

# MPI



**Maximum pressure 10 bar**  
**Flow rates to 3000 l/min**

## Filter housing (Materials)

- Insert assembly: Nylon (only for: MPI 100)  
Aluminium (all the other)
- Diffuser: Zinc Plated steel
- Valve: Steel

## Pressure

- Working pressure: 10 bar (1 MPa)

## Temperature

- From -25 °C to +110 °C

## Bypass valve

- Opening pressure 1,75 bar ±10%
- Opening pressure 2,5 bar ±10% (excluded for MPI 850)

## Δp Elements type

- Series MR elements: 10 bar
- Oil flow from inside to outside.

## Seals

- Standard NBR series A
- Optional FPM series V

## MPI FILTERS ARE PROVIDED FOR VERTICAL MOUNTING

## Weights (kg)

Length	1	2	3	4
• MPI 100	0,90	1,00	1,20	1,50
• MPI 250	2,20	2,50	2,90	4,30
• MPI 630	3,40	3,90	4,30	5,40
• MPI 850	15,2	18,2	21,2	25,2

## Recommended maximum flow rate

- Pressure drop of filter assembly equal to Δp 0,5 bar.
- Oil kinematic viscosity 30 mm<sup>2</sup>/s (cSt).
- Density 0,86 kg/dm<sup>3</sup>.

## Volumes (dm<sup>3</sup>)

Length	1	2	3	4
• MPI 100	0,90	0,90	1,20	1,60
• MPI 250	3,50	3,50	4,50	7,00
• MPI 630	5,80	7,40	9,50	11,4
• MPI 850	8,80	12,2	16,7	20,8

## Compatibility (to ISO 2943)

- Housings/Diffuser compatible with:  
Mineral oils, synthetic fluids.  
Aqueous emulsions, water and glycol (series W required).
- The filter elements are compatible with:  
Mineral oils, synthetic fluids.  
Aqueous emulsions, water and glycol (series W required).
- NBR seals series A, compatible with:  
Mineral oils, synthetic fluids.  
Aqueous emulsions, water and glycol.
- FPM seals V series, compatible with:  
Synthetic fluids type HS-HFDR-HFDS-HFDU

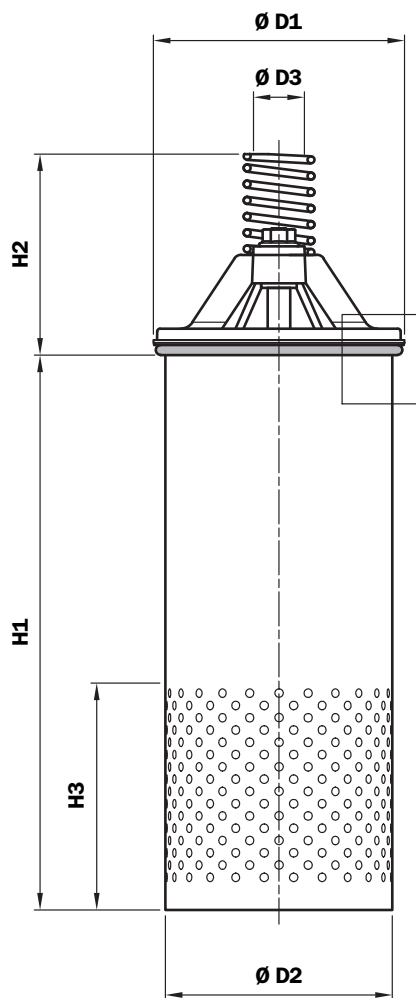
## Filtration

	Length	A03	A06	A10	A16	A25	P10	P25	M25 - M60 - M90
<b>MPI 100</b>	1	26	29	72	80	106	160	185	280
	2	42	45	110	115	160	164	187	300
	3	63	72	130	155	175	215	245	300
	4	89	98	180	198	215	265	300	300
	5	115	125	200	218	240	280	300	300
<b>MPI 250</b>	1	92	100	205	245	300	330	370	700
	2	120	145	310	410	420	462	517	700
	3	185	215	415	402	500	550	616	700
	4	255	295	550	615	750	825	700	700
<b>MPI 630</b>	1	160	198	360	410	510	561	628	1200
	2	235	250	555	600	1025	1128	1200	1200
	3	325	370	730	770	1200	1200	1200	1200
	4	370	400	870	990	1200	1200	1200	1200
	5	610	690	1180	1200	1200	1200	1200	1200
<b>MPI 850</b>	1	770	1030	1240	1550	2230	2600	2650	3000
	2	1170	1520	1680	1740	2440	2684	2900	3000
	3	1480	1910	1990	2010	3000	3000	3000	3000
	4	1660	2080	2300	2360	3000	3000	3000	3000

