

AIR AND GAS

Standard product catalogue 2019-2021

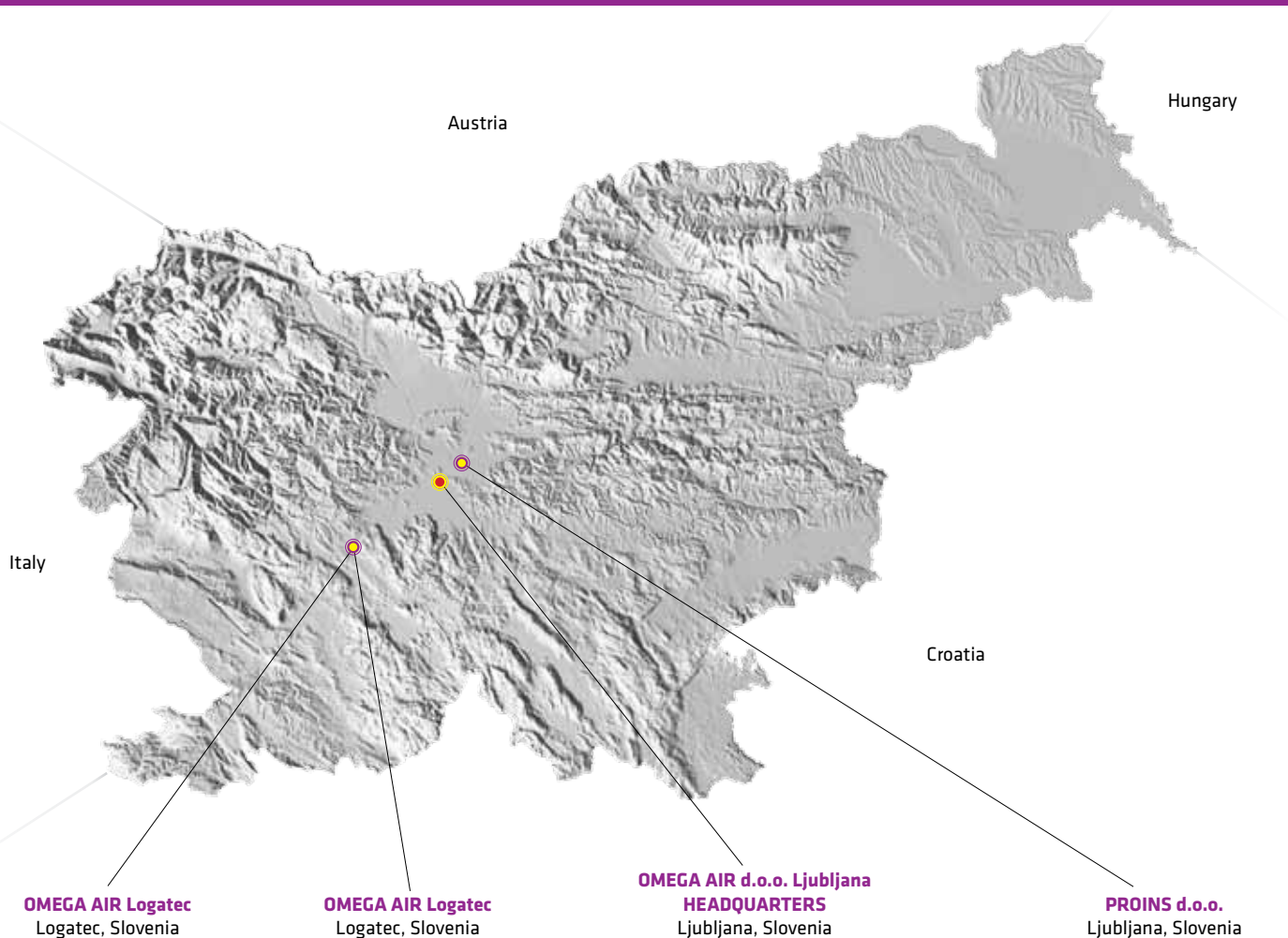




OMEGA AIR d.o.o. Ljubljana
Cesta Dolomitskega odreda 10
SI-1000 Ljubljana, Slovenia

T +386 (0)1 200 68 00
F +386 (0)1 200 68 50
info@omega-air.si
www.omega-air.si

GPS: 46°2'27.13" 14°27'59.46"



Main warehouse
Area: 4000 m²



Compressors and technique dept.
Service centre
Welding department
Dryers production
Land: 31.500 m²
Facilities: 4.100 m²



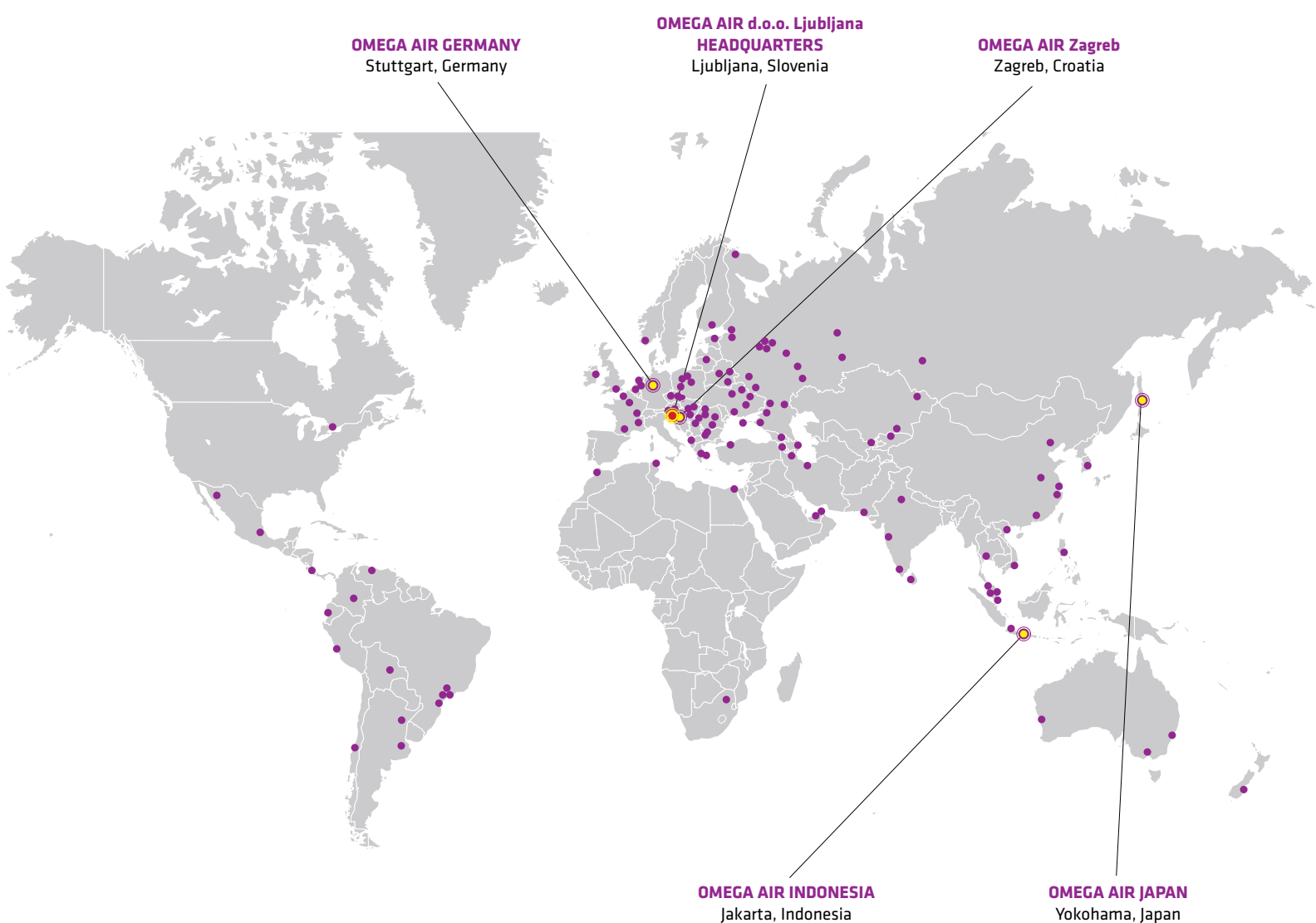
Head office
Production halls
Sales office
R & D
Area: 6.600 m²

proINS
Napredne inštalacije

Mechanical installations

OMEGA AIR

Air and Gas



- OMEGA AIR Headquarters
- OMEGA AIR Subsidiary/ Representative office
- OMEGA AIR Customers

Table of contents



COMPRESSED AIR FILTERS		Pressure	Capacity	Page
AF	Aluminium compressed air filters	16 bar	60 - 2.760 Nm³/h	14
AF HT	Aluminium high temperature compressed air filters	10 bar	60 - 2.760 Nm³/h	16
AAF	Aluminium compressed air filters	16 bar	10 - 780 Nm³/h	18
CF	Aluminium compressed air filters	20 bar	72 - 2.760 Nm³/h	20
BF	Welded carbon steel compressed air filters	16 bar	1.680 - 31.400 Nm³/h	22
BF HP	High pressure welded carbon steel compressed air filters	25 bar	1.680 - 31.400 Nm³/h	24
WFIT	Welded stainless steel comp. air filters - threaded connections	14 bar	75 - 3.600 Nm³/h	26
WHFIT	High pressure stainless steel process compressed air filters	50 bar	150 - 2.400 Nm³/h	28
WFIF	Welded stainless steel comp. air filters - flanged connections	14 bar	150 - 21.120 Nm³/h	30
WFIW	Welded stainless steel comp. air filters - welding end connections	14 bar	75 - 3.600 Nm³/h	32
P-VAC	Vacuum pump protection filters	20-2.000 mbar	7,5 - 345 Nm³/h	34
M-VAC	Medical vacuum filters	20-2.000 mbar	7,5 - 787 Nm³/h	36
AFs	Silicone free compressed air filters	16 bar	60 - 2.760 Nm³/h	38
HF	Cast aluminium high pressure compressed air filters	50 bar	71 - 2.760 Nm³/h	40
CHP	Carbon steel high pressure compressed air filters	100, 250, 420 bar	40 - 715 Nm³/h	42
IHP	Stainless steel high pressure compressed air filters	100, 250, 420 bar	40 - 715 Nm³/h	44
PF	Stainless steel process compressed air filters	14 bar	75 - 21.120 Nm³/h	46
HPF	High pressure stainless steel process compressed air filters	50 bar	150 - 2.400 Nm³/h	48
PFL	Stainless steel process filter for liquids	10 bar	3 - 600 l/min	50
SFL	Stainless steel sterile filters for liquids	10 bar	3 - 600 l/min	52
SF	Stainless steel sterile compressed air filters	10 bar	75 - 21.120 Nm³/h	54
SPF	Stainless steel sterile compressed air filters	14 bar	75 - 3.600 Nm³/h	56
AV	Stainless steel air venting filters		9 - 310 Nm³/h	58
MSS	Mobile steam sterilizer	1 to 3,6 bar	-	60



CONDENSATE SEPARATORS		Pressure	Capacity	Page
CKL-B	Aluminium condensate separators	16 bar	60 - 2.160 Nm³/h	64
CKL-B HT	Aluminium high temperature condensate separators	10 bar	60 - 2.160 Nm³/h	66
CKL-C	Aluminium condensate separators	20 bar	72 - 2.760 Nm³/h	68
CS/CS SS	Welded condensate separators	16 bar	840 - 14.280 Nm³/h	70
SFH/SFH SS	Welded condensate separators	16 bar	1.760 - 12.550 Nm³/h	72
SFH HP	Welded carbon steel high pressure condensate separators	50 bar	1.760 - 12.550 Nm³/h	74
CKL-HF	Aluminium condensate separators	50 bar	71 - 2.760 Nm³/h	76
CKL-CHP	Carbon steel high pressure condensate separators	100, 250, 420 bar	40 - 715 Nm³/h	78
CKL-IHP	Stainless steel high pressure condensate separators	100, 250, 420 bar	40 - 715 Nm³/h	80



INDICATORS		Pressure		Page
PDI 16	Differential pressure indicator	16 bar		84
MDM 40	Differential pressure indicators	20 bar		85
MDM 60	Differential pressure indicators	16 bar		86
MDP 60	Differential pressure indicators	16 bar		87
MDA 60	Differential pressure indicators	20 bar		88
EPG 60	Electronic pressure gauge	16 bar		89
MDHI 50	Differential high pressure stainless steel indicator	50 bar		90
MDH 200	Differential high pressure indicators	200 bar		91
MDH 420	Differential high pressure indicators	420 bar		92
OCI	Oil content indicator	0,68 - 16 bar		93
CHI	Humidity indicator	20 bar		94
VPG 60	Differential pressure indicators	20-2.000 mbar		95



ACCESSORIES		Pressure		Page
AK	Assembly kits for filters	20 bar		98
WB	Wall mounting brackets for filters			98
WK	Wall mounting kits for filters	16 bar		98
FA	Flange adapter	16, 63 bar		99
SG	Sight glass	16 bar		99
ES	Exhaust silencer	16 bar		99



CONDENSATE DRAINS		Pressure	Capacity	Page
EMD	Electronic condensate drains	16 (8) bar	up to 300 l/h	102
ECD-B	Electronic condensate drains	16 bar	15-150 l/h	104
IED	Electronic condensate drains	16 bar	8 l/h	106
EMD HP	High pressure electronic condensate drains	50 bar	30,4 l/h	108
TD M	Timer controlled condensate drains	16, 25, 50, 150 bar	95 l/h	110
TD 420M	High pressure timer controlled condensate drains	420 bar	see spec.	112
AOK 13PA	Automatic mechanical plastic condensate drains	13 bar	167 l/h	113
AOK 20B	Automatic mechanical condensate drains	20 bar	167 l/h	114
AOK 20SS	Automatic mechanical stainless steel condensate drains	20 bar	167 l/h	115
AOK 50B	Automatic mechanical high pressure condensate drains	8-50 bar	145 l/h	116
AOK 50SS	Automatic stainless steel high pressure condensate drains	8-50 bar	145 l/h	117
AOK 16B	Automatic mechanical condensate drains	16 bar		118
AOK 16C	Automatic mechanical condensate drains	16 bar		119
AOK 16F	Automatic mechanical condensate drains	16 bar		120
MCD-B	Manual condensate drains	16 bar		121
MCD	Manual condensate drains	20 bar		122
EVD	Vacuum drains	20-2.000 mbar		123

WATER/OIL SEPARATION EQUIPMENT				Page
WOSm	Water - oil separators			126
WOS	Water - oil separators			128
WOS CD	Condensate distributor			130

DRYERS, COOLERS, OIL REMOVERS		Pressure	Capacity	Dew point	Page
A-DRY	Adsorption heatless regeneration compressed air dryers	4 to 16 bar	6 - 200 Nm³/h	-40°C (-25°C/-70°C)	134
A-DRY BI+BM	Adsorption heatless regeneration compressed air dryers	4 to 16 bar	6 - 200 Nm³/h	-40°C (-25°C/-70°C)	136
A-DRY TAC	Adsorption compressed air dryers with activated carbon tower	4 to 16 bar	6 - 200 Nm³/h	-40°C (-25°C/-70°C)	138
X-DRY	Adsorption heatless regeneration modular comp. air dryers	4 to 16 bar	300 - 1.050 Nm³/h	-40°C (-25°C/-70°C)	140
B-DRY	Adsorption heatless regeneration compressed air dryers	4 to 16 bar	110 - 1.152 Nm³/h	-40°C (-25°C/-70°C)	142
F-DRY	Adsorption heatless regeneration compressed air dryers	4 to 16 bar	1.200 - 6.500 Nm³/h	-40°C (-25°C/-70°C)	144
COM-DRY	Refrigerant + adsorption compressed air dryers	4 to 14 bar	6 - 6.500 Nm³/h	-40°C	146
R-DRY BVA	Adsorption dryers - Vacuum regeneration with ambient air	4 to 11 bar	390 - 20.200 Nm³/h	-40°C	148
R-DRY BP	Adsorption dryers - Cooling with purge	4 to 11 bar	390 - 20.200 Nm³/h	-40°C	150
R-DRY BVL	Adsorption dryers - Vacuum regeneration with closed loop	4 to 11 bar	390 - 20.200 Nm³/h	-40°C	152
RC-DRY	Adsorption dryers - Regen. by heat of compression - full stream	4 to 11 bar	390 - 20.200 Nm³/h	-20°C	154
HPR-DRY	Adsorption dryers - High pressure heat regeneration	50 bar	2.485 - 23.400 Nm³/h	-40°C	156
HP-DRY	Adsorption high pressure heatless regeneration dryers	50, 100, 250, 420 bar	50 - 1.600 Nm³/h	-40°C	158
M-DRY	Membrane compressed air dryers	12 bar	3 - 180 Nm³/h	+15, +3, -20, -40°C	160
RDP	Refrigeration compressed air dryers	14 bar	20 - 13.200 Nm³/h	3°C	162
RDL	Refrigeration compressed air dryers	14 bar	20 - 235 Nm³/h	5°C	164
RDF	Refrigeration compressed air dryers with filters	14 bar	20 - 235 Nm³/h	5°C	166
RDHP	Refrigeration high pressure compressed air dryers	50 bar	20 - 950 Nm³/h	3°C	168
ACA	Air cooled aftercoolers	15 bar	66 - 4.500 Nm³/h		170
ACW	Water cooled aftercoolers	16 bar	132 - 45.570 Nm³/h		171
TAC	Activated carbon towers	16 bar	6 - 6.500 Nm³/h		172
TAC HP	High pressure activated carbon towers	50, 100, 250, 420 bar	50 - 1.600 Nm³/h		174
CO₂ R-DRY	CO ₂ dryer	4 to 11 bar	390 - 20.200 Nm³/h	-40°C	176
PICO DRY	Adsorption heatless regenerated dryer	16 bar	6 - 12 Nm³/h		178
CNG DRY	Compressed natural gas dryer	0,1 to 420 bar	On request	-40°C	180
A-CAT	Oil vapours catalytic converter	4 to 11 bar	100 - 2.500 Nm³/h		182
SORBEO	Adsorbents				184

Table of contents



GENERATORS		Pressure	Capacity	Dew point	Page
N-GEN	PSA nitrogen generators	6-10 bar	0,83 - 766 Nm ³ /h	<-45°C	188
NC-GEN	Compact PSA nitrogen generators	6-10 bar	0,14 - 14,2 Nm ³ /h	<-45°C	190
NM-GEN	Membrane nitrogen generators	5-24 bar	0,8 - 780 Nm ³ /h	<-50°C	192
O-GEN	PSA oxygen generators	5-6 bar	1,02 - 94,9 Nm ³ /h	<-60°C	194
OC-GEN	Compact PSA oxygen generators	5-6 bar	0,41 - 6,76 Nm ³ /h	<-60°C	196

MEASURING EQUIPMENT		Pressure			Page
OS 330, OS 331	Display / data logger				200
OS 215, OS 220	Dew point sensor	50 (16) bar			201
OS 401, OS 421	Economic flow / consumption sensor	50 (16) bar			202
OS 415, OS 418	Thermal mass flow meter	10 bar			203
OS 16, OS 40	Pressure sensor	16 (40) bar			204
OS TS	Temperature sensor				204
OS 120	Residual oil sensor	3 to 15 bar			205
OS 130	Laser particle counter	3 to 8 bar			206
OS 600	Compressed air purity analyzer	3 to 15 bar			207
OS 551 - P6 set	Pressure data logger, flow, dew point, pressure sensors				208
OS 530	Portable leak detector for pressurized systems				209
OS 505 set	Portable dew point sensor	-1 to 15 bar			210

PRESSURE VESSEL		Pressure			Page
PV PED	PED pressure vessels	11 bar			214
HPV PED	PED high pressure vessels	16, 21, 32, 42, 48 bar			216
CUSTOM MADE PV	ASME pressure vessels	on request			218

COMPRESSED AIR EQUIPMENT		Pressure	Capacity		Page
PP	Painting air filtration systems	16 bar	78 - 120 Nm ³ /h		222
B-AIR	Breathing air filtration systems	16 bar	78 - 780 Nm ³ /h		224
B-AIR plus	Portable breathing air filtration system	16 bar	120 Nm ³ /h		226
AIRWATT	Heat recovery units	16 bar			228
BS 12-3,5	Petrol station equipment	12 bar	350 NI/h		230
AWS	Petrol station equipment	10 bar	170 NI/h		231
PETRO-PACK	Petrol station equipment	12 bar	350 NI/h		232
BS TOWER	Petrol station equipment	12 bar			233

INDUSTRIAL WATER CHILLERS					Page
OBE	Air-cooled water chillers with axial fans, rotary and scroll compressors				236
OWT	Air-cooled water chillers with rotary and scroll compressors				238
OWE/HWE	Air-cooled water chillers and heat pumps with scroll compressors				240
OWB	Air-cooled water chillers with axial fans and scroll compressors				242

PRODUCT SELECTION SOFTWARE					Page
AirSys	Compressed air treatment sizing software				246

INDUSTRIAL ENGINEERING					Page
Comp. air stations	Custom made solutions				250
MIBP and BP	Biogas plants				251
TERMOWATT	Micro cogeneration stations				252
MJ	Micro compressed natural gas stations				253
SKIDS	Skid/container based packages				254

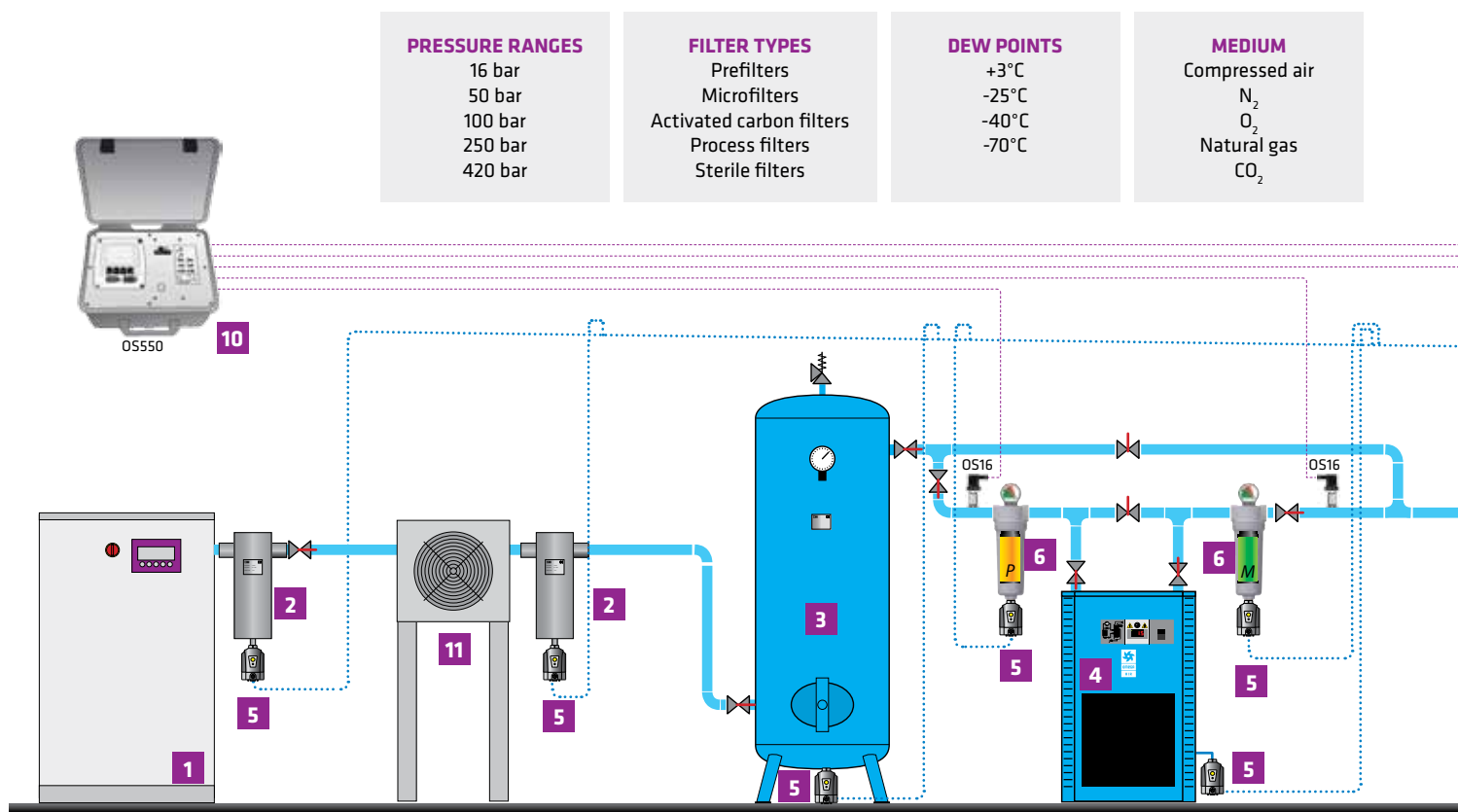


SERVICE PARTS / SPARE PARTS				Page
SERVICE PARTS	Replacement parts			258

OMEGA AIR GROUP				Page
PRODUCTION				262
RESEARCH AND DEVELOPMENT				263
SERVICE				264
MARKETING				265
QUALITY, CERTIFICATES				266
TRANSPORT AND LOGISTICS				267
SHOPS				268
MEGA AIR				269
PROINS				270
REFERENCES				271

Compressed air and gas treatment

BASIC PRINCIPLES OF MOST TYPICAL COMPRESSED AIR APPLICATION



PRESSURE RANGES

16 bar
50 bar
100 bar
250 bar
420 bar

FILTER TYPES

Prefilters
Microfilters
Activated carbon filters
Process filters
Sterile filters

DEW POINTS

+3°C
-25°C
-40°C
-70°C

MEDIUM

Compressed air
N₂
O₂
Natural gas
CO₂

1 COMPRESSOR

The basic working principle of an air compressor is to compress atmospheric air, which is then used as per the requirements. In the process, atmospheric air is drawn in through an intake valve; more and more air is pulled inside a limited space mechanically by means of piston, impeller, or vane. Since the amount of pulled atmospheric air is increased in the receiver or storage tank, volume is reduced and pressure is raised automatically. In simpler terms, free or atmospheric air is compressed after reducing its volume and at the same time, increasing its pressure. There are three major types, namely, reciprocating, rotary, and centrifugal compressor.

2 CYCLONE CONDENSATE SEPARATOR

Cyclone condensate separators use centrifugal motion to force liquid water out of compressed air. The spinning causes the condensate to join together on the centrifugal separators walls. When the condensate gains enough mass it falls to the bottom of the separators bowl where it pools in the sump until it is flushed out of the system by the automatic float drain valve.

They are installed following aftercoolers to remove the condensed moisture.

3 PRESSURE VESSEL

Pressure vessel plays very important role in compressed air system:

- Damping pulsations caused by reciprocating compressors,
- Providing a location for free water and lubricant to settle from the compressed air stream,
- Supplying peak demands from stored air without needing to run an extra compressor,
- Reducing load/unload or start/stop cycle frequencies to help screw compressors run more efficiently and reduce motor starts,
- Slowing system pressure changes to allow better compressor control and more stable system pressures.

4 COMPRESSED AIR DRYER

Compressed air leaving the compressor aftercooler and moisture separator is normally warmer than the ambient air and fully saturated with moisture. As the air cools, the moisture will condense in the compressed air lines. Excessive entrained moisture can result in undesired pipe corrosion and contamination at point of end use. For this reason some sort of air dryer is normally required. Some end use applications require very dry air, such as compressed air distribution systems where pipes are exposed to winter conditions. Drying the air to dew points below ambient conditions is necessary to prevent ice buildup.

5 CONDENSATE DRAIN

Drains are needed at all separators, filters, dryers and receivers in order to remove the liquid condensate from the compressed air system.

Failed drains can allow slugs of moisture to flow downstream, that can overload the air dryer and foul end use equipment.

6 FILTER

Compressed air filters are used for high efficient removal of solid particles, water, oil aerosols, hydrocarbons, odour and vapours from compressed air systems.

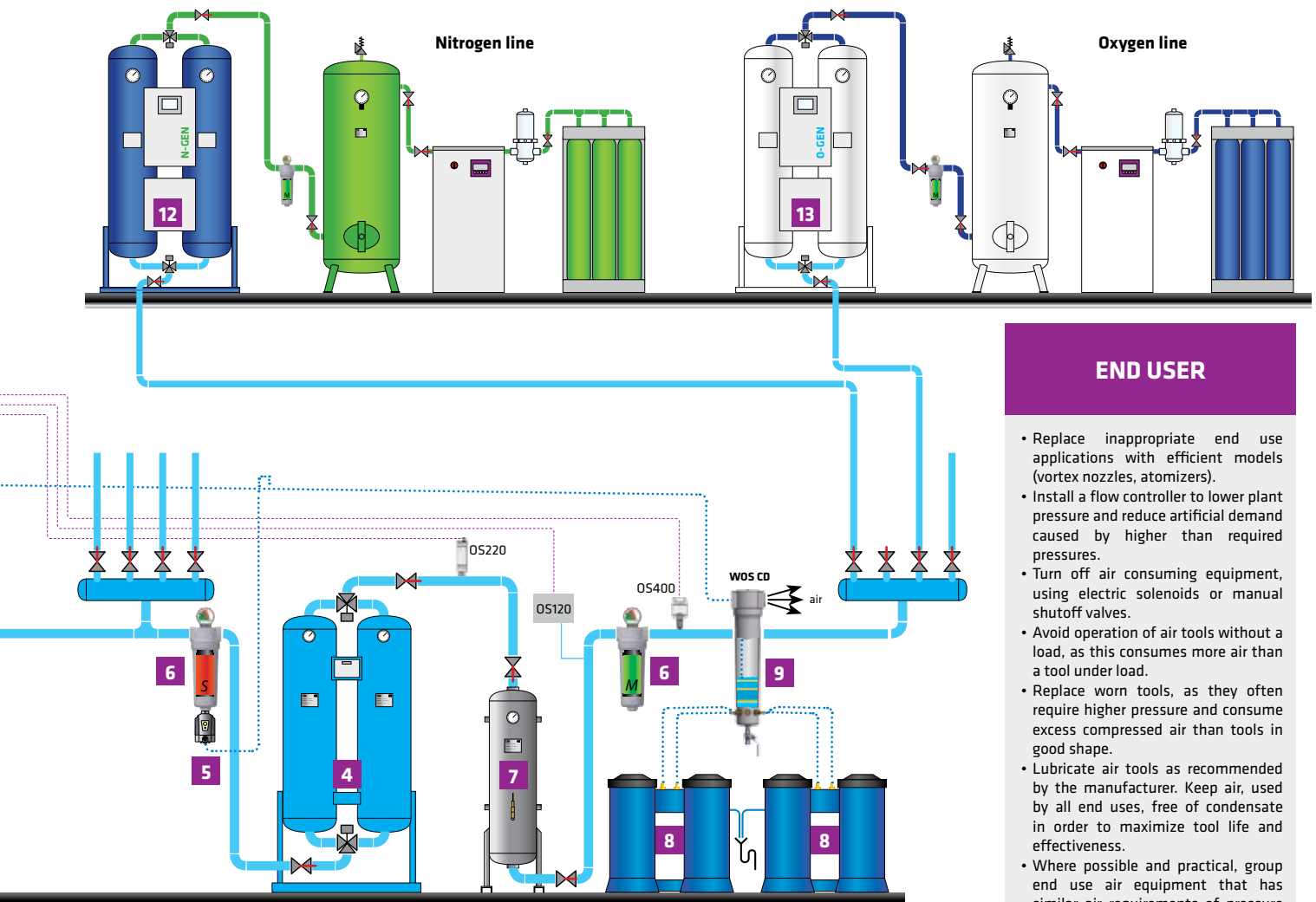
To meet the required compressed air quality, appropriate filter element must be installed into filter housing.

7 ACTIVATED CARBON TOWER

Activated carbon tower eliminates hydrocarbon vapours and odours from compressed air. Towers are filled with activated carbon adsorbent that adsorbs contaminants onto the surface of its internal pores. Activated carbon towers are used at applications where content of oil vapours needs to be reduced to minimum. Activated carbon towers can be incorporated in existing compressed air systems, significantly minimising the risks of contamination.

8 OIL/WATER SEPARATOR

Local environmental laws and regulations state that condensate drained from compressed air systems cannot be returned to the sewage system due to the content of compressor lubricating oil. Water/oil separators are one of the most effective and economical solution. Multistage separation process using oleophilic filters and activated carbon, ensures exceptional performance and trouble free operation.



END USER

- Replace inappropriate end use applications with efficient models (vortex nozzles, atomizers).
- Install a flow controller to lower plant pressure and reduce artificial demand caused by higher than required pressures.
- Turn off air consuming equipment, using electric solenoids or manual shutoff valves.
- Avoid operation of air tools without a load, as this consumes more air than a tool under load.
- Replace worn tools, as they often require higher pressure and consume excess compressed air than tools in good shape.
- Lubricate air tools as recommended by the manufacturer. Keep air, used by all end uses, free of condensate in order to maximize tool life and effectiveness.
- Where possible and practical, group end use air equipment that has similar air requirements of pressure and air quality.

9 CONDENSATE DISTRIBUTOR

WOS CD is intended for systems, where amount of generated condensate exceeds capacity of single largest available WOS water oil separator. WOS CD can evenly distribute collected condensate between up to three WOS-35 water oil separators.

WOS CD is equipped with flow distributor on the inlet port and up to 8 hose tail connections mounted.

11 AFTERCOOLERS

Air cooled aftercoolers series ACA have been designed to reduce compressed air temperature and water vapour dew point in compressed air system. High efficiency axial fan forces ambient air over the heat exchangers copper tubes supported by aluminium fins, which provides the necessary cooling effect. The compressed air is cooled down to approximately 10°C above ambient temperature.

ACA aftercoolers ensures the maximum performance and protection of all equipment, such as refrigeration dryers, adsorption dryers and filters, positioned downstream of this unit.

12 NITROGEN GENERATORS

The nitrogen generators extract the available nitrogen in the ambient air from the other gases by applying the Pressure Swing Adsorption (PSA) technology. During the PSA process compressed, cleaned ambient air is led to a molecular sieve bed, which allows the nitrogen to pass through as a product gas, but adsorbs other gases.

The sieve releases the adsorbed gases to the atmosphere, when the outlet valve is closed and the bed pressure returns to ambient pressure. Subsequently the bed will be purged with nitrogen before fresh compressed air will enter for a new production cycle.

In order to guarantee a constant product flow, the nitrogen generators use modules of two molecular sieve beds, which alternatively switch between the adsorption and the regeneration phase.

Under normal operating conditions and with correct maintenance the molecular sieve beds will have an almost indefinite lifetime.

13 OXYGEN GENERATORS

The oxygen generators extract the available oxygen in the ambient air from the other gases by applying the Pressure Swing Adsorption (PSA) technology. During the PSA process compressed, cleaned ambient air is led to a molecular sieve bed, which allows the oxygen to pass through as a product gas, but adsorbs other gases.

The sieve releases the adsorbed gases to the atmosphere, when the outlet valve is closed and the bed pressure returns to ambient pressure. Subsequently the bed will be purged with oxygen before fresh compressed air will enter for a new production cycle.

In order to guarantee a constant product flow, oxygen generators use modules of two molecular sieve beds, which alternatively switch between the adsorption and the regeneration phase.

Under normal operating conditions and with correct maintenance the molecular sieve beds will have an almost indefinite lifetime.

10 CENTRAL MONITORING SYSTEM

Stable product quality, process optimization and energy savings are just some of the reasons why measuring equipment is becoming essential part of today's compressed air/gas systems. Type and number of sensors depend on specific application but the most common are pressure, flow and dew point sensors.

