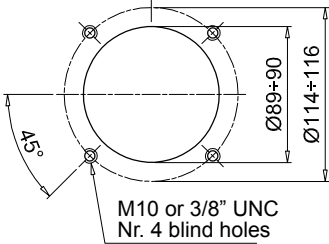
FILTER ELEMENT									
Series MRC	Example: MRC 100 50 A0025 D A 00 NN P01 NN								
Size 100									
Length 10 20 30 40 50									
Filtration rating (filter media)									
A0003 Inorganic microfiber 3 µm									
A0006 Inorganic microfiber 6 µm									
A0010 Inorganic microfiber 10 µm									
A0016 Inorganic microfiber 16 µm									
A0025 Inorganic microfiber 25 µm									
M0025 Wire mesh 25 µm									
M0060 Wire mesh 60 µm									
M0090 Wire mesh 90 µm									
P0010 Resin impregnated paper 10 µm									
P0025 Resin impregnated paper 25 µm									
Element Δp D 10 bar									
Seals and treatments									
A NBR									
V FPM									
Bypass 00 Without bypass									
Additional features NN Without additional features									
Execution P01 Standard catalogue item									
Certificates NN None									

Dimensions

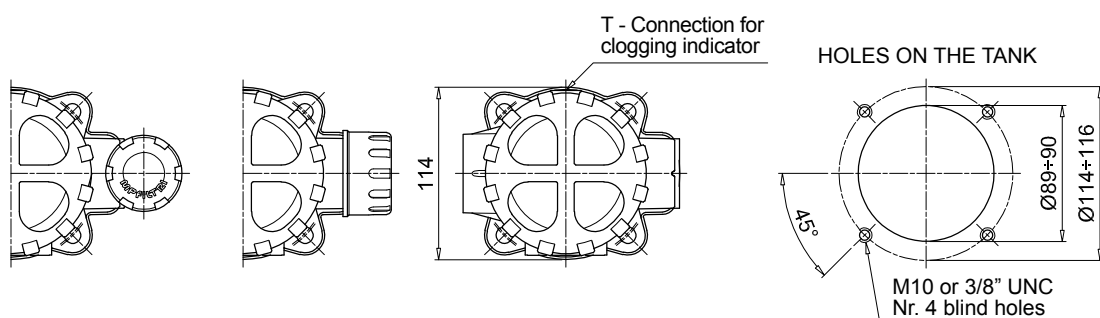
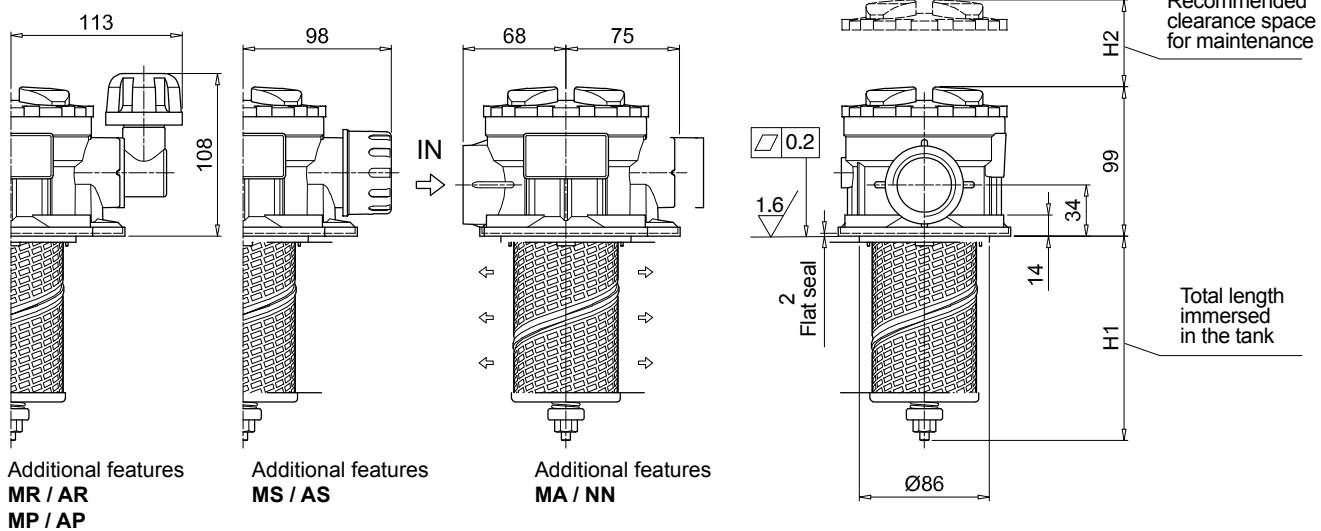
MPHC114				
with diffuser				
Connection	T	Filter length	H1 [mm]	H2 [mm]
FG034	G 1/8"	10	188	255
FG100		20	188	255
FG114		30	238	305
FN034	1/8" NPT	40	338	405
FN100		50	438	505
FN114				
FS012	1/8" NPT			
FS016				
FS020				



HOLES ON THE TANK



MPHC114				
without diffuser				
Connection	T	Filter length	H1 [mm]	H2 [mm]
FG034	G 1/8"	10	129	190
FG100		20	173	235
FG114		30	223	285
FN034	1/8" NPT	40	323	385
FN100		50	423	485
FN114				
FS012	1/8" NPT			
FS016				
FS020				



Designation & Ordering code

COMPLETE FILTER

Series	Example: MPHC	116	50	A0025	D	W	17	FS012	0	3T	DA	P01	NN
MPHC													
Size													
116													
Length													
10 20 30 40 50													
Filtration rating (filter media)													
A0003	Inorganic microfiber	3 µm											
A0006	Inorganic microfiber	6 µm											
A0010	Inorganic microfiber	10 µm											
A0016	Inorganic microfiber	16 µm											
A0025	Inorganic microfiber	25 µm											
M0025	Wire mesh	25 µm											
M0060	Wire mesh	60 µm											
M0090	Wire mesh	90 µm											
P0010	Resin impregnated paper	10 µm											
P0025	Resin impregnated paper	25 µm											
Element Δp													
D	10 bar												
Seals and treatments													
A0xxx	M0xxx	P0xxx											
A	NBR												
V	FPM												
W	NBR with filter and components surface treatment												
Z	FPM with filter and components surface treatment												
Flat seal on head on request													
By-pass valve													
00	Without bypass												
17	With bypass 1.75 bar												
25	With bypass 2.5 bar												
Connections													
FG034	G 3/4"	FN034	3/4" NPT	FS012	SAE 12 - 1 1/16" - 12 UN								
FG100	G 1"	FN100	1" NPT	FS016	SAE 16 - 1 5/16" - 12 UN								
FG114	G 1 1/4"	FN114	1 1/4" NPT	FS020	SAE 20 - 1 5/8" - 12 UN								
Additional connections													
0	Without additional connections												
Connections for clogging indicator													
3T	With left indicator connection, with metal plug												
Additional features													
DA	With diffuser												
DE	With diffuser and magnetic filter												
MA	With magnetic filter												
NN	Without additional features												
Execution													
P01	Standard catalogue item												
Certificates													
NN	None												

CLOGGING INDICATORS

See pages 776-777

BVA	Axial pressure gauge
BVR	Radial pressure gauge
BVP	Visual pressure indicator with automatic reset
BVQ	Visual pressure indicator with manual reset

BEA	Electrical pressure indicator
BEM	Electrical pressure indicator
BLA	Electrical / visual pressure indicator

