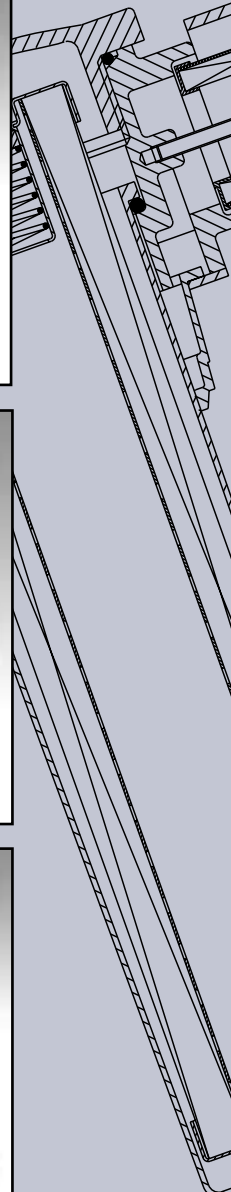
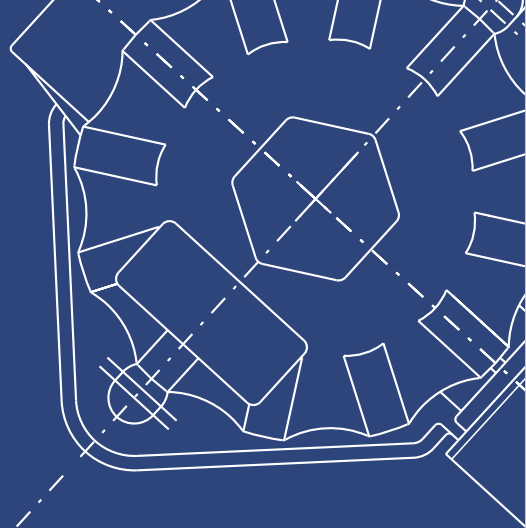


Return line filters

Return line filters



Uni-Cardan®

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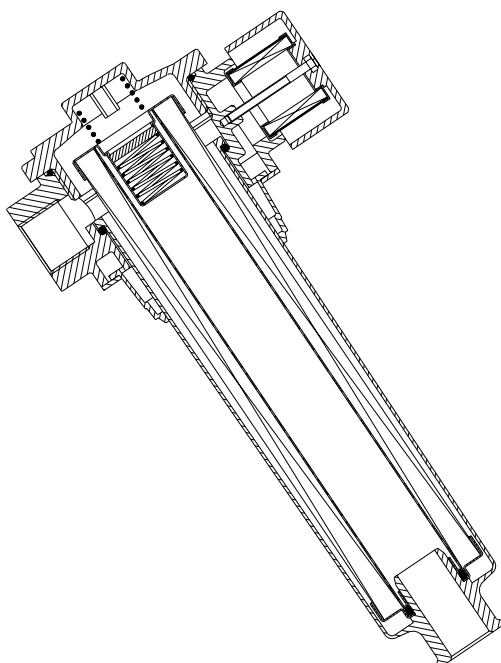
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*Uni-Cardan Italia S.p.A. reserves the right to make technical changes to the products without notice.
The products shown in this catalogue have been developed by Uni-Cardan Italia S.p.A., a company owned by GKN Automotive.*

Return line filters Series UCMP

Description

The filters series UCMP are suitable for application on the return line of hydraulic circuits with rated flow up to 150 l/min. They are designed to be installed on the tank top, semi immersed in the oil tank.

All series are equipped with By-pass valve and an air breather available with filtration rating of 10 or 40 microns. It is designed into the head of the filter for reservoir ventilation.

A visual or electrical indicator is available as an option. The filters series UCMP are specifically designed for use on small power units for industrial or mobile applications.