COMPRESSED AIR QUALITY CLASSES ACCORDING TO ISO 8573-1

CLASS	SOLID PARTICLES			HUMIDITY AND LIQUID WATER		OIL	
	Maximum number of particles per cubic meter as a function of particle size, $d^{(2)}$			Pressure dew point		Concentration of total oil ⁽²⁾ (liquid, aerosol and vapour)	
	$0,1 \mu\text{m} < d \leq 0,5 \mu\text{m}$	$0,5 \mu\text{m} < d \leq 1,0 \mu\text{m}$	$1,0 \mu\text{m} < d \leq 5,0 \mu\text{m}$	°C	°F	mg/m ³	ppm/w/w
0	As specified by the equipment user or supplier and more stringent than class 1						
1	≤ 20.000	≤ 400	≤ 10	≤ -70	-94	$\leq 0,01$	$\leq 0,008$
2	≤ 400.000	≤ 6.000	≤ 100	≤ -40	-40	$\leq 0,1$	$\leq 0,08$
3	Not specified	≤ 90.000	≤ 1.000	≤ -20	-4	≤ 1	$\leq 0,8$
4	Not specified	Not specified	≤ 10.000	$\leq +3$	38	≤ 5	≤ 4
5	Not specified	Not specified	≤ 100.000	$\leq +7$	45	Not specified	Not specified
6				$\leq \pm 10$	50		
	Mass concentration ⁽²⁾ - C_p			LIQUID WATER CONTENT ⁽²⁾ - C_w			
	mg/m ³			g/m ³			
6	$0 < C_p \leq 5$					Not specified	Not specified
7	$5 < C_p \leq 10$			$C_w \leq 0,5$		Not specified	Not specified
8	Not specified			$0,5 \leq C_w \leq 5$		Not specified	Not specified
9	Not specified					Not specified	Not specified
X	$C_p > 10$					> 5	> 4

⁽¹⁾ To qualify for a class designation, each size range and particle number within a class shall be met.

⁽²⁾ At reference conditions: air temperature of 20° C, absolute air pressure of 100 kPa (1 bar), 0 relative water vapour pressure.

TYPICAL APPLICATION REQUIREMENTS

Table shows typical compressed air applications and the classification classes needed to suit the duty. Care should be taken when using this information, as it is for guidance only since individual uses can vary.

APPLICATION	TYPICAL QUALITY CLASSES ISO 8573-1			Cyclone separator	Prefilter	Microfilter	Activated carbon filter	Refrigerated dryer	Adsorption dryer	Sterile filter
	Solids	Water	Oil							
FOOD AND BEVERAGE INDUSTRY										
Control air / drive air	2	4	2	✓	✓	✓		✓		
Sterile air overlay	1	4	1	✓	✓	✓	✓	✓		✓
Conveying air / process air	1	3-4	1	✓	✓	✓	✓		✓	✓
Packaging production and processes, moulding	1	4	2-4	✓	✓	✓		✓		✓
PAPER/TEXTILE/CHEMICAL INDUSTRY										
Control air / drive air	2	4	2	✓	✓	✓		✓		
Conveying air / process air	2	4	1	✓	✓	✓	✓	✓		
Breathing air	1	1	1-3	✓	✓	✓	✓		✓	✓
METAL WORKING/FOUNDRY/GLASS/PLASTICS INDUSTRY										
Control air / drive air	2	4	2	✓	✓	✓		✓		
Blowing air / process air	2	4	1-2	✓	✓	✓	✓	✓		
SURFACE TREATMENT										
Control air	2	4	2	✓	✓	✓		✓		
Powder coating	2	3-4	1	✓	✓	✓	✓	✓	✓	
Blasting	-	4	2	✓	✓	✓		✓	✓	
Coating	2	3-4	1	✓	✓	✓	✓	✓	✓	
Breathing air	1	1	1-3	✓	✓	✓	✓		✓	✓
MECHANICAL / PLANT ENGINEERING										
Control air	2	4	2	✓	✓	✓		✓		
Blowing air	2-3	4	2	✓	✓	✓		✓		
Drive air	2-3	4	3-4	✓	✓	✓		✓		
Process air	2	4	1	✓	✓	✓	✓	✓		
MEASUREMENT AND MONITORING SYSTEMS										
3D measurement systems	1-2	3-4	1	✓	✓	✓	✓	✓	✓	
Measurement and monitoring systems	1-2	3-4	1	✓	✓	✓	✓	✓	✓	
GENERAL PURPOSE AIR										
General workshop air / Cleaning	4	5	4	✓	✓			✓		
Machine tools	3	5	4	✓	✓			✓		
Pneumatic tools	4	4	4	✓	✓			✓		
ELECTRONICS										
Micro electronics manufacture	1	1	1	✓	✓	✓	✓		✓	
MEDICAL AIR										
Medical equipment	1	1	1	✓	✓	✓			✓	✓
Breathing air	1	1	1-3	✓	✓	✓	✓		✓	✓
Dental laboratories	1	1	1	✓	✓	✓			✓	✓

Table in accordance with VDMA recommendation, Guideline 15390-1 (Draft 11/2013).



COMPRESSED AIR FILTERS

Airborne particles, water vapour, microbes, and chemical gases enter compressors. After compression has taken place these contaminants become concentrated and more destructive.

Compressed air quality is essential to all modern production facilities. Compressed air filters, often referred to as line filters, are used to remove these contaminants from compressed air. Clean and dry air protects the compressed air system, reduces maintenance costs and increases finished product quality.

Types of filters vary depending on the application, the pressure level and type of contaminants.

Industrial filters

Industrial filters are used in typical industrial low pressure applications. They are typically made of cast aluminium for lower air flows, and of carbon steel for higher flows. They all have anticorrosion protection.

High pressure filters

Demanding technical construction calculations according to PED and ASME ensure the safe operation of the filters even at high pressures.

Sterile filters

The rugged stainless steel housing allows the sterilization process in the demanding pharmaceutical, food and similar applications.

Filters for special applications

Different types of filters are available for special applications.

COMPRESSED AIR FILTERS		Pressure	Capacity	Page
AF	Aluminium compressed air filters	16 bar	60 - 2.760 Nm ³ /h	14
AF HT	Aluminium high temperature compressed air filters	10 bar	60 - 2.760 Nm ³ /h	16
AAF	Aluminium compressed air filters	16 bar	10 - 780 Nm ³ /h	18
CF	Aluminium compressed air filters	20 bar	72 - 2.760 Nm ³ /h	20
BF	Welded carbon steel compressed air filters	16 bar	1.680 - 31.400 Nm ³ /h	22
BF HP	High pressure welded carbon steel compressed air filters	25 bar	1.680 - 31.400 Nm ³ /h	24
WFIT	Welded stainless steel comp. air filters - threaded connections	14 bar	75 - 3.600 Nm ³ /h	26
WHFIT	High pressure stainless steel compressed air filters	50 bar	150 - 2.400 Nm ³ /h	28
WFIF	Welded stainless steel comp. air filters - flanged connections	14 bar	150 - 21.120 Nm ³ /h	30
WFIW	Welded stainless steel comp. air filters - welding end connections	14 bar	75 - 3.600 Nm ³ /h	32
P-VAC	Vacuum pump protection filters	20-2.000 mbar	7,5 - 345 Nm ³ /h	34
M-VAC	Medical vacuum filters	20-2.000 mbar	7,5 - 787 Nm ³ /h	36
AFs	Silicone free compressed air filters	16 bar	60 - 2.760 Nm ³ /h	38
HF	Cast aluminium high pressure compressed air filters	50 bar	71 - 2.760 Nm ³ /h	40
CHP	Carbon steel high pressure compressed air filters	100, 250, 420 bar	40 - 715 Nm ³ /h	42
IHP	Stainless steel high pressure compressed air filters	100, 250, 420 bar	40 - 715 Nm ³ /h	44
PF	Stainless steel process compressed air filters	14 bar	75 - 21.120 Nm ³ /h	46
HPF	High pressure stainless steel process compressed air filters	50 bar	150 - 2.400 Nm ³ /h	48
PFL	Stainless steel process filter for liquids	10 bar	3 - 600 l/min	50
SFL	Stainless steel sterile filters for liquids	10 bar	3 - 600 l/min	52
SF	Stainless steel sterile compressed air filters	10 bar	75 - 21.120 Nm ³ /h	54
SPF	Stainless steel sterile compressed air filters	14 bar	75 - 3.600 Nm ³ /h	56
AV	Stainless steel air venting filters		9 - 310 Nm ³ /h	58
MSS	Mobile steam sterilizer	1 to 3,6 bar	-	60



**16 bar**

operating pressure

60 to 2.760 Nm³/h

volume flow rate

3/8" to 3"

connections

1,5 to 65 °C

operating temperature range

RAL 5012

standard colour

DESCRIPTION

AF filters are designed for protection of the downstream compressed air system and equipment against defects and other failures.

They ensure high efficient removal of solid particles, water, oil aerosols, hydrocarbons, odour and vapours from compressed air systems up to 16 bar. For any other technical gas please contact producer or your local distributor.

Required compressed air quality according to standard ISO 8571-1 can be achieved with 9 different grades of filter elements (B, P, R, M, S, A, A², H² and MS²).

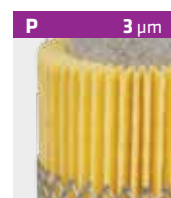
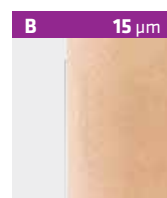
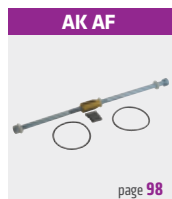
Optional internal and external condensate drains should be used for efficient condensate draining from filter housing.

APPLICATIONS

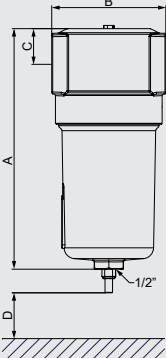
- General industrial applications
- Automotive
- Electronics
- Food and beverage
- Chemical
- Petrochemical
- Plastics
- Paint

AF SERIES

ALUMINIUM COMPRESSED AIR FILTERS





TECHNICAL DATA										FILTER ELEMENTS									
Filter housing size	Pipe size	Max. oper. press.	Flow rate at 7 bar(g), 20 °C		Dimensions [mm]				Mass	B sintered 15 µm	P prefilter 3 µm	R prefilter 1 µm	M microfilter 0,1 µm	S microfilter 0,01 µm	A activated carbon	A ⁴⁾ adsorption (act. carbon)	H ⁴⁾ catalyst (hopcalite)	MS ⁴⁾ molecular sieve	
	inch	[bar/psi]	Nm³/h	scfm	A	B	C	D	kg										
AF 0056	3/8"	16/232	60	35	192	88	25	60	0,6	06050 B15	06050 P	06050 R	06050 M	06050 S	06050 A	-	-	-	
AF 0076	1/2"	16/232	78	46	192	88	25	60	0,6	07050 B15	07050 P	07050 R	07050 M	07050 S	07050 A	07050 A²	07050 H²	07050 MS²	
AF 0106	3/4"	16/232	120	70	262	88	25	80	0,7	14050 B15	14050 P	14050 R	14050 M	14050 S	14050 A	14050 A²	14050 H²	14050 MS²	
AF 0186	1"	16/232	198	116	264	125	39	100	1,2	12075 B15	12075 P	12075 R	12075 M	12075 S	12075 A	12075 A²	12075 H²	12075 MS²	
AF 0306	1"	16/232	335	197	364	125	39	120	1,6	22075 B15	22075 P	22075 R	22075 M	22075 S	22075 A	22075 A²	22075 H²	22075 MS²	
AF 0476	1 1/2"	16/232	510	300	464	125	39	140	1,9	32075 B15	32075 P	32075 R	32075 M	32075 S	32075 A	32075 A²	32075 H²	32075 MS²	
AF 0706	1 1/2"	16/232	780	459	644	125	39	160	2,6	50075 B15	50075 P	50075 R	50075 M	50075 S	50075 A	50075 A²	50075 H²	50075 MS²	
AF 0946	2"	16/232	1000	588	696	164	50	520	5,7	51090 B15	51090 P	51090 R	51090 M	51090 S	51090 A	-	-	-	
AF 1506	2"	16/232	1500	882	943	164	50	770	7,6	76090 B15	76090 P	76090 R	76090 M	76090 S	76090 A	-	-	-	
AF 1756	2 1/2"	16/232	1680	990	943	164	50	770	7,3	76090 B15	76090 P	76090 R	76090 M	76090 S	76090 A	-	-	-	
AF 2006	3"	16/232	2160	1270	801	242	60	630	14,1	51140 B15	51140 P	51140 R	51140 M	51140 S	51140 A	-	-	-	
AF 2406	3"	16/232	2760	1620	998	242	60	780	16,7	75140 B15	75140 P	75140 R	75140 M	75140 S	75140 A	-	-	-	
										quality class - solids (ISO 8573-1)	7	6	3	2	1	1 ³⁾	1 ³⁾	1 ³⁾	1
										residual oil content [mg/m³]	-	-	-	<0,1	<0,01	<0,005	<0,005	-	-
										quality class - oils (ISO 8573-1)	-	-	-	2	1	1	0/1	-	-
										pressure drop - new element [mbar / psi]	20 / 0,290	10 / 0,145	20 / 0,290	50 / 0,725	80 / 1,160	60 / 0,870	see spec.	see spec.	< 50 / 0,725
										change filter cartridge at pressure drop [mbar / psi]	1)	350 / 5,07	350 / 5,07	350 / 5,07	350 / 5,07	6 months 2)	6 months 2)	6 months 2)	
										filter material	sintered brass	acrylic fibres, cellulose	borosilicate micro fibres	borosilicate micro fibres					
														activ. carbon	activ. carbon	hopcalite	molecular sieve		
										pleated version	-	✓	✓	✓	✓	-	✓	✓	✓
										wrapped version	-	-	-	-	-	✓	-	-	-
										sintered version	✓	-	-	-	-	-	-	-	-
										min. operating temperature (°C / °F)	1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35
										max. operating temperature (°C / °F)	65 / 149	65 / 149	65 / 149	65 / 149	65 / 149	45 / 113	45 / 113	45 / 113	45 / 113

CORRECTION FACTORS															
Operating pressure [bar]	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Operating pressure [psi]	29	44	58	72	87	100	115	130	145	160	174	189	203	218	232
Correction factor	0,38	0,50	0,63	0,75	0,88	1	1,13	1,25	1,38	1,50	1,63	1,75	1,88	2,00	2,13

¹⁾ "B" filter element can be cleaned with ultrasonic bath or with back flushing. Intervals of cleaning depends of application. If necessary replace filter element with new one.

²⁾ Filter elements "A", A²⁾, H²⁾, must be changed periodically to suit application, but at least every 6 months. Activated carbon filters must not operate in oil saturated conditions.

³⁾ Valid if "S" filter cartridge is installed upstream.

⁴⁾ For elements A²⁾, H²⁾ and MS²⁾ it is necessary to reduce the flow according to technical data sheet specification.



10 bar
operating pressure

60 to 2760 Nm³/h
volume flow rate

3/8" to 3"
connections

1,5 to 120 °C (at 10 barg)
1,5 to 85 °C (at 13 barg)
operating temperature range

RAL 5012
standard colour

DESCRIPTION

AF HT filter housings have been specifically developed for very high efficient removal of solid particles, water and oil aerosols, from compressed air systems in high temperature applications. To meet the required compressed air quality appropriate filter element must be installed into filter housing.

For any other technical gas please contact us or your local dealer.

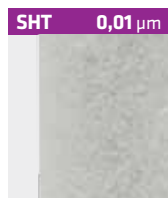
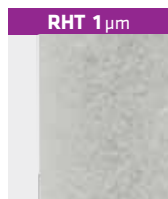
AF HT filter housing can be used in variety of applications. For applications not listed please contact us or your local dealer.

APPLICATIONS

- General industrial applications
- Automotive
- Electronics
- Food and beverage
- Chemical
- Petrochemical
- Plastics

AF HT SERIES

ALUMINIUM HIGH TEMPERATURE COMPRESSED AIR FILTERS





TECHNICAL DATA										FILTER ELEMENTS					
Filter housing size	Pipe size	Max. oper. press.	Flow rate at 7 bar(g), 20 °C		Dimensions [mm]				Mass	BHT sintered 15 µm	N25HT prefilter 25 µm	N5HT prefilter 5 µm	RHT prefilter 1 µm	MHT microfilter 0,1 µm	SHT microfilter 0,01 µm
	inch	[bar/psi]	Nm³/h	scfm	A	B	C	D	kg						
AF 0056 HT	3/8"	10/145	60	35	192	88	25	60	0,6	06050 BHT	06050 N25HT	06050 N5HT	06050 RHT	06050 MHT	06050 SHT
AF 0076 HT	1/2"	10/145	78	46	192	88	25	60	0,6	07050 BHT	07050 N25HT	07050 N5HT	07050 RHT	07050 MHT	07050 SHT
AF 0106 HT	3/4"	10/145	120	70	262	88	25	80	0,7	14050 BHT	14050 N25HT	14050 N5HT	14050 RHT	14050 MHT	14050 SHT
AF 0186 HT	1"	10/145	198	116	264	125	39	100	1,2	12075 BHT	12075 N25HT	12075 N5HT	12075 RHT	12075 MHT	12075 SHT
AF 0306 HT	1"	10/145	335	197	364	125	39	120	1,6	22075 BHT	22075 N25HT	22075 N5HT	22075 RHT	22075 MHT	22075 SHT
AF 0476 HT	1 1/2"	10/145	510	300	464	125	39	140	1,9	32075 BHT	32075 N25HT	32075 N5HT	32075 RHT	32075 MHT	32075 SHT
AF 0706 HT	1 1/2"	10/145	780	459	644	125	39	160	2,6	50075 BHT	50075 N25HT	50075 N5HT	50075 RHT	50075 MHT	50075 SHT
AF 0946 HT	2"	10/145	1000	588	695	164	50	520	5,7	51090 BHT	51090 N25HT	51090 N5HT	51090 RHT	51090 MHT	51090 SHT
AF 1506 HT	2"	10/145	1500	882	942	164	50	770	7,6	76090 BHT	76090 N25HT	76090 N5HT	76090 RHT	76090 MHT	76090 SHT
AF 1756 HT	2 1/2"	10/145	1680	990	942	164	50	770	7,3	76090 BHT	76090 N25HT	76090 N5HT	76090 RHT	76090 MHT	76090 SHT
AF 2006 HT	3"	10/145	2160	1270	801	242	60	630	14,1	51140 BHT	51140 N25HT	51140 N5HT	51140 RHT	51140 MHT	51140 SHT
AF 2406 HT	3"	10/145	2760	1620	1000	242	60	780	16,7	75140 BHT	75140 N25HT	75140 N5HT	75140 RHT	75140 MHT	75140 SHT
										quality class - solids (ISO 8573-1)	7	6	-	3	1
										residual oil content [mg/m³]	-	-	-	-	<0,01
										quality class - oils (ISO 8573-1)	-	-	-	-	1
										pressure drop - new element [mbar / psi]	20 / 0,290	10 / 0,145	10 / 0,145	20 / 0,290	80 / 1,160
										change filter cartridge at pressure drop [mbar / psi]	1)	350 / 5,07	-	350 / 5,07	350 / 5,07
										filter material	sintered brass	stainless steel mesh 14301	stainless steel mesh 14301	borosilicate micro fibres	
										pleated version	-	-	-	✓	✓
										wrapped version	-	✓	✓	-	-
										sintered version	✓	-	-	-	-
										min. operating temperature (°C / °F)	1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35
										max. operating temperature (°C / °F)	120-248	120-248	120-248	120-248	120-248

CORRECTION FACTORS									
Operating pressure [bar]	2	3	4	5	6	7	8	9	10
Operating pressure [psi]	29	44	58	72	87	100	115	130	145
Correction factor	0,38	0,50	0,63	0,75	0,88	1	1,13	1,25	1,38

Replace filter element at least every 12 months or follow the instructions for specific filter element. Change the sealing when you disassemble filter housing. Once per year make a visual check of filter housing and make sure there is no visual damage.



16 bar
operating pressure

10 to 780 Nm³/h
volume flow rate

1/8" to 1 1/2"
connections

1,5 to 65 °C
operating temperature range

RAL 5012
standard colour

DESCRIPTION

AAF filters are designed for protection of the downstream compressed air system and equipment with lower air flows against defects and other failures.

They ensure high efficient removal of solid particles, water, oil aerosols, hydrocarbons, odour and vapours from compressed air systems up to 16 bar. For any other technical gas please contact producer or your local distributor.

Required compressed air quality according to standard ISO 8571-1 can be achieved with 5 different grades of filter elements (P, R, M, S and A).

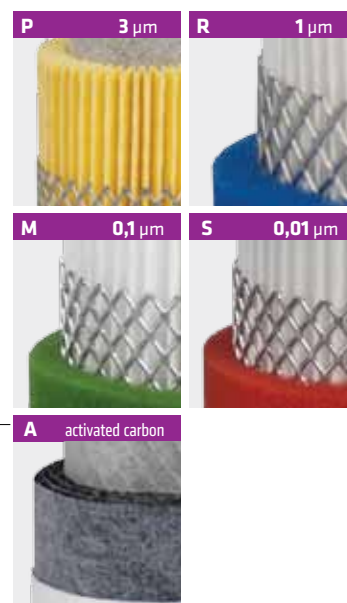
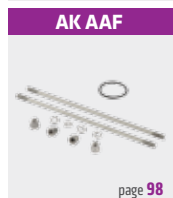
Optional internal and external condensate drains should be used for efficient condensate draining from filter housing.

APPLICATIONS

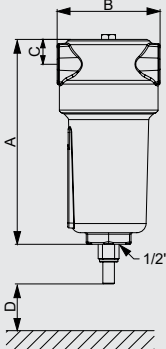
- General industrial applications
- Automotive
- Electronics
- Food and beverage
- Chemical
- Petrochemical
- Plastics
- Paint

AAF SERIES

ALUMINIUM COMPRESSED AIR FILTERS





TECHNICAL DATA										FILTER ELEMENTS							
Filter housing size	Pipe size	Max.oper. pressure	Flow rate at 7 bar(g), 20 °C		Dimensions [mm]				Mass	P prefilter 3 µm	R prefilter 1 µm	M microfilter 0,1 µm	S microfilter 0,01 µm	A activated carbon	CKL-AAF	AAR pressure regulator	AAL lubricator
	inch	[bar/psi]	Nm³/h	scfm	A	B	C	D	kg								
AAF 0006	1/8"	16/232	10	6	105	55	14	50	0,23	03528 P	03528 R	03528 M	03528 S	03528 A	CKL-AAF 0006	AAR 0006	AAL 0006
AAF 0016	1/4"	16/232	18	11	125	55	14	70	0,24	05528 P	05528 R	05528 M	05528 S	05528 A	CKL-AAF 0016	AAR 0016	AAL 0016
AAF 0026	1/4"	16/232	25	15	145	73	18	50	0,42	03844 P	03844 R	03844 M	03844 S	03844 A	CKL-AAF 0026	AAR 0026	AAL 0026
AAF 0036	3/8"	16/232	30	18	145	73	18	50	0,42	03844 P	03844 R	03844 M	03844 S	03844 A	CKL-AAF 0036	AAR 0036	AAL 0036
AAF 0046	1/4"	16/232	35	22	189	88	32	60	0,72	06050 P	06050 R	06050 M	06050 S	06050 A	CKL-AAF 0046	-	-
AAF 0056	3/8"	16/232	60	35	189	88	32	60	0,71	06050 P	06050 R	06050 M	06050 S	06050 A	CKL-AAF 0056	-	-
AAF 0076	1/2"	16/232	78	46	189	88	32	80	0,70	07050 P	07050 R	07050 M	07050 S	07050 A	CKL-AAF 0076	-	-
AAF 0106	3/4"	16/232	120	70	257	88	32	150	0,78	14050 P	14050 R	14050 M	14050 S	14050 A	CKL-AAF 0106	-	-
AAF 0186	1"	16/232	198	116	261	125	37	160	1,9	12075 P	12075 R	12075 M	12075 S	12075 A	CKL-AAF 0186	-	-
AAF 0306	1"	16/232	335	197	361	125	37	250	2,4	22075 P	22075 R	22075 M	22075 S	22075 A	CKL-AAF 0306	-	-
AAF 0476	1 1/2"	16/232	510	300	461	125	37	350	2,6	32075 P	32075 R	32075 M	32075 S	32075 A	CKL-AAF 0476	-	-
AAF 0706	1 1/2"	16/232	780	459	641	125	37	530	3,5	50075 P	50075 R	50075 M	50075 S	50075 A	CKL-AAF 0706	-	-
	quality class - solids (ISO 8573-1)									6	3	2	1	1 ²⁾	-	-	-
	residual oil content [mg/m³]									-	-	<0,1	<0,01	<0,005	-	-	-
	quality class - oils (ISO 8573-1)									-	-	2	1	1	-	-	-
	pressure drop - new element [mbar / psi]									10 / 0,145	20 / 0,290	50 / 0,725	80 / 1,160	60 / 0,870	-	-	-
	change filter cartridge at pressure drop [mbar / psi]									350 / 5,07	350 / 5,07	350 / 5,07	350 / 5,07	6 months ^{y)}	-	-	-
	filter material									acrylic fibres, cellulose		borosilicate micro fibres		activated carbon	-	-	-
	min. operating temperature (°C / °F)									1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35	-	-
	max. operating temperature (°C / °F)									65 / 149	65 / 149	65 / 149	65 / 149	45 / 113	65 / 149	-	-

CORRECTION FACTORS

Operating pressure [bar]	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Operating pressure [psi]	29	44	58	72	87	100	115	130	145	160	174	189	203	218	232
Correction factor	0,38	0,50	0,63	0,75	0,88	1	1,13	1,25	1,38	1,50	1,63	1,75	1,88	2,00	2,13

¹⁾ Filter elements "A" must be changed periodically to suit application, but at least every 6 months. Activated carbon filters must not operate in oil saturated conditions.

²⁾ Valid if "S" filter cartridge is installed upstream.

³⁾ For size AAF 0006 and 0016 no differential pressure indicator and no internal condensate drain is available, IED not available.

**20 bar**

operating pressure

72 to 2.760 Nm³/h

volume flow rate

3/8" to 3"

connections

1,5 to 65 °C

operating temperature range

RAL 5012

standard colour

DESCRIPTION

CF filters are designed for protection of the downstream compressed air system with pressure up to 20 bar against defects and other failures.

They ensure high efficient removal of solid particles, water, oil aerosols, hydrocarbons, odour and vapours from compressed air systems. For any other technical gas please contact producer or your local distributor.

Required compressed air quality according to standard ISO 8571-1 can be achieved with 6 different grades of filter elements (B, P, R, M, S and A).

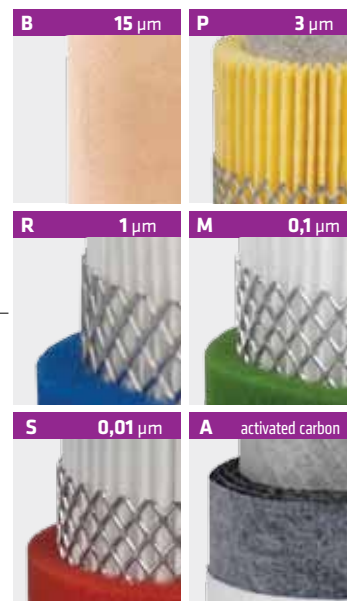
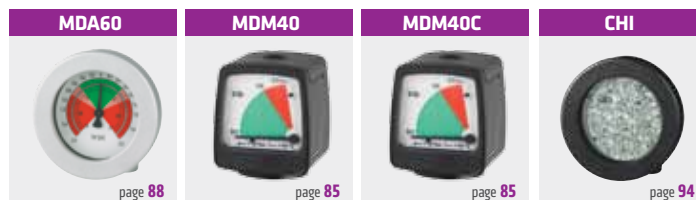
Optional internal and external condensate drains should be used for efficient condensate draining from filter housing.

APPLICATIONS

- General industrial applications
- Automotive
- Electronics
- Food and beverage
- Chemical
- Petrochemical
- Plastics
- Paint

CF SERIES

ALUMINIUM COMPRESSED AIR FILTERS





TECHNICAL DATA										FILTER ELEMENTS					
Filter housing size	Pipe size	Max. oper. pressure	Flow rate at 7 bar(g), 20 °C		Dimensions [mm]				Mass	B sintered 15 µm	P prefilter 3 µm	R prefilter 1 µm	M microfilter 0,1 µm	S microfilter 0,01 µm	A activated carbon
	inch	bar/psi	Nm³/h	scfm	A	B	C	D	kg						
CF 20	3/8"	20/290	72	42	187	88	20	80	0,7	20 CB	20 CP	20 CR	20 CM	20 CS	20 CA
CF 21	1/2"	20/290	96	56	256	88	20	80	0,8	21 CB	21 CP	21 CR	21 CM	21 CS	21 CA
CF 30	1/2"	20/290	150	88	278	106	25	100	1,3	30 CB	30 CP	30 CR	30 CM	30 CS	30 CA
CF 31	3/4"	20/290	216	127	278	106	25	100	1,3	31 CB	31 CP	31 CR	31 CM	31 CS	31 CA
CF 40	1"	20/290	282	166	252	125	32	120	2,1	40 CB	40 CP	40 CR	40 CM	40 CS	40 CA
CF 41	1"	20/290	360	212	352	125	32	140	2,4	41 CB	41 CP	41 CR	41 CM	41 CS	41 CA
CF 42	1 1/4"	20/290	432	254	352	125	32	140	2,4	42 CB	42 CP	42 CR	42 CM	42 CS	42 CA
CF 43	1 1/2"	20/290	510	300	450	125	32	160	3,2	43 CB	43 CP	43 CR	43 CM	43 CS	43 CA
CF 44	1 1/2"	20/290	750	441	450	125	32	160	3,2	44 CB	44 CP	44 CR	44 CM	44 CS	44 CA
CF 50	2"	20/290	888	522	605	160	43	180	5,1	50 CB	50 CP	50 CR	50 CM	50 CS	50 CA
CF 51	2"	20/290	1176	692	605	160	43	180	5,1	51 CB	51 CP	51 CR	51 CM	51 CS	51 CA
CF 52	2 1/2"	20/290	1440	847	685	160	43	200	6,3	52 CB	52 CP	52 CR	52 CM	52 CS	52 CA
CF 60	3"	20/290	1968	1158	800	240	55	300	12,9	60 CB	60 CP	60 CR	60 CM	60 CS	60 CA
CF 61	3"	20/290	2760	1624	800	240	55	300	12,9	61 CB	61 CP	61 CR	61 CM	61 CS	61 CA

Technical drawing of a filter element. It shows a cylindrical body with a top flange and a bottom threaded connection. Dimension A is the total height. Dimension B is the top flange diameter. Dimension C is the top flange thickness. Dimension D is the height of the main cylindrical body. The bottom connection is labeled 1/2".

quality class - solids (ISO 8573-1)	7	6	3	2	1	1 ³⁾
residual oil content [mg/m³]	-	-	-	<0,1	<0,01	<0,005
quality class - oils (ISO 8573-1)	-	-	-	2	1	1
pressure drop - new element [mbar / psi]	20 / 0,290	10 / 0,145	20 / 0,290	50 / 0,725	80 / 1,160	60 / 0,870
change filter cartridge at pressure drop [mbar / psi]	¹⁾	350 / 5,07	350 / 5,07	350 / 5,07	350 / 5,07	6 months ²⁾
filter media	sintered brass	acrylic fibres, cellulose	borosilicate micro fibres			activated carbon
pleated version	-	✓	✓	✓	✓	-
wrapped version	-	-	-	-	-	✓
sintered version	✓	-	-	-	-	-
min. operating temperature (°C / °F)	1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35
max. operating temperature (°C / °F)	65 / 149	65 / 149	65 / 149	65 / 149	65 / 149	45 / 113

CORRECTION FACTORS																			
Operating pressure [bar]	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Operating pressure [psi]	29	44	58	72	87	100	115	130	145	160	174	189	203	218	232	247	261	276	290
Correction factor	0,38	0,50	0,63	0,75	0,88	1	1,13	1,25	1,38	1,50	1,63	1,75	1,88	2,00	2,13	2,25	2,38	2,50	2,63

¹⁾ B filter element can be cleaned with ultrasonic bath or with back flushing. Intervals of cleaning depends of application. If necessary replace filter element with new one.

²⁾ Filter elements "A", must be changed periodically to suit application, but at least every 6 months. Activated carbon filters must not operate in oil saturated conditions.

³⁾ Valid if "S" filter cartridge is installed upstream.

**16 bar**

operating pressure

1.680 to 31.400 Nm³/h

volume flow rate

DN80 to DN300

connections

1,5 to 65 °C

operating temperature range

RAL 5012

standard colour

DESCRIPTION

BF filters are designed for protection of the downstream compressed air system and equipment against defects and other failures. Due to their robust welded carbon steel construction, are used for installation in heavy industrial applications with high air flows.

They ensure high efficient removal of solid particles, water, oil aerosols, hydrocarbons, odour and vapours from compressed air systems up to 16 bar. For any other technical gas please contact producer or your local distributor.

Required compressed air quality according to standard ISO 8571-1 can be achieved with 6 different grades of filter elements (B, P, R, M, S and A).

Optional external condensate drains should be used for efficient condensate draining from filter housing.

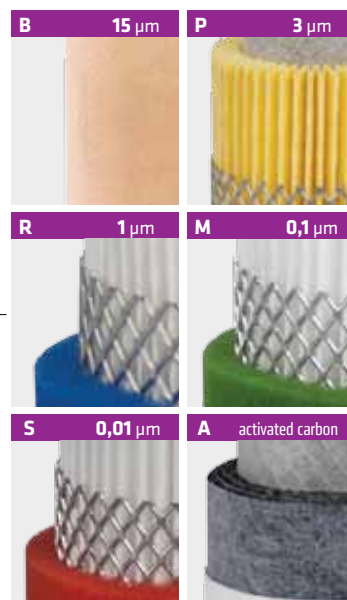
Fluid group 1 on request.

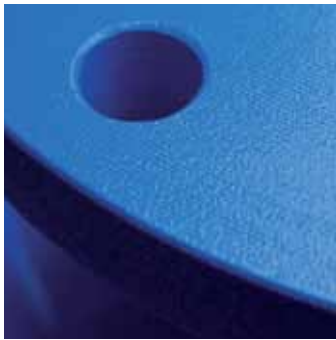
APPLICATIONS

- General industrial applications
- Automotive
- Electronics
- Food and beverage
- Chemical
- Petrochemical
- Plastics
- Paint

BF SERIES

WELDED CARBON STEEL COMPRESSED AIR FILTERS





TECHNICAL DATA											FILTER ELEMENTS					
Filter housing size	Pipe size	Max. oper. pressure	Flow rate at 7 bar(g), 20 °C		Dimensions [mm]					Mass	B sintered 15 µm	P prefilter 3 µm	R prefilter 1 µm	M microfilter 0,1 µm	S microfilter 0,01 µm	A activated carbon
	DN	bar/psi	Nm³/h	scfm	A	B	C	D	E	kg						
BF 0240	80	16/232	1.680	989	1145	450	1640	219	157	71	1×76090 B15	1×76090 P	1×76090 R	1×76090 M	1×76090 S	1×76090 A
BF 0300	100	16/232	3.150	1.853	1330	560	1780	324	208	110	2×76090 B15	2×76090 P	2×76090 R	2×76090 M	2×76090 S	2×76090 A
BF 0450	125	16/232	4.700	2.765	1330	560	1780	324	206	115	3×76090 B15	3×76090 P	3×76090 R	3×76090 M	3×76090 S	3×76090 A
BF 0600	150	16/232	6.300	3.706	1360	620	1780	368	241	154	4×76090 B15	4×76090 P	4×76090 R	4×76090 M	4×76090 S	4×76090 A
BF 0900	150	16/232	9.400	5.530	1420	680	1810	405	261	195	6×76090 B15	6×76090 P	6×76090 R	6×76090 M	6×76090 S	6×76090 A
BF 1200	200	16/232	12.550	7.382	1850	792	525	508	-	340	8×76090 B15	8×76090 P	8×76090 R	8×76090 M	8×76090 S	8×76090 A
BF 1500	200	16/232	15.700	9.235	1890	918	545	610	-	497	10×76090 B15	10×76090 P	10×76090 R	10×76090 M	10×76090 S	10×76090 A
BF 1800	250	16/232	18.850	11.088	1920	955	555	610	-	367	12×76090 B15	12×76090 P	12×76090 R	12×76090 M	12×76090 S	12×76090 A
BF 2500	250	16/232	25.100	14.765	2030	1042	685	711	-	643	16×76090 B15	16×76090 P	16×76090 R	16×76090 M	16×76090 S	16×76090 A
BF 3000	300	16/232	31.400	18.481	2130	1085	680	711	-	656	20×76090 B15	20×76090 P	20×76090 R	20×76090 M	20×76090 S	20×76090 A
quality class - solids (ISO 8573-1)											7	6	3	2	1	1 ³⁾
residual oil content [mg/m³]											-	-	-	<0,1	<0,01	<0,005
quality class - oils (ISO 8573-1)											-	-	-	2	1	1
pressure drop - new element [mbar / psi]											20 / 0,290	10 / 0,145	20 / 0,290	50 / 0,725	80 / 1,160	60 / 0,870
change filter cartridge at pressure drop [mbar / psi]											¹⁾	350 / 5,07	350 / 5,07	350 / 5,07	350 / 5,07	6 months ²⁾
filter media											sintered brass	acrylic fibres, cellulose	borosilicate micro fibres		activated carbon	
pleated version											-	✓	✓	✓	✓	-
wrapped version											-	-	-	-	-	✓
sintered version											✓	-	-	-	-	-
min. operating temperature (°C / °F)											1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35
max. operating temperature (°C / °F)											65 / 149	65 / 149	65 / 149	65 / 149	65 / 149	45 / 113

CORRECTION FACTORS																
Operating pressure [bar]	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Operating pressure [psi]	29	44	58	72	87	100	115	130	145	160	174	189	203	218	232	
Correction factor	0,38	0,50	0,63	0,75	0,88	1	1,13	1,25	1,38	1,50	1,63	1,75	1,88	2,00	2,13	

¹⁾ "B" filter element can be cleared with ultrasonic bath or with back flushing. Intervals of cleaning depends of application. If necessary replace filter element with new one.

