AIR AND GAS

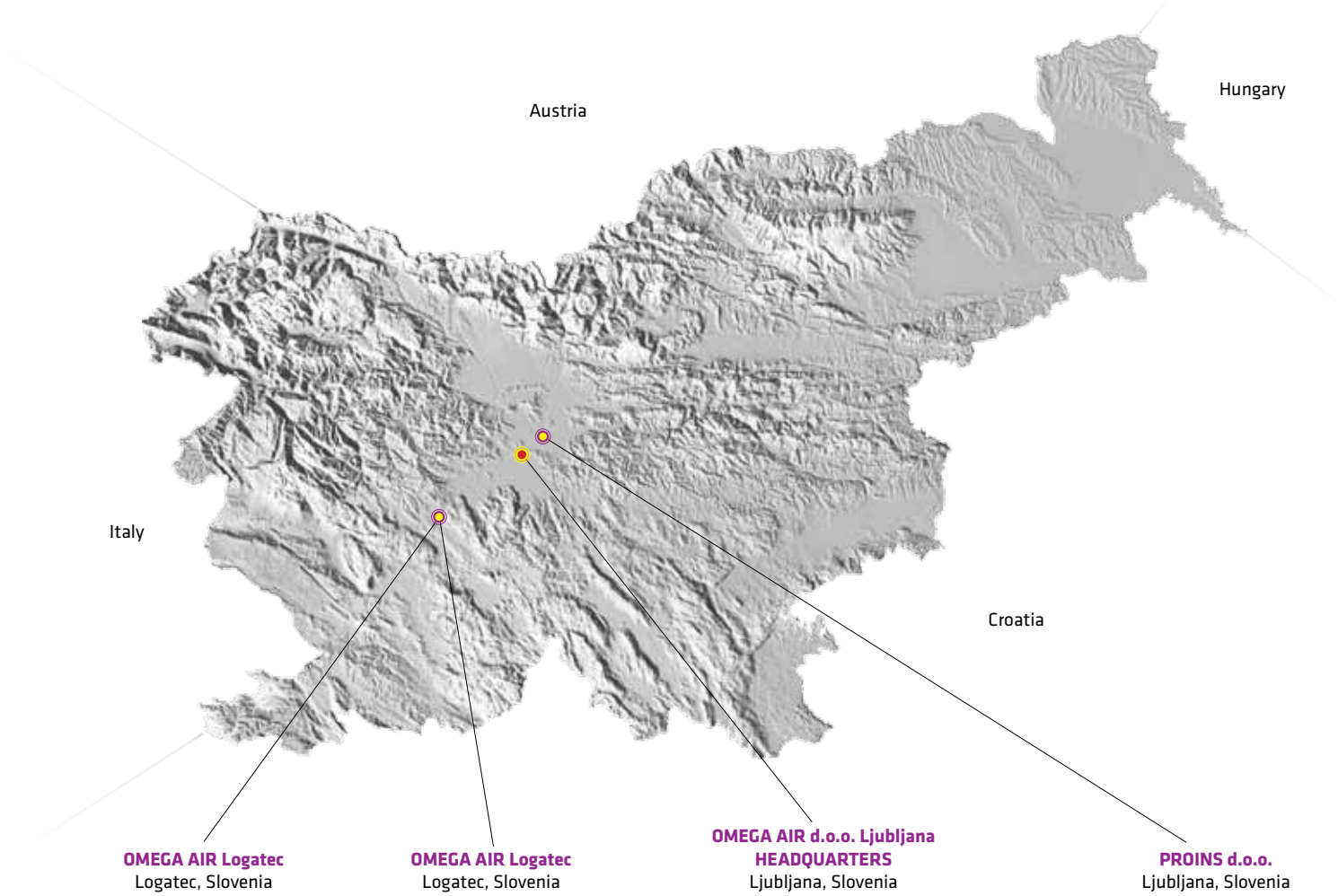
Standard product catalogue 2019-2021

OMEGA AIR

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"



OMEGA AIR Logatec
Logatec, Slovenia

OMEGA AIR Logatec
Logatec, Slovenia

OMEGA AIR d.o.o. Ljubljana
HEADQUARTERS
Ljubljana, Slovenia

PROINS d.o.o.
Ljubljana, Slovenia

Main warehouse
Area: 4000 m²

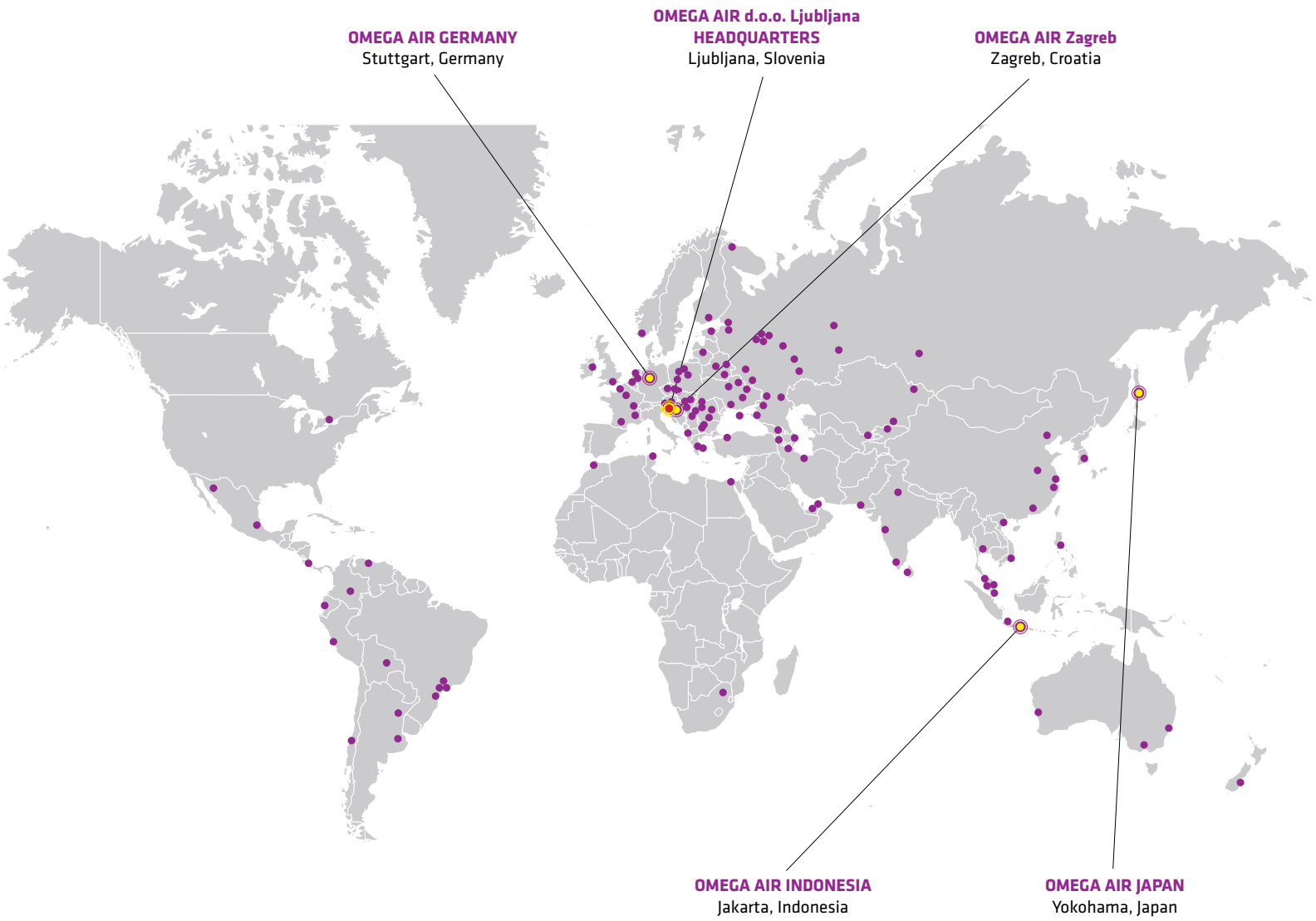
Compressors and technique dept.
Service centre
Welding department
Dryers production
Land: 31.500 m²
Facilities: 4.100 m²

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

Mechanical installations

OMEGA AIR

Air and Gas



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

Table of contents

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

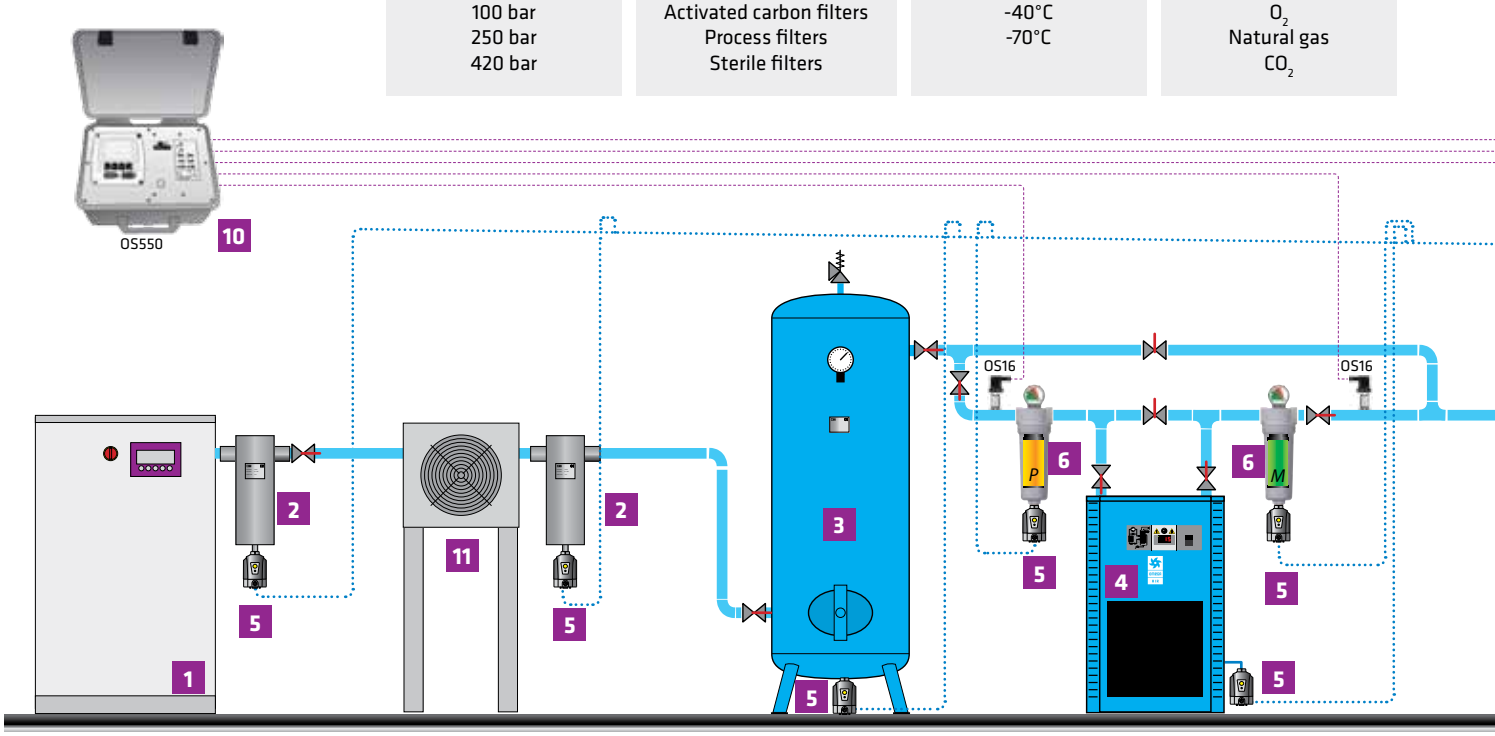
DRYERS, COOLERS, OIL REMOVERS		Pressure	Capacity	Dew point	Page
A-DRY	Adsorption heatless regeneration compressed air dryers	4 to 16 bar	6 - 200 Nm³/h	-40°C (-25°C/-70°C)	134
A-DRY BI+BM	Adsorption heatless regeneration compressed air dryers	4 to 16 bar	6 - 200 Nm³/h	-40°C (-25°C/-70°C)	136
A-DRY TAC	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
CO_2 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

Compressed air and gas treatment

BASIC PRINCIPLES OF MOST TYPICAL COMPRESSED AIR APPLICATION

PRESSURE RANGES	FILTER TYPES	DEW POINTS	MEDIUM
16 bar	Prefilters	+3°C	Compressed air
50 bar	Microfilters	-25°C	N_2
100 bar	Activated carbon filters	-40°C	O_2
250 bar	Process filters	-70°C	Natural gas
420 bar	Sterile filters		CO_2



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.

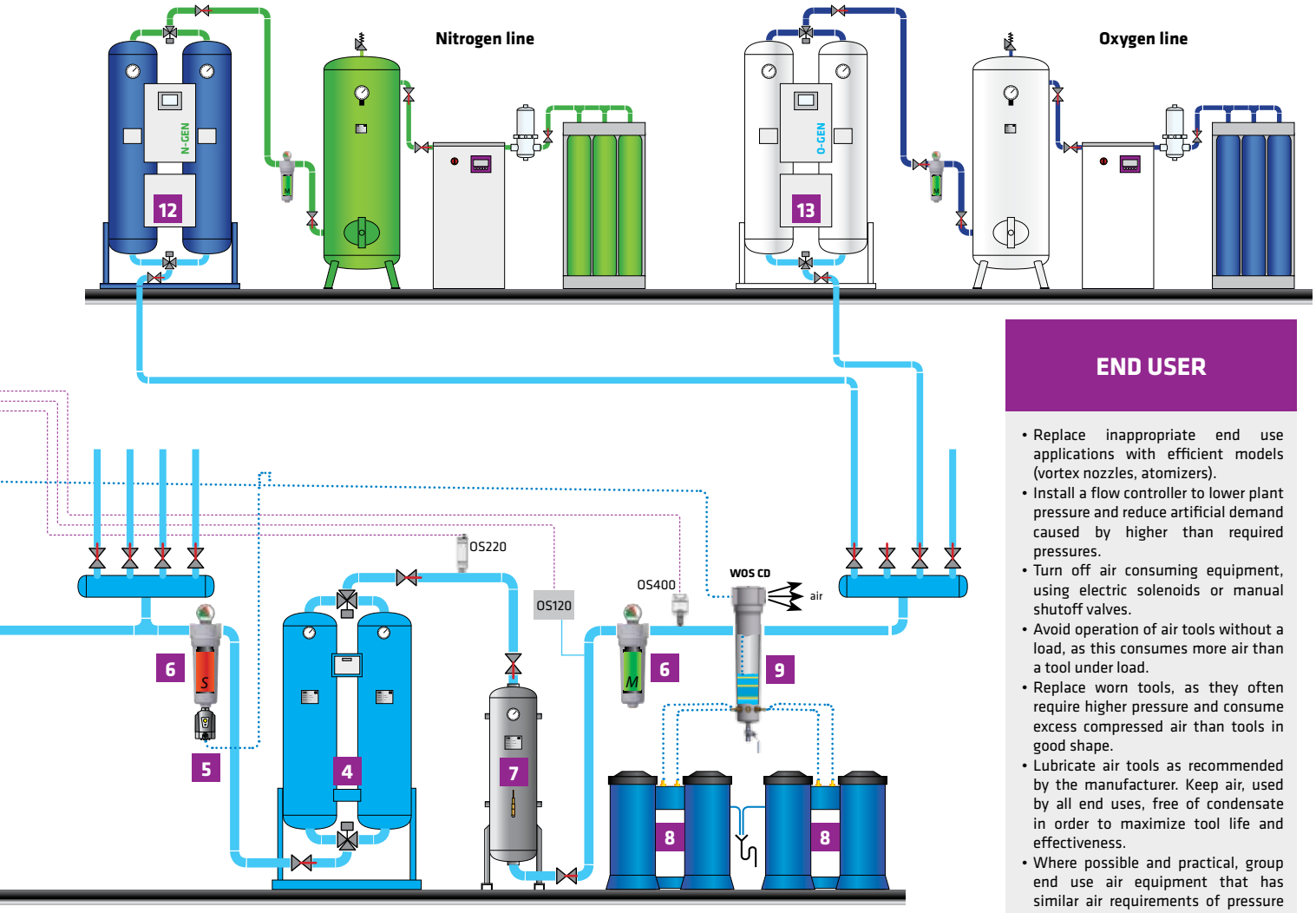
To meet the required compressed air quality, appropriate filter element must be installed into filter housing.

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.

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 todays compressed air/gas systems. Type and number of sensors depend on specific application but the most common are pressure, flow and dew point sensors.

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.

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 µm < d ≤ 0,5 µm	0,5 µm < d ≤ 1,0 µm	1,0 µm < d ≤ 5,0 µm	°C	°F	mg/m³	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	≤ 0,01	≤ 0,008
2	≤ 400.000	≤ 6.000	≤ 100	≤ -40	-40	≤ 0,1	≤ 0,08
3	Not specified	≤ 90.000	≤ 1.000	≤ -20	-4	≤ 1	≤ 0,8
4	Not specified	Not specified	≤ 10.000	≤ +3	38	≤ 5	≤ 4
5	Not specified	Not specified	≤ 100.000	≤ +7	45	Not specified	Not specified
6				≤ ±10	50		
	Mass concentration[2]-C_p			LIQUID WATER CONTENT[2] - C_w			
	mg/m³			g/m³			
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 contaminates 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 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 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

AF SERIES

ALUMINIUM COMPRESSED AIR FILTERS

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.

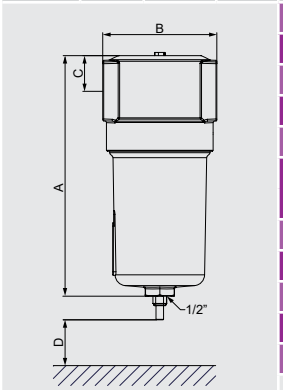
APPLICATIONS

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





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	[4] **A²** adsorption (act. carbon)	[4] **H²** catalyst (hopcalite)	[4] **MS²** 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.

AF HT SERIES

ALUMINIUM HIGH TEMPERATURE COMPRESSED AIR FILTERS

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

FA

page 99

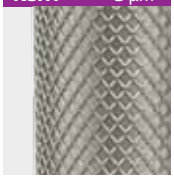
WB

page 98

BHT 15 µm

N25HT 25 µm

N5HT 5 µm



RHT 1 µm

MHT 0,1 µm

SHT 0,01 µm

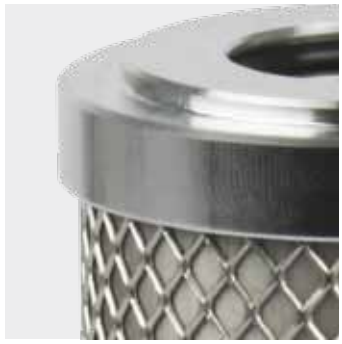
MCDI

page 122

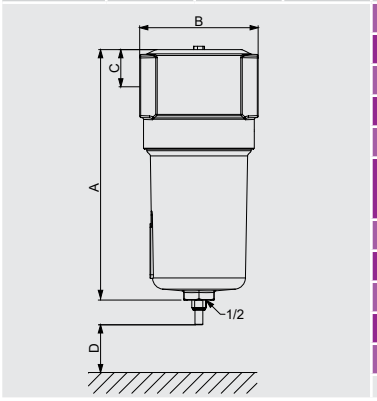
AOK 20SS

page 115




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	1
residual oil content [mg/m³]	-	-	-	-	<0,01	<0,01
quality class - oils (ISO 8573-1)	-	-	-	-	1	1
pressure drop - new element [mbar / psi]	20 / 0,290	10 / 0,145	10 / 0,145	20 / 0,290	80 / 1,160	80 / 1,160
change filter cartridge at pressure drop [mbar / psi]	1)	350 / 5,07	-	350 / 5,07	350 / 5,07	350 / 5,07
filter material	sintered brass	stainless steel mesh 1.4301	stainless steel mesh 1.4301	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	1,5 / 35
max. operating temperature (°C / °F)	120-248	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.

AAF SERIES

ALUMINIUM COMPRESSED AIR FILTERS

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.

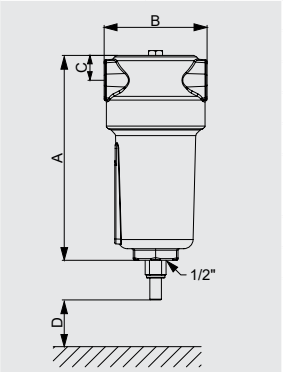
Required compressed air quality according to standard ISO 8571-1 can be achieved with 5 different grades of filter elements (P, R, M, S and A).

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

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 [1]	-	-	-
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.

CF SERIES

ALUMINIUM COMPRESSED AIR FILTERS

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

MDA60 page 88

MDM40 page 85

MDM40C page 85

CHI page 94

FA page 99

AK page 98

B 15 µm

P 3 µm

R 1 µm

M 0,1 µm

S 0,01 µm

A activated carbon

EMD HP page 108

TD 25M page 110

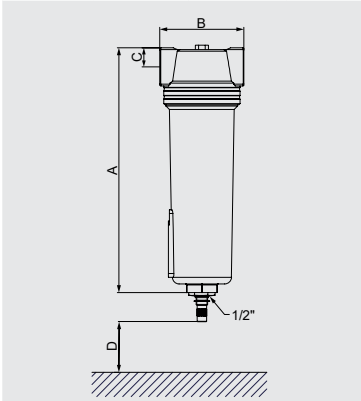
AOK 20B page 114

MCD page 122





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



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.

BF SERIES

WELDED CARBON STEEL COMPRESSED AIR FILTERS

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

MDA60

page 88

B 15 µm

P 3 µm

R 1 µm

M 0,1 µm

S 0,01 µm

A activated carbon

EMD

page 102

ECD-B

page 104

TD 16M

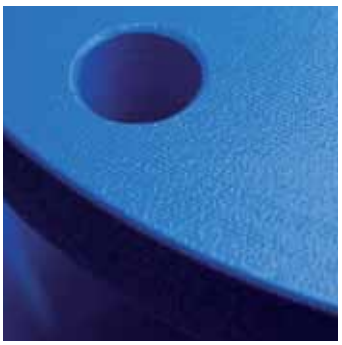
page 110

AOK 13PA

page 113

AOK 20B

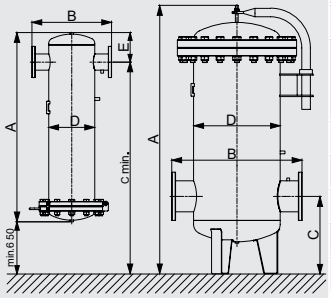
page 114



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

BF 0240
BF 0300
BF 0450
BF 0600
BF 0900

BF 1200
BF 1500
BF 1800
BF 2500
BF 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	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.

BF HP SERIES

HIGH PRESSURE WELDED CARBON STEEL COMPRESSED AIR FILTERS

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

MDH200

page 91

B 15 µm

P 3 µm

R 1 µm

M 0,1 µm

S; 0,01 µm

A activated carbon

Drain valve

TD25M

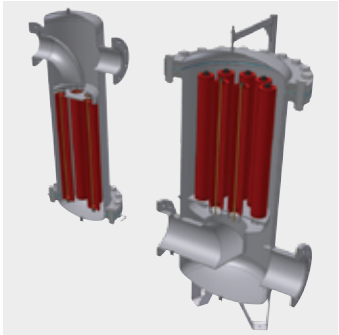
page 110

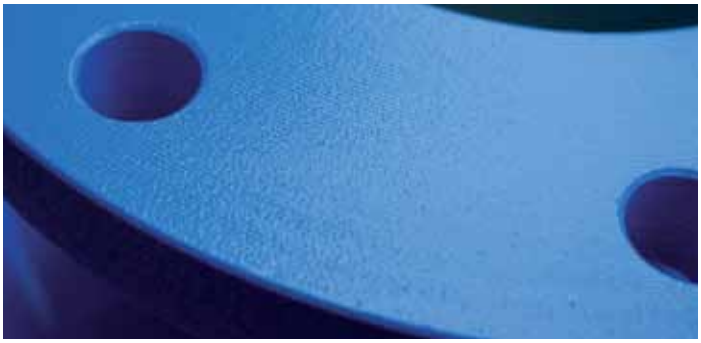
EMD HP

page 108

AOK 50B

page 116

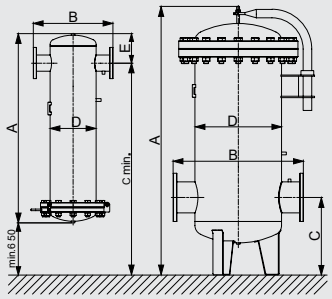




TECHNICAL DATA										FILTER ELEMENTS					
Filter housing size	Pipe size	Max.oper. pressure	Flow rate at 7 bar(g), 20 °C		Dimensions [mm]					**B** sintered 15 µm	**P** prefilter 3 µm	**R** prefilter 1 µm	**M** microfilter 0,1 µm	**S** microfilter 0,01 µm	**A** activated carbon
	DN	bar/psi	Nm³/h	scfm	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.

WFIT SERIES

WELDED STAINLESS STEEL COMPRESSED AIR FILTERS - THREADED CONNECT.

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

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

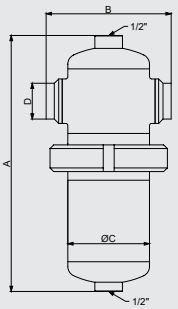
TD16Mcr

page 110





TECHNICAL DATA									FILTER ELEMENTS								
Filter housing size	Pipe size D	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 [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

WHFIT SERIES

HIGH PRESSURE STAINLESS STEEL COMPRESSED AIR FILTERS

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

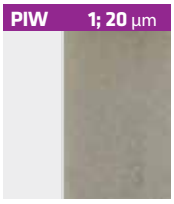
- General industrial applications
- Packing industry
- Biotechnology
- Breweries
- Chemical industry
- Dairies
- Fermentation processes
- Food and beverage industry
- Pharmaceutical industry
- Hospitals

MDHI 50 KIT

page 90

PI 1; 20 µm

PIW 1; 20 µm

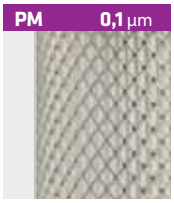


PN 5; 25 µm

PP 3 µm

PR 1 µm

PM 0,1 µm



PS 0,01 µm

PA activated carbon

CKL-P separator

Drain valve

AOK 50 SS

page 117

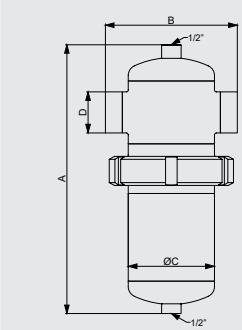
TD 420M

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	**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.

WFIF SERIES

WELDED STAINLESS STEEL FILTERS - FLANGED CONNECTIONS

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

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

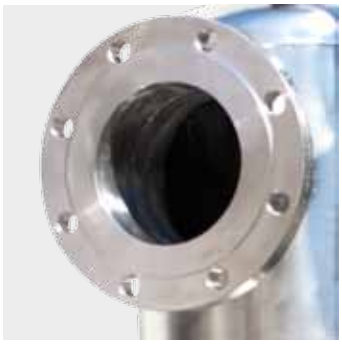
page 122

AOK 20SS

page 115

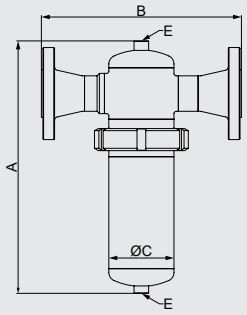
TD16Mcr

page 110





TECHNICAL DATA											FILTER ELEMENTS								
Filter housing size	Pipe size	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**
		bar/psi	Nm³/h	scfm	A	B	B*	C	E	kg									
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
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 Cl 150

WFIW SERIES

WELDED STAINLESS STEEL FILTERS - WELDING END CONNECTIONS

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
- Diaries
- Fermentation processes
- Pharmaceutical industry
- Hospitals

MDHI 50 KIT

page 90

PI 1; 20 µm

PIW 1; 20 µm

PN 5; 25 µm

PP 3 µm

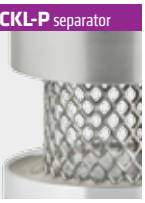
PR 1 µm

PM 0,1 µm

PS 0,01 µm

PA activated carbon

CKL-P separator



Drain valve

MCDI

page 122

AOK 20SS

page 115

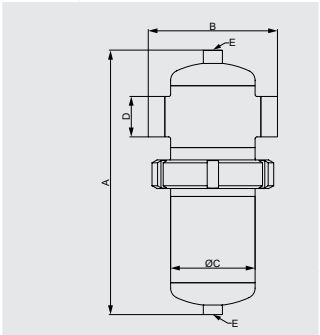
TD16Mcr

page 110





TECHNICAL DATA										FILTER ELEMENTS								
Filter housing size	Pipe size D	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**
	[ø, mm]	bar/psi	Nm³/h	scfm	A	B	C	E	kg									
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 [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

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.

P-VAC SERIES

VACUUM PUMP PROTECTION FILTERS

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.

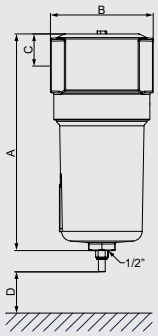
APPLICATIONS

- Vacuum pumps





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	acrilyc 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.

M-VAC SERIES

MEDICAL VACUUM FILTERS

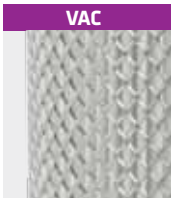
20 to 2000 mbar(abs)
operating pressure

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.

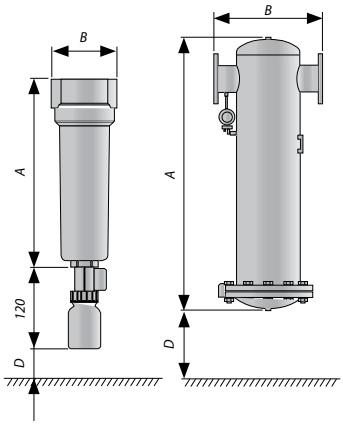
APPLICATIONS

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





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 fibes
							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.

AFs SERIES

SILICONE FREE FILTERS

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

Ms 0,1 µm

Ss 0,01 µm

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.

Drain valve

MCDI

page 122

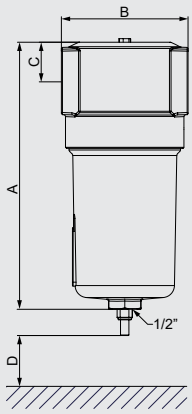
APPLICATIONS

- Painting
- Automotive industry





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 fibes	borosilicate micro fibes
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

HF SERIES

CAST ALUMINIUM HIGH PRESSURE FILTERS

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.

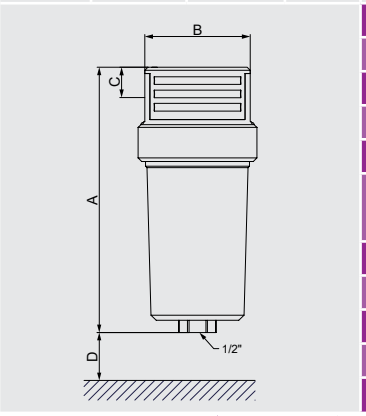
APPLICATIONS

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





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]
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]	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.

CHP SERIES

CARBON STEEL HIGH PRESSURE FILTERS

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

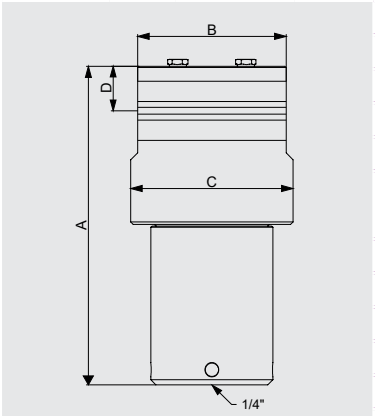
CHP carbon steel high pressure filters have been specifically developed for high efficient removal of solid particles, water, oil aerosols, hydrocarbons and other vapours from compressed air systems. To meet the required compressed air quality appropriate filter element must be installed into filter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

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.

IHP SERIES

STAINLESS STEEL HIGH PRESSURE FILTERS

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

MDH 420

page 92

WB

page 98

N5 5 µm


N25 25 µm


M 0,1 µm

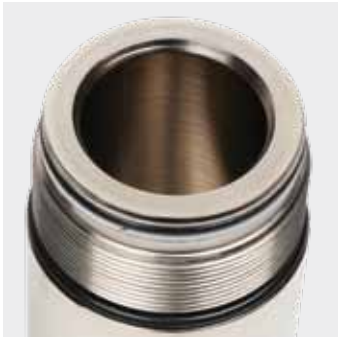

S 0,01 µm


A activated carbon

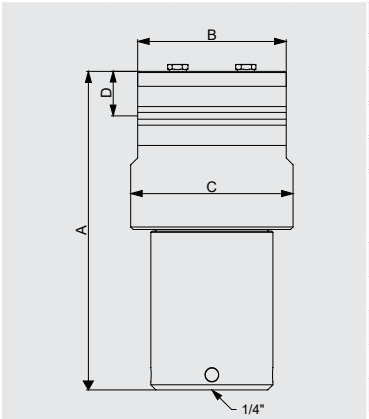

Drain valve


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	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.

