

# MPH series

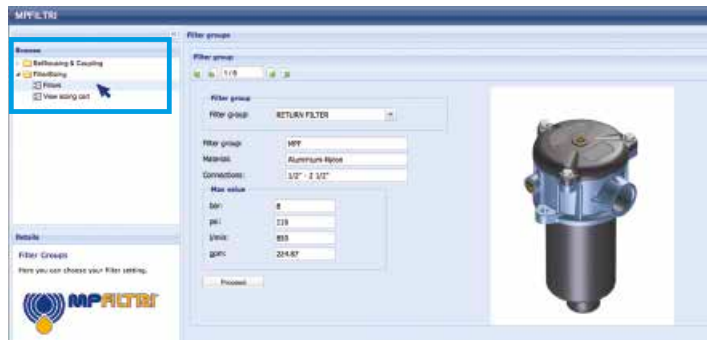
Maximum working pressure up to 1 MPa (10 bar) - Flow rate up to 3500 l/min





# TYPICAL FILTER SIZING Selection Software

**Step 1** Select "FILTERS"



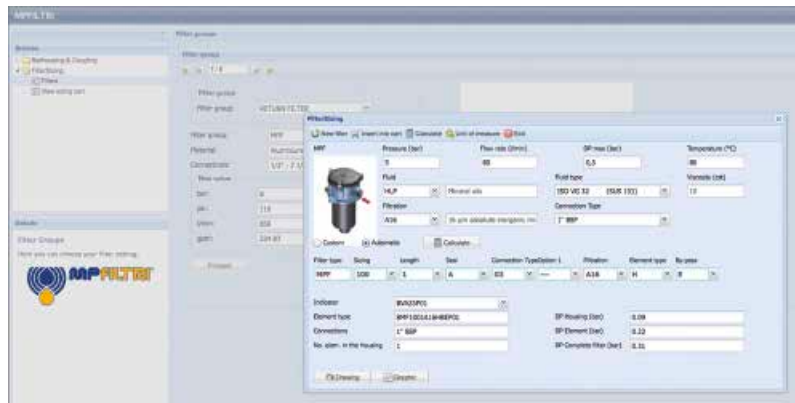
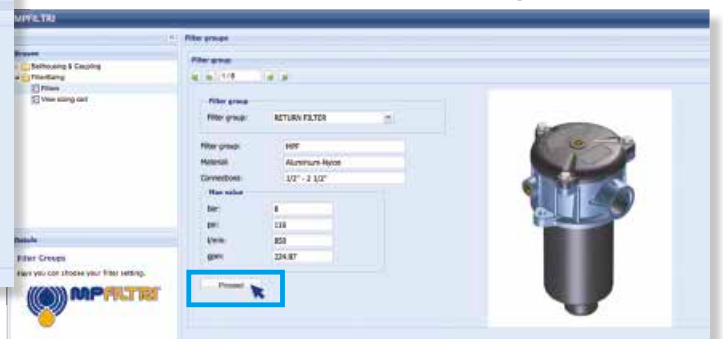
**Step 2** Choose filter group (Return Filter, Pressure Filter, etc.)



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



**Step 4** Push "PROCEED"



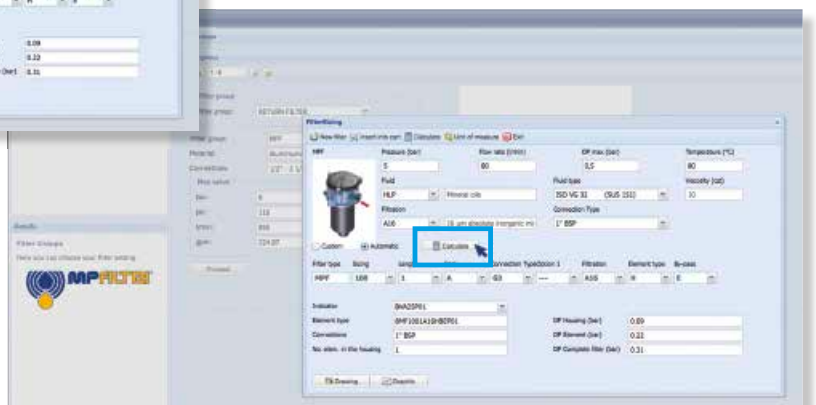
**Step 5**

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"



### Return filter

**Maximum working pressure up to 1 MPa (10 bar)**

**Flow rate up to 3500 l/min**

MPH 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 3000 l/min
- Multiple connections, to connect several return lines or drains
- 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: MPH 110-114-116-120-250
  - Anodized Aluminium: MPH 630-850
  - Painted Aluminium: MPH 660

- Cover
  - Nylon: MPH 110-114-116-120
  - Aluminium: MPH 250
  - Anodized Aluminium: MPH 630
  - Painted Aluminium: MPH 660
  - Steel: MPH 850

- Insert assembly
  - Nylon: MPH 110-114-116-120
  - Aluminium: MPH 250-630-660-850

- Diffuser: Tinned Steel

- Valve: Phosphatized Steel

### Bypass valve

- Opening pressure 175 kPa (1.75 bar)±10%
- Opening pressure 250 kPa (2.5 bar) ±10%, except for MPH 850

### Δp element type

- Microfibre filter elements - series MR: 10 bar
- Fluid flow through the filter element from IN to OUT

### Seals

- Standard NBR series A
- Optional FPM series V

### Temperature

From -25 °C to +110 °C

### Note

MPH filters are provided for vertical mounting



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

Filter series	Weights [kg]					Volumes [dm <sup>3</sup> ]						
	Length	1	2	3	4	5	Length	1	2	3	4	5
<b>MPH 110</b>	1.60	1.70	1.80	2.20	2.60		1.60	1.70	1.80	2.20	2.60	
<b>MPH 114</b>	1.60	1.70	1.80	2.20	2.60		1.60	1.70	1.80	2.20	2.60	
<b>MPH 116</b>	1.60	1.70	1.80	2.20	2.60		1.60	1.70	1.80	2.20	2.60	
<b>MPH 120</b>	1.60	1.70	1.80	2.20	2.60		1.60	1.70	1.80	2.20	2.60	
<b>MPH 250</b>	3.60	3.90	4.20	5.60	-		4.40	4.40	5.40	8.00	-	
<b>MPH 630</b>	6.50	7.00	7.40	8.50	10.50		7.30	9.00	11.00	13.00	19.20	
<b>MPH 660</b>	-	-	-	11.50	14.00		-	-	-	14.60	21.00	
<b>MPH 850</b>	32.00	35.00	38.00	42.00	-		13.00	16.50	21.00	25.00	-	

Filter series	Length	A03	A06	A10	A16	A25	M25 M60 M90	P10	P25
<b>MPH 110-114 116-120</b>	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
<b>MPH 250</b>	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
<b>MPH 630</b>	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
<b>MPH 660</b>	4	370	399	903	1042	1460	2376	1596	1830
	5	624	699	1282	1343	1997	2663	2182	2331
<b>MPH 850</b>	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 mm<sup>2</sup>/s (cSt) and a density of 0.86 kg/dm<sup>3</sup>.

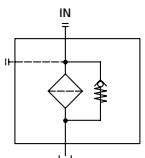
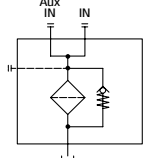
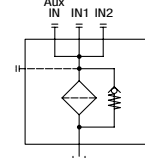
For different pressure drop or fluid viscosity we recommend to use our selection software available on [www.mpfiltri.com](http://www.mpfiltri.com).

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	Style 1 connection	Style 2 connections	Style 3 connections
<b>MPH 110</b>		•	
<b>MPH 114</b>	•		
<b>MPH 116</b>	•		
<b>MPH 120</b>			•
<b>MPH 250</b>	•	•	
<b>MPH 630</b>	•	•	
<b>MPH 660</b>	•		
<b>MPH 850</b>		•	

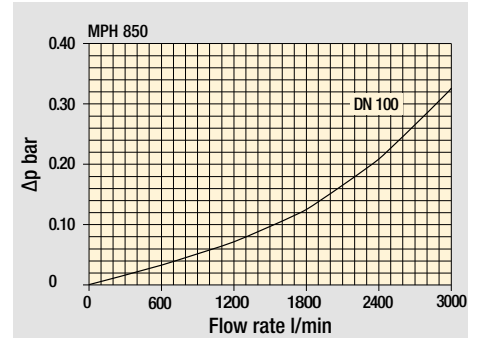
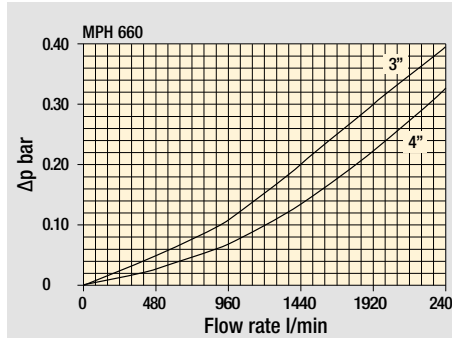
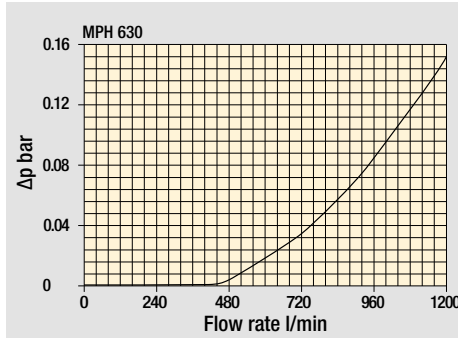
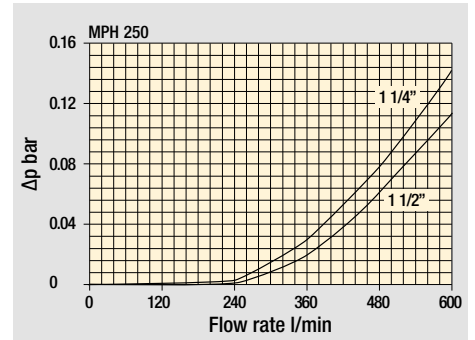
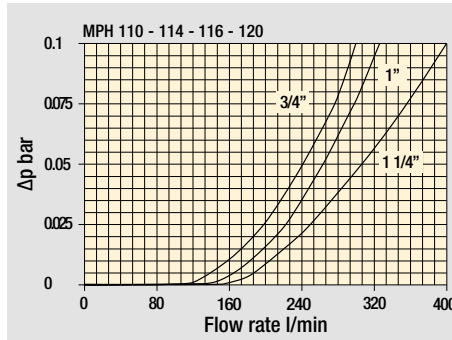
  

		
---	---	---

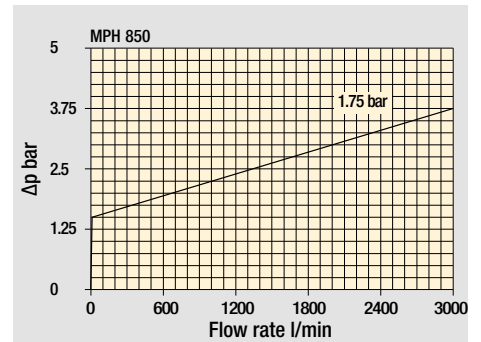
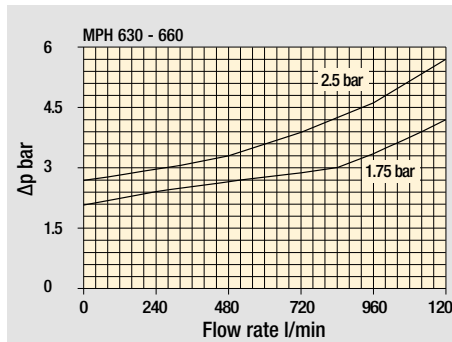
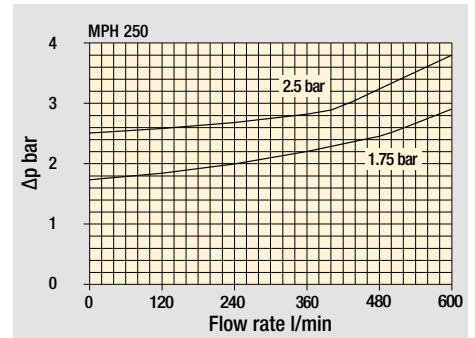
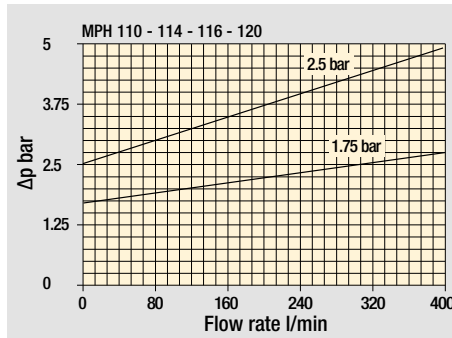
# MPH GENERAL INFORMATION

## Pressure drop

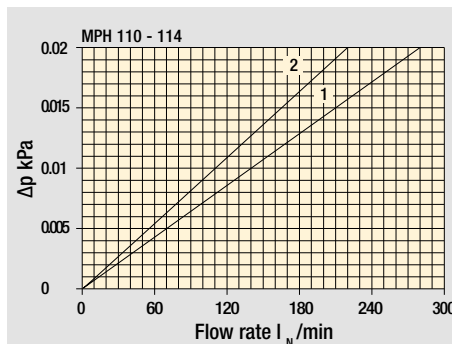
### Filter housings $\Delta p$ pressure drop



### Bypass valve pressure drop



### Air breather pressure drop



- 1  C With air breather 10  $\mu$ m
- 2  D With anti-splash and SAP50 10  $\mu$ m

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.