²⁾ Filter elements "A" must be changed periodically to suit application, but at least every 6 months. Activated carbon filters must not operate in oil saturated conditions.

³⁾ Valid if "S" filter cartridge is installed upstream.

Models BF 0240 to BF 0900 can be produced with optional integrated support legs, which should be noticed at order.

**25 bar**

operating pressure

1.680 to 31.400 Nm³/h

volume flow rate

DN80 to DN300

connections

1,5 to 65 °C

operating temperature range

RAL 5012

standard colour

DESCRIPTION

BF HP filters are designed for protection of the downstream compressed air system and equipment against defects and other failures in high pressure applications. Due to their robust welded carbon steel construction, are used for installation in heavy industrial applications with high air flows.

They ensure high efficient removal of solid particles, water, oil aerosols, hydrocarbons, odour and vapours from compressed air systems up to 25 bar. For any other technical gas please contact producer or your local distributor.

Required compressed air quality according to standard ISO 8571-1 can be achieved with 6 different grades of filter elements (B, P, R, M, S and A).

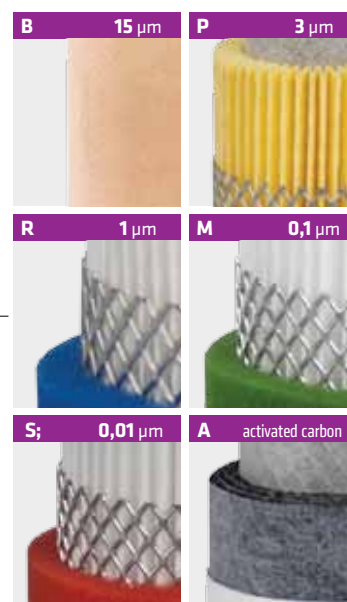
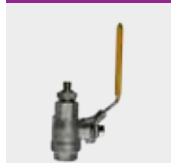
Optional external condensate drains should be used for efficient condensate draining from filter housing. Fluid group 1 on request.

APPLICATIONS

- General industrial applications
- Automotive
- Electronics
- Food and beverage
- Chemical
- Petrochemical
- Plastics
- Paint

BF HP SERIES

HIGH PRESSURE WELDED CARBON STEEL COMPRESSED AIR FILTERS

**Drain valve****TD25M**

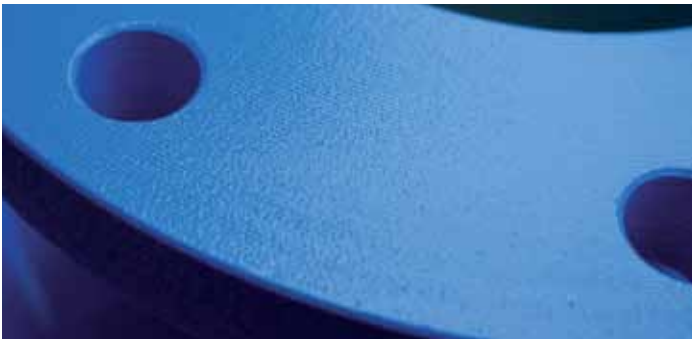
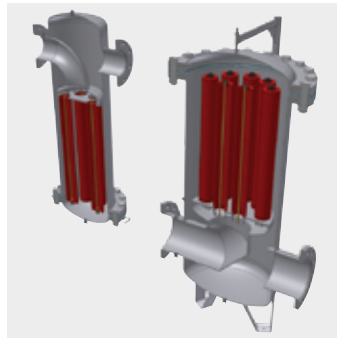
page 110

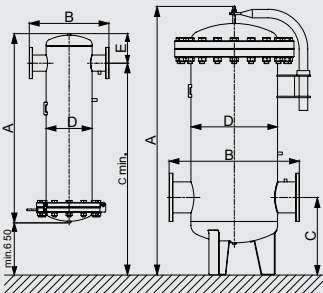
EMD HP

page 108

AOK 50B

page 116



TECHNICAL DATA										FILTER ELEMENTS					
Filter housing size	Pipe size	Max.oper. pressure	Flow rate at 7 bar(g), 20 °C		Dimensions [mm]					B sintered 15 µm	P prefilter 3 µm	R prefilter 1 µm	M microfilter 0,1 µm	S microfilter 0,01 µm	A activated carbon
	DN	bar/psi	Nm³/h	scfm	A	B	C	D	E						
BF HP 0240	80	25/362	1.680	989	1170	450	1660	219	166	1×76090 B15	1×76090 P	1×76090 R	1×76090 M	1×76090 S	1×76090 A
BF HP 0300	100	25/362	3.150	1.853	1330	560	1780	324	208	2×76090 B15	2×76090 P	2×76090 R	2×76090 M	2×76090 S	2×76090 A
BF HP 0450	125	25/362	4.700	2.765	1330	560	1780	324	206	3×76090 B15	3×76090 P	3×76090 R	3×76090 M	3×76090 S	3×76090 A
BF HP 0600	150	25/362	6.300	3.706	1360	620	1780	368	241	4×76090 B15	4×76090 P	4×76090 R	4×76090 M	4×76090 S	4×76090 A
BF HP 0900	150	25/362	9.400	5.530	1420	680	1810	405	261	6×76090 B15	6×76090 P	6×76090 R	6×76090 M	6×76090 S	6×76090 A
BF HP 1200	200	25/362	12.550	7.382	1850	792	525	508	-	8×76090 B15	8×76090 P	8×76090 R	8×76090 M	8×76090 S	8×76090 A
BF HP 1500	200	25/362	15.700	9.235	1890	918	545	610	-	10×76090 B15	10×76090 P	10×76090 R	10×76090 M	10×76090 S	10×76090 A
BF HP 1800	250	25/362	18.850	11.088	1920	655	555	610	-	12×76090 B15	12×76090 P	12×76090 R	12×76090 M	12×76090 S	12×76090 A
BF HP 2500	250	25/362	25.100	14.765	2030	1042	685	711	-	16×76090 B15	16×76090 P	16×76090 R	16×76090 M	16×76090 S	16×76090 A
BF HP 3000	300	25/362	31.400	18.481	2130	1085	680	711	-	20×76090 B15	20×76090 P	20×76090 R	20×76090 M	20×76090 S	20×76090 A
BF HP 0240 BF HP 0300 BF HP 0450 BF HP 0600 BF HP 0900 BF HP 1200 BF HP 1500 BF HP 1800 BF HP 2500 BF HP 3000 	quality class - solids (ISO 8573-1)									7	6	3	2	1	1 ³⁾
	residual oil content [mg/m³]									-	-	-	<0,1	<0,01	<0,005
	quality class - oils (ISO 8573-1)									-	-	-	2	1	1
	pressure drop - new element [mbar / psi]									20 / 0,290	10 / 0,145	20 / 0,290	50 / 0,725	80 / 1,160	60 / 0,870
	change filter cartridge at pressure drop [mbar / psi]									¹⁾	350 / 5,07	350 / 5,07	350 / 5,07	350 / 5,07	6 months ²⁾
	filter media									sintered brass	acrylic fibres, cellulose	borosilicate micro fibres			activated carbon
	pleated version									-	✓	✓	✓	✓	-
	wrapped version									-	-	-	-	-	✓
	sintered version									✓	-	-	-	-	-
	min. operating temperature (°C / °F)									1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35
max. operating temperature (°C / °F)									65 / 149	65 / 149	65 / 149	65 / 149	65 / 149	45 / 113	

CORRECTION FACTORS

Operating pressure [bar]	2	3	4	5	6	7	8	9	10	12	14	15	18	20	22	25
Operating pressure [psi]	29	44	58	72	87	100	115	130	145	174	203	218	261	290	319	363
Correction factor	0,38	0,5	0,63	0,75	0,88	1	1,13	1,25	1,38	1,63	1,88	2,00	2,37	2,63	2,89	3,25

¹⁾ "B" filter element can be cleared with ultrasonic bath or with back flushing. Intervals of cleaning depends of application. If necessary replace filter element with new one.

²⁾ Filter elements "A" must be changed periodically to suit application, but at least every 6 months. Activated carbon filters must not operate in oil saturated conditions.

³⁾ Valid if "S" filter cartridge is installed upstream.

Models BF HP 0240 to BF HP 0900 can be produced with optional integrated support legs, which should be noticed at order.



14 bar
operating pressure

75 to 3600 Nm³/h
volume flow rate

1/4" to 3"
connections

up to +150 °C
operating temperature range

stainless steel 1.4404-standard

stainless steel 1.4301-option
material

DESCRIPTION

WFIT welded stainless steel filter housings with threaded connections have been developed for filtration of compressed air as well as many other gasses where the risk for corrosion is very high or where stainless steel housing is required. To meet the required gas quality appropriate filter element must be installed into filter housing.

For list of suitable gasses please contact us or your local dealer.

WFIT process filter housing can be used in variety of applications. For applications not listed please contact us or your local dealer.

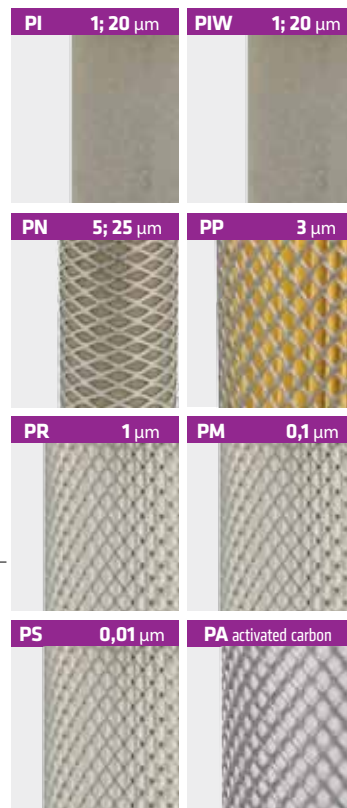
Fluid group 1 on request.

APPLICATIONS

- General industrial applications
- Biotechnology
- Breweries
- Chemical industry
- Petrochemical industry
- Dairies
- Fermentation processes
- Pharmaceutical industry
- Hospitals

WFIT SERIES

WELDED STAINLESS STEEL COMPRESSED AIR FILTERS - THREADED CONNECT.





TECHNICAL DATA									FILTER ELEMENTS									
Filter housing size	Pipe size D	Operat. press.	Flow rate at 7 bar(g), 20°C		Dimensions [mm]			Mass	PI prefilter 1; 20 µm	PIW prefilter 1; 20 µm	PN prefilter 5; 25 µm	PP prefilter 3 µm	PR prefilter 1 µm	PM microfilter 0,1 µm	PS microfilter 0,01 µm	PA activated carbon	CKL-P	
	inch		bar/psi	Nm³/h	scfm	A	B		C	kg								
WFIT 005	1/4"	14/203	75	44	204	120	76,1	1,9	0310 PI	0310 PIW	0310 PN	0310 PP	0310 PR	0310 PM	0310 PS	0310 PA	0310 CKL-P	
WFIT 007	3/8"	14/203	105	62	235	120	76,1	2,1	0410 PI	0410 PIW	0410 PN	0410 PP	0410 PR	0410 PM	0410 PS	0410 PA	0410 CKL-P	
WFIT 010	1/2"	14/203	150	88	239	121	76,1	2,2	0420 PI	0420 PIW	0420 PN	0420 PP	0420 PR	0420 PM	0420 PS	0420 PA	0420 CKL-P	
WFIT 018	3/4"	14/203	225	132	263	121	76,1	2,3	0520 PI	0520 PIW	0520 PN	0520 PP	0520 PR	0520 PM	0520 PS	0520 PA	0520 CKL-P	
WFIT 030	1"	14/203	315	185	278	136	88,9	3,1	0525 PI	0525 PIW	0525 PN	0525 PP	0525 PR	0525 PM	0525 PS	0525 PA	0525 CKL-P	
WFIT 047	1 1/4"	14/203	420	247	343	155	88,9	3,4	0725 PI	0725 PIW	0725 PN	0725 PP	0725 PR	0725 PM	0725 PS	0725 PA	0725 CKL-P	
WFIT 070	1 1/2"	14/203	600	353	376	180	114,3	4,6	0730 PI	0730 PIW	0730 PN	0730 PP	0730 PR	0730 PM	0730 PS	0730 PA	0730 CKL-P	
WFIT 094	2"	14/203	900	530	458	180	114,3	5,4	1030 PI	1030 PIW	1030 PN	1030 PP	1030 PR	1030 PM	1030 PS	1030 PA	1030 CKL-P	
WFIT 150	2"	14/203	1.260	742	571	180	114,3	6,1	1530 PI	1530 PIW	1530 PN	1530 PP	1530 PR	1530 PM	1530 PS	1530 PA	1530 CKL-P	
WFIT 175	2 1/2"	14/203	1.680	989	722	226	139,7	11,4	2030 PI	2030 PIW	2030 PN	2030 PP	2030 PR	2030 PM	2030 PS	2030 PA	2030 CKL-P	
WFIT 200	3"	14/203	2.400	1.413	1004	224	139,7	12	3030 PI	3030 PIW	3030 PN	3030 PP	3030 PR	3030 PM	3030 PS	3030 PA	3030 CKL-P	
WFIT 240	3"	14/203	3.600	2.119	1029	252	168,3	16	3050 PI	3050 PIW	3050 PN	3050 PP	3050 PR	3050 PM	3050 PS	3050 PA	3050 CKL-P	
					quality class - solids (ISO 8573-1)				-	-	-	6	3	2	1	1 ⁰	-	
					quality class - oils (ISO 8573-1)				-	-	-	-	-	2	1	1	-	
					pressure drop - new element-dry [mbar]				≤2600; ≤60	≤2600; ≤60	10	10	20	50	80	60	-	
					filter media				sintered INOX 1.4404	sintered INOX 1.4404	stainless steel mesh 1.4301	acrylic fibres, cellulose	borosilicate micro fibres				borosilicate micro fibres, activ. carbon	-
					pleated version				-	-	-	✓	✓	✓	✓	-	-	
					wrapped version				-	-	✓	-	-	-	-	✓	-	
					sintered version				✓	✓	-	-	-	-	-	-	-	
					min. operating temperature (°C / °F)				1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35
					max. operating temperature (°C / °F)				150 / 302	150 / 302	150 / 302	65 / 149	120 / 248	120 / 248	120 / 248	45 / 113	120 / 248	
CORRECTION FACTORS																		
Operating pressure [bar]			2	3	4	5	6	7	8	9	10	11	12	13	14			
Operating pressure [psi]			29	44	58	72	87	100	115	130	145	160	174	189	203			
Correction factor			0,38	0,50	0,63	0,75	0,88	1	1,13	1,25	1,38	1,50	1,63	1,75	1,88			

**50 bar**

operating pressure

150 to 2400 Nm³/h

volume flow rate

1/2" to 3"

connections

1,5 to 150 °C

operating temperature range

stainless steel 1.4404-standard**stainless steel 1.4301**-option
material

DESCRIPTION

WHFIT welded stainless steel filter housings with threaded connections have been developed for filtration of compressed air as well as many other gasses where the risk for corrosion is very high or where stainless steel housing is required. To meet the required gas quality appropriate filter element must be installed into filter housing.

For any other technical gas please contact us or your local dealer.

WHFIT process filter housing can be used in variety of applications. For applications not listed please contact us or your local dealer.

For oil removal, coalescing filter element must be installed and flow direction inside-out must be provided. General arrangement is filter head on top and filter bowl on bottom.

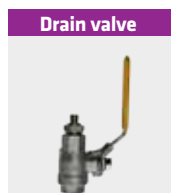
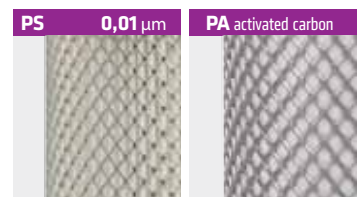
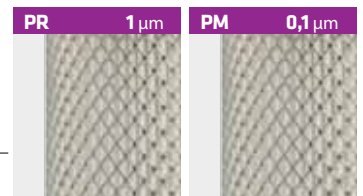
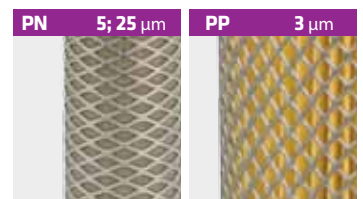
Fluid group 1 on request.

APPLICATIONS

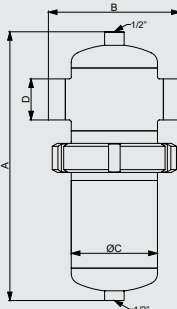
- General industrial applications
- Packing industry
- Biotechnology
- Breweries
- Chemical industry
- Dairies
- Fermentation processes
- Food and beverage industry
- Pharmaceutical industry
- Hospitals

WHFIT SERIES

HIGH PRESSURE STAINLESS STEEL COMPRESSED AIR FILTERS





TECHNICAL DATA									FILTER ELEMENTS								
Filter housing size	Pipe size D	Oper. press.	Flow rate at 7 bar(g), 20 °C		Dimensions [mm]			Mass	PI prefilter 1; 20 µm	PIW prefilter 1; 20 µm	PN prefilter 5; 25 µm	PP prefilter 3 µm	PR prefilter 1 µm	PM microfilter 0,1 µm	PS microfilter 0,01 µm	PA activated carbon	CKL-P
	inch	bar/psi	Nm³/h	scfm	A	B	C	kg									
WHFIT 010	1/2"	50/725	150	88	244	121	76,1	2,6	0420 PI	0420 PIW	0420 PN	0420 PP	0420 PR	0420 PM	0420 PS	0420 PA	0420 CKL-P
WHFIT 018	3/4"	50/725	225	132	268	121	76,1	2,8	0520 PI	0520 PIW	0520 PN	0520 PP	0520 PR	0520 PM	0520 PS	0520 PA	0520 CKL-P
WHFIT 030	1"	50/725	315	185	302	143	88,9	3,4	0525 PI	0525 PIW	0525 PN	0525 PP	0525 PR	0525 PM	0525 PS	0525 PA	0525 CKL-P
WHFIT 047	1 1/4"	50/725	420	247	335	160	88,9	3,9	0725 PI	0725 PIW	0725 PN	0725 PP	0725 PR	0725 PM	0725 PS	0725 PA	0725 CKL-P
WHFIT 070	1 1/2"	50/725	600	353	402	182	114,3	5,6	0730 PI	0730 PIW	0730 PN	0730 PP	0730 PR	0730 PM	0730 PS	0730 PA	0730 CKL-P
WHFIT 094	2"	50/725	900	530	469	180	114,3	6,2	1030 PI	1030 PIW	1030 PN	1030 PP	1030 PR	1030 PM	1030 PS	1030 PA	1030 CKL-P
WHFIT 150	2"	50/725	1260	742	606	180	114,3	6,9	1530 PI	1530 PIW	1530 PN	1530 PP	1530 PR	1530 PM	1530 PS	1530 PA	1530 CKL-P
WHFIT 200	3"	50/725	2400	1413	1028	228	139,7	11,5	3030 PI	3030 PIW	3030 PN	3030 PP	3030 PR	3030 PM	3030 PS	3030 PA	3030 CKL-P
					quality class - solids (ISO 8573-1)			-	-	-	6	3	2	1	1 ¹⁾	-	
					quality class - oils (ISO 8573-1)			-	-	-	-	-	2	1	1	-	
					pressure drop - new elem.-dry [mbar / psi]			≤2600; ≤60	≤2600; ≤60	10	10	20	50	80	60	-	
					filter media			sintered INOX 1.4404	sintered INOX 1.4404	stainless steel mesh 1.4301	acrylic fibres, cellulose	borosilicate micro fibres		borosilicate micro fibres, activ. carbon		-	
					pleated version			-	-	-	✓	✓	✓	✓	-	-	
					wrapped version			-	-	✓	-	-	-	-	✓	-	
					sintered version			✓	✓	-	-	-	-	-	-	-	
					min. operating temperature (°C / °F)			1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35	
					max. operating temperature (°C / °F)			150 / 302	150 / 302	150 / 302	65 / 149	120 / 248	120 / 248	120 / 248	45 / 113	120 / 248	

CORRECTION FACTORS										
Operating pressure [bar]	3	5	7	10	13	16	20	30	40	50
Operating pressure [psi]	44	72	100	145	189	232	290	435	580	725
Correction factor	0,50	0,75	1	1,38	1,75	2,13	2,63	3,88	5,13	6,38

¹⁾ Valid if "S" filter cartridge is installed upstream.



14 bar
operating pressure

150 to 21.120 Nm³/h
volume flow rate

DN15 to DN200
connections

up to +150 °C
operating temperature range

stainless steel 1.4404-standard
stainless steel 1.4301-option
material

DESCRIPTION

WFIF welded stainless steel filter housings with flange connections have been specifically developed for filtration of compressed air as well as many other gasses where the risk for corrosion is very high or where stainless steel housing is required. To meet the required gas quality appropriate filter element must be installed into filter housing.

For list of suitable gasses please contact us or your local dealer.

WFIF process filter housing can be used in variety of applications. For applications not listed please contact us or your local dealer.

Fluid group 1 on request.

APPLICATIONS

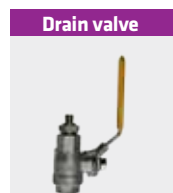
- General industrial applications
- Biotechnology
- Breweries
- Chemical industry
- Petrochemical industry
- Dairies
- Fermentation processes
- Pharmaceutical industry
- Hospitals

WFIF SERIES

WELDED STAINLESS STEEL FILTERS - FLANGED CONNECTIONS



PI	1; 20 µm	PIW	1; 20 µm
PN	5; 25 µm	PP	3 µm
PR	1 µm	PM	0,1 µm
PS	0,01 µm	PA	activated carbon

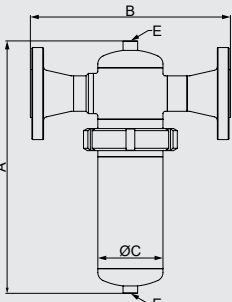


page 122

page 115

page 110



TECHNICAL DATA											FILTER ELEMENTS										
Filter housing size	Pipe size	Oper. press.	Flow rate at 7 bar(g), 20 °C		Dimensions [mm]					Mass kg	PI prefilter 1; 20 µm	PIW prefilter 1; 20 µm	PN prefilter 5; 25 µm	PP prefilter 3 µm	PR prefilter 1 µm	PM microfilter 0,1 µm	PS microfilter 0,01 µm	PA activated carbon	CKL-P		
		bar/psi	Nm³/h	scfm	A	B	B*	C	E												
WFIF 010	DN15	14/203	150	88	230	195	217	76,1	1/2"	3,5	0420 PI	0420 PIW	0420 PN	0420 PP	0420 PR	0420 PM	0420 PS	0420 PA	0420 CKL-P		
WFIF 018	DN20	14/203	225	132	263	201	219	76,1	1/2"	4,3	0520 PI	0520 PIW	0520 PN	0520 PP	0520 PR	0520 PM	0520 PS	0520 PA	0520 CKL-P		
WFIF 030	DN25	14/203	315	185	279	216	244	88,9	1/2"	5,7	0525 PI	0525 PIW	0525 PN	0525 PP	0525 PR	0525 PM	0525 PS	0525 PA	0525 CKL-P		
WFIF 047	DN32	14/203	420	247	343	235	267	88,9	1/2"	6,6	0725 PI	0725 PIW	0725 PN	0725 PP	0725 PR	0725 PM	0725 PS	0725 PA	0725 CKL-P		
WFIF 070	DN40	14/203	600	353	391	260	290	114,3	1/2"	8,0	0730 PI	0730 PIW	0730 PN	0730 PP	0730 PR	0730 PM	0730 PS	0730 PA	0730 CKL-P		
WFIF 094	DN50	14/203	900	530	444	270	304	114,3	1/2"	9,8	1030 PI	1030 PIW	1030 PN	1030 PP	1030 PR	1030 PM	1030 PS	1030 PA	1030 CKL-P		
WFIF 150	DN50	14/203	1.260	742	571	270	304	114,3	1/2"	11,0	1530 PI	1530 PIW	1530 PN	1530 PP	1530 PR	1530 PM	1530 PS	1530 PA	1530 CKL-P		
WFIF 175	DN65	14/203	1.680	989	752	295	340	139,7	1/2"	14,2	2030 PI	2030 PIW	2030 PN	2030 PP	2030 PR	2030 PM	2030 PS	2030 PA	2030 CKL-P		
WFIF 200	DN80	14/203	2.400	1.413	978	306	340	139,7	1/2"	21,2	3030 PI	3030 PIW	3030 PN	3030 PP	3030 PR	3030 PM	3030 PS	3030 PA	3030 CKL-P		
WFIF 240	DN80	14/203	3.600	2.119	1041	332	368	168,3	1/2"	22,9	3050 PI	3050 PIW	3050 PN	3050 PP	3050 PR	3050 PM	3050 PS	3050 PA	3050 CKL-P		
WFIF 450	DN100	10/145	5.040	2.966	981	410	-	219,1	1"	55	3x2030 PI	3x2030 PIW	3x2030 PN	3x2030 PP	3x2030 PR	3x2030 PM	3x2030 PS	3x2030 PA	-		
WFIF 600	DN100	10/145	6.720	3.955	1288	410	456	219,1	1"	64	3x3030 PI	3x3030 PIW	3x3030 PN	3x3030 PP	3x3030 PR	3x3030 PM	3x3030 PS	3x3030 PA	-		
WFIF 900	DN150	10/145	9.600	5.650	1310	480	-	273,0	1"	87	4x3030 PI	4x3030 PIW	4x3030 PN	4x3030 PP	4x3030 PR	4x3030 PM	4x3030 PS	4x3030 PA	-		
WFIF 1200	DN150	10/145	13.440	7.910	1351	540	598	323,9	1"	110	6x3030 PI	6x3030 PIW	6x3030 PN	6x3030 PP	6x3030 PR	6x3030 PM	6x3030 PS	6x3030 PA	-		
WFIF 1800	DN200	10/145	17.280	10.171	1496	660	-	406,4	1"	200	8x3030 PI	8x3030 PIW	8x3030 PN	8x3030 PP	8x3030 PR	8x3030 PM	8x3030 PS	8x3030 PA	-		
WFIF 2000	DN200	10/145	21.120	12.431	1496	660	-	406,4	1"	200	10x3030 PI	10x3030 PIW	10x3030 PN	10x3030 PP	10x3030 PR	10x3030 PM	10x3030 PS	10x3030 PA	-		
					quality class - solids (ISO 8573-1)					-	-	-	6	3	2	1	1 ¹⁾	-			
					quality class - oils (ISO 8573-1)					-	-	-	-	-	2	1	1	-			
					pressure drop - new element-dry [mbar]					≤2600; ≤60		≤2600; ≤60		10	10	20	50	80	60	-	
					filter media					sintered INOX 1.4404		sintered INOX 1.4404		stainless steel mesh 1.4301	acrylic fibres, cellulose		borosilicate micro fibres		borosilicate micro fibres, activ. carbon		-
					pleated version					-		-		-	✓	✓	✓	✓	-	-	
					wrapped version					-		-		✓	-	-	-	-	✓	-	
					sintered version					✓		✓		-	-	-	-	-	-	-	
					min. operating temperature (°C / °F)					1,5 / 35		1,5 / 35		1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35
					max. operating temperature (°C / °F)					150 / 302		150 / 302		150 / 302	65 / 149	120 / 248	120 / 248	120 / 248	45 / 113	120 / 248	

CORRECTION FACTORS

Operating pressure [bar]	2	3	4	5	6	7	8	9	10	11	12	13	14
Operating pressure [psi]	29	44	58	72	87	100	115	130	145	160	174	189	203
Correction factor	0,38	0,50	0,63	0,75	0,88	1	1,13	1,25	1,38	1,50	1,63	1,75	1,88

¹⁾ Valid if "S" filter cartridge is installed upstream.

B = flange connection EN 1092-1/11 PN16

B* = flange connection ANSI B16.5 WN CI 150



14 bar
operating pressure

75 to 3.600 Nm³/h
volume flow rate

ø13 to ø219,1
connections

up to +150 °C
operating temperature range

stainless steel 1.4404-standard
stainless steel 1.4301-option
material

DESCRIPTION

WFIW welded stainless steel filter housings have been specifically developed for filtration of compressed air as well as many other gasses where the risk for corrosion is very high or where stainless steel housing is required. To meet the required gas quality appropriate filter element must be installed into filter housing.

For list of suitable gasses please contact us or your local dealer.

WFIW process filter housing can be used in variety of applications. For applications not listed please contact us or your local dealer.

Fluid group 1 on request.

APPLICATIONS

- General industrial applications
- Biotechnology
- Breweries
- Chemical industry
- Petrochemical industry
- Dairies
- Fermentation processes
- Pharmaceutical industry
- Hospitals

WFIW SERIES

WELDED STAINLESS STEEL FILTERS - WELDING END CONNECTIONS

MDHI 50 KIT

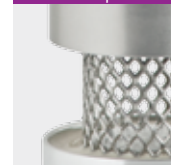


page 90

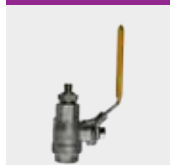


PI	1; 20 µm	PIW	1; 20 µm
PN	5; 25 µm	PP	3 µm
PR	1 µm	PM	0,1 µm
PS	0,01 µm	PA	activated carbon

CKL-P separator



Drain valve



MCDI



page 122

AOK 20SS



page 115

TD16Mcr



page 110



TECHNICAL DATA										FILTER ELEMENTS									
Filter housing size	Pipe size D [ø, mm]	Oper. press. bar/psi	Flow rate at 7 bar(g), 20 °C		Dimensions [mm]				Mass kg	PI prefilter 1; 20 µm	PIW prefilter 1; 20 µm	PN prefilter 5; 25 µm	PP prefilter 3 µm	PR prefilter 1 µm	PM microfilter 0,1 µm	PS microfilter 0,01 µm	PA activated carbon	CKL-P	
			Nm³/h	scfm	A	B	C	E											
WFIW 005	13,5	14/203	75	44	202	116	76,1	1/2"	1,8	0310 PI	0310 PIW	0310 PN	0310 PP	0310 PR	0310 PM	0310 PS	0310 PA	0310 CKL-P	
WFIW 010	14,2	14/203	150	88	240	121	76,1	1/2"	2,0	0420 PI	0420 PIW	0420 PN	0420 PP	0420 PR	0420 PM	0420 PS	0420 PA	0420 CKL-P	
WFIW 018	21,3	14/203	225	132	254	125	76,1	1/2"	2,0	0520 PI	0520 PIW	0520 PN	0520 PP	0520 PR	0520 PM	0520 PS	0520 PA	0520 CKL-P	
WFIW 030	26,9	14/203	315	185	280	136	88,9	1/2"	3,0	0525 PI	0525 PIW	0525 PN	0525 PP	0525 PR	0525 PM	0525 PS	0525 PA	0525 CKL-P	
WFIW 047	33,7	14/203	420	247	337	155	88,9	1/2"	3,0	0725 PI	0725 PIW	0725 PN	0725 PP	0725 PR	0725 PM	0725 PS	0725 PA	0725 CKL-P	
WFIW 070	48,3	14/203	600	353	376	176	114,3	1/2"	4,3	0730 PI	0730 PIW	0730 PN	0730 PP	0730 PR	0730 PM	0730 PS	0730 PA	0730 CKL-P	
WFIW 094	60,3	14/203	900	530	457	180	114,3	1/2"	4,8	1030 PI	1030 PIW	1030 PN	1030 PP	1030 PR	1030 PM	1030 PS	1030 PA	1030 CKL-P	
WFIW 150	60,3	14/203	1.260	742	583	180	114,3	1/2"	5,3	1530 PI	1530 PIW	1530 PN	1530 PP	1530 PR	1530 PM	1530 PS	1530 PA	1530 CKL-P	
WFIW 175	76,1	14/203	1.680	989	740	224	139,7	1/2"	9,0	2030 PI	2030 PIW	2030 PN	2030 PP	2030 PR	2030 PM	2030 PS	2030 PA	2030 CKL-P	
WFIW 200	88,9	14/203	2.400	1.413	1004	224	139,7	1/2"	10,8	3030 PI	3030 PIW	3030 PN	3030 PP	3030 PR	3030 PM	3030 PS	3030 PA	3030 CKL-P	
WFIW 240	88,9	14/203	3.600	2.119	1029	252	168,3	1/2"	16,2	3050 PI	3050 PIW	3050 PN	3050 PP	3050 PR	3050 PM	3050 PS	3050 PA	3050 CKL-P	
										quality class - solids (ISO 8573-1)		-	-	-	6	3	2	1 ¹⁾	-
										quality class - oils (ISO 8573-1)		-	-	-	-	-	2	1	-
										pressure drop - new element-dry [mbar]		≤2600; ≤60	≤2600; ≤60	10	10	20	50	80	60
										filter media		sintered INOX 1.4404	sintered INOX 1.4404	stainless steel mesh 1.4301	acrylic fibres, cellulose	borosilicate micro fibres		borosilicate micro fibres, activ. carbon	
										pleated version		-	-	-	✓	✓	✓	✓	-
										wrapped version		-	-	✓	-	-	-	✓	-
										sintered version		✓	✓	-	-	-	-	-	-
										min. operating temperature (°C / °F)		1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35
										max. operating temperature (°C / °F)		150 / 302	150 / 302	150 / 302	65 / 149	120 / 248	120 / 248	120 / 248	45 / 113

CORRECTION FACTORS

Operating pressure [bar]	2	3	4	5	6	7	8	9	10	11	12	13	14
Operating pressure [psi]	29	44	58	72	87	100	115	130	145	160	174	189	203
Correction factor	0,38	0,50	0,63	0,75	0,88	1	1,13	1,25	1,38	1,50	1,63	1,75	1,88

Replace filter element at least every 12 months or follow the instructions for specific filter element. Change the sealing when you disassemble filter housing. Once per year make a visual check of filter housing and make sure there is no visual damage.



20 to 2000 mbar(abs)

operating pressure

7,5 to 345 Nm³/h

volume flow rate

3/8" to 3"

connections

1,5 to 65 °C

operating temperature range

RAL 5012

standard colour

DESCRIPTION

P-VAC filters are designed for protection of vacuum pumps. These filters are optimized for high-efficient removal of solid particles and other contamination from the suction side of vacuum pumps preventing damage to the pump.

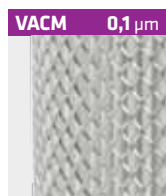
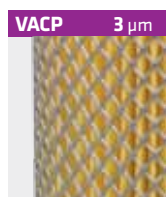
Two filtration stages are available for P-VAC filters. Rough prefilter "VACP" removes bulk liquid and large solid particles, while high efficiency microfilter VACM removes very fine impurities which may damage the pump.