Flow rate l/min

# Dimensions

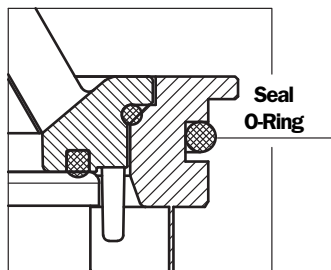
## MPI With diffuser



Version MPI 100



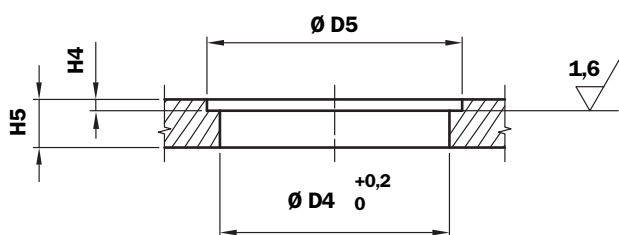
Version MPI 250 - 630 - 850



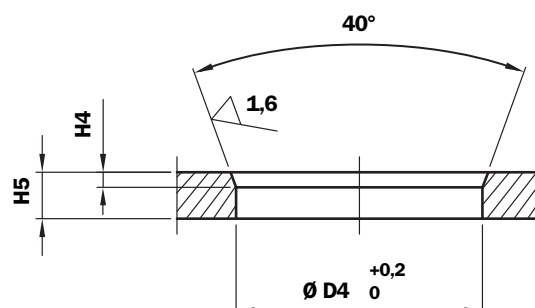
Type	H1 mm	H2 mm	H3 mm	H4 mm	H5 mm
MPI 100-1	198				
MPI 100-2	198				
MPI 100-3	248	62	80	4	12
MPI 100-4	348				
MPI 100-5	448				
MPI 250-1	266				
MPI 250-2	266	81	90	4	15
MPI 250-3	336				
MPI 250-4	524				
MPI 630-1	298				
MPI 630-2	378				
MPI 630-3	478	103	110	5	15
MPI 630-4	568				
MPI 630-5	868				
MPI 850-1	427		150		
MPI 850-2	642	145	150	5	17
MPI 850-3	922		250		
MPI 850-4	1187		250		

Type	Ø D1	Ø D2	Ø D3	Ø D4	Ø D5
MPI 100-1					
MPI 100-2					
MPI 100-3	88,5	80	18	81	90
MPI 100-4					
MPI 100-5					
MPI 250-1					
MPI 250-2	155	132	25	145	-
MPI 250-3					
MPI 250-4					
MPI 630-1					
MPI 630-2					
MPI 630-3	185	165	25	178	-
MPI 630-4					
MPI 630-5					
MPI 850-1					
MPI 850-2	260	250	40	250,5	-
MPI 850-3					
MPI 850-4					