## Designation & Ordering code

### COMPLETE FILTER

Series and size **MPH110** Configuration example: **MPH110** | **1** | **S** | **D** | **S** | **A** | **G1** | **1** | **A10** | **P01**

**Length**  
1 | 2 | 3 | 4 | 5 |

**Bypass valve**  
**S** Without bypass | **C** 1.75 bar | **E** 2.5 bar

**Diffuser and magnetic filter**  
**D** With diffuser, with magnetic filter  
**F** With diffuser, without magnetic filter  
**O** Without diffuser, with magnetic filter  
**E** Without diffuser, without magnetic filter

**Air breather**  
**S** Without air breather  
**C** With air breather 10 µm  
**D** With anti-splash and air breather SAP050 10 µm  
**P** With anti-splash and air breather SAP050 10 µm pressurization 0.5 bar

Seals and treatments	Filtration rating		
	Axx	Mxx	Pxx
<b>A</b> NBR	•	•	•
<b>V</b> FPM	•	•	•
<b>W</b> NBR head anodized filter element compatible with fluids HFA-HFB-HFC	•	•	
<b>Z</b> FPM head anodized	•	•	

Main Connections	Aux size 1	Aux size 2	Main Connections	Aux size 1	Aux size 2		
<b>G1</b> G 3/4"	G 3/8"	G 1/2"	<b>G7</b> SAE 12 - 1 1/16" - 12 UN	SAE 6 - 9/16" - 18 UNF	SAE 8 - 3/4" - 16 UNF		
<b>G2</b> G 1"			<b>G8</b> SAE 16 - 1 5/16" - 12 UN				
<b>G3</b> G 1 1/4"			<b>G9</b> SAE 20 - 1 5/8" - 12 UN				
<b>G4</b> 3/4" NPT			3/8" NPT	1/2" NPT			
<b>G5</b> 1" NPT							
<b>G6</b> 1 1/4" NPT							

**Aux connection** - see previous table  
**0** Not machined | **1** Aux size 1 | **2** Aux size 2

**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

**Execution**  
**P01** MP Filtri standard  
**Pxx** Customized

### FILTER ELEMENT

Element series and size **MR100** Configuration example: **MR100** | **1** | **A10** | **A** | **P01**

**Element length**  
1 | 2 | 3 | 4 | 5 |

**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

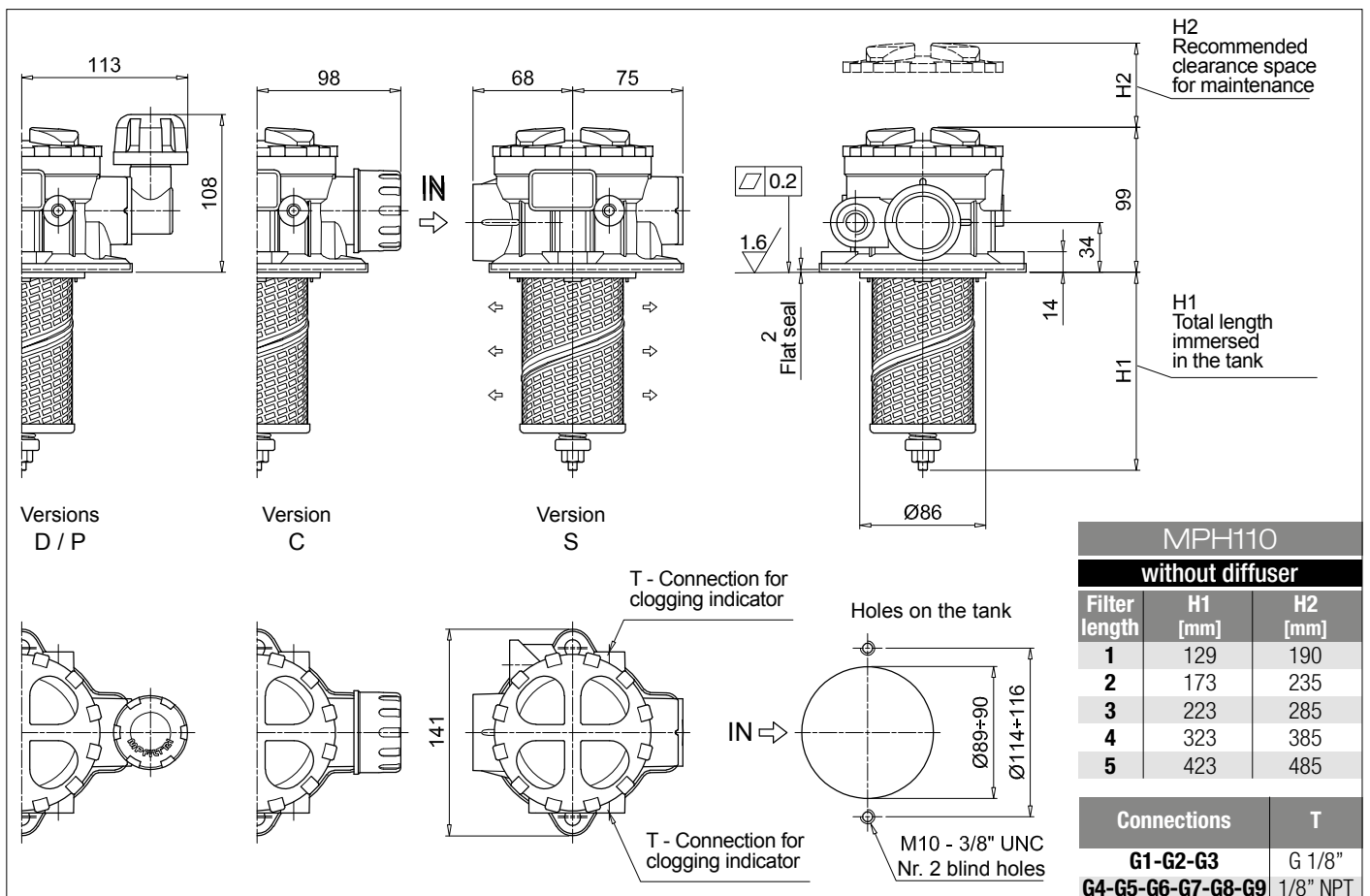
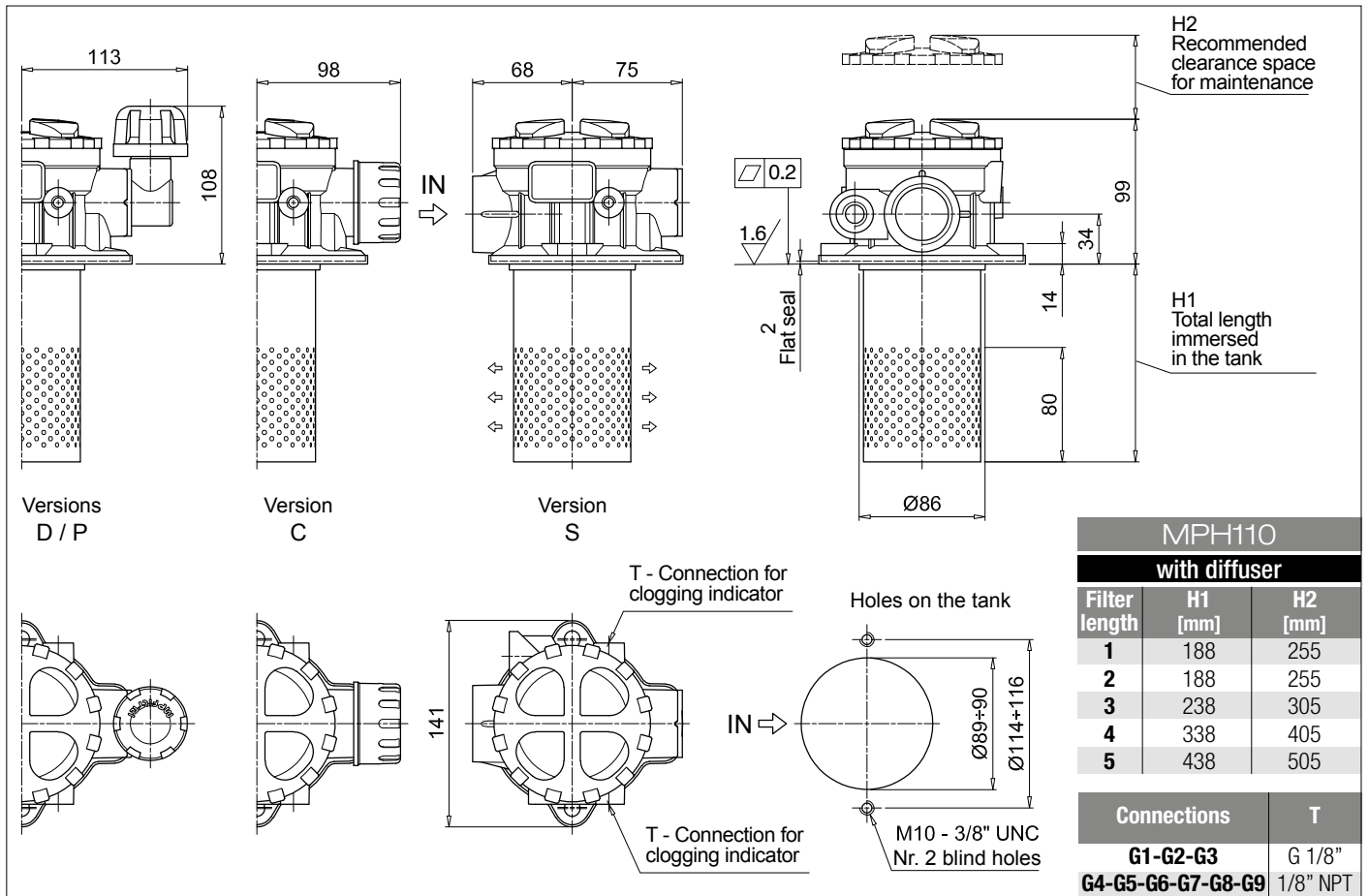
**Seals**  
**A** NBR  
**V** FPM

**Execution**  
**P01** MP Filtri standard  
**Pxx** Customized

### ACCESSORIES

Indicators	page		page
<b>BVA</b> Axial pressure gauge	240	<b>BEA</b> Electrical pressure indicator	239
<b>BVR</b> Radial pressure gauge	240	<b>BEM</b> Electrical pressure indicator	239
<b>BVP</b> Visual pressure indicator with automatic reset	241	<b>BLA</b> Electrical / visual pressure indicator	239-240
<b>BVQ</b> Visual pressure indicator with manual reset	241		
Additional features	page		
<b>DPT</b> Dipstick	249		