Technical data complete filter

- Filter head in aluminium alloy
- Cap and bowl in fiber glass reinforced Nylon
- Max working pressure = 10 bar
- Differential collapse pressure filter elements = 5 bar
- By-pass valve set at 1,5 bar \pm 10%
- Working temperature from -20° C up to +95° C
- Connections: BSP – NPT – SAE threaded ports from 1/2" up to 1"

Technical data filter elements

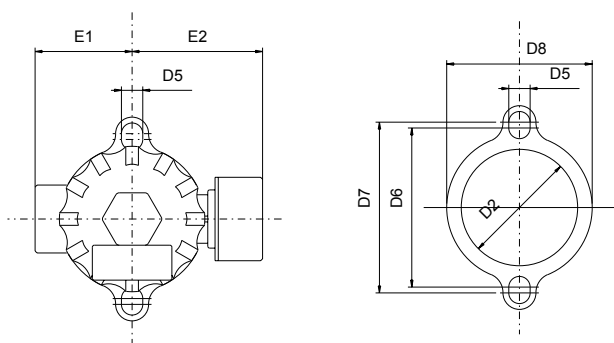
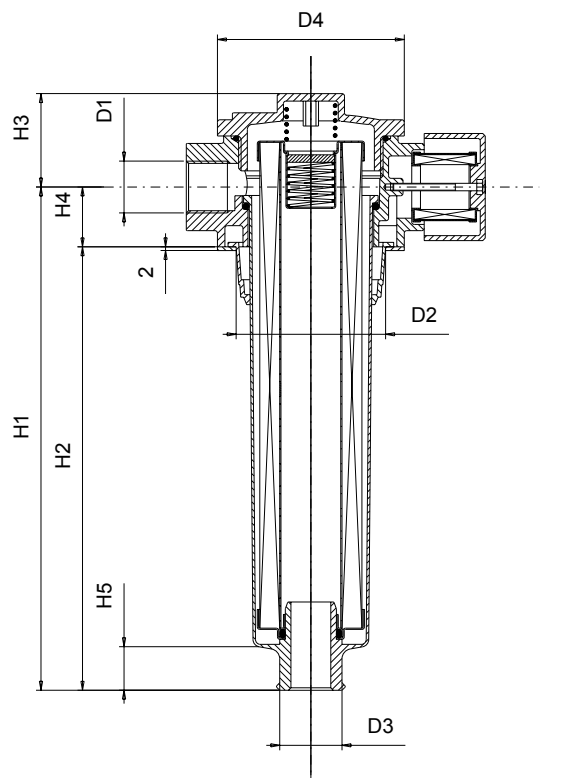
- A/B: paper treated with resin, filtration rating 10 and 25 microns, $\beta_x \geq 2$
- N/G/H: inorganic fiber, filtration rating 6, 10 and 25 microns, $\beta_x \geq 200$
- M/L: stainless steel wire mesh (AISI 304), filtration rating 25 and 60 microns
- C/E: brass wire mesh, filtration rating 90 and 125 microns
- End cap in galvanized steel
- Support tube in galvanized steel
- Support mesh in galvanized steel with epoxy coating

Filter elements are manufactured in accordance with the following ISO standards:

- ISO 4572
Filtration performance valuated with Multi-pass test
- ISO 2941
Verification of collapse/burst resistance
- ISO 2942
Verification of fabrication integrity and determination of the first bubble point
- ISO 2943
Compatibility of materials with fluids (type HH, HM, HR, HV, HG according with ISO 6743/4)
- ISO 3723
Method for the end load test
- ISO 3724
Verification of flow fatigue characteristics
- ISO 3968
Evaluation of pressure drop versus flow characteristics



Filters series UCMP 20



Size	
Type	UCMP 20
D1	1/2" - 3/4"
D2	min. 60 - max. 63
D3	28
D4	75
D5	11
D6	82
D7	88
D8	77
H1	202
H2	178
H3	41
H4	24
H5	16
E1	50
E2	70

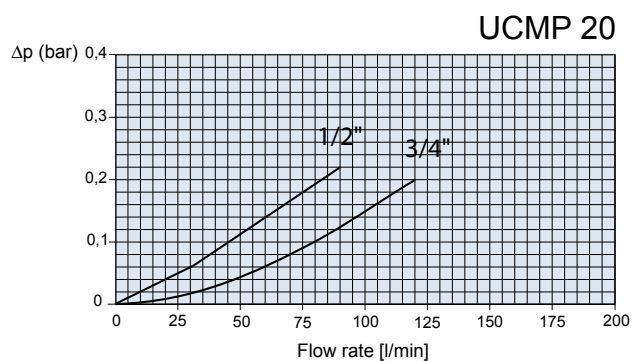
Pressure drop (in accordance with ISO 3968)

The assembly pressure drop is obtained by adding the pressure drop of the filter housing with the pressure drop of the filter element.