APPLICATIONS

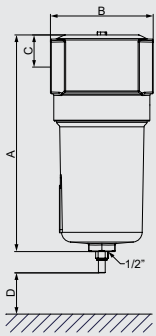
- Vacuum pumps

P-VAC SERIES

VACUUM PUMP PROTECTION FILTERS





TECHNICAL DATA									FILTER ELEMENTS			
Filter model	Pipe size	Free air capacity at atmospheric pressure		Dimensions [mm]				Mass	VACP Prefilter	VACM Microfilter		
	inch	Nm³/h	scfm	A	B	C	D	kg				
P-VAC 0056	3/8"	7,5	4,5	192	88	25	60	0,6	06050 VACP	06050 VACM		
P-VAC 0076	1/2"	9,8	5,8	192	88	25	60	0,6	07050 VACP	07050 VACM		
P-VAC 0106	3/4"	15,0	8,8	262	88	25	80	0,7	14050 VACP	14050 VACM		
P-VAC 0186	1"	24,8	14,6	264	125	39	100	1,2	12075 VACP	12075 VACM		
P-VAC 0306	1"	41,9	24,7	364	125	39	120	1,6	22075 VACP	22075 VACM		
P-VAC 0476	1 1/2"	63,8	37,6	464	125	39	140	1,9	32075 VACP	32075 VACM		
P-VAC 0706	1 1/2"	97,5	57,4	644	125	39	160	2,6	50075 VACP	50075 VACM		
P-VAC 0946	2"	125	73,6	696	164	50	520	5,7	51090 VACP	51090 VACM		
P-VAC 1506	2"	187	110,4	943	164	50	770	7,6	76090 VACP	76090 VACM		
P-VAC 1756	2 1/2"	210	123,6	943	164	50	770	7,3	76090 VACP	76090 VACM		
P-VAC 2006	3"	270	158,9	801	242	60	630	14,1	51140 VACP	51140 VACM		
P-VAC 2406	3"	345	203	998	242	60	780	16,7	75140 VACP	75140 VACM		
					pressure drop - new element-dry [mbar / psi]				10 / 0,15	30 / 0,45		
					filter media				acrylic fibres, cellulose	borosilicate micro fibres		
					min. operating temperature (°C / °F)				1,5 / 35	1,5 / 35		
					max. operating temperature (°C / °F)				65 / 149	65 / 149		
CORRECTION FACTORS												
Absolute pressure [bar]	1	0,9	0,8	0,7	0,6	0,5	0,4	0,3	0,2	0,1	0,05	0,02
Absolute pressure [psi]	14,7	13	11,6	10,2	8,7	7,3	5,8	3,3	2,9	1,45	0,73	0,29
Correction factor	1	0,9	0,8	0,7	0,6	0,5	0,4	0,3	0,2	0,1	0,05	0,02

• To calculate the correct capacity of a given filter based on actual operating conditions, multiply the nominal flow capacity by the appropriate correction factor.



20 to 2000 mbar(abs)
operating pressure

7,5 to 787 Nm³/h
volume flow rate

3/8" to DN150
connections

1,5 to 65 °C
operating temperature range

RAL 9003
standard colour

DESCRIPTION

M-VAC filters are designed for medical vacuum applications. They are optimized for high-efficient removal of bacterial and other contamination (solids and liquids) from the suction side of vacuum pumps preventing damage to the pump and the potential biological infection of the surrounding environment. Removed liquids are collected in a transparent flask which can be removed for sterilisation.

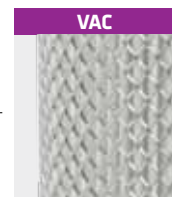
The efficiency of the installed filter elements exceeds the 0,005 % penetration specified in HTM 2022 for infectious disease units, when tested in accordance with BS 3928.

APPLICATIONS

- Operating theatres
- Maternity units
- Dental applications
- Pathology laboratories
- Pharmaceutical applications
- Mortuary and post-mortem rooms

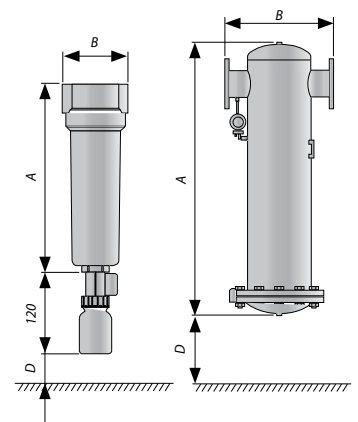
M-VAC SERIES

MEDICAL VACUUM FILTERS





TECHNICAL DATA								FILTER ELEMENTS
Filter model	Pipe size	Free air capacity at atmospheric pressure		Dimensions [mm]			Mass	VAC
	inch	Nm³/h	scfm	A	B	D	kg	
M-VAC 0056	3/8"	7,5	4	187	88	60	0,7	06050
M-VAC 0076	1/2"	9,8	6	187	88	60	0,7	07050
M-VAC 0106	3/4"	15,0	9	257	88	80	0,8	14050
M-VAC 0186	1"	24,8	15	263	125	100	1,8	12075
M-VAC 0306	1"	41,9	25	363	125	120	2,5	22075
M-VAC 0476	1 1/2"	63,8	38	461	125	140	2,5	32075
M-VAC 0706	1 1/2"	97,5	57	640	125	160	3,2	50075
M-VAC 0946	2"	125	74	684	163	520	5,1	51090
M-VAC 1506	2"	187,5	110	935	163	770	7,1	76090
M-VAC 1756	2 1/2"	210	124	935	163	770	6,9	76090
M-VAC 2006	3"	270	159	795	240	630	12,9	51140
M-VAC 2406	3"	345	203	1000	240	780	14	75140
M-VAC B240	DN80	275	162	1170	450	650	61	1x 76090
M-VAC B300	DN100	394	232	1340	560	650	115	2x 76090
M-VAC B450	DN125	587	345	1340	560	650	123	3x 76090
M-VAC B600	DN150	787	463	1425	620	650	178	4x 76090
pressure drop - new element-dry [mbar / psi]								30 / 0,45
filter media								borosilicate micro fibres
min. operating temperature (°C / °F)								1,5 / 35
max. operating temperature (°C / °F)								65 / 149



CORRECTION FACTORS													
Absolute pressure [bar]	1	0,9	0,8	0,7	0,6	0,5	0,4	0,3	0,2	0,1	0,05	0,02	
Absolute pressure [psi]	14,7	13	11,6	10,2	8,7	7,3	5,8	3,3	2,9	1,45	0,73	0,29	
Correction factor	1	0,9	0,8	0,7	0,6	0,5	0,4	0,3	0,2	0,1	0,05	0,02	

• To calculate the correct capacity of a given filter based on actual operating conditions, multiply the nominal flow capacity by the appropriate correction factor.



16 bar
operating pressure

60 to 2.760 Nm³/h
volume flow rate

3/8" to 3"
connections

1,5 to 65 °C
operating temperature range

RAL 3020
standard colour

DESCRIPTION

AFs filters are designed for applications in paint industry. Quantity of substances that could cause impairments in paint wetting applications or cause defects in paint work have been reduced to a minimum.

To meet the required compressed air quality appropriate "paint compatible" filter element must be installed into filter housing.

APPLICATIONS

- Painting
- Automotive industry

AFs SERIES

SILICONE FREE FILTERS



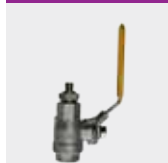
Ms 0,1 µm



Ss 0,01 µm



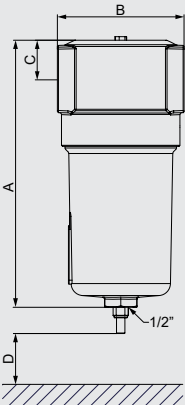
Drain valve



MCDI





TECHNICAL DATA									FILTER ELEMENTS	
Filter model	Pipe size	Flow rate at 7 bar(g), 20 °C		Dimensions [mm]				Mass	Ms Microfilter 0,1 µm	Ss Microfilter 0,01 µm
	inch	Nm³/h	scfm	A	B	C	D	kg		
AFs 0056	3/8"	60	35	192	88	25	60	0,6	06050 Ms	06050 Ss
AFs 0076	1/2"	78	46	192	88	25	60	0,6	07050 Ms	07050 Ss
AFs 0106	3/4"	120	70	262	88	25	80	0,7	14050 Ms	14050 Ss
AFs 0186	1"	198	116	264	125	39	100	1,2	12075 Ms	12075 Ss
AFs 0306	1"	335	197	364	125	39	120	1,6	22075 Ms	22075 Ss
AFs 0476	1 1/2"	510	300	464	125	39	140	1,9	32075 Ms	32075 Ss
AFs 0706	1 1/2"	780	459	644	125	39	160	2,6	50075 Ms	50075 Ss
AFs 0946	2"	1000	588	695	164	50	520	5,7	51090 Ms	51090 Ss
AFs 1506	2"	1500	882	942	164	50	770	7,6	76090 Ms	76090 Ss
AFs 1756	2 1/2"	1680	990	942	164	50	770	7,3	76090 Ms	76090 Ss
AFs 2006	3"	2160	1270	801	242	60	630	14,1	51140 Ms	51140 Ss
AFs 2406	3"	2760	1620	1000	242	60	780	16,7	75140 Ms	75140 Ss
						quality class - solids (ISO 8573-1)			2	1
						quality class - oils (ISO 8573-1)			2	1
						residual oil content			<0,1 mg/m³	<0,01 mg/m³
						pressure drop - new element-dry [mbar / psi]			50/0,725	80 / 1,160
						pressure drop - new element-wet [mbar / psi]			120/1,74	190 / 2,756
						change filter element at pressure drop [mbar / psi]			350 mbar	350 mbar
						filter media			borosilicate micro fibres	borosilicate micro fibres
						pleated version			✓	✓
						wrapped version			-	-
						sintered version			-	-
						min. operating temperature (°C / °F)			1,5 / 35	1,5 / 35
						max. operating temperature (°C / °F)			65 / 149	65 / 149

CORRECTION FACTORS															
Operating pressure [bar]	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Operating pressure [psi]	29	44	58	72	87	100	115	130	145	160	174	189	203	218	232
Correction factor	0,38	0,50	0,63	0,75	0,88	1	1,13	1,25	1,38	1,50	1,63	1,75	1,88	2,00	2,13

**50 bar**

operating pressure

71 to 2760 Nm³/h

volume flow rate

1/2" to 3"

connections

1,5 to 65 °C

operating temperature range

RAL 5012

standard colour

DESCRIPTION

HF filters are designed for high efficient removal of solid particles, water, oil aerosols, hydrocarbons and other vapours from compressed air systems.

To meet the required compressed air quality appropriate filter element (B, P, R, M, S, A) must be installed into filter housing.

For any other technical gas please contact producer or your local distributor.

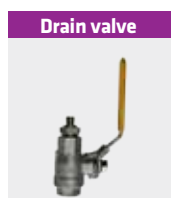
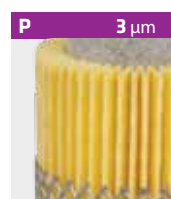
Optional external condensate drains should be used for efficient condensate draining from filter housing.

APPLICATIONS

- General industrial applications
- Automotive
- Electronics
- Food and beverage
- Chemical
- Petrochemical
- PET
- Paint

HF SERIES

CAST ALUMINIUM HIGH PRESSURE FILTERS





TECHNICAL DATA										FILTER ELEMENTS					
Filter housing size	Pipe size	Max. oper. pressure	Flow rate at 7 bar(g), 20 °C		Dimensions [mm]				Mass	B sintered 15 µm	P prefilter 3 µm	R prefilter 1 µm	M microfilter 0,1 µm	S microfilter 0,01 µm	A activated carbon
	inch	bar/psi	Nm³/h	scfm	A	B	C	D	kg						
HF 007	1/2"	50/725	71	42	250	110	30	80	2,1	HF 6060 B	HF 6060 P	HF 6060 R	HF 6060 M	HF 6060 S	HF 6060 A
HF 010	3/4"	50/725	112	66	250	110	30	90	2,1	HF 7060 B	HF 7060 P	HF 7060 R	HF 7060 M	HF 7060 S	HF 7060 A
HF 018	1"	50/725	204	120	250	110	30	140	2,1	HF 12060 B	HF 12060 P	HF 12060 R	HF 12060 M	HF 12060 S	HF 12060 A
HF 047	1 1/2"	50/725	282	166	535	160	45	260	9,5	HF 22090 B	HF 22090 P	HF 22090 R	HF 22090 M	HF 22090 S	HF 22090 A
HF 070	1 1/2"	50/725	400	235	535	160	45	360	9,5	HF 32090 B	HF 32090 P	HF 32090 R	HF 32090 M	HF 32090 S	HF 32090 A
HF 094	2"	50/725	494	291	715	160	45	540	12,2	HF 50090 B	HF 50090 P	HF 50090 R	HF 50090 M	HF 50090 S	HF 50090 A
HF 150	2"	50/725	799	470	715	160	45	550	12,2	HF 51090 B	HF 51090 P	HF 51090 R	HF 51090 M	HF 51090 S	HF 51090 A
HF 200	3"	50/725	2160	1270	862	198	70	620	30,4	HF 51140 B	HF 51140 P	HF 51140 R	HF 51140 M	HF 51140 S	HF 51140 A
HF 240	3"	50/725	2760	1620	1010	198	70	780	34,9	HF 75140 B	HF 75140 P	HF 75140 R	HF 75140 M	HF 75140 S	HF 75140 A
										quality class - solids (ISO 8573-1)					
										7	6	3	2	1	1 ³⁾
										-	-	-	<0,1	<0,01	<0,005
										quality class - oils (ISO 8573-1)					
										-	-	-	2	1	1
										pressure drop - new element [mbar / psi]					
										20 / 0,29	10 / 0,145	20 / 0,29	50 / 0,725	80 / 1,16	60 / 0,87
										change filter cartridge at pressure drop [mbar / psi]					
										1 ¹⁾	350 / 5,07	350 / 5,07	350 / 5,07	350 / 5,07	6 months ²⁾
										filter media					
										sintered brass	acrylic fibres, cellulose	borosilicate micro fibres			activated carbon
										pleated version	✓	✓	✓	✓	-
										wrapped version	-	-	-	-	✓
										sintered version	✓	-	-	-	-
										min. operating temperature (°C / °F)					
										1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35
										max. operating temperature (°C / °F)					
										65 / 149	65 / 149	65 / 149	65 / 149	65 / 149	45 / 113
CORRECTION FACTORS															
Operating pressure [bar]	3	5	7	10	13	16	20	30	40	50					
Operating pressure [psi]	44	72	100	145	189	232	290	435	580	725					
Correction factor	0,50	0,75	1	1,38	1,75	2,13	2,63	3,88	5,13	6,38					

¹⁾ B filter element can be cleaned with ultrasonic bath or with back flushing. Intervals of cleaning depends of application. If necessary replace filter element with new one.

²⁾ Filter elements "A", must be changed periodically to suit application, but at least every 6 months. Activated carbon filters must not operate in oil saturated conditions.

³⁾ Valid if "S" filter cartridge is installed upstream.



100, 250, 420 bar

operating pressure

40 to 715 Nm³/h

volume flow rate

1/4" to 2"

connections

1,5°C to 65°C

operating temperature range

Nickel plated 15 µm

surface protection

DESCRIPTION

CHP carbon steel high pressure filters have been specifically developed for high efficient removal of solid particles, water, oil aerosols, hydrocarbons and other vapours from compressed air systems. To meet the required compressed air quality appropriate filter element must be installed into filter housing.

For any other technical gas please contact us or your local dealer.

CHP filter housing can be used in variety of applications. For applications not listed please contact us or your local dealer.

APPLICATIONS

- General industrial applications
- Automotive
- Electronics
- Food and beverage
- Chemical
- Petrochemical
- Plastics
- Paint

CHP SERIES

CARBON STEEL HIGH PRESSURE FILTERS

MDH 200



page 91

MDH 420



page 92

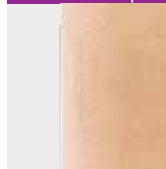
WB



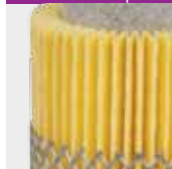
page 98



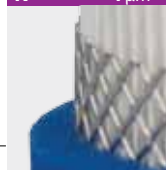
B 15 µm



P 3 µm



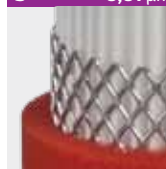
R 1 µm



M 0,1 µm



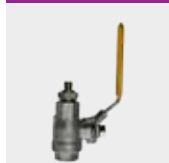
S 0,01 µm



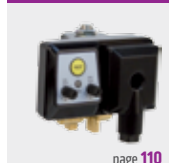
A activated carbon



Drain valve



TD 150M



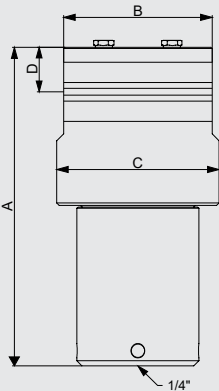
page 110

TD 420M



page 112



TECHNICAL DATA										FILTER ELEMENTS						
Filter housing size	Pipe size	Max. oper. pressure	Flow rate at 7 bar(g), 20 °C		Dimensions [mm]				Mass	B sintered 15 µm	P prefilter 3 µm	R prefilter 1 µm	M microfilter 0,1 µm	S microfilter 0,01 µm	A activated carbon	
	inch	bar	Nm³/h	scfm	A	B	C	D	kg							
CHP 003	1/4"	100/250/420	40	23,5	182	98	104	30	7,6	CHP 0305 B	CHP 0305 P	CHP 0305 R	CHP 0305 M	CHP 0305 S	CHP 0305 A	
CHP 005	3/8"	100/250/420	70	41,2	182	98	104	30	7,6	CHP 0310 B	CHP 0310 P	CHP 0310 R	CHP 0310 M	CHP 0310 S	CHP 0310 A	
CHP 007	1/2"	100/250/420	130	76,5	230	118	129	36	15,3	CHP 0420 B	CHP 0420 P	CHP 0420 R	CHP 0420 M	CHP 0420 S	CHP 0420 A	
CHP 010	3/4"	100/250/420	195	115	254	118	129	36	16,1	CHP 0520 B	CHP 0520 P	CHP 0520 R	CHP 0520 M	CHP 0520 S	CHP 0520 A	
CHP 018	1"	100/250/420	275	162	276	145	158	46	26,5	CHP 0525 B	CHP 0525 P	CHP 0525 R	CHP 0525 M	CHP 0525 S	CHP 0525 A	
CHP 030	1 1/4"	100/250/420	380	223	328	145	158	46	28,6	CHP 0725 B	CHP 0725 P	CHP 0725 R	CHP 0725 M	CHP 0725 S	CHP 0725 A	
CHP 047	1 1/2"	100/250/420	495	291	385	195	216	65	65,9	CHP 0730 B	CHP 0730 P	CHP 0730 R	CHP 0730 M	CHP 0730 S	CHP 0730 A	
CHP 094	2"	100/250/420	715	421	460	195	216	65	71,4	CHP 1030 B	CHP 1030 P	CHP 1030 R	CHP 1030 M	CHP 1030 S	CHP 1030 A	
										quality class - solids (ISO 8573-1)	8	6	3	2	1	1 ³⁾
										residual oil content [mg/m³]	-	-	-	<0,1	<0,01	<0,005
										quality class - oils (ISO 8573-1)	-	-	-	2	1	1
										pressure drop - new element [mbar / psi]	20 / 0,29	10 / 0,145	20 / 0,29	50 / 0,725	80 / 1,16	60 / 0,87
										change filter cartridge at pressure drop [mbar / psi]	1)	350 / 5,07	350 / 5,07	350 / 5,07	350 / 5,07	6 months ²⁾
										filter media	sintered brass	acrylic fibres, cellulose	borosilicate micro fibres			activated carbon
										pleated version	-	✓	✓	✓	✓	-
										wrapped version	-	-	-	-	-	✓
										sintered version	✓	-	-	-	-	-
										min. operating temperature (°C / °F)	1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35
										max. operating temperature (°C / °F)	65 / 149	65 / 149	65 / 149	65 / 149	65 / 149	45 / 113

CORRECTION FACTORS							
Operating pressure [bar]	7	25	40	64	100	250	420
Operating pressure [psi]	100	362	580	928	1450	3625	6091
Correction factor	1	3	5	8	12	12	12

¹⁾ B filter element can be cleaned with ultrasonic bath or with back flushing. Intervals of cleaning depends of application. If necessary replace filter element with new one.

²⁾ Filter elements "A", must be changed periodically to suit application, but at least every 6 months. Activated carbon filters must not operate in oil saturated conditions.

³⁾ Valid if "S" filter cartridge is installed upstream.



100, 250, 420 bar

operating pressure

40 to 715 Nm³/h

volume flow rate

1/4" to 2"

connections

1,5°C to 65°C

operating temperature range

stainless steel **1.4301**-standard

stainless steel **1.4404**-option

material

DESCRIPTION

IHP stainless steel high pressure filters are designed for high efficient removal of solid particles, water, oil aerosols, hydrocarbons and other vapours from compressed air systems up to 420 bar.

Required compressed air quality according to standard ISO 8571-1 can be achieved with 5 different grades of filter elements (N5, N25, M, S and A).

For any other technical gas please contact producer or your local distributor.

Optional external condensate drain should be used for efficient condensate draining from filter housing.

APPLICATIONS

- General industrial applications
- Automotive
- Electronics
- Food and beverage
- Chemical
- Petrochemical
- PET
- Paint

IHP SERIES

STAINLESS STEEL HIGH PRESSURE FILTERS





TECHNICAL DATA										FILTER ELEMENTS					
Filter housing size	Pipe size	Max. oper. pressure	Flow rate at 7 bar(g), 20 °C		Dimensions [mm]				Mass	N5 5 µm	N25 25 µm	M microfilter 0,1 µm	S microfilter 0,01 µm	A activated carbon	CKL-IHP
	inch	bar	Nm³/h	scfm	A	B	C	D	kg						
IHP 003	1/4"	100/250/420	40	23,5	182	98	104	30	7,9	IHP 0305 N5	IHP 0305 N25	IHP 0305 M	IHP 0305 S	IHP 0305 A	CKL-IHP 0305
IHP 005	3/8"	100/250/420	70	41,2	182	98	104	30	7,9	IHP 0310 N5	IHP 0310 N25	IHP 0310 M	IHP 0310 S	IHP 0310 A	CKL-IHP 0310
IHP 007	1/2"	100/250/420	130	76,5	230	118	129	36	15,7	IHP 0420 N5	IHP 0420 N25	IHP 0420 M	IHP 0420 S	IHP 0420 A	CKL-IHP 0420
IHP 010	3/4"	100/250/420	195	115	254	118	129	36	16,6	IHP 0520 N5	IHP 0520 N25	IHP 0520 M	IHP 0520 S	IHP 0520 A	CKL-IHP 0520
IHP 018	1"	100/250/420	275	162	276	145	158	46	27,3	IHP 0525 N5	IHP 0525 N25	IHP 0525 M	IHP 0525 S	IHP 0525 A	CKL-IHP 0525
IHP 030	1 1/4"	100/250/420	380	223	328	145	158	46	29,6	IHP 0725 N5	IHP 0725 N25	IHP 0725 M	IHP 0725 S	IHP 0725 A	CKL-IHP 0725
IHP 047	1 1/2"	100/250/420	495	291	385	195	216	65	67,8	IHP 0730 N5	IHP 0730 N25	IHP 0730 M	IHP 0730 S	IHP 0730 A	CKL-IHP 0730
IHP 094	2"	100/250/420	715	421	460	195	216	65	73,5	IHP 1030 N5	IHP 1030 N25	IHP 1030 M	IHP 1030 S	IHP 1030 A	CKL-IHP 1030

quality class - solids (ISO 8573-1)	-	-	2	1	1 ²⁾	-
residual oil content [mg/m³]	-	-	<0,1	<0,01	<0,005	-
quality class - oils (ISO 8573-1)	-	-	2	1	1	-
pressure drop - new element [mbar / psi]	10 / 0,15	10 / 0,15	50 / 0,725	80 / 1,16	60 / 0,87	-
change filter cartridge at pressure drop [mbar / psi]	-	-	350 / 5,07	350 / 5,07	6 months ¹⁾	-
filter media	stainless steel mesh 1.4301	stainless steel mesh 1.4301	borosilicate micro fibres		activated carbon	-
pleated version	-	-	✓	✓	-	-
wrapped version	✓	✓	-	-	✓	-
sintered version	-	-	-	-	-	-
min. operating temperature (°C / °F)	1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35
max. operating temperature (°C / °F)	65 / 149	65 / 149	65 / 149	65 / 149	45 / 113	65 / 149

CORRECTION FACTORS							
Operating pressure [bar]	7	25	40	64	100	250	420
Operating pressure [psi]	100	362	580	928	1450	3625	6091
Correction factor	1	3	5	8	12	12	12

¹⁾ Filter elements "A", must be changed periodically to suit application, but at least every 6 months. Activated carbon filters must not operate in oil saturated conditions.

²⁾ Valid if "S" filter cartridge is installed upstream.

**14 bar**

operating pressure

75 to 21120 Nm³/h

volume flow rate

1/4" to DN200

connections

up to 150 °C

operating temperature range

stainless steel 1.4404-standard**stainless steel 1.4301**-option
material

DESCRIPTION

PF process filters are designed for applications in process industry, where the risk for corrosion of compressed air system components is very high.

Required compressed air quality according to standard ISO 8571-1 can be achieved with 9 different grades of filter elements.

PF process filter housing can be used in variety of applications. For applications not listed please contact producer or your local distributor.

For any other technical gas please contact producer or your local distributor.

For oil removal, coalescing filter element must be installed and flow direction inside-out must be provided. General arrangement is bowl and filter head on the top and filter head on the bottom.

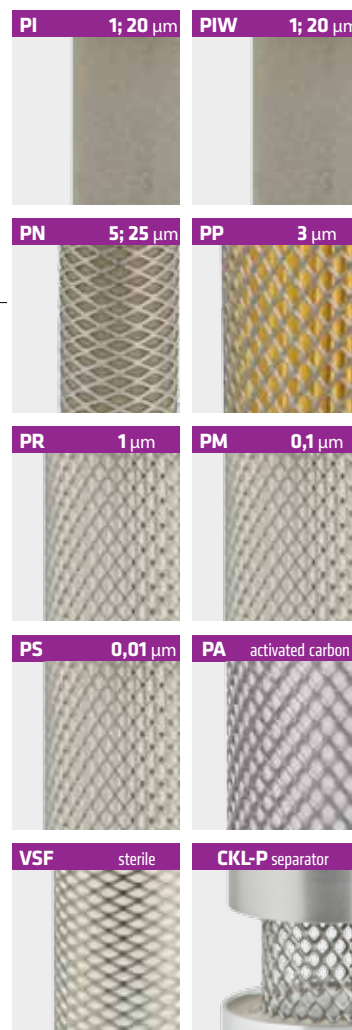
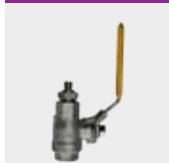
Fluid group 1 on request.

APPLICATIONS

- Packing industry
- Biotechnology
- Breweries
- Chemical industry
- Dairies
- Fermentation processes
- Food and beverage industry
- Pharmaceutical industry
- Hospitals
- Steam

PF SERIES

STAINLESS STEEL PROCESS FILTERS

**Drain valve****MCDI**

page 122

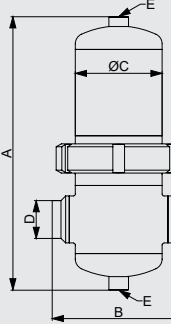
AOK 20SS

page 115

TD16Mcr

page 110



TECHNICAL DATA										FILTER ELEMENTS									
Filter housing size	Pipe size D	Oper. press.	Flow rate at 7 bar(g), 20 °C		Dimensions [mm]				Mass	PI prefilter 1; 20 µm	PIW prefilter 1; 20 µm	PN prefilter 5; 25 µm	PP prefilter 3 µm	PR prefilter 1 µm	PM microfilter 0,1 µm	PS microfilter 0,01 µm	PA activated carbon	CKL-P	
	inch		bar/psi	Nm³/h	scfm	A	B	C											E
PF 005	1/4"	14/203	75	44	206	120	76,1	1/4"	1,8	0310 PI	0310 PIW	0310 PN	0310 PP	0310 PR	0310 PM	0310 PS	0310 PA	0310 PA	
PF 007	3/8"	14/203	105	62	236	120	76,1	1/4"	2,0	0410 PI	0410 PIW	0410 PN	0410 PP	0410 PR	0410 PM	0410 PS	0410 PA	0410 PA	
PF 010	1/2"	14/203	150	88	239	121	76,1	1/4"	2,1	0420 PI	0420 PIW	0420 PN	0420 PP	0420 PR	0420 PM	0420 PS	0420 PA	0420 PA	
PF 018	3/4"	14/203	225	132	263	121	76,1	1/4"	2,2	0520 PI	0520 PIW	0520 PN	0520 PP	0520 PR	0520 PM	0520 PS	0520 PA	0520 PA	
PF 030	1"	14/203	315	185	280	136	88,9	1/4"	3,0	0525 PI	0525 PIW	0525 PN	0525 PP	0525 PR	0525 PM	0525 PS	0525 PA	0525 PA	
PF 047	1 1/4"	14/203	420	247	343	155	88,9	1/4"	3,4	0725 PI	0725 PIW	0725 PN	0725 PP	0725 PR	0725 PM	0725 PS	0725 PA	0725 PA	
PF 070	1 1/2"	14/203	600	353	376	180	114,3	1/4"	4,6	0730 PI	0730 PIW	0730 PN	0730 PP	0730 PR	0730 PM	0730 PS	0730 PA	0730 PA	
PF 094	2"	14/203	900	530	445	180	114,3	1/4"	5,2	1030 PI	1030 PIW	1030 PN	1030 PP	1030 PR	1030 PM	1030 PS	1030 PA	1030 PA	
PF 150	2"	14/203	1.260	742	572	180	114,3	1/4"	6,0	1530 PI	1530 PIW	1530 PN	1530 PP	1530 PR	1530 PM	1530 PS	1530 PA	1530 PA	
PF 175	2 1/2"	14/203	1.680	989	736	226	139,7	1/4"	9,6	2030 PI	2030 PIW	2030 PN	2030 PP	2030 PR	2030 PM	2030 PS	2030 PA	2030 PA	
PF 200	3"	14/203	2.400	1.413	979	226	139,7	1/4"	13,7	3030 PI	3030 PIW	3030 PN	3030 PP	3030 PR	3030 PM	3030 PS	3030 PA	3030 PA	
PF 240	3"	14/203	3.600	2.119	1041	256	168,3	1/4"	18,5	3050 PI	3050 PIW	3050 PN	3050 PP	3050 PR	3050 PM	3050 PS	3050 PA	3050 PA	
PF 450	DN100	10/145	5.040	2.966	981	410	219,1	1"	56	3x2030 PI	3x2030 PIW	3x2030 PN	3x2030 PP	3x2030 PR	3x2030 PM	3x2030 PS	3x2030 PA	-	
PF 600	DN100	10/145	6.720	3.955	1240	410	219,1	1"	60	3x3030 PI	3x3030 PIW	3x3030 PN	3x3030 PP	3x3030 PR	3x3030 PM	3x3030 PS	3x3030 PA	-	
PF 900	DN150	10/145	9.600	5.650	1311	480	273,0	1"	90	4x3030 PI	4x3030 PIW	4x3030 PN	4x3030 PP	4x3030 PR	4x3030 PM	4x3030 PS	4x3030 PA	-	
PF 1200	DN150	10/145	13.440	7.910	1330	540	323,9	1"	112	6x3030 PI	6x3030 PIW	6x3030 PN	6x3030 PP	6x3030 PR	6x3030 PM	6x3030 PS	6x3030 PA	-	
PF 1800	DN200	10/145	17.280	10.171	1496	660	406,4	1"	201	8x3030 PI	8x3030 PIW	8x3030 PN	8x3030 PP	8x3030 PR	8x3030 PM	8x3030 PS	8x3030 PA	-	
PF 2000	DN200	10/145	21.120	12.431	1496	660	406,4	1"	202	10x3030 PI	10x3030 PIW	10x3030 PN	10x3030 PP	10x3030 PR	10x3030 PM	10x3030 PS	10x3030 PA	-	
										quality class - solids (ISO 8573-1)	-	-	-	6	3	2	1	1 ¹⁾	-
										quality class - oils (ISO 8573-1)	-	-	-	-	-	2	1	1	-
										pressure drop - new element-dry [mbar]	≤2600; ≤60	≤2600; ≤60	10	10	20	50	80	60	-
										filter media	sintered INOX 1.4404	sintered INOX 1.4404	stainless steel mesh 1.4301	acrylic fibres, cellulose	borosilicate micro fibres		borosilicate micro fibres, activ. carbon		-
										pleated version	-	-	-	✓	✓	✓	✓	-	-
										wrapped version	-	-	✓	-	-	-	-	✓	-
										sintered version	✓	✓	-	-	-	-	-	-	-
										min. operating temperature (°C / °F)	1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35
										max. operating temperature (°C / °F)	150 / 302	150 / 302	150 / 302	65 / 149	120 / 248	120 / 248	120 / 248	45 / 113	120 / 248

CORRECTION FACTORS

Operating pressure [bar]	2	3	4	5	6	7	8	9	10	11	12	13	14
Operating pressure [psi]	29	44	58	72	87	100	115	130	145	160	174	189	203
Correction factor	0,38	0,50	0,63	0,75	0,88	1	1,13	1,25	1,38	1,50	1,63	1,75	1,88

¹⁾ Valid if "S" filter cartridge is installed upstream.



50 bar
operating pressure

150 to 2400 Nm³/h
volume flow rate

1/2" to 3"
connections

1,5 to 150 °C
operating temperature range

stainless steel 1.4404-standard
stainless steel 1.4301-option
material

DESCRIPTION

HPF process filters are designed for high pressure applications in process industry, where the risk for corrosion of compressed air system components is very high.

Required compressed air quality according to standard ISO 8571-1 can be achieved with 9 different grades of filter elements.

HPF process filter housing can be used in variety of applications. For applications not listed please contact producer or your local distributor.

For any other technical gas please contact producer or your local distributor.
For oil removal, coalescing filter element must be installed and flow direction inside-out must be provided. General arrangement is bowl on the top and filter head on the bottom.

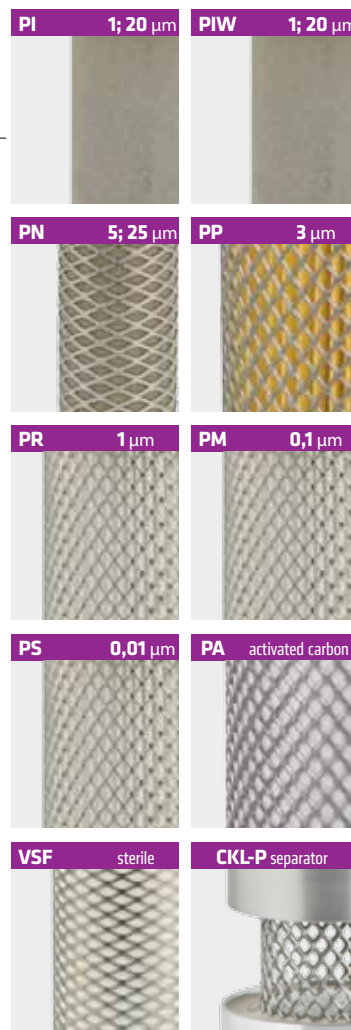
Fluid group 1 on request.