## Designation & Ordering code

### COMPLETE FILTER

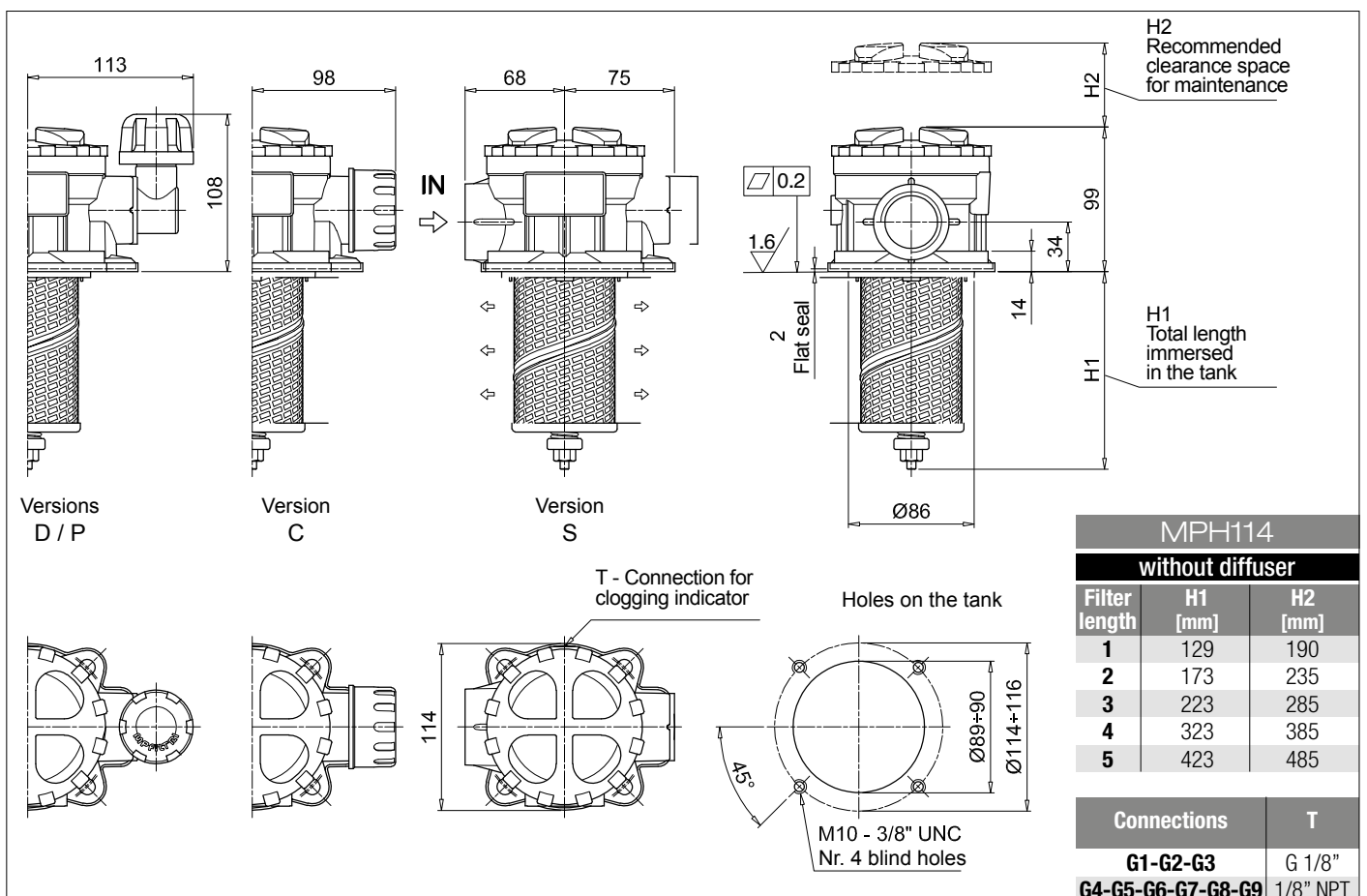
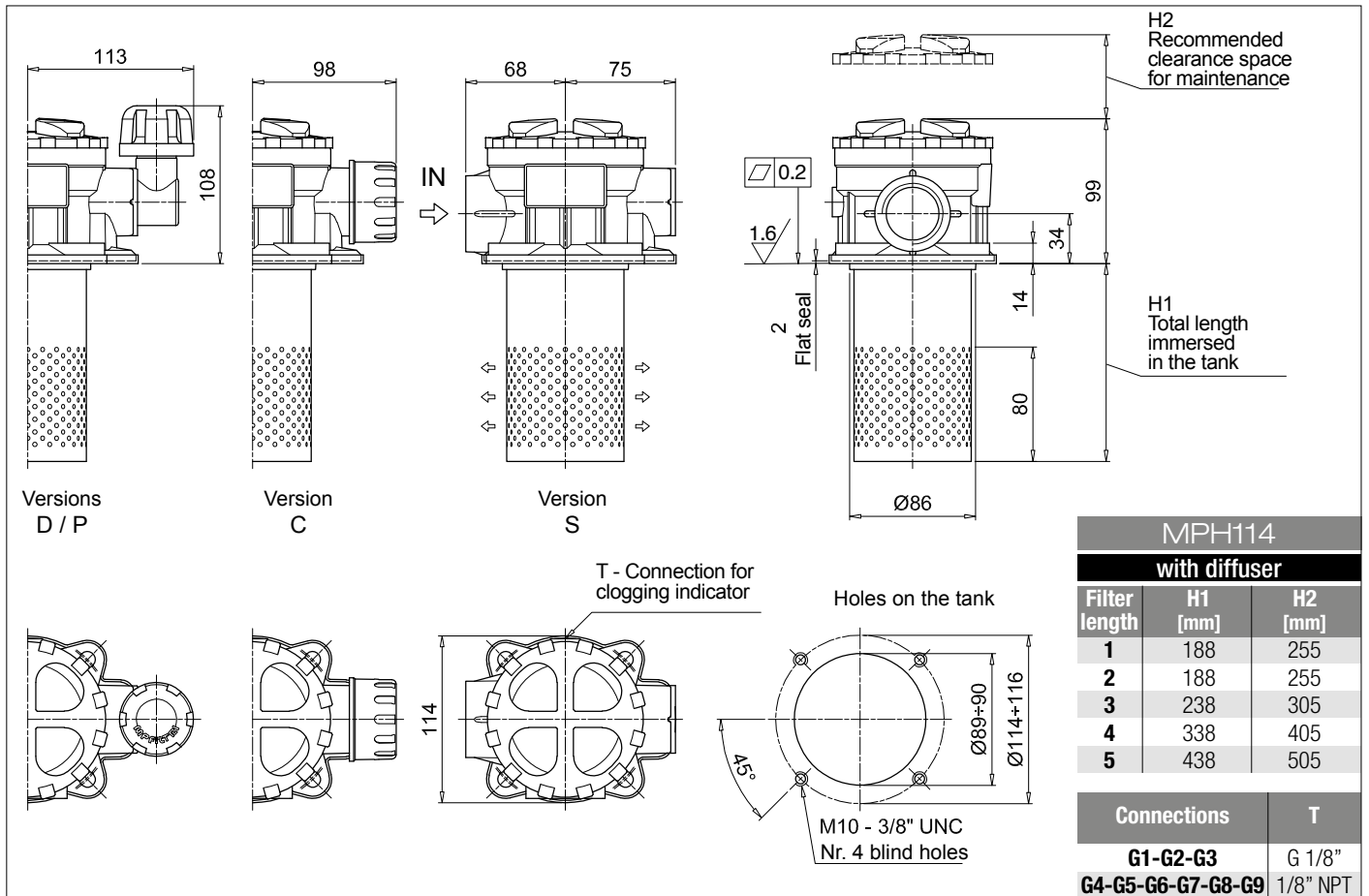
<b>Series and size</b> <b>MPH114</b>	Configuration example: <b>MPH114</b>   <b>3</b>   <b>C</b>   <b>E</b>   <b>C</b>   <b>Z</b>   <b>G6</b>   <b>M60</b>   <b>P01</b>									
<b>Length</b> 1   2   <b>3</b>   4   5										
<b>Bypass valve</b> <b>S</b> Without bypass   <b>C</b> 1.75 bar   <b>E</b> 2.5 bar										
<b>Diffuser and magnetic filter</b> <b>D</b> With diffuser, with magnetic filter <b>F</b> With diffuser, without magnetic filter <b>O</b> Without diffuser, with magnetic filter <b>E</b> Without diffuser, without magnetic filter										
<b>Air breather</b> <b>S</b> Without air breather <b>C</b> With air breather 10 µm <b>D</b> With anti-splash and air breather SAP050 10 µm <b>P</b> With anti-splash and air breather SAP050 10 µm pressurization 0.5 bar										
<b>Seals and treatments</b>	Filtration rating									
<b>A</b> NBR	<b>Axx</b>	<b>Mxx</b>	<b>Pxx</b>							
<b>V</b> FPM	•	•	•							
<b>W</b> NBR head anodized	•	•		filter element compatible with fluids HFA-HFB-HFC						
<b>Z</b> FPM head anodized	•	•								
<b>Connections</b>										
<b>G1</b> G 3/4"	<b>G6</b> 1 1/4" NPT									
<b>G2</b> G 1"	<b>G7</b> SAE 12 - 1 1/16" - 12 UN									
<b>G3</b> G 1 1/4"	<b>G8</b> SAE 16 - 1 5/16" - 12 UN									
<b>G4</b> 3/4" NPT	<b>G9</b> SAE 20 - 1 5/8" - 12 UN									
<b>G5</b> 1" NPT										
<b>Filtration rating (filter media)</b>										
<b>A03</b> Inorganic microfiber 3 µm	<b>M25</b> Wire mesh 25 µm									
<b>A06</b> Inorganic microfiber 6 µm	<b>M60</b> Wire mesh 60 µm									
<b>A10</b> Inorganic microfiber 10 µm	<b>M90</b> Wire mesh 90 µm									
<b>A16</b> Inorganic microfiber 16 µm	<b>P10</b> Resin impregnated paper 10 µm									
<b>A25</b> Inorganic microfiber 25 µm	<b>P25</b> Resin impregnated paper 25 µm									
										<b>Execution</b>
										<b>P01</b> MP Filtri standard
										<b>Pxx</b> Customized

### FILTER ELEMENT

<b>Element series and size</b> <b>MR100</b>	Configuration example: <b>MR100</b>   <b>3</b>   <b>M60</b>   <b>V</b>   <b>P01</b>			
<b>Element length</b> 1   2   <b>3</b>   4   5				
<b>Filtration rating (filter media)</b>				
<b>A03</b> Inorganic microfiber 3 µm	<b>M25</b> Wire mesh 25 µm			
<b>A06</b> Inorganic microfiber 6 µm	<b>M60</b> Wire mesh 60 µm			
<b>A10</b> Inorganic microfiber 10 µm	<b>M90</b> Wire mesh 90 µm			
<b>A16</b> Inorganic microfiber 16 µm	<b>P10</b> Resin impregnated paper 10 µm			
<b>A25</b> Inorganic microfiber 25 µm	<b>P25</b> Resin impregnated paper 25 µm			
		<b>Seals</b>	<b>Execution</b>	
		<b>A</b> NBR	<b>P01</b> MP Filtri standard	
		<b>V</b> FPM	<b>Pxx</b> Customized	

### ACCESSORIES

Indicators	page		page
<b>BVA</b> Axial pressure gauge	240	<b>BEA</b> Electrical pressure indicator	239
<b>BVR</b> Radial pressure gauge	240	<b>BEM</b> Electrical pressure indicator	239
<b>BVP</b> Visual pressure indicator with automatic reset	241	<b>BLA</b> Electrical / visual pressure indicator	239-240
<b>BVQ</b> Visual pressure indicator with manual reset	241		
Additional features	page		
<b>DPT</b> Dipstick	249		



