

MANN+HUMMEL Air/oil separator filters

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Fitting advice

The air/oil separator filters are fitted in an easily accessible position either vertical or suspended in the pipe downstream of the compressed air tank. Please observe the marked flow direction. The oil return pipe (steel pipe 8x1C-PHR) is fitted by the customer using the screw connection in the head. The steel pipe is not part of the scope of supply.

Maintenance

The air/oil separator boxes of the filters must be replaced if flow resistance reaches 1 bar (0.1 MPa). The box may only be replaced when the system is depressurised. A commercially available belt wrench is sufficient to remove the box. The box is fitted and tightened manually.

Flow rates

Air/oil separator filters are available for nominal flow rates of 1 m³/min up to 11 m³/min at a compressor pressure of 7 bar (0.7 MPa).

Pressure drop

The pressure drop at nominal flow rate and at 7 bar (0.7 MPa) operating pressure is approx. 0.3 bar (30 KPa) with a new element.

Pressure resistance

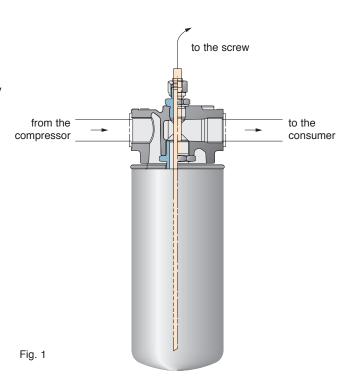
The housings of the air/oil separator filters are designed for operating pressures up to a maximum of 20 bar (2 MPa) or a maximum of 14 bar (1.4 MPa) (please refer to values in the table on page 15). The built-in filter elements can withstand pressure differences of an upwards 5 bar (0.5 MPa).

Separation efficiency

The residual oil content of the compressed air at nominal flow rate and at 7 bar (0.7 MPa) operating pressure is approx. 1 to 3 mg/m³.

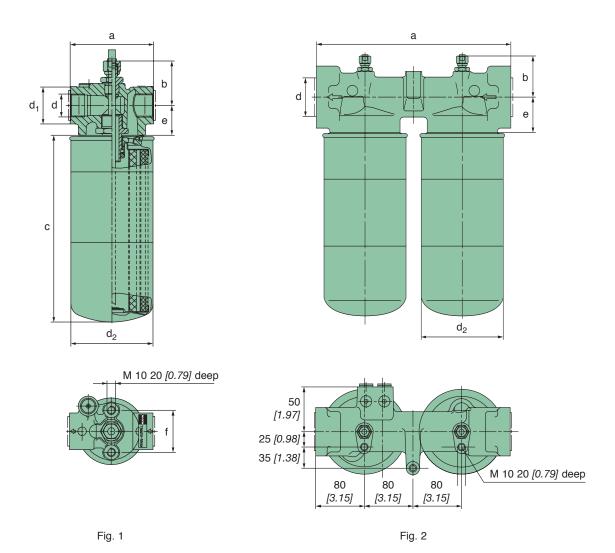
Service life

The rise in flow resistance and thus service life primarily depend on the cleanness of the oil and the quality of the air filter. A service life of several thousand hours can be achieved with a well-functioning system.



Installation of the air/oil separator in the compressed air pipe

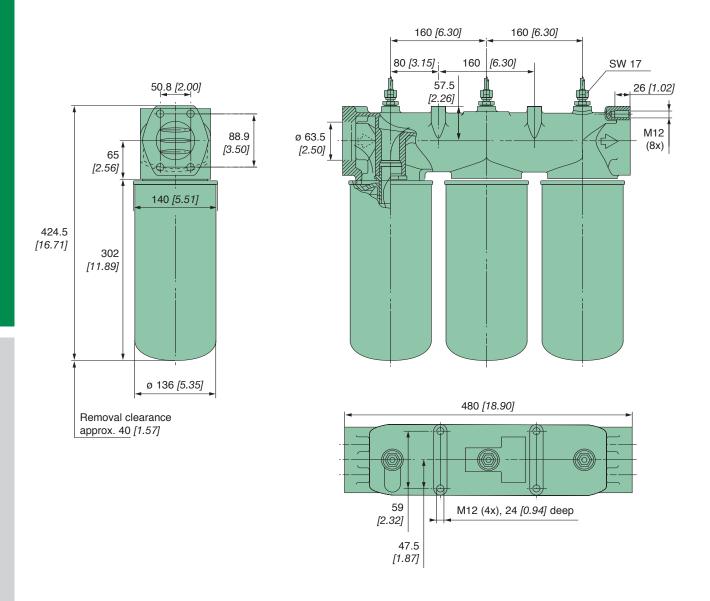
Dimensions and order numbers



Order No.	Mounted air/oil separator box	Fig.	Nominal flow rate ¹⁾ [m³/min] [cfm]	a	Dimens	sions in	mm [<i>din</i>	nensio	ns in ir	e	f	wor	ax. king sure [MPa]
49 303 62 101	1x LB 719/2	1	1.0 <i>[35.31]</i>	95 [3.74]	50 [1.97]	127 [5.00]	G 3/4"	36 [1.42]	76 [2.99]	34 [1.34]	47.5 [1.87]	20	2.0
49 306 62 101	1x LB 962/2	1	2.0 [70.63]	95 [3.74]	50 [1.97]	212 [8.35]	G 3/4"	36 [1.42]	93 [3.66]	34 [1.34]	47.5 [1.87]	20	2.0
49 308 62 101	1x LB 1374/2	1	3.0 <i>[105.94]</i>	135 [5.32]	54 [2.13]	177 [6.97]	G 1 1/4"	50 [1.97]	136 <i>[5.35]</i>	41 [1.61]	56 [2.20]	20	2.0
49 316 62 101	1x LB 13 145/3	1	5.5 [194.23]	135 [5.32]	54 [2.13]	302 [11.89]	G 1 1/4"	50 [1.97]	136 [5.35]	41 [1.61]	56 [2.20]	20	2.0
49 330 62 101	2x LB 13 145/3	2	11 <i>[388.46]</i>	320 [12.60]	68 [2.68]	302 [11.89]	G 2"	-	136 <i>[5.35]</i>	58 [2.28]	_	20	2.0

¹⁾ Flow rate according to DIN 1945 at 7 bar (0.7 MPa) operating pressure.

Dimensions and order numbers



Order No.	Mounted air/oil separator box	Nominal flow rate ¹⁾ [m³/min] [cfm]	max. working pressure [bar] [MPa]		
49 316 62 141	3x LB 13 145/3	16.5 [582.69]	20	2.0	

¹⁾ Flow rate according to DIN 1945 at 7 bar (0.7 MPa) operating pressure.