Filter Housing pressure drop

Housing pressure drop

All the curves have been obtained with mineral oil with a density of 860 Kg/m³. The pressure drop is proportional to the variation of density.

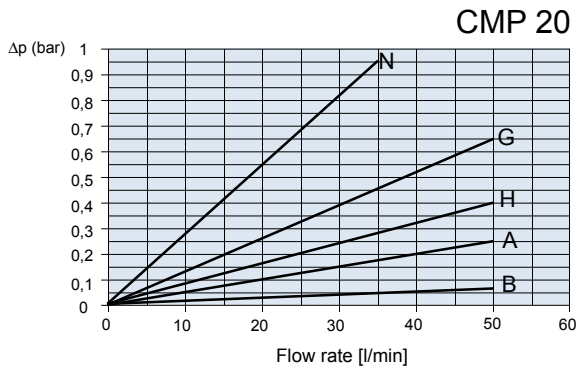


Filtration area (cm ²)	
Type	UCMP 20
CMP A	870
CMP B	870
CMP C	680
CMP E	680
CMP N	710
CMP G	710
CMP H	710
CMP M	680
CMP L	680

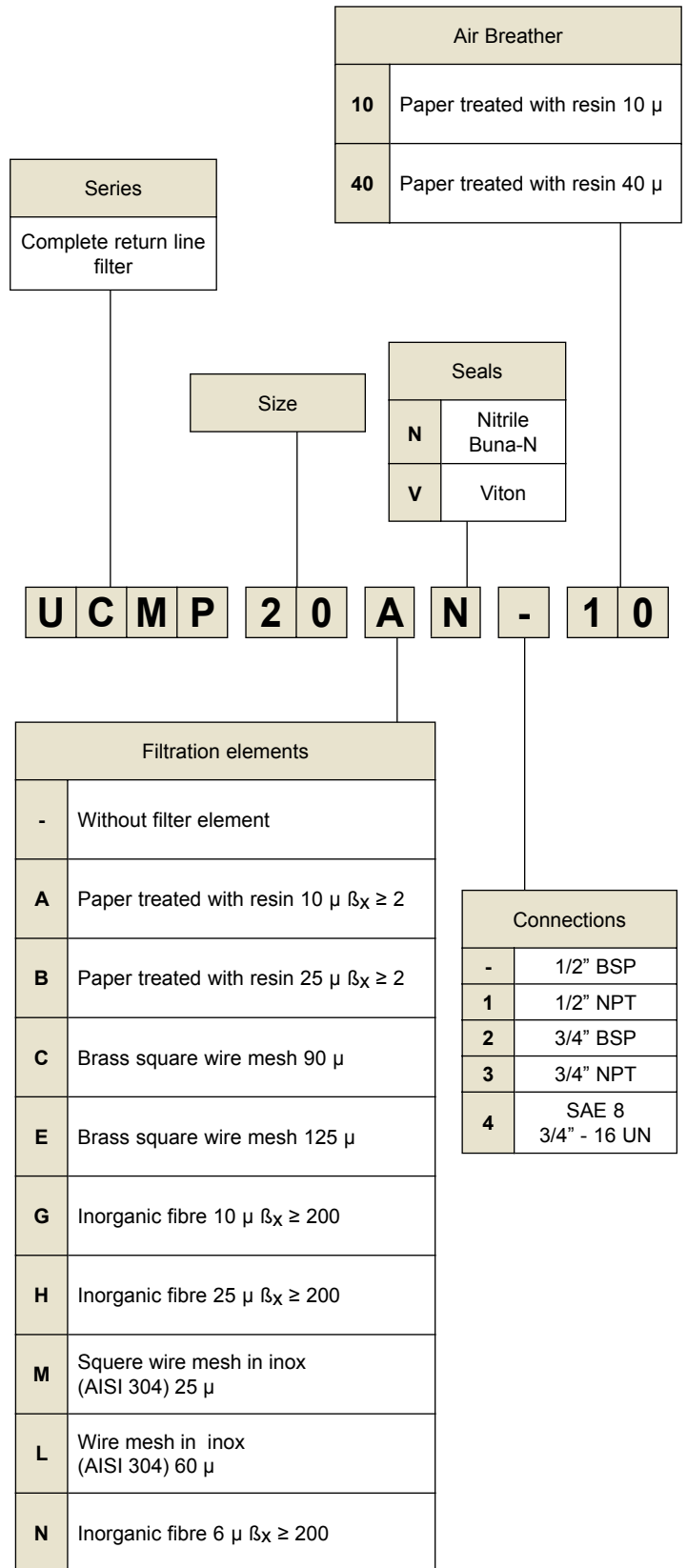
Filter elements pressure drop

Pressure drops in the filtering elements

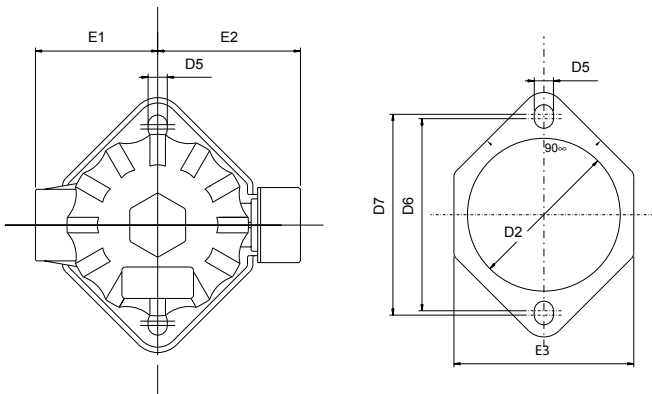
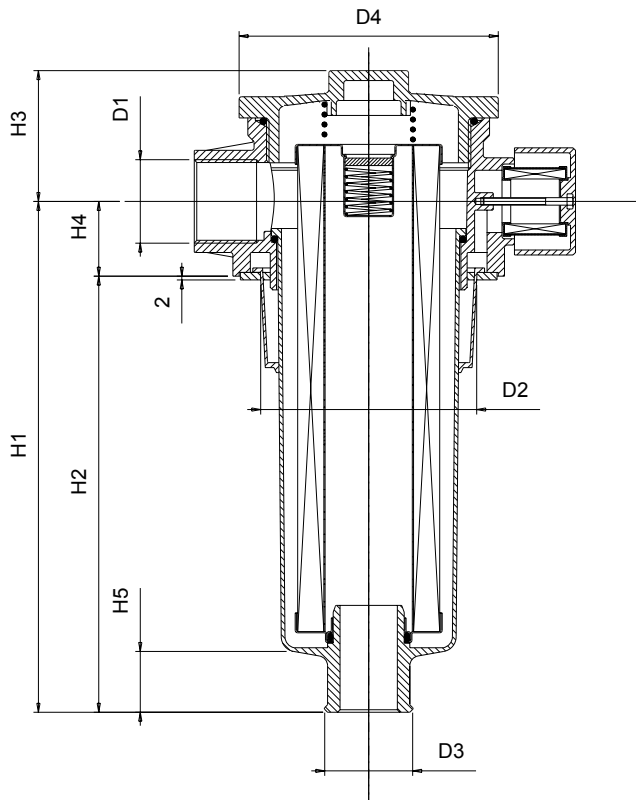
All the curves have been obtained using mineral oil with kinematic viscosity of 30 cSt. The pressure drop is proportional to the variation of kinematic viscosity.