## Designation & Ordering code

### COMPLETE FILTER

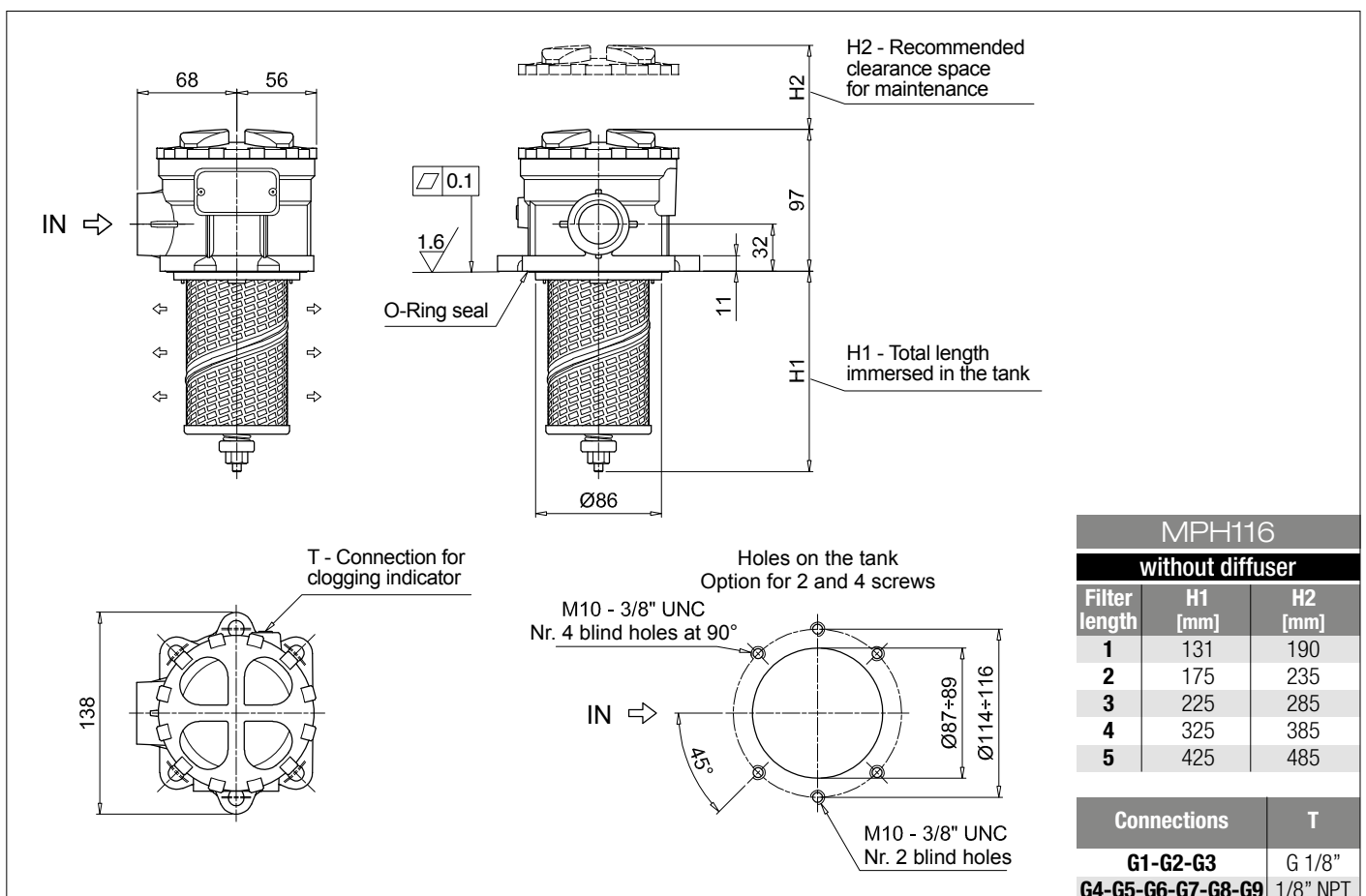
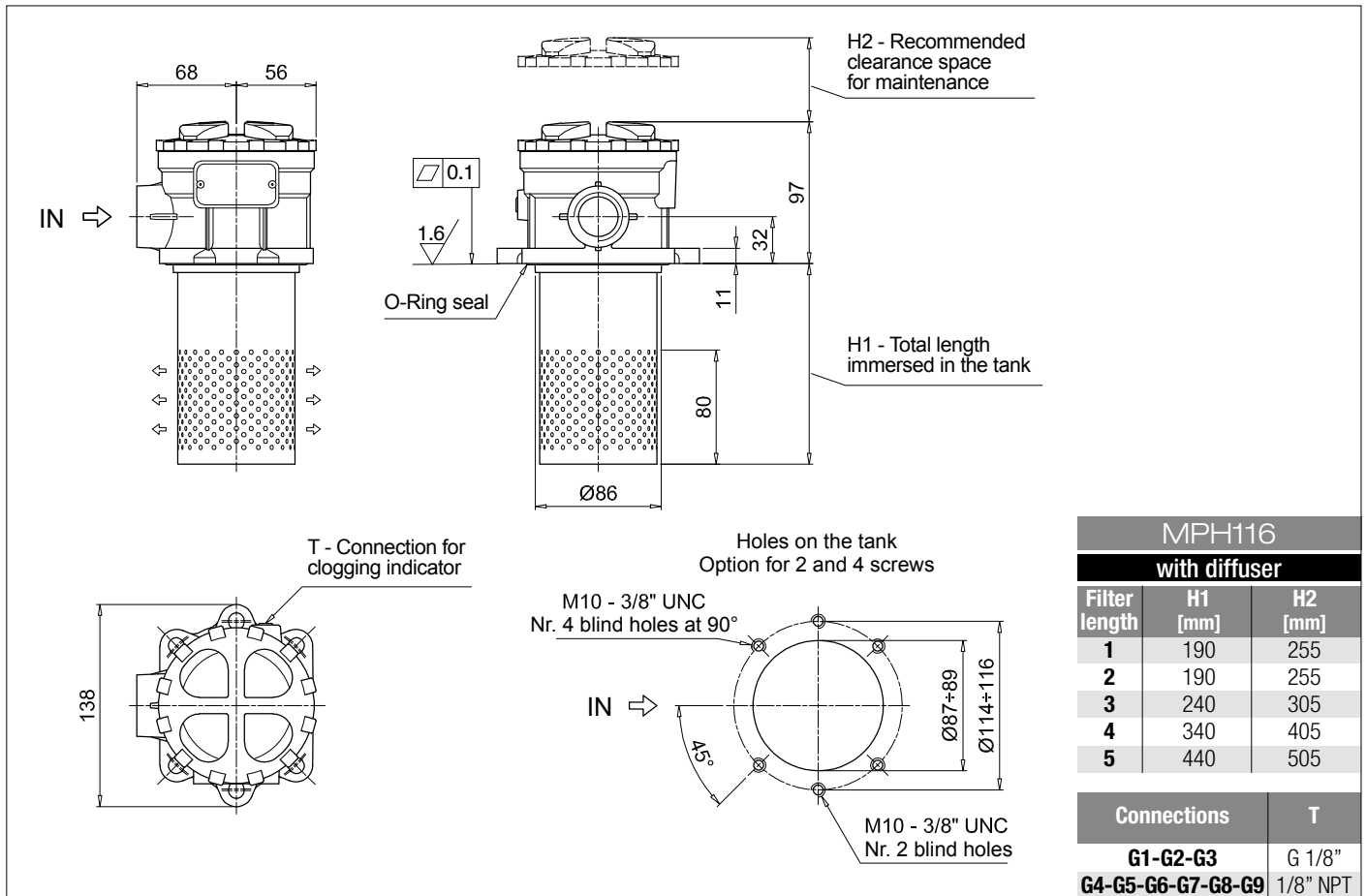
<b>Series and size</b> <b>MPH116</b>	Configuration example: <b>MPH116</b>   <b>5</b>   <b>S</b>   <b>D</b>   <b>S</b>   <b>A</b>   <b>G1</b>   <b>A10</b>   <b>P01</b>									
<b>Length</b> <b>1</b>   <b>2</b>   <b>3</b>   <b>4</b>   <b>5</b>										
<b>Bypass valve</b> <b>S</b> Without bypass   <b>C</b> 1.75 bar   <b>E</b> 2.5 bar										
<b>Diffuser and magnetic filter</b> <b>D</b> With diffuser, with magnetic filter <b>F</b> With diffuser, without magnetic filter <b>O</b> Without diffuser, with magnetic filter <b>E</b> Without diffuser, without magnetic filter										
<b>Air breather</b> <b>S</b> Without air breather										
<b>Seals and treatments</b>	Filtration rating									
<b>A</b> NBR	<b>Axx</b>	<b>Mxx</b>	<b>Pxx</b>							
<b>V</b> FPM										
<b>W</b> NBR head anodized				filter element compatible with fluids HFA-HFB-HFC						
<b>Z</b> FPM head anodized										
Flat seal on the head on request										
<b>Connections</b>										
<b>G1</b> G 3/4"	<b>G6</b> 1 1/4" NPT									
<b>G2</b> G 1"	<b>G7</b> SAE 12 - 1 1/16" - 12 UN									
<b>G3</b> G 1 1/4"	<b>G8</b> SAE 16 - 1 5/16" - 12 UN									
<b>G4</b> 3/4" NPT	<b>G9</b> SAE 20 - 1 5/8" - 12 UN									
<b>G5</b> 1" NPT										
<b>Filtration rating (filter media)</b>										
<b>A03</b> Inorganic microfiber 3 µm	<b>M25</b> Wire mesh 25 µm									
<b>A06</b> Inorganic microfiber 6 µm	<b>M60</b> Wire mesh 60 µm									
<b>A10</b> Inorganic microfiber 10 µm	<b>M90</b> Wire mesh 90 µm									
<b>A16</b> Inorganic microfiber 16 µm	<b>P10</b> Resin impregnated paper 10 µm									
<b>A25</b> Inorganic microfiber 25 µm	<b>P25</b> Resin impregnated paper 25 µm									
										<b>Execution</b>
										<b>P01</b> MP Filtri standard
										<b>Pxx</b> Customized

### FILTER ELEMENT

<b>Element series and size</b> <b>MR100</b>	Configuration example: <b>MR100</b>   <b>5</b>   <b>A10</b>   <b>A</b>   <b>P01</b>			
<b>Element length</b> <b>1</b>   <b>2</b>   <b>3</b>   <b>4</b>   <b>5</b>				
<b>Filtration rating (filter media)</b>				
<b>A03</b> Inorganic microfiber 3 µm	<b>M25</b> Wire mesh 25 µm			
<b>A06</b> Inorganic microfiber 6 µm	<b>M60</b> Wire mesh 60 µm			
<b>A10</b> Inorganic microfiber 10 µm	<b>M90</b> Wire mesh 90 µm			
<b>A16</b> Inorganic microfiber 16 µm	<b>P10</b> Resin impregnated paper 10 µm			
<b>A25</b> Inorganic microfiber 25 µm	<b>P25</b> Resin impregnated paper 25 µm			
		<b>Seals</b>	<b>Execution</b>	
		<b>A</b> NBR	<b>P01</b> MP Filtri standard	
		<b>V</b> FPM	<b>Pxx</b> Customized	

### ACCESSORIES

Indicators	page		page
<b>BVA</b> Axial pressure gauge	240	<b>BEA</b> Electrical pressure indicator	239
<b>BVR</b> Radial pressure gauge	240	<b>BEM</b> Electrical pressure indicator	239
<b>BVP</b> Visual pressure indicator with automatic reset	241	<b>BLA</b> Electrical / visual pressure indicator	239-240
<b>BVQ</b> Visual pressure indicator with manual reset	241		
Additional features	page		
<b>DPT</b> Dipstick	249		



## Designation & Ordering code

### COMPLETE FILTER

Series and size Configuration example: **MPH120** | **1** | **S** | **D** | **A** | **G1** | **1** | **A10** | **P01**

#### MPH120

Length  
**1** | **2** | **3** | **4** | **5** |

Bypass valve  
**S** Without bypass | **C** 1.75 bar | **E** 2.5 bar

Diffuser and magnetic filter  
**D** With diffuser, with magnetic filter  
**F** With diffuser, without magnetic filter  
**O** Without diffuser, with magnetic filter  
**E** Without diffuser, without magnetic filter

Seals and treatments	Filtration rating		
	Axx	Mxx	Pxx
<b>A</b> NBR	•	•	•
<b>V</b> FPM	•	•	•
<b>W</b> NBR head anodized	•	•	
<b>Z</b> FPM head anodized	•	•	

Main Connections	Rear connections	Aux size 1	Aux size 2
<b>G1</b> G 3/4"	G 3/4"	G 3/8"	G 1/2"
<b>G2</b> G 1"	G 1"		
<b>G3</b> G 1 1/4"	G 3/4"		
<b>G4</b> 3/4" NPT	3/4" NPT	3/8" NPT	1/2" NPT
<b>G5</b> 1" NPT	1" NPT		
<b>G6</b> 1 1/4" NPT	3/4" NPT		
<b>G7</b> SAE 12 - 1 1/16" - 12 UN	SAE 12 - 1 1/16" - 12 UN	SAE 6 - 9/16" - 18 UNF	SAE 8 - 3/4" - 16 UNF
<b>G8</b> SAE 16 - 1 5/16" - 12 UN	SAE 16 - 1 5/16" - 12 UN		
<b>G9</b> SAE 20 - 1 5/8" - 12 UN	SAE 12 - 1 1/16" - 12 UN		

Aux connection - see previous table  
**0** Not machined | **1** Aux size 1 | **2** Aux size 2

Filtration rating (filter media)	
<b>A03</b> Inorganic microfiber 3 µm	<b>M25</b> Wire mesh 25 µm
<b>A06</b> Inorganic microfiber 6 µm	<b>M60</b> Wire mesh 60 µm
<b>A10</b> Inorganic microfiber 10 µm	<b>M90</b> Wire mesh 90 µm
<b>A16</b> Inorganic microfiber 16 µm	<b>P10</b> Resin impregnated paper 10 µm
<b>A25</b> Inorganic microfiber 25 µm	<b>P25</b> Resin impregnated paper 25 µm

Execution  
**P01** MP Filtri standard  
**Pxx** Customized

### FILTER ELEMENT

Element series and size Configuration example: **MR100** | **1** | **A10** | **A** | **P01**