PF SERIES

STAINLESS STEEL PROCESS FILTERS

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.

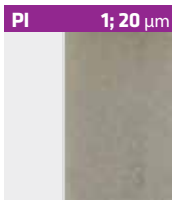
For any other technical gas please contact producer or your local distributor.

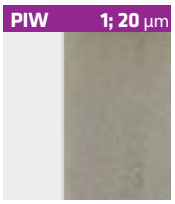
For oil removal, coalescing filter element must be installed and flow direction inside-out must be provided. General arrangement is bowl on the top and filter head on the bottom.

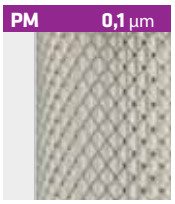
Fluid group 1 on request.

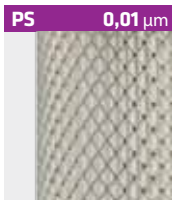
APPLICATIONS

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









Drain valve

MCDI

page 122

AOK 20SS

page 115

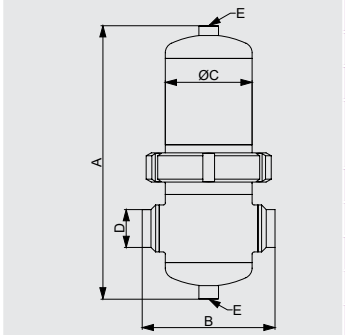
TD16Mcr

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	Nm^3/h	scfm	A	B	C	E	kg									
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.

HPF SERIES

HIGH PRESSURE STAINLESS STEEL PROCESS FILTERS

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.

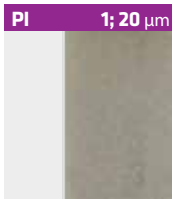
HPF process filter housing can be used in variety of applications. For applications not listed please contact producer or your local distributor.

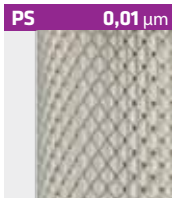
For any other technical gas please contact producer or your local distributor.
For oil removal, coalescing filter element must be installed and flow direction inside-out must be provided. General arrangement is bowl on the top and filter head on the bottom.

Fluid group 1 on request.

APPLICATIONS

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





AOK 50SS

page 117

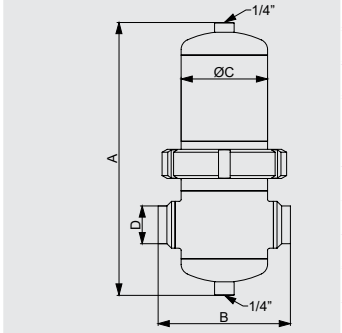
TD 420M

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	**PS** microfilter 0,01 µm	**PA** activated carbon	CKL-P
	inch	bar/psi	Nm^3/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 PS	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 PS	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 PS	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 PS	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 PS	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 PS	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 PS	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 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 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]	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.

PFL SERIES

STAINLESS STEEL PROCESS FILTERS FOR LIQUIDS

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.

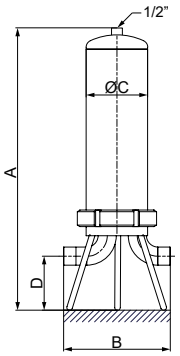
APPLICATIONS

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

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
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.



SFL SERIES

STAINLESS STEEL STERILE FILTERS FOR LIQUIDS

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.

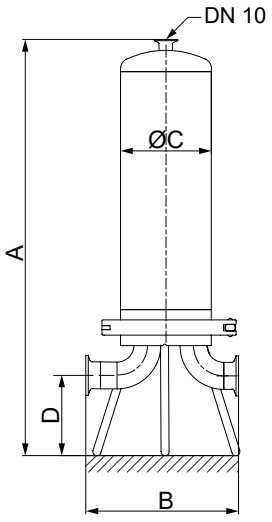
APPLICATIONS

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

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.



SF SERIES

STAINLESS STEEL STERILE FILTERS

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

VSF sterile

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

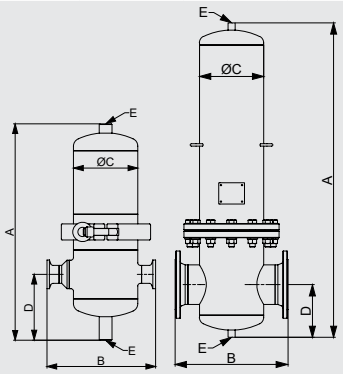
MSS

page 60





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

SPF SERIES

STAINLESS STEEL STERILE FILTERS

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.

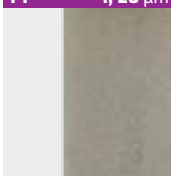
For any other technical gas please contact us or your local dealer.

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

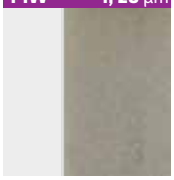
For oil removal, coalescing filter element must be installed and flow direction inside-out must be provided. General arrangement is filter head on top and filter bowl on bottom.

Fluid group 1 on request.

PI 1; 20 µm

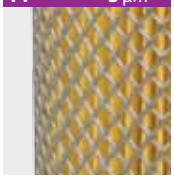


PIW 1; 20 µm



PN 5; 25 µm

PP 3 µm

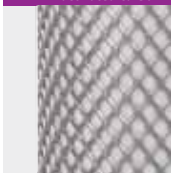


PR 1 µm

PM 0,1 µm

PS 0,01 µm

PA activated carbon



VSF sterile

MSS

page 60

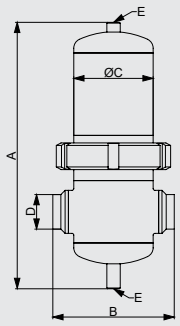
APPLICATIONS

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





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

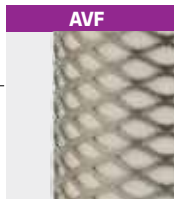
STAINLESS STEEL AIR VENTING FILTERS

9 to 310 Nm^3/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

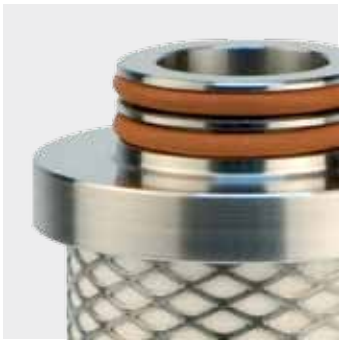
AV stainless steel filter housings are designed to remove impurities from air which is being feed or exhausted from tank during changing of liquid level.

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.

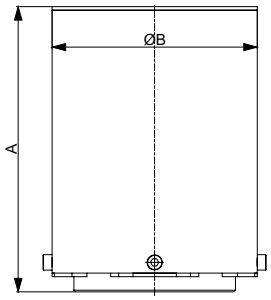
APPLICATIONS

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



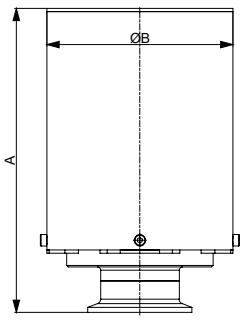
Sizes

Filter housing model	Connection DIN 11851	Flow rate	Dimensions [mm]		Mass	Filter element type
	DN	Nm³/h	A	ø B	kg	
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	Filter element type
		Nm³/h	A	ø B	kg	
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



MSS

MOBILE STEAM STERILIZER

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.

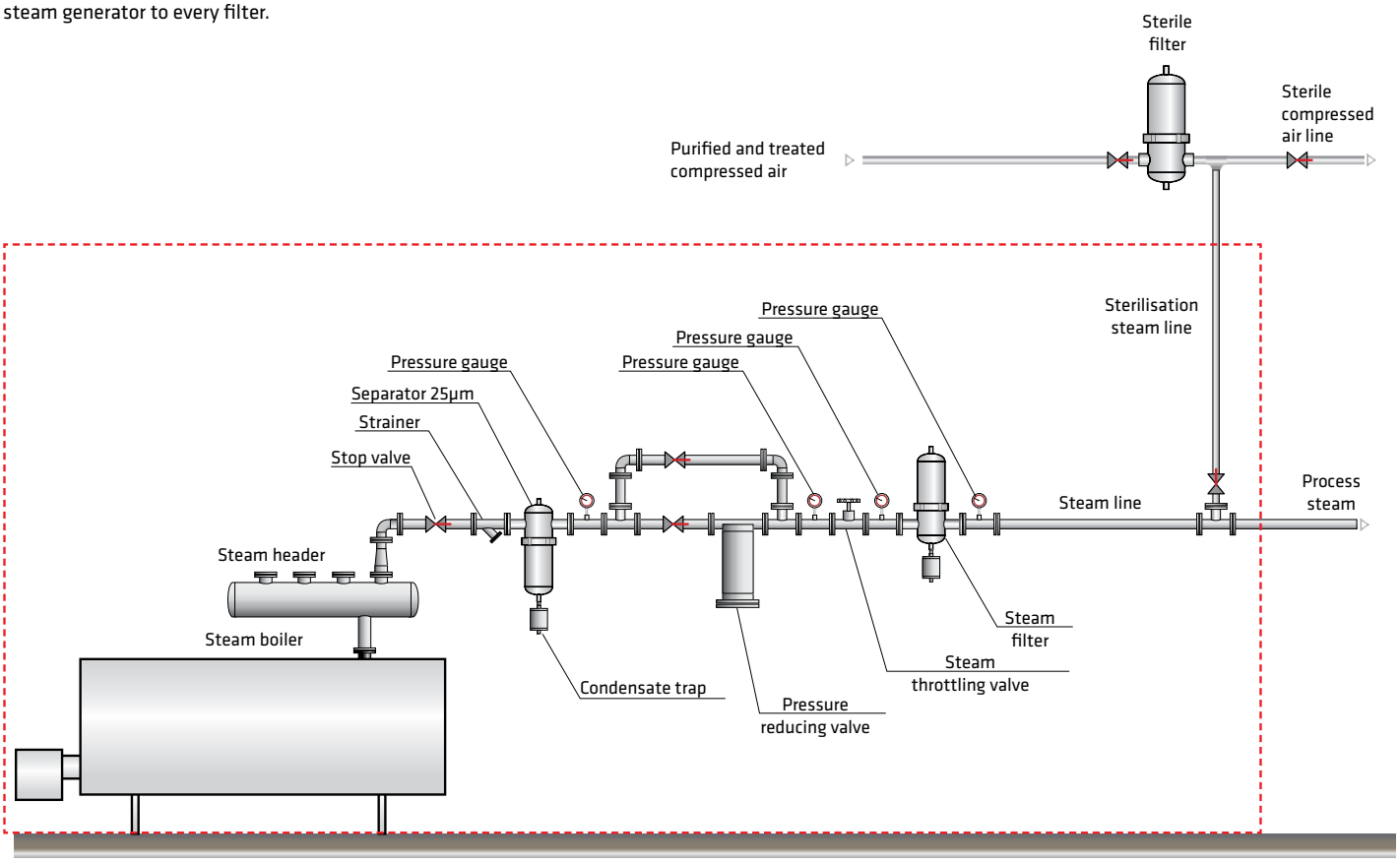
Sterilization in place (SIP) ensures much better results and is more common in the process industry. Steam sterilization is an effective method to stop microbial activity. "Mobile Steam Sterilizer" is designed for easier, cheaper and faster SIP. MSS can be easily connected to any part of installation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

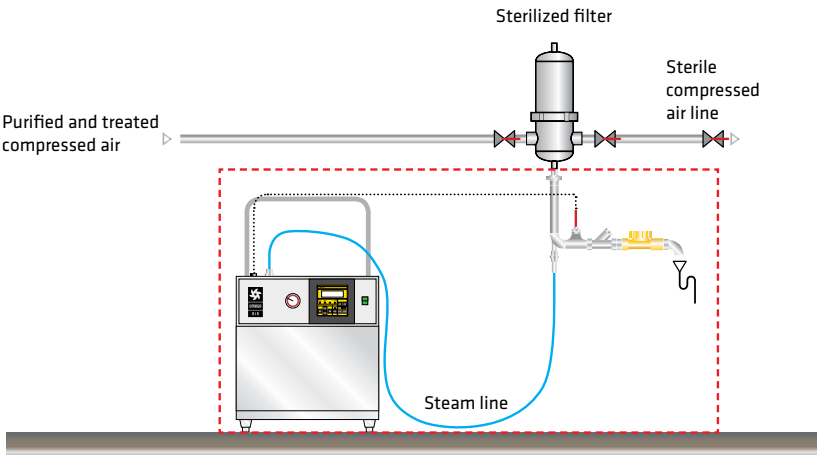
INSTALLATION OF CONVENTIONAL STERILIZATION

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

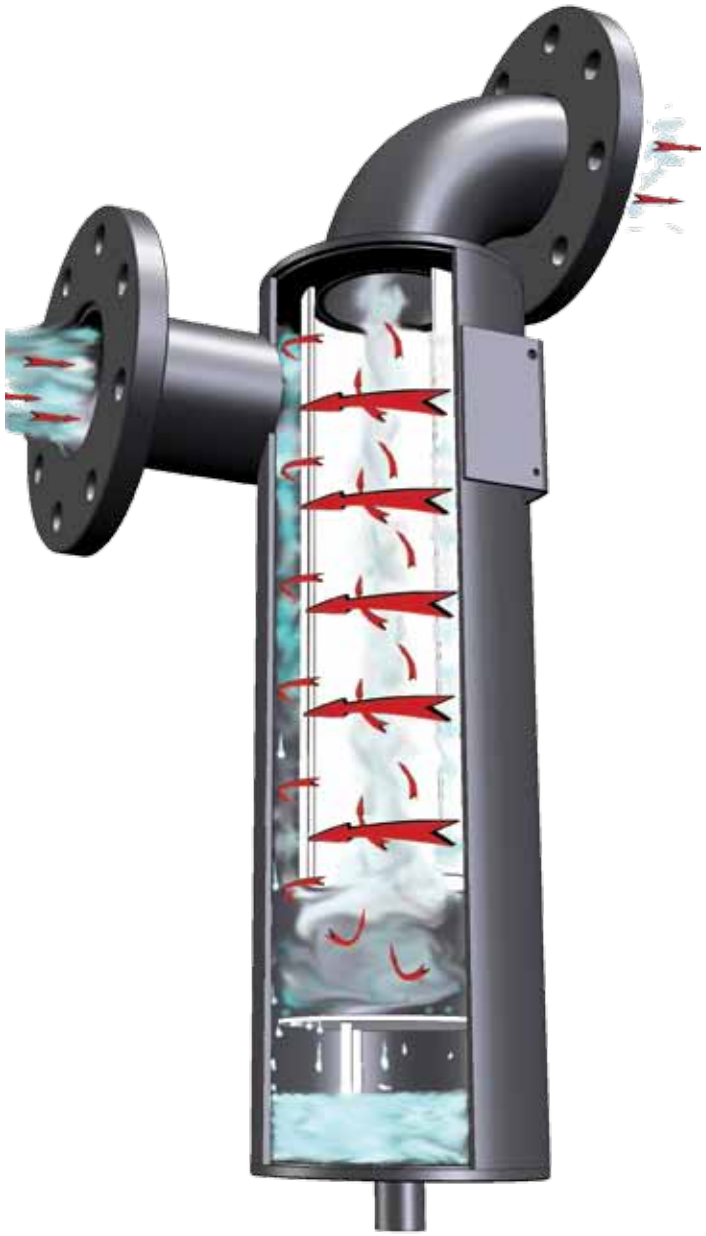
Since water moisture is a part of atmospheric air, condensate in compressed air systems can't be avoided. During compression process, the air is heated. It cools down as it passes through hoses, valves and piping. As it nears the ambient temperature (approach), vapour condenses to liquid and can be removed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



CKL-B SERIES

ALUMINIUM CONDENSATE SEPARATORS

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

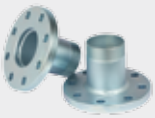
CKL-B condensate separators have been developed for high efficient removal of bulk liquids from compressed air and vacuum systems. Inside the housing there is an insert with vanes that creates controlled rotation of the air.

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

FA

page 99

WB

page 98

AK

page 98

SG

page 99

EMD

page 102

ECD-B

page 104

TD 16M

page 110

AOK 13PA

page 113

AOK 20B

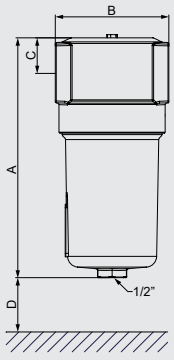
page 114

AOK 16B

page 118

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	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

CKL-B HT SERIES

HIGH TEMPERATURE ALUMINIUM CONDENSATE SEPARATORS

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.

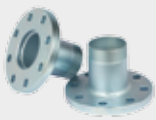
As a result of centrifugal action liquids (water, oil) and large particles are forced to the housing wall, slowed down and accumulated at the bottom of separator housing as condensate. The turbulent free zone in the lower part of the filter housing prevents condensate from being picked up and "carried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

FA



page 99

WB

page 98

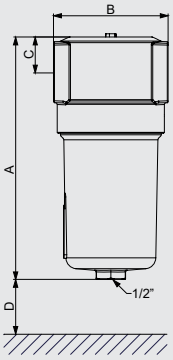
AOK 20SS

page 115





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 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

CKL-C SERIES

ALUMINIUM CONDENSATE SEPARATORS

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

FA

page 99

AK

page 98

AOK 20B

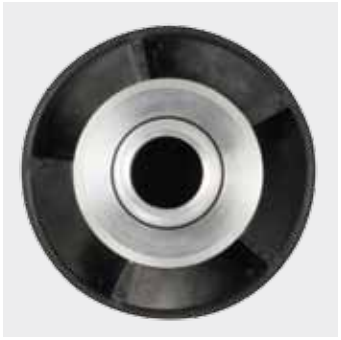
page 114

EMD HP

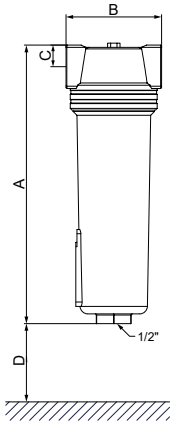
page 108

TD25M

page 110


TECHNICAL DATA									
Filter housing size	Pipe size	Max. oper. pressure	Flow rate at 7 bar(g), 20 °C		Dimensions [mm]				Mass
	inch	bar/psi	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

CS/CS SS SERIES

WELDED CONDENSATE SEPARATORS

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

TD16MCr

page 110

AOK 20SS

page 115

AOK 13PA

page 113

AOK 20B

page 114

TD16M

page 110

ECD-B

page 104

EMD

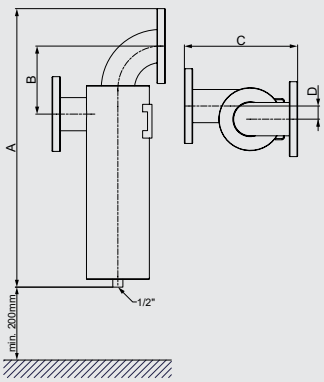
page 102





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

SFH/SFH SS SERIES

WELDED CONDENSATE SEPARATORS

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

TD16MCr

page 110

AOK 20SS

page 115

AOK 13PA

page 113

AOK 20B

page 114

TD16M

page 110

ECD-B

page 104

EMD

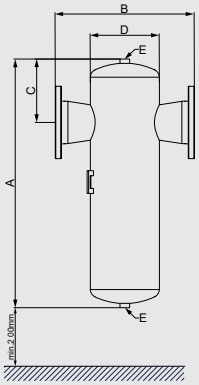
page 102





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	SFH bar/psi	SFH SS bar/psi	Nm^3/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

SFH HP SERIES

WELDED HIGH PRESSURE CONDENSATE SEPARATORS

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

TD 50M

page 110

EMD HP

page 108

AOK 50B

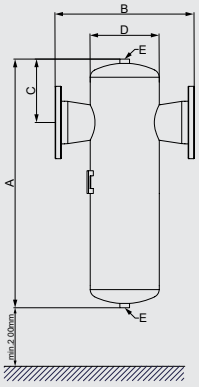
page 116





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	Nm³/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

CKL-HF SERIES

ALUMINIUM CONDENSATE SEPARATORS

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

FA

page 99

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

TD 50M

page 110

EMD HP

page 108

AOK 50B

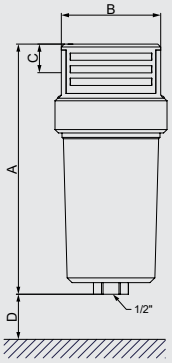
page 116





TECHNICAL DATA

Model	Pipe size	Max.oper. pressure	Flow rate at 7 bar(g), 20 °C		Temperature oper. range		Dimensions [mm]				Mass
	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

CKL-CHP SERIES

CARBON STEEL HIGH PRESSURE CONDENSATE SEPARATORS

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

WB

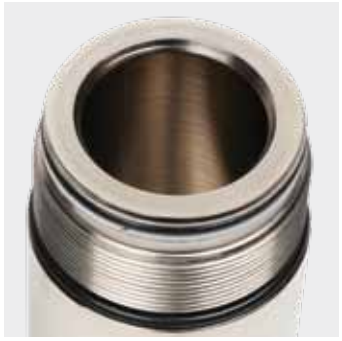
page 98

TD 150M

page 110

TD 420M

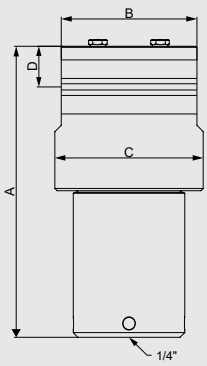
page 112


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-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

CKL-IHP SERIES

STAINLESS STEEL HIGH PRESSURE CONDENSATE SEPARATORS

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

WB

page 98

TD 420M

page 112

DESCRIPTION

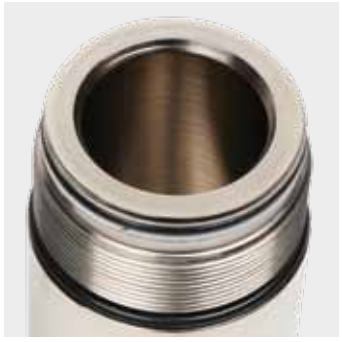
CKL-IHP condensate separators are designed for high efficient removal of bulk liquids from high pressure compressed air systems.

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.

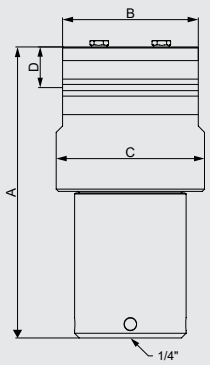
APPLICATIONS

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


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.


www.omega-air.si
EPG 60


bar (psi)


0.9 bar
0.6
0.1
pmax = 20 bar, Tmax = 65 °C

PDI 16

DIFFERENTIAL PRESSURE INDICATOR

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.

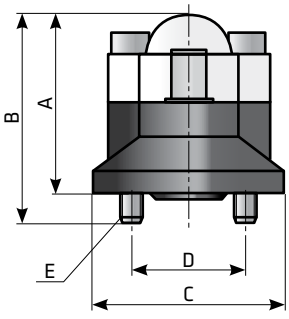
It detects when the filter cartridge is clogged and should be replaced. PDI 16 is typically installed on the head of the filter housing.

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

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

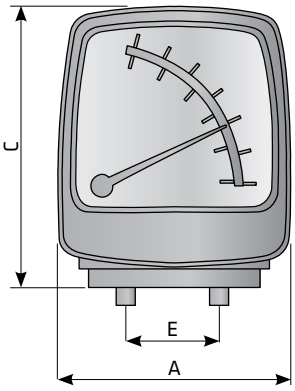
1,5 to 65 °C
operating temperature range

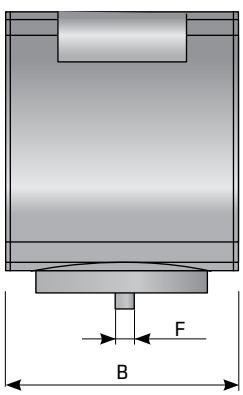
DESCRIPTION

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.





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

APPLICATIONS

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

MDM 60

DIFFERENTIAL PRESSURE INDICATOR

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.

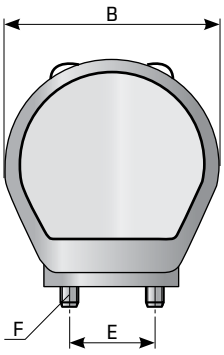
It detects when the filter cartridge is clogged and should be replaced. MDM 60 is typically installed on the head of the filter housing.

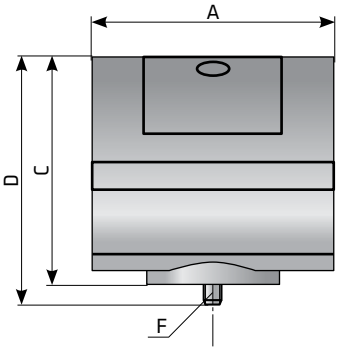
MDM 60 can be used in variety of applications. For applications not listed please contact producer or your local distributor.

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

APPLICATIONS

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

MDP 60

DIFFERENTIAL PRESSURE INDICATOR

16 bar
operating pressure

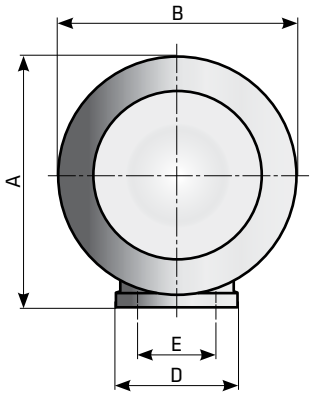
1,5 to 65 °C
operating temperature range

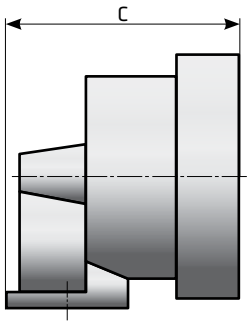
DESCRIPTION

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

MDA 60

DIFFERENTIAL PRESSURE INDICATOR

20 bar
operating pressure

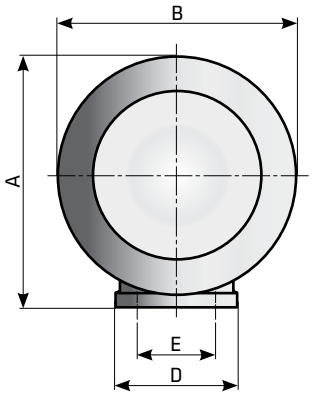
1,5 to 65 °C
operating temperature range

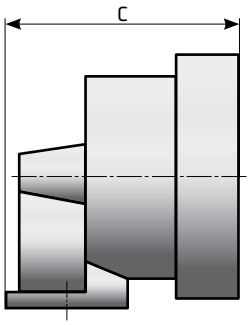
DESCRIPTION

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.





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

APPLICATIONS

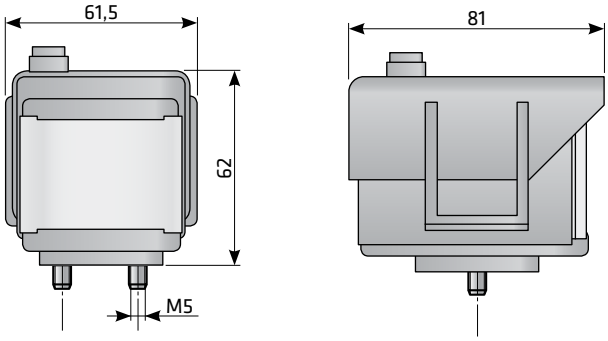
- Automotive
- Electronics
- Food and beverage
- Chemical
- Petrochemical
- Plastics
- Paint
- General industrial application

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

MDHI 50

DIFFERENTIAL HIGH PRESSURE STAINLESS STEEL INDICATOR

50 bar
operating pressure

1,5 to 65 °C
operating temperature range

DESCRIPTION

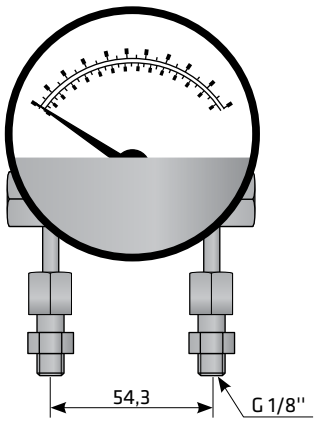
Differential pressure drop indicator MDHI 50 has been developed for accurate indication of pressure drop across the filter element in compressed air system.

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

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

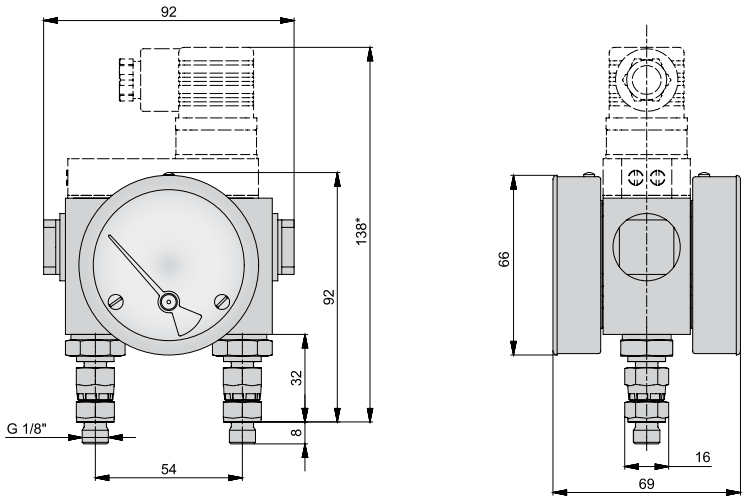
1,5 to 80 °C
operating temperature range

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

MDH 420

DIFFERENTIAL HIGH PRESSURE INDICATOR

420 bar
operating pressure

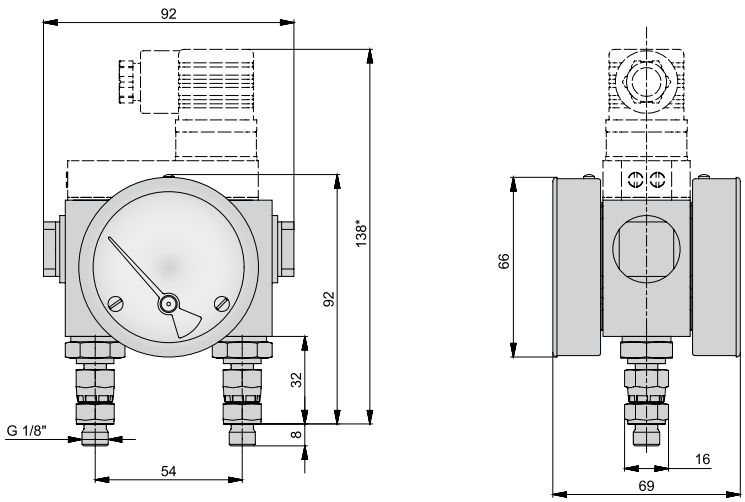
1,5 to 80 °C
operating temperature range

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.



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/m³

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

CHI

HUMIDITY INDICATOR

20 bar
operating pressure

RAL 9005
standard colour

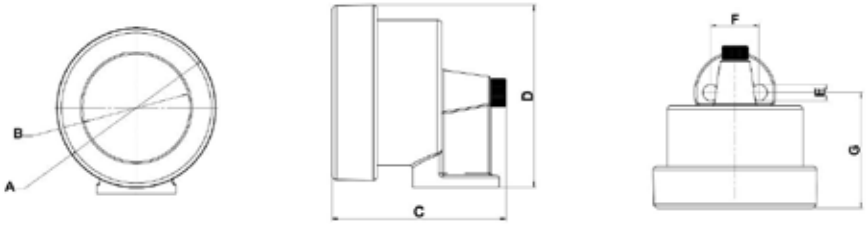
DESCRIPTION

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

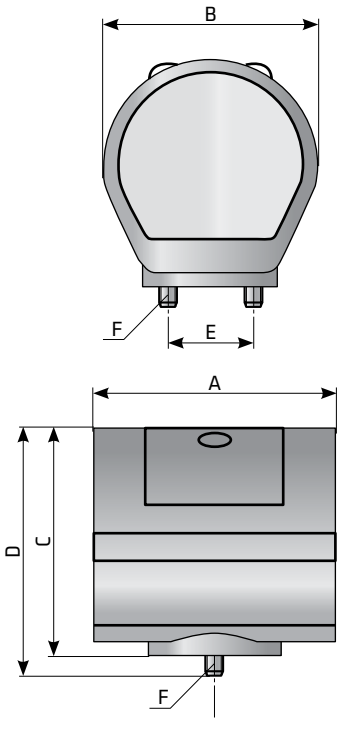
DESCRIPTION

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.