How to order the complete filter



Filters series UCMP 101-102-103



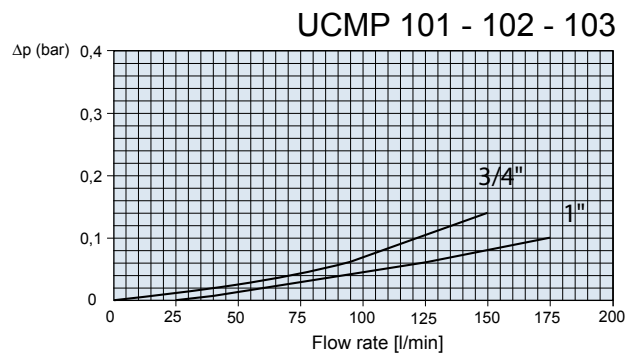
Pressure drop (in accordance with ISO 3968)

The assembly pressure drop is obtained by adding the pressure drop of the filter housing with the pressure drop of the filter element.

Filter Housing pressure drop

Housing pressure drop

All the curves have been obtained with mineral oil with a density of 860 Kg/m³. The pressure drop is proportional to the variation of density.



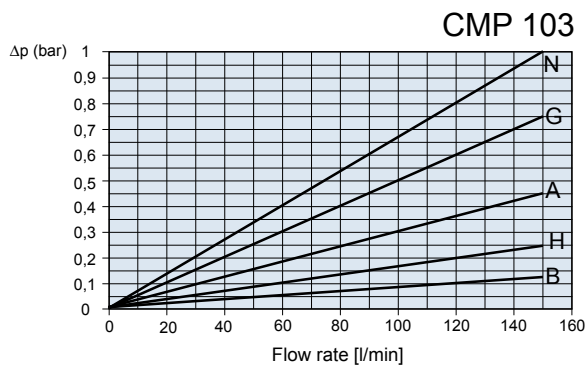
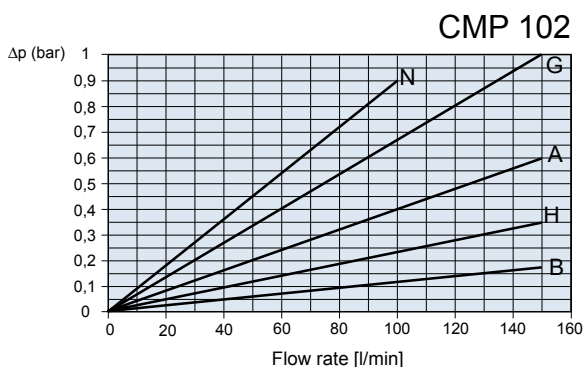
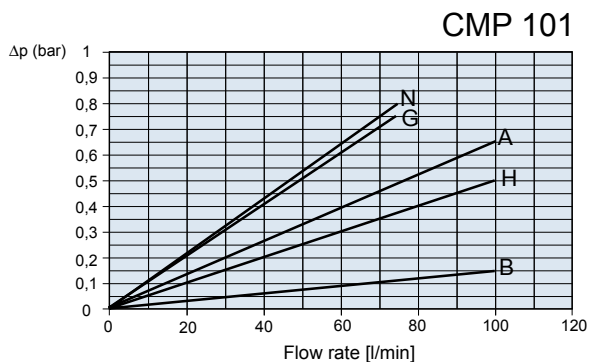
Size			
Type	UCMP 101	UCMP 102	UCMP 103
D1	3/4" - 1"		
D2	min. 87 - max. 91		
D3	36		
D4	104		
D5	11		
D6	110		
D7	115		
H1	140	205	305
H2	110	175	275
H3	60		
H4	30		
H5	22		
E1	70		
E2	83		
E3	103		

Filtration area (cm ²)			
Type	UCMP 101	UCMP 102	UCMP 103
CMP A	940	1500	1850
CMP B	940	1500	1850
CMP C	670	1020	1590
CMP E	670	1020	1590
CMP N	670	1020	1670
CMP G	670	1020	1670
CMP H	670	1020	1670
CMP M	670	1020	1590
CMP L	670	1020	1590