#### MR100

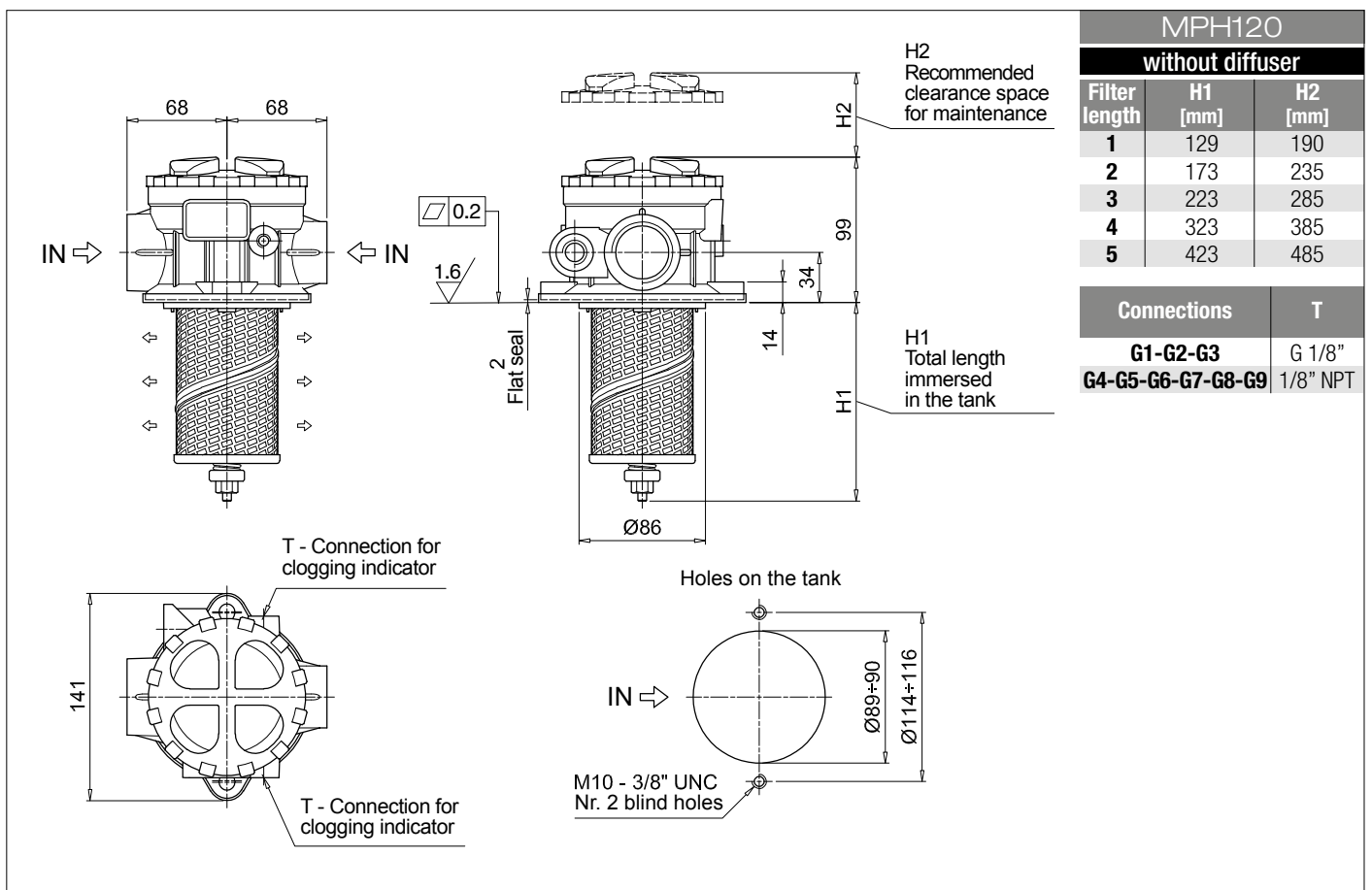
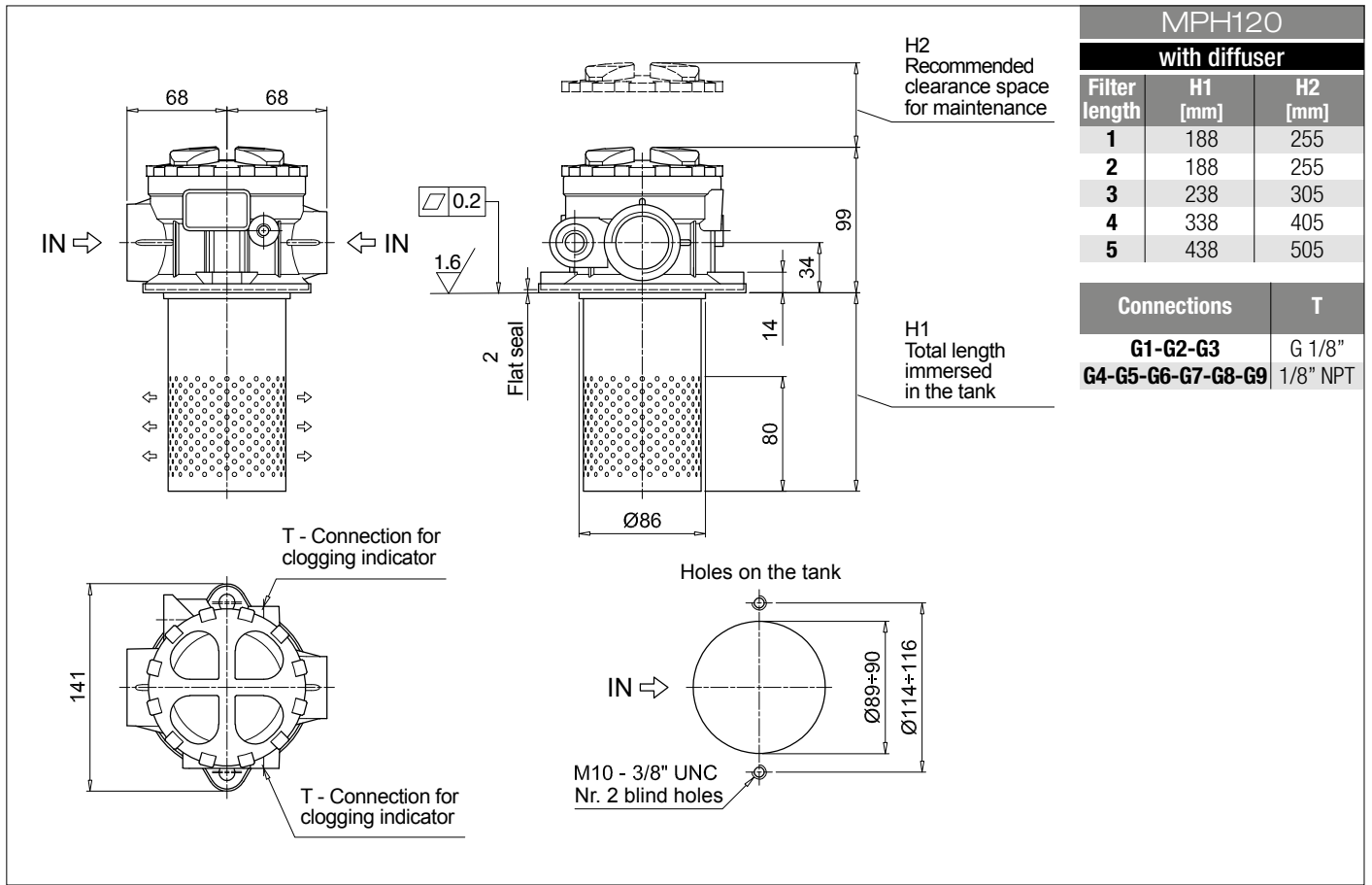
Element length  
**1** | **2** | **3** | **4** | **5** |

Filtration rating (filter media)	
<b>A03</b> Inorganic microfiber 3 µm	<b>M25</b> Wire mesh 25 µm
<b>A06</b> Inorganic microfiber 6 µm	<b>M60</b> Wire mesh 60 µm
<b>A10</b> Inorganic microfiber 10 µm	<b>M90</b> Wire mesh 90 µm
<b>A16</b> Inorganic microfiber 16 µm	<b>P10</b> Resin impregnated paper 10 µm
<b>A25</b> Inorganic microfiber 25 µm	<b>P25</b> Resin impregnated paper 25 µm

Seals  
**A** NBR  
**V** FPM  
 Execution  
**P01** MP Filtri standard  
**Pxx** Customized

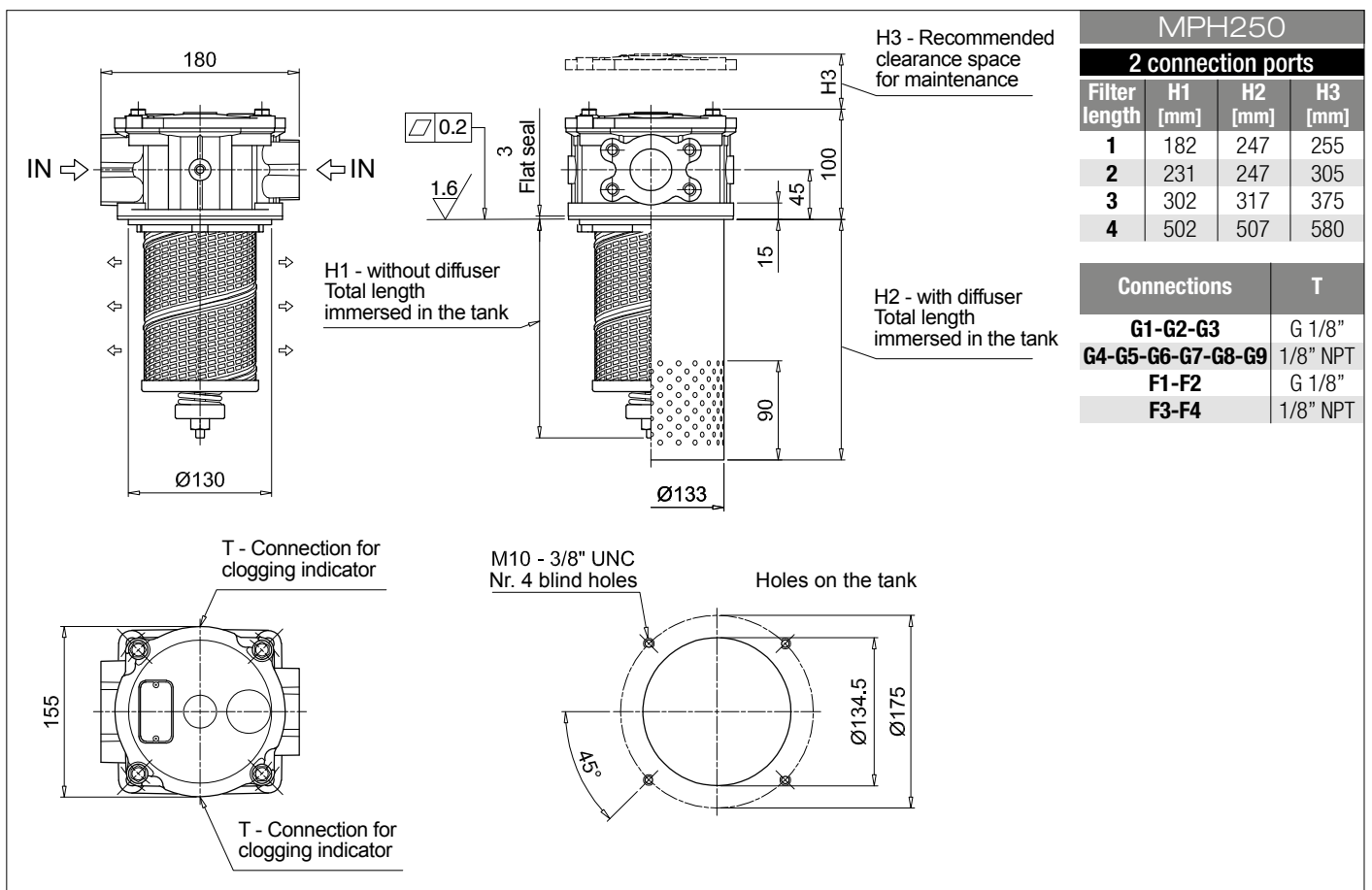
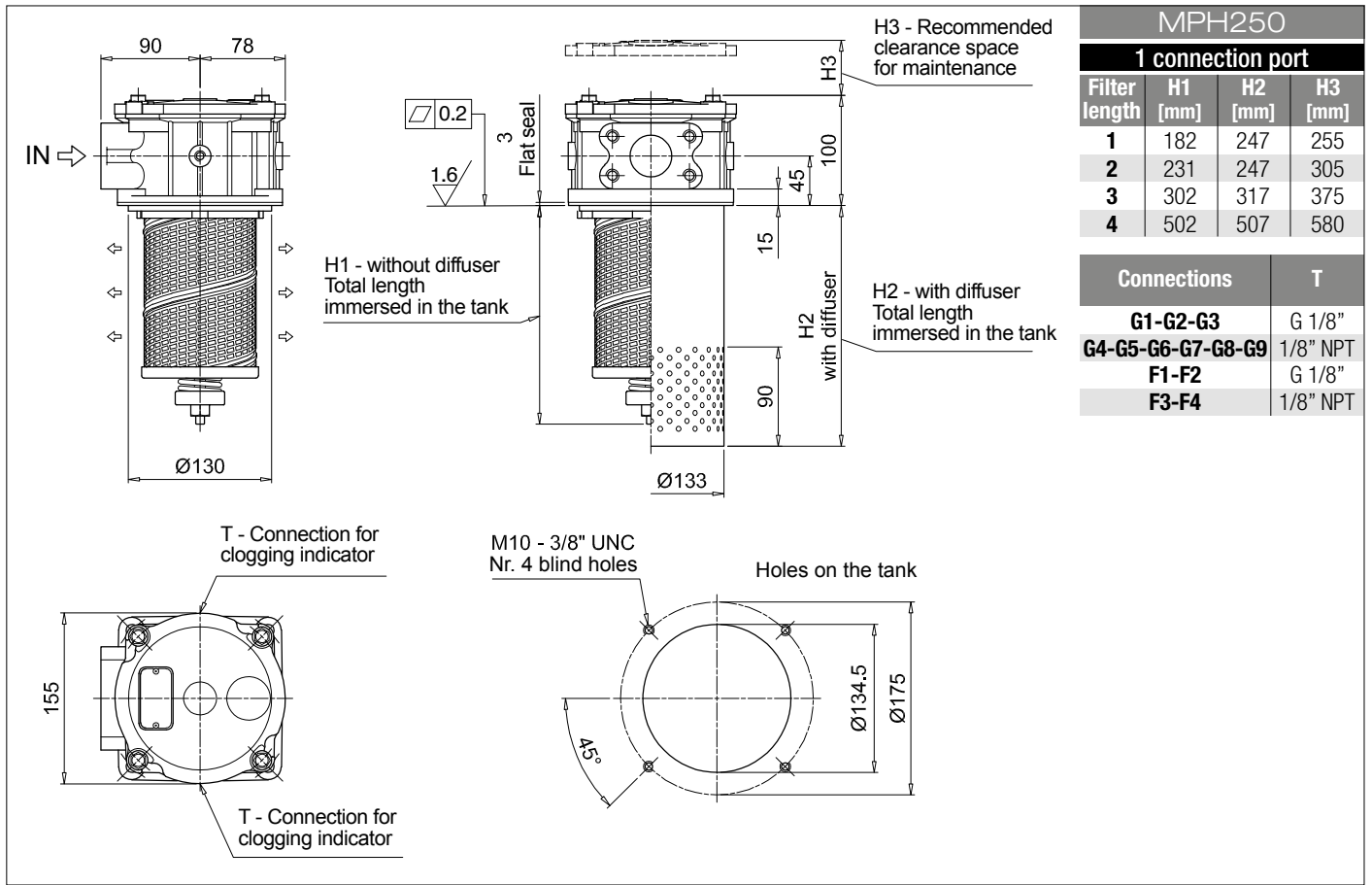
### ACCESSORIES