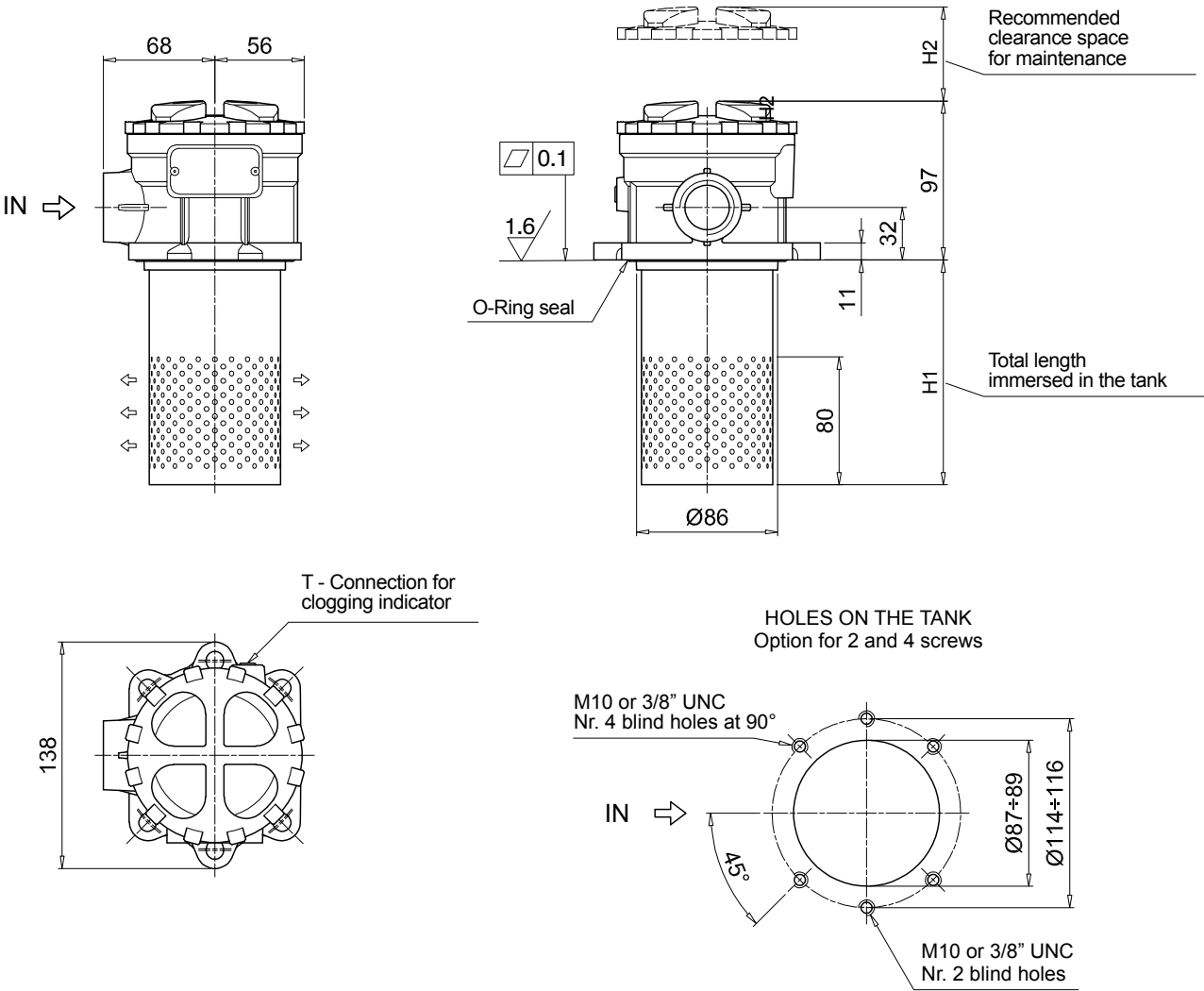
ACCESSORIES

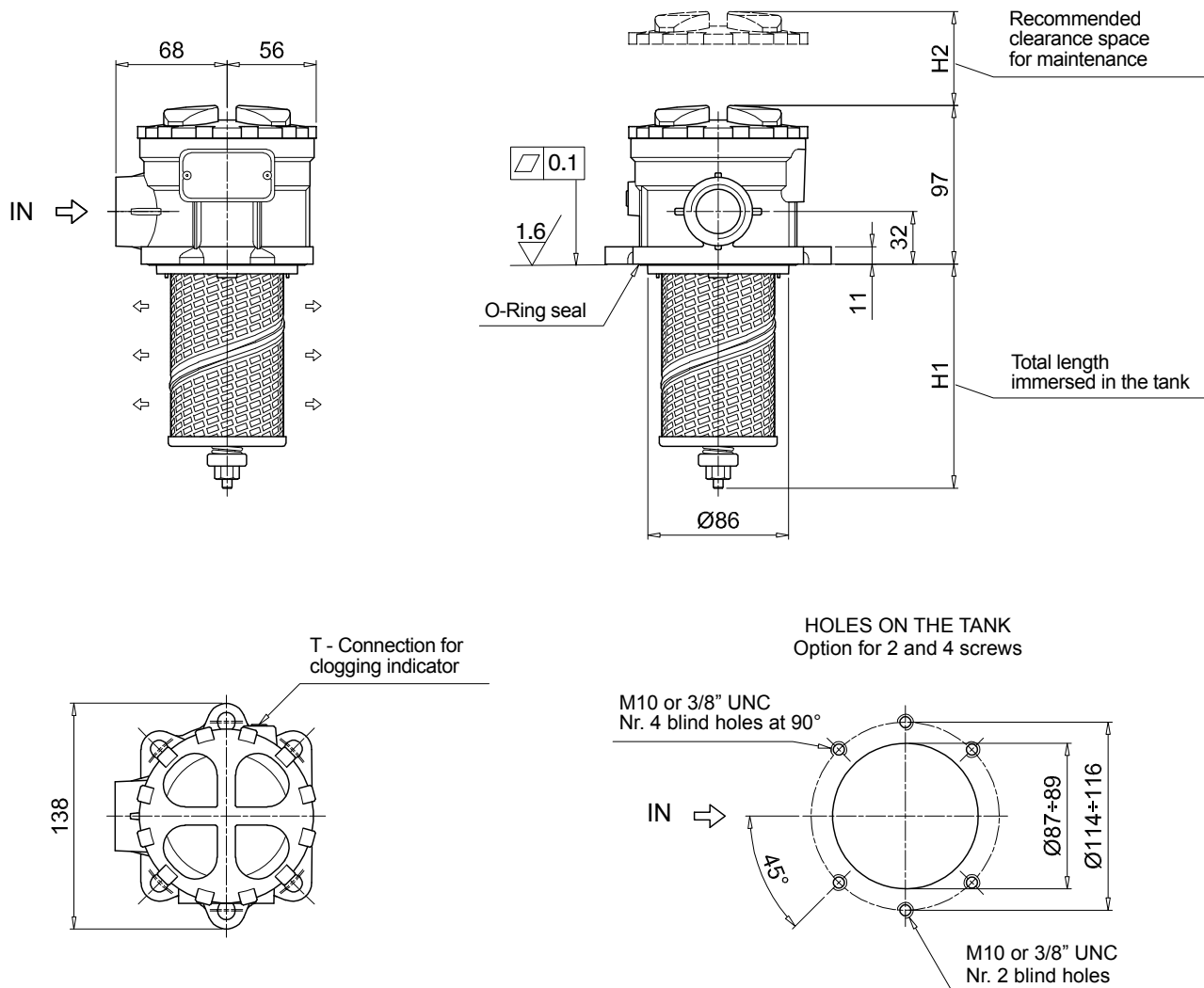
See page 270

DPT	Dipstick
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FILTER ELEMENT									
Series	Example: MRC 100 50 A0025 D A 00 NN P01 NN								
MRC									
Size									
100									
Length									
10 20 30 40 50									
Filtration rating (filter media)									
A0003 Inorganic microfiber 3 µm									
A0006 Inorganic microfiber 6 µm									
A0010 Inorganic microfiber 10 µm									
A0016 Inorganic microfiber 16 µm									
A0025 Inorganic microfiber 25 µm									
M0025 Wire mesh 25 µm									
M0060 Wire mesh 60 µm									
M0090 Wire mesh 90 µm									
P0010 Resin impregnated paper 10 µm									
P0025 Resin impregnated paper 25 µm									
Element Δp									
D 10 bar									
Seals and treatments									
A NBR									
V FPM									
Bypass									
00 Without bypass									
Additional features									
NN Without additional features									
Execution									
P01 Standard catalogue item									
Certificates									
NN None									

MPHC116				
Additional features DA / DE		with diffuser		
Connection	T	Filter length	H1 [mm]	H2 [mm]
FG034	G 1/8"	10	190	255
FG100		20	190	255
FG114		30	240	305
FN034	1/8" NPT	40	340	405
FN100		50	440	505
FN114				
FS012	1/8" NPT			
FS016				
FS020				





Designation & Ordering code

COMPLETE FILTER

Series	Example: MPHC	120	50	A0025	D	W	17	FS012	1	6T	DA	P01	NN
MPHC													
Size													
120													
Length													
10 20 30 40 50													
Filtration rating (filter media)													
A0003 Inorganic microfiber	3 µm												
A0006 Inorganic microfiber	6 µm												
A0010 Inorganic microfiber	10 µm												
A0016 Inorganic microfiber	16 µm												
A0025 Inorganic microfiber	25 µm												
M0025 Wire mesh	25 µm												
M0060 Wire mesh	60 µm												
M0090 Wire mesh	90 µm												
P0010 Resin impregnated paper	10 µm												
P0025 Resin impregnated paper	25 µm												
Element Δp													
D 10 bar													
Seals and treatments		A0xxx	M0xxx	P0xxx									
A NBR		•	•	•									
V FPM		•	•	•									
W NBR with filter and components surface treatment		•	•	-									
Z FPM with filter and components surface treatment		•	•	-									
By-pass valve													
00 Without bypass													
17 With bypass 1.75 bar													
25 With bypass 2.5 bar													
Connections													
FG034 G 3/4"	FN034 3/4" NPT	FS012 SAE 12 - 1 1/16" - 12 UN											
FG100 G 1"	FN100 1" NPT	FS016 SAE 16 - 1 5/16" - 12 UN											
FG114 G 1 1/4"	FN114 1 1/4" NPT	FS020 SAE 20 - 1 5/8" - 12 UN											
Additional connections													
1 Main connection	FG034 FG100 G 3/8" FN114	Main connection	FN034 FN100 3/8" NPT FN114	Main connection	FS012 FS016 SAE 6 - 9/16" FS020 18 UNF								
2 Main connection	FG034 FG100 G 1/2" FN114	Main connection	FN034 FN100 1/2" NPT FN114	Main connection	FS012 FS016 SAE 8 - 3/4" FS020 16 UNF								
Connections for clogging indicator													
6T With both side indicator connections, with metal plugs													
Additional features													
DA With diffuser													
DE With diffuser and magnetic filter													
MA With magnetic filter													
NN Without additional features													
Execution													
P01 Standard catalogue item													
Certificates													
NN None													

CLOGGING INDICATORS

See pages 776-777

BVA Axial pressure gauge	
BVR Radial pressure gauge	
BVP Visual pressure indicator with automatic reset	
BVQ Visual pressure indicator with manual reset	

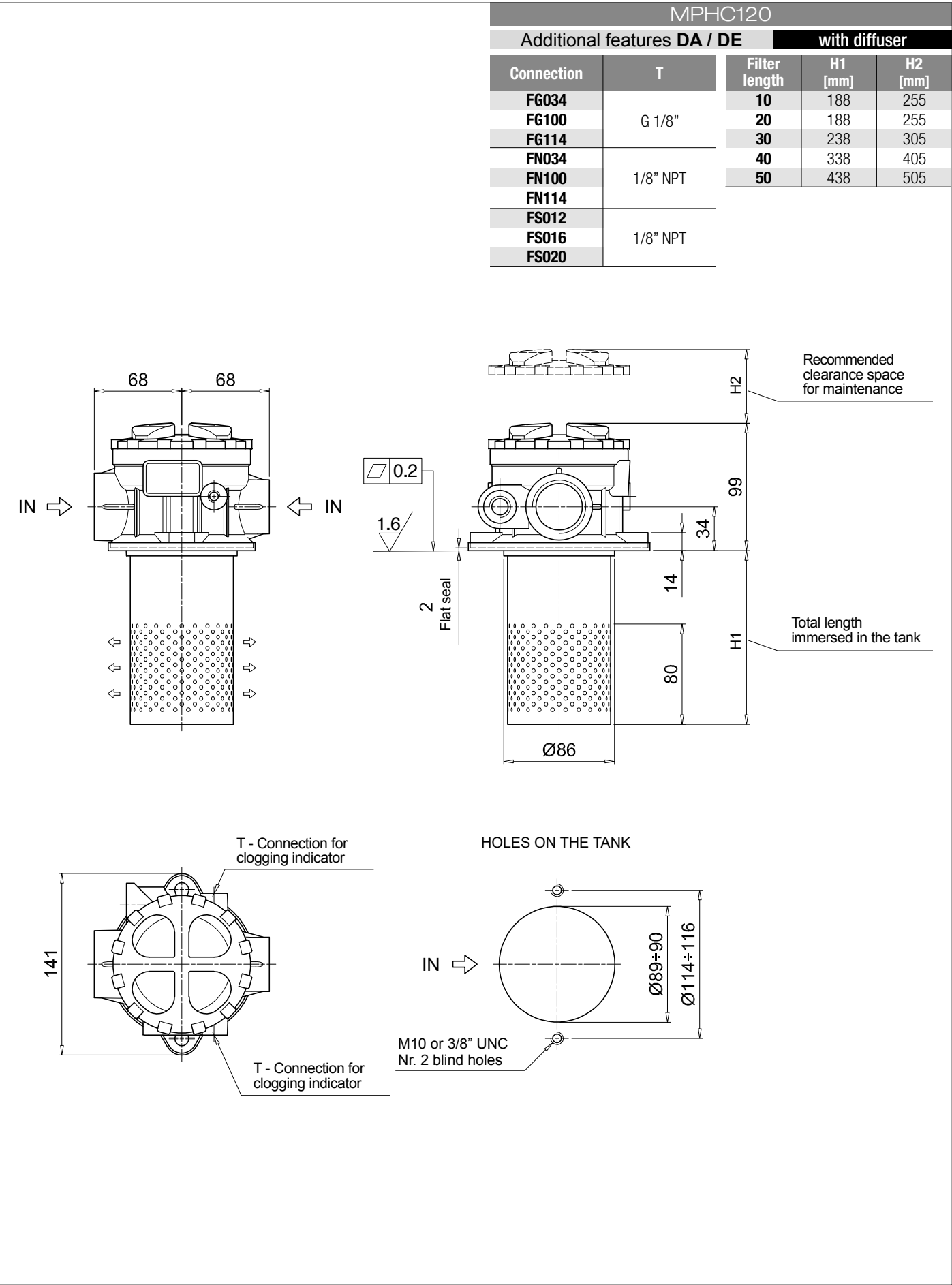
BEA Electrical pressure indicator	
BEM Electrical pressure indicator	
BLA Electrical / visual pressure indicator	