APPLICATIONS

- Packing industry
- Biotechnology
- Breweries
- Chemical industry
- Dairies
- Fermentation processes
- Food and beverage industry
- Pharmaceutical industry
- Hospitals

HPF SERIES

HIGH PRESSURE STAINLESS STEEL PROCESS FILTERS



AOK 50SS



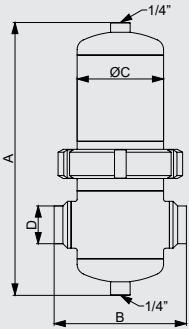
page 117

TD 420M



page 112



TECHNICAL DATA									FILTER ELEMENTS										
Filter housing size	Pipe size D	Oper. press.	Flow rate at 7 bar(g), 20 °C		Dimensions [mm]			Mass	PI prefilter 1; 20 µm	PIW prefilter 1; 20 µm	PN prefilter 5; 25 µm	PP prefilter 3 µm	PR prefilter 1 µm	PM microfilter 0,1 µm	P5 microfilter 0.01 µm	PA activated carbon	CKL-P		
	inch		bar/psi	Nm³/h	scfm	A	B		C	kg									
HPF 010	1/2"	50/725	150	88	243	121	76,1	2,5	0420 PI	0420 PIW	0420 PN	0420 PP	0420 PR	0420 PM	0420 P5	0420 PA	0420 CKL-P		
HPF 018	3/4"	50/725	225	132	267	129	76,1	2,7	0520 PI	0520 PIW	0520 PN	0520 PP	0520 PR	0520 PM	0520 P5	0520 PA	0520 CKL-P		
HPF 030	1"	50/725	315	185	286	143	88,9	3,4	0525 PI	0525 PIW	0525 PN	0525 PP	0525 PR	0525 PM	0525 P5	0525 PA	0525 CKL-P		
HPF 047	1 1/4"	50/725	420	247	336	160	88,9	3,9	0725 PI	0725 PIW	0725 PN	0725 PP	0725 PR	0725 PM	0725 P5	0725 PA	0725 CKL-P		
HPF 070	1 1/2"	50/725	600	353	400	182	114,3	5,6	0730 PI	0730 PIW	0730 PN	0730 PP	0730 PR	0730 PM	0730 P5	0730 PA	0730 CKL-P		
HPF 094	2"	50/725	900	530	481	180	114,3	9,2	1030 PI	1030 PIW	1030 PN	1030 PP	1030 PR	1030 PM	1030 P5	1030 PA	1030 CKL-P		
HPF 150	2"	50/725	1260	742	607	180	114,3	10,9	1530 PI	1530 PIW	1530 PN	1530 PP	1530 PR	1530 PM	1530 P5	1530 PA	1530 CKL-P		
HPF 200	3"	50/725	2400	1413	1018	228	139,7	11,5	3030 PI	3030 PIW	3030 PN	3030 PP	3030 PR	3030 PM	3030 P5	3030 PA	3030 CKL-P		
					quality class - solids (ISO 8573-1)				-	-	-	6	3	2	1	1 ¹⁾	-		
					quality class - oils (ISO 8573-1)				-	-	-	-	-	2	1	1	-		
					pressure drop - new element-dry [mbar]				≤2600; ≤60	≤2600; ≤60	10	10	20	50	80	60	-		
					filter media				sintered INOX 1.4404	sintered INOX 1.4404	stainless steel mesh 1.4301	acrylic fibres, cellulose	borosilicate micro fibres		borosilicate micro fibres, activ. carbon		-		
					pleated version				-	-	-	✓	✓	✓	✓	-	-		
					wrapped version				-	-	✓	-	-	-	-	✓	-		
					sintered version				✓	✓	-	-	-	-	-	-	-		
					min. operating temperature (°C / °F)				1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35	
					max. operating temperature (°C / °F)				150 / 302	150 / 302	150 / 302	65 / 149	120 / 248	120 / 248	120 / 248	45 / 113	120 / 248		
CORRECTION FACTORS																			
Operating pressure [bar]					3	5	7	10	13	16	20	30	40	50					
Operating pressure [psi]					44	72	100	145	189	232	290	435	580	725					
Correction factor					0,50	0,75	1	1,38	1,75	2,13	2,63	3,88	5,13	6,38					

¹⁾ Valid if "S" filter cartridge is installed upstream.



10 bar
operating pressure

3 to 600 l/min
volume flow rate

3/8" to 3"
connections

1,5 to 150 °C
operating temperature range

stainless steel 1.4404
material

DESCRIPTION

PFL process filter housings have been specifically developed for liquid filtration applications.

To meet the required liquid quality, appropriate filter element must be installed into filter housing.

For any other technical gas/liquid, please contact us or your local dealer.

PFL process filter housing can be used in variety of applications. For applications not listed please contact producer or your local dealer.

APPLICATIONS

- Biotechnology
- Breweries
- Chemical industry
- Dairies
- Fermentation processes
- Food and beverage industry
- Hospitals

PFL SERIES

STAINLESS STEEL PROCESS FILTERS FOR LIQUIDS





TECHNICAL DATA

Filter housing size	Pipe size	Operating pressure	Flow rate at 7 bar(g), 20 °C		Dimensions [mm]				Mass
	inch		l/min	gpm	A	B	C	D	kg
PFL 003	3/8"	10/145	3	0,8	270	110	76,1	90	1,2
PFL 008	3/8"	10/145	8	2,1	330	110	76,1	90	1,4
PFL 012	1"	10/145	12	3,2	402	220	114,3	105	4,4
PFL 025	1"	10/145	25	6,6	540	220	114,3	105	5,1
PFL 050	1"	10/145	50	13,2	785	220	114,3	105	6,4
PFL 075	1"	10/145	75	19,8	1.029	220	114,3	105	7,8
PFL 080	1 1/2"	10/145	80	21,1	680	320	168,3	192	16
PFL 150	1 1/2"	10/145	150	39,6	930	320	168,3	192	18
PFL 225	1 1/2"	10/145	225	59,4	1.200	320	168,3	192	20
PFL 250	2"	10/145	250	66	960	400	219,1	165	24
PFL 375	2"	10/145	375	99	1.210	400	219,1	165	27
PFL 400*	2 1/2"	10/145	400	106	980	500	323,9	175	36
PFL 600*	3"	10/145	600	159	1.230	500	323,9	175	41

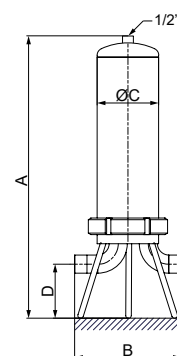
CORRECTION FACTORS

Operating pressure [bar]	2	3	4	5	6	7	8	9	10
Operating pressure [psi]	29	44	58	72	87	100	115	130	145
Correction factor	0,38	0,50	0,63	0,75	0,88	1	1,13	1,25	1,38

Flow capacity based on water.

Standard is BSP pipe connection, other pipe connection on request.

* Max. operating pressure for liquids is 7 bar; 3 bar for saturated steam.





10 bar
operating pressure

3 to 600 l/min
volume flow rate

DN10 to DN65
connections

1,5 to 150 °C
operating temperature range

stainless steel 1.4404
material

DESCRIPTION

SFL stainless steel sterile filter housings have been specifically developed for liquid filtration applications.

To meet the required liquid purity, appropriate filter element must be installed into filter housing.

For any other technical gas/liquid, please contact us or your local dealer.

SFL process filter housing can be used in variety of applications. For applications not listed please contact producer or your local dealer.

APPLICATIONS

- Biotechnology
- Breweries
- Chemical industry
- Dairies
- Fermentation processes
- Food and beverage industry
- Hospitals

SFL SERIES

STAINLESS STEEL STERILE FILTERS FOR LIQUIDS





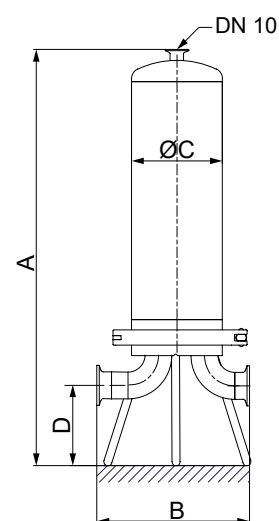
TECHNICAL DATA									
Filter housing size	Pipe size	Operating pressure	Flow rate at 7 bar(g), 20 °C		Dimensions [mm]				Mass
	inch	bar/psi	l/min	gpm	A	B	C	D	kg
SFL 003	DN10	10/145	3	0,8	260	110	76,1	90	1,2
SFL 008	DN10	10/145	8	2,1	323	110	76,1	90	1,4
SFL 012	DN25	10/145	12	3,2	396	220	114,3	105	4,4
SFL 025	DN25	10/145	25	6,6	530	220	114,3	105	5,1
SFL 050	DN25	10/145	50	13,2	775	220	114,3	105	6,4
SFL 075	DN25	10/145	75	19,8	1.019	220	114,3	105	7,8
SFL 080	DN40	10/145	80	21,1	680	320	168,3	192	16
SFL 150	DN40	10/145	150	39,6	930	320	168,3	192	18
SFL 225	DN40	10/145	225	59,4	1.200	320	168,3	192	20
SFL 250	DN50	10/145	250	66	960	400	219,1	165	24
SFL 375	DN50	10/145	375	99	1.210	400	219,1	165	27
SFL 400*	DN65	10/145	400	106	980	500	323,9	175	36
SFL 600*	DN65	10/145	600	159	1.230	500	323,9	175	41

CORRECTION FACTORS									
Operating pressure [bar]	2	3	4	5	6	7	8	9	10
Operating pressure [psi]	29	44	58	72	87	100	115	130	145
Correction factor	0,38	0,50	0,63	0,75	0,88	1	1,13	1,25	1,38

Flow capacity based on water.

Standard is BSP pipe connection, other pipe connection on request.

* Max. operating pressure for liquids is 7 bar; 3 bar for saturated steam.





10 bar
operating pressure

75 to 21.120 Nm³/h
volume flow rate

DN10 to DN80 TC ISO
DN100 to DN200 EN
connections

1,5°C to 150°C
operating temperature range

stainless steel 1.4404-standard
stainless steel 1.4301-option
material

DESCRIPTION

SF stainless steel sterile filters are designed for high-efficient sterile filtration of compressed air, process air and technical gasses. SF sterile filters provide high-efficient removal of sub-micron particles down to 0,01µm including microorganisms (bacteria). Filter housing surface is polished down to grade Ra0,8.

Required compressed air quality according to standard ISO 8571-1 can be achieved with appropriate filter element.

For any other technical gas please contact producer or your local distributor.

Fluid group 1 on request.

APPLICATIONS

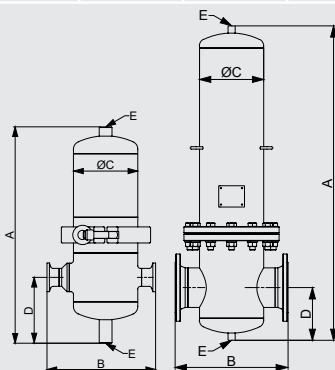
- Packing industry
- Biotechnology
- Breweries
- Chemical industry
- Dairies
- Fermentation processes
- Food and beverage industry
- Pharmaceutical industry
- Hospitals

SF SERIES

STAINLESS STEEL STERILE FILTERS





TECHNICAL DATA											FILTER ELEMENTS
Filter housing size	Pipe size	Max. oper. pressure	Flow rate at 7 bar(g), 20 °C		Dimensions [mm]					Mass	VSF sterile 0,01 µm
	inch	bar/psi	Nm³/h	scfm	A	B	C	D	E	kg	
SF 0006	DN10	10/145	75	44	220	130	76,1	74	1/8"	1,6	1 x 0310 VSF
SF 0009	DN10	10/145	105	62	248	130	76,1	74	1/8"	1,6	1 x 0410 VSF
SF 0012	DN15	10/145	150	88	256	128	76,1	78	1/8"	1,8	1 x 0420 VSF
SF 0018	DN15	10/145	225	132	288	128	76,1	78	1/8"	1,8	1 x 0520 VSF
SF 0032	DN25	10/145	315	185	315	180	114,3	99	1/4"	3,1	1 x 0530 VSF
SF 0048	DN32	10/145	600	353	368	181	114,3	90	1/4"	3,4	1 x 0730 VSF
SF 0072	DN40	10/145	900	530	449	174	114,3	65	1/4"	3,6	1 x 1030 VSF
SF 0108	DN50	10/145	1.260	742	591	188	114,3	110	1/4"	4,9	1 x 1530 VSF
SF 0144	DN65	10/145	1.680	989	741	205	139,7	136	1/4"	8,4	1 x 2030 VSF
SF 0192	DN80	10/145	2.400	1.413	1014	203	139,7	136	1/4"	10,2	1 x 3030 VSF
SF 0432	DN100	10/145	5.040	2.966	1005	410	219,1	183	1/2"	44	3 x 2030 VSF
SF 0576	DN100	10/145	6.720	3.955	1266	410	219,1	183	1/2"	45	3 x 3030 VSF
SF 0768	DN150	10/145	9.600	5.650	1337	480	273	267	1/2"	70	4 x 3030 VSF
SF 1152	DN150	10/145	13.440	7.910	1331	540	323,9	267	1"	80	6 x 3030 VSF
SF 1536	DN200	10/145	17.200	10.124	1496	660	406,4	306	1"	200	8 x 3030 VSF
SF 1920	DN200	10/145	21.120	12.431	1496	660	406,4	306	1"	201	10 x 3030 VSF
							quality class - solids (ISO 8573-1)		1		
							quality class - oils (ISO 8573-1)		-		
							pressure drop - new element (dry) [mbar / psi]		80/1,160		
							pressure drop - new element (wet) [mbar / psi]		190/2,756		
							filter media		Borosilicate micro fibres		
							pleated version		-		
							wrapped version		✓		
							sintered version		-		
							min. operating temperature (°C / °F)		-20 / -4		
max. operating temperature (°C / °F)		150 / 302									
CORRECTION FACTORS											
Operating pressure [bar]	2	3	4	5	6	7	8	9	10		
Operating pressure [psi]	29	44	58	72	87	100	115	130	145		
Correction factor	0,38	0,50	0,63	0,75	0,88	1	1,13	1,25	1,38		



14 bar
operating pressure

75 to 3600 Nm³/h
volume flow rate

1/4" to 3"
connections

1,5 to +150 °C
operating temperature range

stainless steel **1.4404**-standard
stainless steel **1.4301**-option
material

DESCRIPTION

SPF stainless steel sterile filter housings have been specifically developed for applications in process industry, where the risk for corrosion of compressed air system components is very high. To meet the required compressed air quality appropriate filter element (Sterile filter cartridge) must be installed into filter housing.

For any other technical gas please contact us or your local dealer.

SPF process filter housing can be used in variety of applications. For applications not listed please contact us or your local dealer.

For oil removal, coalescing filter element must be installed and flow direction inside-out must be provided. General arrangement is filter head on top and filter bowl on bottom.

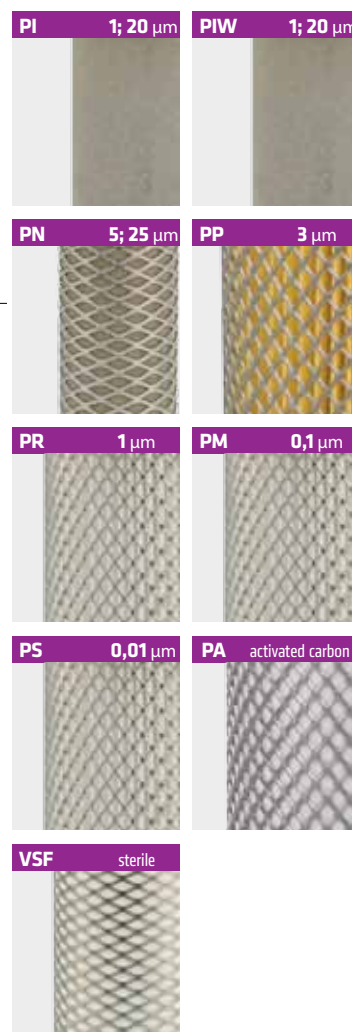
Fluid group 1 on request.

APPLICATIONS

- Packing industry
- Biotechnology
- Breweries
- Chemical industry
- Dairies
- Fermentation processes
- Food and beverage industry
- Pharmaceutical industry
- Hospitals

SPF SERIES

STAINLESS STEEL STERILE FILTERS





TECHNICAL DATA									FILTER ELEMENTS									
Filter housing size	Pipe size D	Oper. press.	Flow rate at 7 bar(g), 20 °C		Dimensions [mm]				Mass	PI prefilter 1; 20 µm	PIW prefilter 1; 20 µm	PN prefilter 5; 25 µm	PP prefilter 3 µm	PR prefilter 1 µm	PM microfilter 0,1 µm	PS microfilter 0,01 µm	PA activated carbon	VSF sterile 0,01 µm
	inch	bar/psi	Nm³/h	scfm	A	B	C	E	kg									
SPF 005	1/4"	14/203	75	44	225	120	76,1	1/8"	1,9	0310 PI	0310 PIW	0310 PN	0310 PP	0310 PR	0310 PM	0310 PS	0310 PA	0310 VSF
SPF 007	3/8"	14/203	105	62	251	120	76,1	1/8"	2,0	0410 PI	0410 PIW	0410 PN	0410 PP	0410 PR	0410 PM	0410 PS	0410 PA	0410 VSF
SPF 010	1/2"	14/203	150	88	258	121	76,1	1/8"	2,1	0420 PI	0420 PIW	0420 PN	0420 PP	0420 PR	0420 PM	0420 PS	0420 PA	0420 VSF
SPF 018	3/4"	14/203	225	132	282	121	76,1	1/8"	2,3	0520 PI	0520 PIW	0520 PN	0520 PP	0520 PR	0520 PM	0520 PS	0520 PA	0520 VSF
SPF 030	1"	14/203	315	185	299	136	88,9	1/8"	3,1	0525 PI	0525 PIW	0525 PN	0525 PP	0525 PR	0525 PM	0525 PS	0525 PA	0525 VSF
SPF 047	1 1/4"	14/203	420	247	359	155	88,9	1/8"	3,4	0725 PI	0725 PIW	0725 PN	0725 PP	0725 PR	0725 PM	0725 PS	0725 PA	0725 VSF
SPF 070	1 1/2"	14/203	600	353	395	180	114,3	1/4"	4,7	0730 PI	0730 PIW	0730 PN	0730 PP	0730 PR	0730 PM	0730 PS	0730 PA	0730 VSF
SPF 094	2"	14/203	900	530	464	180	114,3	1/4"	5,3	1030 PI	1030 PIW	1030 PN	1030 PP	1030 PR	1030 PM	1030 PS	1030 PA	1030 VSF
SPF 150	2"	14/203	1260	742	592	180	114,3	1/4"	6,0	1530 PI	1530 PIW	1530 PN	1530 PP	1530 PR	1530 PM	1530 PS	1530 PA	1530 VSF
SPF 175	2 1/2"	14/203	1680	989	743	226	139,7	1/4"	11,4	2030 PI	2030 PIW	2030 PN	2030 PP	2030 PR	2030 PM	2030 PS	2030 PA	2030 VSF
SPF 200	3"	14/203	2400	1413	995	226	139,7	1/4"	12	3030 PI	3030 PIW	3030 PN	3030 PP	3030 PR	3030 PM	3030 PS	3030 PA	3030 VSF
SPF 240	3"	14/203	3600	2119	1029	256	168,3	1/4"	18	3050 PI	3050 PIW	3050 PN	3050 PP	3050 PR	3050 PM	3050 PS	3050 PA	3050 VSF
									quality class - solids (ISO 8573-1)	-	-	-	6	3	2	1	1 ¹⁾	1
									quality class - oils (ISO 8573-1)	-	-	-	-	-	2	1	1	-
									pressure drop - new element-dry [mbar]	≤2600; ≤60	≤2600; ≤60	10	10	20	50	80	60	80
									filter media	sintered stainless steel 1.4404	sintered stainless steel 1.4404	stainless steel mesh 1.4301	acrylic fibres, cellulose		borosilicate micro fibres		borosilicate micro fibres, activ. carbon	borosilicate micro fibres
									pleated version	-	-	-	✓	✓	✓	✓	-	-
									wrapped version	-	-	✓	-	-	-	-	✓	✓
									sintered version	✓	✓	-	-	-	-	-	-	-
									min. operating temperature (°C / °F)	1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 354	1,5 / 35	1,5 / 35	1,5 / 35	-20 / -4
									max. operating temperature (°C / °F)	150 / 302	150 / 302	150 / 302	65 / 149	120 / 248	120 / 248	120 / 248	45 / 113	150 / 302

CORRECTION FACTORS

Operating pressure [bar]	2	3	4	5	6	7	8	9	10	11	12	13	14
Operating pressure [psi]	29	44	58	72	87	100	115	130	145	160	174	189	203
Correction factor	0,38	0,50	0,63	0,75	0,88	1	1,13	1,25	1,38	1,50	1,63	1,75	1,88

¹⁾ Valid if "S" filter cartridge is installed upstream.



AV SERIES

STAINLESS STEEL AIR VENTING FILTERS

9 to 310 Nm³/h

volume flow rate

DN32 to DN80

connections

1,5 +200 °C

operating temperature range

stainless steel **1.4404**-standard

stainless steel **1.4301**-option
material

DESCRIPTION

AV stainless steel filter housings are designed to remove impurities from air which is being feed or exhausted from tank during changing of liquid level.

To meet the required air quality appropriate filter element (typically AVF filtration grade) must be installed into filter housing.

AV filter housing is also designed for sterilisation. Before use, if needed for the application, sterilize the filters.



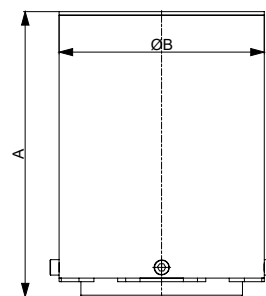
APPLICATIONS

- Packing industry
- Biotechnology
- Breweries
- Chemical industry
- Dairies
- Fermentation processes
- Food and beverage industry
- Pharmaceutical industry
- Water treatment systems



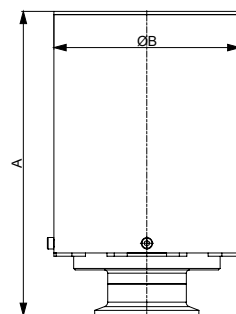
Sizes

Filter housing model	Connection DIN 11851	Flow rate Nm ³ /h	Dimensions [mm]		Mass kg	Filter element type
	DN		A	ø B		
AV 006	32	9	110	88,9	1,2	0310 AVF
AV 027	40	25	160	114,3	2,1	0525 AVF
AV 032	50	40	165	114,3	1,9	0530 AVF
AV 072	50	110	290	114,3	2,6	1030 AVF
AV 144	80	210	550	168,3	7,3	2030 AVF
AV 192	80	310	820	168,3	9,5	3030 AVF



Sizes - Tri-clamp connections

Filter housing model	Connection ISO 1127	Flow rate	Dimensions [mm]		Mass kg	Filter element type
		Nm ³ /h	A	ø B		
AV 006	DN40 (1 1/2")	9	126	88,9	1,2	0310 AVF
AV 027	DN40 (1 1/2")	25	179	114,3	2,4	0525 AVF
AV 032	DN50 (2")	40	181	114,3	2,0	0530 AVF
AV 072	DN50 (2")	110	308	114,3	2,7	1030 AVF
AV 144	DN80 (3")	210	568	168,3	7,7	2030 AVF
AV 192	DN80 (3")	310	812	168,3	12,5	3030 AVF





1 to 3,6 bar

steam pressure

100 °C to 135 °C

steam operating temperature

up to 90 min

sterilisation time

up to 90 min

drying time

DESCRIPTION

Compressed air piping with high temperature and humidity is a suitable environment for microbial growth. In order to stop microbial activity, filters have to be sterilized. Sterilization can be done in place or in the autoclave. To perform autoclave, sterilization filters need to be removed from the system and due to septic conditions in the atmosphere it is difficult to prevent contamination during re-assembly of the installation.

Sterilization in place (SIP) ensures much better results and is more common in the process industry. Steam sterilization is an effective method to stop microbial activity. "Mobile Steam Sterilizer" is designed for easier, cheaper and faster SIP. MSS can be easily connected to any part of installation where sterilization is required. After filter sterilization is completed MSS can simply be disconnected and transported to another location.

APPLICATIONS

- Food industry
- Wine production
- Dairies
- Small breweries

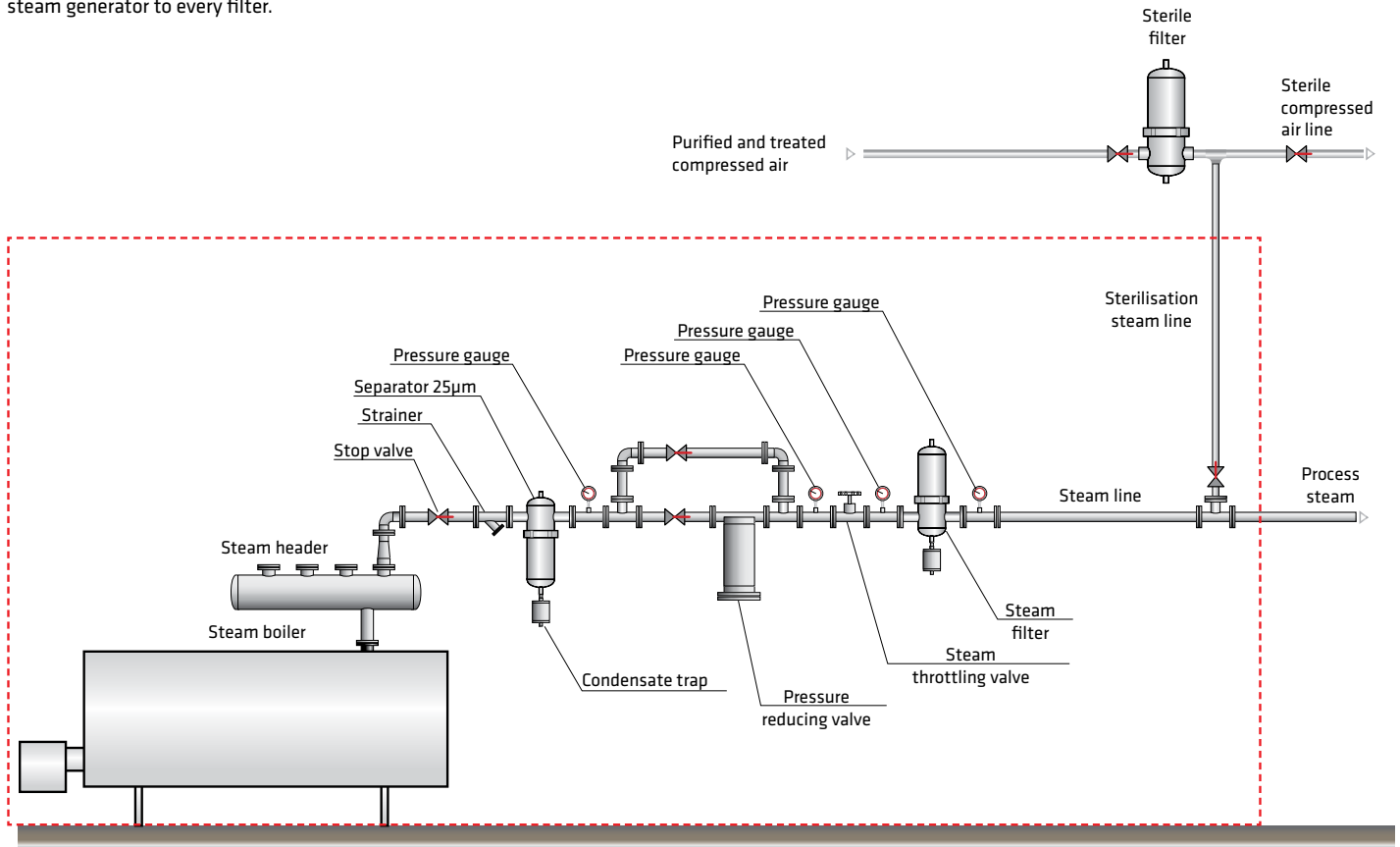
MSS

MOBILE STEAM STERILIZER



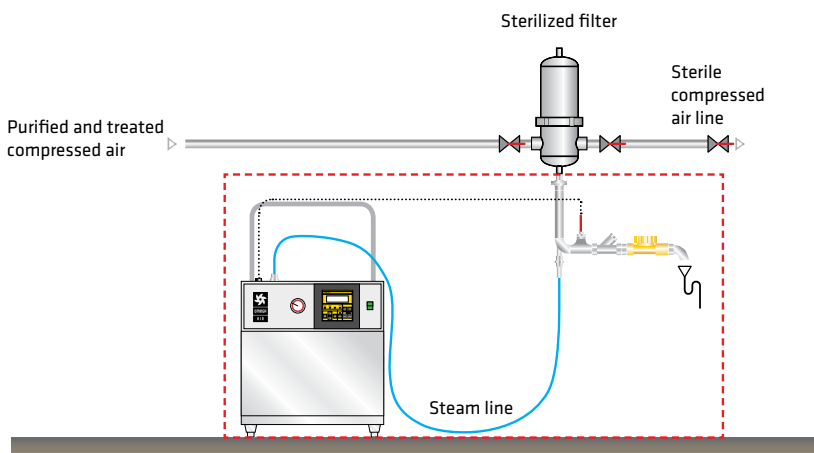
INSTALLATION OF CONVENTIONAL STERILIZATION

Scheme of a conventional sterilization in place system. All the equipment surrounded by red line is required to perform sterilization of the filter housing in the upper right corner. Such a fixed steam distribution line connects steam generator to every filter.



INSTALLATION OF MSS ON STERILE FILTER

Scheme of a new Mobile Steam Sterilizer connected to a filter. After sterilization cycle is completed flexible hose for steam distribution is disconnected from the filter and complete sterilizer (equipment outlined by a red frame) can be moved to another location.



TECHNICAL DATA	MSS
Power supply	110-230V / 50/60 Hz
Power consumption	1,7 kW
Sterilization temperature	Adjustable from 100 - 135 °C
Sterilization time	Adjustable up to 90 min
Material drying time	Adjustable up to 90 min
Sound level	60 dB(A)
Dimensions W x H x -L	450 x 855 x 445 mm



CONDENSATE SEPARATORS

Since water moisture is a part of atmospheric air, condensate in compressed air systems can't be avoided. During compression process, the air is heated. It cools down as it passes through hoses, valves and piping. As it nears the ambient temperature (approach), vapour condenses to liquid and can be removed by mechanical separation. As the air cools further, more condensate is present.

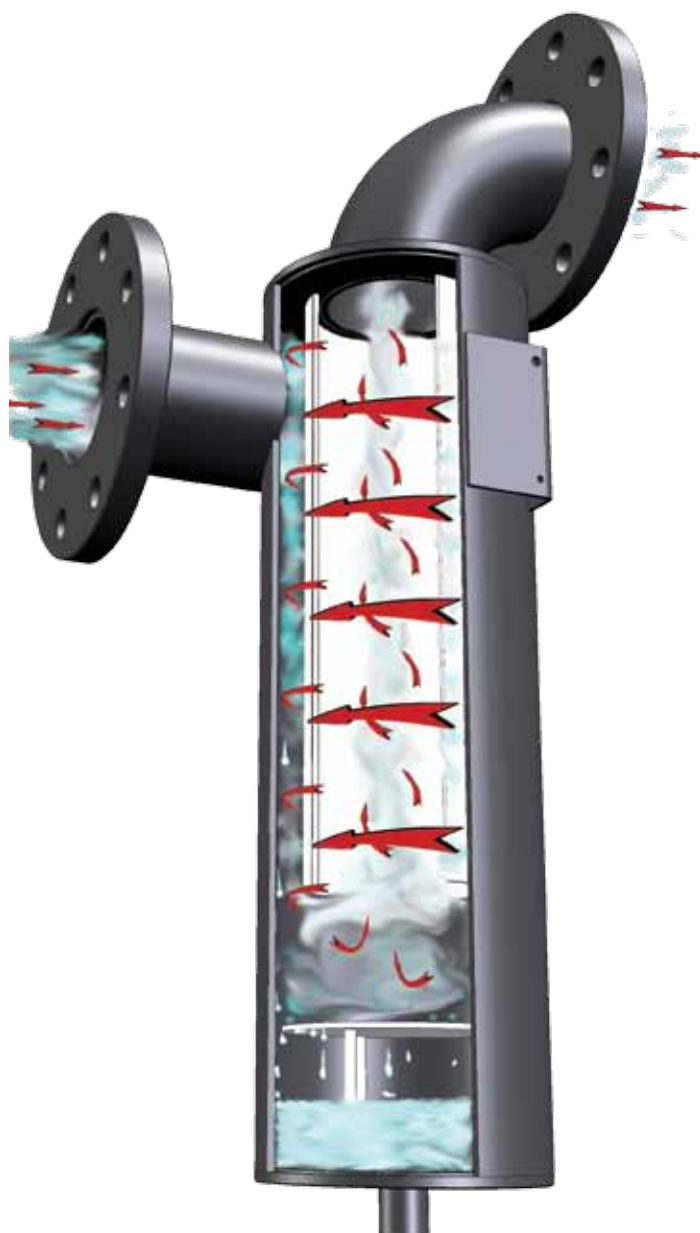
Water moisture is not the only undesirable substance. There are also other pollutants in compressed air: lubricating oil carried over from oil lubricated air compressors, atmospheric corrosive gases inhaled by the air compressor, aerosols and vapours, solid particles and rust from pipe system and pressure vessels and solid particles drawn in by the air compressor.

It is very important to remove the most of impurities from compressed air. The first stage is to remove the major part of condensate, which contains the large amount of upper mentioned pollutants. This can be done by condensate separators.

Cyclone condensate separators use centrifugal motion to force condensate out of compressed air. The spinning causes the condensate to join together on the centrifugal separators walls. When the condensate gains enough mass it moves to the bottom of the separator bowl where the blind plate calms the air flow and prevents the condensate to be sucked by upper air flow. Condensate is removed out of the system by the condensate drain.

The compressed air leaving the condensate separator loses the most of condensate and pollutants, but the small amount still remains in air stream. They must be removed by other procedures - micro filtration processes and drying.

CONDENSATE SEPARATORS		Pressure	Capacity	Page
CKL-B	Aluminium condensate separators	16 bar	60 - 2.160 Nm ³ /h	64
CKL-B HT	Aluminium high temperature condensate separators	10 bar	60 - 2.160 Nm ³ /h	66
CKL-C	Aluminium condensate separators	20 bar	72 - 2.760 Nm ³ /h	68
CS/CS SS	Welded condensate separators	16 bar	840 - 14.280 Nm ³ /h	70
SFH/SFH SS	Welded condensate separators	16 bar	1.760 - 12.550 Nm ³ /h	72
SFH HP	Welded carbon steel high pressure condensate separators	50 bar	1.760 - 12.550 Nm ³ /h	74
CKL-HF	Aluminium condensate separators	50 bar	71 - 2.760 Nm ³ /h	76
CKL-CHP	Carbon steel high pressure condensate separators	100, 250, 420 bar	40 - 715 Nm ³ /h	78
CKL-IHP	Stainless steel high pressure condensate separators	100, 250, 420 bar	40 - 715 Nm ³ /h	80





16 bar
operating pressure

60 to 2160 Nm³/h
volume flow rate

3/8" to 3"
connections

1,5 to 65 °C
operating temperature range

RAL 9005
standard colour

DESCRIPTION

CKL-B condensate separators have been developed for high efficient removal of bulk liquids from compressed air and vacuum systems. Inside the housing there is an insert with vanes that creates controlled rotation of the air.

As a result of centrifugal action liquids (water, oil) and large particles are forced to the housing wall, slowed down and accumulated at the bottom of separator housing as condensate. The turbulent free zone in the lower part of the filter housing prevents condensate from being picked up and "carried over" into the airstream.

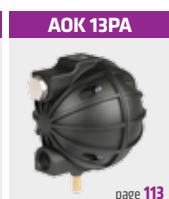
Because of the nature of application, it is essential to install appropriately sized condensate drain on the separator.

APPLICATIONS

- Automotive
- Electronics
- Food and beverage
- Chemical
- Petrochemical
- Plastics
- Paint
- General industrial applications

CKL-B SERIES

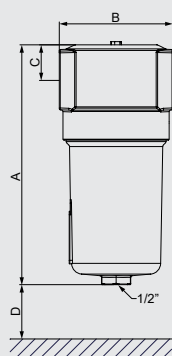
ALUMINIUM CONDENSATE SEPARATORS





TECHNICAL DATA

Model	Pipe size	Max.oper. pressure	Flow rate at 7 bar(g), 20 °C		Temperature oper. range		Dimensions [mm]				Mass
	inch	bar/psi	Nm³/h	SCFM	°C	°F	A	B	C	D	kg
CKL 005 B	3/8"	16/232	60	35	1,5 - 65	35 - 149	192	88	25	60	0,6
CKL 007 B	1/2"	16/232	78	46	1,5 - 65	35 - 149	192	88	25	60	0,6
CKL 010 B	3/4"	16/232	120	70	1,5 - 65	35 - 149	264	88	25	80	0,7
CKL 018 B	1"	16/232	198	116	1,5 - 65	35 - 149	264	125	39	100	1,9
CKL 047 B	1 1/2"	16/232	510	300	1,5 - 65	35 - 149	464	125	39	140	1,9
CKL 094 B	2"	16/232	1000	588	1,5 - 65	35 - 149	694	163	50	520	5,7
CKL 150 B	2 1/2"	16/232	1500	882	1,5 - 65	35 - 149	694	163	50	520	7,6
CKL 200 SS*	3"	16/232	2160	1270	1,5 - 65	35 - 149	801	242	60	630	14,1



*Stainless steel cyclone element

quality class - solids (ISO 8573-1)

-

quality class - water (ISO 8573-1)

8

quality class - oils (ISO 8573-1)

-

efficiency

>98%

CORRECTION FACTORS

Operating pressure [bar]	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Operating pressure [psi]	29	44	58	72	87	100	115	130	145	160	174	189	203	218	232
Correction factor	0,38	0,50	0,63	0,75	0,88	1	1,13	1,25	1,38	1,50	1,63	1,75	1,88	2,00	2,13



10 bar
operating pressure

60 to 2160 Nm³/h
volume flow rate

3/8" to 3"
connections

1,5 to 120 °C (at 10 barg)

1,5 to 85 °C (at 13 barg)

operating temperature range

RAL 9005
standard colour

DESCRIPTION

CKL-B HT condensate separators have been developed for high efficient removal of bulk liquids from compressed air⁽¹⁾ and vacuum systems. Inside the housing there is an insert with vanes that creates controlled rotation of the air.