Indicators	page		page
<b>BVA</b> Axial pressure gauge	240	<b>BEA</b> Electrical pressure indicator	239
<b>BVR</b> Radial pressure gauge	240	<b>BEM</b> Electrical pressure indicator	239
<b>BVP</b> Visual pressure indicator with automatic reset	241	<b>BLA</b> Electrical / visual pressure indicator	239-240
<b>BVQ</b> Visual pressure indicator with manual reset	241		
Additional features	page		
<b>DPT</b> Dipstick	249		









## Designation & Ordering code

### COMPLETE FILTER

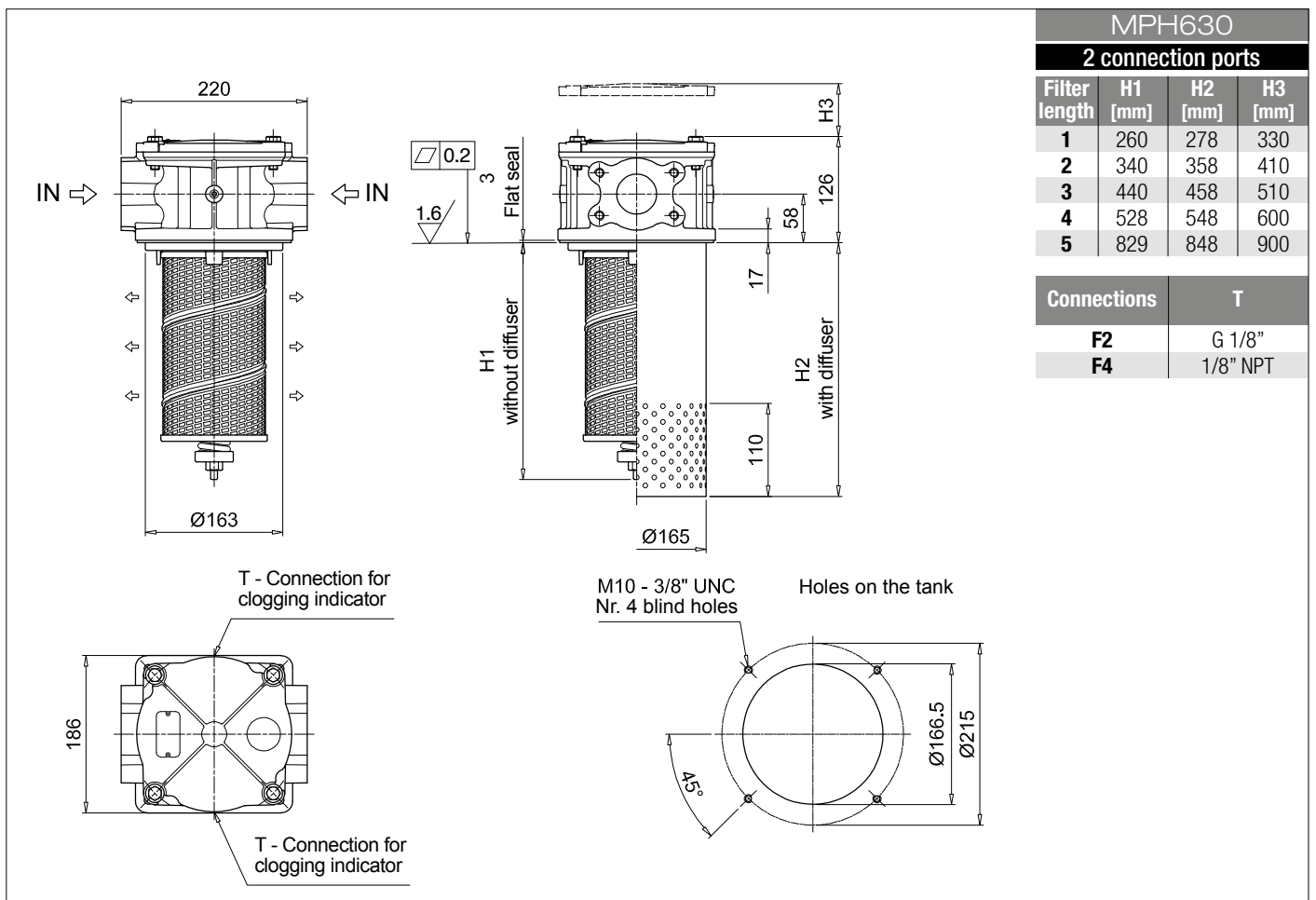
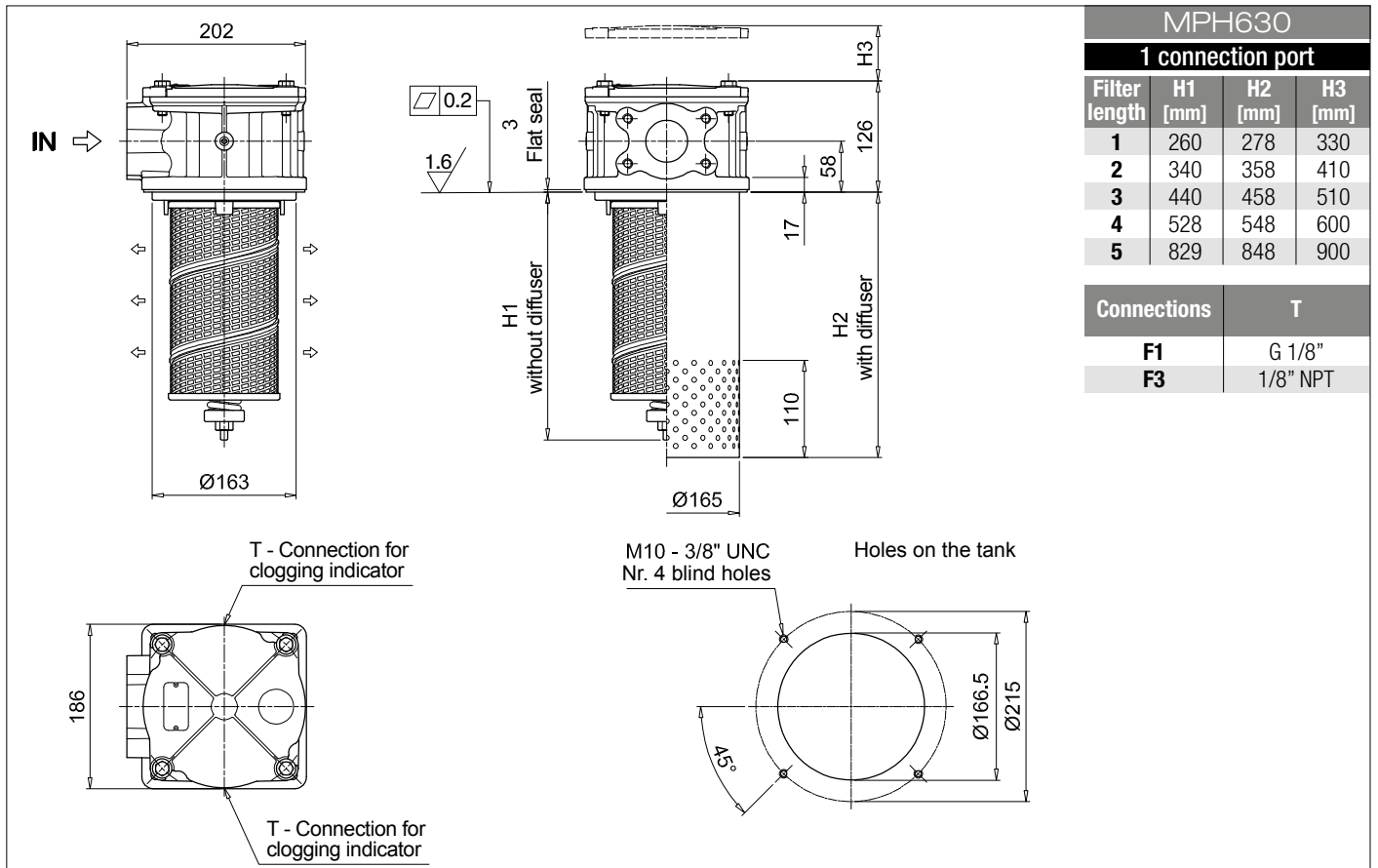
<b>Series and size</b>	Configuration example: <b>MPH630</b>   <b>1</b>   <b>S</b>   <b>E</b>   <b>S</b>   <b>W</b>   <b>F1</b>   <b>M25</b>   <b>P01</b>									
<b>MPH630</b>										
<b>Length</b>	1   2   3   4   5									
<b>Bypass valve</b>	S Without bypass   C 1.75 bar   E 2.5 bar									
<b>Diffuser and magnetic filter</b>	D With diffuser, with magnetic filter F With diffuser, without magnetic filter O Without diffuser, with magnetic filter E Without diffuser, without magnetic filter									
<b>Air breather</b>	S Without air breather									
<b>Seals and treatments</b>	Filtration rating									
	Axx	Mxx	Pxx							
A NBR	•	•	•							
V FPM	•	•	•							
W NBR head anodized	•	•		filter element compatible with fluids HFA-HFB-HFC						
Z FPM head anodized	•	•								
<b>Main Connections</b>	<b>Rear connections</b>									
F1 2 1/2" SAE 3000 psi/M	-									
F2 2 1/2" SAE 3000 psi/M	2" SAE 3000 psi/M									
F3 2 1/2" SAE 3000 psi/UNC	-									
F4 2 1/2" SAE 3000 psi/UNC	2" SAE 3000 psi/UNC									
<b>Filtration rating (filter media)</b>										
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									
	<b>Execution</b>									
	P01 MP Filtri standard									
	Pxx Customized									

### FILTER ELEMENT

<b>Element series and size</b>	Configuration example: <b>MR630</b>   <b>1</b>   <b>M25</b>   <b>A</b>   <b>P01</b>				
<b>MR630</b>					
<b>Element length</b>	1   2   3   4   5				
<b>Filtration rating (filter media)</b>					
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				
	<b>Seals</b>		<b>Execution</b>		
	A NBR		P01 MP Filtri standard		
	V FPM		Pxx Customized		

### ACCESSORIES

Indicators	page		page
BVA Axial pressure gauge	240	BEA Electrical pressure indicator	239
BVR Radial pressure gauge	240	BEM Electrical pressure indicator	239
BVP Visual pressure indicator with automatic reset	241	BLA Electrical / visual pressure indicator	239-240
BVQ Visual pressure indicator with manual reset	241		