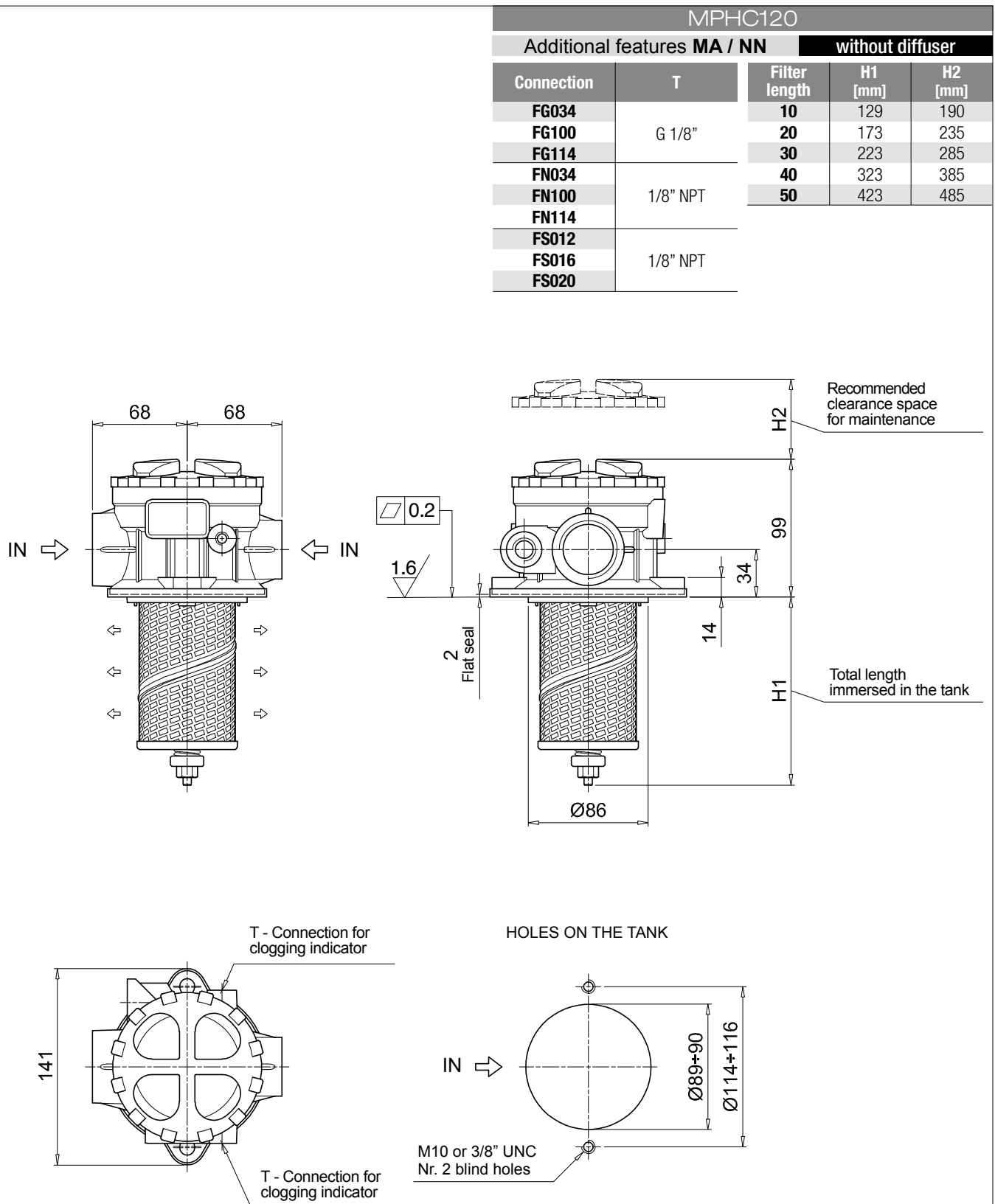
ACCESSORIES

See page 270

DPT Dipstick	
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FILTER ELEMENT									
Series MRC	Example: MRC 100 50 A0025 D A 00 NN P01 NN								
Size 100									
Length 10 20 30 40 50									
Filtration rating (filter media)									
A0003 Inorganic microfiber 3 µm									
A0006 Inorganic microfiber 6 µm									
A0010 Inorganic microfiber 10 µm									
A0016 Inorganic microfiber 16 µm									
A0025 Inorganic microfiber 25 µm									
M0025 Wire mesh 25 µm									
M0060 Wire mesh 60 µm									
M0090 Wire mesh 90 µm									
P0010 Resin impregnated paper 10 µm									
P0025 Resin impregnated paper 25 µm									
Element Δp D 10 bar									
Seals and treatments									
A NBR									
V FPM									
Bypass 00 Without bypass									
Additional features NN Without additional features									
Execution P01 Standard catalogue item									
Certificates NN None									





Designation & Ordering code

COMPLETE FILTER

Series	Example: MPHC	250	30	M0090	D	V	25	FS024	1	9T	DA	P01	NN
MPHC													
Size													
250													
Length													
10 20 30 40													
Filtration rating (filter media)													
A0003	Inorganic microfiber	3 µm											
A0006	Inorganic microfiber	6 µm											
A0010	Inorganic microfiber	10 µm											
A0016	Inorganic microfiber	16 µm											
A0025	Inorganic microfiber	25 µm											
M0025	Wire mesh	25 µm											
M0060	Wire mesh	60 µm											
M0090	Wire mesh	90 µm											
P0010	Resin impregnated paper	10 µm											
P0025	Resin impregnated paper	25 µm											
Element Δp													
D	10 bar												
Seals and treatments													
A0xxx	M0xxx	P0xxx											
A	NBR												
V	FPM												
W	NBR with filter and components surface treatment												
Z	FPM with filter and components surface treatment												
By-pass valve													
00	Without bypass												
17	With bypass 1.75 bar												
25	With bypass 2.5 bar												
Connections													
FG112	G 1 1/2"	FN112	1 1/2" NPT	FS024	SAE 24 - 1 7/8" - 12 UN	FE112	1 1/2" SAE 3000 psi/M						
						FF112	1 1/2" SAE 3000 psi/UNC						
Additional connections													
0	Without additional connections												
1	Main connection												
		FG112	G 1 1/2"										
		FN112	1 1/2" NPT										
		FS024	SAE 24 - 1 7/8" - 12 UN										
		FE112	1 1/2" SAE 3000 psi/M										
		FF112	1 1/2" SAE 3000 psi/UNC										
Connections for clogging indicator													
9T	With multiple indicator connections, with metal plugs												
Additional features													
DA	With diffuser												
DE	With diffuser and magnetic filter												
MA	With magnetic filter												
NN	Without additional features												
Execution													
P01	Standard catalogue item												
Certificates													
NN	None												

CLOGGING INDICATORS

See pages 776-777

BVA	Axial pressure gauge
BVR	Radial pressure gauge
BVP	Visual pressure indicator with automatic reset
BVQ	Visual pressure indicator with manual reset

BEA	Electrical pressure indicator
BEM	Electrical pressure indicator
BLA	Electrical / visual pressure indicator