AK

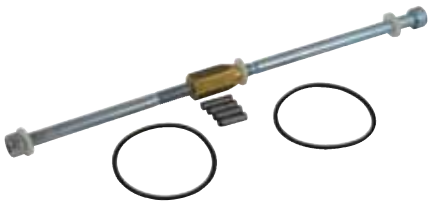
ASSEMBLY KITS FOR FILTERS

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.

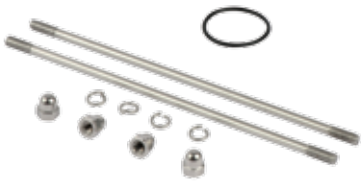
AK - UNIVERSAL ASSEMBLY KITS

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 AF

AK AAF



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 AF

WB CHP/IHP

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 AAF

WK - WALL MOUNTING KITS

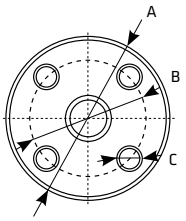
For filters	Wall mounting kit type	Suitable for filter size	Number of filters	Operating pressure	Maximum load [N]
AAF	**WK AAF 1S**	**AAF 0006-0016**	1	0-16 bar	40 N
	WK AAF 2S		2		
	WK AAF 3S		3		
	WK AAF 1M	**AAF 0026-0036**	1	0-16 bar	60 N
	WK AAF 2M		2		
	WK AAF 3M		3		
	WK AAF 1L	**AAF 0046-0106**	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 20-16		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 he 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

ES

ES B

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.

EMD SERIES

ELECTRONIC CONDENSATE DRAIN

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 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:

ECD-B SERIES

ELECTRONIC CONDENSATE DRAIN

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.

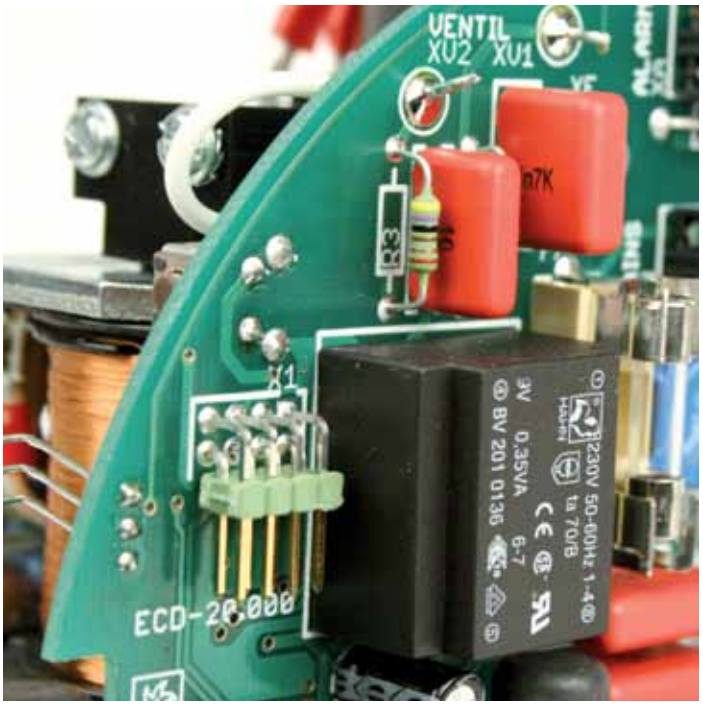
The units can be installed as external drain on any application specified. Condensate accumulates in the collecting reservoir and when the level is high enough condensate is being discharged from the system without any air losses. Fluid level is detected by precise capacitive level sensor.

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.

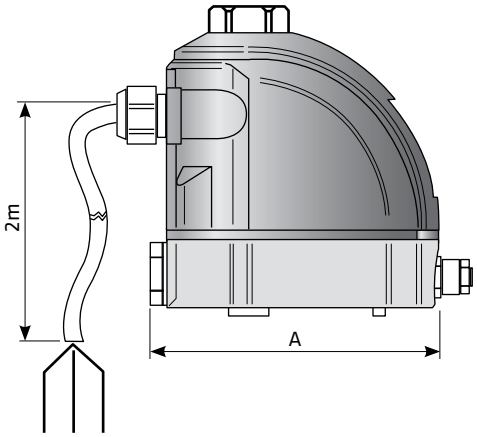
ECD-B series can be used in variety of applications. For applications not listed please contact producer or your local distributor.

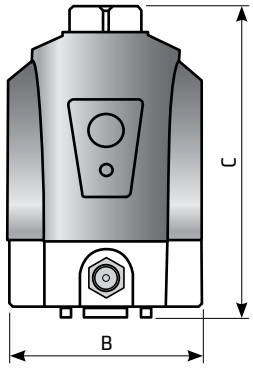
APPLICATIONS

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



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 mm²	3 × 0,75 mm²	3 × 0,75 mm²	3 × 0,75 mm²
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 [m³/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 [m³/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 [m³/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

IED SERIES

ELECTRONIC CONDENSATE DRAIN

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.

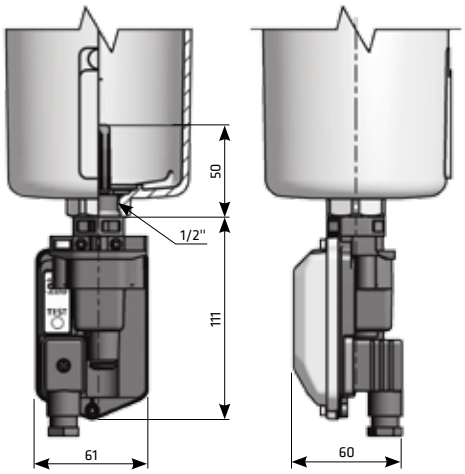
IED drain series is also equipped with led indicator and test button.

APPLICATIONS

- Air filter

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 netvork 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.

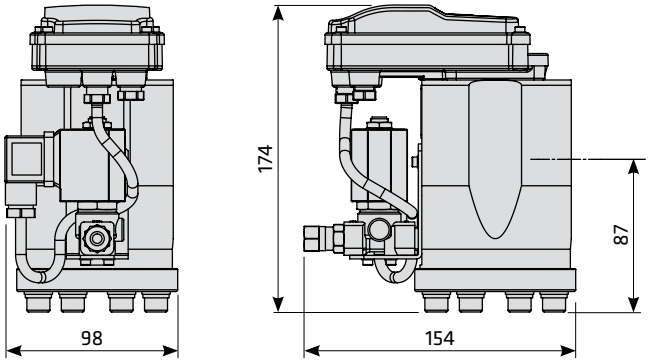
APPLICATIONS

- 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 m^3/min	22,2 m^3/min	12,9 m^3/min
40 bar	26,4 m^3/min	19,9 m^3/min	11,5 m^3/min
30 bar	22,9 m^3/min	17,2 m^3/min	10,0 m^3/min
20 bar	18,7 m^3/min	14,0 m^3/min	8,1 m^3/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.

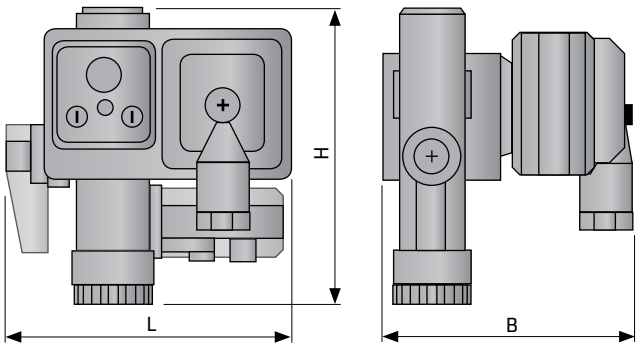
Discharge intervals can be set with two adjustment knobs. TD M drain is available in several types based on operating pressure and operating medium.

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 mm²		3 × 0,75 mm²		3 × 0,75 mm²		3 × 0,75 mm²		3 × 0,75 mm²	
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	



TD 420M SERIES

TIMER CONTROLLED CONDENSATE DRAIN

420 bar(g)
operating pressure

see spec.
drain capacity

1/4”
connections

1,5 to 150 °C
operating temperature range

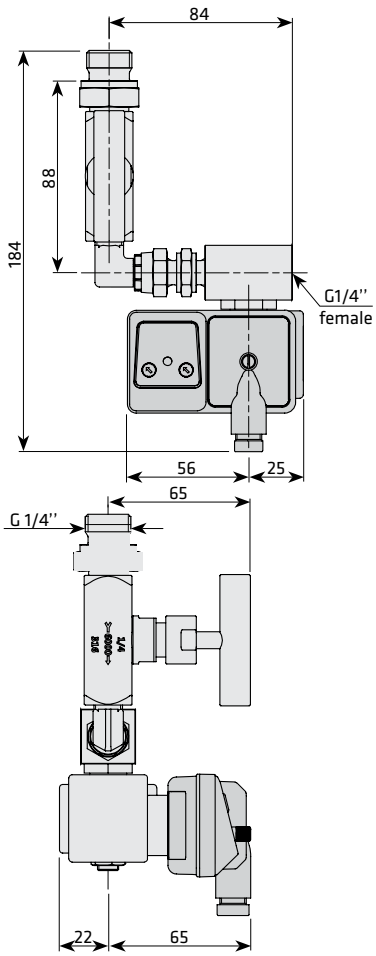
DESCRIPTION

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

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 mm²	
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.

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

APPLICATIONS

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

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

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 agressive
Dimensions (A x B x C)	125 x 115 x 131 mm

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.

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.

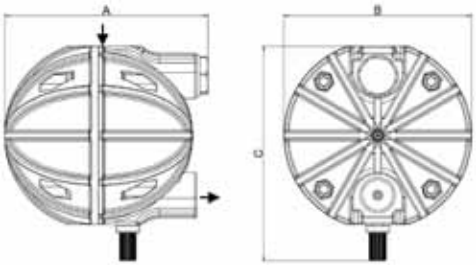
Condensate accumulates in reservoir and when the level is high enough condensate is being discharged from the system without any air losses.

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.

CAPACITY			
	Northern Europe, Canada, Central Asia	Rest of the World	Moist tropical and subtropical regions
Peak compressor capacity	110 m^3/min	100 m^3/min	60 m^3/min
Peak dryer capacity	240 m^3/min	190 m^3/min	120 m^3/min
Peak filter capacity	1.200 m^3/min	970 m^3/min	600 m^3/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

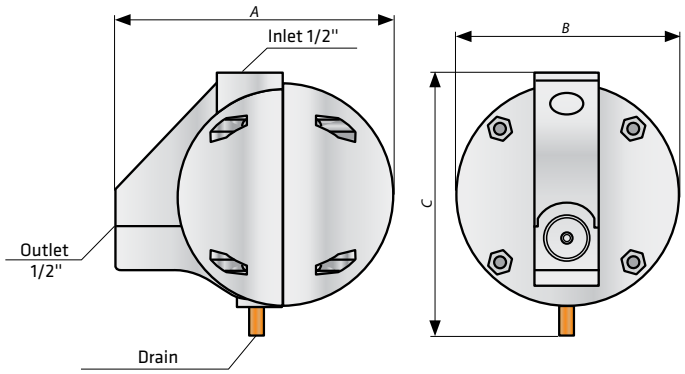
APPLICATIONS

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

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.



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.

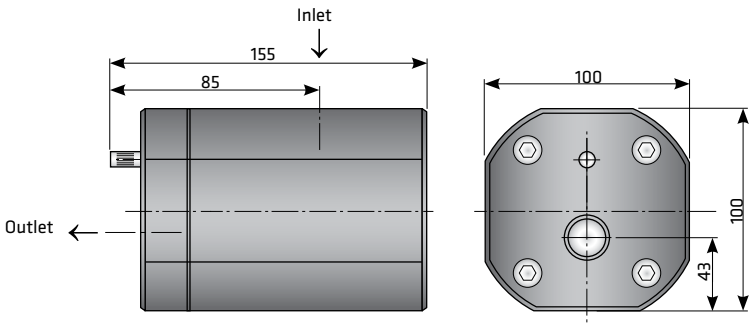
Condensate accumulates in the stainless steel reservoir and when the level is high enough the condensate is discharged from the system without any air loss. A direct acting valve is operated by a precise level controlled floater which assures reliable and efficient operation.

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.

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 agressive

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.



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

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.

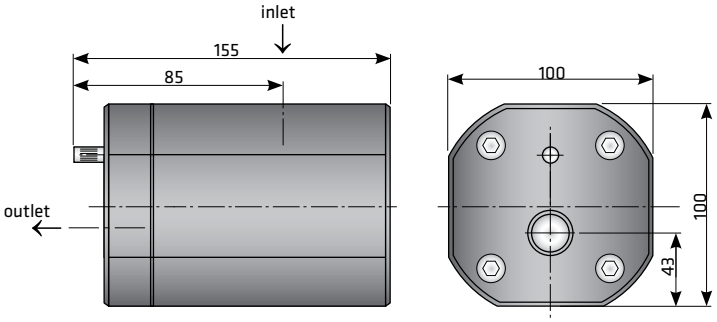
TECHNICAL DATA	AOK 50 B
Operating temperature range	1,5 - 65 °C (35-149 °F)
Operating pressure	8-50 bar (116-725 psi)
Min. recommended operating pressure	10 bar(g) (145 psi)
Mass	2,8 kg
Discharge capacity	145 l/h (at 50 barg)
Inlet connection	G 1/2" (NPT on request)
Outlet connection	G 1/2" (NPT on request)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

APPLICATIONS

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



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.

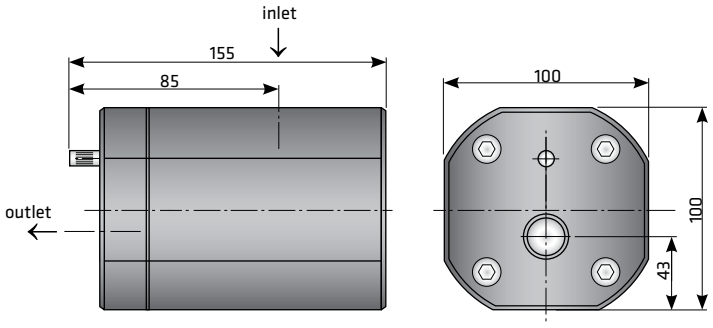
A direct acting valve is operated by a precise level controlled floater which assures reliable and efficient operation.

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

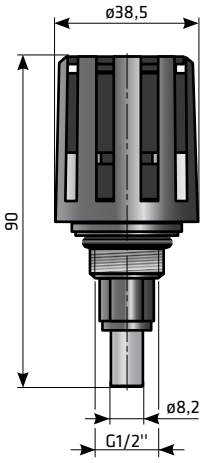
1,5 to 65 °C
operating temperature range

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

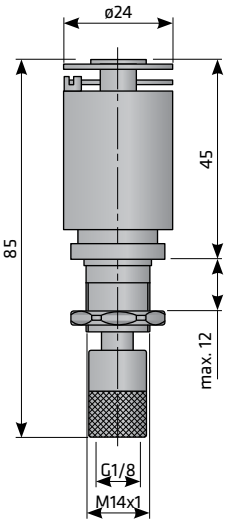
1,5 to 50 °C
operating temperature range

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 × D	85 × ø24 mm
Medium	Condensate (air, water, oil)



APPLICATIONS

- Air filter

MCD B SERIES

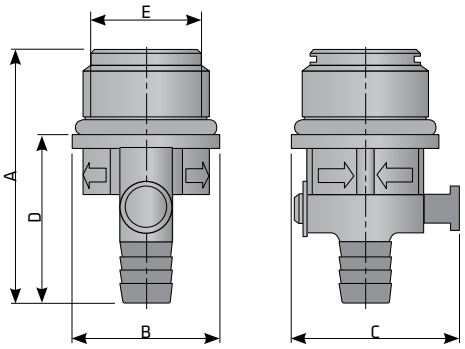
MANUAL CONDENSATE DRAIN

16 bar
operating pressure

1/2"
connections

1,5 to 65 °C
operating temperature range

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)



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.

APPLICATIONS

- Air filter

MCD SERIES

MANUAL CONDENSATE DRAIN

20 bar
operating pressure

1/2”
connections

1,5 to 65 °C
operating temperature range

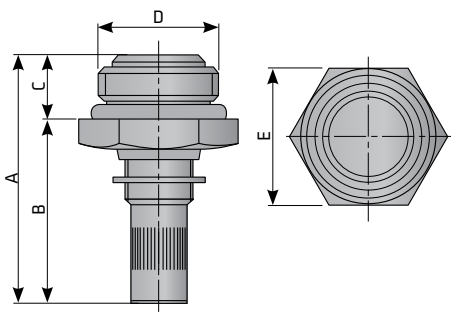
DESCRIPTION

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.

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

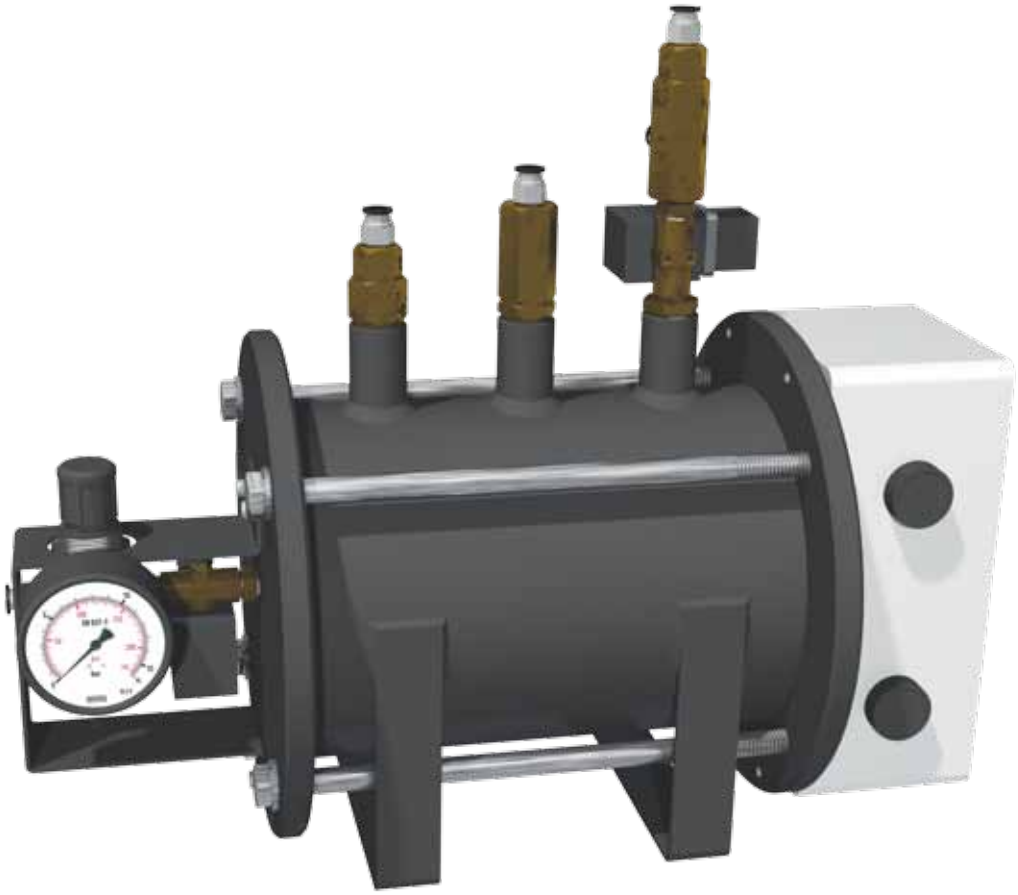


APPLICATIONS

- 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 aggresive
Material		Aluminium

APPLICATIONS

- Vacuum systems

WATER/OIL SEPARATION EQUIPMENT

Condensate is an unavoidable result of air compression. It is a chemically aggressive fluid that mainly consists of water, but also contains oil and dirt particles. Oil carryover is unavoidable if you have compressors that use oil in the compression chamber. The lubricant will mix with the condensation and create an oily water that must be properly handled to avoid violating environmental regulations.

Just one litre of used oil can contaminate up to one million litres of fresh water. This is the reason that environmental regulations strictly prohibit the discharge of oily wastes and chemicals, including the condensate drained from a compressed air system.

Compressed air condensate must therefore be treated in accordance with water resource legislation to achieve prescribed safety levels before it can be disposed of in the waste water system.

Compressor condensate must therefore be either collected and treated by special processes or treated prior to disposal to the environment. An oil/water separator can be used here to remove the oil from the condensate.

Since the condensate is approximately 95 % water and 5 % oil, water/oil separators have been developed to reduce or eliminate the amount of oil in the condensate.


IN
OUT

WOSm SERIES

WATER-OIL SEPARATORS

ø8 mm
inlet connection

1,5 to 65 °C
operating temperature range

DESCRIPTION

WOSm water oil separators have been developed to separate lubricant oil from condensate generated in compressed air systems. Due to patented technology regular service can be done in 30 seconds without any cleaning.

Separation begins in “cyclonic depressurization chamber” and continues in “filter cartridge”. When the “filter cartridge” is fully saturated you just simply unscrew complete cartridge and replace it with new one.

All the condensate stays in old cartridge which can also be sealed with plastic cover and disposed according to local directives and laws.

APPLICATIONS

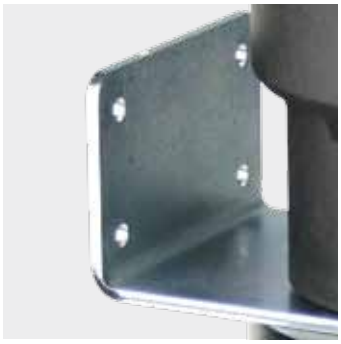
- Compressed air systems
- Suitable for installation inside compressors
- Compressed air dryers
- Condensate separators
- Pressure vessels

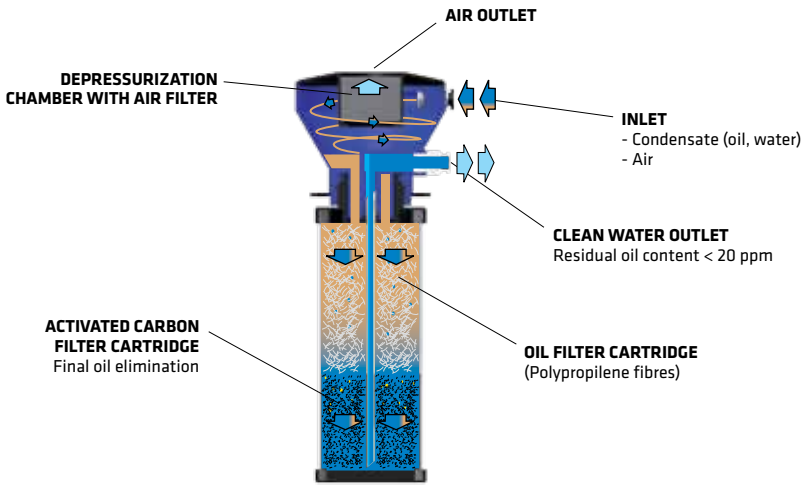
ADVANTAGES

✓ Quick and clean separator cartridge replacement.

✓ Easy installation due to compact design and small dimensions.

OMEGA AIR
Z-83.5-31
Deutsches Institut für Bautechnik, Berlin

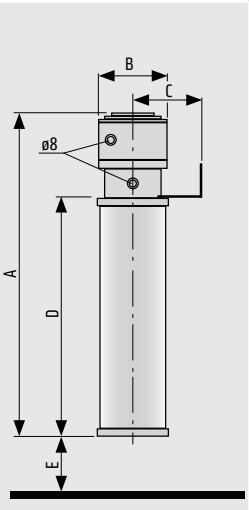




TECHNICAL DATA

Operating temperature	1,5 - 45 °C (max 65 °C)[1]; 35 - 113 °F (max. 149 °F)[1]
Operating media	Condensate (air, water, oil); Non aggressive; Not suitable for emulsion
Residual oil content	< 20ppm
Service interval	When first of following parameters appears:
	- 4000 operating hours of compressor [2]
	- 12 months regardless of compressor operating hours
	- when all white polypropylene media becomes yellow

		Cold climate zone 15 °C 60 %RH	Mild climate zone 25 °C 60 %RH	Hot climate zone 40 °C 100 %RH	Dimensions [mm] A	B	C	D	E
WOSm1	Max oil adsorption [g]	740	650	370	483	106	80	335	50
	Max FAD [Nm³/min]/[scfm]	1,23/43,05	1,08/37,8	0,62/21,9					
	Max condensate flow [l/h]	0,57	0,90	1,91					
WOSm2	Max oil adsorption [g]	1520	1340	770	816	106	80	670	50
	Max FAD [Nm³/min]/[scfm]	2,54/88,9	2,23/78,05	1,28/45,2					
	Max condensate flow [l/h]	1,19	1,87	3,96					



[1] Max. operating temperature is 65 °C, but when temperature is over 45 °C, performance may decrease.
[2] At compressor oil carryover 2,5 mg/m³. Lower/higher oil carry over means proportionally longer/shorter lifetime (e.g. if oil carryover is 5 mg/m³ lifetime reduces to 2000 operating hours).

WOS SERIES

WATER-OIL SEPARATORS

ø10 mm
inlet connection

1,5 to 45 °C
operating temperature range

RAL 5012
standard colour

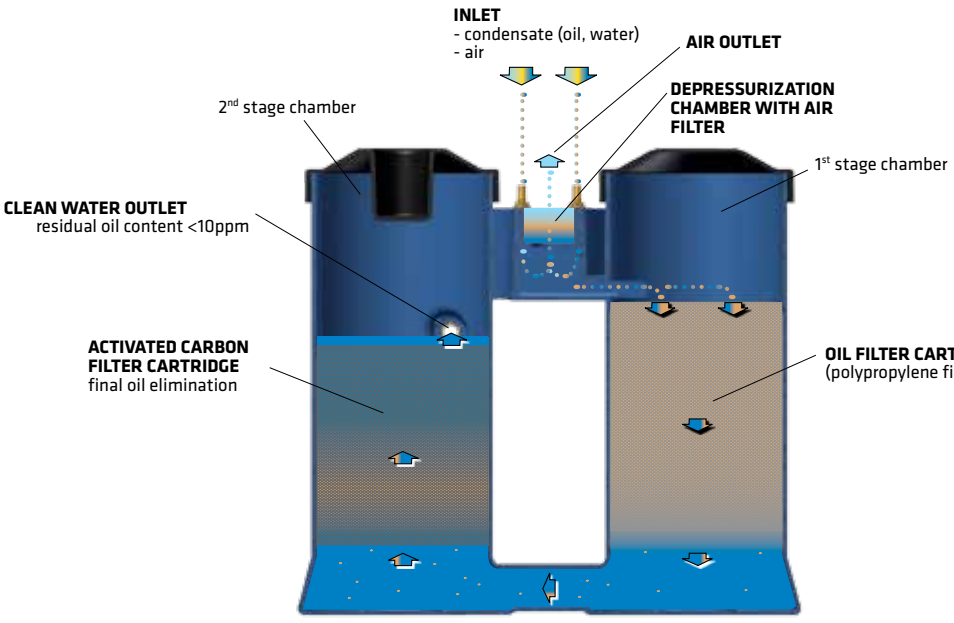
ADVANTAGES

- ✓ No complex sizing required.
- ✓ Simple to install.
- ✓ Works with any type od condensate drain.
- ✓ Can handle and separate any type of oil.
- ✓ Oil residue value is less than 10 ppm.
- ✓ Easy to maintain.
- ✓ No condensate settling tank is required (therefore there is no bacteria build-up).
- ✓ Small compact design.
- ✓ Test valve and test set included for sampling purposes.

DESCRIPTION

WOS water oil separators have been developed to separate lubricant oil from condensate from compressed air systems.

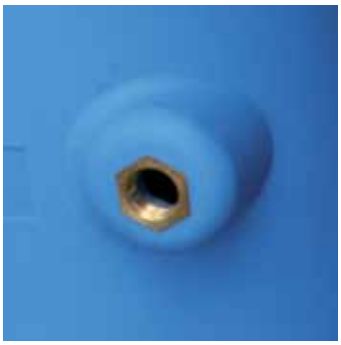
WOS water-oil separator can be used in variety of applications. For applications not listed please contact producer or your local distributor.



APPLICATIONS

- Compressed air systems

OMEGA AIR
Z-83.5-31
Deutsches Institut für Bautechnik, Berlin



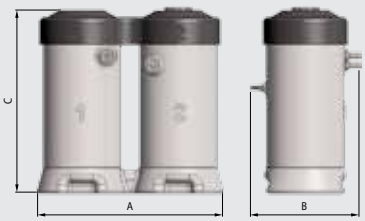
Water quality test

Water quality test should be performed at least once per month, to control the contamination level of disposed condensate.

If oil concentration is reached, oil filter cartridges must be changed.

TECHNICAL DATA	
Operating temperature	1,5 - 45 °C (max 65 °C)[1]; 35 - 113 °F (max. 149 °F)[2]
Operating media	Condensate (air, water, oil); Non aggressive; Not suitable for emulsion
Residual oil content	< 10ppm
Service interval	When first of following parameters appears:
	- 4000 operating hours of compressor [4]
	- 12 months regardless of compressor operating hours
	- outlet oil concentration reaches concentration determined with local directives

TECHNICAL DATA		Cold climate zone 15 °C 60 %RH	Mild climate zone 25 °C 60 %RH	Hot climate zone 40 °C 100 %RH	Dimensions [mm] A	B	C
WOS-4	Max oil adsorption [kg]	2,89	2,43	1,23	416	243	411
	Max FAD [Nm³/min]/[scfm]	4,82/170	4,04/142	2,05/72,3			
	Max condensate flow [l/h]	2,3	3,4	6,3			
WOS-8	Max oil adsorption [kg]	6,01	5,04	2,55	730	343	680
	Max FAD [Nm³/min]/[scfm]	10,0/353	8,4/296	4,25/150			
	Max condensate flow [l/h]	4,7	7,1	13,1			
WOS-20	Max oil adsorption [kg]	14,64	12,28	6,22	820	366	940
	Max FAD [Nm³/min]/[scfm]	24,4/861	20,5/723	10,37/366			
	Max condensate flow [l/h]	11,4	17,2	32,0			
WOS-35	Max oil adsorption [kg]	25,4	21,31	10,79	960	386	1137
	Max FAD [Nm³/min]/[scfm]	42,3/1495	35,5/1254	17,99/635			
	Max condensate flow [l/h]	19,8	29,8	55,6			



[1] Max. operating temperature is 65 °C, but when temperature is over 45 °C, performance may decrease.

[2] At compressor oil carryover 2,5 mg/m³. Lower/higher oil carry over means proportionally longer/shorter lifetime (e.g. if oil carryover is 5mg/m³ lifetime reduces to 2000 operating hours).

WOS CD SERIES

CONDENSATE DISTRIBUTOR

3/4" to 3"
inlet connection

1,5 to 65 °C
operating temperature range

RAL 5012
standard colour

DESCRIPTION

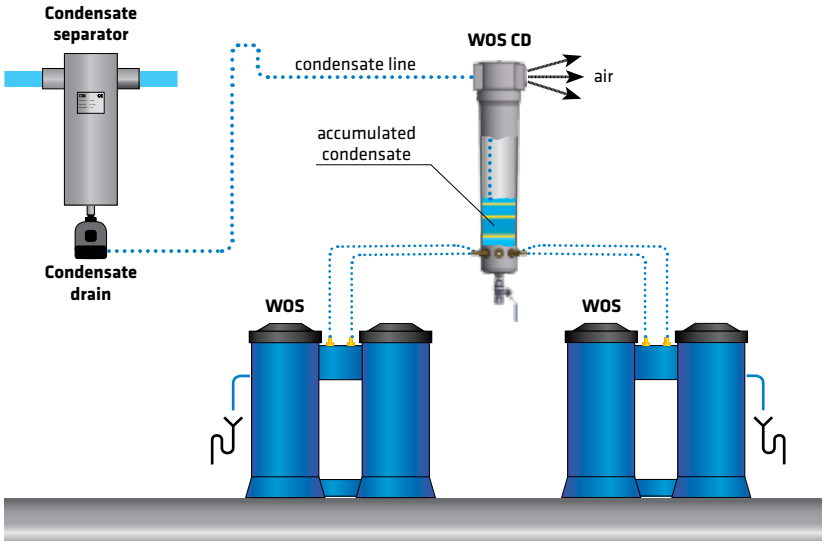
WOS CD is intended for systems, where amount of generated condensate exceeds capacity of single largest available WOS water oil separator. WOS CD can evenly distribute collected condensate between up to three WOS 35 water oil separators.