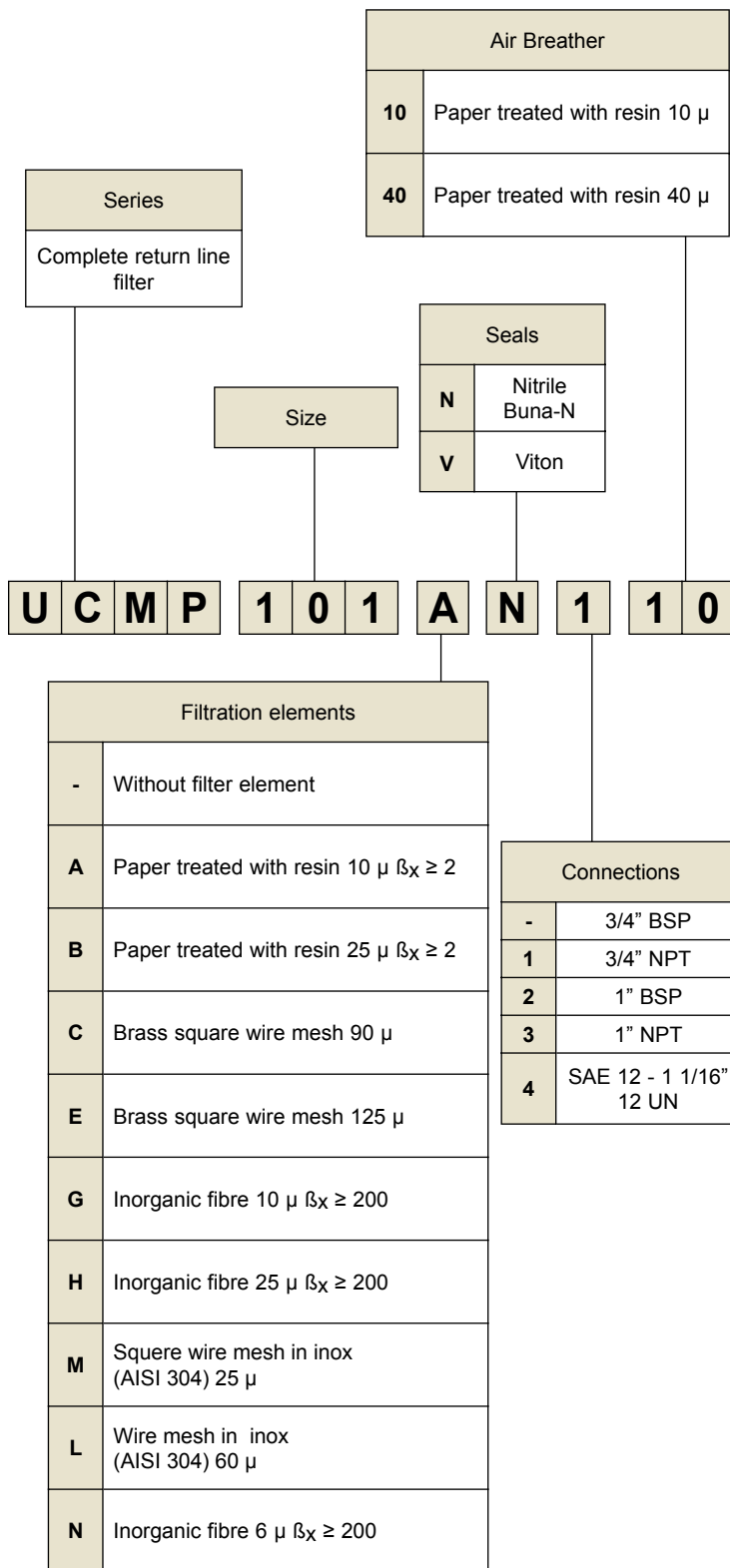
Filter elements pressure drop

Pressure drops in the filtering elements

All the curves have been obtained using mineral oil with kinematic viscosity of 30 cSt. The pressure drop is proportional to the variation of kinematic viscosity.