ACCESSORIES

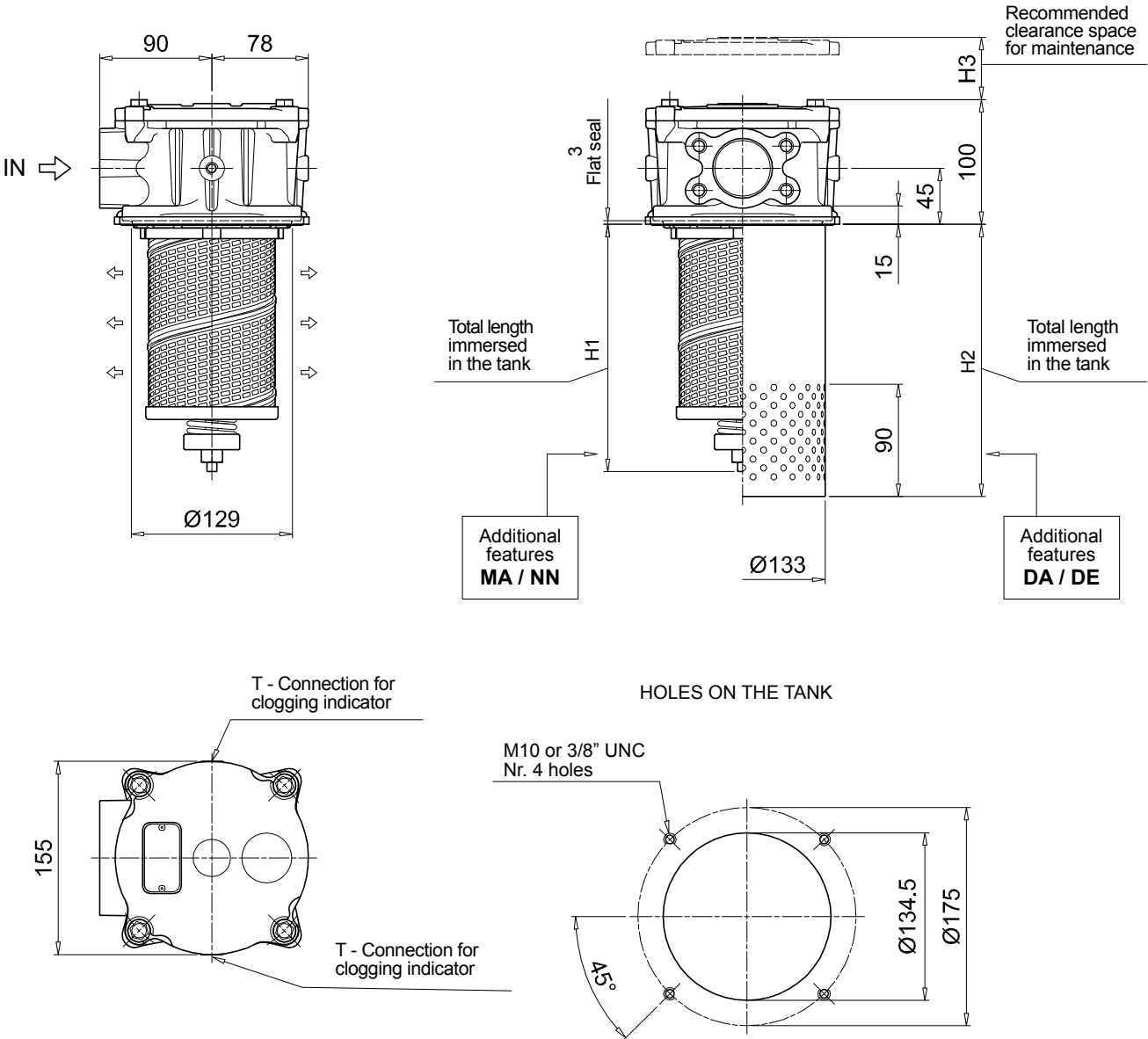
See page 270

DPT	Dipstick
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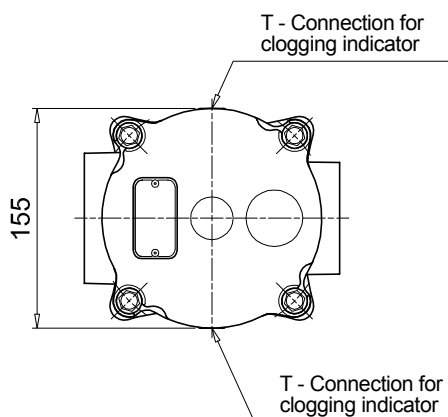
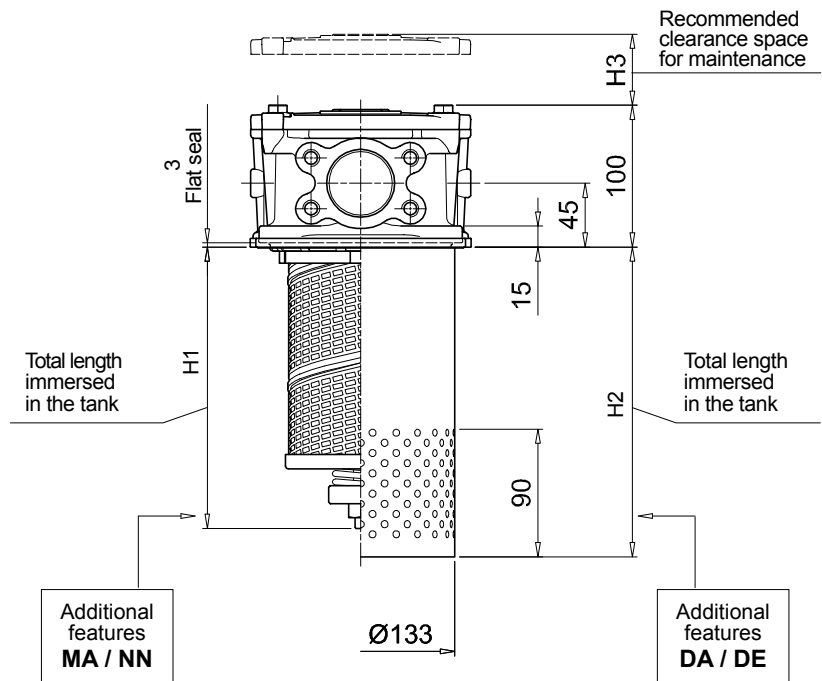
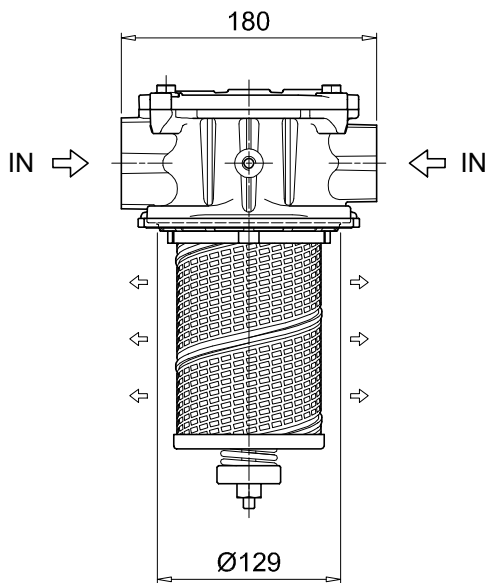
FILTER ELEMENT									
Series	Example: MRC 250 30 M0090 D V 00 NN P01 NN								
MRC									
Size									
250									
Length									
10 20 30 40									
Filtration rating (filter media)									
A0003 Inorganic microfiber 3 µm									
A0006 Inorganic microfiber 6 µm									
A0010 Inorganic microfiber 10 µm									
A0016 Inorganic microfiber 16 µm									
A0025 Inorganic microfiber 25 µm									
M0025 Wire mesh 25 µm									
M0060 Wire mesh 60 µm									
M0090 Wire mesh 90 µm									
P0010 Resin impregnated paper 10 µm									
P0025 Resin impregnated paper 25 µm									
Element Δp									
D 10 bar									
Seals and treatments									
A NBR									
V FPM									
Bypass									
00 Without bypass									
Additional features									
NN Without additional features									
Execution									
P01 Standard catalogue item									
Certificates									
NN None									

Dimensions

MPHC250					
Additional connection "O"					
Connection	T	Filter length	H1 [mm]	H2 [mm]	H3 [mm]
FG112	G 1/8"	10	182	247	255
FN112	1/8" NPT	20	231	247	305
FS024	1/8" NPT	30	302	317	375
FE112	G 1/8"	40	502	507	580
FF112	1/8" NPT				

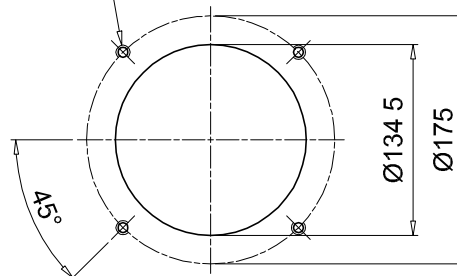


MPHC250					
Additional connection "1"					
Connection	T	Filter length	H1 [mm]	H2 [mm]	H3 [mm]
FG112	G 1/8"	10	182	247	255
FN112	1/8" NPT	20	231	247	305
FS024	1/8" NPT	30	302	317	375
FE112	G 1/8"	40	502	507	580
FF112	1/8" NPT				



HOLES ON THE TANK

M10 or 3/8" UNC
Nr. 4 holes



Designation & Ordering code

COMPLETE FILTER

Series	Example: MPHC	630	50	A0025	D	W	17	FE212	1	6T	DA	P01	NN
MPHC													
Size													
630													
Length													
10 20 30 40 50													
Filtration rating (filter media)													
A0003	Inorganic microfiber	3 µm											
A0006	Inorganic microfiber	6 µm											
A0010	Inorganic microfiber	10 µm											
A0016	Inorganic microfiber	16 µm											
A0025	Inorganic microfiber	25 µm											
M0025	Wire mesh	25 µm											
M0060	Wire mesh	60 µm											
M0090	Wire mesh	90 µm											
P0010	Resin impregnated paper	10 µm											
P0025	Resin impregnated paper	25 µm											
Element Δp													
D	10 bar												
Seals and treatments													
A0xxx	M0xxx	P0xxx											
A NBR	•	•	•										
V FPM	•	•	•										
W NBR with filter and components surface treatment	•	•	-										
Z FPM with filter and components surface treatment	•	•	-										
By-pass valve													
00	Without bypass												
17	With bypass 1.75 bar												
25	With bypass 2.5 bar												
Connections													
FE212	2 1/2" SAE 3000 psi/M												
FF212	2 1/2" SAE 3000 psi/UNC												
Additional connections													
0	Without additional connections												
1	Main connection FE212 2" SAE 3000 psi/M												
	connection FF212 2" SAE 3000 psi/UNC												
Connections for clogging indicator													
6T	With both side indicator connection, with metal plug												
Additional features													
DA	With diffuser												
DE	With diffuser and magnetic filter												
MA	With magnetic filter												
NN	Without additional features												
Execution													
P01	Standard catalogue item												
Certificates													
NN	None												

CLOGGING INDICATORS

See pages 776-777

BVA	Axial pressure gauge
BVR	Radial pressure gauge
BVP	Visual pressure indicator with automatic reset
BVQ	Visual pressure indicator with manual reset

BEA	Electrical pressure indicator
BEM	Electrical pressure indicator
BLA	Electrical / visual pressure indicator

ACCESSORIES

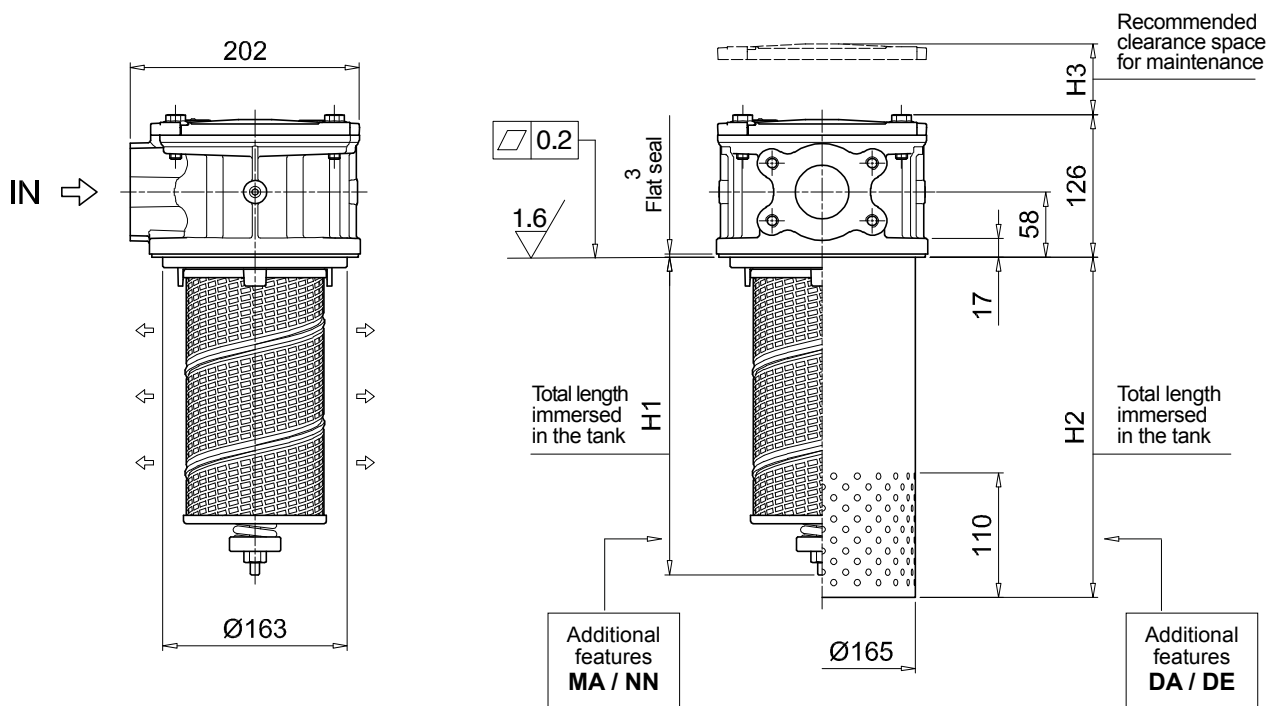
See page 270

DPT	Dipstick
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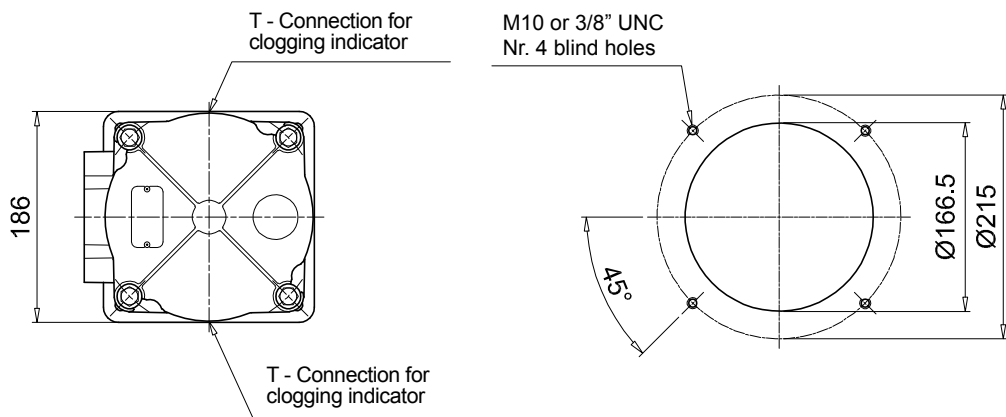
FILTER ELEMENT

Series	Example: MRC 630 50 A0025 D A 00 NN P01 NN										
MRC											
Size											
630											
Length											
10 20 30 40 50											
Filtration rating (filter media)											
A0003 Inorganic microfiber 3 µm											
A0006 Inorganic microfiber 6 µm											
A0010 Inorganic microfiber 10 µm											
A0016 Inorganic microfiber 16 µm											
A0025 Inorganic microfiber 25 µm											
M0025 Wire mesh 25 µm											
M0060 Wire mesh 60 µm											
M0090 Wire mesh 90 µm											
P0010 Resin impregnated paper 10 µm											
P0025 Resin impregnated paper 25 µm											
Element Δp											
D 10 bar											
Seals and treatments											
A NBR											
V FPM											
Bypass											
00 Without bypass											
Additional features											
NN Without additional features											
Execution											
P01 Standard catalogue item											
Certificates											
NN None											