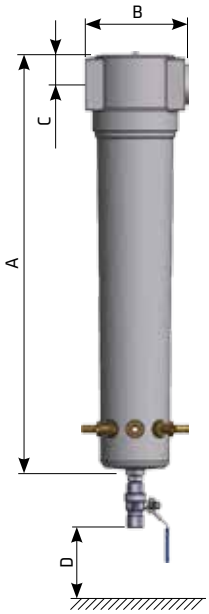
WOS CD is equipped with flow distributor on the inlet port, up to 8 hose tail connections mounted on elbows for convenient outlet, manual ball valve for cleaning purpose and vent port for safe aeration.

Optional wall mounting kit is available. Maximum capacity in regard to free air delivery, when connected to WOS-35 is 120 Nm^3/min.

APPLICATIONS

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





TECHNICAL DATA

Type	Pipe size	Hosetail connections	Dimensions [mm]				Volume	Mass
	inch	pcs	A	B	C	D	L	kg
WOS CD 2	3/4"	2	257	88	20	140	0,6	1,2
WOS CD 4	1 1/2"	4	461	125	32	140	2,8	3
WOS CD 8	2"	8	684	163	43	140	6,0	6
WOS CD 12	3"	12	795	240	59	140	20,0	12,9

DRYERS, COOLERS, OIL REMOVERS

No matter where you are, in tropics or in desert, atmospheric air contains some water vapour. When the air or gas cools to the point where it can hold no more water vapour (past the saturation point), it will start to condense into liquid water. This happens at the temperature called the dew point. This dew point is a kind of measure, how much compressed air drying is needed.

Dry air is important. In almost every process, clean and dry compressed air will result in lower operating costs. Impurities such as solid particles, water and oil, which are in the air will be deposited on the inner surfaces of pipes fittings and inner components, causing an increase in pressure drop. The result is undesired loss of performance efficiency.

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
CO_2 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

A-DRY SERIES

HEATLESS REGENERATION ADSORPTION COMPRESSED AIR DRYERS

4 to 16 bar
operating pressure

1,5 to 50 °C
inlet air temperature range

-40 °C (-25 °C / -70 °C)
pressure dew points

6 to 200 Nm³/h
flow rate

RAL 5012
standard / optional colour

15-20 %
avg. comp. air consumption

DESCRIPTION

A-DRY 6-200 desiccant adsorption dryer has been designed to separate water moisture from compressed air thus reducing the dew point in the system. A-DRY is a range of products offering our customers a wide array of dried air solutions with volumetric flow rates ranging from 6 Nm³/h to 200 Nm³/h.

An innovative design of A-DRY adsorption driers, developed with consideration of our customers, enables fast and reliable installation, use and servicing. Installation is simple with our ready to use controller while minimising the number of parts and motions required for assembly and disassembly makes servicing fast and reliable.

ADVANTAGES

- ✓ Wide range of products to fit your need.
- ✓ Robust and intuitive ready to use controller.
- ✓ Simple assembly and disassembly.
- ✓ Fast and reliable servicing.
- ✓ Adsorbent in cartridges.
- ✓ Standard version includes coalescing prefilter and particle afterfilter.

APPLICATIONS

- Compressed air systems

Wall mounted version

Convenient brackets allow the dryer to be firmly mounted on the floor as well as on the wall. Wall mounting is possible simply by rotating the bracket by angle of 90°.

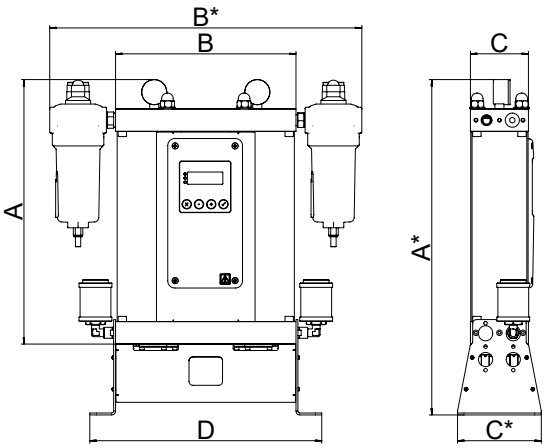
TECHNICAL DATA											
Type	Connection IN/OUT	Nominal volume flow		Dimensions							Mass
		Inlet[1]	Outlet[2]								
	''	[Nm³/h]	[Nm³/h]	A [mm]	A* [mm]	B [mm]	B* [mm]	C [mm]	C* [mm]	D [mm]	kg
A-DRY 06	G3/8"	6	4,7	339	520	280	480	100	130	354	10,5
A-DRY 12	G3/8"	12	9,5	573	715	280	480	100	130	354	13,5
A-DRY 24	G3/8"	24	19,0	1041	1105	280	480	100	130	354	19,0
A-DRY 36	G3/8"	36	28,4	1509	1495	280	480	100	130	354	27,5
A-DRY 60	G3/4"	60	47,4	972	1105	370	570	148	170	434	45,0
A-DRY 75	G3/4"	75	59,3	1167	1300	370	570	148	170	434	53,0
A-DRY 105	G3/4"	117	83	1567	1700	370	570	148	170	434	70,0
A-DRY 150	G1"	150	118	1345	1440	440	725	198	240	570	170,5
A-DRY 200	G1"	200	158	1538	1655	440	725	198	240	570	182,2

Operating pressure range	4 to 16 bar(g)
Operating temperature range	+1,5 °C to +50 °C
Pressure dew points	-25 °C / -40 °C / -70 °C
Voltage, frequency	230V, 50/60 Hz
Power consumption	<35 W
Protection class	IP 65
Filter (inlet)*	super fine; 0,01 µm
Filter (outlet)	dust filter; 1 µm

(1) Refers to 1 bar(a) and 20 °C at 7 bar operating pressure, inlet temperature 35 °C and pressure dew point at outlet -40 °C.

(2) Outlet flow refers to typical assumption during regeneration phase for operating at nominal inlet flow conditions. Outlet flow includes average air losses of approximately 17,3 %.

* If dryer is supplied without inlet filter compressed air class 1 (ISO 8753-1) for solid particles and oil should be provided to the inlet of the dryer.



CORRECTION FACTORS - F1													
Operating pressure [bar]	4	5	6	7	8	9	10	11	12	13	14	15	16
Operating pressure [psi]	58	72	87	100	115	130	145	160	174	189	203	218	232
Correction factor	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

CORRECTION FACTORS - F2						
Inlet temperature [°C]	25	30	35	40	45	50
Correction factor	1,00	1,00	1,00	0,97	0,87	0,80

DEW POINT			
[°C]	-25	-40	-70
C_D	1,1	1	0,7

A-DRY BI/BM SERIES

HEATLESS REGENERATION ADSORPTION COMPRESSED AIR DRYERS

4 to 16 bar
operating pressure

1,5 to 50 °C
inlet air temperature range

-40 °C (-25 °C / -70 °C)
pressure dew points

6 to 200 Nm³/h
flow rate

RAL 9003
standard colour

15-20 %
avg. comp. air consumption

DESCRIPTION

A-DRY BI/BM desiccant adsorption dryer has been designed to separate water moisture from compressed air thus reducing the dew point in the system. A-DRY BI/BM is a range of products offering our customers a wide array of dried air solutions with volumetric flow rates ranging from 6 Nm³/h to 200 Nm³/h.

An innovative new design of A-DRY BI/BM adsorption driers, developed with consideration of our customers, enables fast and reliable installation, use and servicing. Installation is simple with our ready to use controller while minimising the number of parts and motions required for assembly and disassembly makes servicing fast and reliable.

APPLICATIONS

- Compressed air systems

ADVANTAGES

- ✓ Wide range of products to fit your need.
- ✓ Robust and intuitive ready to use controller.
- ✓ Simple assembly and disassembly.
- ✓ Fast and reliable servicing.
- ✓ Adsorbent in cartridges.
- ✓ Standard version includes coalescing prefilter and particle afterfilter.

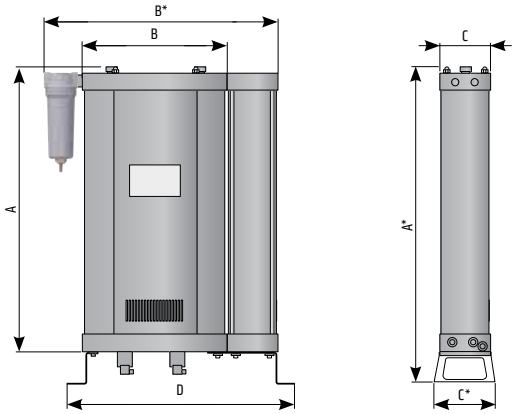
TECHNICAL DATA											
Type	Connection IN/OUT	Nominal volume flow		Dimensions							Mass
		Inlet[1]	Outlet[2]								
	"	[Nm³/h]	[Nm³/h]	A [mm]	A* [mm]	B [mm]	B* [mm]	C [mm]	C* [mm]	D [mm]	kg
A-DRY 06 BI/BM	G3/8"	6	4,7	339	520	280	467	100	130	444	10,5
A-DRY 12 BI/BM	G3/8"	12	9,5	573	715	280	467	100	130	444	13,5
A-DRY 24 BI/BM	G3/8"	24	19,0	1041	1105	280	467	100	130	444	19,0
A-DRY 36 BI/BM	G3/8"	36	28,4	1509	1495	280	467	100	130	444	27,5
A-DRY 60 BI/BM	G3/4"	60	47,4	972	1105	370	607	148	170	573	45,0
A-DRY 75 BI/BM	G3/4"	75	59,3	1167	1300	370	607	148	170	573	53,0
A-DRY 105 BI/BM	G3/4"	117	83	1567	1700	370	607	148	170	573	70,0
A-DRY 150 BI/BM	G1"	150	118	1345	1440	440	948	198	240	933	170,5
A-DRY 200 BI/BM	G1"	200	158	1538	1655	440	948	198	240	933	182,2

Operating pressure range	4 to 16 bar(g)
Operating temperature range	+1,5 °C to +50 °C
Pressure dew points	-25 °C / -40 °C / -70 °C
Voltage, frequency	230V, 50/60 Hz
Power consumption	<35 W
Protection class	IP 65
Filter (inlet)*	super fine; 0,01 µm
Filter (outlet)	dust filter; 1 µm

[1] Refers to 1 bar(a) and 20 °C at 7 bar operating pressure, inlet temperature 35 °C and pressure dew point at outlet -40 °C.

[2] Outlet flow refers to typical assumption during regeneration phase for operating at nominal inlet flow conditions. Outlet flow includes average air losses of approximately 17,3 %.

* If dryer is supplied without inlet filter compressed air class 1 (ISO 8753-1) for solid particles and oil should be provided to the inlet of the dryer.



CORRECTION FACTORS - F1													
Operating pressure [bar]	4	5	6	7	8	9	10	11	12	13	14	15	16
Operating pressure [psi]	58	72	87	100	115	130	145	160	174	189	203	218	232
Correction factor	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

CORRECTION FACTORS - F2						
Inlet temperature [°C]	25	30	35	40	45	50
Correction factor	1,00	1,00	1,00	0,97	0,87	0,80

DEW POINT			
[°C]	-25	-40	-70
C_D	1,1	1	0,7

A-DRY TAC SERIES

ADSORPTION COMPRESSED AIR DRYERS WITH ACTIVATED CARBON TOWER

4 to 16 bar
operating pressure

1,5 to 50 °C
inlet air temperature range

-40 °C (-25 °C / -70 °C)
pressure dew points

6 to 200 Nm³/h
flow rate

RAL 5012
standard colour

15-20 %
avg. comp. air consumption

DESCRIPTION

A-DRY 6-200 TAC desiccant adsorption dryers with integrated activated carbon tower are designed to achieve low pressure dew point as well as to remove oil vapours and odours from the compressed air. A-DRY is a range of products offering our customers a wide array of dried air solutions with volumetric flow rates ranging from 6 Nm³/h to 200 Nm³/h.

An innovative design of A-DRY TAC adsorption driers, developed with consideration of our customers, enables fast and reliable installation, use and servicing. Installation is simple with our ready to use controller while minimising the number of parts and motions required for assembly and disassembly makes servicing fast and reliable.

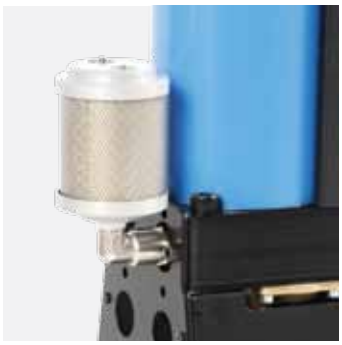
A-DRY TAC has integrated activated carbon tower, which is developed for separating oil vapours from compressed air (dry type separation).

ADVANTAGES

- ✓ Wide range of products to fit your need.
- ✓ Robust and intuitive ready to use controller.
- ✓ Simple assembly and disassembly.
- ✓ Fast and reliable servicing.
- ✓ Adsorbent in cartridges.
- ✓ Standard version includes coalescing prefilter and particle afterfilter.

APPLICATIONS

- Compressed air systems



TECHNICAL DATA

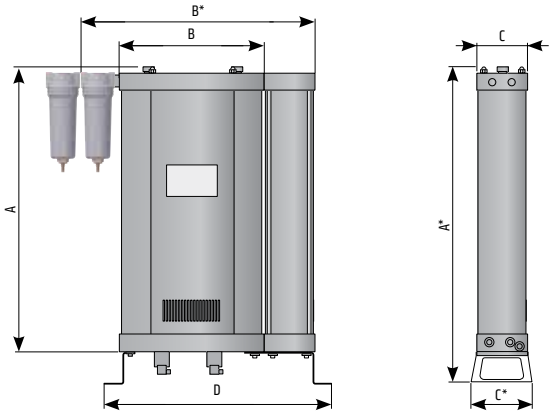
Type	Connection IN/OUT	Nominal volume flow		Dimensions							Mass
		Inlet[1]	Outlet[2]								
	''	[Nm³/h]	[Nm³/h]	A [mm]	A* [mm]	B [mm]	B* [mm]	C [mm]	C* [mm]	D [mm]	kg
A-DRY 06 TAC	G3/8''	6	4,7	339	520	280	467	100	130	444	10,5
A-DRY 12 TAC	G3/8''	12	9,5	573	715	280	467	100	130	444	13,5
A-DRY 24 TAC	G3/8''	24	19,0	1041	1105	280	467	100	130	444	19,0
A-DRY 36 TAC	G3/8''	36	28,4	1509	1495	280	467	100	130	444	27,5
A-DRY 60 TAC	G3/4''	60	47,4	972	1105	370	607	148	170	573	45,0
A-DRY 75 TAC	G3/4''	75	59,3	1167	1300	370	607	148	170	573	53,0
A-DRY 105 TAC	G3/4''	117	83	1567	1700	370	607	148	170	573	70,0
A-DRY 150 TAC	G1''	150	118	1345	1440	440	948	198	240	933	170,5
A-DRY 200 TAC	G1''	200	158	1538	1655	440	948	198	240	933	182,2

Operating pressure range	4 to 16 bar(g)
Operating temperature range	+1,5 °C to +50 °C
Pressure dew points	-25 °C / -40 °C / -70 °C
Voltage, frequency	230V, 50/60 Hz
Power consumption	<35 W
Protection class	IP 65
Filter (inlet)*	super fine; 0,01 µm
Filter (outlet)	dust filter; 1 µm

(1) Refers to 1 bar(a) and 20 °C at 7 bar operating pressure, inlet temperature 35 °C and pressure dew point at outlet -40 °C.

(2) Outlet flow refers to typical assumption during regeneration phase for operating at nominal inlet flow conditions. Outlet flow includes average air losses of approximately 17,3 %.

* If dryer is supplied without inlet filter compressed air class 1 (ISO 8753-1) for solid particles and oil should be provided to the inlet of the dryer.



CORRECTION FACTORS - F1													
Operating pressure [bar]	4	5	6	7	8	9	10	11	12	13	14	15	16
Operating pressure [psi]	58	72	87	100	115	130	145	160	174	189	203	218	232
Correction factor	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

CORRECTION FACTORS - F2						
Inlet temperature [°C]	25	30	35	40	45	50
Correction factor	1,00	1,00	1,00	0,97	0,87	0,80

DEW POINT			
[°C]	-25	-40	-70
C_D	1,1	1	0,7

X-DRY SERIES

HEATLESS REGENERATION MODULAR ADSORPTION COMPRESSED AIR DRYERS

4 to 16 bar
operating pressure

1,5 to 50 °C
inlet air temperature range

-40 °C (-25 °C / -70 °C)
pressure dew points

300 to 1050 Nm³/h
flow rate

RAL 5012
standard / optional colour

15-20 %
avg. comp. air consumption

DESCRIPTION

X-DRY 300-1050 modular adsorption dryers are designed for continuous separation of water vapour from compressed air thus reducing dew point. Operation of dryer requires two columns operated alternately. Adsorption takes place under pressure in first column while second column regenerates with a portion of already dried compressed air at ambient pressure.

A dryer consists of two columns, filled with desiccant beads, controller with LCD display, valves, manometers, support construction and suitable filter housings with the required filter element. Proven robust design enables efficient and reliable operation, fast installation and simple maintenance.

APPLICATIONS

- Compressed air systems

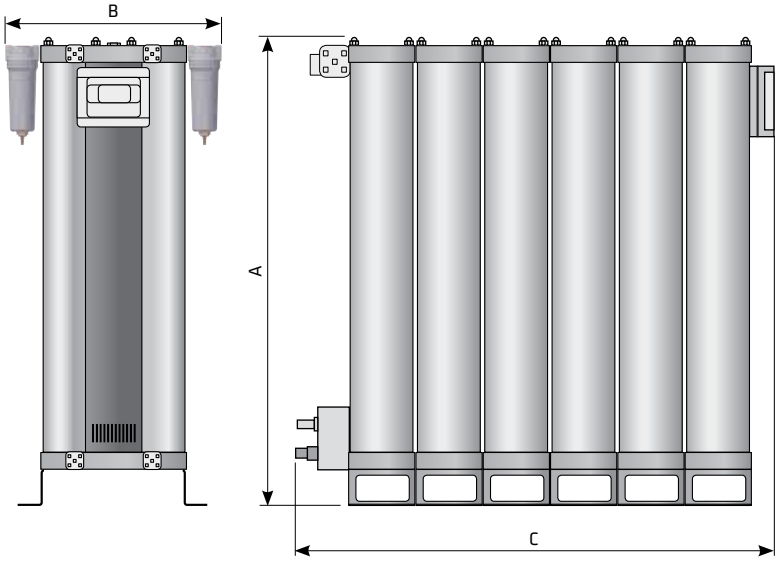




TECHNICAL DATA							
Type	Connection IN/OUT[3]	Nominal volume flow		Dimensions			Mass
		Inlet[1]	Outlet[2]				
	''	[Nm³/h]	[Nm³/h]	A [mm]	B [mm]	C [mm]	kg
X-DRY 300	G 2''	300	237	1515	674	686	350
X-DRY 450	G 2''	450	255,5	1515	674	886	520
X-DRY 600	G 2''	600	474	1515	674	1086	690
X-DRY 750	G 2''	750	592,5	1515	674	1286	860
X-DRY 900	G 2''	900	711	1515	674	1486	1030
X-DRY1050	G 2''	1050	829,5	1515	674	1686	1200

[1] Refers to 1 bar(a) and 20 °C at 7 bar operating pressure, inlet temperature 35 °C and pressure dew point at outlet -40 °C.
[2] Outlet flow refers to typical assumption during regeneration phase for operating at nominal inlet flow conditions. Outlet flow includes average air losses of approximately 17,3 %.
* Refers to inlet and outlet filter housing.

Operating pressure range	4 to 16 bar
Operating temperature range	+1,5 °C to +60 °C
Pressure dew points	-40 °C (-25 °C / -70 °C)
Voltage, frequency	230V, 50/60 Hz
Power consumption	<60 W
Protection class	IP 65
Filter (inlet)*	super fine - 0,01 µm
Filter (outlet)	dust filter; 1 µm



CORRECTION FACTORS - F1															
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	0,5	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

CORRECTION FACTORS - F2								
Inlet temperature [°C]	25	30	35	40	45	50	55	60
Correction factor	1,00	1,00	1,00	0,97	0,87	0,80	0,64	0,51

DEW POINT			
[°C]	-25	-40	-70
C_D	1,1	1	0,7

B-DRY SERIES

HEATLESS REGENERATION ADSORPTION COMPRESSED AIR DRYERS

4 to 16 bar
operating pressure

1,5 to 60 °C
inlet air temperature range

-40 °C (-25 °C / -70 °C)
pressure dew points

110 to 1.152 Nm³/h
flow rate

RAL 5012
standard / optional colour

15-20 %
avg. comp. air consumption

DESCRIPTION

B-DRY adsorption dryers are designed for continuous separation of water vapour from the compressed air thus reducing the pressure dew point. B-DRY series dryer consists of two columns, filled with desiccant beds, controller with LCD display, valves, manometers, support construction and suitable filter housings with the required filter element. Adsorption takes place under pressure in the first column while the second column regenerates with a portion of already dried compressed air at ambient pressure.

When the first column is saturated to a certain level column switch-over is carried out and the process of adsorption continues in the second column without any drop of pressure at the outlet of the dryer. Regeneration of saturated desiccant is possible because a small portion of already dry compressed air is decompressed and when expanded it becomes extremely dry.

APPLICATIONS

- Compressed air systems

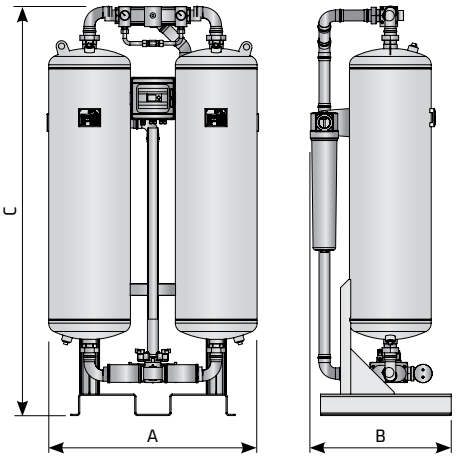




TECHNICAL DATA							
Type	Connection IN/OUT	Nominal volume flow		Dimensions			Mass
		Inlet[1]	Outlet[2]				
	"	[Nm³/h]	[Nm³/h]	A [mm]	B [mm]	C [mm]	kg
B-DRY 110	G 1"	110	86,0	719 ±5	422	1647	140
B-DRY 150	G 1"	150	117,5	707 ±5	422	1897	156
B-DRY 200	G 1"	200	157,0	707 ±5	471	1664	196
B-DRY 250	G 1"	260	204,0	707 ±5	471	1914	236
B-DRY 300	G 1 1/2"	320	251,0	860 ±5	535	1742	274
B-DRY 400	G 1 1/2"	410	321,5	854 ±5	535	1989	295
B-DRY 600	G 1 1/2"	590	462,5	854 ±5	671	2051	392
B-DRY 800	G 2"	770	603,5	1051 ±10	701	2080	507
B-DRY 1000	G 2"	1000	784,0	1051 ±10	701	2140	597
B-DRY 1200	G 2"	1152	903,2	1153 ±10	727	2140	625

Voltage, frequency	230V, 50/60 Hz
Power consumption	<60 W
Protection class	IP 65
Filter (inlet)*	super fine - 0,01 µm
Filter (outlet)	dust filter; 1 µm
DPD control	optional
Input for stand-by	standard

DEW POINT - CORRECTION FACTORS - C_D			
Operat. temperature [°C]	-25	-40	-70
Operat. temperature [F]	-13	-40	-94
Correction factor C_D	1,1	1	0,7



OPERATING TEMPERATURE - CORRECTION FACTORS - C_{OT}								
Operat. temperature [°C]	25	30	35	40	45	50	55	60
Operat. temperature [F]	77	86	95	104	113	122	131	140
Correction factor C_{OT}	1	1	1	0,97	0,87	0,80	0,64	0,51

OPERATING PRESSURE - CORRECTION FACTORS - C_{OP}															
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 C_{OP}	0,38	0,5	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) Refers to 1 bar(a) and 20 °C at 7 bar operating pressure, inlet temperature 35 °C and pressure dew point at outlet -40 °C.

(2) Outlet flow refers to typical assumption during regeneration phase for operating at nominal inlet flow conditions. Outlet flow includes average air losses of approximately 17,3 %.

* If dryer is supplied without inlet filter compressed air class 1 (ISO 8753-1) for solid particles and oil should be provided to the inlet of the dryer.

F-DRY SERIES

HEATLESS REGENERATION ADSORPTION COMPRESSED AIR DRYERS

4 to 16 bar
operating pressure

1,5 to 60 °C
inlet air temperature range

-40 °C (-25 °C / -70 °C)
pressure dew points

1200 to 6500 Nm³/h
flow rate

RAL 5012
standard colour

15-20 %
avg. comp. air consumption

DESCRIPTION

F-DRY adsorption dryers are designed for continuous separation of water vapour from the compressed air thus reducing pressure dew point. F-DRY series dryer consists of two columns, filled with desiccant beds, controller with LCD display, valves, manometers, support construction and suitable filter housings with the required filter element. Adsorption takes place under pressure in the first column while the second column regenerates with a portion of already dried compressed air at ambient pressure.
When the first column is saturated to a certain level column switch-over is carried out and the process of adsorption continues in the second column without any drop of pressure at the outlet of the dryer. Regeneration of saturated desiccant is possible because a small portion of already dry compressed air is decompressed and when expanded it becomes extremely dry.

APPLICATIONS

- Compressed air systems

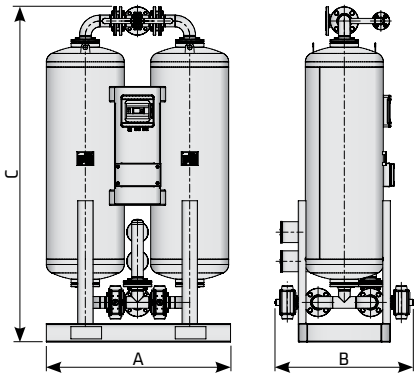




TECHNICAL DATA

Type	Connection IN/OUT	Nominal volume flow		Dimensions			Mass
		Inlet[1]	Outlet[2]				
	DN	[Nm³/h]	[Nm³/h]	A [mm]	B [mm]	C [mm]	kg
F-DRY 1200	DN50	1200	936	1210	850	2170	820
F-DRY 1500	DN65	1500	1170	1535	950	2210	980
F-DRY 2000	DN65	2000	1560	1685	980	2330	1550
F-DRY 2500	DN80	2500	1950	1785	1120	2260	1680
F-DRY 3000	DN80	3000	2340	1875	1120	2400	1850
F-DRY 3750	DN100	3750	2925	2025	1230	2490	2300
F-DRY 5000	DN100	5000	3900	2235	1230	2600	2850
F-DRY 6500	DN125	6500	5070	2420	1430	2730	3750

Voltage, frequency	230V, 50/60 Hz
Power consumption	<60 W
Protection class	IP 65
Filter (inlet)*	super fine - 0,01 µm
Filter (outlet)	dust filter; 1 µm
DPD control	optional
Input for stand-by	standard



OPERATING PRESSURE - CORRECTION FACTORS - C_{OP}													
Operating pressure [bar]	4	5	6	7	8	9	10	11	12	13	14	15	16
Operating pressure [psi]	58	72	87	100	115	130	145	160	174	189	203	218	232
Correction factor C_{OP}	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

OPERATING TEMPERATURE - CORRECTION FACTORS - C_{OT}								
Operat. temperature [°C]	25	30	35	40	45	50	55	60
Operat. temperature [F]	77	86	95	104	113	122	131	140
Correction factor C_{OT}	1	1	1	0,97	0,87	0,80	0,64	0,51

DEW POINT - CORRECTION FACTORS - C_D			
Operat. temperature [°C]	-25	-40	-70
Operat. temperature [F]	-13	-40	-94
Correction factor C_D	1,1	1	0,7

(1) Refers to 1 bar(a) and 20 °C at 7 bar operating pressure, inlet temperature 35 °C and pressure dew point at outlet -40 °C.

(2) Outlet flow refers to typical assumption during regeneration phase for operating at nominal inlet flow conditions. Outlet flow includes average air losses of approximately 17,3 %.

* If dryer is supplied without inlet filter compressed air class 1 (ISO 8753-1) for solid particles and oil should be provided to the inlet of the dryer.

COM-DRY SERIES

REFRIGERANT + ADSORPTION COMPRESSED AIR DRYERS

4 to 14 bar
operating pressure

1,5 to 55 °C
operating temperature range

down to -40 °C
pressure dew points

6 to 6.500 Nm³/h
flow rate

4,6 %
avg. comp. air consumption

DESCRIPTION

COM-Dry dryers have been designed for continuous separation of water vapour from compressed air thus reducing dew point. Drying consist of two steps.

Refrigerant dryer first eliminates large majority of water and reduces dew point down to PDP +3°C.

Further reduction of dew point is carried out by adsorption dryer. Operation of dryer is more simple compared to conventional heat regenerated adsorption dryer while average compressed air losses present only up to 4,6%.

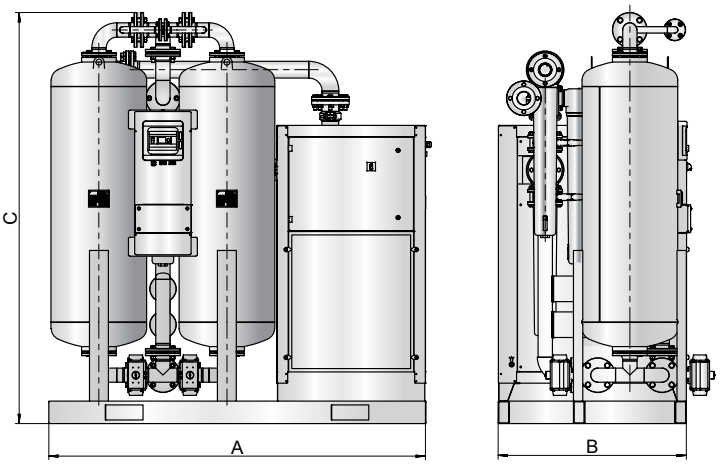
APPLICATIONS

• Compressed air systems

TECHNICAL DATA						
Type	Connection IN/OUT [2]	Nominal volume flow Inlet [1]	Adsorption dryer	Refrigeration dryer	Power	Volume
	DN	[Nm³/h]			kW	l
COM-DRY 06	G 3/8"	6	A-DRY 06	RDP 20	0,15	2,6
COM-DRY 12	G 3/8"	12	A-DRY 12	RDP 20	0,15	4,3
COM-DRY 24	G 3/8"	24	A-DRY 24	RDP 35	0,16	7,8
COM-DRY 36	G 3/8"	36	A-DRY 36	RDP 35	0,16	11,2
COM-DRY 60	G 1/2"	60	A-DRY 60	RDP 75	0,21	19,9
COM-DRY 75	G 1/2"	75	A-DRY 75	RDP 100	0,29	24,3
COM-DRY 110	G 3/4"	110	B-DRY 110	RDP 140	0,39	20
COM-DRY 150	G 1"	150	B-DRY 150	RDP 180	0,48	25
COM-DRY 200	G 1"	200	B-DRY 200	RDP 235	0,71	36
COM-DRY 250	G 1"	260	B-DRY 250	RDP 300	0,79	45
COM-DRY 300	G 1"	320	B-DRY 300	RDP 380	0,82	57
COM-DRY 400	G 1 1/2"	410	B-DRY 400	RDP 480	0,71	70
COM-DRY 600	G 1 1/2"	590	B-DRY 600	RDP 750	1,4	102
COM-DRY 800	G 2"	770	B-DRY 800	RDP 950	1,5	134
COM-DRY 1000	G 2"	1000	B-DRY 1000	RDP 1150	2,1	164
COM-DRY 1200	DN50	1200	F-DRY 1200	RDP 1300	2,3	225
COM-DRY 1500	DN65	1500	F-DRY 1500	RDP 1900	3,6	280
COM-DRY 2000	DN65	2000	F-DRY 2000	RDP 2600	3,9	295
COM-DRY 2500	DN80	2500	F-DRY 2500	RDP 2600	5,2	470
COM-DRY 3000	DN80	3000	F-DRY 3000	RDP 3400	5,9	570
COM-DRY 3750	DN100	3750	F-DRY 3750	RDP 4400	7,1	660
COM-DRY 5000	DN100	5000	F-DRY 5000	RDP 5400	10,8	980
COM-DRY 6500	DN125	6500	F-DRY 6500	RDP 6600	11,3	1200

[1] Refers to 1 bar(a) and 20 °C at 7 bar operating pressure, inlet temperature 35 °C and pressure dew point at outlet -40 °C.
Outlet flow refers to typical assumption during regeneration phase for operating at nominal inlet flow conditions. Outlet flow includes average air losses of approximately 4,6%. Maximum purge air flow during regeneration phase is up to 5,7% of nominal inlet conditions.