How to order the complete filter

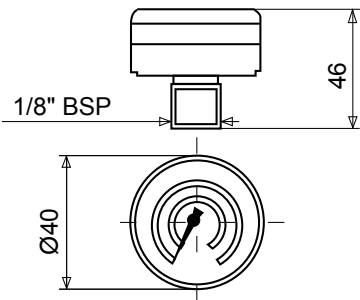


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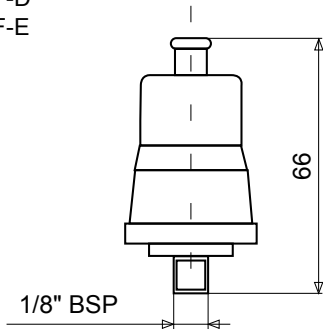
Accessories

Clogging indicators

UCF-B



UCF-D
UCF-E



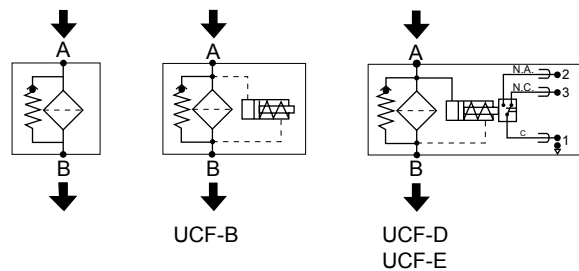
How to order

U C F B

UCF B	Pressure gauge with scale from 0 to 12 bar
UCF D	Pressure switch with N.O. contacts set at 1,3 bar \pm 10%
UCF E	Pressure switch with N.C. contacts set at 1,3 bar \pm 10%