Filter seat  
MPI 100

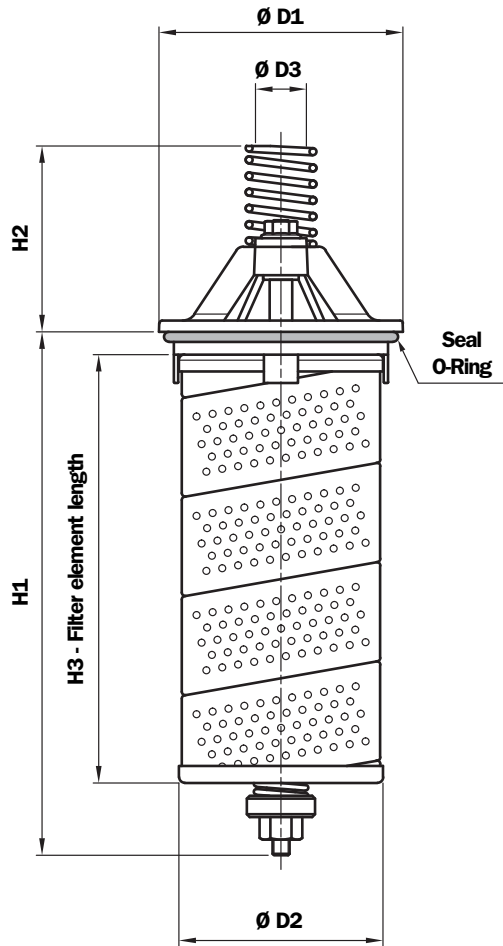


Filter seat  
MPI 250 - 630 - 850

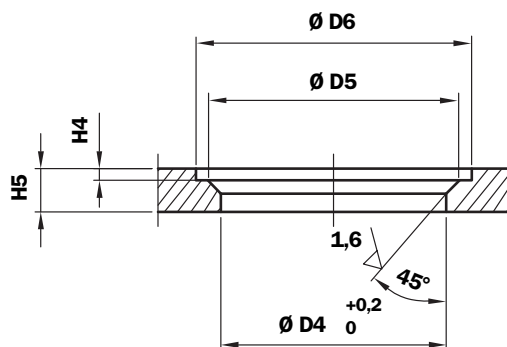


# MPI

## Without diffuser



Filter seat

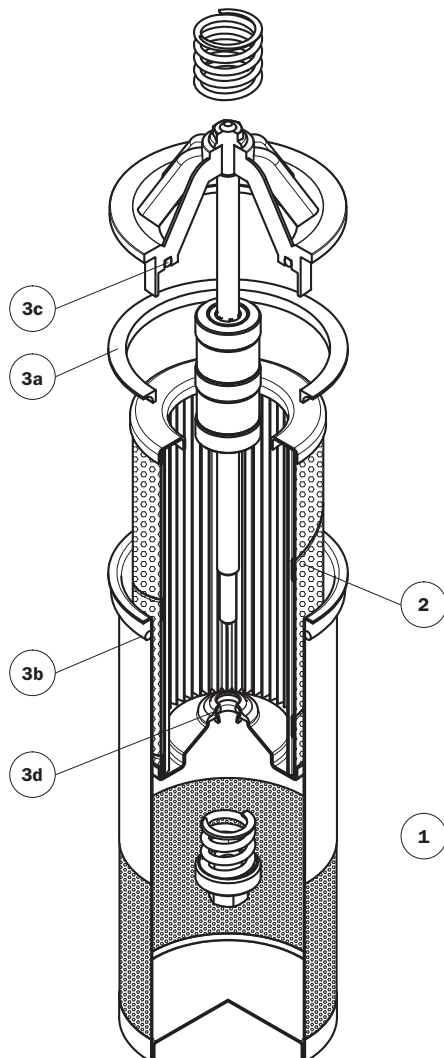


Type	H1 mm	H2 mm	H3 mm	H4 mm	H5 mm
MPI 100-1	141		110		
MPI 100-2	185		150		
MPI 100-3	235	57	200	4	12
MPI 100-4	335		300		
MPI 100-5	435		400		
MPI 250-1	193		140		
MPI 250-2	243	82	190	5	12
MPI 250-3	313		260		
MPI 250-4	516		463		
MPI 630-1	275		210		
MPI 630-2	355		290		
MPI 630-3	455	105	390	7	15
MPI 630-4	540		478		
MPI 630-5	841		779		
MPI 850-1	405		327		
MPI 850-2	620	145	542	8	15
MPI 850-3	900		819		
MPI 850-4	1165		1090		

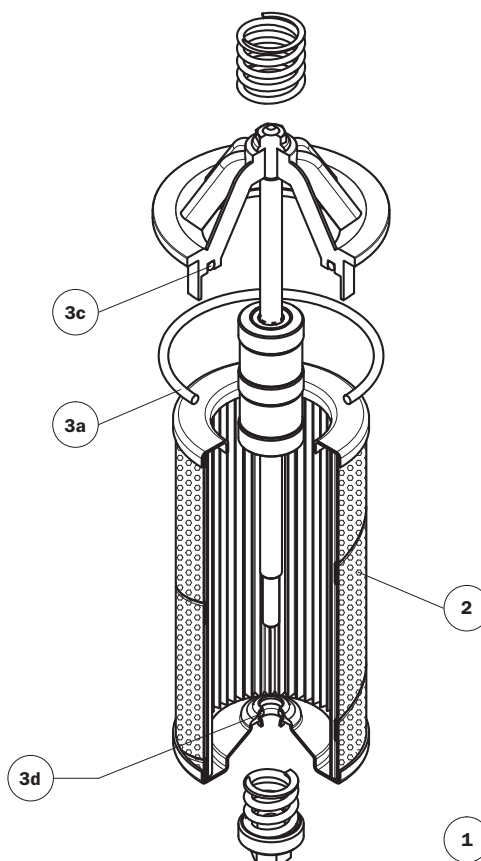
Type	Ø D1	Ø D2	Ø D3	Ø D4	Ø D5	Ø D6
MPI 100-1						
MPI 100-2						
MPI 100-3	87	72	18	76	86	88
MPI 100-4						
MPI 100-5						
MPI 250-1						
MPI 250-2	125	106	25	117	123,5	126
MPI 250-3						
MPI 250-4						
MPI 630-1						
MPI 630-2						
MPI 630-3	150	126	25	139	149	151
MPI 630-4						
MPI 630-5						
MPI 850-1						
MPI 850-2	230	203	40	217	227	231
MPI 850-3						
MPI 850-4						

