9 STRÁNSKÝ A PETRŽÍK



COALESCING FILTERS SERIES MJF



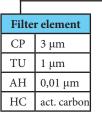
A range of fine filters designed primarily as main filters in compressed air supply systems. The filter cartridges have up to 98% pore volume, which ensures long service life and low operating costs. Thanks to the folded design of the filter media, the cartridge provides a significantly larger filtration area than a conventional cylindrical filter. This means a higher dirt retention capacity, lower pressure losses and thus more economical operation. The internal and external stainless steel reinforcements of the filter cartridge protect the filter media and form a mechanical pre-filter, which increases the efficiency of dirt separation.

Size	10F	15F	25F	40F	60F	100F	150F
Threads	R1/2"	R3/4"	R1"	R1 1/2"	R1 1/2"	R2"	R2 1/2"
Max. capacity [Nm³/min] at 0,7 MPa	1,6	2,4	3,6	5,5	8,1	15	25
Weight [kg]	1,3	1,3	3,6	3,6	6,7	8,9	11,0

Filter element	СР	TU	AH	НС
Features	coarse pre-filtration	general pre-filtration	high perf. filtration	activated carbon filter
Size of particles removed [µm]	3,0	1,0	0,01	-
Oil contaminant retention down to [mg/m³]	-	0,1	0,01	0,003
Nominal initial pressure drop [mbar]	0,03	0,05	0,09	0,1
Max. operating temperature [°C]	80	60	60	60
Life time [h]	8000	8000	8000	1000

Order codes Complete filter

PMJF- <u>CP</u> - <u>60F</u> <u>H1</u> <u>-D</u>-



Thread size								
10F	R1/2"							
15F	R3/4"							
25F	R1"							
40F	R1 1/2"							
60F	R1 1/2"							
100F	R2"							
150F	R2 1/2"							

Thre	ad size	Pressure range					
0F	R1/2"		up to 1 MPa				
5F	R3/4"	H1	1 to 2 MPa				
5F	R1"	H2	2 to 3 MPa				
0F	R1 1/2"	Н3	3 to 4 MPa				
0F	R1 1/2"	H4	4 to 5 MPa				
00F	R2"	Note: the	body is made of Al				

I	113 3 to 4 MPa									
	H4 4 to 5 MPa									
ć	alloy, for	e body is made of Al variants H1-H4 the nade of steel	•							

Option	18
	manual drain (up to 1,6 MPa)
-D	auto drain (up to 5,0 MPa)
-G	manual drain, diffe- rential pressure gauge
-D-G	auto drain, differential pressure gauge



Inlet pressure must be considered when determining the appropriate size. Please see the following page for details.



MJF series filters have R pipe threads!

The CP, TU and AH filter elements must be replaced every 12 months or when the contamination indicator is in the red field.

The HC filter element must be replaced after 1000 hours of operation.



When the filter element is dirty (the differential pressure gauge indicator is in the red field), the pressure difference is at least 0,06 MPa.

Spare filter element

Filter element С 3 μm (CP) Т 1 μm (TU) 0,01 μm (AH) Α act.carbon (HC)

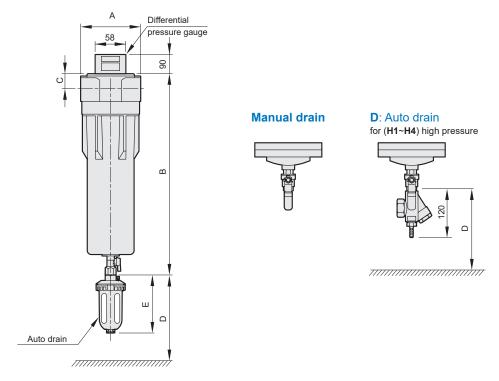
Thread size								
NF1Ex1	R1/2" (10F) & R3/4" (15F)							
NF2Ex1	R1" (25F) & R1 1/2" (40F)							
NF3Ex1	R1 1/2" (60F)							
NF4Ex1	R2" (100F)							
NL1Ex1	R2 1/2" (150F)							



Inner stainless steel support sleeve

- Pleated filter media pack (4 layers)
 - 2 layers PP support media (inside and outside) 2 layers borosilicate microfiber
- Outer stainless steel support sleeve
- Outer absorption drainage foam sock layer
- Aluminum end caps

Dimensions



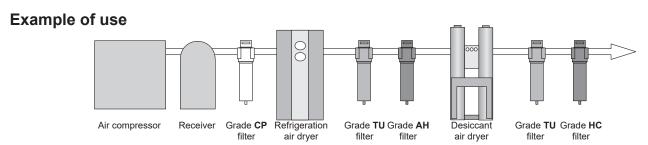
Size	Thread	A	В	С	D	E
10F	R1/2"	87	303	24	380	200
15F	R3/4"	87	303	24	380	200
25F	R1"	130	325	43	390	200
40F	R1 1/2"	130	325	43	390	200
60F	R1 1/2"	130	740	43	630	200
100F	R2"	163	762	55	790	200
150F	R2 1/2"	163	1017	55	900	200

Filter size selection

To correctly select the filter size, it is necessary to base it on the lowest inlet pressure and the highest expected flow rate.

- 1. Determine the value of the minimum working (inlet) pressure (e.g. 0,55 MPa) and the maximum compressed air flow rate (e.g. 5 Nm³/min) at the filter inlet.
- 2. Select the conversion factor corresponding to the minimum inlet pressure from the table below (always round the pressure down, e.g. for 0,45 MPa, use the correction factor 1,54 (value for 0,4 MPa)).
- 3. Calculate the minimum filtration capacity by multiplying the required flow rate by the conversion factor (e.g. 5*1,54=7,7)
- 4. Select the filter model using the minimum filtration capacity value (the selected filter must have a flow rate equal to or greater than the calculated minimum filtration capacity). So for our example we cannot choose size 40F which would correspond to the required flow rate of 5 Nm³/min, but we must choose size 60F which corresponds to the calculated minimum filtration capacity of 7,7 Nm³/min.

Inlet pressure [MPa]	0,1	0,2	0,3	0,4	0,5	0,6	0,7	0,8	0,9	1,0	1,1	1,2	1,3	1,4	1,5	1,6
Conversion factor	4,00	2,63	2,00	1,54	1,33	1,14	1,00	0,88	0,80	0,72	0,67	0,61	0,57	0,53	0,50	0,47



The TU cartridge filter is installed after the desicant air dryer to remove mechanical impurities from the dryer. However, it must be connected in reverse and automatic drain is not required.

The HC cartridge filter is used to remove oil mist and odors. Automatic drain and differential pressure gauge are not required.