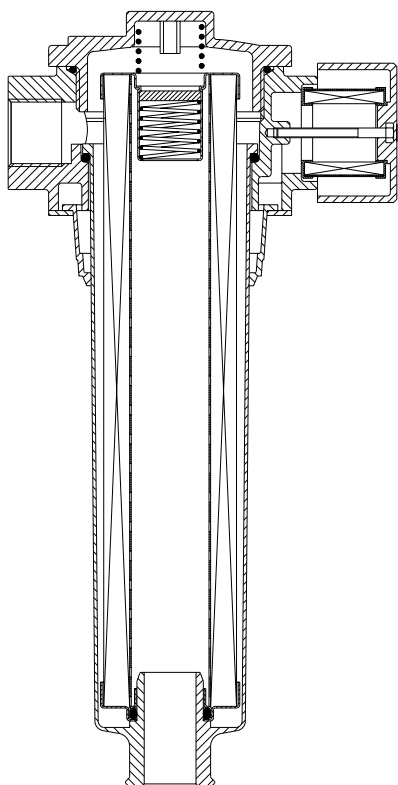
Symbol

With By-pass

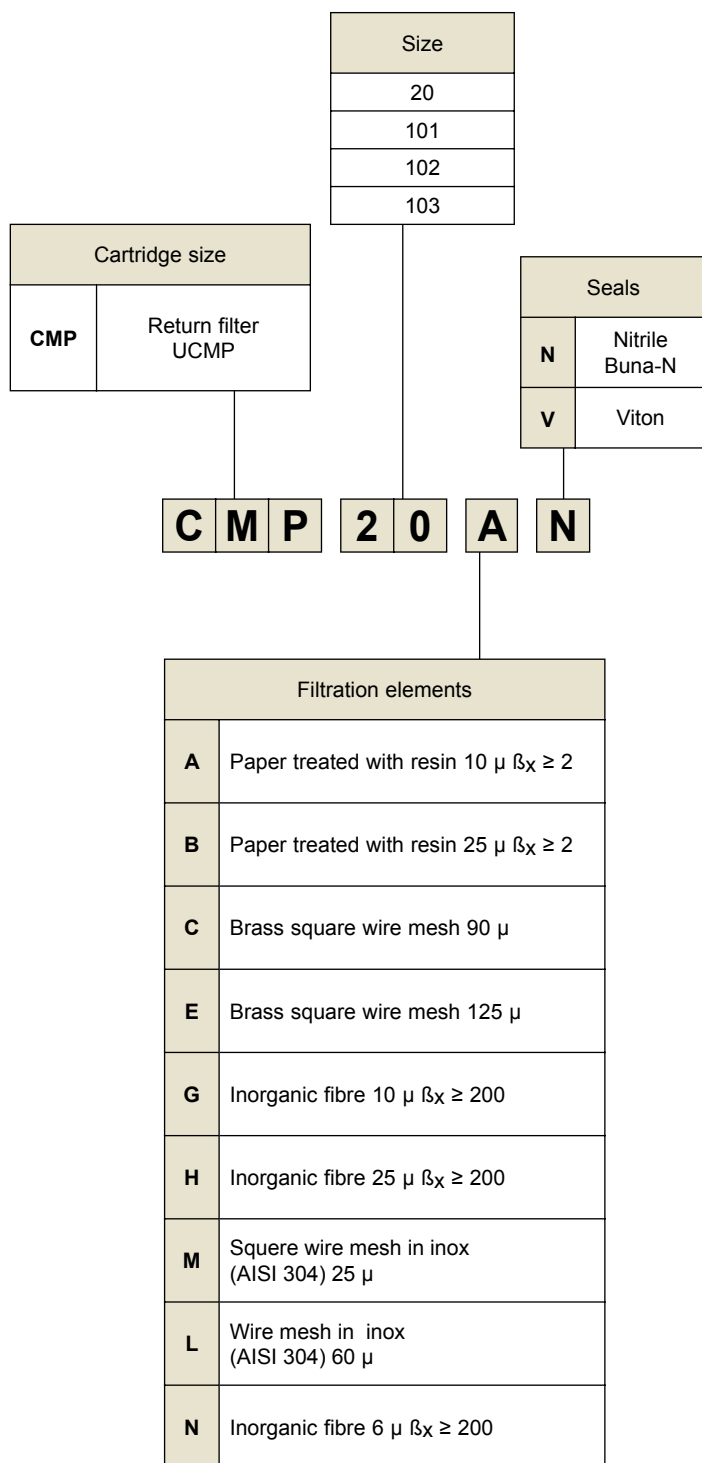


Spare parts

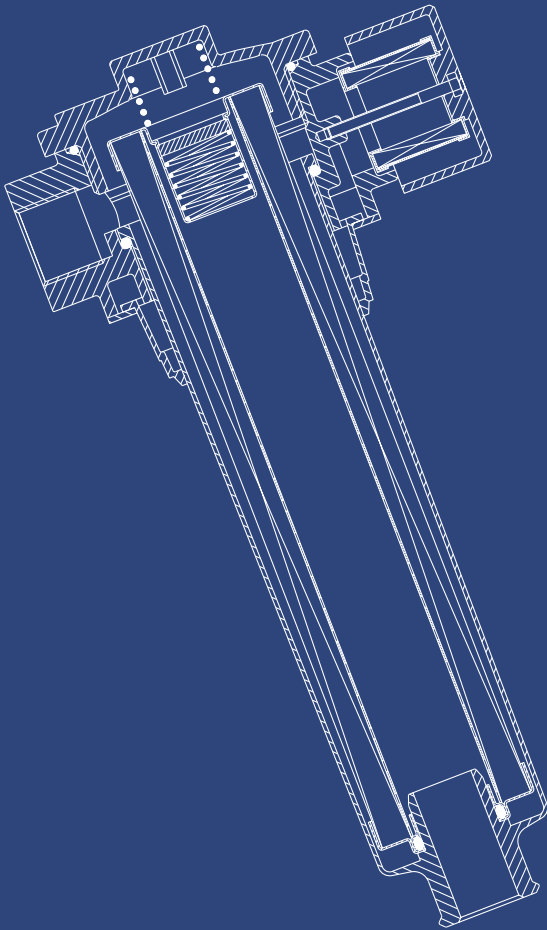
Cartridge series CMP



How to order



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