## Designation & Ordering code

### COMPLETE FILTER

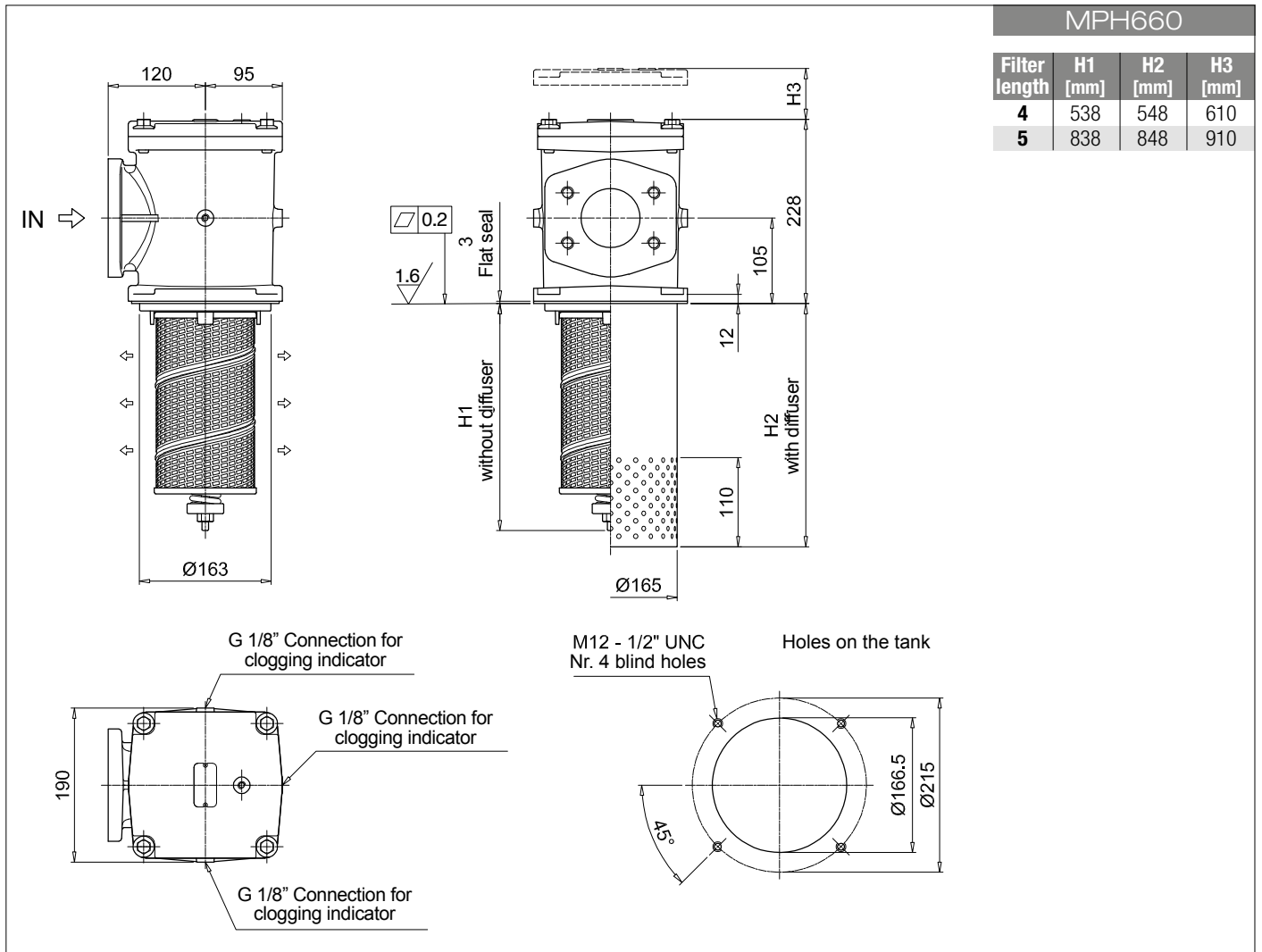
<b>Series and size</b>	Configuration example: MPH660										
<b>MPH660</b>	4	C	D	S	A	F2	A10	P01			
<b>Length</b>											
4   5											
<b>Bypass valve</b>											
S Without bypass	C 1.75 bar	E 2.5 bar									
<b>Diffuser and magnetic filter</b>											
D With diffuser, with magnetic filter											
F With diffuser, without magnetic filter											
O Without diffuser, with magnetic filter											
E Without diffuser, without magnetic filter											
<b>Air breather</b>											
S Without air breather											
<b>Seals and treatments</b>	Filtration rating										
	Axx	Mxx	Pxx								
A NBR	•	•	•								
V FPM	•	•	•								
W NBR head anodized	•	•		filter element compatible with fluids HFA-HFB-HFC							
Z FPM head anodized	•	•									
<b>Main Connections</b>											
F1 3" SAE 3000 psi/M											
F2 4" SAE 3000 psi/M											
<b>Filtration rating (filter media)</b>											
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										
	<b>Execution</b>										
	P01 MP Filtri standard										
	Pxx Customized										

### FILTER ELEMENT

<b>Element series and size</b>	Configuration example: MR630			
<b>MR630</b>	5	M25	A	P01
<b>Element length</b>				
4   5				
<b>Filtration rating (filter media)</b>				
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			
	<b>Seals</b>	<b>Execution</b>		
	A NBR	P01 MP Filtri standard		
	V FPM	Pxx Customized		

### ACCESSORIES

Indicators	page		page
BVA Axial pressure gauge	240	BEA Electrical pressure indicator	239
BVR Radial pressure gauge	240	BEM Electrical pressure indicator	239
BVP Visual pressure indicator with automatic reset	241	BLA Electrical / visual pressure indicator	239-240
BVQ Visual pressure indicator with manual reset	241		



## Designation & Ordering code

### COMPLETE FILTER

Series and size **MPH850** Configuration example: **MPH850** | **1** | **C** | **D** | **S** | **A** | **F1** | **A10** | **P01**

Length **1** | **2** | **3** | **4** |

Bypass valve **S** Without bypass | **C** 1.75 bar

Diffuser and magnetic filter  
**D** With diffuser, with magnetic filter  
**F** With diffuser, without magnetic filter  
**O** Without diffuser, with magnetic filter  
**E** Without diffuser, without magnetic filter

Air breather  
**S** Without air breather

Seals and treatments	Filtration rating		
	Axx	Mxx	Pxx
<b>A</b> NBR	•	•	•
<b>V</b> FPM	•	•	•
<b>W</b> NBR head anodized	•	•	
<b>Z</b> FPM head anodized	•	•	

filter element compatible with fluids HFA-HFB-HFC

Main Connections	Rear connections
<b>F1</b> UNI 2223 DN 100 PN 10/16	3" SAE 3000 psi/M
<b>F2</b> UNI 2223 DN 100 PN 10/16	3" SAE 3000 psi/UNC
<b>F5</b> Not machined	3" SAE 3000 psi/M
<b>F6</b> Not machined	3" SAE 3000 psi/UNC
<b>F7</b> 4" SAE 3000 psi/M	3" SAE 3000 psi/M
<b>F8</b> 4" SAE 3000 psi/UNC	3" SAE 3000 psi/UNC

Filtration rating (filter media)

<b>A03</b> Inorganic microfiber 3 µm	<b>M25</b> Wire mesh 25 µm
<b>A06</b> Inorganic microfiber 6 µm	<b>M60</b> Wire mesh 60 µm
<b>A10</b> Inorganic microfiber 10 µm	<b>M90</b> Wire mesh 90 µm
<b>A16</b> Inorganic microfiber 16 µm	<b>P10</b> Resin impregnated paper 10 µm
<b>A25</b> Inorganic microfiber 25 µm	<b>P25</b> Resin impregnated paper 25 µm

Execution  
**P01** MP Filtri standard  
**Pxx** Customized

### FILTER ELEMENT

Element series and size **MR850** Configuration example: **MR850** | **1** | **A10** | **A** | **P01**

Element length **1** | **2** | **3** | **4** |

Filtration rating (filter media)

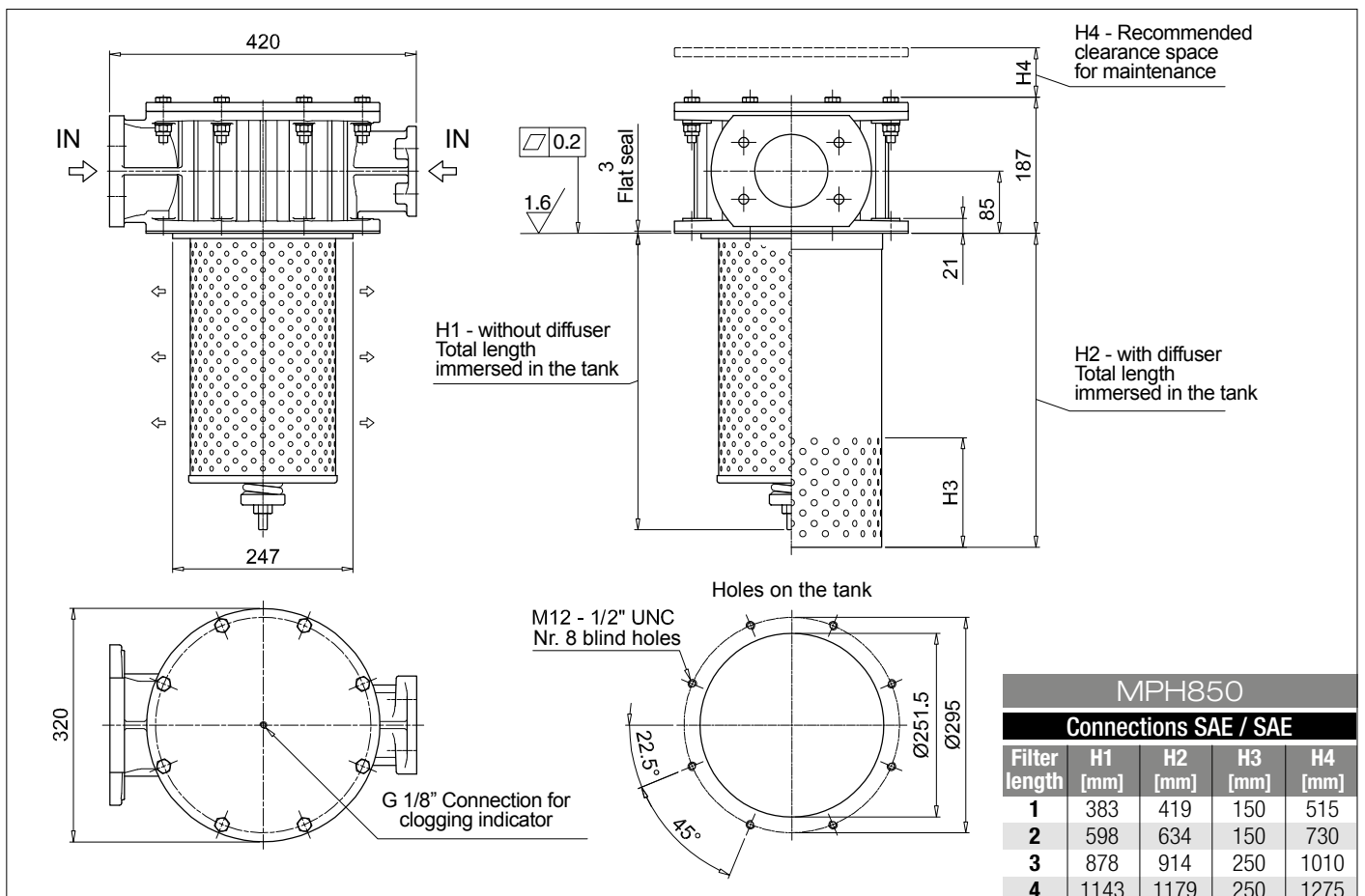
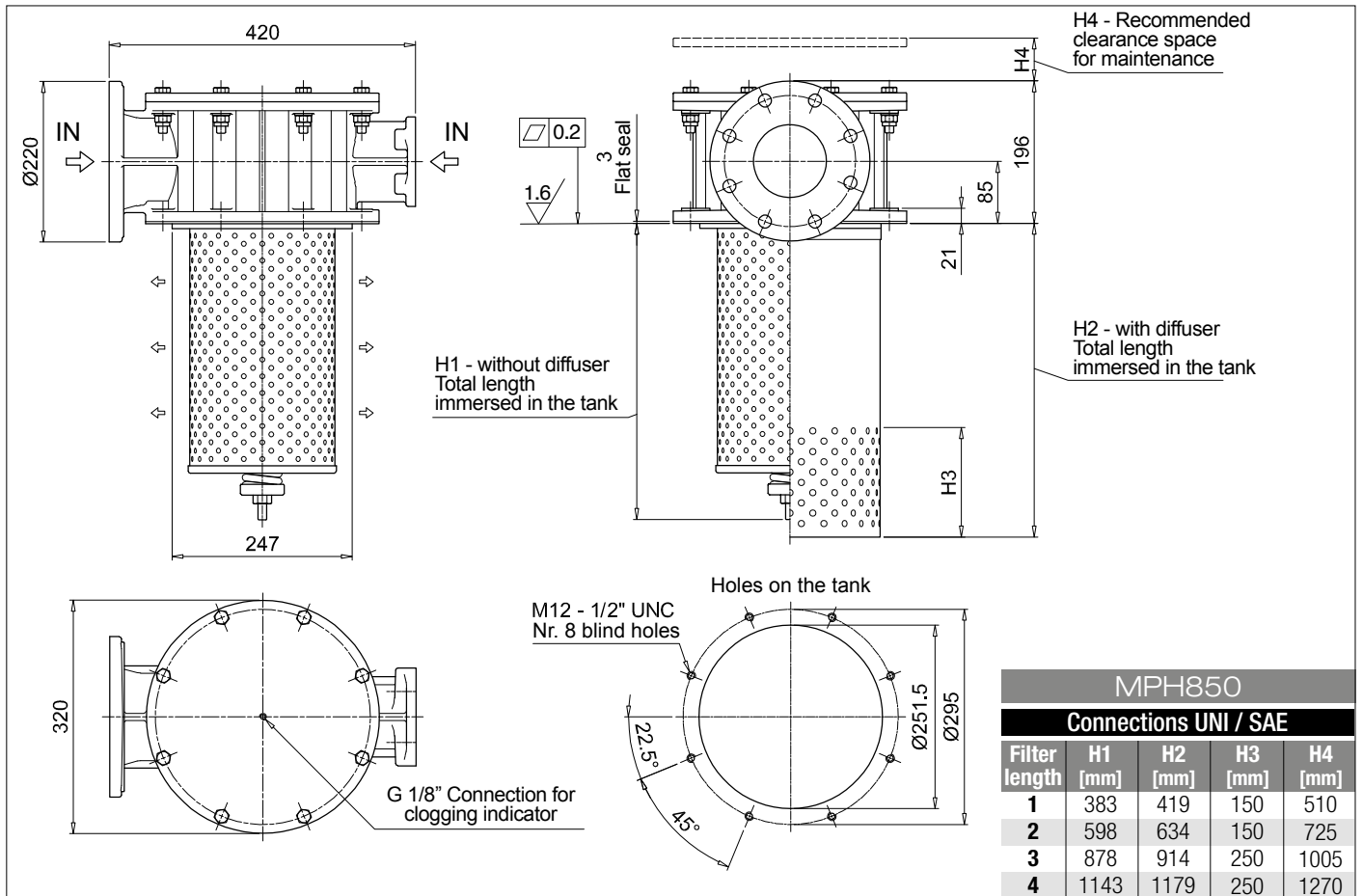
<b>A03</b> Inorganic microfiber 3 µm	<b>M25</b> Wire mesh 25 µm
<b>A06</b> Inorganic microfiber 6 µm	<b>M60</b> Wire mesh 60 µm
<b>A10</b> Inorganic microfiber 10 µm	<b>M90</b> Wire mesh 90 µm
<b>A16</b> Inorganic microfiber 16 µm	<b>P10</b> Resin impregnated paper 10 µm
<b>A25</b> Inorganic microfiber 25 µm	<b>P25</b> Resin impregnated paper 25 µm