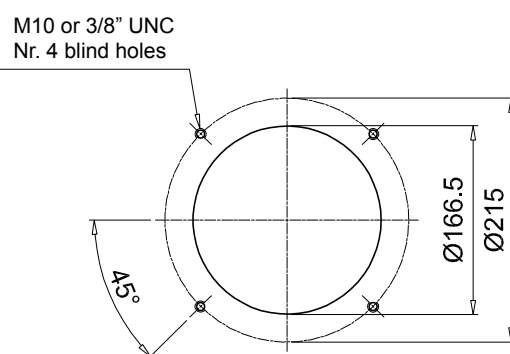
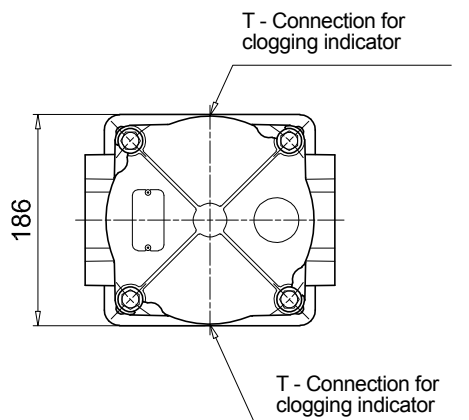
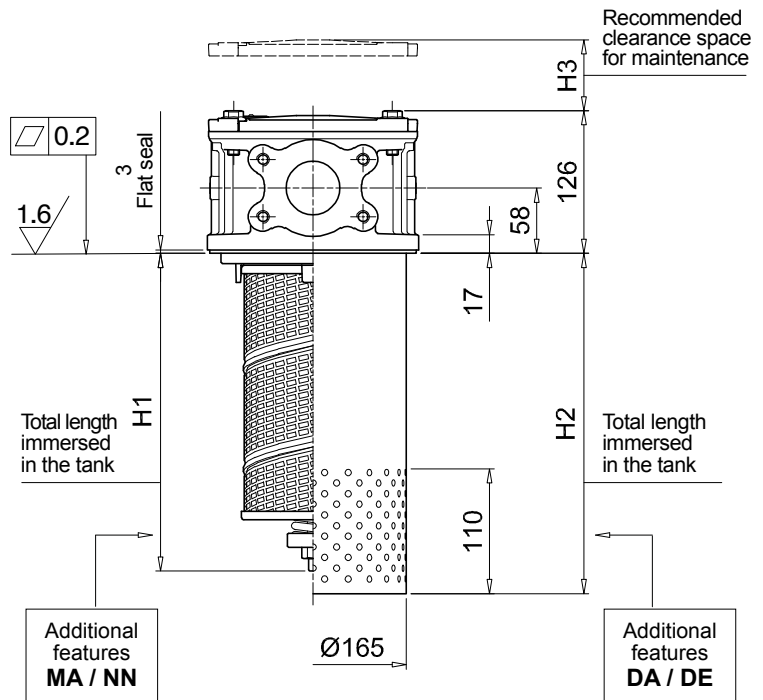
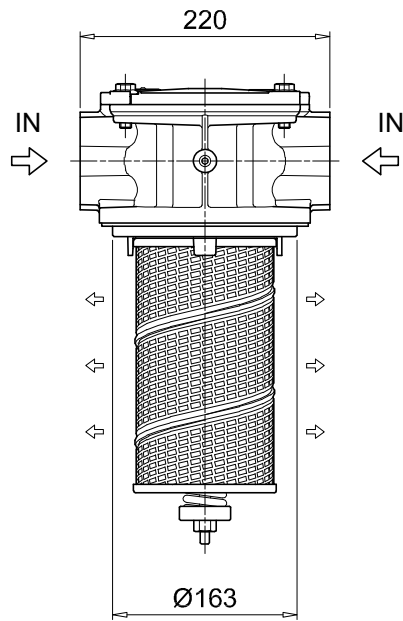
MPHC630					
Additional connection "0"					
Connection	T	Filter length	H1 [mm]	H2 [mm]	H3 [mm]
FE212	G 1/8"	10	260	278	330
FF212	1/8" NPT	20	340	358	410
		30	440	458	510
		40	528	548	600
		50	829	848	900



HOLES ON THE TANK



MPHC630					
Additional connection "1"					
Connection	T	Filter length	H1 [mm]	H2 [mm]	H3 [mm]
FE212	G 1/8"	10	260	278	330
FF212	1/8" NPT	20	340	358	410
		30	440	458	510
		40	528	548	600
		50	829	848	900



Designation & Ordering code

COMPLETE FILTER

Series	Example: MPHC	660	40	A0025	D	W	17	FE300	0	9T	DA	P01	NN
MPHC													
Size													
660													
Length													
40 50													
Filtration rating (filter media)													
A0003	Inorganic microfiber	3 µm											
A0006	Inorganic microfiber	6 µm											
A0010	Inorganic microfiber	10 µm											
A0016	Inorganic microfiber	16 µm											
A0025	Inorganic microfiber	25 µm											
M0025	Wire mesh	25 µm											
M0060	Wire mesh	60 µm											
M0090	Wire mesh	90 µm											
P0010	Resin impregnated paper	10 µm											
P0025	Resin impregnated paper	25 µm											
Element Δp													
D	10 bar												
Seals and treatments													
A NBR													
V FPM													
W NBR with filter and components surface treatment													
Z FPM with filter and components surface treatment													
By-pass valve													
00 Without bypass													
17 With bypass 1.75 bar													
25 With bypass 2.5 bar													
Connections													
FE300 3" SAE 3000 psi/M													
FE400 4" SAE 3000 psi/M													
Additional connections													
0 Without additional connections													
Connections for clogging indicator													
9T With multiple indicator connections, with metal plugs													
Additional features													
DA With diffuser													
DE With diffuser and magnetic filter													
MA With magnetic filter													
NN Without additional features													
Execution													
P01 Standard catalogue item													
Certificates													
NN None													

CLOGGING INDICATORS

See pages 776-777

BVA	Axial pressure gauge
BVR	Radial pressure gauge
BVP	Visual pressure indicator with automatic reset
BVQ	Visual pressure indicator with manual reset

BEA	Electrical pressure indicator
BEM	Electrical pressure indicator
BLA	Electrical / visual pressure indicator

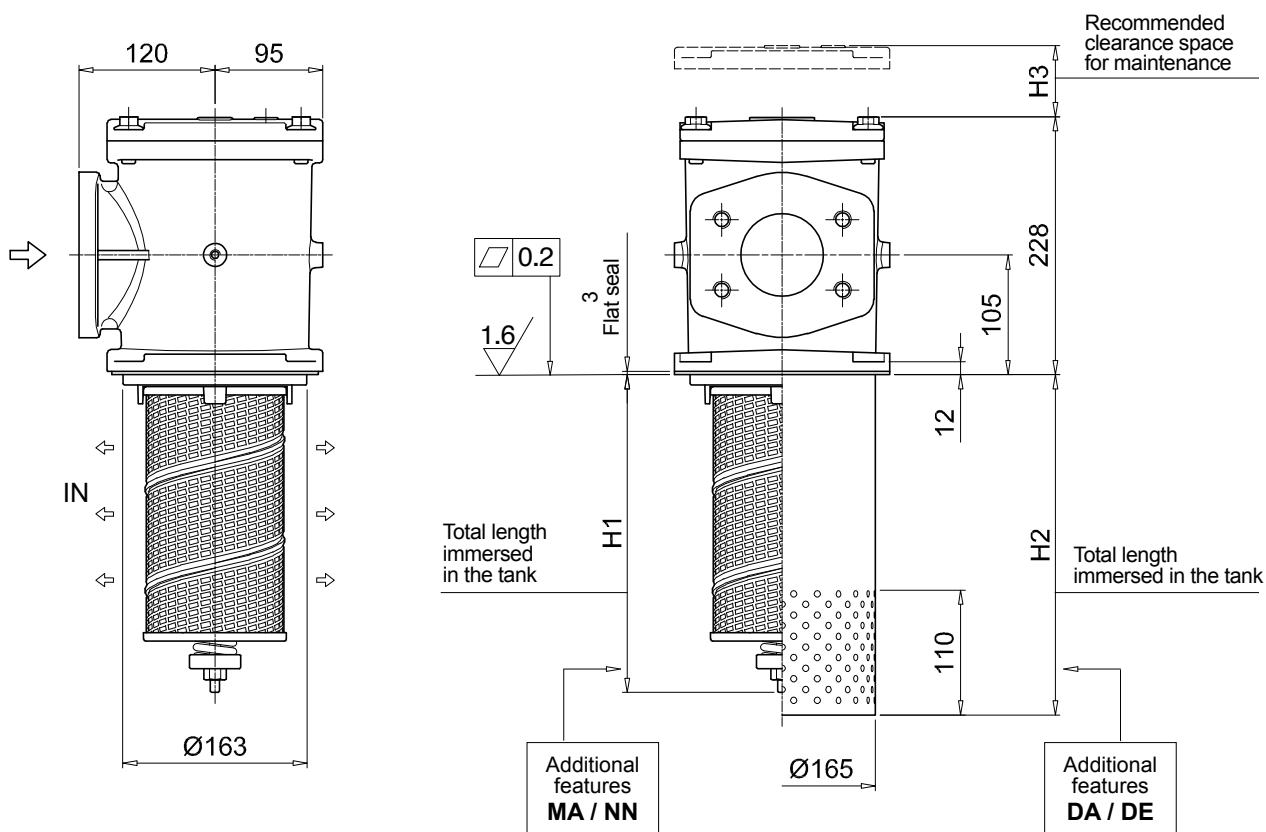
ACCESSORIES

See page 270

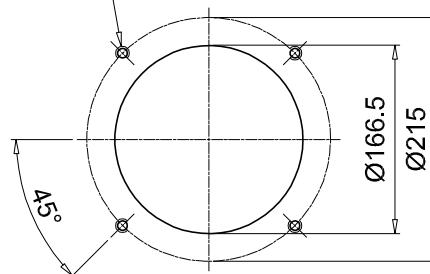
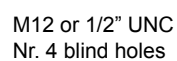
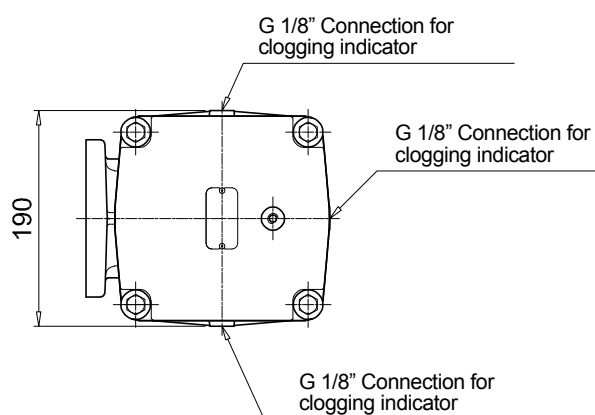
DPT	Dipstick
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FILTER ELEMENT		
Series	Example: MRC 630 40 A0025 D A 00 NN P01 NN	
MRC		
Size		
630		
Length		
40 50		
Filtration rating (filter media)		
A0003 Inorganic microfiber 3 µm		
A0006 Inorganic microfiber 6 µm		
A0010 Inorganic microfiber 10 µm		
A0016 Inorganic microfiber 16 µm		
A0025 Inorganic microfiber 25 µm		
M0025 Wire mesh 25 µm		
M0060 Wire mesh 60 µm		
M0090 Wire mesh 90 µm		
P0010 Resin impregnated paper 10 µm		
P0025 Resin impregnated paper 25 µm		
Element Δp		
D 10 bar		
Seals and treatments		
A NBR		
V FPM		
Bypass		
00 Without bypass		
Additional features		
NN Without additional features		
Execution		
P01 Standard catalogue item		
Certificates		
NN None		