[2] Reffers to inlet and outlet filter housing.



CORRECTION FACTORS

To calculate the correct capacity of a given filter based on actual operating conditions, multiply the nominal flow capacity by the appropriate correction factor(s).
CORRECTED CAPACITY = NOMINAL FLOW CAPACITY x C_{OP} x C_{IT} x C_{AT} x C_{D}

OPERATING PRESSURE - CORRECTION FACTORS - C_{OP}											
Operating pressure [bar]	4	5	6	7	8	9	10	11	12	13	14
Operating pressure [psi]	58	72	87	100	115	130	145	160	174	189	203
Correction factor C_{OP}	0,63	0,75	0,88	1	1,05	1,09	1,14	1,18	1,21	1,24	1,27

INLET TEMPERATURE - CORRECTION FACTORS - C_{IT}							
Inlet temperature [°C]	25	30	35	40	45	50	55
Inlet temperature [F]	77	86	95	104	113	122	131
Correction factor C_{IT}	*	*	1	0,81	0,67	0,55	0,45

AMBIENT TEMPERATURE - CORRECTION FACTORS - C_{AT}					
Ambient temp. [°C]	<25	30	35	40	45
Ambient temp. [F]		86	95	104	113
Correction factor C_{IT}	1	0,95	0,88	0,79	0,68

DEW POINT - CORRECTION FACTORS - C_{D}			
Ambient temp. [°C]	-25	-40	-70
Ambient temp. [F]	-13	-40	94
Correction factor C_{D}	*	1	*

*Contact manufacturer.

R-DRY BVA SERIES

VACUUM REGENERATION WITH AMBIENT AIR

4 to 11 bar
operating pressure

1,5 to 42,5 °C
inlet air temperature range

-40 °C
pressure dew points

390 to 20.200 Nm³/h
flow rate

0 %
avg. comp. air consumption

DESCRIPTION

R-DRY BVA 400-20000 adsorption dryers are designed for continuous separation of water vapour from compressed air thus lowering the dew point.

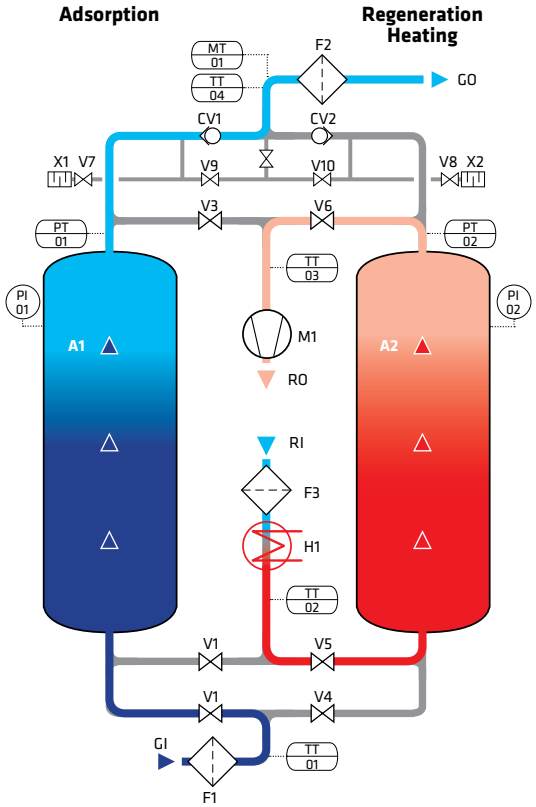
R-DRY BVA dryers have two columns that operate alternately. Adsorption takes place under pressure in the first column while the second column regenerates (heated ambient air for desorption + ambient air in vacuum mode for cooling). BVA type of dryer is suitable for applications running at mild ambient conditions. Due to regeneration in vacuum mode BVA type of dryers don't consume any compressed air for the operation.

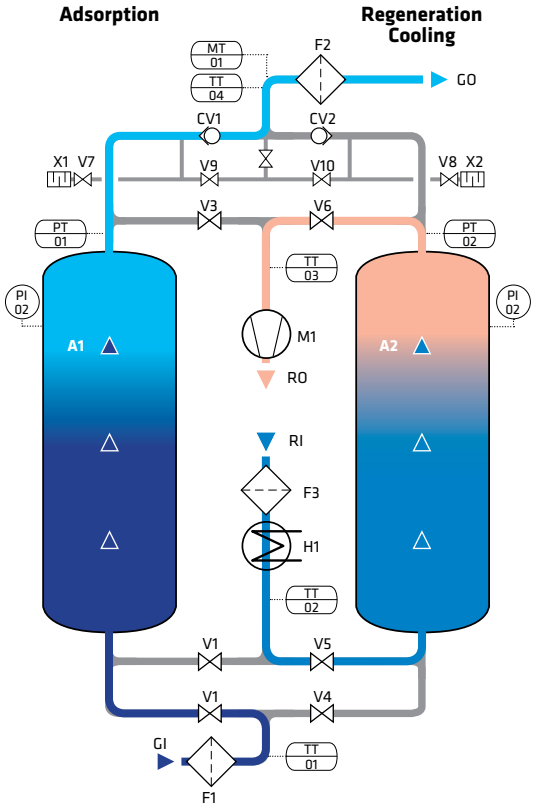
A dryer consists of two columns, filled with desiccant beads, a blower, heater, controller with an LCD display, valves, manometers, and a support construction. A proven and robust design enables efficient and reliable operation, fast installation and simple maintenance.

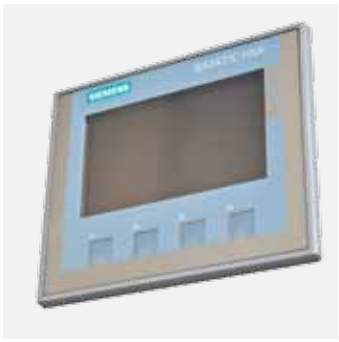
APPLICATIONS

- Compressed air systems

A1-2	pressure vessel
F1	inlet filter (super fine coalescing)
F2	outlet filter (dust)
V1-6	ball valve with pneumatic actuator
V7-10	angle seated valve with pneumatic actuator
CV1-2	check valve
TT1-4	temperature transducer
PI1-2	pressure indicator
PT1-2	pressure transducer
DT1	dew point transducer
M1	blower
H1	heater
F3	regeneration air filter
GI	air inlet
GO	air outlet
RI	regeneration air inlet
RO	regeneration air outlet
ES1-2	expansion silencer







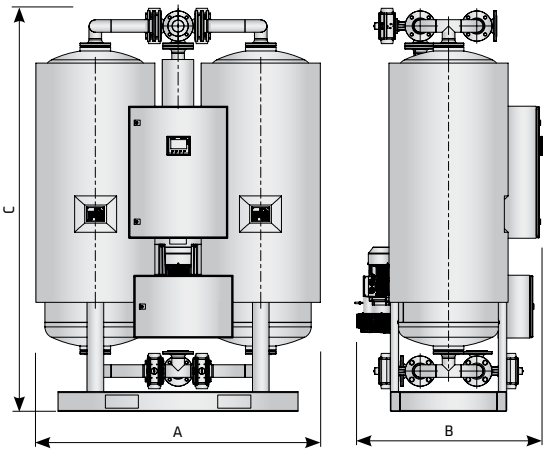
TECHNICAL DATA									
Type	Connection IN/OUT [2]	Nominal volume flow Inlet [1]	Dimensions			Mass	Blower power	Heater power	Filter type
	DN	[Nm³/h]	A [mm]	B [mm]	C [mm]	kg	kW	kW	
R-DRY 400 BVA	DN50	390	1.200	850	2.250	1.000	1,3	3,5	AF 0476
R-DRY 600 BVA	DN50	590	1.500	900	2.350	1.400	1,6	5,5	AF 0706
R-DRY 780 BVA	DN50	780	1.750	1.000	2.450	1.800	1,6	7	AF 0706
R-DRY 1000 BVA	DN50	930	1.750	1.250	2.450	1.900	1,6	8	AF 0946
R-DRY 1200 BVA	DN80	1.150	1.900	1.100	2.450	2.200	1,6	10	AF 1506
R-DRY 1600 BVA	DN80	1.600	1.900	1.350	2.500	2.600	4	14	AF 1756
R-DRY 2000 BVA	DN100	1.950	2.200	1.150	2.600	3.400	4	17	AF 2006
R-DRY 2500 BVA	DN100	2.530	2.350	1.150	2.750	3.800	7,5	22	AF 2406
R-DRY 3000 BVA	DN100	2.990	2.500	1.150	2.750	4.000	8,5	26	BF 300
R-DRY 3600 BVA	DN100	3.680	2.800	1.350	2.850	4.800	8,5	32	BF 450
R-DRY 4100 BVA	DN125	4.100	3.000	1.350	2.850	5.100	8,5	35	BF 450
R-DRY 5000 BVA	DN125	4.990	3.200	1.450	2.950	5.900	15	45	BF 600
R-DRY 6500 BVA	DN150	6.550	3.520	1.750	3.050	7.200	15	56	BF 900
R-DRY 7700 BVA	DN150	7.700	3.700	2.000	3.100	7.900	15	70	BF 900
R-DRY 10000 BVA	DN200	10.250	4.300	2.200	3.550	12.000	22	95	BF 1200
R-DRY 12000 BVA	DN200	11.700	4.400	2.500	3.550	14.200	-	-	BF 1200
R-DRY 14000 BVA	DN200	14.800	4.800	2.600	3.650	16.800	-	-	BF 1500
R-DRY 16000 BVA	DN250	16.000	5.000	3.200	3.650	18.500	-	-	BF 1800
R-DRY 18000 BVA	DN250	18.200	5.200	3.500	4.200	20.000	-	-	BF 1800
R-DRY 20000 BVA	DN250	20.200	6.000	3.500	4.350	23.000	-	-	BF 2500

OPERATING PRESSURE - CORRECTION FACTORS - C_{OP}								
Operating pressure [bar]	4	5	6	7	8	9	10	11
Operating pressure [psi]	58	72	87	100	115	130	145	160
Correction factor C_{OP}	0,63	0,75	0,88	1	1,13	1,25	1,38	1,50

OPERATING TEMPERATURE - CORRECTION FACTORS - C_{OT}					
Operat. temperature [°C]	25	30	35	40	42,5
Operat. temperature [F]	77	86	95	104	108
Correction factor C_{OT}	1	1	1	0,7	0,52

[1] Refers to 1 bar(a) and 20 °C at 7 bar operating pressure , inlet temperature 35 °C and pressure dew point at outlet -40 °C

[2] Refers to dryer inlet and outlet connection without filters



Protection class	IP 54
Filter (inlet)	super fine - 0,01 µm
Filter (outlet)	dust filter; 1 µm
Column insulation	optional
Blower suction conditions	Max 40 °C, 25 % RH

R-DRY BP SERIES

COOLING WITH PURGE

4 to 11 bar
operating pressure

1,5 to 42,5 °C
inlet air temperature range

-40 °C
pressure dew points

390 to 20.200 Nm³/h
flow rate

2-3 %
avg. comp. air consumption

DESCRIPTION

R-DRY BP 400-20000 adsorption dryers are designed for continuous separation of water vapour from compressed air thus lowering the dew point.

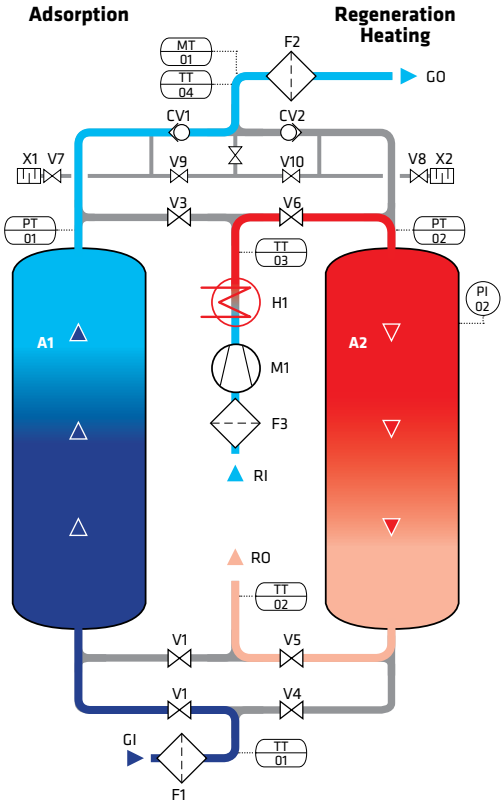
R-DRY BP dryers have two columns that operate alternately. Adsorption takes place under pressure in the first column while the second column regenerates (heated ambient air for desorption + expanded dry compressed air purge for cooling). BP type of dryer is suitable for applications where low PDP is required at hotter and more humid ambient conditions and where compressed air can be utilised for cooling.

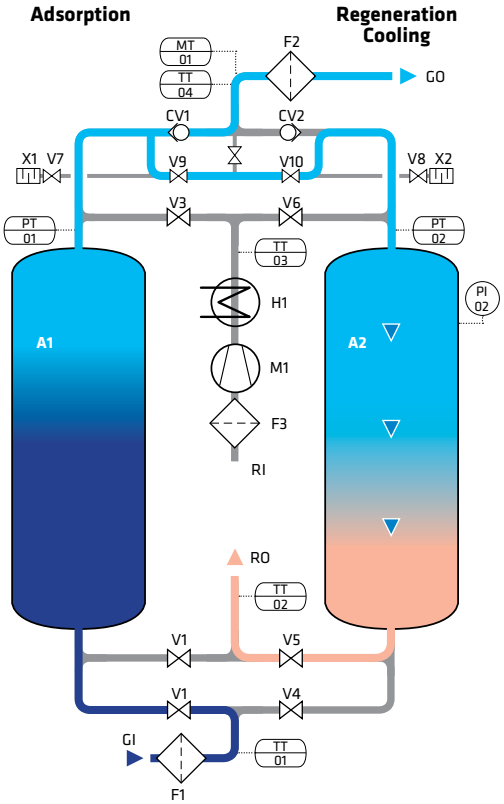
A dryer consists of two columns, filled with desiccant beads, a blower, heater, controller with an LCD display, valves, manometers, and a support construction. A proven and robust design enables efficient and reliable operation, fast installation and simple maintenance.

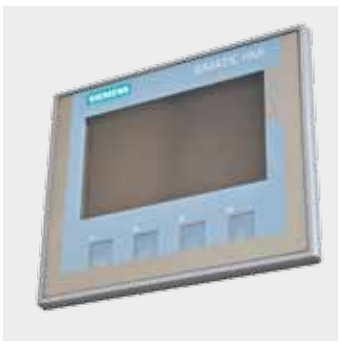
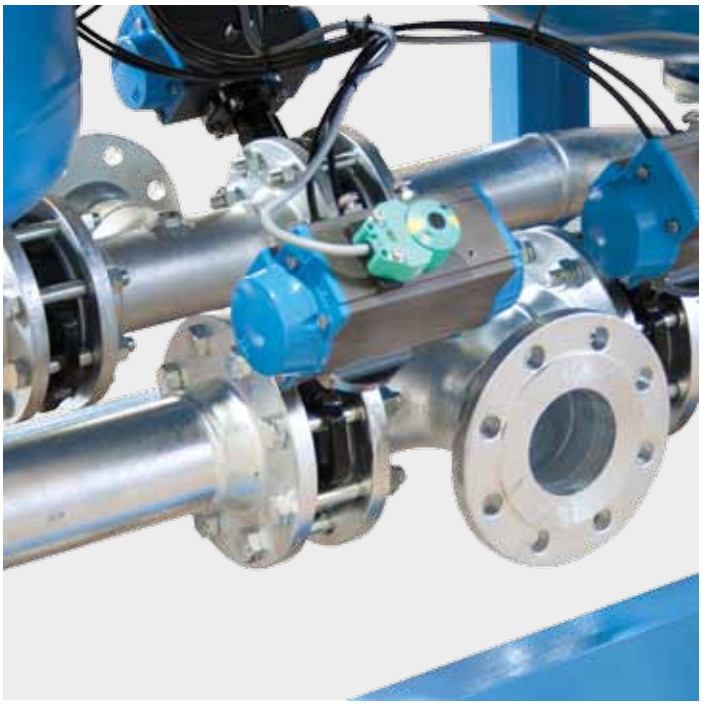
APPLICATIONS

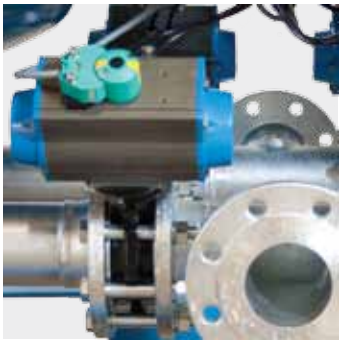
- Compressed air systems

A1-2	pressure vessel
F1	inlet filter (super fine coalescing)
F2	outlet filter (dust)
V1-6	ball valve with pneumatic actuator
V7-10	angle seated valve with pneumatic actuator
CV1-2	check valve
TT1-4	temperature transducer
PI1-2	pressure indicator
PT1-2	pressure transducer
DT1	dew point transducer
M1	blower
H1	heater
F3	regeneration air filter
GI	air inlet
GO	air outlet
RI	regeneration air inlet
RO	regeneration air outlet
ES1-2	expansion silencer

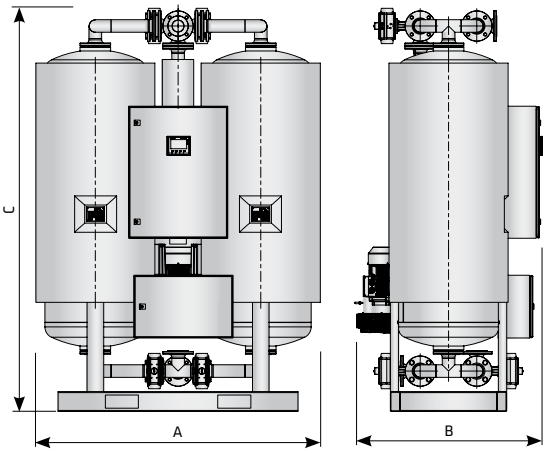






TECHNICAL DATA									
Type	Connection IN/OUT (2)	Nominal volume flow Inlet (1)	Dimensions			Mass	Blower power	Heater power	Filter type
	DN	[Nm³/h]	A [mm]	B [mm]	C [mm]	kg	kW	kW	
R-DRY 400 BP	DN50	390	1.200	850	2.250	1.000	1,3	3,5	AF 0476
R-DRY 600 BP	DN50	590	1.500	900	2.350	1.400	1,6	5,5	AF 0706
R-DRY 780 BP	DN50	780	1.750	1.000	2.450	1.800	1,6	7	AF 0706
R-DRY 1000 BP	DN50	930	1.750	1.250	2.450	1.900	1,6	8	AF 0946
R-DRY 1200 BP	DN80	1.150	1.900	1.100	2.450	2.200	1,6	10	AF 1506
R-DRY 1600 BP	DN80	1.600	1.900	1.350	2.500	2.600	4	14	AF 1756
R-DRY 2000 BP	DN100	1.950	2.200	1.150	2.600	3.400	4	17	AF 2006
R-DRY 2500 BP	DN100	2.530	2.350	1.150	2.750	3.800	7,5	22	AF 2406
R-DRY 3000 BP	DN100	2.990	2.500	1.150	2.750	4.000	8,5	26	BF 300
R-DRY 3600 BP	DN100	3.680	2.800	1.350	2.850	4.800	8,5	32	BF 450
R-DRY 4100 BP	DN125	4.100	3.000	1.350	2.850	5.100	8,5	35	BF 450
R-DRY 5000 BP	DN125	4.990	3.200	1.450	2.950	5.900	15	45	BF 600
R-DRY 6500 BP	DN150	6.550	3.520	1.750	3.050	7.200	15	56	BF 900
R-DRY 7700 BP	DN150	7.700	3.700	2.000	3.100	7.900	15	70	BF 900
R-DRY 10000 BP	DN200	10.250	4.300	2.200	3.550	12.000	22	95	BF 1200
R-DRY 12000 BP	DN200	11.700	4.400	2.500	3.550	14.200	-	-	BF 1200
R-DRY 14000 BP	DN200	14.800	4.800	2.600	3.650	16.800	-	-	BF 1500
R-DRY 16000 BP	DN250	16.000	5.000	3.200	3.650	18.500	-	-	BF 1800
R-DRY 18000 BP	DN250	18.200	5.200	3.500	4.200	20.000	-	-	BF 1800
R-DRY 20000 BP	DN250	20.200	6.000	3.500	4.350	23.000	-	-	BF 2500



OPERATING PRESSURE - CORRECTION FACTORS - C_{OP}								
Operating pressure [bar]	4	5	6	7	8	9	10	11
Operating pressure [psi]	58	72	87	100	115	130	145	160
Correction factor C_{OP}	0,63	0,75	0,88	1	1,13	1,25	1,38	1,50

OPERATING TEMPERATURE - CORRECTION FACTORS - C_{OT}					
Operating temperature [°C]	25	30	35	40	42,5
Operating temperature [F]	77	86	95	104	108
Correction factor C_{OT}	1	1	1	0,7	0,52

(1) Refers to 1 bar(a) and 20 °C at 7 bar operating pressure , inlet temperature 35 °C and pressure dew point at outlet -40 °C

(2) Refers to dryer inlet and outlet connection without filters

Protection class	IP 54
Filter (inlet)	super fine - 0,01 µm
Filter (outlet)	dust filter; 1 µm
Column insulation	optional
Blower suction conditions	Max 50 °C, 35 % RH

R-DRY BVL SERIES

VACUUM REGENERATION WITH CLOSED LOOP

4 to 11 bar
operating pressure

1,5 to 50 °C
ambient operating temp. range

1,5 to 42,5 °C
inlet air temperature range

-40 °C
pressure dew points

390 to 20.200 Nm³/h
flow rate

0 %
avg. comp. air consumption

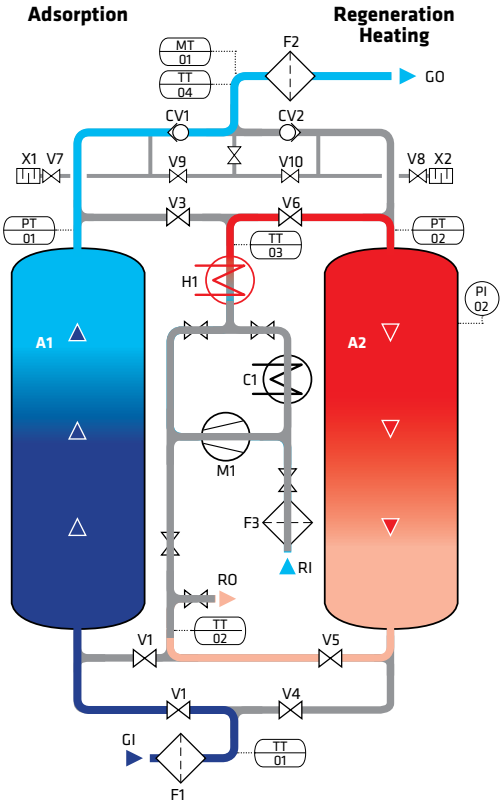
DESCRIPTION

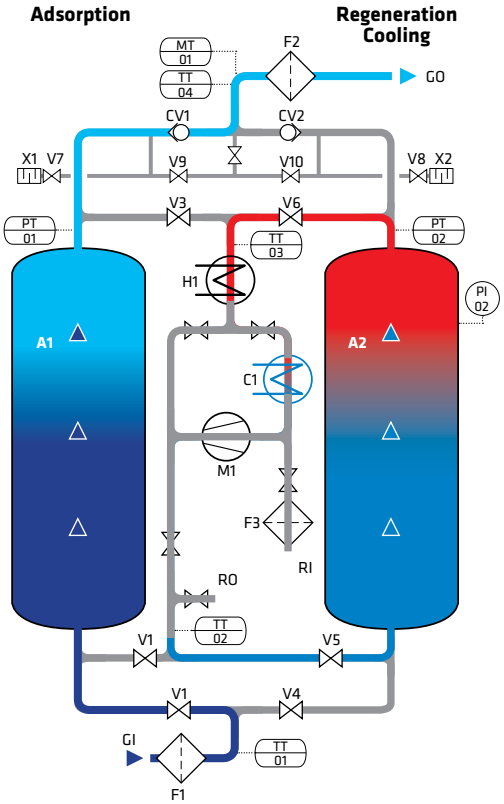
R-DRY BVL 400-10000 adsorption dryers are designed for continuous separation of water vapour from compressed air thus lowering the dew point. R-Dry BVL dryers have two columns that operate alternately. Adsorption takes place under pressure in the first column while the second column is regenerated(heated ambient air for desorption + cooling with water cooled air in a closed loop). Due to cooling in a closed loop BVL type of dryer is suitable for applications where low PDP is required at hotter and more humid ambient conditions. Due to cooling with water cooled air in a closed loop BVL type of dryers don't consume any compressed air for the operation.
A dryer consists of two columns, filled with desiccant beads, blower, heater, air-water heat exchanger, controller with an LCD display, valves, manometers, and support construction. A proven and robust design enables efficient and reliable operation, fast installation and simple maintenance.

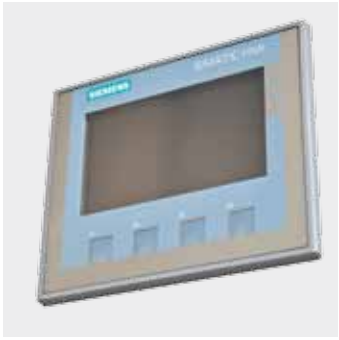
APPLICATIONS

- Compressed air systems

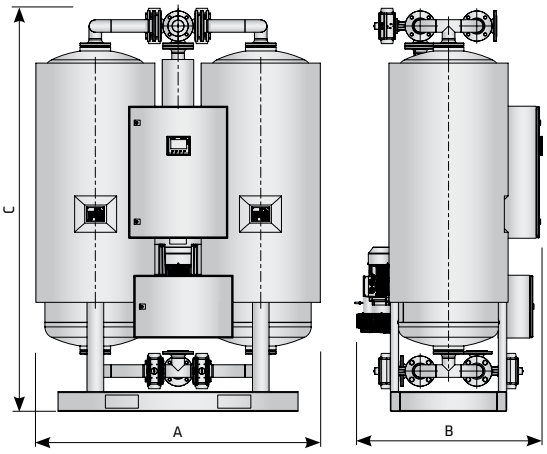
A1-2	pressure vessel
F1	inlet filter (super fine coalescing)
F2	outlet filter (dust)
V1-6	ball valve with pneumatic actuator
V7-10	angle seated valve with pneumatic actuator
CV1-2	check valve
TT1-4	temperature transducer
PI1-2	pressure indicator
PT1-2	pressure transducer
DT1	dew point transducer
M1	blower
H1	heater
F3	regeneration air filter
GI	air inlet
GO	air outlet
RI	regeneration air inlet
RO	regeneration air outlet
ES1-2	expansion silencer
C1	water cooled heat exchanger






TECHNICAL DATA									
Type	Connection IN/OUT (2)	Nominal volume flow Inlet (1)	Dimensions			Mass	Blower power	Heater power	Filter type
	DN	[Nm³/h]	A [mm]	B [mm]	C [mm]	kg	kW	kW	
R-DRY 400 BVL	DN50	390	1.200	850	2.250	1.400	1,3	3,5	AF 0476
R-DRY 600 BVL	DN50	590	1.500	900	2.350	1.900	1,6	5,5	AF 0706
R-DRY 780 BVL	DN50	780	1.750	1.000	2.450	2.300	1,6	7	AF 0706
R-DRY 1000 BVL	DN50	930	1.750	1.250	2.450	2.400	1,6	8	AF 0946
R-DRY 1200 BVL	DN80	1.150	1.900	1.100	2.450	3.000	1,6	10	AF 1506
R-DRY 1600 BVL	DN80	1.600	1.900	1.350	2.500	3.200	4	14	AF 1756
R-DRY 2000 BVL	DN100	1.950	2.200	1.150	2.600	4.420	4	17	AF 2006
R-DRY 2500 BVL	DN100	2.530	2.350	1.150	2.750	5.000	7,5	22	AF 2406
R-DRY 3000 BVL	DN100	2.990	2.500	1.150	2.750	5.200	8,5	26	BF 300
R-DRY 3600 BVL	DN100	3.680	2.800	1.350	2.850	6.240	8,5	32	BF 450
R-DRY 4100 BVL	DN125	4.100	3.000	1.350	2.850	6.700	8,5	35	BF 450
R-DRY 5000 BVL	DN125	4.990	3.200	1.450	2.950	7.700	15	45	BF 600
R-DRY 6500 BVL	DN150	6.550	3.520	1.750	3.050	9.400	15	56	BF 900
R-DRY 7700 BVL	DN150	7.700	3.700	2.000	3.100	10.300	15	70	BF 900
R-DRY 10000 BVL	DN200	10.250	4.300	2.200	3.550	15.600	22	95	BF 1200
R-DRY 12000 BVL	DN200	11.700	4.400	2.500	3.550	-	-	-	BF 1200
R-DRY 14000 BVL	DN200	14.800	4.800	2.600	3.650	-	-	-	BF 1500
R-DRY 16000 BVL	DN250	16.000	5.000	3.200	3.650	-	-	-	BF 1800
R-DRY 18000 BVL	DN250	18.200	5.200	3.500	4.200	-	-	-	BF 1800
R-DRY 20000 BVL	DN250	20.200	6.000	3.500	4.350	-	-	-	BF 2500



OPERATING PRESSURE - CORRECTION FACTORS - C_{OP}								
Operating pressure [bar]	4	5	6	7	8	9	10	11
Operating pressure [psi]	58	72	87	100	115	130	145	160
Correction factor C_{OP}	0,63	0,75	0,88	1	1,13	1,25	1,38	1,50

OPERATING TEMPERATURE - CORRECTION FACTORS - C_{OT}					
Operating temperature [°C]	25	30	35	40	42,5
Operating temperature [F]	77	86	95	104	108
Correction factor C_{OT}	1	1	1	0,7	0,52

Protection class	IP 54
Filter (inlet)	super fine - 0,01 µm
Filter (outlet)	dust filter; 1 µm
Column insulation	optional
Blower suction conditions	Max 50 °C, 35 % RH

(1) Refers to 1 bar(a) and 20 °C at 7 bar operating pressure , inlet temperature 35 °C and pressure dew point at outlet -40 °C

(2) Refers to dryer inlet and outlet connection without filters

RC-DRY SERIES

REGENERATION BY HEAT OF COMPRESSION - FULL STREAM

4 to 11 bar
operating pressure

140 to 200 °C
inlet air temperature range

-20 °C
pressure dew points

390 to 20.200 Nm³/h
flow rate

0 %
avg. comp. air consumption

DESCRIPTION

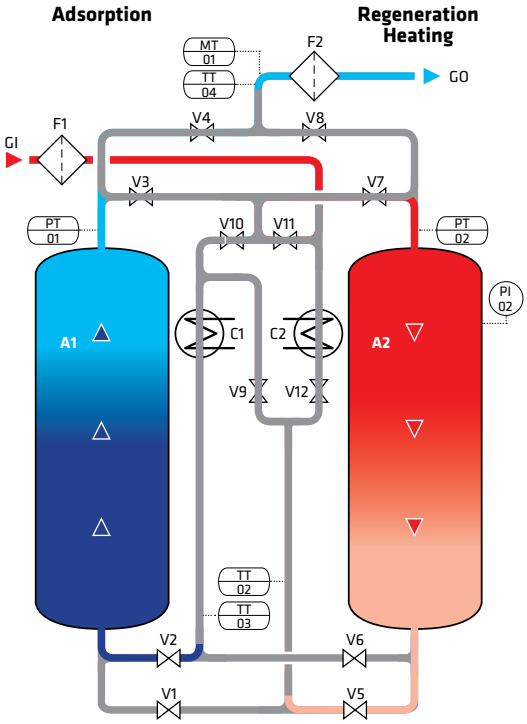
RC-DRY adsorption dryers have been designed for continuous separation of water vapour from compressed air thus reducing dew point. Operation of dryer requires two columns operated alternately. Heat of compression dryers do not need any additional source of energy to regenerate the adsorbent as they fully or partially utilise the heat generated during compression of the air in the compressor. Adsorption as well as regeneration take place under pressure meaning no compressed air is wasted for depressurisation.