As a result of centrifugal action liquids (water, oil) and large particles are forced to the housing wall, slowed down and accumulated at the bottom of separator housing as condensate. The turbulent free zone in the lower part of the filter housing prevents condensate from being picked up and "carried over" into the airstream.

Because of the nature of application, it is essential to install appropriately sized condensate drain on the separator.

APPLICATIONS

- Automotive
- Electronics
- Food and beverage
- Chemical
- Petrochemical
- Plastics
- Paint
- General industrial applications

CKL-B HT SERIES

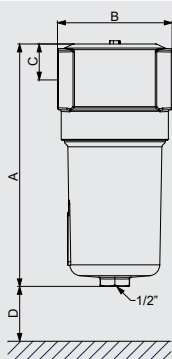
HIGH TEMPERATURE ALUMINIUM CONDENSATE SEPARATORS





TECHNICAL DATA

Model	Pipe size	Max.oper. pressure	Flow rate at 7 bar(g), 20 °C		Temperature oper. range		Dimensions [mm]				Mass
	inch	bar/psi	Nm ³ /h	SCFM	°C	°F	A	B	C	D	kg
CKL 005 B HT	3/8"	10/145	60	35	1,5 - 120	35 - 248	192	88	25	60	0,6
CKL 007 B HT	1/2"	10/145	78	46	1,5 - 120	35 - 248	192	88	25	60	0,6
CKL 010 B HT	3/4"	10/145	120	70	1,5 - 120	35 - 248	264	88	25	80	0,7
CKL 018 B HT	1"	10/145	198	116	1,5 - 120	35 - 248	264	125	39	100	1,9
CKL 047 B HT	1 1/2"	10/145	510	300	1,5 - 120	35 - 248	464	125	39	140	1,9
CKL 094 B HT	2"	10/145	1.000	588	1,5 - 120	35 - 248	694	163	50	520	5,7
CKL 150 B HT	2 1/2"	10/145	1.500	882	1,5 - 120	35 - 248	694	163	50	520	7,6
CKL 200 B HT	3"	10/145	2.160	1.270	1,5 - 120	35 - 248	801	242	60	630	14,1



quality class - solids (ISO 8573-1)

-

quality class - water (ISO 8573-1)

8

quality class - oils (ISO 8573-1)

-

efficiency

>98%

CORRECTION FACTORS

Operating pressure [bar]	2	3	4	5	6	7	8	9	10
Operating pressure [psi]	29	44	58	72	87	100	115	130	145
Correction factor	0,38	0,50	0,63	0,75	0,88	1	1,13	1,25	1,38



20 bar
operating pressure

72 to 2760 Nm³/h
volume flow rate

3/8" to 3"
connections

1,5 to 65 °C
operating temperature range

RAL 9005
standard colour

DESCRIPTION

CKL-C condensate separators are designed for high efficient removal of bulk liquids from compressed air and vacuum systems up to 20 bar. Inside the housing there is an insert with vanes that creates controlled rotation of the air.

As a result of centrifugal action liquids (water, oil) and large particles are forced to the housing wall, slowed down and accumulated at the bottom of separator housing as condensate. The turbulent free zone in the lower part of the filter housing prevents condensate from being picked up and "carried over" into the airstream.

To discharge condensate from the CKL-C cyclone separator it is essential to install automatic or electronic condensate drain. Fluid group 1 on request.

APPLICATIONS

- General industrial applications
- Automotive
- Electronics
- Food and beverage
- Chemical
- Petrochemical
- Plastics
- Paint

CKL-C SERIES

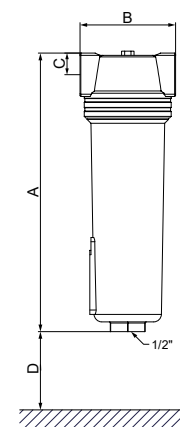
ALUMINIUM CONDENSATE SEPARATORS





TECHNICAL DATA

Filter housing size	Pipe size	Max. oper. pressure	Flow rate at 7 bar(g), 20 °C		Dimensions [mm]				Mass
	inch		Nm³/h	scfm	A	B	C	D	kg
CKL-C 20	3/8"	20/290	72	42	187	88	20	80	0,7
CKL-C 21	1/2"	20/290	96	56	256	88	20	80	0,8
CKL-C 30	1/2"	20/290	150	88	278	106	25	100	1,3
CKL-C 31	3/4"	20/290	216	127	278	106	25	100	1,3
CKL-C 40	1"	20/290	282	166	252	125	32	120	2,1
CKL-C 43	1 1/2"	20/290	510	300	450	125	32	160	3,2
CKL-C 50	2"	20/290	888	522	605	160	43	180	5,1
CKL-C 52	2 1/2"	20/290	1440	847	685	160	43	200	6,3
CKL-C 61*	3"	20/290	2760	1624	800	240	60	300	12,9
*Stainless steel cyclone element					quality class - solids (ISO 8573-1)				-
					quality class - water (ISO 8573-1)				8
					quality class - oils (ISO 8573-1)				-
					efficiency				>98%



CORRECTION FACTORS

Operating pressure [bar]	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Operating pressure [psi]	29	44	58	72	87	100	115	130	145	160	174	189	203	218	232	247	261	276	290
Correction factor	0,38	0,50	0,63	0,75	0,88	1	1,13	1,25	1,38	1,50	1,63	1,75	1,88	2,00	2,13	2,25	2,38	2,50	2,63

**16 (13) bar**

operating pressure

840 to 14.280 Nm³/h

volume flow rate

DN65 to DN300

connections

1,5 to 120 °C

operating temperature range

RAL 9005

standard colour CS series

CS: carbon steel**CS SS: stainless steel 1.4404 material**

DESCRIPTION

CS condensate separators are designed for high efficient removal of bulk liquids and large impurities from compressed air systems. The insert inside the housing creates controlled rotation of the air flow. Centrifugal flow of liquids (water, oil) and large particles is forced to the housing wall, slowed down and accumulated at the bottom of separator housing as condensate.

The turbulent free zone in the lower part of the cyclone housing prevents condensate from being picked up and "carried over" into the airstream.

To discharge condensate from the CS cyclone separator it is essential to install automatic or electronic condensate drain. CS cyclone separators are also available in stainless steel version CS-SS.

Fluid group 1 on request.

APPLICATIONS

- Automotive
- Electronics
- Food and beverage
- Chemical
- Petrochemical
- Plastics
- Paint
- General industrial applications

CS/CS SS SERIES

WELDED CONDENSATE SEPARATORS

**TD16MCr**

page 110

AOK 20SS

page 115

AOK 13PA

page 113

AOK 20B

page 114

TD16M

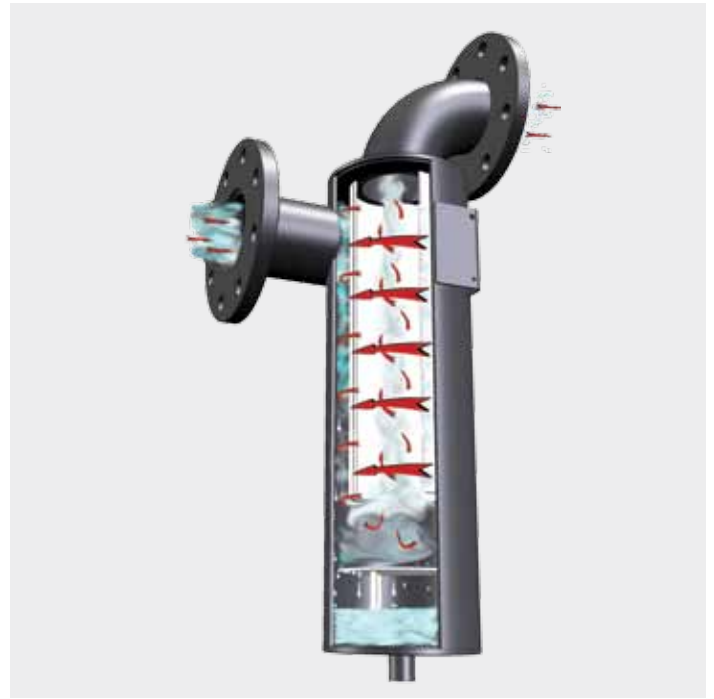
page 110

ECD-B

page 104

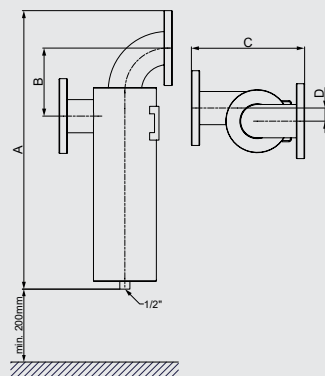
EMD

page 102



TECHNICAL DATA

Model		Pipe size	Max.oper. pressure		Flow rate at 7 bar(g), 20 °C		Temperature oper. range		Dimensions [mm]				Mass
carbon steel	stainless steel	DN	CS bar/psi	CS SS bar/psi	Nm ³ /h	SCFM	°C	°F	A	B	C	D	kg
CS 14	CS SS 14	65	16/232	13/188	840	495	1,5 - 120	35 - 248	613	153	302	45	21
CS 28	CS SS 28	80	16/232	13/188	1.710	1.005	1,5 - 120	35 - 248	745	182	302	35	26
CS 62	CS SS 62	125	16/232	13/188	3.720	2.190	1,5 - 120	35 - 248	1041	280	390	43	58
CS 88	CS SS 88	150	16/232	13/188	5.280	3.110	1,5 - 120	35 - 248	1298	330	489	50	87
CS 124	CS SS 124	200	16/232	13/188	7.440	4.380	1,5 - 120	35 - 248	1506	436	619	52	147
CS 238	CS SS 238	300	16/232	13/188	14.280	8.404	1,5 - 120	35 - 248	1680	509	805	89	314



quality class - solids (ISO 8573-1)

-

quality class - water (ISO 8573-1)

8

quality class - oils (ISO 8573-1)

-

efficiency

>98%

CORRECTION FACTORS

Operating pressure [bar]	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Operating pressure [psi]	29	44	58	72	87	100	115	130	145	160	174	189	203	218	232
Correction factor	0,38	0,50	0,63	0,75	0,88	1	1,13	1,25	1,38	1,50	1,63	1,75	1,88	2,00	2,13

**16 (13)bar**

operating pressure

1760 to 12550 Nm³/h

volume flow rate

DN80 to DN350

connections

1,5 to 120 °C

operating temperature range

RAL 9005

standard colour CS series

SFH: carbon steel**SFH SS: stainless steel 1.4404 material**

DESCRIPTION

SFH condensate separators are designed for high efficient removal of bulk liquids and large impurities from compressed air systems. The insert inside the housing creates controlled rotation of the air flow. Centrifugal flow of liquids (water, oil) and large particles is forced to the housing wall, slowed down and accumulated at the bottom of separator housing as condensate.

The turbulent free zone in the lower part of the cyclone housing prevents condensate from being picked up and "carried over" into the airstream.

To discharge condensate from the SFH cyclone separator it is essential to install automatic or electronic condensate drain. SFH cyclone separators are also available in stainless steel version SFH SS.

Fluid group 1 on request.

APPLICATIONS

- Automotive
- Electronics
- Food and beverage
- Chemical
- Petrochemical
- Plastics
- Paint
- General industrial applications

SFH/SFH SS SERIES

WELDED CONDENSATE SEPARATORS

SFH**SFH SS****TD16MCr**

page 110

AOK 20SS

page 115

AOK 13PA

page 113

AOK 20B

page 114

TD16M

page 110

ECD-B

page 104

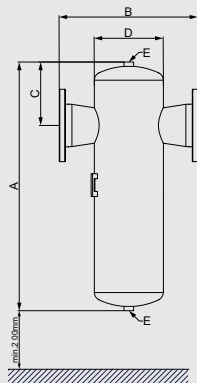
EMD

page 102



TECHNICAL DATA

Model		Pipe size	Max.oper. pres- sure		Flow rate at 7 bar(g), 20 °C		Temperature oper. range		Dimensions [mm]					Mass
carbon steel	stainless steel	DN	SFH bar/psi	SFH SS bar/psi	Nm³/h	SCFM	°C	°F	A	B	C	D	E	kg
SFH 029	SFH SS 029	80	16/232	13/188	1.760	1.024	1,5 - 120	35 - 248	720	400	165	219	1/2"	33
SFH 037	SFH SS 037	100	16/232	13/188	2.200	1.307	1,5 - 120	35 - 248	890	460	236	244	1/2"	45
SFH 066	SFH SS 066	125	16/232	13/188	3.940	2.331	1,5 - 120	35 - 248	980	550	250	273	1"	58
SFH 088	SFH SS 088	150	16/232	13/188	5.300	3.108	1,5 - 120	35 - 248	1040	570	250	300	1"	81
SFH 097	SFH SS 097	200	16/232	13/188	5.820	3.426	1,5 - 120	35 - 248	1110	690	265	350	1"	117
SFH 142	SFH SS 142	250	16/232	13/188	8.520	5.015	1,5 - 120	35 - 248	1330	800	360	480	1"	227
SFH 180	SFH SS 180	300	16/232	13/188	10.770	6.357	1,5 - 120	35 - 248	1470	820	408	550	1"	280
SFH 209	SFH SS 209	350	16/232	13/188	12.550	7.381	1,5 - 120	35 - 248	1670	920	471	622	1"	379



quality class - solids (ISO 8573-1)

-

quality class - water (ISO 8573-1)

8

quality class - oils (ISO 8573-1)

-

efficiency

>98%

CORRECTION FACTORS

Operating pressure [bar]	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Operating pressure [psi]	29	44	58	72	87	100	115	130	145	160	174	189	203	218	232
Correction factor	0,38	0,50	0,63	0,75	0,88	1	1,13	1,25	1,38	1,50	1,63	1,75	1,88	2,00	2,13

**50 bar**

operating pressure

1.760 to 12.550 Nm³/h

volume flow rate

DN80 to DN350

connections

1,5 to 65 °C

operating temperature range

RAL 9005

standard colour CS series

carbon steel

material

DESCRIPTION

SFH HP condensate separators have been developed for high efficient removal of bulk liquids and large impurities from compressed air systems.

Inside the housing there is an insert that creates controlled rotation of the air. As a result of centrifugal action liquids (water, oil) and large particles are forced to the housing wall, slowed down and accumulated at the bottom of separator housing as condensate. The turbulent free zone in the lower part of the cyclone housing prevents condensate from being picked up and "carried over" into the airstream.

Because of the nature of application, it is essential to install appropriately sized condensate drain on the separator.

Fluid group 1 on request.

APPLICATIONS

- Automotive
- Electronics
- Food and beverage
- Chemical
- Petrochemical
- Plastics
- Paint
- General industrial applications

SFH HP SERIES

WELDED HIGH PRESSURE CONDENSATE SEPARATORS

**TD 50M**

page 110

EMD HP

page 108

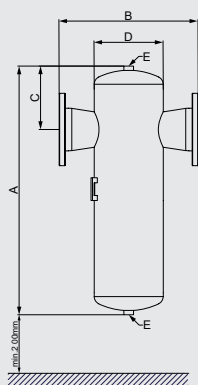
AOK 50B

page 116



TECHNICAL DATA

Model	Pipe size	Max.oper. pressure	Flow rate at 7 bar(g), 20 °C		Temperature oper. range		Dimensions [mm]					Mass
	DN	bar/psi	Nm ³ /h	SCFM	°C	°F	A	B	C	D	E	kg
SFH HP 029	80	50/725	1.760	1.024	1,5 - 65	35 - 149	720	400	165	219	1/2"	41
SFH HP 037	100	50/725	2.200	1.307	1,5 - 65	35 - 149	890	460	236	244	1/2"	52
SFH HP 066	125	50/725	3.940	2.331	1,5 - 65	35 - 149	980	550	250	273	1"	66
SFH HP 088	150	50/725	5.300	3.108	1,5 - 65	35 - 149	1.040	570	250	300	1"	92
SFH HP 097	200	50/725	5.820	3.426	1,5 - 65	35 - 149	1.110	690	265	350	1"	113
SFH HP 142	250	50/725	8.520	5.015	1,5 - 65	35 - 149	1.330	800	360	480	1"	234
SFH HP 180	300	50/725	10.770	6.357	1,5 - 65	35 - 149	1.470	820	408	550	1"	300
SFH HP 209	350	50/725	12.550	7.381	1,5 - 65	35 - 149	1.670	920	471	622	1"	440



quality class - solids (ISO 8573-1)

-

quality class - water (ISO 8573-1)

8

quality class - oils (ISO 8573-1)

-

efficiency

>98%

CORRECTION FACTORS

Operating pressure [bar]	3	5	7	10	13	16	20	30	40	50
Operating pressure [psi]	44	72	100	145	189	232	290	435	580	725
Correction factor	0,50	0,75	1	1,38	1,75	2,13	2,63	3,88	5,13	6,38

**50 bar**

operating pressure

71 to 2760 Nm³/h

volume flow rate

1/2" to 3"

connections

1,5 to 65 °C

operating temperature range

RAL 9005

standard colour

DESCRIPTION

CKL-HF condensate separators are designed for high efficient removal of bulk liquids from compressed air systems. Inside the housing there is a condensate separator element.

This element separates already liquefied water from mainstream and prevents the liquids and large particles from being airborne again.

To discharge condensate from the CKL-HF condensate separator it is essential to install automatic or electronic condensate drain.

APPLICATIONS

- Automotive
- Electronics
- Food and beverage
- Chemical
- Petrochemical
- Plastics
- PET
- General industrial application

CKL-HF SERIES

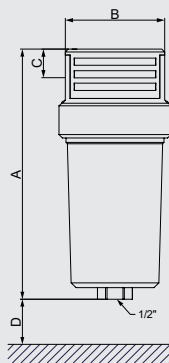
ALUMINIUM CONDENSATE SEPARATORS





TECHNICAL DATA

Model	Pipe size	Max.oper. pressure	Flow rate at 7 bar(g), 20 °C		Temperature oper. range		Dimensions [mm]				Mass
	inch	bar/psi	Nm³/h	SCFM	°C	°F	A	B	C	D	kg
CKL-HF 007	1/2"	50/725	71	42	1,5 - 65	35 - 149	250	110	30	80	2,1
CKL-HF 010	3/4"	50/725	112	66	1,5 - 65	35 - 149	250	110	30	90	2,1
CKL-HF 018	1"	50/725	204	120	1,5 - 65	35 - 149	250	110	30	140	2,1
CKL-HF 047	1 1/2"	50/725	282	166	1,5 - 65	35 - 149	535	160	45	260	9,5
CKL-HF 070	1 1/2"	50/725	400	235	1,5 - 65	35 - 149	535	160	45	360	9,5
CKL-HF 094	2"	50/725	494	291	1,5 - 65	35 - 149	715	160	45	540	12,2
CKL-HF 150	2"	50/725	799	470	1,5 - 65	35 - 149	715	160	45	550	12,2
CKL-HF 200	3"	50/725	2160	1270	1,5 - 65	35 - 149	772	198	70	620	30,4
CKL-HF 240	3"	50/725	2760	1620	1,5 - 65	35 - 149	1.010	198	70	780	34,9



quality class - solids (ISO 8573-1)

-

quality class - water (ISO 8573-1)

8

quality class - oils (ISO 8573-1)

-

efficiency

>98%

CORRECTION FACTORS

Operating pressure [bar]	3	5	7	10	13	16	20	30	40	50
Operating pressure [psi]	44	72	100	145	189	232	290	435	580	725
Correction factor	0,50	0,75	1	1,38	1,75	2,13	2,63	3,88	5,13	6,38



100, 250, 420 bar
operating pressure

40 to 715 Nm³/h
volume flow rate

1/4" to 2"
connections

1,5 to 65 °C
operating temperature range

Nickel plated 15 µm
surface protection

DESCRIPTION

CKL-CHP condensate separators are designed for high efficient removal of bulk liquids from high pressure compressed air systems.

Condensate separator element inside the housing separates already liquefied water from mainstream and prevents the liquids and large particles from being airborne again.

To discharge condensate from the CKL-CHP condensate separator it is essential to install condensate drain. Please take appropriate pressure level into account.

APPLICATIONS

- General industrial applications
- Automotive
- Electronics
- Food and beverage
- Chemical
- Petrochemical
- Plastics
- Paint

CKL-CHP SERIES

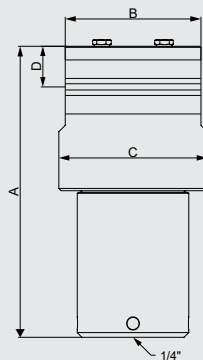
CARBON STEEL HIGH PRESSURE CONDENSATE SEPARATORS





TECHNICAL DATA

Filter housing size	Pipe size	Max. oper. pressure		Flow rate at 7 bar(g), 20 °C		Temperature oper. range		Dimensions [mm]			Mass
	inch	bar	psi	Nm³/h	scfm	°C	°F	A	B	C	kg
CKL-CHP 003	1/4"	100/250/420	1450/3626/6091	40	23,5	1,5 - 65	35 - 149	182	98	104	7,6
CKL-CHP 005	3/8"	100/250/420	1450/3626/6091	70	41,2	1,5 - 65	35 - 149	182	98	104	7,6
CKL-CHP 007	1/2"	100/250/420	1450/3626/6091	130	76,5	1,5 - 65	35 - 149	230	118	129	15,3
CKL-CHP 010	3/4"	100/250/420	1450/3626/6091	195	115	1,5 - 65	35 - 149	254	118	129	16,1
CKL-CHP 018	1"	100/250/420	1450/3626/6091	275	162	1,5 - 65	35 - 149	276	145	158	26,5
CKL-CHP 030	1 1/4"	100/250/420	1450/3626/6091	380	223	1,5 - 65	35 - 149	328	145	158	28,6
CKL-CHP 047	1 1/2"	100/250/420	1450/3626/6091	495	291	1,5 - 65	35 - 149	385	195	216	65,9
CKL-CHP 094	2"	100/250/420	1450/3626/6091	715	421	1,5 - 65	35 - 149	460	195	216	71,4



quality class - solids (ISO 8573-1)

-

quality class - water (ISO 8573-1)

8

quality class - oils (ISO 8573-1)

-

efficiency

>98%

CORRECTION FACTORS

Operating pressure [bar]	7	25	40	64	100	250	420
Operating pressure [psi]	100	362	580	928	1450	3625	6091
Correction factor	1	3	5	8	12	12	12



100, 250, 420 bar
operating pressure

40 to 715 Nm³/h
volume flow rate

1/4" to 2"
connections

1,5 to 65 °C
operating temperature range

stainless steel 1.4301-standard
stainless steel 1.4404-option
material

DESCRIPTION

CKL-IHP condensate separators are designed for high efficient removal of bulk liquids from high pressure compressed air systems.

Condensate separator element inside the housing separates already liquefied water from mainstream and prevents the liquids and large particles from being airborne again.

To discharge condensate from the CKL-IHP condensate separator it is essential to install condensate drain. Please take appropriate pressure level into account.

APPLICATIONS

- General industrial applications
- Automotive
- Electronics
- Food and beverage
- Chemical
- Petrochemical
- Plastics
- Paint

CKL-IHP SERIES

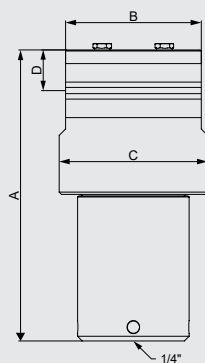
STAINLESS STEEL HIGH PRESSURE CONDENSATE SEPARATORS





TECHNICAL DATA

Filter housing size	Pipe size	Max. oper. pressure		Flow rate at 7 bar(g), 20 °C		Temperature oper. range		Dimensions [mm]			Mass
	inch	bar	psi	Nm ³ /h	scfm	°C	°F	A	B	C	kg
CKL-IHP 003	1/4"	100/250/420	1450/3626/6091	40	23,5	1,5 - 65	35 - 149	182	98	104	7,9
CKL-IHP 005	3/8"	100/250/420	1450/3626/6091	70	41,2	1,5 - 65	35 - 149	182	98	104	7,9
CKL-IHP 007	1/2"	100/250/420	1450/3626/6091	130	76,5	1,5 - 65	35 - 149	230	118	129	15,7
CKL-IHP 010	3/4"	100/250/420	1450/3626/6091	195	115	1,5 - 65	35 - 149	254	118	129	16,6
CKL-IHP 018	1"	100/250/420	1450/3626/6091	275	162	1,5 - 65	35 - 149	276	145	158	27,3
CKL-IHP 030	1 1/4"	100/250/420	1450/3626/6091	380	223	1,5 - 65	35 - 149	328	145	158	29,6
CKL-IHP 047	1 1/2"	100/250/420	1450/3626/6091	495	291	1,5 - 65	35 - 149	385	195	216	67,8
CKL-IHP 094	2"	100/250/420	1450/3626/6091	715	421	1,5 - 65	35 - 149	460	195	216	73,5



quality class - solids (ISO 8573-1)

-

quality class - water (ISO 8573-1)

8

quality class - oils (ISO 8573-1)

-

efficiency

>98%

CORRECTION FACTORS

Operating pressure [bar]	7	25	40	64	100	250	420
Operating pressure [psi]	100	362	580	928	1450	3625	6091
Correction factor	1	3	5	8	12	12	12



INDICATORS

Pressure drop is a huge problem in compressed air system. Every additional obstruction of compressed air flow requires additional power to drive the compressor.

Compressed air system pipeline has fixed pressure drop, which has already been taken into account in the phase of compressor dimensioning. This pressure drop generally can't be changed.

Filter element pressure drop is variable factor of compressed air system. Despite the fact that the filter element play a useful role in the removal of compressed air pollutants, it's saturation could be a problem since it will increase in time. The result is an increase of pressure drop, additional compressor power, which means the significantly rising of operating costs.

For this reason the pressure drop in filter element must be monitored and controlled.

Omega Air produces several types of products for this purpose. There are indicators of pressure drop with an analogue or digital display of saturation level of the filter element, some of them with output for remote monitoring.

INDICATORS		Pressure		Page
PDI 16	Differential pressure indicator	16 bar		84
MDM 40	Differential pressure indicators	20 bar		85
MDM 60	Differential pressure indicators	16 bar		86
MDP 60	Differential pressure indicators	16 bar		87
MDA 60	Differential pressure indicators	20 bar		88
EPG 60	Electronic pressure gauge	16 bar		89
MDHI 50	Differential high pressure stainless steel indicator	50 bar		90
MDH 200	Differential high pressure indicators	200 bar		91
MDH 420	Differential high pressure indicators	420 bar		92
OCI	Oil content indicator	0,68 - 16 bar		93
CHI	Humidity indicator	20 bar		94
VPG 60	Differential pressure indicators	20-2.000 mbar		95





16 bar
operating pressure

1,5 to 65 °C
operating temperature range

DESCRIPTION

Pressure drop indicator PDI 16 is designed to indicate pressure drop across the filter element in compressed air system.

It detects when the filter cartridge is clogged and should be replaced. PDI 16 is typically installed on the head of the filter housing.

PDI 16 can be used in variety of applications. For applications not listed please contact us or your local distributor.



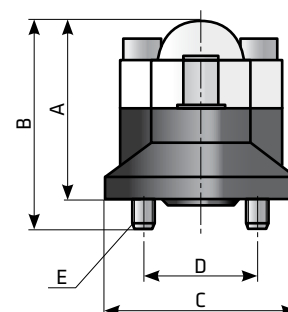
APPLICATIONS

- Automotive
- Electronics
- Food and beverage
- Chemical
- Petrochemical
- Plastics
- Paint
- General industrial application

PDI 16

DIFFERENTIAL PRESSURE INDICATOR

TECHNICAL DATA	
pressure drop (green area)	0 - 0,6 bar (0 - 8,7 psi)
pressure drop (red area)	0,6 - 0,9 bar (8,7 - 13 psi)
max. operating pressure	16 bar (232 psi)
operating temperature range	1,5 - 65 °C (35 - 149 °F)
mass	0,03 kg
DIMENSIONS	
A	35 mm
B	43 mm
C	ø40 mm
D	24 mm
E	M5



MDM 40

DIFFERENTIAL PRESSURE INDICATOR



20 bar
operating pressure

1,5 to 65 °C
operating temperature range

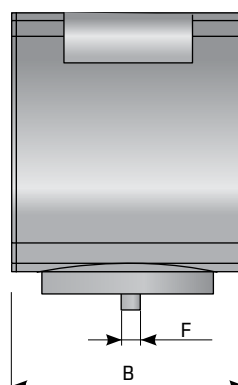
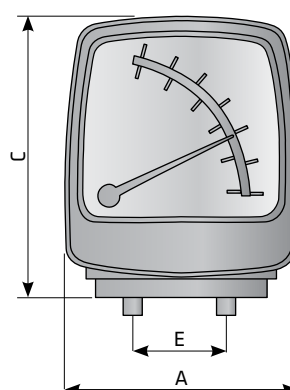


DESCRIPTION

Magnetic differential manometer MDM 40 is designed to indicate pressure drop across the filter element in compressed air system. For any other technical gas please contact producer or your local distributor.

It detects when the filter cartridge is clogged and should be replaced. MDM 40 is typically installed on the head of the filter housing.

MDM 40 can be used in variety of applications. For applications not listed please contact producer or your local distributor.



APPLICATIONS

- Automotive
- Electronics
- Food and beverage
- Chemical
- Petrochemical
- Plastics
- Paint
- General industrial application

TECHNICAL DATA - MDM40

operating pressure	20 bar (290 psi)
operating temperature range	1,5 - 65 °C (35 - 149 °F)
mass	0,15 kg
measuring range	0,9 bar (13 psi)

DIMENSIONS

A	54 mm
B	54 mm
C	65 mm
E	23,5 mm (24,0 mm)
F	M5

Model	Description
MDM 40	basic version
MDM 40C	voltage-free contact version for remote alarm



16 bar
operating pressure

1,5 to 65 °C
operating temperature range

DESCRIPTION

Magnetic differential manometer MDM 60 has been developed to indicate pressure drop across the filter element in compressed air system. For any other technical gas please contact producer or your local distributor.

It detects when the filter cartridge is clogged and should be replaced. MDM 60 is typically installed on the head of the filter housing.

MDM 60 can be used in variety of applications. For applications not listed please contact producer or your local distributor.

APPLICATIONS

- Automotive
- Electronics
- Food and beverage
- Chemical
- Petrochemical
- Plastics
- Paint
- General industrial application

MDM 60
DIFFERENTIAL PRESSURE INDICATOR

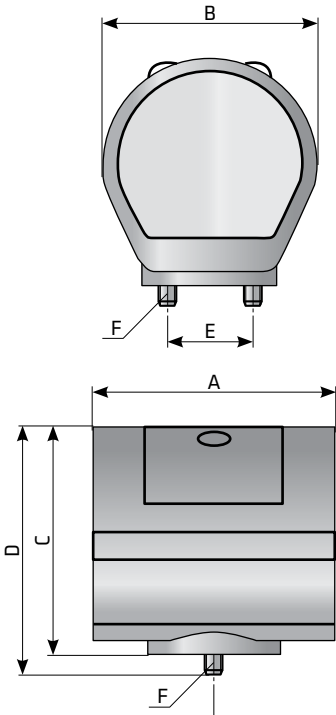


MDM 60
Basic version

MDM 60 E
Electronic version
with LED alarm

MDM 60 C
Voltage free contact version
for remote alarm

TECHNICAL DATA	
operating pressure	16 bar (232 psi)
operating temperature range	1,5 - 65 °C (35 - 149 °F)
mass	0,15 kg
measuring range	0,9 bar (13 psi)
DIMENSIONS	
A	72 mm
B	64 mm
C	68 mm
D	74 mm
E	24 mm
F	M5
TYPES	
MDM 60	basic version
MDM 60E	electronic version (battery) with LED alarm light
MDM 60C	voltage-free contact version for remote alarm



MDP 60

DIFFERENTIAL PRESSURE INDICATOR



16 bar
operating pressure

1,5 to 65 °C
operating temperature range

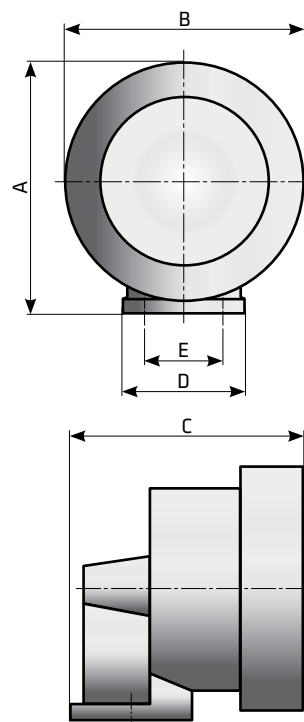


DESCRIPTION

Pressure drop indicator MDP 60 is designed for accurate indication of pressure drop across the filter element in compressed air system. For any other technical gas please contact producer or your local distributor.

MDP 60 is optimized for installation on the head of the filter housing.

MDP 60 can be used in variety of applications. For applications not listed please contact producer or your local distributor.



TECHNICAL DATA

operating pressure range	16 bar (232 psi)
operating temperature range	1,5 - 65 °C (35 - 149 °F)
mass	0,15 kg
measuring range	2 bar (29 psi)

DIMENSIONS

A	84 mm
B	80 mm
C	78 mm
D	ø40 mm
E	24 mm

APPLICATIONS

- Automotive
- Electronics
- Food and beverage
- Chemical
- Petrochemical
- Plastics
- Paint
- General industrial application



20 bar
operating pressure

1,5 to 65 °C
operating temperature range

DESCRIPTION

Pressure drop indicator MDA 60 is designed for accurate indication of pressure drop across the filter element in compressed air system. For any other technical gas please contact producer or your local distributor.

MDA 60 is optimized for installation on the head of the filter housing.

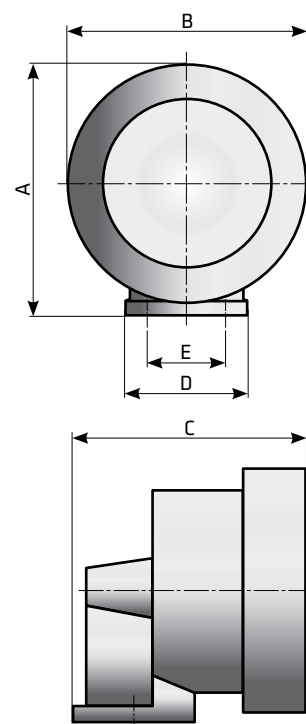
MDA 60 can be used in variety of applications. For applications not listed please contact producer or your local distributor.



APPLICATIONS

- Automotive
- Electronics
- Food and beverage
- Chemical
- Petrochemical
- Plastics
- Paint
- General industrial application

TECHNICAL DATA	
operating pressure range	20 bar (290 psi)
operating temperature range	1,5 - 65 °C (35 - 149 °F)
mass	0,36 kg
measuring range	2 bar (29 psi)
DIMENSIONS	
A	84 mm
B	80 mm
C	78 mm
D	ø40 mm
E	24 mm



EPG 60

ELECTRONIC PRESSURE GAUGE



16 bar

operating pressure

1,5 to 40 °C

operating temperature range



DESCRIPTION

The EPG 60 is electronic pressure gauge designed for monitoring of filter cartridge condition.