MPHC660			
Filter length	H1 [mm]	H2 [mm]	H3 [mm]
40	538	548	610
50	838	848	910



HOLES ON THE TANK



Designation & Ordering code

COMPLETE FILTER

Series	Example: MPHC	850	20	A0025	D	W	17	FE300	1	1T	DA	P01	NN
MPHC													
Size													
850													
Length													
10 20 30 40													
Filtration rating (filter media)													
A0003	Inorganic microfiber	3 µm											
A0006	Inorganic microfiber	6 µm											
A0010	Inorganic microfiber	10 µm											
A0016	Inorganic microfiber	16 µm											
A0025	Inorganic microfiber	25 µm											
M0025	Wire mesh	25 µm											
M0060	Wire mesh	60 µm											
M0090	Wire mesh	90 µm											
P0010	Resin impregnated paper	10 µm											
P0025	Resin impregnated paper	25 µm											
					Element Δp								
					D	10 bar							
Seals and treatments			A0xxx	M0xxx	P0xxx								
A NBR			•	•	•								
V FPM			•	•	•								
W NBR with filter and components surface treatment			•	•	-								
Z FPM with filter and components surface treatment			•	•	-								
By-pass valve													
00 Without bypass													
17 With bypass 1.75 bar													
Connections													
FE300	3" SAE 3000 psi/M												
FF300	3" SAE 3000 psi/UNC												
Additional connections													
0 Without additional connections													
1 Main connection	FE300 4" SAE 3000 psi/M FF300 4" SAE 3000 psi/UNC												
2 Main connection	FE300 UNI 2223 FF300 DN 100 PN 10/16												
Connections for clogging indicator													
1T With top indicator connection, with metal plug													
Additional features													
DA With diffuser													
DE With diffuser and magnetic filter													
MA With magnetic filter													
NN Without additional features													
Execution													
P01 Standard catalogue item													
Certificates													
NN None													

CLOGGING INDICATORS

See pages 776-777

BVA	Axial pressure gauge
BVR	Radial pressure gauge
BVP	Visual pressure indicator with automatic reset
BVQ	Visual pressure indicator with manual reset

BEA	Electrical pressure indicator
BEM	Electrical pressure indicator
BLA	Electrical / visual pressure indicator

ACCESSORIES

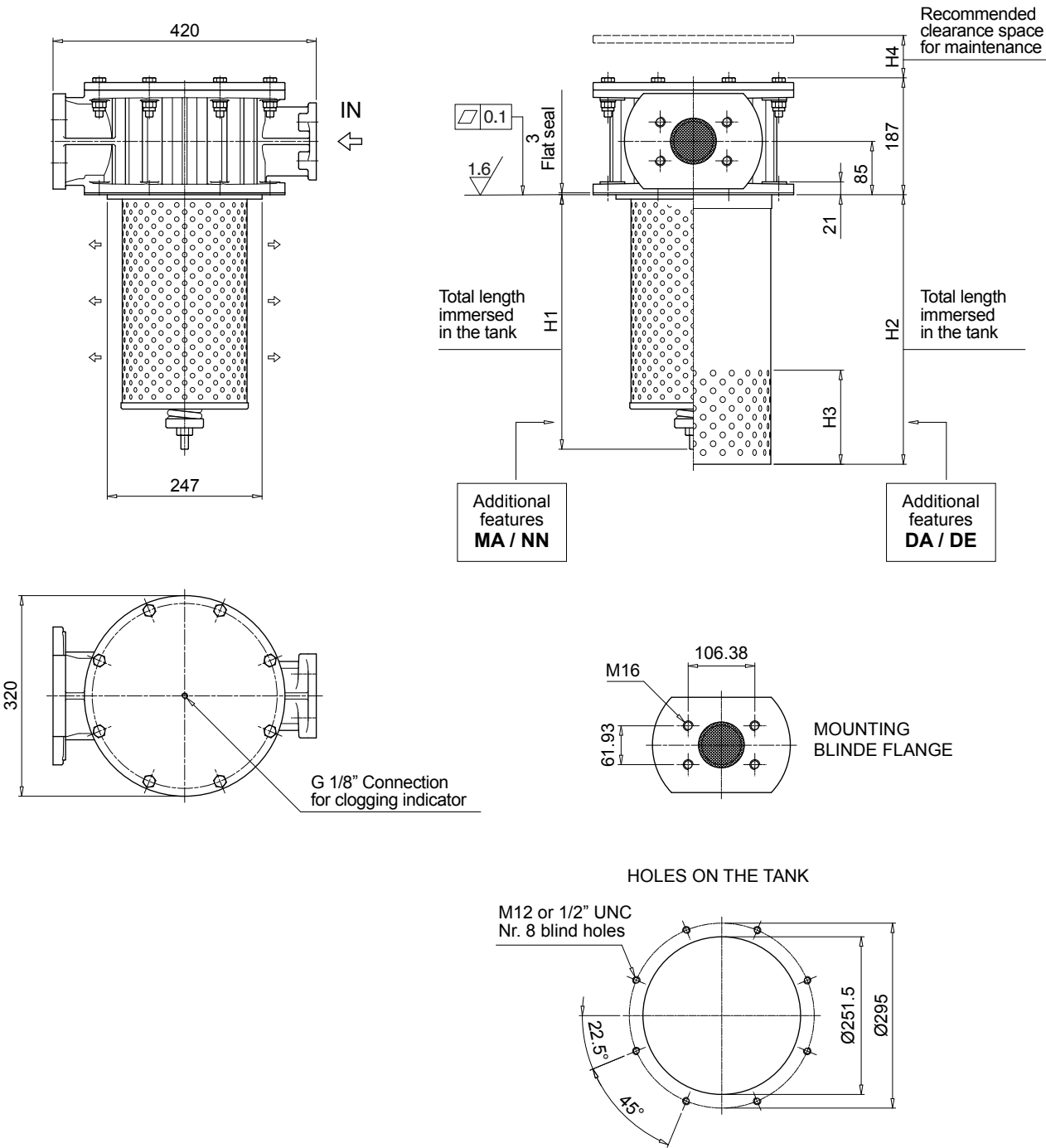
See page 270

DPT	Dipstick
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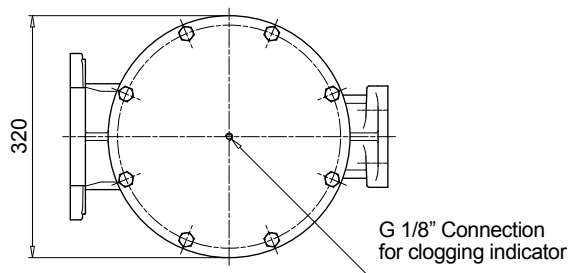
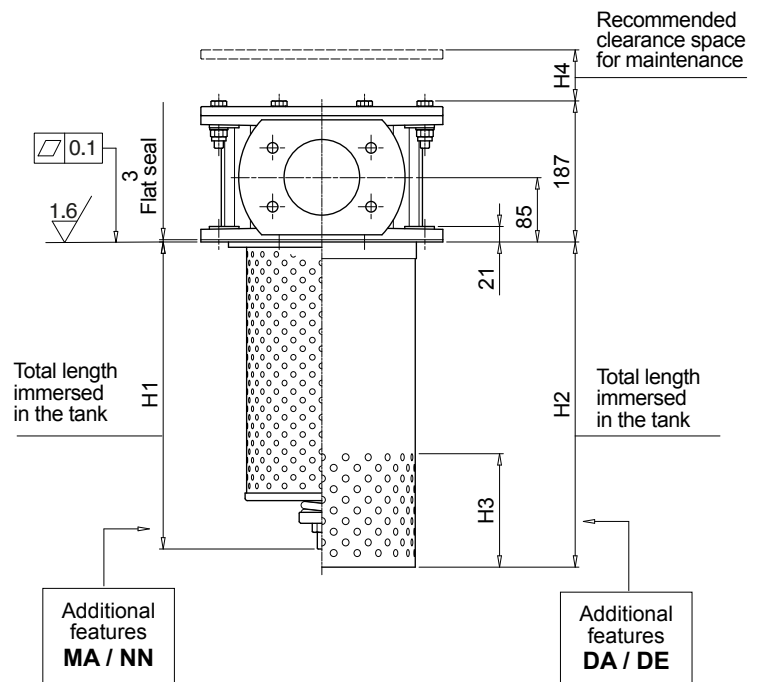
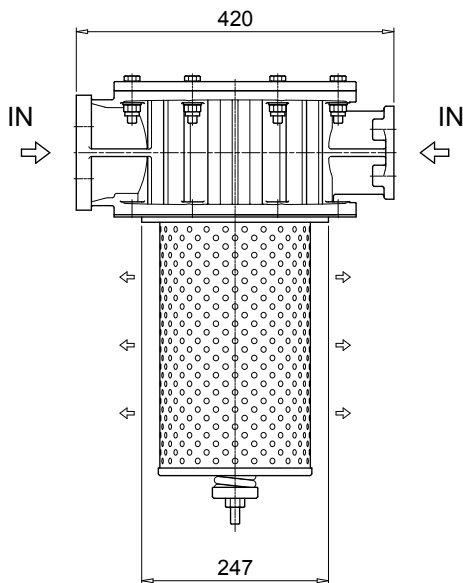
FILTER ELEMENT

Series	Example: MRC 850 20 A0025 D A 00 NN P01 NN									
MRC										
Size										
850										
Length										
10 20 30 40										
Filtration rating (filter media)										
A0003 Inorganic microfiber 3 µm										
A0006 Inorganic microfiber 6 µm										
A0010 Inorganic microfiber 10 µm										
A0016 Inorganic microfiber 16 µm										
A0025 Inorganic microfiber 25 µm										
M0025 Wire mesh 25 µm										
M0060 Wire mesh 60 µm										
M0090 Wire mesh 90 µm										
P0010 Resin impregnated paper 10 µm										
P0025 Resin impregnated paper 25 µm										
Element Δp										
D 10 bar										
Seals and treatments										
A NBR										
V FPM										
Bypass										
00 Without bypass										
Additional features										
NN Without additional features										
Execution										
P01 Standard catalogue item										
Certificates										
NN None										

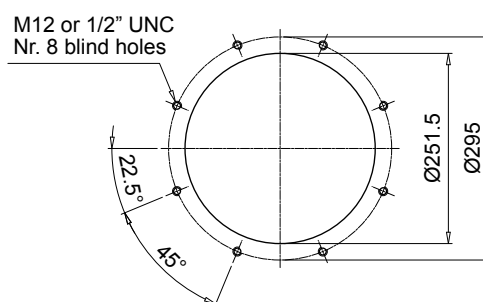
MPHC850				
Additional connection "O"				
Filter length	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]
10	383	419	150	515
20	598	634	150	730
30	878	914	250	1010
40	1143	1179	250	1275