Seals  
**A** NBR  
**V** FPM

Execution  
**P01** MP Filtri standard  
**Pxx** Customized

### ACCESSORIES

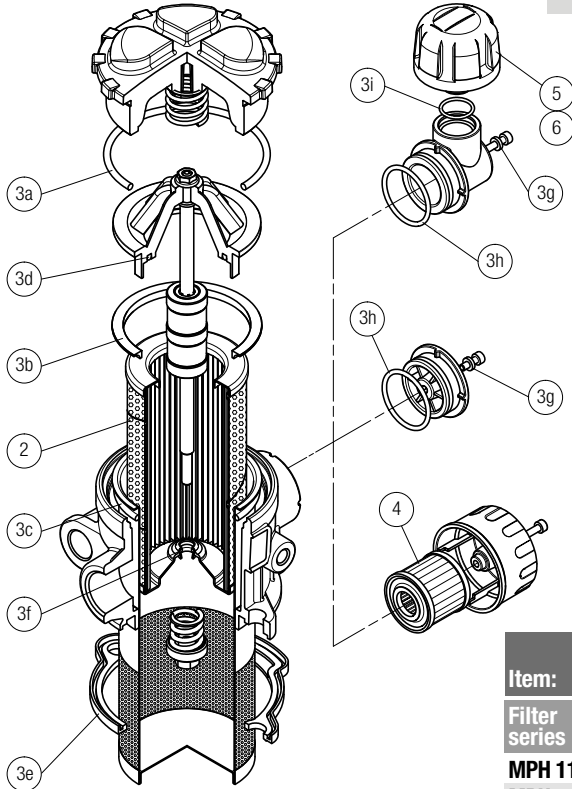
Indicators	page		page
<b>BVA</b> Axial pressure gauge	240	<b>BEA</b> Electrical pressure indicator	239
<b>BVR</b> Radial pressure gauge	240	<b>BEM</b> Electrical pressure indicator	239
<b>BVP</b> Visual pressure indicator with automatic reset	241	<b>BLA</b> Electrical / visual pressure indicator	239-240
<b>BVQ</b> Visual pressure indicator with manual reset	241		



# MPH SPARE PARTS

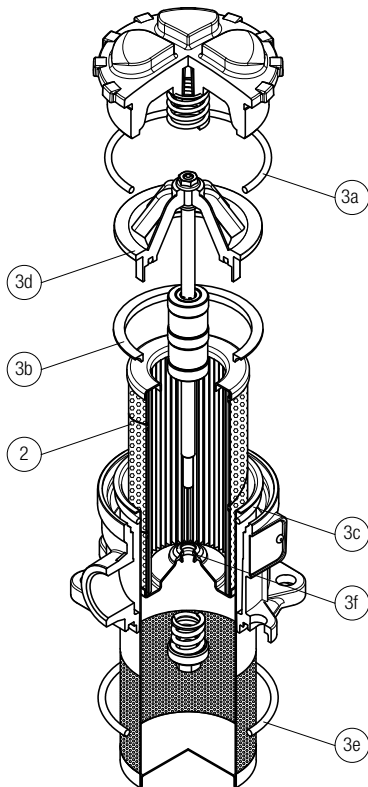
Order number for spare parts

## MPH 110 - 114



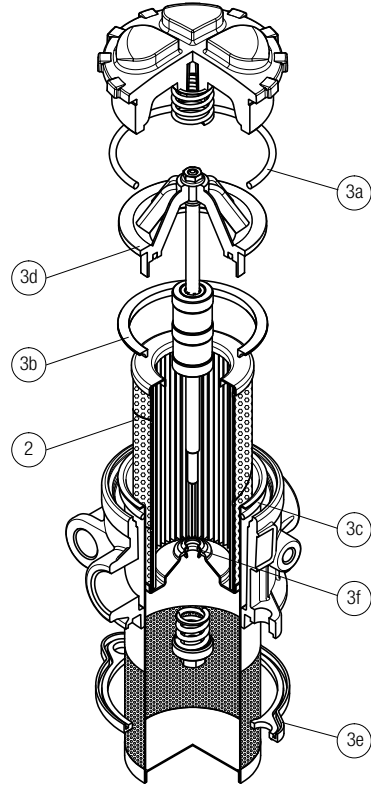
Item:	Q.ty: 1 pc.	Q.ty: 1 pc.		Q.ty: 1 pc.	Q.ty: 1 pc.		Q.ty: 1 pc.
Filter series	Filter element	Seal Kit code number		Air breather filter element - version:			
		NBR	FPM	C	D	P	
<b>MPH 110</b>	See order table	02050565	02050566	10 µm A3L03	10 µm SAP50G3L03A0P01	10 µm SAP50G3L03A1P01	
<b>MPH 114</b>	See order table	02050582	02050583				

## MPH 116



Item:	Q.ty: 1 pc.	Q.ty: 1 pc.	
Filter series	Filter element	Seal Kit code number	
		NBR	FPM
<b>MPH 116</b>	See order table	02050741	02050742

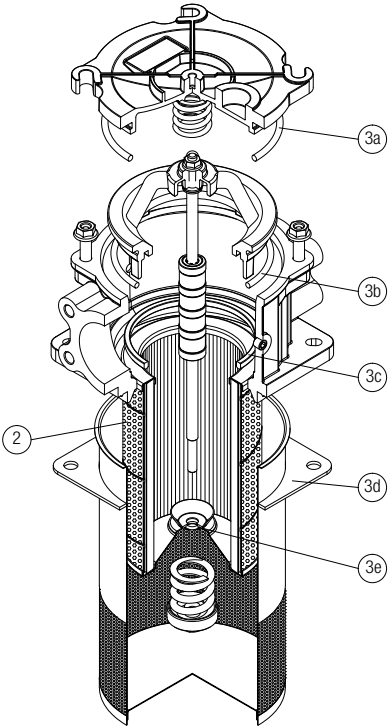
## MPH 120



Item:	Q.ty: 1 pc.	Q.ty: 1 pc.	
Filter series	Filter element	Seal Kit code number	
		NBR	FPM
<b>MPH 120</b>	See order table	02050567	02050568

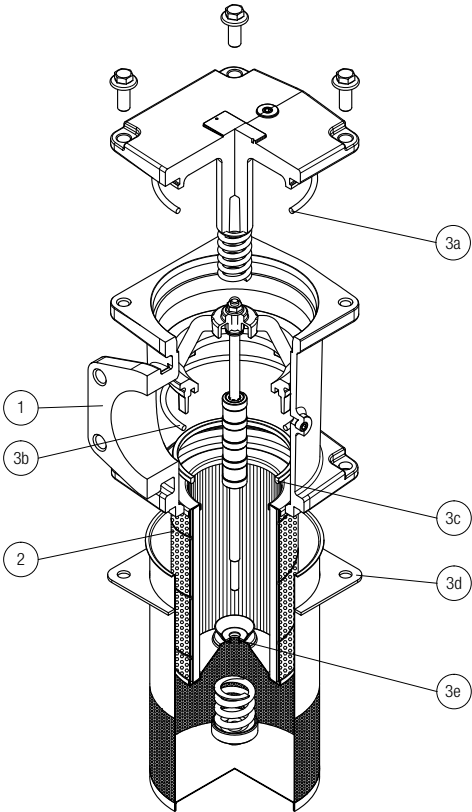


**MPH 250 - 630**

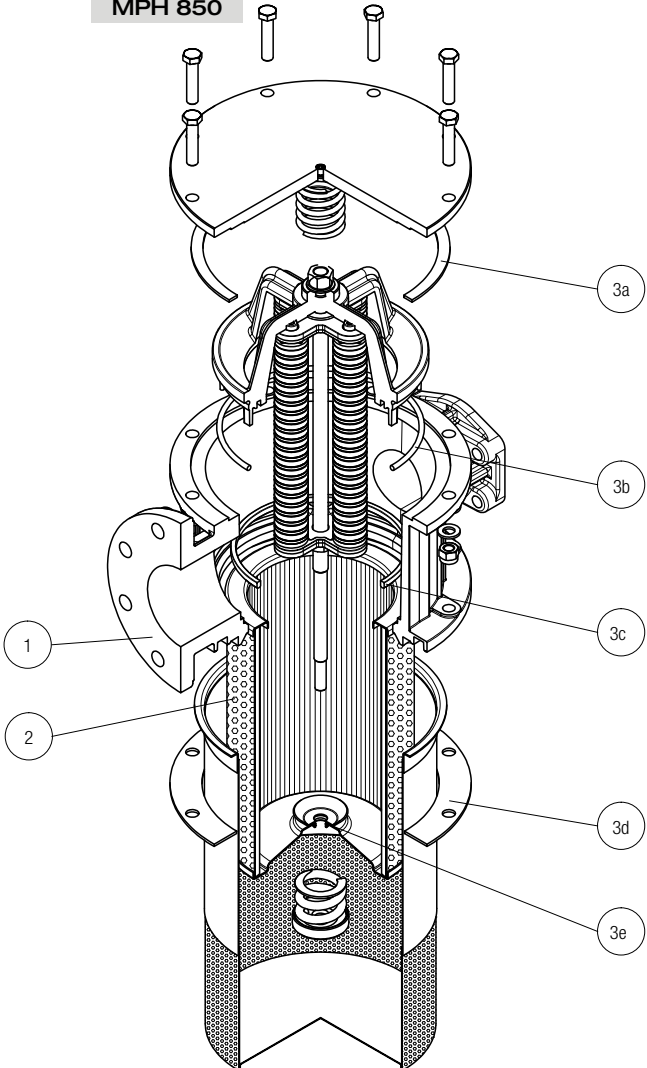


Item:	Q.ty: 1 pc.	Q.ty: 1 pc.	
Filter series	Filter element	Seal Kit code number	
MPH 250	MPH 630	NBR	FPM
	2	3 (3a ÷ 3e)	
	See order table	02050151	02050152
	See order table	02050153	02050154

**MPH 660**



**MPH 850**



Item:	Q.ty: 1 pc.	Q.ty: 1 pc.	
Filter series	Filter element	Seal Kit code number	
MPH 660	MPH 850	NBR	FPM
	2	3 (3a ÷ 3e)	
	See order table	02050153	02050154
	See order table	02050155	02050156