# Spare parts

## With diffuser

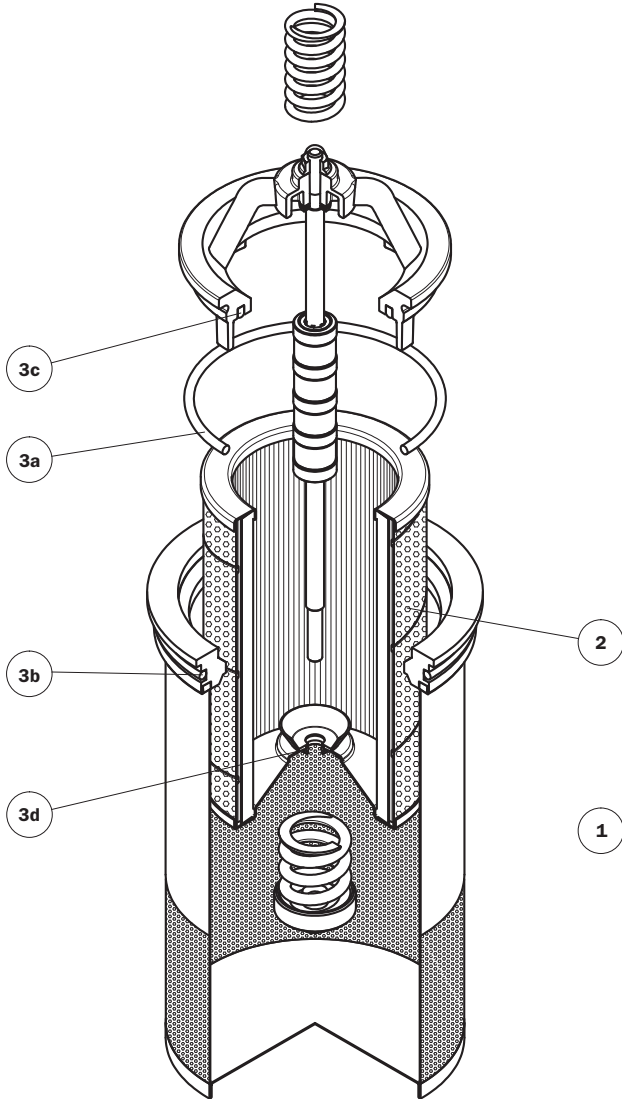


## Without diffuser

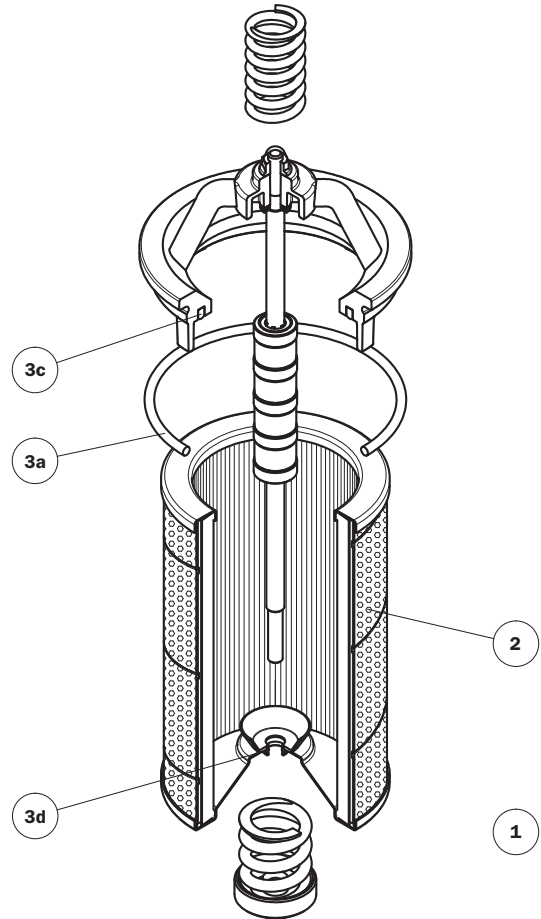


Item	Description	Q.ty	FILTER Series MPI 100	
1	Filter assembly	1	See order table	
2	Filter element	1	See order table	
3	Seal Kit	1	NBR 02050145	FPM 02050146
3a	Insert assembly external seal version with diffuser	1	01026554	01026560