Filter cartridge condition is estimated from pressure drop, working hours, total hours or their combination. A change filter cartridge warning is issued when these parameters approach their limiting values.

An optional Alarm/ Warning output and Service Network Protocol for remote surveillance available.

EPG 60 is battery operated. Low power consumption allows long intervals between battery replacements.

TECHNICAL DATA

TYPE		EPG-SN	EPG	EPG 4-20mA
Service network connection possible		Yes	No	No
System pressure range		16 bar (232 psi)		
Differential pressure range		0,07 bar - 1,00 bar (1.0 psi - 14.5 psi)		
Max. differential pressure		1 bar, 14,7 psi		
Operating temperature	Ambient	1,5 °C - 40 °C (34,7 °F - 104 °F)		
	Compressed air	1,5 °C - 65 °C (34,7 °F - 149 °F)		
Mass		130 g (without batteries)		
Materials		PA6, glass fibres, NBR (sealing)		
Battery life time		>1 year (alkaline AA)		-
Output signal		No	No	4-20 mA

APPLICATIONS

- Automotive
- Electronics
- Food and beverage
- Chemical
- Petrochemical
- Plastics
- Paint
- General industrial application



50 bar
operating pressure

1,5 to 65 °C
operating temperature range

DESCRIPTION

Differential pressure drop indicator MDHI 50 has been developed for accurate indication of pressure drop across the filter element in compressed air system.

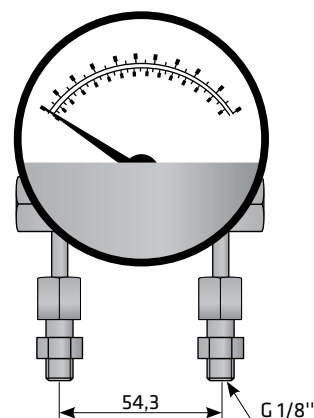
MDHI 50 is optimized for installation on the head of the filter housing.

APPLICATIONS

- Automotive
- Electronics
- Food and beverage
- Chemical
- Petrochemical
- Plastics
- Paint
- General industrial application

MDHI 50

DIFFERENTIAL HIGH PRESSURE STAINLESS STEEL INDICATOR



TECHNICAL DATA		
Ambient temperature range	1,5 - 60 °C	35 - 140 °F
Measuring range	0 - 1 bar	0 - 14,5 psi
Static pressure	50 bar	725 psi
Protection class	IP 54	
Accuracy	±3 % of full scale	
Connection	2 x G 1/8" male	

MDH 200

DIFFERENTIAL HIGH PRESSURE INDICATOR



200 bar

operating pressure

1,5 to 80 °C

operating temperature range

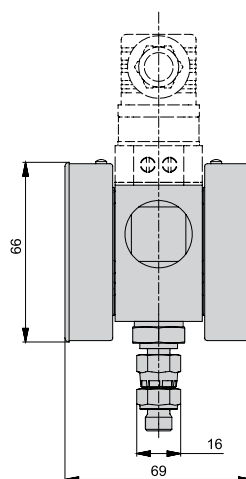
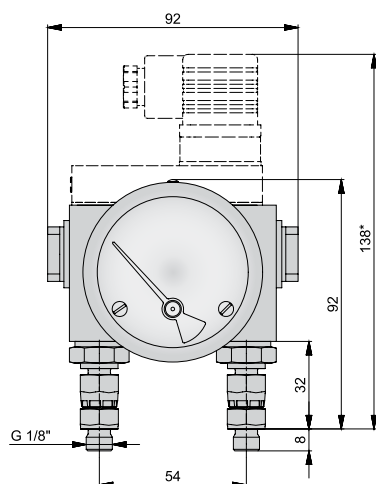


DESCRIPTION

Magnetic differential manometer MDH 200 is designed to indicate pressure drop across the filter element in compressed air system.

It detects when the filter cartridge is clogged and should be replaced. MDH 200 is usually installed on the head of the filter housing.

Double dials on manometer allows readout values from both sides of the differential manometer.



TECHNICAL DATA

Ambient temperature range	1,5 - 80 °C	35 - 175°F
Measuring range	0 - 1 bar	0 - 14,5 psi
Static pressure	200 bar	2900 psi
Protection class	IP 64	
Accuracy	±5 % of full scale	
Connection	2 x G 1/8" male	
Model	Description	
MDH 200	basic version	
MDH 200C	voltage-free contact version for remote alarm	

APPLICATIONS

- Automotive
- Electronics
- Food and beverage
- Chemical
- Petrochemical
- Plastics
- Paint
- General industrial application

**420 bar**

operating pressure

1,5 to 80 °C

operating temperature range

DESCRIPTION

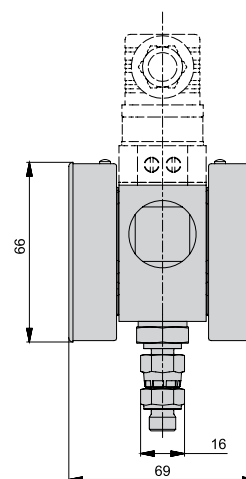
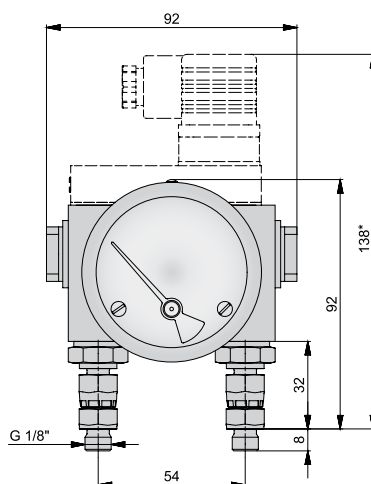
Magnetic differential manometer MDH 420 is designed to indicate pressure drop across the filter element in compressed air system.

It detects when the filter cartridge is clogged and should be replaced. MDH 420 is usually installed on the head of the filter housing.

Double dials on manometer allows readout values from both sides of the differential manometer. Thanks to resistance stainless steel housing is also suitable for demanding applications.

MDH 420

DIFFERENTIAL HIGH PRESSURE INDICATOR



APPLICATIONS

- Automotive
- Electronics
- Food and beverage
- Chemical
- Petrochemical
- Plastics
- Paint
- General industrial application

TECHNICAL DATA		
Ambient temperature range	1,5 - 80 °C	35 - 175 °F
Measuring range	0 - 1 bar	0 - 14,7 psi
Static pressure	420 bar	6091 psi
Protection class	IP 65	
Accuracy	±5 % of full scale	
Connection	On body G1/4"female - reducing fittings G1/8" male	
Model	Description	
MDH 420	basic version	
MDH 420C	voltage-free contact version for remote alarm	

OCI

OIL CONTENT INDICATOR



0,68 - 16 bar
operating pressure

1,5 to 49 °C
operating temperature range



DESCRIPTION

OCI oil content indicator has been designed to monitor oil content in pressure vessels and receivers where air quality is critical. It is calibrated to detect aerosol-mist level of oil with sensitivity down to 0,01 PPMm (0,012 mg/m³).

Replacement cartridge is available when original is worn out.

TECHNICAL DATA

TYPE	OCI A-4000-120
Connection	G1/8"
Dimensions	166 x 16,2 mm
Mass	0,134 kg
Pressure range	0,68 - 16 barg
Operating temperature range	1,5 °C to 49 °C
Measuring range	0 - 25 PPM(m) at 20 °C 0 - 30 mg/m ³

APPLICATIONS

- Automotive
- Electronics
- Food and beverage
- Chemical
- Petrochemical
- Plastics
- Paint
- General industrial applications
- Outlet of activated carbon filters
- Outlet of activated carbon towers
- Monitoring of oil content



20 bar
operating pressure

RAL 9005
standard colour

CHI

HUMIDITY INDICATOR



DESCRIPTION

Humidity indicator CHI has been designed for optical indication of dew point in compressed air system. Humidity / dew point is determined based on the colour of a silica gel, from orange (dry) to translucent (wet).

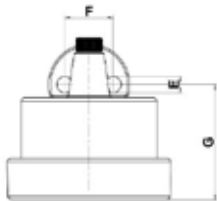
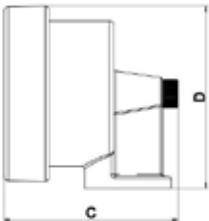
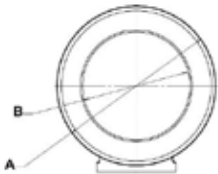
CHI can be used in variety of applications. For applications not listed please contact producer or your local distributor.

TECHNICAL DATA							
Operating pressure	0-20 bar _g				0-290 psi		
Total weight	375 g				0,83 lbs		
Adsorbent weight	75 g				0,66 lbs		
Typical installation	Head of filter housing						
Accuracy							
Air loss	Some compressed air is lost due to the operation of the indicator.						
	A	B	C	D	E	F	G
Dimensions (mm)	81	55	80	84	M5	24	57

Silicagel colour	Condition	Dew point
Orange	Dry air	-25°C
Translucent	Wet air	+15°C

APPLICATIONS

- Desiccant dryers
- General compressed air



VPG 60

DIFFERENTIAL PRESSURE INDICATOR



20 to 2000 mbar(a)
operating pressure

1,5 to 65 °C
operating temperature range



VPG 60
Basic version

VPG 60 E
Electronic version
with LED alarm

VPG 60 C
Voltage free contact version
for remote alarm

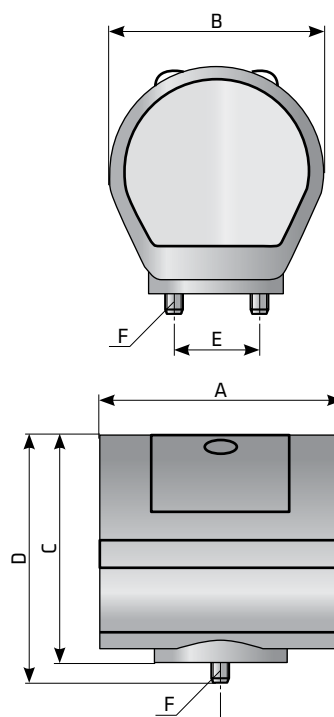
DESCRIPTION

Magnetic differential manometer VPG 60 has been developed to indicate pressure drop across the filter element in vacuum system. It detects when the filter cartridge is clogged and should be replaced. VPG 60 is typically installed on the head of the filter housing.

For any other technical gas please contact us or your local distributor.

VPG 60 can be used in variety of applications. For applications not listed please contact us or your local dealer.

TECHNICAL DATA	
operating pressure range	20 - 2000 mbar(a) (0,29 - 29 psi(a))
operating temperature range	1,5 - 65 °C (35 - 149 °F)
mass	0,15 kg
measuring range	0,09 bar (0,0013 psi)
DIMENSIONS	
A	72 mm
B	64 mm
C	68 mm
D	74 mm
E	24 mm
F	M5
TYPES	
VPG 60	basic version
VPG 60E	electronic version (battery) with LED alarm light
VPG 60C	voltage-free contact version for remote alarm



APPLICATIONS

- Automotive
- Electronics
- Food and beverage
- Chemical
- Petrochemical
- Plastics
- Paint
- General industrial application



ACCESSORIES

Different accessories are small, but important part of compressed air system.

Despite the fact that this equipment is often unnoticed, also plays an important role in the reliable operation of the compressed air system.

Reliable mounting of compressed air equipment reduces mechanical stresses and relief the equipment, which ensures long and reliable operation without the risk of mechanical collapse.

Reliable connection of different types of filters through our Assembly kits for filters protects against compressed air leakage and allows the merging of filters with various threaded connections and filters of different manufacturers.

ACCESSORIES		Pressure		Page
AK	Assembly kits for filters	20 bar		98
WB	Wall mounting brackets for filters			98
WK	Wall mounting kits for filters	16 bar		98
FA	Flange adapter	16, 63 bar		99
SG	Sight glass	16 bar		99
ES	Exhaust silencer	16 bar		99



AK

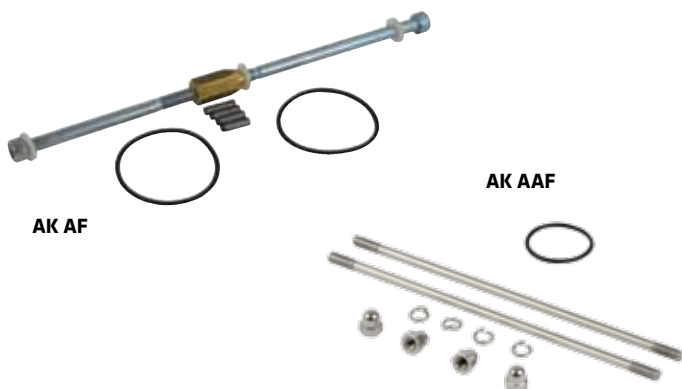
ASSEMBLY KITS FOR FILTERS



DESCRIPTION

Assembly kits have been developed to connect two or more air filters together. Construction of assembly kit is universal and it can be used for any type of filter, including filters of some other world producers. It is easy to connect two filters together and it includes supporting elements for easy mounting on the wall or other surface.

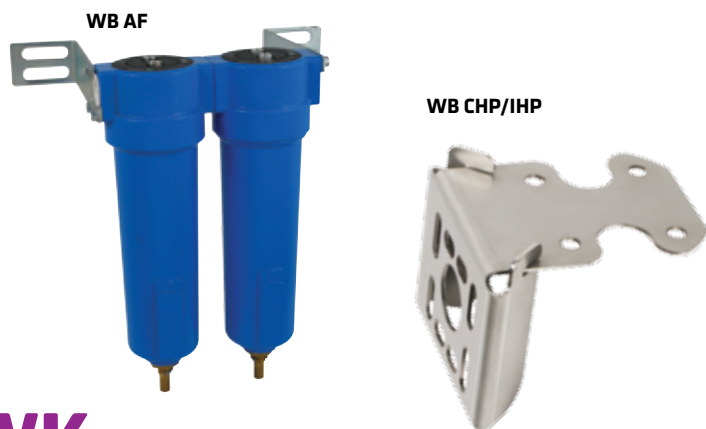
AK - UNIVERSAL ASSEMBLY KITS					
Type	Connection	Operating temp.	Operating pressure	Max. load/console [kg]	Mass [kg]
AK 3/8"	3/8"	1,5 - 65 °C	0 - 20 bar	0,47	0,3
AK 1/2"	1/2"	1,5 - 65 °C	0 - 20 bar	0,47	0,3
AK 3/4"	3/4"	1,5 - 65 °C	0 - 20 bar	0,6	0,3
AK 1"	1"	1,5 - 65 °C	0 - 20 bar	1,57	0,5
AK 1 1/2"	1 1/2"	1,5 - 65 °C	0 - 20 bar	2,2	0,5
AK 2"	2"	1,5 - 65 °C	0 - 20 bar	2,32	1,57
AK 2 1/2"	2 1/2"	1,5 - 65 °C	0 - 20 bar	2,28	1,53
AK 3"	3"	1,5 - 65 °C	0 - 20 bar	2,22	1,47



AK - ASSEMBLY KITS FOR OMEGA AIR FILTERS				
Filter type	Assembly kit type	Suitable for filter size	Number of filters	Operating pressure
AF	AK AF 2S	AF 0056-0106	2	0-16 bar
	AK AF 3S		3	0-16 bar
	AK AF 2M	AF 0186-0706	2	0-16 bar
	AK AF 3M		3	0-16 bar
AAF	AK AAF 2S	AAF 0006-0016	2	0-16 bar
	AK AAF 3S		3	0-16 bar
	AK AAF 2M	AAF 0026-0036	2	0-16 bar
	AK AAF 3M		3	0-16 bar
	AK AAF 2L	AAF 0046-0106	2	0-16 bar
	AK AAF 3L		3	0-16 bar
	AK AAF 2XL	AAF 0186-0706	2	0-16 bar
	AK AAF 3XL		3	0-16 bar

WB

WALL MOUNTING BRACKETS FOR FILTERS



WB - WALL MOUNTING BRACKETS			
For filters	Wall mounting bracket type	Suitable for filter size	Maximum load [N]
AF	WB AF S	AF 0056-0106	60 N
	WB AF M	AF 0186-0706	150 N
CHP/IHP	WB CHP/IHP S	CHP 003-005	100 N
		IHP 003-005	
	WB CHP/IHP M	CHP 007-010	150 N
		IHP 007-010	
	WB CHP/IHP L	CHP 018-030	250 N
		IHP 018-030	
	WB CHP/IHP XL	CHP 047	350 N
		IHP 047	
	WB CHP/IHP XXL	CHP 094	700 N
		IHP 094	

WK

WALL MOUNTING KITS FOR FILTERS



WK - WALL MOUNTING KITS					
For filters	Wall mounting kit type	Suitable for filter size	Number of filters	Operating pressure	Maximum load [N]
AAF	WK AAF 1S	AAF 0006-0016	1	0-16 bar	40 N
	WK AAF 2S		2		
	WK AAF 3S		3		
	WK AAF 1M	AAF 0026-0036	1	0-16 bar	60 N
	WK AAF 2M		2		
	WK AAF 3M		3		
	WK AAF 1L	AAF 0046-0106	1	0-16 bar	100 N
	WK AAF 2L		2		
	WK AAF 3L		3		
	WK AAF 1XL	AAF 0186-0706	1	0-16 bar	150 N
	WK AAF 2XL		2		
	WK AAF 3XL		3		

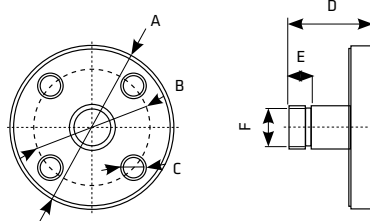
FA

FLANGE ADAPTER



DESCRIPTION

Flange adapter FA is designed for all products and devices which cannot be connected to the pipeline without flanges such as: filter housings, condensate drains, dryers, valves, The product is made of male pipe thread which can be screwed to the female connection and the flange which can be coupled to another flange. The Flange adapter FA is completely protected from corrosion with zinc coating.



TECHNICAL DATA

Type	Flange size ⁽¹⁾	Pressure rating	Dimensions [mm]						Mass [kg]
			A	B	C	D	E	F	
FA 15-16	DN15	PN16	95	65	4 × ø14	65	15	G 1/2	0,7
FA 15-63		PN63	105	75	4 × ø14	65	15		1,1
FA 20-16	DN20	PN16	105	75	4 × ø14	65	15	G 3/4	1,0
FA 20-63		PN63	130	90	4 × ø18	65	15		1,4
FA 25-16	DN25	PN16	115	85	4 × ø14	65	17	G 1	1,2
FA 25-63		PN63	140	100	4 × ø18	65	17		1,8
FA 32-16	DN32	PN16	140	100	4 × ø18	85	17	G 1 1/4	2,1
FA 32-63		PN63	155	110	4 × ø22	85	17		2,7
FA 40-16	DN40	PN16	150	110	4 × ø18	95	19	G 1 1/2	2,4
FA 40-63		PN63	170	125	4 × ø22	95	19		3,2
FA 50-16	DN50	PN16	165	125	4 × ø18	105	21	G 2	3,2
FA 50-63		PN63	180	135	4 × ø22	105	21		4,5
FA 65-16	DN65	PN16	185	145	4 × ø18	105	21	G 2 1/2	3,7
FA 65-63		PN63	205	160	8 × ø22	105	21		5,2
FA 80-16	DN80	PN16	200	160	8 × ø18	105	21	G 3	4,7
FA 80-63		PN63	215	170	8 × ø22	105	21		7,4

⁽¹⁾ Standard flange EN 1092-1, other pipe connection on request.

SG

SIGHT GLASS



DESCRIPTION

Sight glass has been developed to easily check the level of accumulated condensate at the bottom of a compressed air filter.

Every cast aluminium filter housing has a pre-cast area where the sight glass can be mounted after appropriate holes are drilled.

TECHNICAL DATA

TYPE	SG
Operating pressure	0 to 16 bar (0 to 232 psi)
Operating temp.	1,5 to +65 °C (35 to 149 °F)
Operating fluid	Air, water, oil
Mass (kg)	0,010
Material	PA12
Dimensions (mm)	59,0 x 20,5 x 11,0

ES

EXHAUST SILENCER



DESCRIPTION

ES series expansion silencers are designed for efficient noise reduction at variety of applications where compressed air is expanded/depressurised to ambient pressure.

ES B series - exhaust silencers with bypass valves are available as an option. The bypass valve is designed to protect silencer from overload. It is positioned on the other side of the inlet port. The valve opens when the pressure in the silencer exceeds the limited value. The bypass valve is triggered by a spring-loaded mechanism.

ES E and ES BE series - version with nipple connection

TECHNICAL DATA

Type		Connection	Flow capacity		Operating pressure	Operating temp.	Dimensions	
Standard version	Pressure relief option		Nm³/h	scfm			ø [mm]	h [mm]
ES 06050	ES 06050 B	1/4"	190	118	0 to 16bar	1,5 to +65 °C	51	70
ES 14050	ES 14050 B	3/8"	420	262			51	127
ES 12075	ES 12075 B	1/2"	850	530			75	130
ES 22075	ES 22075 B	3/4"	1.820	1.134			75	230
ES 22090	ES 22090 B	1"	2.310	1.440			90	233
ES 32090	ES 32090 B	1 1/4"	4.550	2.835			90	333
ES 32140	ES 32140 B	1 1/2"	6.370	3.970			140	336
ES 45140	ES 45140 B	2"	11.200	6.970			140	475

Versions ES E and ES BE are equipped with external thread connection.



CONDENSATE DRAINS

Condensate draining equipment is possibly the most ignored component of a compressed air system but nevertheless, a most important part. No matter how much money you wasted on high-quality equipment for compressed air (compressors, dryers, filters), compressed air quality becomes worthless, if the condensate is not discharged from the system.

Condensate in compressed air system can cause large problems:

- An inconsistent supply of dry air will cause production problems. For example, the moisture will wash away the lubrication from air tools, and cause erratic performance, downtime and maintenance.
- The presence of water will lead to the formation of rust and scale in the air piping system. This solid contamination will foul equipment.
- Your air dryers and in-line filtration products will not perform if they become overloaded with liquid contamination. Slugs of water due to drain failure can cause major problems in a desiccant dryer.
- Also, water can back up into the compressor and wreck the machinery.
- When a drain fails to eject all of the condensate collected, oil and/or water will collect, affecting - filter efficiency - causing carry over into the system - allowing freeze-up in the winter.
- Drains stuck in the open position due to condensate debris can be a major source of wasted energy in some plants.
- The condensate transferred to the end user, can lead to irreparable consequences to the final product or process.

Condensate drains are installed on moisture separators, coalescing filters, air receivers, air dryers and drip legs to remove this condensate from the compressed air system. The condensate should be piped from automatic drain valves to oil/water separators to remove the oil from the condensate prior to discharge to a drain. Pay attention, that the drains operate properly. Only in that way the filters and separators are successful in completing their task.

CONDENSATE DRAINS		Pressure	Capacity	Page
EMD	Electronic condensate drains	16 (8) bar	up to 300 l/h	102
ECD-B	Electronic condensate drains	16 bar	15-150 l/h	104
IED	Electronic condensate drains	16 bar	8 l/h	106
EMD HP	High pressure electronic condensate drains	50 bar	30,4 l/h	108
TD M	Timer controlled condensate drains	16, 25, 50, 150 bar	95 l/h	110
TD 420M	High pressure timer controlled condensate drains	420 bar	see spec.	112
AOK 13PA	Automatic mechanical plastic condensate drains	13 bar	167 l/h	113
AOK 20B	Automatic mechanical condensate drains	20 bar	167 l/h	114
AOK 20SS	Automatic mechanical stainless steel condensate drains	20 bar	167 l/h	115
AOK 50B	Automatic mechanical high pressure condensate drains	8-50 bar	145 l/h	116
AOK 50SS	Automatic stainless steel high pressure condensate drains	8-50 bar	145 l/h	117
AOK 16B	Automatic mechanical condensate drains	16 bar		118
AOK 16C	Automatic mechanical condensate drains	16 bar		119
AOK 16F	Automatic mechanical condensate drains	16 bar		120
MCD-B	Manual condensate drains	16 bar		121
MCD	Manual condensate drains	20 bar		122
EVD	Vacuum drains	20-2.000 mbar		123





16 (8) bar

operating pressure

up to 300 l/h

drain capacity

1/2"

connections

1,5 to 65 °C

operating temperature range

DESCRIPTION

EMD series is designed for fully automatic discharging of condensate or any other non-aggressive fluid from compressed air system. The units can be installed as external drain on any application specified. Condensate accumulates in the collecting reservoir. When the level is high enough condensate is being discharged from the system without any air losses. Fluid level is detected by precise capacitive level sensor.

Special self-cleaning direct acting valve assures reliable operation. EMD series is also equipped with operation alarm, led indicator, test button and internal strainer. Version with Service Network for diagnostics parameter setting and alarm output is also available.

APPLICATIONS

- Air compressor (piston or screw)
- After-cooler
- Cyclone condensate separator
- Pressure vessel/air tank
- Air dryer
- Air filter

EMD SERIES

ELECTRONIC CONDENSATE DRAIN



EMD 12



EMD 25



EMD 75



EMD 150



EMD 300

		Drain capacity (at 7 bar/ 101 psi)	Voltage	Service network connect.	Alarm output	Internal fuse	Power	Operating pressure range	Operating temp. range	Inlet connection	Outlet connection	Protection class	Dimensions [L x W x H]	Mass
EMD 12	EMD 12 230V	12 l/h (0,007 cfm)	230 VAC 50-60 Hz	-	-	5 x 20 1A T	10 VA	16 bar (232 psi)	1,5-65°C (25-149°F)	G 1/2"	Push conn. for tube ø8	IP54	133 x 76 x 147 mm	0,55 kg
	EMD 12 A 230V			-	✓									
	EMD 12 C 230V			✓	✓									
	EMD 12 115V		115 VAC 50-60 Hz	-	-	5 x 20 1A T	10 VA	16 bar (232 psi)						
	EMD 12 A 115V			-	✓									
	EMD 12 C 115V			✓	✓									
	EMD 12 24Vac		24 Vac 50-60 Hz	-	-	2A	10 VA	16 bar (232 psi)						
	EMD 12 A 24Vac			-	✓									
EMD 12 C 24Vdc	24 Vdc	-	✓	2A	8,5 W	8 bar								
EMD 25	EMD 25 230V	25 l/h (0,015 cfm)	230 VAC 50-60 Hz	-	-	5 x 20 1A T	18 VA	16 bar (232 psi)	1,5-65°C (25-149°F)	G 1/2"	Push conn. for tube ø8	IP54	131 x 83 x 166 mm	0,5 kg
	EMD 25 A 230V			-	✓									
	EMD 25 C 230V			✓	✓									
	EMD 25 115V		115 VAC 50-60 Hz	-	-	5 x 20 1A T	18 VA	16 bar (232 psi)						
	EMD 25 A 115V			-	✓									
	EMD 25 C 115V			✓	✓									
	EMD 25 24Vac		24 Vac 50-60 Hz	-	-	2A	18 VA	16 bar (232 psi)						
	EMD 25 A 24Vac			-	✓									
EMD 25 C 24Vdc	24 Vdc	-	✓	2A	14 W	8 bar								
EMD 75	EMD 75 230V	75 l/h (0,044 cfm)	230 VAC 50-60 Hz	-	-	5 x 20 1A T	18 VA	16 bar (232 psi)	1,5-65°C (25-149°F)	G 1/2"	Push conn. for tube ø8	IP54	161 x 97 x 162 mm	1,1 kg
	EMD 75 A 230V			-	✓									
	EMD 75 C 230V			✓	✓									
	EMD 75 115V		115 VAC 50-60 Hz	-	-	5 x 20 1A T	18 VA	16 bar (232 psi)						
	EMD 75 A 115V			-	✓									
	EMD 75 C 115V			✓	✓									
	EMD 75 24Vac		24 Vac 50-60 Hz	-	-	2A	18 VA	16 bar (232 psi)						
	EMD 75 A 24Vac			-	✓									
EMD 75 C 24Vdc	24 Vdc	-	✓	2A	14 W	8 bar								
EMD 150	EMD 150 230V	150 l/h (0,088 cfm)	230 VAC 50-60 Hz	-	-	5 x 20 1A T	18 VA	16 bar (232 psi)	1,5-65°C (25-149°F)	G 1/2"	Push conn. for tube ø8	IP54	190 x 97 x 162 mm	1,2 kg
	EMD 150 A 230V			-	✓									
	EMD 150 C 230V			✓	✓									
	EMD 150 115V		115 VAC 50-60 Hz	-	-	5 x 20 1A T	18 VA	16 bar (232 psi)						
	EMD 150 A 115V			-	✓									
	EMD 150 C 115V			✓	✓									
	EMD 150 24Vac		24 Vac 50-60 Hz	-	-	2A	18 VA	16 bar (232 psi)						
	EMD 150 A 24Vac			-	✓									
EMD 150 C 24Vdc	24 Vdc	-	✓	2A	14 W	8 bar								
EMD 300	EMD 300 230V	300 l/h (0,176 cfm)	230 VAC 50-60 Hz	-	-	5 x 20 1A T	18 VA	16 bar (232 psi)	1,5-65°C (25-149°F)	G 1/2"	Push conn. for tube ø8	IP54	190 x 97 x 162 mm	1,6 kg
	EMD 300 A 230V			-	✓									
	EMD 300 C 230V			✓	✓									
	EMD 300 115V		115 VAC 50-60 Hz	-	-	5 x 20 1A T	18 VA	16 bar (232 psi)						
	EMD 300 A 115V			-	✓									
	EMD 300 C 115V			✓	✓									
	EMD 300 24Vac		24 Vac 50-60 Hz	-	-	2A	18 VA	16 bar (232 psi)						
	EMD 300 A 24Vac			-	✓									
EMD 300 C 24Vdc	24 Vdc	-	✓	2A	14 W	8 bar								
				Northern Europe, Canada, Central Asia			Rest of the World			Moist tropical and subtropical regions				
Peak compressor capacity [m³/min]			EMD 12	8,8			7,4			4,6				
			EMD 25	18,3			15,4			9,6				
			EMD 75	55			46,2			28,7				
			EMD 150	110			92			57				
			EMD 300	220			185			115				
Peak dryer capacity [m³/min]			EMD 12	18,56			14,9			9,28				
			EMD 25	38,6			31			19,3				
			EMD 75	116			93,1			58				
			EMD 150	232			186			116				
			EMD 300	464			372			232				
Peak filter capacity [m³/min]			EMD 12	92,8			74,4			46,4				
			EMD 25	193,3			155			96,7				
			EMD 75	580			465			290				
			EMD 150	1160			930			580				
			EMD 300	2320			1860			1160				

The amount of condensed water in compressed air system depends mainly on outside air temperature. Please take the relevant climate zone into account when dimensioning yours specific EMD drain series application:



16 bar
operating pressure

15 to 150 l/h
drain capacity

1/2"
connections

1,5 to 65 °C
operating temperature range

DESCRIPTION

ECD-B series is designed for fully automatic discharging of condensate or any other non-aggressive fluid from compressed air system. For any other technical gas please contact producer or your local distributor.

The units can be installed as external drain on any application specified. Condensate accumulates in the collecting reservoir and when the level is high enough condensate is being discharged from the system without any air losses. Fluid level is detected by precise capacitive level sensor.

Special self-cleaning direct acting valve assures reliable operating. ECD-B series is also equipped with operation alarm, led indicator, test button and internal strainer.

ECD-B series can be used in variety of applications. For applications not listed please contact producer or your local distributor.

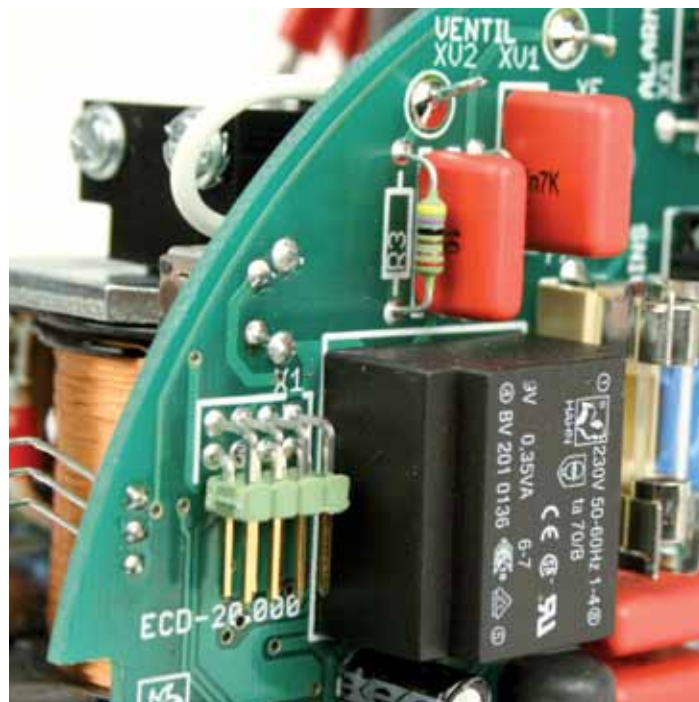
APPLICATIONS

- Air compressor (piston or screw)
- After-cooler
- Cyclone condensate separator
- Pressure vessel/air tank
- Air filter

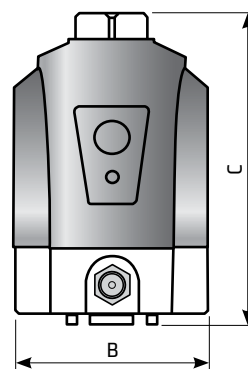
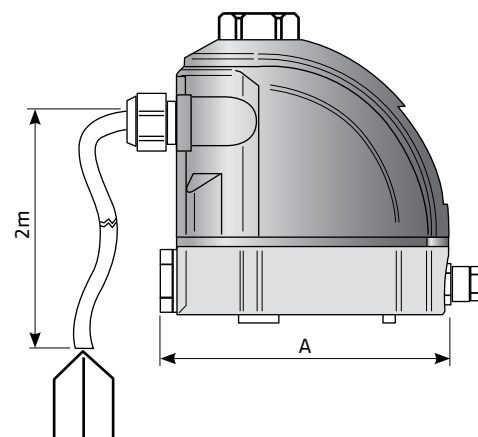
ECD-B SERIES

ELECTRONIC CONDENSATE DRAIN





TECHNICAL DATA		ECD 15B	ECD 40B	ECD 90B	ECD 150B
Voltage	115 VAC	115 V ± 10 %	115 V ± 10 %	115 V ± 10 %	115 V ± 10 %
	230 VAC	230 V ± 10 %	230 V ± 10 %	230 V ± 10 %	230 V ± 10 %
Power	115 VAC	24 VA	24 VA	24 VA	24 VA
	230 VAC	24 VA	24 VA	24 VA	24 VA
Frequency		50-60 Hz			
Operating pressure		16 bar (232 psi)			
Drain capacity (at 7 bar/101 psi)		15 l/h (0,0088 cfm)	40 l/h (0,023 cfm)	90 l/h (0,053 cfm)	150 l/h (0,088 cfm)
Operating temperature range		1,5 - 65 °C (35-149 °F)			
Inlet connection		R 1/2"	R 1/2"	R 1/2"	R 1/2"
Outlet connection		R 1/8"	R 1/8"	R 1/8"	R 1/8"
Power interface		3 × 0,75 mm ²	3 × 0,75 mm ²	3 × 0,75 mm ²	3 × 0,75 mm ²
Protection class		IP54	IP54	IP54	IP54
Mass [kg]		0,9	0,9	1,05	1,15
Dimensions A × B × C [mm]		120 × 82 × 125	120 × 82 × 125	120 × 82 × 135	120 × 82 × 150
Peak compressor performance [m ³ /min]	a	11,6	29,4	60,6	111,6
	b	9,3	23,5	48,5	89,3
	c	5,8	14,7	30,3	55,8
Peak dryer performance [m ³ /min]	a	23,2	58,8	121,2	223,2
	b	18,6	47,0	97,0	178,6
	c	11,6	29,4	60,6	111,6
Peak filter performance [m ³ /min]	a	116	294	606	1116
	b	93	235	485	893
	c	58	147	303	558
Compressor motor power [kW]		up to 30	up to 75	up to 160	up to 315



Please take the relevant climate zone into account when dimensioning yours specific ECD-B drain series application:

a	Northern Europe, Canada, Northern USA, Central Asia
b	Central and Southern Europe, Central America
c	South East Asian coastal regions, Oceania, Amazon and Congo regions



16 bar
operating pressure

8 l/h
drain capacity

1/2"
connections

1,5 to 65 °C
operating temperature range

DESCRIPTION

IED drain series is designed for fully automatic discharging of condensate or any other non-aggressive fluid from compressed air system. The series is designed to discharge condensed water from filter housing primarily.