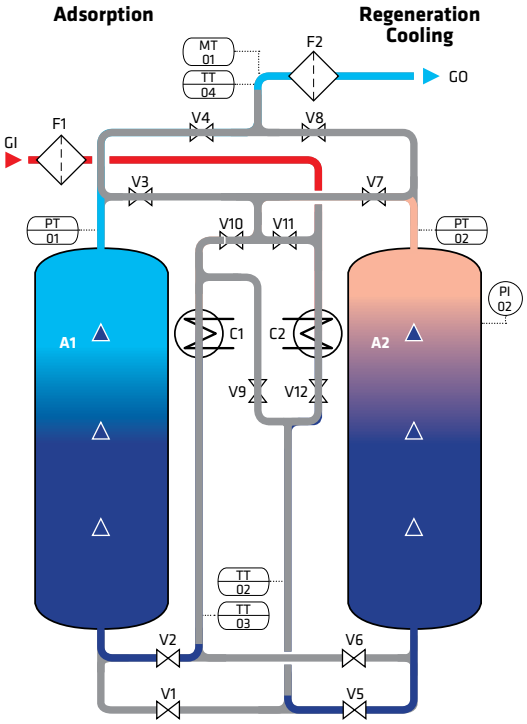
A dryer consists of two columns, filled with desiccant beads, water cooled heat exchangers, controller with LCD display, valves, manometers, and support construction. Proven robust design enables efficient and reliable operation, fast installation and simple maintenance.

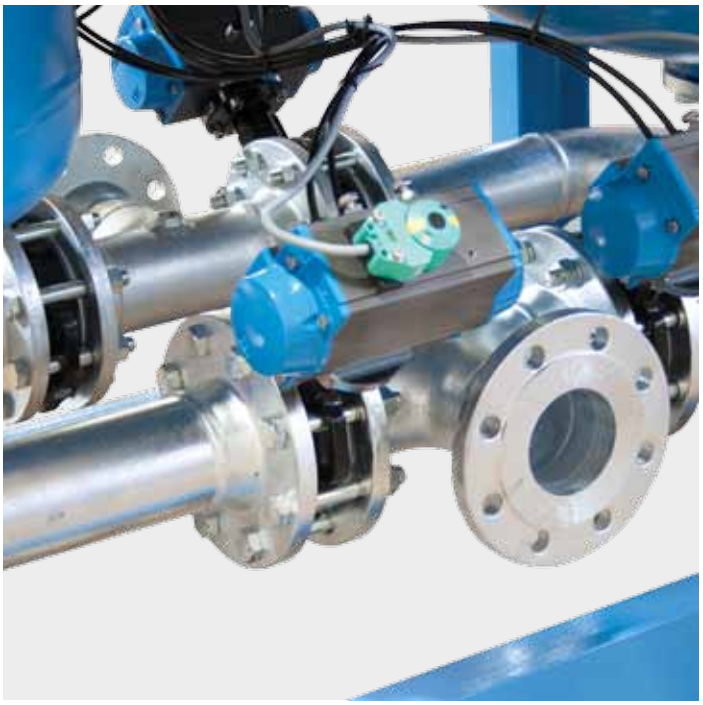
APPLICATIONS

- Compressed air systems

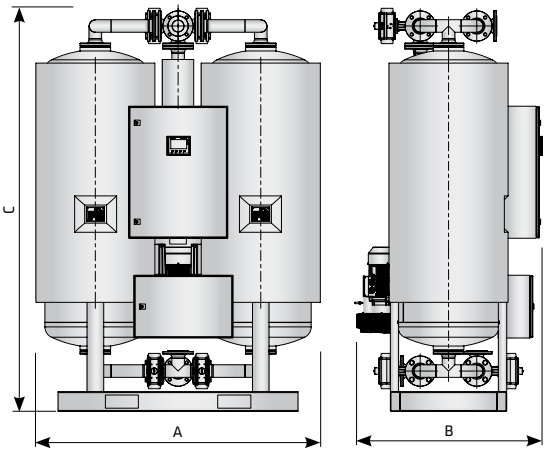
A1-2	pressure vessel
F1	inlet filter (super fine coalescing)
F2	outlet filter (dust)
V1-6	ball valve with pneumatic actuator
V7-10	angle seated valve with pneumatic actuator
CV1-2	check valve
TT1-4	temperature transducer
PI1-2	pressure indicator
PT1-2	pressure transducer
DT1	dew point transducer
GI	air inlet
GO	air outlet
RO	regeneration air outlet
C1-2	water cooled heat exchanger







TECHNICAL DATA			
Type	Connection IN/OUT [2]	Nominal volume flow Inlet [1]	Filter type
	DN	[Nm³/h]	
RC-DRY 400	DN50	390	AF 0476
RC-DRY 600	DN50	590	AF 0706
RC-DRY 780	DN50	780	AF 0706
RC-DRY 1000	DN50	930	AF 0946
RC-DRY 1200	DN80	1.150	AF 1506
RC-DRY 1600	DN80	1.600	AF 1756
RC-DRY 2000	DN100	1.950	AF 2006
RC-DRY 2500	DN100	2.530	AF 2406
RC-DRY 3000	DN100	2.990	BF 300
RC-DRY 3600	DN100	3.680	BF 450
RC-DRY 4100	DN125	4.100	BF 450
RC-DRY 5000	DN125	4.990	BF 600
RC-DRY 6500	DN150	6.550	BF 900
RC-DRY 7700	DN150	7.700	
RC-DRY 10000	DN200	10.250	
RC-DRY 12000	DN200	11.700	
RC-DRY 14000	DN200	14.800	
RC-DRY 16000	DN250	16.000	
RC-DRY 18000	DN250	18.200	
RC-DRY 20000	DN250	20.200	



OPERATING PRESSURE - CORRECTION FACTORS - C_{OP}								
Operating pressure [bar]	4	5	6	7	8	9	10	11
Operating pressure [psi]	58	72	87	100	115	130	145	160
Correction factor C_{OP}	0,63	0,75	0,88	1	1,13	1,25	1,38	1,50

OPERATING TEMPERATURE - CORRECTION FACTORS - C_{OT}					
Operating temperature [°C]	25	30	35	40	42,5
Operating temperature [F]	77	86	95	104	108
Correction factor C_{OT}	1	1	1	0,7	0,52

Protection class	IP 54
Filter (inlet)	super fine - 0,01 µm
Filter (outlet)	dust filter; 1 µm
Column insulation	optional

[1] Refers to 1 bar(a) and 20 °C at 7 bar operating pressure , inlet temperature 35 °C and pressure dew point at outlet -40 °C

[2] Refers to dryer inlet and outlet connection without filters

HPR-DRY SERIES

HIGH PRESSURE HEAT REGENERATION

up to 50 bar
operating pressure

1,5 to 42,5 °C
inlet air temperature range

-40 °C
pressure dew points

2.485 to 23.400 Nm³/h
flow rate

RAL 5012
standard colour

DESCRIPTION

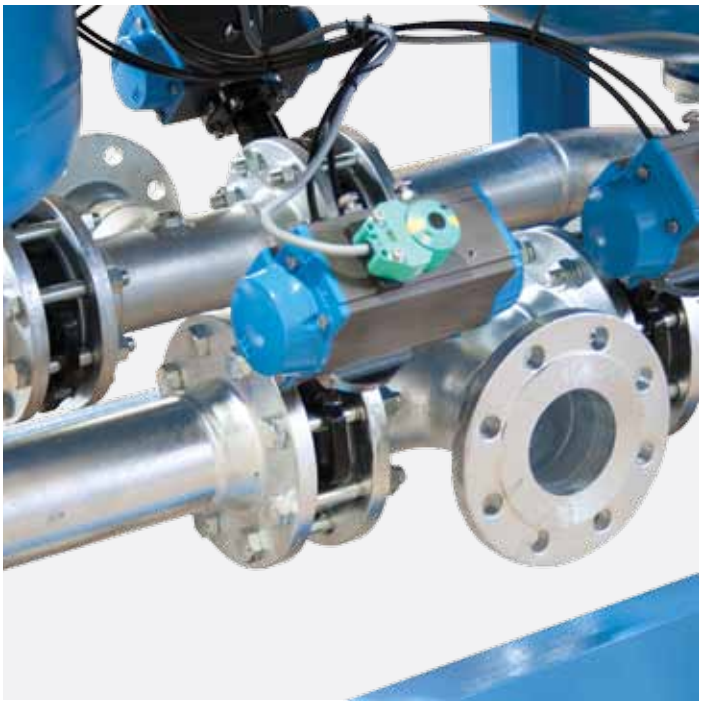
HPR-DRY adsorption dryers are designed for continuous separation of water vapour from compressed air thus reducing dew point. Operation of dryer requires two columns operated alternately.

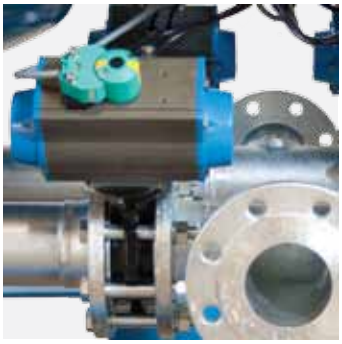
Adsorption takes place under pressure in first column while second column regenerates with a heated ambient air or purge.

A dryer consists of two columns, filled with desiccant beads, blower, heater, controller with LCD display, valves, manometers, and support construction. Proven robust design enables efficient and reliable operation, fast installation and simple maintenance.

APPLICATIONS

- Compressed air systems





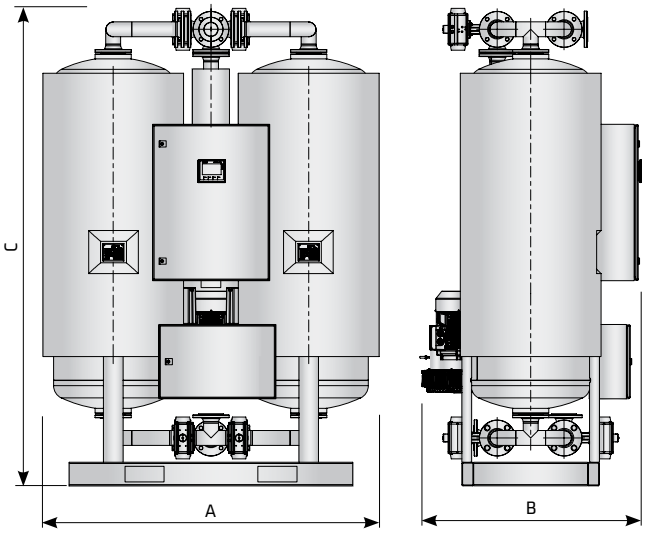
Protection class	IP 54
Filter (inlet)	super fine - 0,01 µm
Filter (outlet)	dust filter; 1 µm
Column insulation	optional

Type	Max. oper. pressure	Connection IN/OUT	Inlet nominal volume flow(1)
	bar	DN	[Nm³/h]
HPR-DRY 400	50	DN50	2.485
HPR-DRY 600	50	DN50	3.760
HPR-DRY 780	50	DN50	4.970
HPR-DRY 1000	50	DN50	5.930
HPR-DRY 1200	50	DN80	7.330
HPR-DRY 1600	50	DN80	10.200
HPR-DRY 2000	50	DN100	12.430
HPR-DRY 2500	50	DN100	16.120
HPR-DRY 3000	50	DN100	19.000
HPR-DRY 3600	50	DN100	23.400

OPERATING PRESSURE 50 bar - CORRECTION FACTORS - C_{OP} (35 °C; 100 bar)						
Operating pressure [bar]	25	30	35	40	45	50
Correction factor C_{OP}	0,51	0,61	0,71	0,81	0,90	1

OPERATING TEMPERATURE - CORRECTION FACTORS - C_{OT}					
Operating temperature [°C]	25	30	35	40	42,5
Operating temperature [F]	77	86	95	104	108
Correction factor C_{OT}	1	1	1	0,7	0,52

(1) Refers to 1 bar(a) and 20 °C at 7 bar operating pressure, inlet temperature 35 °C and pressure dew point at outlet -40°C.



HP-DRY SERIES

HIGH PRESSURE HEATLESS REGENERATION ADSORPTION DRYERS

50, 100, 250, 420 bar
operating pressure

1,5 to 50 °C
inlet air temperature range

-40 °C
pressure dew points

50 to 1600 Nm³/h
flow rate

RAL 5012
standard colour

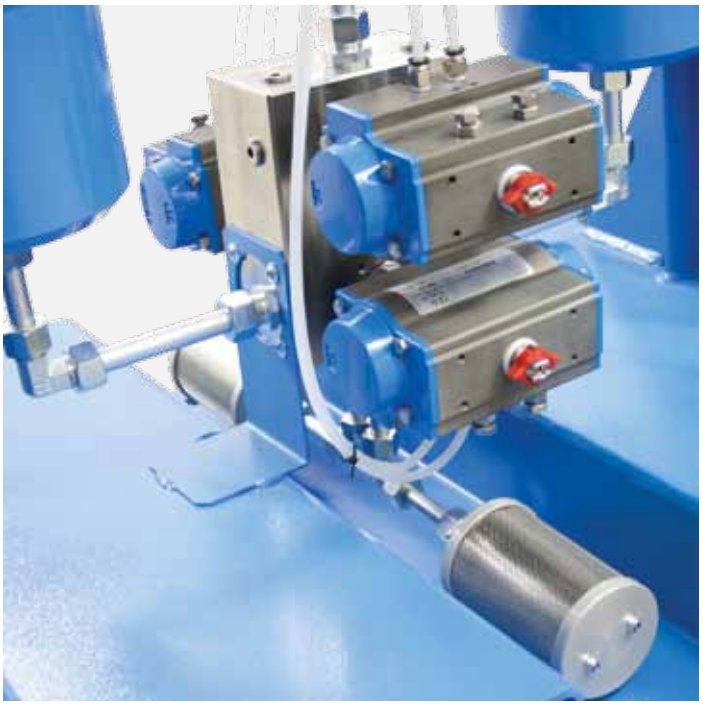
DESCRIPTION

HP-DRY adsorption dryers have been designed for continuous separation of water vapour from compressed air thus reducing dew point. Operation of the dryer requires two columns operated alternately. Adsorption takes place under pressure in the first column while the second column regenerates with a portion of already dried compressed air at ambient pressure.

Dryers consists from control valves, controller with LED display and two columns filled with desiccant. Springs in the columns make sure that the desiccant beads will not move during operation. Proven robust design enables efficient and reliable operation, fast installation and simple maintenance.

APPLICATIONS

- Compressed air systems



50 bar version							
Type	Connection [3]	Inlet flow [1]	Outlet flow [2]	Dimensions			Mass
	IN/OUT ["]	[Nm³/h]	[Nm³/h]	H [mm]	W [mm]	D [mm]	[kg]
HP-DRY 050 PN50	G 3/8"	50	48,5	1200	680	580	130
HP-DRY 100 PN50	G 3/8"	100	97	1250	680	580	150
HP-DRY 150 PN50	G 3/8"	150	145,5	1550	680	580	170
HP-DRY 250 PN50	G 3/8"	250	242,5	1700	820	700	260
HP-DRY 350 PN50	G 1/2"	350	339,5	1700	820	700	320
HP-DRY 500 PN50	G 1/2"	500	485	1920	820	700	410
HP-DRY 650 PN50	G 1/2"	650	630,5	2250	820	700	460

OPERATING PRESSURE 50 bar - CORRECTION FACTORS - C_{OP} (35 °C; 50 bar)						
Operating pressure [bar]	25	30	35	40	45	50
Correction factor C_{OP}	0,51	0,61	0,71	0,81	0,90	1

100 bar version							
Type	Connection [3]	Inlet flow [1]	Outlet flow [2]	Dimensions			Mass
	IN/OUT ["]	[Nm³/h]	[Nm³/h]	H [mm]	W [mm]	D [mm]	[kg]
HP-DRY 050 PN100	G 3/8"	50	48,5	1250	680	580	125
HP-DRY 100 PN100	G 3/8"	100	97	1350	680	580	170
HP-DRY 150 PN100	G 3/8"	150	145,5	1650	680	580	200
HP-DRY 250 PN100	G 3/8"	250	242,5	1550	680	600	210
HP-DRY 350 PN100	G 1/2"	350	339,5	1460	820	680	270
HP-DRY 500 PN100	G 1/2"	500	485	1700	820	680	290
HP-DRY 650 PN100	G 1/2"	650	630,5	1800	820	700	380
HP-DRY 800 PN100	G 1/2"	800	776	1850	820	680	480

OPERATING PRESSURE 100 bar - CORRECTION FACTORS - C_{OP} (35 °C; 100 bar)						
Operating pressure [bar]	50	60	70	80	90	100
Correction factor C_{OP}	0,50	0,60	0,70	0,80	0,90	1,00

250 bar version							
Type	Connection [3]	Inlet flow [1]	Outlet flow [2]	Dimensions			Mass
	IN/OUT ["]	[Nm³/h]	[Nm³/h]	H [mm]	W [mm]	D [mm]	[kg]
HP-DRY 050 PN250	G 3/8"	50	48,5	1000	680	450	95
HP-DRY 100 PN250	G 3/8"	100	97	1360	680	450	135
HP-DRY 150 PN250	G 3/8"	150	145,5	1600	680	450	145
HP-DRY 250 PN250	G 3/8"	250	242,5	1500	680	450	180
HP-DRY 350 PN250	G 1/2"	350	339,5	1400	820	650	250
HP-DRY 500 PN250	G 1/2"	500	485	1500	820	650	300
HP-DRY 650 PN250	G 1/2"	650	630,5	1500	820	650	400
HP-DRY 800 PN250	G 1/2"	800	776	1550	820	650	460
HP-DRY 1000 PN250	G 1/2"	1000	970	1600	820	650	580
HP-DRY 1200 PN250	G 1/2"	1200	1164	1550	820	700	620
HP-DRY 1400 PN250	G 1/2"	1400	1358	1650	820	700	650

OPERATING PRESSURE 250 bar - CORRECTION FACTORS - C_{OP} (35 °C; 250 bar)						
Operating pressure [bar]	110	130	160	190	220	250
Correction factor C_{OP}	0,44	0,52	0,64	0,76	0,88	1,00

420 bar version							
Type	Connection [3]	Inlet flow [1]	Outlet flow [2]	Dimensions			Mass
	IN/OUT ["]	[Nm³/h]	[Nm³/h]	H [mm]	W [mm]	D [mm]	[kg]
HP-DRY 100 PN420	G 3/8"	100	97	1120	680	450	120
HP-DRY 150 PN420	G 3/8"	150	145,5	1360	680	450	135
HP-DRY 250 PN420	G 3/8"	250	242,5	1450	680	580	190
HP-DRY 350 PN420	G 1/2"	350	339,5	1350	820	580	270
HP-DRY 500 PN420	G 1/2"	500	485	1380	820	650	310
HP-DRY 650 PN420	G 1/2"	650	630	1450	820	650	440
HP-DRY 800 PN420	G 1/2"	800	776	1230	820	650	425
HP-DRY 1000 PN420	G 1/2"	1000	970	1450	820	650	600
HP-DRY 1200 PN420	G 1/2"	1200	1164	1450	1000	900	850
HP-DRY 1400 PN420	G 1/2"	1400	1358	1500	1000	900	800
HP-DRY 1600 PN420	G 1/2"	1600	1552	1450	1000	900	1200

OPERATING PRESSURE 420 bar - CORRECTION FACTORS - C_{OP} (35 °C; 420 bar)								
Operating pressure [bar]	250	275	300	325	350	375	400	420
Correction factor C_{OP}	0,59	0,65	0,71	0,77	0,83	0,89	0,95	1,00

OPERATING TEMPERATURE - CORRECTION FACTORS - C_{OT}						
Operating temperature [°C]	25	30	35	40	45	50
Correction factor C_{OT}	1	1	1	0,97	0,87	0,80

DEW POINT - CORRECTION FACTORS - C_{DP}			
Dew point temperature [°C]	-25	-40	-55
Correction factor C_{DP}	1,1	1	0,7

[1] Refers to 1 bar(a) and 20 °C, at nominal operating pressure , inlet temperature 35 °C and pressure dew point at outlet -40 °C.

[2] Purge air requirements depend on actual operating conditions (Typically about 3 %).

[3] Threads of the dryer are male. It is possible to remove the fittings on the inlet and outlet, to get a pipe connection (for welding), where you should contact the manufacturer for the diameter and thickness. Also on the inlet you can remove the fittings and pipes entirely to get a female connection directly on the pre-filter.

M-DRY SERIES

MEMBRANE COMPRESSED AIR DRYERS

12 bar
operating pressure

1,5 to 60 °C
operating temperature range

+15, +3, -20, -40 °C
pressure dew points

3 to 180 Nm³/h
flow rate

DESCRIPTION

M-DRY membrane air dryers have been developed for high efficient removal of water vapours from compressed air. Super fine coalescing filter is required upstream.

APPLICATIONS

- Automotive painting
- Industrial ''Point-of-use'' drying
- Low dew point instrument air
- Pneumatics
- Medical air
- Analytical equipment
- Pressurizing electrical cabinets

TECHNICAL DATA								
Model	Pipe size	Operating pressure	Flow rate *		DImensions [mm]			
	inch	bar	Nm³/h	scfm	A	B	C	D
M-DRY 3	1/4	12	3	1,8	224	43,7	325	175
M-DRY 6	1/4	12	6	3,5	325	43,7	453	175
M-DRY 9	1/4	12	9	5,3	427	43,7	555	175
M-DRY 12	1/4	12	12	7,1	503	43,7	611	175
M-DRY 18	1/2	12	18	10,6	312	61	476	208
M-DRY 24	1/2	12	24	14,1	376	61	540	208
M-DRY 32	1/2	12	36	21,2	465	61	661	208
M-DRY 44	1/2	12	48	28,3	592	61	788	208
M-DRY 63	1/2	12	63	37,1	411	89	607	208
M-DRY 90	1/2	12	90	53	551	89	755	284
M-DRY 123	1/2	12	123	72,4	551	89	755	284
M-DRY 180	1	12	180	106,6	607	114	1805	290

*At 7 bar, inlet dew point +35 °C, outlet dew point +15 °C

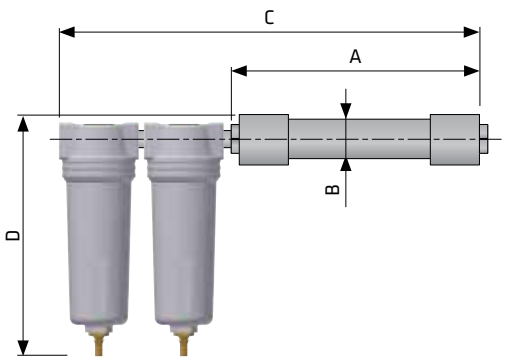
PERFORMANCE DATA								
Outlet dew point	**15 °C**		**3 °C**		**-20 °C**		**-40 °C**	
Purge air consumption	**10 %**		**14 %**		**21 %**		**29 %**	
% Water removal	**69,70 %**		**86,53 %**		**98,20 %**		**99,77 %**	
	Nm³/h	**scfm**	**Nm³/h**	**scfm**	**Nm³/h**	**scfm**	**Nm³/h**	**scfm**
MFP 3	3	1,8	2,2	1,3	1,4	0,8	1,02	0,6
MFP 6	6	3,5	4,3	2,5	2,8	1,7	2	1,2
MFP 9	9	5,3	6,4	3,8	4,3	2,5	3,1	1,8
MFP 12	12	7,1	8,5	5,0	5,7	3,3	4,1	2,4
MFP 18	18	10,6	12,8	7,5	8,5	5,0	6,2	3,6
MFP 24	24	14,1	17	10,1	11,3	6,7	8,2	4,8
MFP 32	36	21,2	25,6	15,1	17	10	12,4	7,3
MFP 44	48	28,3	34,1	20,1	22,7	13,4	16,4	9,7
MFP 63	63	37,1	44,9	26,4	29,7	17,5	21,5	12,7
MFP 90	90	53	67,3	39,6	43,8	25,8	31,1	18,3
MFP 123	123	72,4	91,7	54,0	58,8	34,6	42,6	25,1
MFP 180	180	106,6	128,1	75,4	85,5	50,3	61,5	36,2

At 7 bar, inlet dew point +35 °C, data refers on inlet flow capacity

CORRECTION FACTORS									
Operating pressure [bar]	4	5	6	7	8	9	10	11	12
Operating pressure [psi]	58	72	87	100	115	130	145	160	174
Correction factor - C_{OP}	0,41	0,56	0,76	1	1,22	1,48	1,76	1,86	2,22

quality class - solids (ISO 8573-1)	-
quality class - water (ISO 8573-1)	2*
quality class - oils (ISO 8573-1)	-
differential pressure [mbar / psi]	200 / 2,9
required inlet air quality (particles)	class 1
required inlet air quality (oil)	class 1 <0,01 mg/m³

*Outlet dew point depend on inlet conditions and flow.
For specific operating conditions check tables.



RDP SERIES

REFRIGERATION COMPRESSED AIR DRYERS

14 bar
max. operating pressure

1,5 to 45 °C
operating ambient temperature

3°C
pressure dew point

20 to 13.200 Nm³/h
flow rate

R134a (R407c)
refrigerant

air cooled
type of cooling

DESCRIPTION

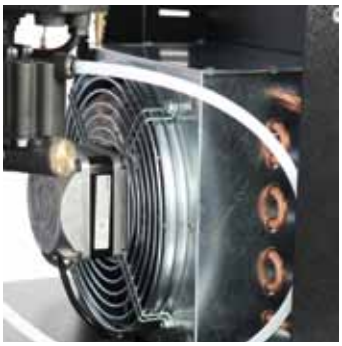
RDP refrigeration dryers have been designed to effectively separate water from the compressed air thus lower pressure dew point all the way down to +3°C.

Drying is achieved on the principle of cooling which takes place inside highly efficient and ultra-compact 3 stage heat exchanger. In the first stage (air-air heat exchanger) hot and humid inlet air is being precooled by the cold outgoing air. In the second stage (air-refrigerant heat exchanger) intensive water condensation takes place due to cooling the air.

All condensed water is separated from the main compressed air stream in the third stage by the integrated demister. A proven and robust design enables efficient and reliable operation, fast installation and simple maintenance.

APPLICATIONS

- Compressed air systems
- Sized to match standard compressor outputs



TECHNICAL DATA

Type	Air flow	Power supply	Dimensions			Power input	Air connection
	Nm³/h	Ph / V / Hz	W [mm]	L [mm]	H [mm]	W	
RDP 20	20	1/230/50	358	455	604	150	G 3/8" BSP-F
RDP 35	35	1/230/50	358	455	604	150	G 3/8" BSP-F
RDP 50	50	1/230/50	358	455	604	180	G 3/4" BSP-F
RDP 75	75	1/230/50	358	455	604	250	G 3/4" BSP-F
RDP 100	100	1/230/50	358	455	604	360	G 3/4" BSP-F
RDP 140	140	1/230/50	486	580	904	460	G 1" BSP-F
RDP 180	180	1/230/50	486	580	904	590	G 1" BSP-F
RDP 235	235	1/230/50	486	580	904	840	G 1" BSP-F
RDP 300	300	1/230/50	486	580	904	1.200	G 1 1/2" BSP-F
RDP 380	380	1/230/50	596	735	1.104	1.400	G 1 1/2" BSP-F
RDP 480	480	1/230/50	596	735	1.104	1.900	G 1 1/2" BSP-F
RDP 600	600	1/230/50	718	697	1.405	1.900	G 2" BSP-F
RDP 750	750	3/400/50	596	735	1.104	2.700	G 2" BSP-F
RDP 950	950	3/400/50	718	697	1.405	3.800	G 2" BSP-F
RDP 1150	1.150	3/400/50	823	837	1.426	3.700	G 2 1/2" BSP-F
RDP 1300	1.300	3/400/50	823	837	1.426	4.700	G 2 1/2" BSP-F
RDP 1500	1.500	3/400/50	900	1.100	1.500		G 2 1/2" BSP-F
RDP 1900	1.900	3/400/50	900	1.100	1.500		DN80
RDP 2600	2.600	3/400/50	1.200	1.250	1.750		DN100
RDP 3400	3.400	3/400/50	1.200	1.250	1.750		DN100
RDP 4400	4.400	3/400/50	1.200	1.250	1.750		DN125
RDP 5400	5.400	3/400/50	1.350	1.800	1.850		DN125
RDP 6600	6.600	3/400/50	1.350	1.800	1.850		DN150
RDP 7200	7.200	3/400/50	1.350	1.800	1.850		DN150
RDP 8800	8.800	3/400/50	1.350	1.800	1.850		DN200
RDP 10800	10.800	3/400/50	1.600	2.300	2.500		DN200
RDP 13200	13.200	3/400/50	1.600	2.300	2.500		DN200

CORRECTION FACTOR FOR OPERATING PRESSURE CHANGES

Operating pressure [bar]	4	5	6	7	8	10	12	14
Operating pressure [bar]	58	72	87	100	115	145	174	203
Correction factor	0,77	0,86	0,93	1,00	1,05	1,14	1,21	1,27

CORRECTION FACTOR FOR DEW POINT CHANGES

Temperature [°C]	3	5	7	10
Temperature [°F]	37,4	41	44,6	50
Correction factor	1,00	1,099	1,209	1,385

CORRECTION FACTOR FOR INLET TEMPERATURE CHANGES

Temperature [°C]	≤25	30	35	40	45	50	55
Temperature [°F]	77	86	95	104	113	122	131
Correction factor	1,2	1,12	1	0,83	0,69	0,59	0,5

CORRECTION FACTOR FOR AMBIENT TEMPERATURE CHANGES

Temperature [°C]	≤25	30	35	40	45
Temperature [°F]	77	86	95	104	113
Correction factor	1	0,96	0,9	0,82	0,72

RDL SERIES

REFRIGERATION COMPRESSED AIR DRYERS

14 bar
max. operating pressure

1,5 to 45 °C
operating ambient temperature

5°C
pressure dew point

20 to 235 Nm³/h
flow rate

R134a
refrigerant

air cooled
type of cooling

DESCRIPTION

RDL dryer series utilizes a natural evolution of the RDP series. Drying is achieved on the principle of cooling which takes place inside highly efficient and ultra-compact 3 stage heat exchanger.

This series is designed with focus on essential components. Its compact size, optimized layout and innovative solutions reduce manufacturing costs whilst maintaining the same levels of reliability, quality and attention to details.

RDL dryer series is designed and manufactured with respect to the environment using recyclable materials.

APPLICATIONS

- Light industrial applications

TECHNICAL DATA							
Type	Inlet flow	Power supply	Dimensions			Power input	Air connection IN and OUT
	Nm^3/h	Ph / V / Hz	W [mm]	L [mm]	H [mm]	W	
RDL 20	20	1/230/50	358	455	604	150	G 3/8" BSP-F
RDL 35	35	1/230/50	358	455	604	150	G 3/8" BSP-F
RDL 50	50	1/230/50	358	455	604	180	G 3/4" BSP-F
RDL 75	75	1/230/50	358	455	604	250	G 3/4" BSP-F
RDL 100	100	1/230/50	358	455	604	360	G 3/4" BSP-F
RDL 140	140	1/230/50	486	580	904	460	G 1" BSP-F
RDL 180	180	1/230/50	486	580	904	590	G 1" BSP-F
RDL 235	235	1/230/50	486	580	904	840	G 1" BSP-F

CORRECTION FACTOR FOR OPERATING PRESSURE CHANGES								
Operating pressure [bar]	4	5	6	7	8	10	12	14
Operating pressure [bar]	58	72	87	100	115	145	174	203
Correction factor	0,77	0,86	0,93	1,00	1,05	1,14	1,21	1,27

CORRECTION FACTOR FOR DEW POINT CHANGES				
Temperature [°C]	3	5	7	10
Temperature [°F]	37,4	41	44,6	50
Correction factor	0,9	1,0	1,1	1,26

CORRECTION FACTOR FOR INLET TEMPERATURE CHANGES							
Temperature [°C]	≤25	30	35	40	45	50	55
Temperature [°F]	77	86	95	104	113	122	131
Correction factor	1,2	1,12	1	0,83	0,69	0,59	0,5

CORRECTION FACTOR FOR AMBIENT TEMPERATURE CHANGES					
Temperature [°C]	≤25	30	35	40	45
Temperature [°F]	77	86	95	104	113
Correction factor	1	0,96	0,9	0,82	0,72

RDF SERIES

REFRIGERATION COMPRESSED AIR DRYERS WITH INTEGRATED FILTERS

14 bar
max. operating pressure

1,5 to 45 °C
operating ambient temperature

5°C
pressure dew point

20 to 235 Nm³/h
flow rate

R134a
refrigerant

air cooled
type of cooling

DESCRIPTION

For maximum convenience the RDF dryer series is equipped with air inlet and outlet filters. It is based on the RDL series with extended casing to include them. The design allows service technicians an easy element replacement.

This series is designed with focus on essential components. Its compact size, optimized layout and innovative solutions reduce manufacturing costs whilst maintaining the same levels of reliability, quality and attention to details.

RDF dryer series is designed and manufactured with respect to the environment using recyclable materials.

Drying is achieved on the principle of cooling which takes place inside highly efficient and ultra-compact 3 stage heat exchanger.