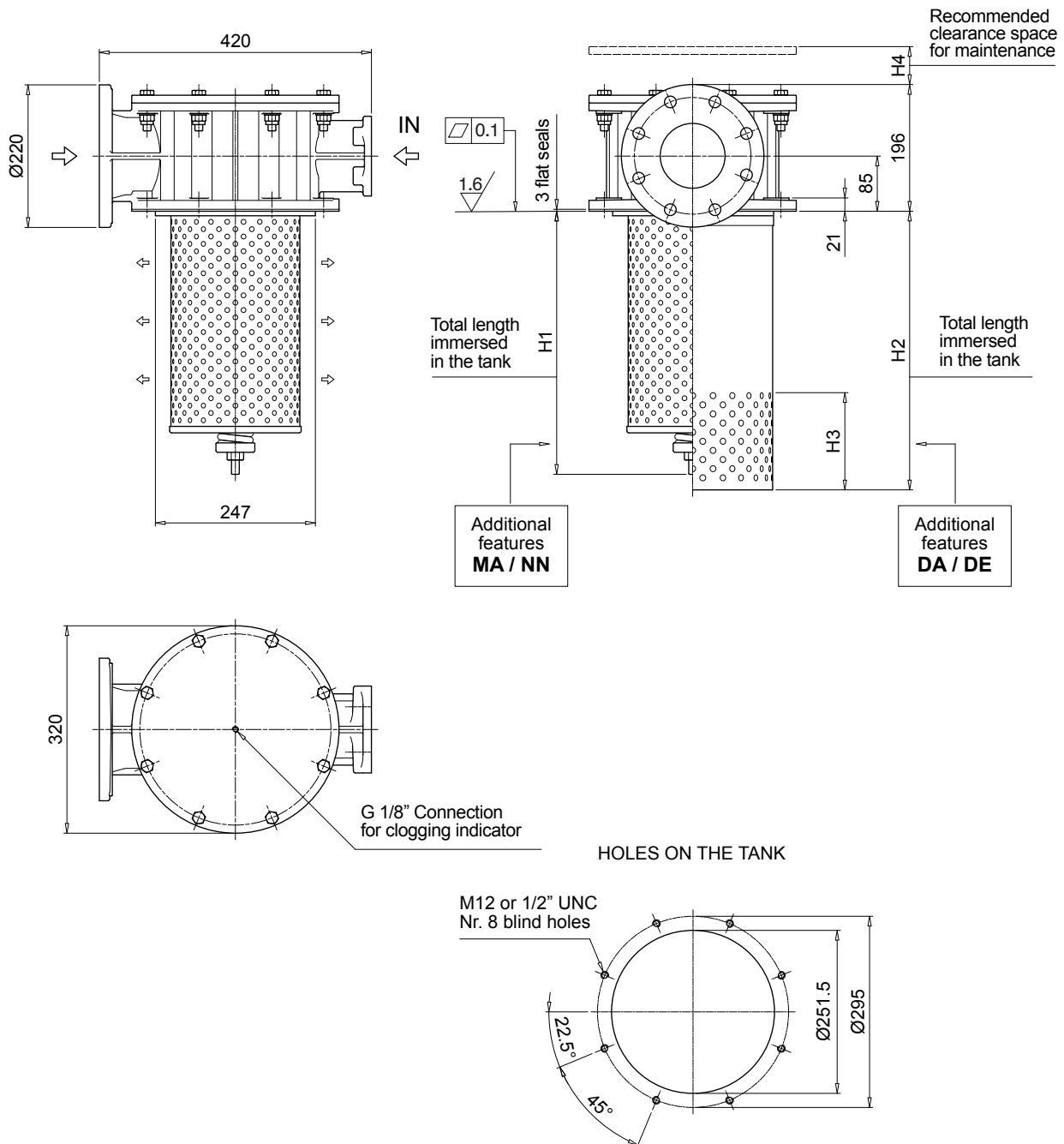
MPHC850				
Additional connection "1"				
Filter length	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]
10	383	419	150	515
20	598	634	150	730
30	878	914	250	1010
40	1143	1179	250	1275



HOLES ON THE TANK



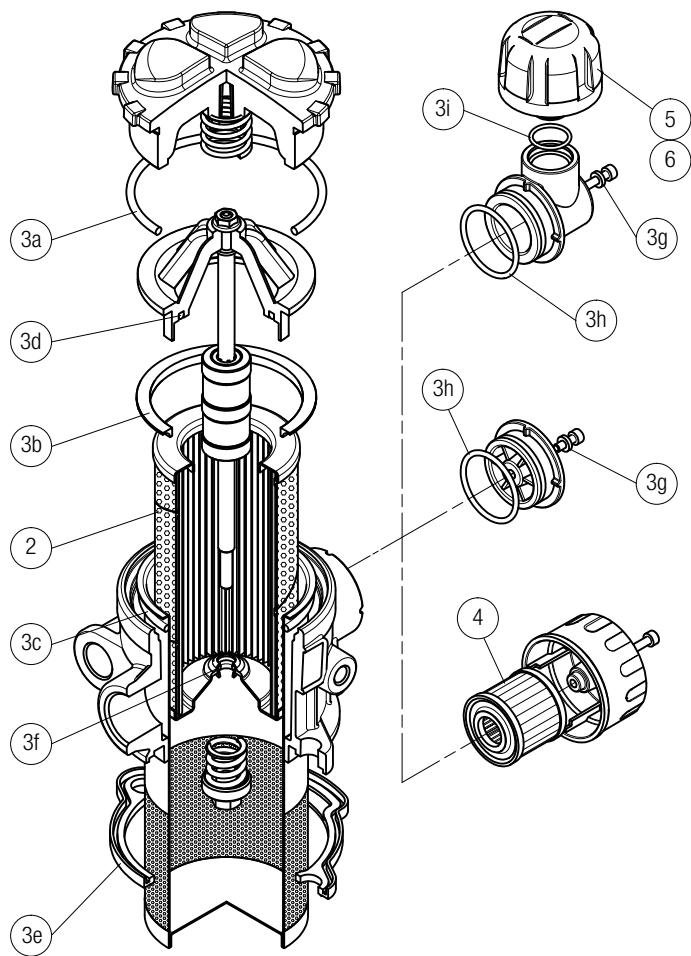
MPHC850				
Additional connection "2"				
Filter length	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]
10	383	419	150	510
20	598	634	150	725
30	878	914	250	1005
40	1143	1179	250	1270



MPHC SPARE PARTS

Order number for spare parts

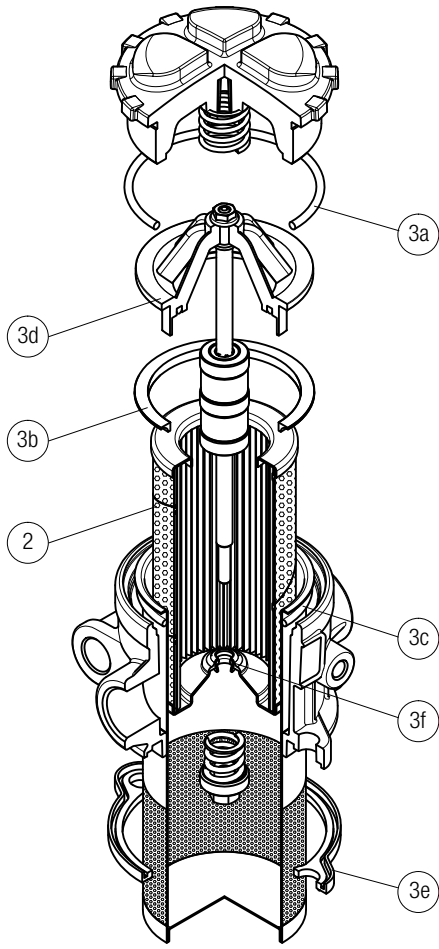
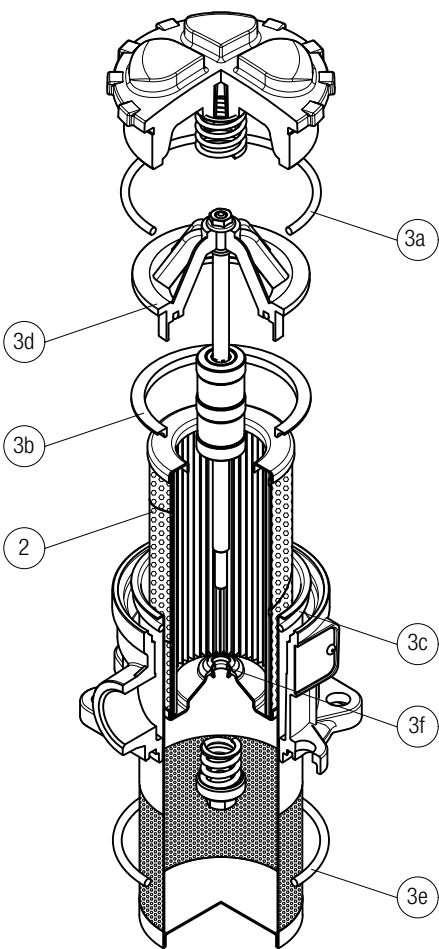
MPHC 110 - 114



Q.ty: 1 pc.		Q.ty: 1 pc.		Q.ty: 1 pc.	Q.ty: 1 pc.	Q.ty: 1 pc.
Item:	2	3	(3a ÷ 3i)	4	5	6
Filter series	Filter element	Seal Kit code number		Air breather filter element - version:		
		NBR	FPM	C	D	P
MPHC 110	See order table	AK021000354	AK021000355	10 µm	10 µm	10 µm
MPHC 114		AK021000371	AK021000372	A3L03	SAP50G3L03A0P01	SAP50G3L03A1P01

MPHC 116

MPHC 120

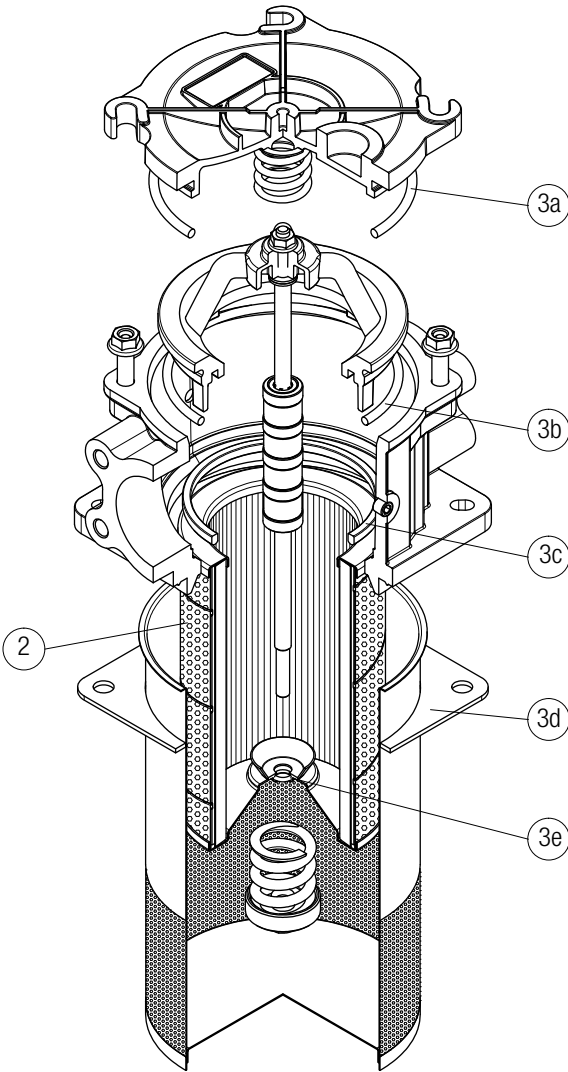


Q.ty: 1 pc.		Q.ty: 1 pc.	
Item:	2	3 (3a ÷ 3f)	
Filter series	Filter element	Seal Kit code number	
		NBR	FPM
MPHC 116	See order table	AK021000500	AK021000501
MPHC 120		AK021000356	AK021000357