Condensate accumulates in the bottom of filter housing. Fluid level is detected by precise capacitive level sensor. When the level is high enough condensate is being discharged from the system without any air losses.

IED drain series is also equipped with led indicator and test button.

APPLICATIONS

- Air filter

IED SERIES

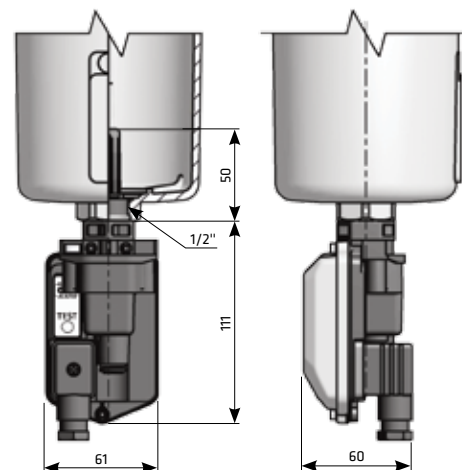
ELECTRONIC CONDENSATE DRAIN





TECHNICAL DATA	IED		IED A		IED C	
Version	230 V	115 V	230 V	115 V	230 V	115 V
Voltage	230 VAC, 50-60 Hz	115 VAC, 50-60 Hz	230 VAC, 50-60 Hz	115 VAC, 50-60 Hz	230 VAC, 50-60 Hz	115 VAC, 50-60 Hz
Internal fuse	5 x 20 1A T	5 x 20 1A T	5 x 20 1A T	5 x 20 1A T	5 x 20 1A T	5 x 20 1A T
Power	10 VA	10 VA	10 VA	10 VA	10 VA	10 VA
Operating pressure range	16 bar (232 psi)	16 bar (232 psi)	16 bar (232 psi)	16 bar (232 psi)	16 bar (232 psi)	16 bar (232 psi)
Drain capacity (at 7 bar/101 psi)	8 l/h at 7 bar (0,005 cfm at 101 psi)		8 l/h at 7 bar (0,005 cfm at 101 psi)		8 l/h at 7 bar (0,005 cfm at 101 psi)	
Operating temperature range	1,5-65 °C (35-149°F)		1,5-65 °C (35-149°F)		1,5-65 °C (35-149°F)	
Inlet connection	G 1/2" parallel thread		G 1/2" parallel thread		G 1/2" parallel thread	
Protection class	IP54		IP54		IP54	
Mass [kg]	0,3		0,3		0,3	
Service network connection	-		-		✓	✓
Alarm output	-		✓	✓	✓	✓

Filter capacities by region			
	Northern Europe, Canada, Central Asia	Rest of the World	Moist tropical and subtropical regions
Peak filter capacity	70 m³/min	55 m³/min	34 m³/min





EMD HP SERIES

HIGH PRESSURE ELECTRONIC CONDENSATE DRAIN

50 bar
operating pressure

30,4 l/h
drain capacity

1/2"
connections

1,5 to 65 °C
operating temperature range

DESCRIPTION

EMD HP series drain have been developed for fully automatic discharging of condensate or any other non-aggressive fluid from compressed air system. The units can be installed as external drain on any application specified below. Condensate accumulates in the collecting reservoir and when the level is high enough condensate is being discharged from the system without any air losses. Fluid level is detected by precise capacitive level sensor.

EMD HP series is also equipped with operation alarm (version A), led indicator, test button and internal strainer. Version with Service Network (version C) for diagnostics and parameter setting is also available. Working hours, valve operations and other operating parameters are stored in internal memory and can be read with Service Network reader.

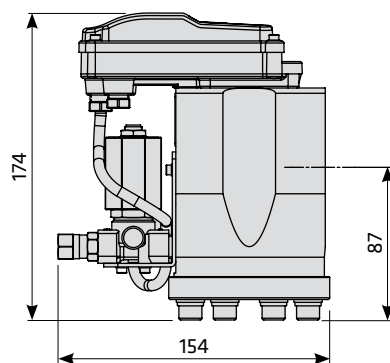
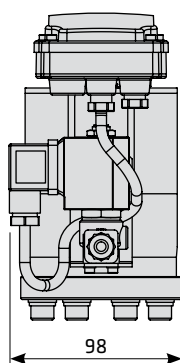
APPLICATIONS

- Air compressor (piston or screw)
- After-cooler
- Cyclone condensate separator
- Pressure vessel/air tank
- Air dryer
- Air filter





TECHNICAL DATA	EMD HP	EMD HP A	EMD HP C	EMD HP	EMD HP A	EMD HP C	EMDHP	EMD HP A	EMD HPA
	230 V			115 V			24 Vac		24 Vdc
Service network connection	-	-	✓	-	-	✓	-	-	-
Alarm output	-	✓	✓	-	✓	✓	-	✓	✓
Voltage	230 VAC, 50-60 Hz			115 VAC, 50-60 Hz			24 Vac, 50-60 Hz		24Vdc
Internal fuse	5 x 20 1A T			5 x 20 1A T			2A		2A
Power	25 VA			25 VA			25 VA		22 W
Operating pressure range	50 bar (725 psi)			50 bar (725 psi)			50 bar (725 psi)		50 bar
Drain capacity (at 7 bar/101 psi)	30,4 l/h at 50 bar (0,018 cfm at 725 psi)								
Operating temperature range	1,5-65 °C (35-149°F)								
Inlet connection	G 1/2" parallel thread								
Outlet connection	G 1/4" parallel thread								
Protection class	IP54								
Mass [kg]	2,3								
PEAK COMPRESSOR CAPACITY									
The data apply for drain, located in the most unfavorable location i.e. compressor cyclone od pressure vessel.									
System pressure	Northern Europe, Canada, Central Asia			Rest of the World			Moist tropical and subtropical regions		
50 bar	29,5 m³/min			22,2 m³/min			12,9 m³/min		
40 bar	26,4 m³/min			19,9 m³/min			11,5 m³/min		
30 bar	22,9 m³/min			17,2 m³/min			10,0 m³/min		
20 bar	18,7 m³/min			14,0 m³/min			8,1 m³/min		





TD M SERIES

TIMER CONTROLLED CONDENSATE DRAIN

16, 25, 50, 150 bar

operating pressure

95 l/h

drain capacity

1/2"

connections

1,5 to 65 °C

operating temperature range

DESCRIPTION

TD M timer controlled condensate drain is designed for reliable removal of condensate or other liquid from compressed air system. For any other technical gas please contact producer or your local distributor.

Discharge intervals can be set with two adjustment knobs. TD M drain is available in several types based on operating pressure and operating medium.

TD M can be used in variety of applications. For applications not listed please contact producer or your local dealer.

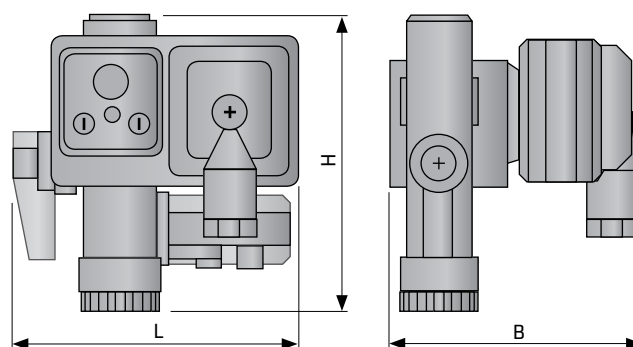


APPLICATIONS

- Air compressor (piston or screw)
- After-cooler
- Cyclone condensate separator
- Pressure vessel/Air tank
- Air dryer
- Air filter



TECHNICAL DATA	TD16M		TD25M		TD50M		TD150M		TD16Mcr	
Supply voltage	115 V	230 V	115 V	230 V	115 V	230 V	115 V	230 V	115 V	230 V
Operating temp. range	1,5 - 65 °C (35-149 °F)		1,5 - 65 °C (35-149 °F)		1,5 - 65 °C (35-149 °F)		1,5 - 65 °C (35-149 °F)		1,5 - 65 °C (35-149 °F)	
Operating pressure	16 bar (232 psi)		25 bar (362 psi)		50 bar (735 psi)		150 bar (2175 psi)		16 bar (232 psi)	
Protection class	IP65		IP65		IP65		IP65		IP65	
Coil power	18VA (holding), 36 VA (inrush)		18VA (holding), 36 VA (inrush)		18VA (holding), 36 VA (inrush)		18VA (holding), 36 VA (inrush)		18VA (holding), 36 VA (inrush)	
Cable dimensions	3 × 0,75 mm ²		3 × 0,75 mm ²		3 × 0,75 mm ²		3 × 0,75 mm ²		3 × 0,75 mm ²	
Mass (cable+valve)	0,35 kg		0,35 kg		0,35 kg		0,35 kg		0,35 kg	
Mass (strainer)	0,23 kg		0,23 kg		0,23 kg		-		0,23 kg	
Time ON	0,5 s - 10 s		0,5 s - 10 s		0,5 s - 10 s		0,5 s - 10 s		0,5 s - 10 s	
Time OFF	0,5 min - 45 min		0,5 min - 45 min		0,5 min - 45 min		0,5 min - 45 min		0,5 min - 45 min	
Drain capacity (at 7 bar)	144 l/h		113 l/h		74 l/h		95 l/h		204 l/h	
Flow rate Kvs	2,4 l/min		1,5 l/min		0,7 l/min		0,7 l/min		3,4 l/min	
Inlet connection	R 1/2"		R 1/2"		R 1/2"		R 1/4"		R 1/2"	
Outlet connection	R 1/4"		R 1/4"		R 1/4"		R 1/4"		R 1/4"	
Dimensions L×B×H [mm]	77×79×93	87,5×90,5×123	77×79×93	87,5×90,5×123	77×79×93	87,5×90,5×123	77×79×93	87,5×90,5×123	77×79×93	87,5×90,5×123
Medium	Air, water, oil		Air, water, oil		Air, water, oil		Air, water, oil		Aggressive fluids	
Option strainer	yes		yes		yes		no		no	



**420 bar(g)**

operating pressure

see spec.

drain capacity

1/4"

connections

1,5 to 150 °C

operating temperature range

DESCRIPTION

TD 420M timer controlled condensate drain is designed for reliable removal of condensate or other liquid from high pressure compressed air system⁽¹⁾. Discharge intervals can be set with two adjustment knobs. TD 420M drain is available with a kit for easy installation which enable us to mount it in many different positions.

TD 420M can be used in variety of applications. For applications not listed please contact us or your local dealer.

⁽¹⁾For any other technical gas please contact us or your local dealer

APPLICATIONS

- Air compressor (piston or screw)
- After-cooler
- Cyclone condensate separator
- Pressure vessel/Air tank
- Air dryer
- Air filter

TD 420M SERIES

TIMER CONTROLLED CONDENSATE DRAIN

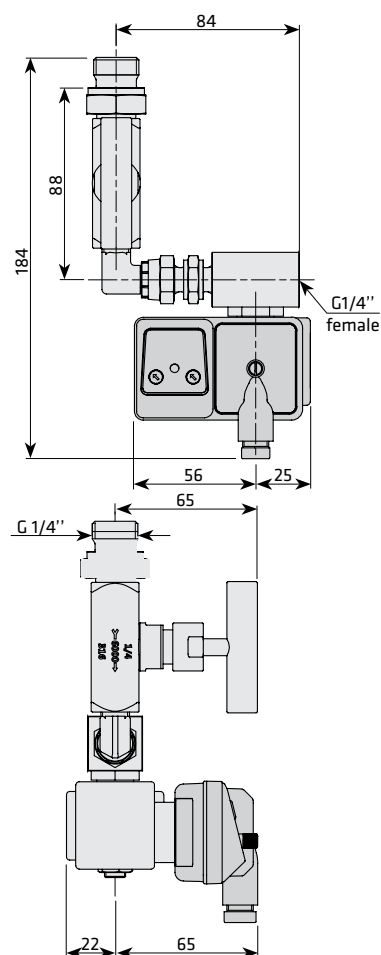


TECHNICAL DATA	TD 420M 230V AC	TD 420M 24V DC
Supply voltage	230V (±10 %), AC, 50/60Hz	24V DC
Operating temp. range	1,5 - 150 °C (35-302 °F)	
Operating pressure	420 bar (6091 psi)	
Protection class	IP65	
Coil power	8W	18 W
Cable dimensions	3 × 0,75 mm ²	
Mass (timer+valve)	0,35 kg	
Mass (fittings+needle valve)	0,23 kg	
Time ON	0,5 s - 10 s	
Time OFF	0,5 min - 45 min	
Valve	Direct acting solenoid valve, 2/2, NC	
Connector	DIN EN 175301-803 form A	
Inlet connection	G 1/4"	
Outlet connection	G 1/4" (female)	
Dimensions L×B×H [mm]	105×87×184	
Medium	Air, water, oil	
Flow coefficient Kvs	0,3 l/min	0,3 l/min

DISCHARGE CAPACITY

Q-Discharge capacity [l/min], Kvs-Flow coefficient, Δp-pressure difference [bar], Time ON and Time OFF are determined by adjustment knobs, the range of each timer is specified in technical specification.

$$Q = Kvs \times \sqrt{\Delta p} \times \left(\frac{\text{Time ON}}{60} \div \left(\frac{\text{Time ON}}{60} + \text{Time OFF} \right) \right)$$



AOK 13PA SERIES

AUTOMATIC MECHANICAL PLASTIC CONDENSATE DRAIN


13 bar

operating pressure

167 l/h

 drain capacity at 7 bar_g
1/2"

connections

1,5 to 65 °C

operating temperature range

PA6

housing material

DESCRIPTION

AOK 13PA has been developed for fully automatic discharging of condensate or any other non-aggressive fluid from compressed air system. The unit can be installed as external drain on any application specified below.

Condensate accumulates in reservoir and when the level is high enough condensate is being discharged from the system without any air losses.

Direct acting valve is operated by precise level-controlled floater which assures reliable and efficient operation.

For any other technical gas please contact us or your local dealer.

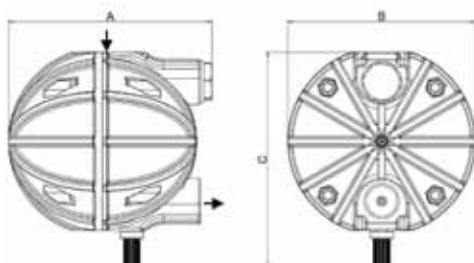
AOK 13PA can be used in variety of applications. For applications not listed please contact us or your local dealer.

RECOMMENDATIONS

Install ball valve between pressure vessel and inlet connection.
Install strainer element between pressure vessel and inlet connection.
Install nipple with venting tube to avoid generating of air bubbles.
Nipple is screwed in inlet connection.

TECHNICAL DATA	AOK 13PA
Operating temperature range	1,5 - 65 °C (35-149 °F)
Operating pressure	13 bar (188 psi)
Min. recommended operating pressure	1,5 bar(g) (21,8 psi)
Mass	0,5 kg
Discharge capacity (at 7 bar/101 psi)	167 l/h (at 7 barg) 227 l/h (at 13 barg)
Inlet connection	G 1/2" (NPT on request)
Outlet connection	G 1/2" (NPT on request)
Medium	Condensate (air, water, oil); non aggressive
Dimensions (A x B x C)	125 x 115 x 131 mm

CAPACITY			
	Northern Europe, Canada, Central Asia	Rest of the World	Moist tropical and subtropical regions
Peak compressor capacity	110 m³/min	100 m³/min	60 m³/min
Peak dryer capacity	240 m³/min	190 m³/min	120 m³/min
Peak filter capacity	1.200 m³/min	970 m³/min	600 m³/min



APPLICATIONS

- Air compressor (piston or screw)
- After-cooler
- Cyclone condensate separator
- Pressure vessel/Air tank
- Air dryer
- Air filter



AOK 20B SERIES

AUTOMATIC MECHANICAL CONDENSATE DRAIN

- 20 bar
operating pressure
- 167 l/h
drain capacity
- 1/2"
connections
- 1,5 to 65 °C
operating temperature range

DESCRIPTION

AOK 20B has been developed for fully automatic discharging of condensate or any other non-aggressive fluid from compressed air system. For any other technical gas please contact producer or your local distributor.

The unit can be installed as external drain on any application specified. Condensate accumulates in the aluminium reservoir and when the level is high enough condensate is discharged from the system without any air losses. Direct acting valve is operated by precise level controlled floater which assures reliable and efficient operation. Thanks to robust aluminium housing AOK 20B is suitable for heavy duty applications. AOK 20B is also equipped with separate manual drain for venting.

AOK 20B can be used in variety of applications. For applications not listed please contact producer or your local distributor



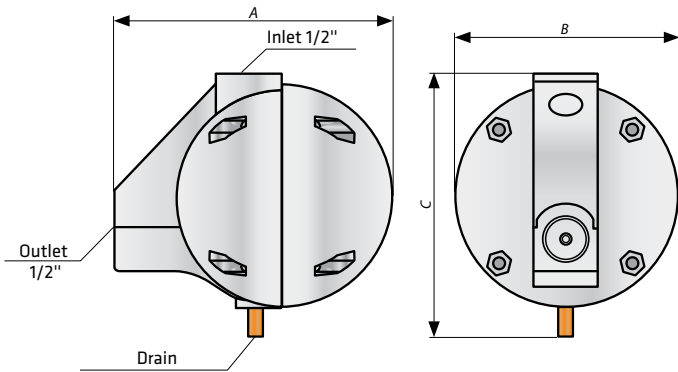
TECHNICAL DATA	AOK 20B
Operating temperature range	1,5 - 65 °C (35-149 °F)
Operating pressure	20 bar (290 psi)
Mass	0,6 kg
Discharge capacity (at 7 bar/101 psi)	167 l/h
Inlet connection	G 1/2" (NPT option)
Outlet connection	G 1/2" (NPT option)
Dimensions A × B × C	135 × 110 × 130 mm
Medium	Condensate (air, water, oil)

RECOMMENDATIONS

- Install ball valve between pressure vessel and inlet connection.
- Install strainer element between pressure vessel and inlet connection.
- Install nipple with venting tube to avoid generating of air bubbles.
- Screw nipple in inlet connection.

APPLICATIONS

- Air compressor (piston or screw)
- After-cooler
- Cyclone condensate separator
- Pressure vessel/Air tank
- Air dryer
- Air filter



AOK 20SS SERIES

AUTOMATIC MECHANICAL STAINLESS STEEL CONDENSATE DRAIN



20 bar
operating pressure

167 l/h
drain capacity

1/2"
connections

1,5 to 65 °C
operating temperature range

stainless steel 1.4408
material

DESCRIPTION

AOK 20SS is designed for fully automatic discharging of condensate or any other non aggressive fluid from compressed air system. For any other technical gas please contact producer or your local distributor. The unit can be installed as external drain on any application specified below.

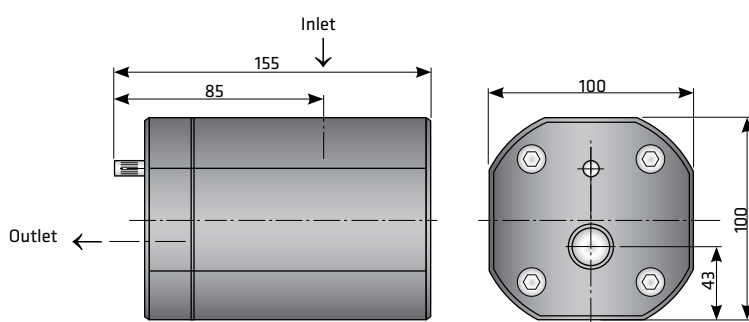
Condensate accumulates in the stainless steel reservoir and when the level is high enough the condensate is discharged from the system without any air loss. A direct acting valve is operated by a precise level controlled floater which assures reliable and efficient operation.

Thanks to its robust stainless steel housing AOK 20SS is suitable for heavy duty applications. On the front, the AOK 20SS, is also equipped with a separate manual drain for venting.

RECOMMENDATIONS

Install ball valve between pressure vessel and inlet connection.
Install strainer element between pressure vessel and inlet connection.
Install nipple with venting tube to avoid generating of air bubbles.
Nipple is screwed in inlet connection.

TECHNICAL DATA	AOK 20 SS
Operating temperature range	1,5 - 65 °C (35-149 °F)
Operating pressure	20 bar (290 psi)
Min. recommended operating pressure	1,5 bar(g) (21,8 psi)
Mass	6,6 kg
Discharge capacity (at 7 bar/101 psi)	167 l/h (at 7 barg) 252 l/h (at 16 barg)
Inlet connection	G 1/2" (NPT on request)
Outlet connection	G 1/2" (NPT on request)
Medium	Condensate (air, water, oil); non aggressive



APPLICATIONS

- Air compressor (piston or screw)
- After-cooler
- Cyclone condensate separator
- Pressure vessel/Air tank
- Air dryer
- Air filter

**8-50 bar**

operating pressure

145 l/h

drain capacity

1/2"

connections

1,5 to 65 °C

operating temperature range

aluminium

material

DESCRIPTION

AOK 50B has been developed for fully automatic discharging of condensate or any other non-aggressive fluid from compressed air system. The unit can be installed as external drain on any application specified below.

Condensate accumulates in the aluminium reservoir and when the level is high enough condensate is being discharged from the system. Direct acting valve is operated by precise level controlled floater which assures reliable and efficient operation.

Thanks to light aluminium housing AOK 50B for ease mounting and is also suitable for heavy duty applications. On front side AOK 50B is also equipped with separate manual drain or venting.

APPLICATIONS

- Air compressor (piston or screw)
- After-cooler
- Cyclone condensate separator
- Pressure vessel/Air tank
- Air dryer
- Air filter

AOK 50B SERIES

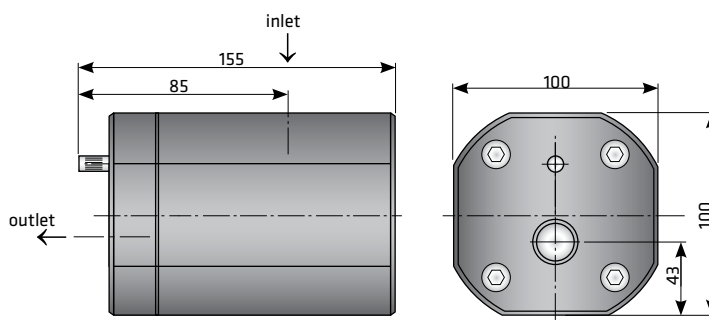
AUTOMATIC MECHANICAL HIGH PRESSURE CONDENSATE DRAIN



TECHNICAL DATA	AOK 50 B
Operating temperature range	1,5 - 65 °C (35-149 °F)
Operating pressure	8-50 bar (116-725 psi)
Min. recommended operating pressure	10 bar(g) (145 psi)
Mass	2,8 kg
Discharge capacity	145 l/h (at 50 barg)
Inlet connection	G 1/2" (NPT on request)
Outlet connection	G 1/2" (NPT on request)
Medium	Condensate (air, water, oil); non aggressive

RECOMMENDATIONS

Install ball valve between pressure vessel and inlet connection.
Install strainer element between pressure vessel and inlet connection.
Install nipple with venting tube to avoid generating of air bubbles.
Screw nipple in inlet connection.



AOK 50SS SERIES

AUTOMATIC STAINLESS STEEL HIGH PRESSURE CONDENSATE DRAIN



8 - 50 barg
operating pressure

1/2"
connections

1,5 to 65 °C
operating temperature range

stainless steel 1.4408
material

DESCRIPTION

AOK 50SS has been developed for fully automatic discharging of condensate or any other non-aggressive fluid from compressed air system. The unit can be installed as external drain on any application specified below.

Condensate accumulates in the stainless steel reservoir and is discharged from the system when the level is high enough.

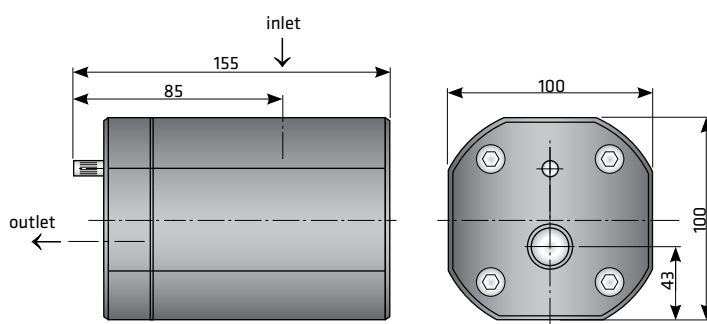
A direct acting valve is operated by a precise level controlled float which assures reliable and efficient operation.

Thanks to its robust stainless steel housing AOK 50SS is suitable for heavy duty applications. On the front, the AOK 50SS, is also equipped with a separate manual drain for venting.

TECHNICAL DATA	AOK 50 SS
Operating temperature range	1,5 - 65 °C (35-149 °F)
Operating pressure	8-50 bar (116-725 psi)
Min. recommended operating pressure	10 bar(g) (145 psi)
Mass	7,2 kg
Discharge capacity	145 l/h (at 50 barg)
Inlet connection	G 1/2" (NPT on request)
Outlet connection	G 1/2" (NPT on request)
Medium	Condensate (air, water, oil); non aggressive

RECOMMENDATIONS

Install ball valve between pressure vessel and inlet connection.
Install strainer element between pressure vessel and inlet connection.
Install nipple with venting tube to avoid generating of air bubbles.
Screw nipple in inlet connection.



APPLICATIONS

- Cyclone condensate separator
- Air filter



AOK 16B SERIES

AUTOMATIC MECHANICAL CONDENSATE DRAIN

16 bar
operating pressure

1/2"
connections

1,5 to 65 °C
operating temperature range

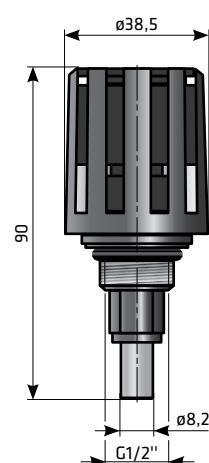
DESCRIPTION

AOK 16B is designed for fully automatic discharging of condensate or any other non aggressive fluid from compressed air system. For any other technical gas please contact producer or your local distributor. AOK 16B is easy to install inside to the filter housing.

AOK 16B can be used in a variety of applications. For applications not listed please contact producer or your local distributor.



TECHNICAL DATA	AOK 16B
Operating temp. range	1,5 - 65 °C (35-149 °F)
Operating pressure	16 bar (232 psi)
Mass	0,04 kg
Connection	G 1/2"
Outlet connection	ø8
Dimensions H × D	90 × ø38,5 mm
Medium	Condensate (air, water, oil)



APPLICATIONS

- Cyclone condensate separator
- Air filter

AOK 16C SERIES

AUTOMATIC MECHANICAL CONDENSATE DRAIN



TECHNICAL DATA	AOK 16C
Operating temp. range	1,5 - 65 °C (35-149 °F)
Operating pressure	16 bar (232 psi)
Mass	0,04 kg
Connection	G 1/2"
Outlet connection	ø8
Dimensions H × D	90 × ø38,5 mm
Medium	Condensate (air, water, oil)

16 bar

operating pressure

1/2"

connections

1,5 to 65 °C

operating temperature range

DESCRIPTION

AOK 16C is designed for fully automatic discharging of condensate or any other non-aggressive fluid from compressed air system.

AOK 16C is easy to install inside to the filter housing. The drain can run in three different ways. Automatic acting-condensate accumulates in the filter housing and when the level is high enough condensate is being automatically discharged from the system.

Servo acting valve is operated by precise level controlled floater which assures reliable and efficient operation.

Semi-automatic action-when the pressure in system drop under the 0,1 bar the condensate drain opens and discharges all accumulated condensate. Manual action-condensate can be drained off by push up lower brass part of the drain.

APPLICATIONS

- Cyclone condensate separator
- Air filter



AOK 16F SERIES

AUTOMATIC MECHANICAL CONDENSATE DRAIN

16 bar
operating pressure

1/8"
connections

1,5 to 50 °C
operating temperature range

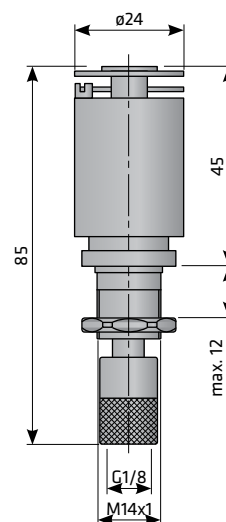
DESCRIPTION

AOK 16F is designed for fully automatic discharging of condensate or any other non aggressive fluid from compressed air system. For any other technical gas please contact producer or your local distributor. AOK 16F is easy to install inside to the filter housing.

AOK 16F can be used in variety of applications. For applications not listed please contact producer or your local distributor.



TECHNICAL DATA	AOK 16F
Operating temp. range	1,5 - 65 °C
Operating pressure	16 bar (232 psi)
Mass	0,05 kg
Connection	ø 14 mm
Outlet connection	G 1/8
Dimensions H x D	85 x ø24 mm
Medium	Condensate (air, water, oil)



APPLICATIONS

- Air filter

MCD B SERIES

MANUAL CONDENSATE DRAIN



16 bar
operating pressure

1/2"
connections

1,5 to 65 °C
operating temperature range

DESCRIPTION

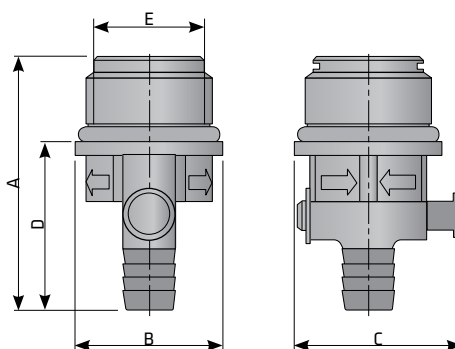
MCD B is designed for manual discharging of condensate or any other non-aggressive fluid from compressed air system. For any other technical gas please contact producer or your local distributor.

MCD B is easy to install on the filter housing. Condensate can be drained only manually.

MCD B is closed even if the system is non-pressurized.

MCD B can be used in variety of applications.

TECHNICAL DATA		MCD B
Operating temp. range		1,5 - 65 °C (35-149 °F)
Operating pressure		16 bar (232 psi)
Mass		0,011 kg
Connection		G 1/2"
Dimensions	A	41,5 mm
	B	ø24,0 mm
	C	27,5mm
	D	27,5mm
	E	G1/2"
Medium		Condensate (air, water, oil)



APPLICATIONS

- Air filter



20 bar
operating pressure

1/2"
connections

1,5 to 65 °C
operating temperature range

DESCRIPTION

MCD is designed for the discharging of condensate or any other non aggressive fluid from compressed air system. For any other technical gas please contact producer or your local distributor.

In order to prevent condensate from re-entering in the airstream we recommend controlling the condensate level in filter bowl, which requires an automatic drain trap.

MCD is easy to install on the filter housing. MCD can be used in variety of applications.

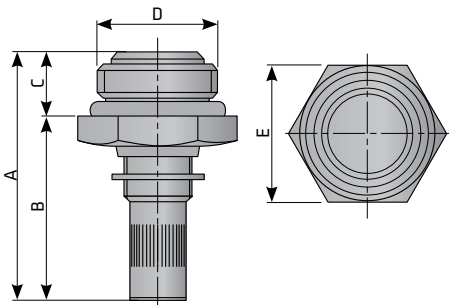
MCD SERIES
MANUAL CONDENSATE DRAIN



TECHNICAL DATA		MCD	MCDi
Operating temp. range		1,5 - 65 °C (35-149 °F)	1,5 - 65 °C (35-149 °F)
Operating pressure		20 bar (290 psi)	20 bar (290 psi)
Mass		0,06 kg	0,06 kg
Connection		G 1/2"	G 1/2"
Dimensions	A	38,2 mm	38,2 mm
	B	29,2 mm	29,2 mm
	C	9 mm	9 mm
	D	G1/2"	G1/2"
	E	24,0 mm	24,0 mm
Medium		Condensate (air, water, oil)	Condensate (air, water, oil)
Material		brass	stainless steel

APPLICATIONS

- Air filter



EVD SERIES

VACUUM DRAIN



20-2000 mbar(abs)

operating pressure

1,5 to 65 °C

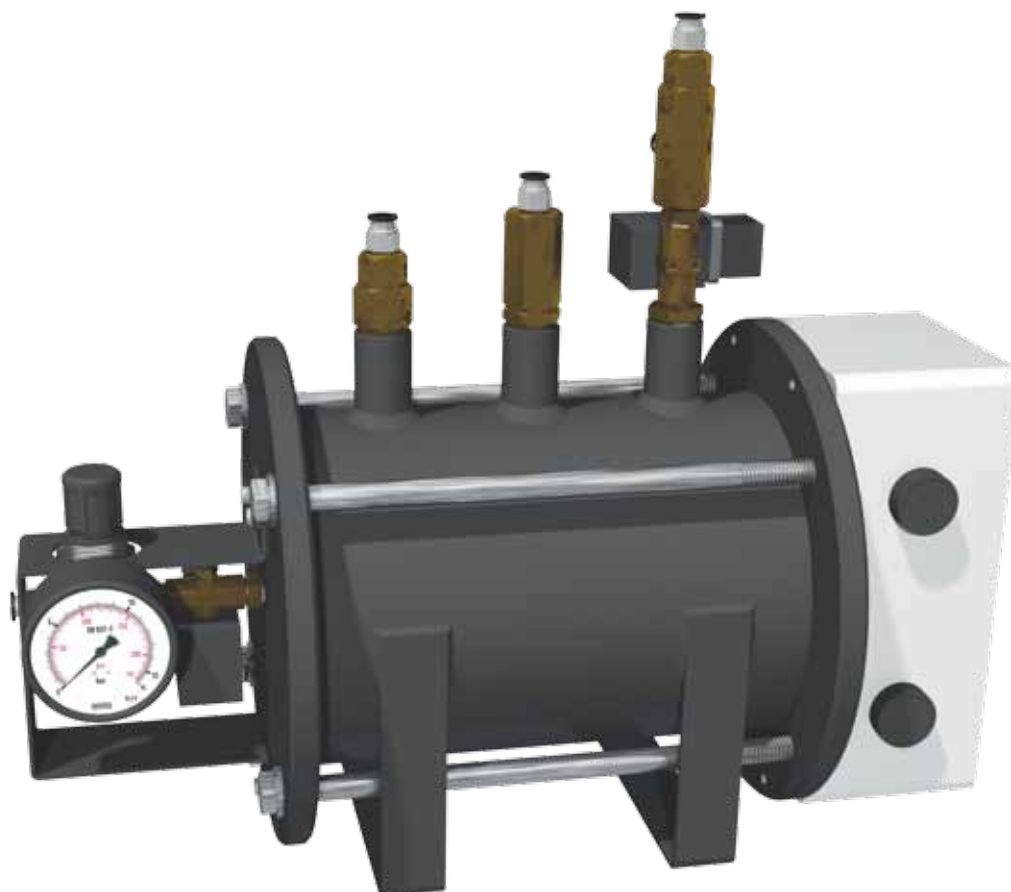
operating temperature range

1/2"

inlet/outlet connections

Ø8"

compressed air supply



DESCRIPTION

EVD has been developed for fully automatic discharging of condensate or any other non-aggressive fluid from vacuum system. The unit can be installed as external drain on any application specified below. Condensate accumulates in the aluminium reservoir and when the level is high enough condensate is being discharged from the system by the compressed air.

TECHNICAL DATA		EVD
Operating temp. range		1,5 - 65 °C (35-149 °F)
Operating pressure		20 - 2000 mbar(abs) / (0,29 - 29 psi)
Inlet connection		G 1/2"
Outlet connection		G 1/2"
Compressed air supply		Push connection for tube ø8
Air vent connection		Push connection for tube ø8
Electric power connection		230 Vac
Dimensions	A	465 mm
	B	240 mm
	C	390 mm
Medium		Condensate (air, water, oil); Non aggressive
Material		Aluminium

APPLICATIONS

- Vacuum systems