	Insert assembly external seal version without diffuser	1	O-R 4275 Ø 69,44 x 3,53	
3b	Diffuser seal	1	O-R 4312 Ø 78,97 x 3,53	
3c	Insert assembly	1	02019052	02019053
3d	Filter element seal	1	O-R Metric Ø 7,5 x 3	

## With diffuser



## Without diffuser

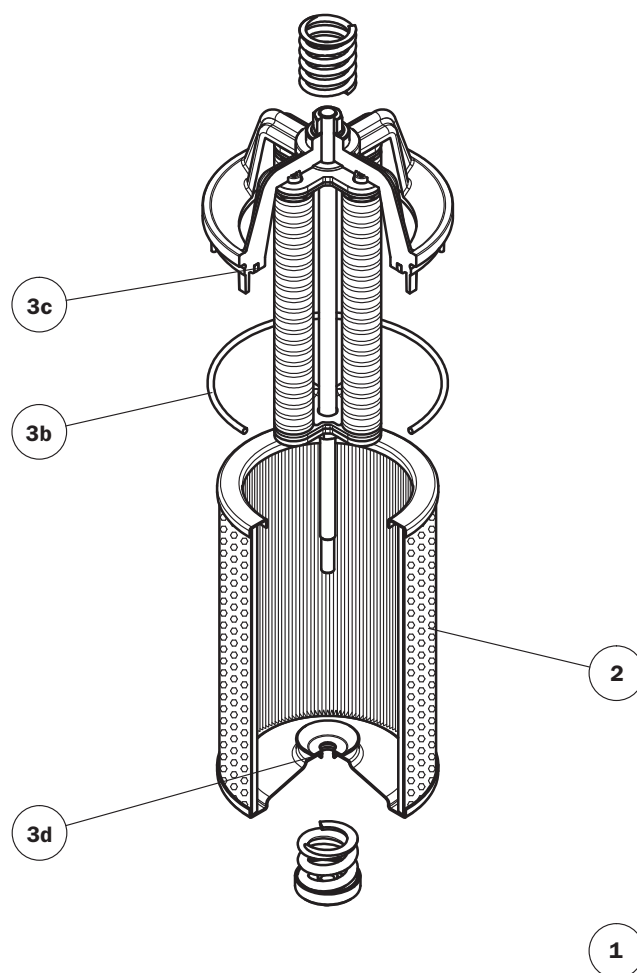
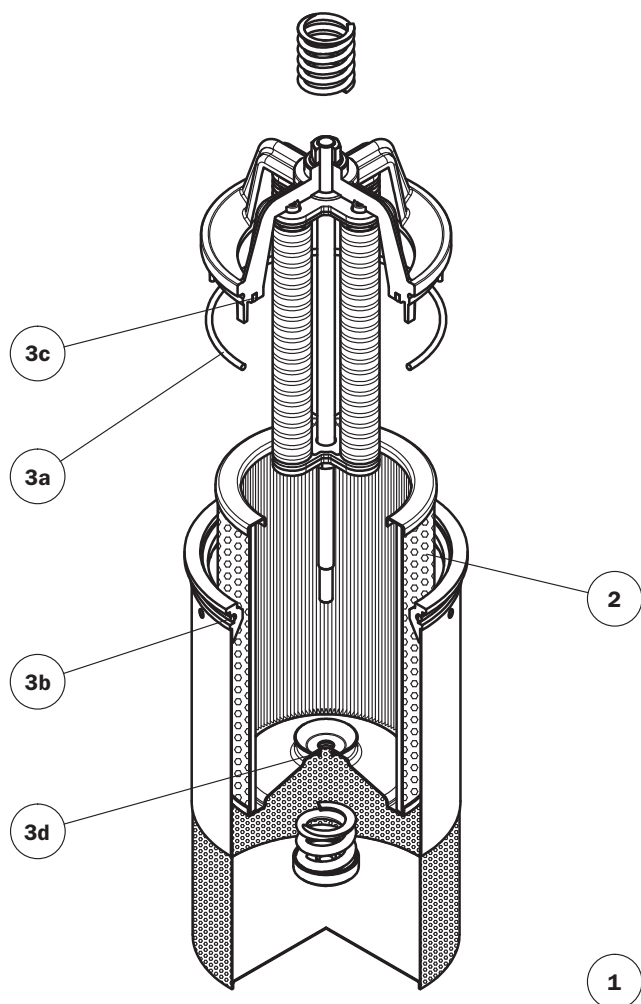