MPHC SPARE PARTS

Order number for spare parts

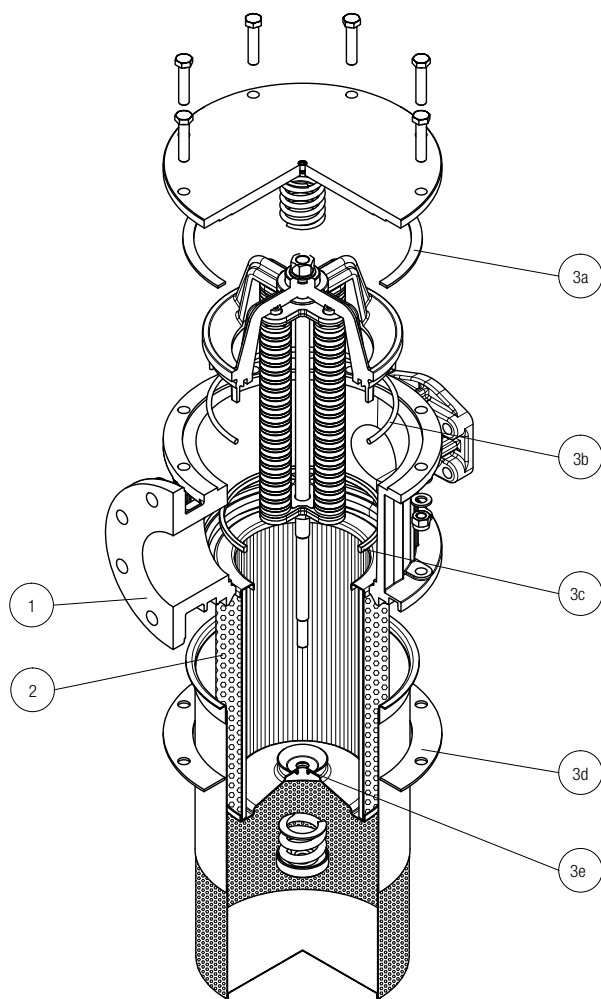
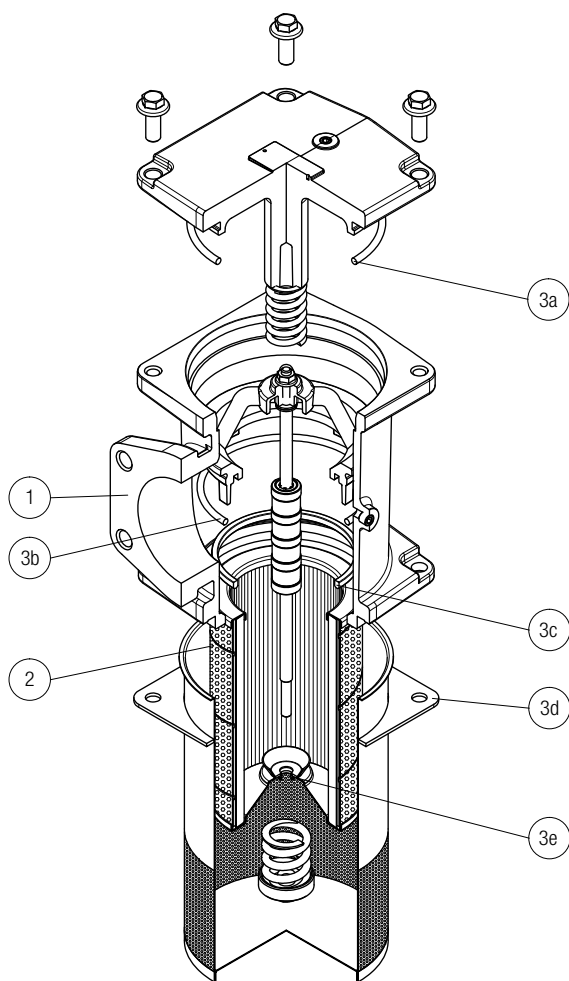
MPHC 250 - 630



Q.ty: 1 pc.		Q.ty: 1 pc.	
Item:	2	3 (3a ÷ 3e)	
Filter series	Filter element	Seal Kit code number	
		NBR	FPM
MPHC 250	See order table	AK021000104	AK021000105
MPHC 630		AK021000106	AK021000107

MPHC 660

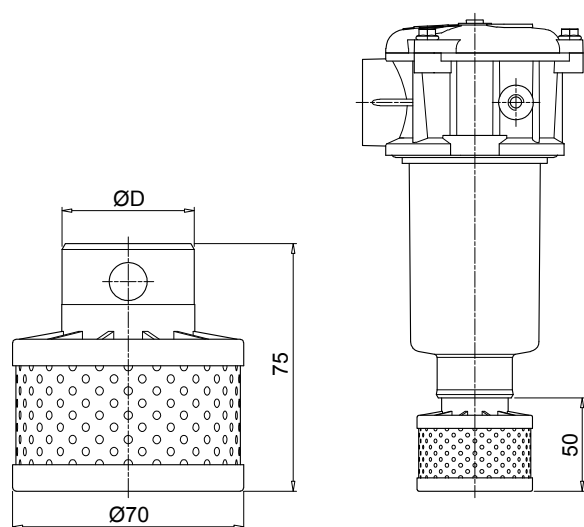
MPHC 850



Q.ty: 1 pc.		Q.ty: 1 pc.	
Item:	2	3	(3a ÷ 3e)
Filter series	Filter element	Seal Kit code number	
		NBR	FPM
MPHC 660	See order table	AK021000106	AK021000107
MPHC 850		AK021000108	AK021000109

Accessories

DIFFUSER WITH FAST LOCK CONNECTION



Example: DFS 40 A 075

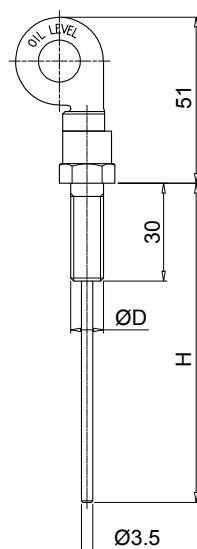
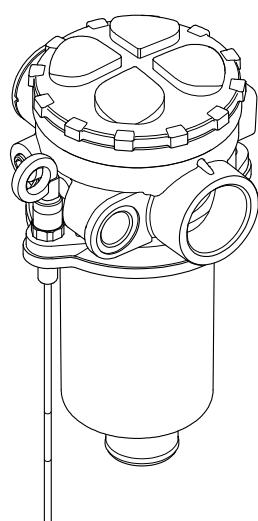
Series
DFS

Size ØD [mm]
40 40

Version
A Standard

Length
075 75 mm

DIPSTICK



Example: DPT 20 M10 A P01

Series
DPT

Length	H [mm]
15	134
20	184
25	234
30	284
35	334

Fastening
M8 Fastening with screws ØD = M8
M10 Fastening with screws ØD = M10

Seals
A NBR
V FPM

Execution
P01 MP Filtri standard
Pxx Customized

Materials

- Screw: phosphatized steel
- Stick: phosphatized steel
- Handle: Polyamide

Technical data

Working temperature:
from -25 °C to +110 °C

FILLER PLUG

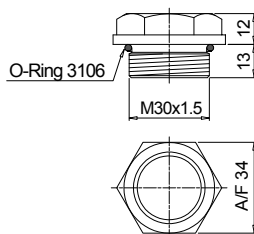
Series
T5

Materials

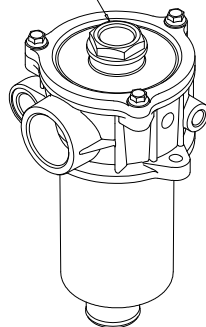
- Body: Polyamide
- Seal: NBR

Technical data

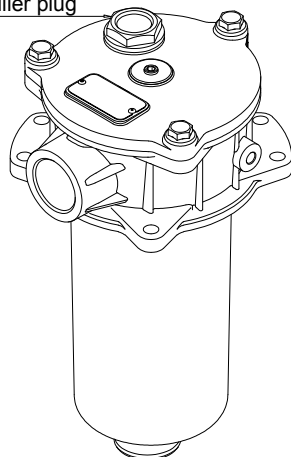
Tightening torque:
15 N·m



Filler plug



Filler plug



POLYAMIDE EXTENSION TUBE

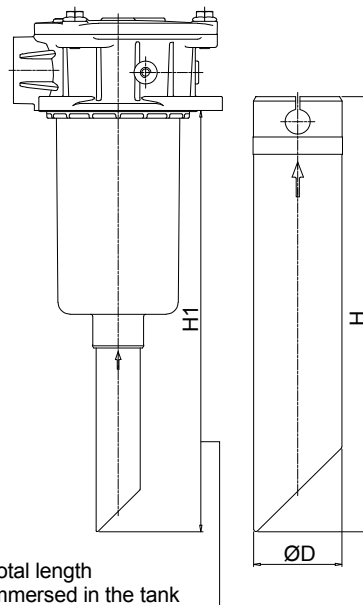
Example: **TE** **40** **A** **250**

Series
TE

Size	ØD [mm]
25	25
40	40
51	51
62	62

Material
A Polyamide

Length	H [mm]	25-40	51-62
200	200	•	•
250	250	•	-
300	300	•	•
350	350	•	-
400	400	•	•
450	450	•	-
500	500	•	•
600	600	-	•



Total length
immersed in the tank

COMPATIBILITY TABLE

Filter series	Filter size	Filter length	TE25	TE40	TE51	TE62	Tube length H1 [mm]							
							200	250	300	350	400	450	500	600
MPFX	030	10	•	-	-	-	266	316	366	416	466	516	566	-
		10	-	•	-	-	277	327	377	427	477	527	577	-
		20	-	•	-	-	322	372	422	472	522	572	622	-
		30	-	•	-	-	400	450	500	550	600	650	700	-
	100 - 104 - 110	40	-	•	-	-	502	552	602	652	702	752	802	-
		10	-	•	-	-	410	460	510	560	610	660	710	-
		20	-	•	-	-	623	673	723	773	823	873	923	-
		30	-	•	-	-	620	-	720	-	820	-	920	1020
	181 - 182 - 184	40	-	•	-	-	352	-	452	-	552	-	652	752
		10	-	•	-	-	411	-	511	-	611	-	711	811
		20	-	•	-	-	459	-	559	-	659	-	759	859
		30	-	•	-	-	597	-	697	-	797	-	897	997
MPTX	025 - 027	40	-	•	-	-	278	328	378	428	478	528	578	-
		10	•	-	-	-	342	392	442	492	542	592	642	-
		20	-	•	-	-	380	430	480	530	580	630	680	-
		30	-	•	-	-	273	323	373	423	473	523	573	-
	110 - 114 - 116 - 120	40	-	•	-	-	318	368	418	468	518	568	618	-
		10	-	•	-	-	396	446	496	546	596	646	696	-
		20	-	•	-	-	498	548	598	648	698	748	798	-
		30	-	•	-	-	284	334	384	434	484	534	584	-
	100	40	-	•	-	-	329	379	429	479	529	579	629	-
		10	-	•	-	-	407	457	507	557	607	657	707	-
		20	-	•	-	-	509	559	609	659	709	759	809	-
		30	-	•	-	-								

For any further information, please, contact our commercial dept.