APPLICATIONS

- Compressed air systems

TECHNICAL DATA								
Type	Inlet flow	Power supply	Dimensions			Power input	Air connection IN and OUT	Integrated filters
	Nm^3/h	Ph / V / Hz	W [mm]	L [mm]	H [mm]	W		
RDF 20	20	1/230/50	358	455	604	150	G 3/8" BSP-F	AF 0056
RDF 35	35	1/230/50	358	455	604	150	G 3/8" BSP-F	AF 0056
RDF 50	50	1/230/50	358	455	604	180	G 3/4" BSP-F	AF 0106
RDF 75	75	1/230/50	358	455	604	250	G 3/4" BSP-F	AF 0106
RDF 100	100	1/230/50	358	455	604	360	G 3/4" BSP-F	AF 0106
RDF 140	140	1/230/50	486	580	904	460	G 1" BSP-F	AF 0186
RDF 180	180	1/230/50	486	580	904	590	G 1" BSP-F	AF 0306
RDF 235	235	1/230/50	486	580	904	840	G 1" BSP-F	AF 0306

CORRECTION FACTOR FOR OPERATING PRESSURE CHANGES								
Operating pressure [bar]	4	5	6	7	8	10	12	14
Operating pressure [bar]	58	72	87	100	115	145	174	203
Correction factor	0,77	0,86	0,93	1,00	1,05	1,14	1,21	1,27

CORRECTION FACTOR FOR DEW POINT CHANGES				
Temperature [°C]	3	5	7	10
Temperature [°F]	37,4	41	44,6	50
Correction factor	0,9	1,0	1,1	1,26

CORRECTION FACTOR FOR INLET TEMPERATURE CHANGES							
Temperature [°C]	≤25	30	35	40	45	50	55
Temperature [°F]	77	86	95	104	113	122	131
Correction factor	1,2	1,12	1	0,83	0,69	0,59	0,5

CORRECTION FACTOR FOR AMBIENT TEMPERATURE CHANGES					
Temperature [°C]	≤25	30	35	40	45
Temperature [°F]	77	86	95	104	113
Correction factor	1	0,96	0,9	0,82	0,72

RDHP SERIES

REFRIGERATION HIGH PRESSURE COMPRESSED AIR DRYERS

50 bar
max. operating pressure

1,5 to 45 °C
operating ambient temperature

3°C
pressure dew point

20 to 950 Nm³/h
flow rate

R134a
refrigerant

air cooled
type of cooling

DESCRIPTION

RDHP series (high pressure dryers for compressed air systems up to 50 barg) makes the most of manufacturing and functional advantages of heat exchangers, designed for high pressure working conditions.

Drying is achieved on the principle of cooling which takes place with highly efficient three stage air thermal management.

Excellent performance with low pressure drop and constant pressure dew point is standard on this series. Robustness, simple and ergonomic component layout guarantees functionality and efficiency.

APPLICATIONS

- High pressure compressed air systems

TECHNICAL DATA					
Type	Inlet flow	Dimensions			Air connection IN and OUT
	Nm^3/h	W [mm]	L [mm]	H [mm]	
RDHP 20	20	358	455	604	G 3/8" BSP-F
RDHP 35	35	358	455	604	G 3/8" BSP-F
RDHP 50	50	358	455	604	G 3/8" BSP-F
RDHP 75	75	358	455	604	G 3/8" BSP-F
RDHP 100	100	358	455	604	G 3/8" BSP-F
RDHP 140	140	486	580	904	G 1/2" BSP-F
RDHP 180	180	486	580	904	G 1/2" BSP-F
RDHP 235	235	486	580	904	G 1/2" BSP-F
RDHP 300	300	486	580	904	G 3/4" BSP-F
RDHP 380	380	596	735	1104	G 3/4" BSP-F
RDHP 480	480	596	735	1104	G 3/4" BSP-F
RDHP 600	600	718	697	1405	G 1" BSP-F
RDHP 750	750	596	735	1104	G 1" BSP-F
RDHP 950	950	718	697	1405	G 1" BSP-F

CORRECTION FACTOR FOR OPERATING PRESSURE CHANGES								
Operating pressure [bar]	15	20	25	30	35	40	45	50
Operating pressure [bar]	218	290	363	435	508	580	652	725
Correction factor	0,52	0,64	0,73	0,80	0,85	0,91	0,95	1

CORRECTION FACTOR FOR DEW POINT CHANGES				
Temperature [°C]	3	5	7	10
Temperature [°F]	37,4	41	44,6	50
Correction factor	1,00	1,099	1,209	1,385

CORRECTION FACTOR FOR INLET TEMPERATURE CHANGES							
Temperature [°C]	≤25	30	35	40	45	50	55
Temperature [°F]	77	86	95	104	113	122	131
Correction factor	1,2	1,12	1	0,83	0,69	0,59	0,5

CORRECTION FACTOR FOR AMBIENT TEMPERATURE CHANGES					
Temperature [°C]	≤25	30	35	40	45
Temperature [°F]	77	86	95	104	113
Correction factor	1	0,96	0,9	0,82	0,72

ACA SERIES

AIR COOLED AFTERCOOLERS

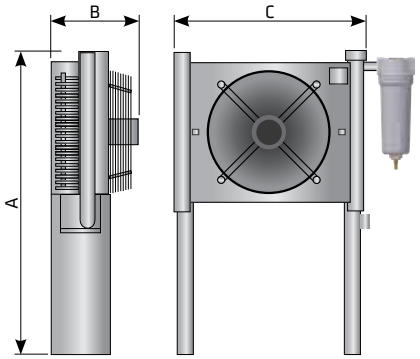
15 bar
operating pressure

120 °C
inlet air temperature

170 °C
max. inlet air temperature

66 to 4500 Nm³/h
flow rate

RAL 9005
standard colour



DESCRIPTION

Air cooled aftercoolers series ACA are 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 refrigeration dryers, adsorption dryers and filters, positioned downstream of this unit.

APPLICATIONS

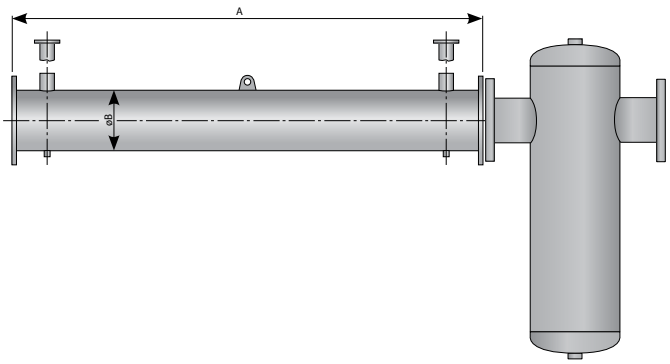
- Compressed air systems

TECHNICAL DATA

Model	Flow rate		Pipe size	Power supply	Fan	Dimensions			Mass
fixed bundle	Nm³/h	scfm		ph/V/Hz	ø mm/ W	A [mm]	B [mm]	C [mm]	kg
ACA 003	66	39	G 1"	1/230/50	ø250-45W	850	300	715	19
ACA 007	126	74	G 1"	1/230/50	ø250-45W	850	300	715	20
ACA 010	222	131	G 1 1/2"	3/400/50	ø350-110W	990	310	845	27
ACA 018	294	173	G 1 1/2"	3/400/50	ø400-130W	990	310	845	29
ACA 030	390	230	G 2"	3/400/50	ø500-750W	1.175	440	980	44
ACA 047	522	307	G 2"	3/400/50	ø500-750W	1.175	440	980	48
ACA 070	774	456	G 2"	3/400/50	ø600-370W	1.325	490	1.130	61
ACA 094	990	583	G 2 1/2"	3/400/50	ø600-370W	1.325	490	1.130	66
ACA 150	1.260	742	DN100	3/400/50	ø800-1470W	1.800	660	1.590	127
ACA 175	1.560	918	DN100	3/400/50	ø800-1470W	1.800	660	1.590	143
ACA 240	1.890	1.112	DN100	3/400/50	ø800-1470W	1.800	790	1.560	148
ACA 300	2.520	1.483	DN100	3/400/50	ø800-1470W	2.000	795	1.740	166
ACA 450	3.090	1.819	DN125	3/400/50	2x ø800-1470W	2.090	830	1.850	212
ACA 600	4.500	2.649	DN125	3/400/50	2x ø800-1470W	2.300	850	2.010	315

ACW SERIES

WATER COOLED AFTERCOOLERS



10 bar
operating pressure

DN50 to DN500
connections

1,5 to 200 °C
operating temperature range

132 to 45570 Nm³/h
flow rate

RAL 9005
standard colour

DESCRIPTION

ACW – Water-cooled aftercooler series has been designed to reduce compressed air temperature thus water vapour content in compressed air system. Hot compressed air/gas passes through the tubes. Cooling water passes around the tubes in counter flow.

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

TECHNICAL DATA							
Model	Connections		Flow capacity[1]		Operating pressure	Dimensions	
fixed bundle	Air	Water	Nm³/h	scfm	bar	A [mm]	B [mm]
ACW 010 F	DN50	DN20	132	78	10	806	60,3
ACW 018 F	DN50	DN20	235	138	10	816	60,3
ACW 030 F	DN50	DN20	367	216	10	816	60,3
ACW 047 F	DN50	DN20	661	389	10	870	60,3
ACW 070 F	DN50	DN20	955	562	10	870	60,3
ACW 094 F	DN80	DN20	1.323	779	10	1.500	88,9
ACW 150 F	DN80	DN20	2.205	1.298	10	1.510	88,9
ACW 200 F	DN100	DN40	2.650	1.560	10	1.500	114,3
ACW 240 F	DN125	DN32	3.087	1.817	10	1.300	139,7
ACW 300 F	DN125	DN32	3.969	2.336	10	1.300	139,7
ACW 375 F	DN150	DN65	5.200	3.060	10	1.300	168,3
ACW 450 F	DN200	DN50	7.056	4.153	10	1.300	219
ACW 600 F	DN200	DN65	8.967	5.278	10	1.300	219
ACW 900 F	DN250	DN80	11.025	6.489	10	1.300	273
ACW 1200 F	DN300	DN80	16.170	9.517	10	1.300	323,9
ACW 1500 F	DN400	DN100	22.050	12.978	10	1.300	406
ACW 1800 F	DN400	DN150	26.460	15.574	10	1.300	406
ACW 2500 F	DN450	DN200	33.810	19.900	10	1.300	457
ACW 3000 F	DN500	DN200	45.570	26.821	10	1.300	508

[1] Refers to 1 bar and 20 °C at 7 bar operating pressure and inlet temperature 120 °C

APPLICATIONS

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

TAC SERIES

ACTIVATED CARBON TOWER

16 bar
operating pressure

1,5 to 45 °C
inlet air temperature range

3/8" to DN125
connections

6 to 6500 Nm³/h
flow rate

RAL 9005
standard colour

DESCRIPTION

TAC activated carbon towers have been developed for separating oil vapours from compressed air (dry type separation).

TAC series is made from high quality carbon steel. Flow distributors ensure uniform distribution of air flow through activated carbon bed. Oil vapours as well as some other hydrocarbons are separated due to adsorption process.

Super fine coalescing filter is required upstream TAC and 1µm dust filter is recommended downstream to intercept activated carbon dust.
High pressure version is available on request.

Stainless steel version available on request.

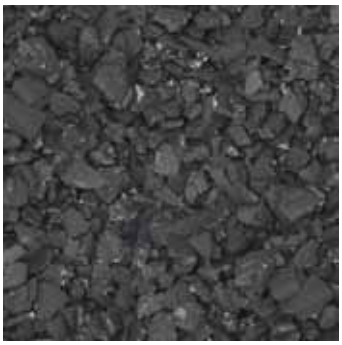
Fluid group 1 on request.

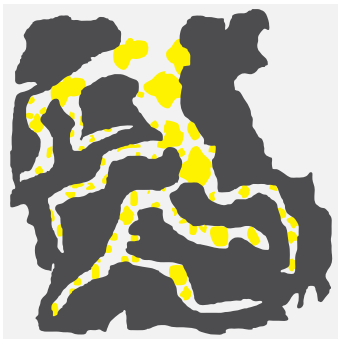
APPLICATIONS

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

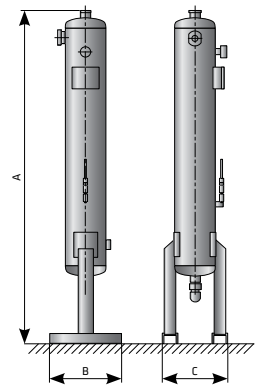
TACm

TAC

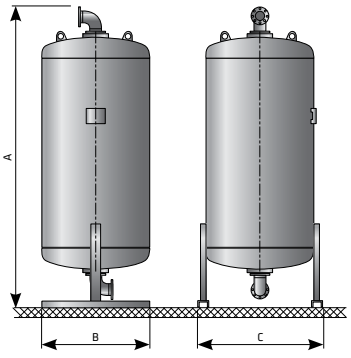




TECHNICAL DATA									
Type	Pipe size	Operating pressure	Flow rate at 7 bar(g), 20 °C		Dimensions [mm]			Mass	Cartridge number
		bar	Nm³/h	scfm	A	B	C	kg	
TACm 6	3/8"	16	6	3,5	404	188	100	3,5	1 x ø80
TACm 12	3/8"	16	12	7	638	188	100	5,3	2 x ø80
TACm 23	3/8"	16	24	14,1	1.106	188	100	6,5	4 x ø80
TACm 35	3/8"	16	36	21,1	1.574	188	100	12	6 x ø80
TACm 56	1/2"	16	60	35,3	1.106	270	148	15	4 x ø129
TACm 70	1/2"	16	75	44,1	1.340	270	148	18	5 x ø129
TACm 105	1/2"	16	105	61,8	1.808	270	148	22	7 x ø129
TAC 110	1"	16	110	86	1.522	350	252	45	-
TAC 150	1"	16	150	117	1.766	350	252	52	-
TAC 200	1"	16	200	157	1.532	400	303	71	-
TAC 250	1"	16	260	204	1.784	400	303	83	-
TAC 300	1 1/2"	16	320	251	1.551	450	357	97	-
TAC 400	1 1/2"	16	410	321	1.798	450	357	114	-
TAC 600	1 1/2"	16	590	462	1.893	650	424	160	-
TAC 800	2"	16	770	603	1.877	650	468	201	-
TAC 1000	2"	16	1.000	784	1.961	650	506	242	-
TAC 1200 F	DN50	16	1.200	936	2.170	550	550	280	-
TAC 1500 F	DN65	16	1.500	1.170	2.210	620	620	355	-
TAC 2000 F	DN65	16	2.000	1.560	2.330	700	700	420	-
TAC 2500 F	DN80	16	2.500	1.950	2.260	760	760	510	-
TAC 3000 F	DN80	16	3.000	2.340	2.400	800	800	595	-
TAC 3750 F	DN100	16	3.750	2925	2.490	920	920	745	-
TAC 5000 F	DN100	16	5.000	3.900	2.600	1.050	1.050	960	-
TAC 6500 F	DN125	16	6.500	5.070	2.730	1.150	1.150	1.300	-



TAC



TAC F

quality class - solids (ISO 8573-1)	-
quality class - water (ISO 8573-1)	-
quality class - oils (ISO 8573-1)	0/1
pressure drop - new element-dry [mbar / psi]	20 / 0,29
filter media	act. carbon
residual oil vapour content (nominal) [mg/m³]	<0,003

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	0,5	0,63	0,75	0,88	1	1,13	1,25	1,38	1,50	1,63	1,75	1,88	2,0	2,13

CORRECTION FACTORS						
Operating temperature [°C]	20	25	30	35	40	45
Correction factor	1	0,98	0,97	0,92	0,86	0,75

Replace activated carbon every 12 months or sooner if required. Check residual oil content with oil indicator monthly.

TAC HP SERIES

HIGH PRESSURE ACTIVATED CARBON TOWERS

50/100/250/420 bar
operating pressure

1,5 to 45 °C
inlet air temperature range

3/8" to 1/2"
connections

50 to 1600 Nm³/h
flow rate

RAL 9005
standard colour

DESCRIPTION

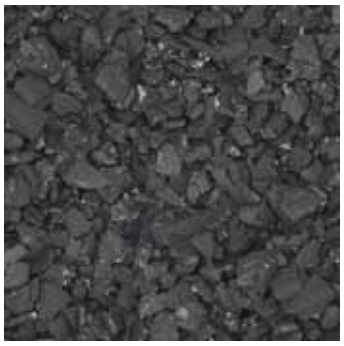
TAC HP activated carbon towers have been developed for separating oil vapours from compressed air (dry type separation). TAC HP series is made from high quality carbon steel. Flow distributors ensure uniform distribution of air flow through activated carbon bed.

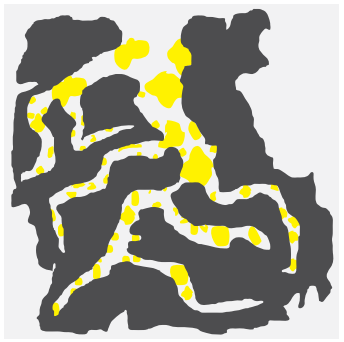
Oil vapours as well as some other hydrocarbons are separated due to adsorption process. Super fine coalescing filter is required upstream TAC HP and 1 µm dust filter is recommended downstream to intercept activated carbon dust.

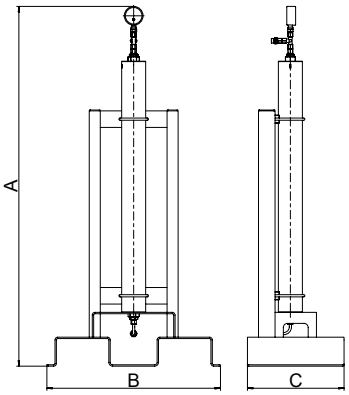
APPLICATIONS

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

TECHNICAL DATA								
Type	Connection size	Operating pressure	Nominal flow		Dimensions [mm]			Mass
	inch	bar	Nm³/h	scfm	A	B	C	kg
TAC HP 50 PN50	3/8"	50	50	49	1.200	340	580	52
TAC HP 100 PN50	3/8"		100	97	1.250	340	580	60
TAC HP 150 PN50	3/8"		150	146	1.550	340	580	68
TAC HP 250 PN50	3/8"		250	243	1.700	410	700	104
TAC HP 350 PN50	1/2"		350	340	1.700	410	700	128
TAC HP 500 PN50	1/2"		500	485	1.920	410	700	164
TAC HP 650 PN50	1/2"		650	631	2.250	410	700	184
TAC HP 50 PN100	3/8"	100	50	49	1.250	340	580	50
TAC HP 100 PN100	3/8"		100	97	1.350	340	580	68
TAC HP 150 PN100	3/8"		150	146	1.650	340	580	80
TAC HP 250 PN100	3/8"		250	243	1.550	340	600	84
TAC HP 350 PN100	1/2"		350	340	1.460	410	680	108
TAC HP 500 PN100	1/2"		500	485	1.700	410	680	116
TAC HP 650 PN100	1/2"		650	631	1.800	410	700	152
TAC HP 800 PN100	1/2"		800	776	1.850	410	680	192
TAC HP 50 PN250	3/8"	250	50	49	1.000	340	450	38
TAC HP 100 PN250	3/8"		100	97	1.360	340	450	54
TAC HP 150 PN250	3/8"		150	146	1.600	340	450	58
TAC HP 250 PN250	3/8"		250	243	1.500	340	450	72
TAC HP 350 PN250	1/2"		350	340	1.500	410	650	120
TAC HP 500 PN250	1/2"		500	485	1.500	410	650	112
TAC HP 650 PN250	1/2"		650	631	1.500	410	650	160
TAC HP 800 PN250	1/2"		800	776	1.550	410	650	184
TAC HP 1000 PN250	1/2"		1.000	970	1.600	410	650	232
TAC HP 1200 PN250	1/2"		1.200	1164	1.550	410	700	248
TAC HP 1400 PN250	1/2"		1.400	1358	1.650	410	700	260
TAC HP 100 PN400	3/8"	420	100	97	1.120	340	450	48
TAC HP 150 PN400	3/8"		150	146	1.360	340	450	54
TAC HP 250 PN400	3/8"		250	243	1.450	340	580	76
TAC HP 350 PN400	1/2"		250	340	1.350	410	580	108
TAC HP 500 PN400	1/2"		500	485	1.380	410	650	124
TAC HP 650 PN400	1/2"		650	631	1.450	410	650	176
TAC HP 800 PN400	1/2"		800	776	1.230	410	650	170
TAC HP 1000 PN400	1/2"		1.000	970	1.450	410	650	240
TAC HP 1200 PN400	1/2"		1.200	1.164	1.450	500	900	340
TAC HP 1400 PN400	1/2"		1.400	1.358	1.500	500	900	320
TAC HP 1600 PN400	1/2"		1.600	1.552	1.450	500	900	480







CORRECTION FACTORS - OPERATING PRESSURE - HP-TAC PN50						
Operating pressure [bar]	25	30	35	40	45	50
Operating pressure [psi]	363	435	508	580	653	725
Correction factor C_{OP}	0,51	0,61	0,71	0,81	0,9	1

CORRECTION FACTORS - OPERATING PRESSURE - HP-TAC PN100						
Operating pressure [bar]	50	60	70	80	90	100
Operating pressure [psi]	725	870	1015	1160	1305	1450
Correction factor C_{OP}	0,5	0,6	0,7	0,8	0,9	1

CORRECTION FACTORS - OPERATING PRESSURE - HP-TAC PN250						
Operating pressure [bar]	110	130	160	190	220	250
Operating pressure [psi]	1595	1885	2320	2755	3190	3625
Correction factor C_{OP}	0,44	0,52	0,64	0,76	0,88	1

CORRECTION FACTORS - OPERATING PRESSURE - HP-TAC PN420								
Operating pressure [bar]	250	275	300	325	350	375	400	420
Operating pressure [psi]	3625	3990	4350	4715	5075	5440	5800	6091
Correction factor C_{OP}	0,59	0,65	0,71	0,77	0,83	0,89	0,95	1

CORRECTION FACTORS - OPERATING TEMPERATURE						
Operating temperature [°C]	20	25	30	35	40	45
Correction factor	1	0,98	0,97	0,92	0,86	0,75

Replace activated carbon every 12 months or sooner if required. Check residual oil content with oil indicator monthly.

CO_2 R-DRY

HEAT REGENERATED ADSORPTION DRYER FOR CO_2

4 to 11 bar
operating pressure

1,5 to 42,5 °C
inlet air temperature range

-40 °C
pressure dew points

390 to 20.200 Nm³/h
flow rate

2-3 %
avg. comp. air consumption

DESCRIPTION

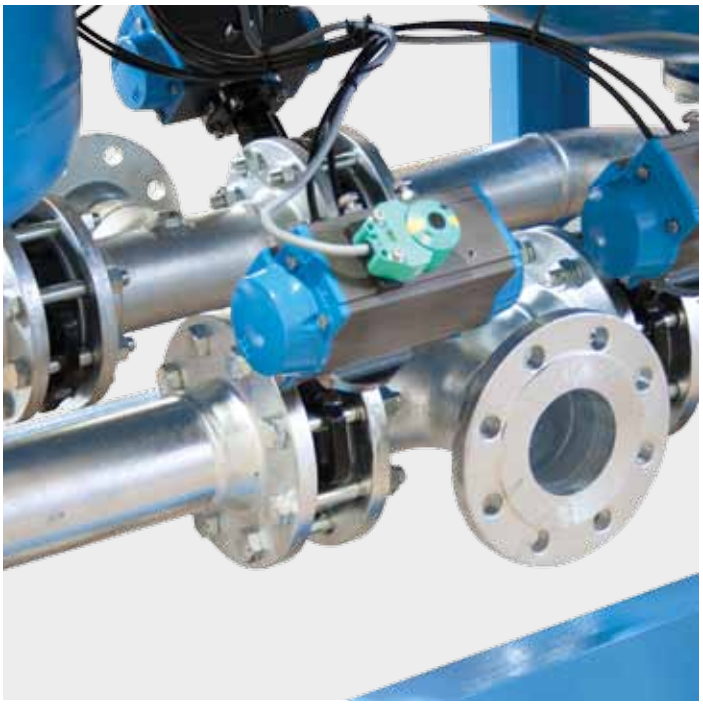
CO_2 R-DRY 400-20000 BP adsorption dryers are designed for continuous separation of water vapour from compressed CO_2 thus lowering the dew point.

CO_2 R-DRY dryers have two columns that operate alternately. Adsorption takes place under pressure in the first column while the second column regenerates (heated ambient air for desorption + expanded dry CO_2 purge for cooling). A dryer consists of two columns, filled with desiccant beads, a blower, heater, controller with an LCD display, valves, manometers, and a support construction.

A proven and robust design enables efficient and reliable operation, fast installation and simple maintenance.

APPLICATIONS

- CO_2 systems



TECHNICAL DATA

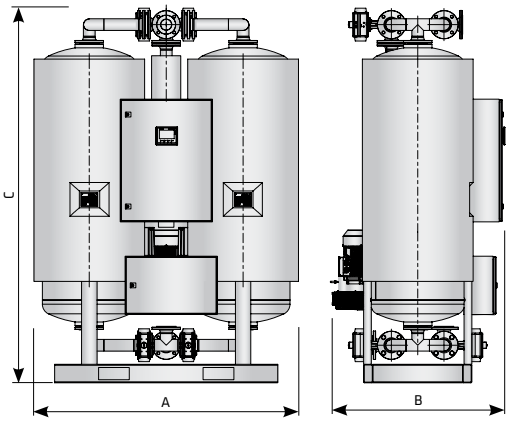
Type	Connection IN/OUT (2)	Nominal volume flow Inlet (1)	Dimensions			Mass	Blower power	Heater power
	DN	[Nm³/h]	A [mm]	B [mm]	C [mm]	kg	kW	kW
CO2 R-DRY 400	DN50	390	1.200	850	2.250	1.000	1,3	3,5
CO2 R-DRY 600	DN50	590	1.500	900	2.350	1.400	1,6	5,5
CO2 R-DRY 780	DN50	780	1.750	1.000	2.450	1.800	1,6	7
CO2 R-DRY 1000	DN50	930	1.750	1.250	2.450	1.900	1,6	8
CO2 R-DRY 1200	DN80	1.150	1.900	1.100	2.450	2.200	1,6	10
CO2 R-DRY 1600	DN80	1.600	1.900	1.350	2.500	2.600	4	14
CO2 R-DRY 2000	DN100	1.950	2.200	1.150	2.600	3.400	4	17
CO2 R-DRY 2500	DN100	2.530	2.350	1.150	2.750	3.800	7,5	22
CO2 R-DRY 3000	DN100	2.990	2.500	1.150	2.750	4.000	8,5	26
CO2 R-DRY 3600	DN100	3.680	2.800	1.350	2.850	4.800	8,5	32
CO2 R-DRY 4100	DN125	4.100	3.000	1.350	2.850	5.100	8,5	35
CO2 R-DRY 5000	DN125	4.990	3.200	1.450	2.950	5.900	15	45
CO2 R-DRY 6500	DN150	6.550	3.520	1.750	3.050	7.200	15	56
CO2 R-DRY 7700	DN150	7.700	3.700	2.000	3.100	7.900	15	70
CO2 R-DRY 10000	DN200	10.250	4.300	2.200	3.550	12.000	22	95
CO2 R-DRY 12000	DN200	11.700	4.400	2.500	3.550	14.200	-	-
CO2 R-DRY 14000	DN200	14.800	4.800	2.600	3.650	16.800	-	-
CO2 R-DRY 16000	DN200	16.000	5.000	3.200	3.650	18.500	-	-
CO2 R-DRY 18000	DN250	18.200	5.200	3.500	4.200	20.000	-	-
CO2 R-DRY 20000	DN250	20.200	6.000	3.500	4.350	23.000	-	-

OPERATING PRESSURE - CORRECTION FACTORS - C_{OP}								
Operating pressure [bar]	4	5	6	7	8	9	10	11
Operating pressure [psi]	58	72	87	100	115	130	145	160
Correction factor C_{OP}	0,63	0,75	0,88	1	1,13	1,25	1,38	1,50

OPERATING TEMPERATURE - CORRECTION FACTORS - C_{OT}					
Operat. temperature [°C]	25	30	35	40	42,5
Operat. temperature [F]	77	86	95	104	108
Correction factor C_{OT}	1	1	1	0,7	0,52

(1) Refers to 1 bar(a) and 20 °C at 7 bar operating pressure , inlet temperature 35 °C and pressure dew point at outlet -40 °C

(2) Refers to dryer inlet and outlet connection without filters



PICO-DRY

HEATLESS REGENERATED ADSORPTION DRYER

16 bar
operating pressure

1,5 to 50 °C
inlet air temperature range

3/8”
connections

6 to 12 Nm³/h
flow rate

-40 (-20) °C
pressure dew point

DESCRIPTION

PICO-DRY adsorption dryers are intended for separation of water vapour from compressed air thus reducing dew point. Those dryers were specifically designed for piston compressors with relatively small duty load (frequent start and stop).

Adsorption takes place under pressure in the lower column. When the compressor stops the adsorption column is depressurised and the dry air from the buffer vessel is slowly expanded and used for regeneration.

Dryer is equipped with aftercooler as well as with filter making sure that liquid water, oil and other large contaminants will not enter adsorption vessel. Springs in the columns make sure that the desiccant beads will not move during operation. Proven robust design enables efficient and reliable operation, fast installation and simple maintenance.

APPLICATIONS

- Piston compressors

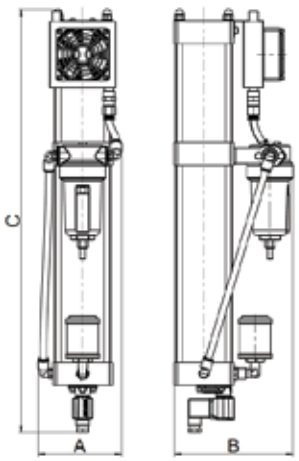
TECHNICAL DATA										
Model	Connection IN/ OUT	Operating pressure	Inlet flow rate [1]	Outlet flow rate [2]	DImensions [mm]				Mass	Filter type
	inch	bar	Nm^3/h	Nm^3/h	A	B	C	D	kg	
PICO-DRY 06	G 3/8"	16 bar	6	/*	339	280	100	354	10,5	AAF 0026
PICO-DRY 12	G 3/8"	16 bar	12	/*	573	280	100	354	13,5	AAF 0026

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

CORRECTION FACTORS						
Operating temperature [°C]	25	30	35	40	45	50
Operating temperature [°F]	77	86	95	104	113	122
Correction factor	1	1	1	0,97	0,87	0,80

CORRECTION FACTORS		
Dew point [°C]	-25	-40
Dew point [°F]	-13	-40
Correction factor	1,1	1

[1] Refers to 1 bar(a) and 20°C at 7 bar operating pressure , inlet temperature 35°C and pressure dew point at outlet down to -40°C.
[2] Heatless regenerated dryers normally consume approx. 15-20% of air for regeneration. Actual consumption of PICO-DRY depend on compressor duty cycle. Volume of 1 vessel (adsorption).



CNG-DRY

COMPRESSED NATURAL GAS DRYER

0,1-420 bar
operating pressure

1,5 to 60 °C
operating temperature (inlet)

-40°C
pressure dew point

on request
flow rate

DESCRIPTION

CNG-DRY adsorption dryers are designed for continuous separation of water vapour from compressed natural gas thus lowering the dew point. CNG-DRY dryers are normally custom made to meet specific project requirements. Several versions are available based on operating pressure and type of regeneration.

G-DRY type of the dryers are manual controlled and without regeneration. After the saturation of the dryer it is possible to replace adsorption material or regenerate it with external regeneration system.

CNG-R-DRY has two columns that operate alternately. Adsorption takes place under pressure in the first column while the second column is heat regenerated.

CNG-HP-DRY has also two columns that operate alternately. Regeneration is made by small portion of already dried CNG at the ambient pressure. Purge CNG is let to the suction side of the compressor.