Item	Description	Q.ty	FILTER Series MPI 250		FILTER Series MPI 630	
			NBR	FPM	NBR	FPM
1	Filter assembly	1	See order table		See order table	
2	Filter element	1	See order table		See order table	
3	Seal Kit	1	02050147	02050148	02050112	02050113
3a	Insert assembly external seal	1	O-R 4437 Ø 110,70 x 3,53		O-R 210 Ø 133,40 x 5,34	
3b	Diffuser seal	1	O-R 210 Ø 133,40 x 5,34		O-R 6645 Ø 164,47 x 5,33	
3c	Insert assembly internal seal	1	01026217	01026220	01026228	01026229
3d	Filter element seal	1	O-R 112 Ø 9,92 x 2,62		O-R 112 Ø 9,92 x 2,62	

# Spare parts

**With diffuser**

**Without diffuser**



Item	Description	Q.ty	FILTER Series MPI 850	
1	Filter assembly	1	See order table	
2	Filter element	1	See order table	
3	Seal Kit	1	NBR 02050114	FPM 02050115
3a	Insert assembly external seal	1	O-R Metric Ø 209,30 x 5,7	
3b	Diffuser seal	1	O-R 8925 Ø 234,30 x 6,99	
3c	Insert assembly internal seal	1	01026248	01026249
3d	Filter element seal	1	O-R 117 Ø 13,10 x 2,62	

# Ordering information MPI

## Filter assembly

### MPI

Example: MPI

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>100</b>	<b>1</b>	<b>C</b>	<b>D</b>	<b>A</b>	<b>A25</b>	<b>P01</b>

## Filter element

### MR

Example: MR

<b>1</b>	<b>2</b>	<b>6</b>	<b>5</b>	<b>7</b>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>100</b>	<b>1</b>	<b>A25</b>	<b>A</b>	<b>P01</b>

### 1 - Style

#### Filter

<b>100</b>
<b>250</b>
<b>630</b>
<b>850</b>

#### Filter element

<b>100</b>
<b>250</b>
<b>630</b>
<b>850</b>

### 2 - Filter length

<b>100</b>
<b>250</b>
<b>630</b>
<b>850</b>

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	

### 3 - By-pass valve

<b>S</b>	Without bypass
<b>C</b>	1,75 bar
<b>E</b>	2,5 bar (not available for filter MPI 850)

### 4 - Execution

<b>O</b>	Without diffuser and with magnetic column
<b>D</b>	With diffuser and with magnetic column
<b>E</b>	Without diffuser and without magnetic column
<b>F</b>	With diffuser and without magnetic column

### 5 - Filter seals & Treatment

<b>A</b>	NBR
<b>V</b>	FPM
<b>W</b>	NBR, Insert assembly anodized. Filter element compatible with fluid HFA, HFB, HFC (only for filter element type Axx and Mxx)
<b>Z</b>	FPM, Insert assembly anodized. Filter element compatible with fluid HFA, HFB, HFC (only for filter element type Axx and Mxx)

### 6 - Filter element

<b>A03</b>	Inorganic microfibre 3 $\mu$	} Absolute filtration $\beta_x(c) \geq 1000$
<b>A06</b>	Inorganic microfibre 6 $\mu$	
<b>A10</b>	Inorganic microfibre 10 $\mu$	
<b>A16</b>	Inorganic microfibre 16 $\mu$	
<b>A25</b>	Inorganic microfibre 25 $\mu$	
<b>M25</b>	Wire mesh	} Nominal Filtration
<b>M60</b>	Wire mesh	
<b>M90</b>	Wire mesh	
<b>P10</b>	Resin impregnated paper	} Nominal Filtration
<b>P25</b>	Resin impregnated paper	

### 7 - Option

<b>P01</b>	MP Filtri standard
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