APPLICATIONS

- CNG application

PRESSURE	REGENERATION TYPE	REGENERATED BY
LOW (up to 16 barg)	Heatless regenerated	Expanded Natural gas; Released to torch and/or guided to compressor inlet
	Heat regenerated	Hot natural gas; Released to torch and/or guided to compressor inlet
	Without regeneration	Replacement of adsorbent or external regeneration unit
MEDIUM (up to 50 barg)	Heatless regenerated	Expanded Natural gas; Released to torch and/or guided to compressor inlet
	Heat regenerated	Hot natural gas; Released to torch and/or guided to compressor inlet
	Without regeneration	Replacement of adsorbent or external regeneration unit
HIGH (up to 420 barg)	Heatless regenerated	Expanded Natural gas; Released to torch and/or guided to compressor inlet
	Heat regenerated	Hot natural gas; Released to torch and/or guided to compressor inlet
	Without regeneration	Replacement of adsorbent or external regeneration unit

REQUIRED DATA TO PREPARE QUOTATION

- Inlet pressure
- Inlet temperature
- Inlet water content
- Preferred dryer type (AUTOMATIC / MANUAL)
- Preferred type of regeneration
  (HEATLESS / HEAT / REPLACEMENT OF ADSORBENT / EXTERNAL REGENERATION UNIT)
- Availability of water cooling water (YES/NO). If yes temperature of cooling water
- Possibility to guide regeneration gas to the suction side of the compressor (YES/NO)

A-CAT SERIES

OIL VAPOURS CATALYTIC CONVERTER

4 to 11 bar
operating pressure

1,5 to 55 °C
inlet air temperature range

DN15 to DN100
connections

100 to 2500 Nm³/h
flow rate

DESCRIPTION

A-CAT is designed for obtaining oil free compressed air from oil-contaminated air - according to standard ISO 8573-1. A-CAT converter guarantees oil free compressed air using catalyst material that ensures total degradation of oil. During the process of oil removal, clean water and CO_2 is produced which are suitable for disposal with no additional processing. Higher oil concentrations does not affect catalyst durability and efficiency.

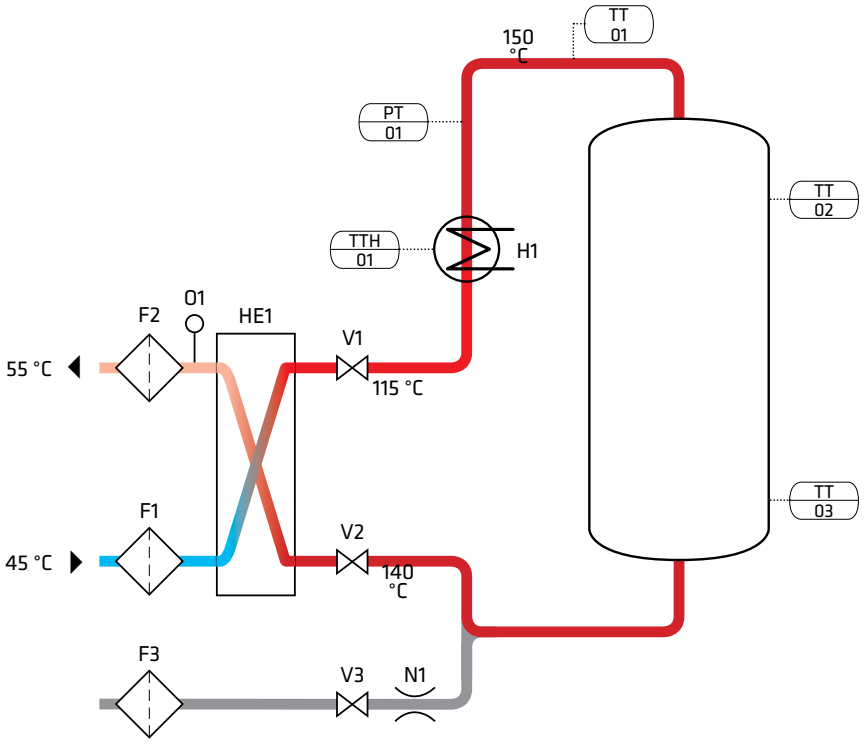
A-CAT is installed on oil-lubricated compressor's outlet pipe. Compressed air flows through a plate heat exchanger and pipe electric heater. Pre-heated compressed air than enters the converter vessel filled with catalyst material. At the bottom, oil free compressed air leaves the converter vessel and flows through the plate heat exchanger again, where it cools down with cold incoming compressed air. After the oil free air is cooled down, it can be used in further applications.

APPLICATIONS

- Food industry
- Chemical industry
- Automotive industry
- PET blowing
- Breathing air





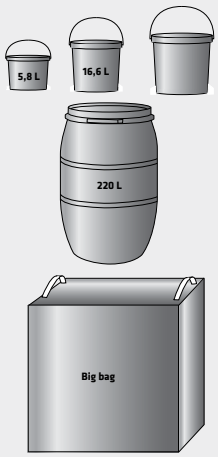


TECHNICAL DATA			
Model	Connection	Inlet flow rate [1]	Heater power
	In/Out	Nm³/h	kW
A-CAT 100	DN15	100	1,5
A-CAT 200	DN25	200	3
A-CAT 300	DN32	300	4
A-CAT 400	DN40	400	5
A-CAT 600	DN50	600	7,5
A-CAT 800	DN50	800	11
A-CAT 1100	DN65	1.100	15
A-CAT 1500	DN80	1.500	20
A-CAT 2000	DN100	2.000	25
A-CAT 2500	DN100	2.500	32

(1)Refers to 1 bar(a) and 20 °C at 7 bar operating pressure, inlet temperature 35 °C.

SORBEO

ADSORBENTS



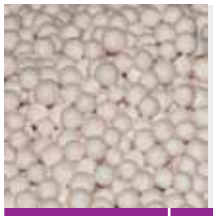
DESCRIPTION

SORBEO type adsorbents are highly porous materials suitable for use in many adsorption applications. Adsorbents are available in several pack sizes.
For detail specification please refer to technical data sheet of specific adsorbent.

APPLICATIONS

- Adsorption dryers
- N_2/O_2 generators
- Air/Gas/Water purification

SORBEO MS 3A - Molecular sieve



Adsorbent SORBEO MS3 is a highly porous, crystalline aluminosilicate in beaded form. The pore openings in the crystals have a diameter of approximately 3 Å. Adsorbent has been specially designated for drying of ethylene in cracked gas units. Also, propylene, butadiene and other unsaturated hydrocarbons are dried using this molecular sieve. Adsorbent is also used in **drying of gases containing H_2S and CO_2** where COS formation has to be minimized.

Model	Shape	Bulk density	Package	Mass
SORBEO MS3-S	Granulate 2,5mm - 5,0mm	0,7 kg/l	5,8 L container	4 kg
SORBEO MS3-M			16,6 L container	11,5 kg
SORBEO MS3-L			35,4 L container	24 kg
SORBEO MS3-XL			216,5 L barrel	150 kg
SORBEO MS3-XXL			4 x barrel	600 kg

SORBEO MS 4A - Molecular sieve

Adsorbent SORBEO MS4 is a highly porous, crystalline aluminosilicate in beaded form. The pore openings in the crystals have a diameter of approximately 4 Å. SORBEO MS4 is a product for dynamic drying of most gases and vapors. It can also be used to remove other impurities with effective molecule diameters smaller than 4 Å. Typical applications for SORBEO MS4 adsorbent are **drying/purification of natural gas, reformer gas and air**.

Model	Shape	Bulk density	Package	Mass
SORBEO MS4-S	Granulate 2,5mm - 5,0mm	0,7 kg/l	5,8 L container	4 kg
SORBEO MS4-M			16,6 L container	11,5 kg
SORBEO MS4-L			35,4 L container	24 kg
SORBEO MS4-XL			220 L barrel	150 kg
SORBEO MS4-XXL			Big bag	800 kg

SORBEO MS 10A - Molecular sieve

Adsorbent SORBEO MS10 is a highly porous, crystalline aluminosilicate in beaded form. The pore openings in the crystals have a diameter of approximately 10 Å. Due to its high capacity for water and CO_2 this molecular sieve is widely used for **air purification in cryogenic air separation plants**. It is also applied in the **removal of H2S/mercaptans and other sulphur compounds** from natural gas and LPG.

Model	Shape	Bulk density	Package	Mass
SORBEO MS10-S	Granulate 2,5mm - 5,0mm	0,64 kg/l	5,8 L container	3,5 kg
SORBEO MS10-M			16,6 L container	10,5 kg
SORBEO MS10-L			35,4 L container	22 kg
SORBEO MS10-XL			216,5 L barrel	130 kg
SORBEO MS10-XXL			4x barrel	520 kg

SORBEO AA - Activated Alumina

Adsorbent SORBEO AA is a smooth sphere of activated alumina. It is a desiccant for drying a wide variety of liquids and gases. Although all molecules are adsorbed to some extent on activated alumina, those molecules having the highest polarity are preferentially absorbed. SORBEO AA can be used as **adsorbent in adsorption dryers, acid removal originating from lubricating oils and refrigerants, process stream purification/removal of highly polar compounds**.

Model	Shape	Bulk density	Package	Mass
SORBEO AA-S	Granulate 2,0mm - 5,0mm	0,77 kg/l	5,8 L container	4 kg
SORBEO AA-M			16,6 L container	12 kg
SORBEO AA-L			35,4 L container	27 kg
SORBEO AA-XL			220 L barrel	170 kg
SORBEO AA-XXL			Big bag	907 kg

SORBEO SGWS - Water resistant silica gel

Adsorbent SORBEO SGWS is a beaded form of alumino-silicat gel resistant to liquid water. It is most frequently used as a protective layer in combination with silica gel or other adsorbents such as molecular sieves, activated alumina, activated carbons and catalysts in order to increase the reliability of the system. It is ideal for applications where adsorbent regeneration with humid gas occurs (e.g. Heat of Compression dryers, ...).

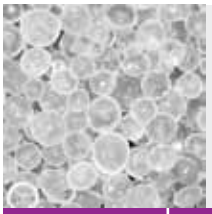
Model	Shape	Bulk density	Package	Mass
SORBEO SGWS-S	Granulate 2,0mm - 5,0mm	0,7 kg/l	5,8 L container	4 kg
SORBEO SGWS-M			16,6 L container	11,5 kg
SORBEO SGWS-L			35,4 L container	24 kg
SORBEO SGWS-XL			220 L barrel	150 kg
SORBEO SGWS-XXL			Big bag	750 kg

SORBEO SGW - Silica Gel

Water resistant adsorbent SORBEO SGW is a wide pore, beaded form of silica gel. It is a buffer adsorbent used to protect adsorbent beds. SGW exhibits a high water capacity under conditions of high relative humidity and in particular when water is present in the liquid phase. It also has a high capacity for liquid hydrocarbons and other organic liquids. It is used as a **buffer layer in molecular sieve and silica gel beds** which may be subject to occasional liquid carryover.

Model	Shape	Bulk density	Package	Mass
SORBEO SGW-S	Granulate 2,0mm - 5,0mm	0,45 kg/l	5,8 L container	2,5 kg
SORBEO SGW-M			16,6 L container	7 kg
SORBEO SGW-L			35,4 L container	15 kg
SORBEO SGW-XL			220 L barrel	100 kg
SORBEO SGW-XXL			4x barrel	400 kg

SORBEO SGR - Silica Gel



Adsorbent SORBEO SGR is a narrow pore, beaded form of silica. SORBEO SGR consists of relatively large beads and is used in a wide variety of drying and purification processes. Main applications are in **dynamic drying and hydrocarbon dew point control of Natural Gas, drying of other gases and liquids in refining and petrochemical processes, and in air drying**. Beaded silica gels are specifically suitable, when dust and attrition are critical in application.

Model	Shape	Bulk density	Package	Mass
SORBEO SGR-S	Granulate 2,0mm - 5,0mm	0,7 kg/l	5,8 L container	4 kg
SORBEO SGR-M			16,6 L container	11,5 kg
SORBEO SGR-L			35,4 L container	24 kg
SORBEO SGR-XL			220 L barrel	150 kg
SORBEO SGR-XXL			Big bag	500 kg

SORBEO AC - Activated Carbon

Activated carbon packages can purify compressed air and gases by means of an adsorptive process and is mainly used for separating oil vapors from compressed air flows.
Activated carbon can be used for other applications according to its specifications at any time. Typical applications for activated carbon are **purification of natural gas, reformer gas and air**.

Model	Shape	Bulk density	Package	Mass
SORBEO AC-S	Pellets 3 mm	0,47 kg/l	5,8 L container	2,7 kg
SORBEO AC-M			16,6 L container	7,8 kg
SORBEO AC-L			35,4 L container	16,5 kg
SORBEO AC-XL			220 L barrel	103 kg

SORBEO HC - Catalyst

Catalyst SORBEO HC is intended for catalytic oxidation of CO to CO_2 in dry air or other gases. In this way poisonous CO is removed and CO_2 is generated instead.
This process is used in applications such as **compressed breathing air, respirators, escape masks and cryogenic gas purification**.

Model	Shape	Bulk density	Package	Mass
SORBEO HC-S	Granulate 3 mm	0,9 kg/l	5,8 L container	5 kg
SORBEO HC-M			16,6 L container	14 kg
SORBEO HC-L			35,4 L container	31 kg
SORBEO HC-XL			220 L barrel	190 kg

SORBEO CMS - Carbon Molecular Sieve

Sorbeo CMS is pelletized form. Mainly is used to separate N_2 from air but it can also be used in many other applications (separating methane from methane/CO_2 mixture or ethylene from ethylene mixture gases, separation of smaller polar molecules.....). **Typical applications for carbon molecular sieve are nitrogen generators.**

Model	Shape	Bulk density	Package	Mass
SORBEO CMS-S	Pellets 1,8 ± 0,2 mm	0,68 -0,73 kg/l	5,8 L container	4,0 kg
SORBEO CMS-M			16,6 L container	11 kg
SORBEO CMS-L			35,4 L container	24 kg
SORBEO CMS-XL			220 L barrel	137 kg

SORBEO SGC - Silica gel

Adsorbent SORBEO SGC is a beaded silica gel with very high mechanical integrity. It meets the demand for a heavy-metal free and environmental friendly indicating agent. Sorbeo SGC provides safe moisture indication without any concerns regarding carcinogenic ingredients. It also provides superior moisture indication with a crisp color change. Typical applications are **transformer air breathers as well as other breather filters, laboratory uses, packaging of moisture sensitive goods and many others.**

Model	Shape	Bulk density	Package	Mass
SORBEO SGC-S	Granulate 2-5 mm	0,8 kg/l	5,8 L container	4 kg
SORBEO SGC-M			16,6 L container	11,5 kg
SORBEO SGC-L			35,4 L container	24 kg
SORBEO SGC-XL			220 L barrel	150 kg

SORBEO SL - Soda lime

Sorbeo SL is absorbent for acidic gases, e.g. carbon dioxide (CO_2), in industrial plants as well as in shelter and rescue rooms with indicator. Typical application of soda lime is absorption of carbon dioxide (CO_2) and other acidic gases under usual air conditions in rooms or environment including various industrial plants and laboratories. As an external signal for the replacement of soda lime it contain colour indicator which with acid gases change from white to violet.

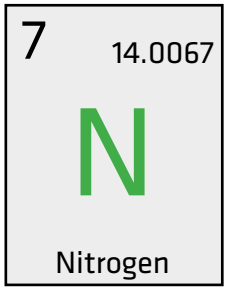
Model	Shape	Bulk density	Package	Mass
SORBEO BTN-S	Hemispherical pellet	0,93 kg/l	5,8 L container	5,3 kg
SORBEO BTN-M			16,6 L container	15,4 kg
SORBEO BTN-L			35,4 L container	32,9 kg
SORBEO BTN-XL			220 L barrel	204,6 kg

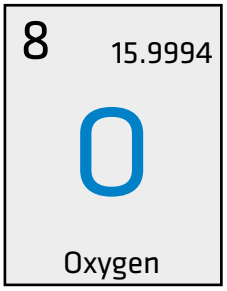
SORBEO BTN - Bentonite

A sodium exchanged bentonite of instant high gel forming. It is used as a fluid mud in oil, gas and water well drilling, in earthing applications and in civil engineering. Typical applications for bentonite are oil removing from condense.

Model	Shape	Bulk density	Package	Mass
SORBEO BTN-S	Powder	0,9 kg/l	5,8 L container	5,22 kg
SORBEO BTN-M			16,6 L container	14,9 kg
SORBEO BTN-L			35,4 L container	31,8 kg
SORBEO BTN-XL			220 L barrel	198 kg

GENERATORS





NITROGEN BASICS

- Inert, Colourless, Odourless and Tasteless Gas
- Nitrogen does not enter in chemical Reactions
- Nitrogen prevents oxygen access:
  - for oxidation of metals, polymers and chemicals,
  - for bacteriological growth (foodstuffs & beverage)
  - to reduces the risk of combustion and explosion (chemicals, reactions, processes)
- Source of Nitrogen
  - LIN = Liquid Nitrogen, GAN = Gaseous Nitrogen

OXYGEN BASICS

- Reactive, Colourless, Odourless and Tasteless Gas
- Reacts with with most of the chemical elements
- Necessary for most living organisms and for Combustion Processes
  - Injection in water (fish farms, waste water treatment plants)
  - Achieving high temperatures (glass blowing, metal cutting and production)
  - Healthcare applications (hospitals, veterinary clinics)
- Source of Oxygen
  - LOX = Liquid Oxygen, GOX = Gaseous Oxygen

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


NC-GEN


OC-GEN


N-GEN 10
OMEGA AIR


O-GEN 5
OMEGA AIR

N-GEN SERIES

PSA NITROGEN GENERATORS

6-10 bar
operating pressure

5 to 50 °C
operating temp. range (feed air)

< -45 °C
dew points (atmospheric)

0,83 to 766,8 Nm³/h
capacity

up to 99,999 %
N_2 purity

DESCRIPTION

The N-GEN 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 N-GEN nitrogen generators use two molecular sieve beds, which alternatively switch between the adsorption and the regeneration phase.

APPLICATIONS

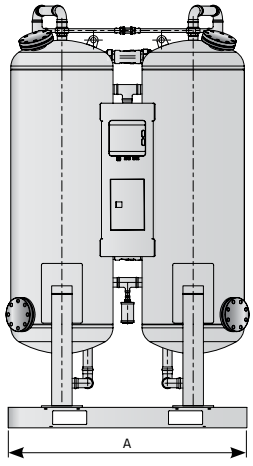
- Blanketing of Chemicals
- Gas Assisted Injection Moulding (GAIM)
- Heat Treatment of Ferrous & Non-Ferrous Metals
- Inerting of Flammable Liquids
- Laser Cutting
- Prevention of Dust Explosions
- Re-flow and Wave Soldering of PCBs
- UV-Curing of Coatings
- Food processing

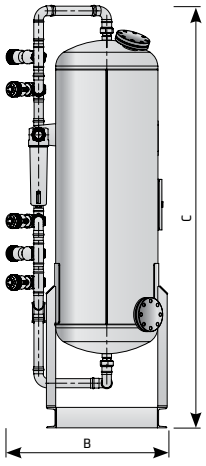
STANDARD EQUIPMENT

- Set of External Feed Air Filters
- Adsorber Vessels in Carbon Steel
- Long life Pneumatic and Solenoid Valves
- Internal Piping & Fittings zinc plated carbon steel
- Product Pressure Transmitters
- Nitrogen and Air flow Regulation
- Pressure Regulator
- Control System with SIEMENS PLC
- WebControl

OPTIONAL EQUIPMENT

- Oxygen Analyser
- Electronic Product Flow Meter
- Feed Air / Product Moisture Analyser
- Feed Air / Product Temperature Transmitters
- Nitrogen Sterile Filters
- Nitrogen Booster
- Nitrogen Cylinder Filling System
- Touch screen Interface
- Serial communications





TECHNICAL DATA						
Type	Connection		Dimensions [mm]			Mass
	In	Out	A	B	C	kg
N-GEN 03	1/2"	1/2"	1085	550	1616	126
N-GEN 05	1/2"	1/2"	1093	550	1734	160
N-GEN 10	1/2"	1/2"	1070	550	1641	205
N-GEN 15	1/2"	1/2"	1079	550	1760	255
N-GEN 20	1"	1/2"	1132	550	1913	335
N-GEN 25	1"	1/2"	1297	760	2048	585
N-GEN 35	1"	1/2"	1453	760	2055	725
N-GEN 50	1"	1/2"	1450	760	2102	845
N-GEN 65	2"	1/2"	1688	860	2184	1170
N-GEN 80	2"	1"	1688	860	2334	1290
N-GEN 100	2"	1"	1848	1010	2267	1675
N-GEN 150	2"	1"	2060	1160	2378	2260
N-GEN 200	2"	1"	2293	1325	2396	2877
N-GEN 250	2"	1"	2605	1425	2500	3950
N-GEN 300	2"	2"	2815	1625	2605	4660
N-GEN 400	3"	2"	3070	1675	2735	6850

PERFORMANCE										
Type		Inlet pressure	Discharge pressure	Residual Oxygen [vol. %]						
		barg	barg	3	2	1	0,5	0,1	0,01	0,001
				Total inert gas purity [vol. %]						
				97	98	99	99,5	99,9	99,99	99,999*
N-GEN 03	N_2 flow [Nm³/h]	7,5	6,3	5,68	5,36	4,88	3,44	2,56	1,47	0,83
	Feed air consumption [Nm³/h]			10,3	10,3	10,2	9,3	9,2	7,2	4,7
N-GEN 05	N_2 flow [Nm³/h]	7,5	6,3	9,23	8,71	7,93	5,59	4,16	2,39	1,35
	Feed air consumption [Nm³/h]			16,8	16,7	16,7	15,1	15,0	11,7	7,6
N-GEN 10	N_2 flow [Nm³/h]	7,5	6,3	15,6	14,7	13,4	9,5	7,0	4,0	2,3
	Feed air consumption [Nm³/h]			28,9	28,3	28,4	25,5	25,3	19,8	12,8
N-GEN 15	N_2 flow [Nm³/h]	7,5	6,3	20,9	19,8	18,0	12,7	9,4	5,4	3,1
	Feed air consumption [Nm³/h]			38,1	37,9	37,8	34,2	34,0	26,6	17,2
N-GEN 20	N_2 flow [Nm³/h]	7,5	6,3	30,9	29,1	26,5	18,7	13,9	8,0	4,5
	Feed air consumption [Nm³/h]			56,2	56,0	55,7	50,5	50,1	39,2	25,3
N-GEN 25	N_2 flow [Nm³/h]	7,5	6,3	43,3	40,9	37,2	26,2	19,5	11,2	6,3
	Feed air consumption [Nm³/h]			78,8	78,5	78,1	70,8	70,3	55,0	35,5
N-GEN 35	N_2 flow [Nm³/h]	7,5	6,3	68,5	64,7	58,9	41,5	30,9	17,8	10,0
	Feed air consumption [Nm³/h]			124,7	124,1	123,6	112,0	111,2	87,0	56,2
N-GEN 50	N_2 flow [Nm³/h]	7,5	6,3	88,8	83,8	76,3	53,8	40,0	23,0	13,0
	Feed air consumption [Nm³/h]			161,5	160,8	160,1	145,1	144,0	112,7	72,8
N-GEN 65	N_2 flow [Nm³/h]	7,5	6,3	115,4	108,9	99,1	69,9	52,0	29,9	16,9
	Feed air consumption [Nm³/h]			210,0	209,0	208,2	188,7	187,2	146,5	94,6
N-GEN 80	N_2 flow [Nm³/h]	7,5	6,3	134,9	127,3	115,9	81,7	60,8	35,0	19,8
	Feed air consumption [Nm³/h]			244,9	243,8	242,7	220,0	218,3	170,9	110,4
N-GEN 100	N_2 flow [Nm³/h]	7,5	6,3	195,6	184,6	168,1	118,5	88,2	50,7	28,7
	Feed air consumption [Nm³/h]			356,0	354,4	352,9	319,9	317,4	248,4	160,5
N-GEN 150	N_2 flow [Nm³/h]	7,5	6,3	263,1	248,2	226,0	159,3	118,6	68,2	38,5
	Feed air consumption [Nm³/h]			478,8	476,6	474,6	430,2	426,8	334,0	215,8
N-GEN 200	N_2 flow [Nm³/h]	7,5	6,3	360,3	340,0	309,6	218,2	162,4	93,4	52,8
	Feed air consumption [Nm³/h]			655,8	652,8	650,1	589,2	584,6	457,6	295,6
N-GEN 250	N_2 flow [Nm³/h]	7,5	6,3	439,5	414,7	377,6	266,2	198,1	113,9	64,4
	Feed air consumption [Nm³/h]			799,9	796,3	792,9	718,7	713,1	558,1	360,5
N-GEN 300	N_2 flow [Nm³/h]	7,5	6,3	600,0	566,2	515,5	363,4	270,4	155,5	87,9
	Feed air consumption [Nm³/h]			1.091,9	1.087,0	1.082,4	981,0	973,4	761,9	492,1
N-GEN 400	N_2 flow [Nm³/h]	7,5	6,3	766,8	723,6	658,8	464,4	345,6	198,7	112,3
	Feed air consumption [Nm³/h]			1.395,6	1.389,3	1.383,5	1.253,9	1.244,2	973,7	629,0

For nitrogen flow capacity at other conditions please contact manufacturer.
Performance +/- 5%.
All flow rates valid for generator operation at compressed air temperature 35 °C.

NC-GEN SERIES

COMPACT PSA NITROGEN GENERATORS

6 - 10 bar
operating pressure

5 to 50 °C
operating temperature range

< -45 °C
dew point (at ambient pressure)

0,14 to 14,2 Nm³/h
N_2 capacity

up to 99,999 %
N_2 purity

DESCRIPTION

The NC-GEN compact 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 nitrogen generators use two molecular sieve beds, which alternatively switch between the adsorption and the regeneration phase.

APPLICATIONS

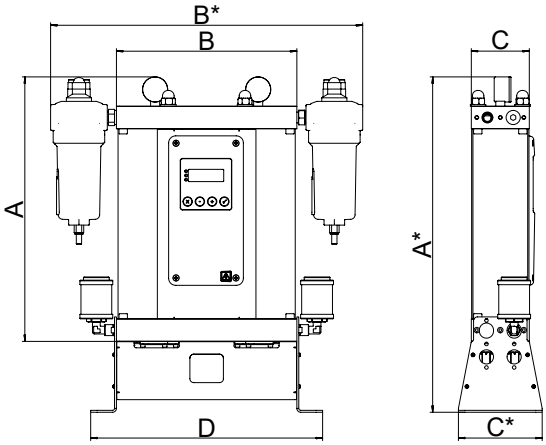
- Blanketing of Chemicals and Pharmaceuticals
- Inerting of Flammable Liquids
- Laser Cutting
- Re-flow and Wave Soldering of PCBs
- UV-Curing of Coatings
- Food processing

STANDARD EQUIPMENT

- Set of external feed air filters
- Adsorber vessels in carbon steel
- Long life solenoid valves
- Internal piping
- Nitrogen and air flow regulation
- Product pressure transmitters

OPTIONAL EQUIPMENT

- Nitrogen Sterile Filters
- Nitrogen Booster
- Nitrogen Cylinder Filling System



TECHNICAL DATA

Type	Connection		Dimensions [mm]							Mass
	In	Out	A	A*	B	B*	C	C*	D	kg
NC-GEN 0,5	G 3/8"	G 3/8"	573	715	280	480	100	130	354	13,5
NC-GEN 1,0	G 3/8"	G 3/8"	1041	1105	280	480	100	130	354	19,0
NC-GEN 1,5	G 3/8"	G 3/8"	1364	1495	280	480	100	130	354	27,5
NC-GEN 2,5	G 3/8"	G 3/8"	972	1105	370	570	148	170	434	45,0
NC-GEN 3,5	G 3/8"	G 3/8"	1167	1300	370	570	148	170	434	53,0
NC-GEN 4,5	G 3/8"	G 3/8"	1567	1700	370	570	148	170	434	70,0
NC-GEN 7,0	G 3/8"	G 3/8"	1345	1440	440	725	198	240	570	170,5
NC-GEN 9,0	G 3/8"	G 3/8"	1538	1655	440	725	198	240	570	182,2

PERFORMANCE

Type		Inlet pressure	Discharge pressure	Residual Oxygen [vol. %]						
		barg	barg	3	2	1	0,5	0,1	0,01	0,001
				Total inert gas purity [vol. %]						
				97	98	99	99,5	99,9	99,99	99,999*
NC-GEN 0,5	N_2 flow [Nm³/h]	7,5	6,3	0,96	0,90	0,83	0,59	0,44	0,25	0,14
	Feed air consumption [Nm³/h]			2,3	2,2	2,2	2,1	2,1	1,7	1,3
NC-GEN 1,0	N_2 flow [Nm³/h]	7,5	6,3	1,73	1,63	1,51	1,06	0,79	0,45	0,26
	Feed air consumption [Nm³/h]			4,1	4,0	3,9	4,0	3,7	3,1	2,3
NC-GEN 1,5	N_2 flow [Nm³/h]	7,5	6,3	2,55	2,4	2,22	1,57	1,16	0,67	0,38
	Feed air consumption [Nm³/h]			6,1	6,0	5,8	5,9	5,5	4,6	3,5
NC-GEN 2,5	N_2 flow [Nm³/h]	7,5	6,3	4,50	4,25	3,93	2,77	2,06	1,18	0,67
	Feed air consumption [Nm³/h]			10,8	10,6	10,3	10,4	9,8	8,1	6,1
NC-GEN 3,5	N_2 flow [Nm³/h]	7,5	6,3	5,55	5,23	4,84	3,41	2,54	1,46	0,82
	Feed air consumption [Nm³/h]			13,3	12,9	12,6	12,8	12,0	9,9	7,5
NC-GEN 4,5	N_2 flow [Nm³/h]	7,5	6,3	7,55	7,12	6,58	4,64	3,45	1,99	1,12
	Feed air consumption [Nm³/h]			18,0	17,6	17,1	17,4	16,3	13,4	10,2
NC-GEN 7,0	N_2 flow [Nm³/h]	7,5	6,3	11,9	11,3	10,4	7,3	5,5	3,1	1,8
	Feed air consumption [Nm³/h]			28,7	28,0	27,2	27,6	26,0	21,4	16,3
NC-GEN 9,0	N_2 flow [Nm³/h]	7,5	6,3	14,2	13,4	12,4	8,7	6,5	3,7	2,1
	Feed air consumption [Nm³/h]			34,0	33,2	32,2	31,9	30,9	25,4	19,3

(1) For concentrations at higher purity please contact manufacturer.
All flow rates valid for generator operation at compressed air temperature max 35°C.
Performance ±5 %.

NM-GEN SERIES

MEMBRANE NITROGEN GENERATORS

5 - 24 bar
nitrogen pressure

35 to 55 °C
operating temp. range (feed air)

< -50 °C
dew point (at ambient pressure)

0,8 to 780 Nm^3/h
N_2 capacity

up to 99,5 %
N_2 purity

DESCRIPTION

The NM-GEN membrane nitrogen generators extract the available nitrogen from the compressed air. Generator use hollow fibre membrane technology to separate nitrogen from other components in compressed air. The membrane uses the principle of selective permeation to produce purity nitrogen. Each gas has a characteristic permeation rate, which is a function of its ability to diffuse through a membrane. Oxygen is a fast gas and is selectively diffused through the membrane wall, while nitrogen is allowed to travel along the inside of the fibre, thus creating a nitrogen-rich product stream. The oxygen-enriched gas, or permeate, is vented from the membrane separator at atmospheric pressure.

Most of the slow gases and a very small amount of the fast gases continue to travel through the fibre until they reach the end of the membrane separator, where the product nitrogen gas is piped to the application.

APPLICATIONS

- Blanketing of Chemicals and Pharmaceuticals
- Inerting of Flammable Liquids
- Laser Cutting
- Re-flow and Wave Soldering of PCBs
- UV-Curing of Coatings
- Food processing

NM-GEN 75-500

NM-GEN 2-50

STANDARD EQUIPMENT

- Set of external feed air filters
- Electric heater
- Supporting frame or cabinet
- Pressure regulator
- Internal piping
- Nitrogen and air flow regulation

OPTIONAL EQUIPMENT

- Nitrogen sterile filters
- Nitrogen booster
- Nitrogen cylinder filling system

TECHNICAL DATA								
Type	Connection			Dimensions [mm]			Mass	No. of membranes
	In	Out	Purge	Height	Width	Depth	kg	kg
NM-GEN 2	1/2"	1/2"	1/2"	1.325	428	530	51	1
NM-GEN 4	1/2"	1/2"	1/2"	1.325	428	530	52	1
NM-GEN 6	1/2"	1/2"	1/2"	1.325	428	530	55	1
NM-GEN 10	3/4"	3/4"	3/4"	1.925	558	630	103	1
NM-GEN 25	3/4"	3/4"	3/4"	1.925	558	630	112	1
NM-GEN 50	3/4"	3/4"	3/4"	1.925	558	630	130	2
NM-GEN 75	2"	2"	2"	2.253	960	1.000	291	3
NM-GEN 100	2"	2"	2"	2.253	960	1.000	310	4
NM-GEN 125	2"	2"	2"	2.253	960	1.000	520	5
NM-GEN 150	2"	2"	2"	2.253	960	1.000	539	6
NM-GEN 175	2"	2"	2"	2.253	960	1.000	557	7
NM-GEN 200	2"	2"	2"	2.253	960	1.000	576	8
NM-GEN 225	2"	2"	2"	2.253	960	1.000	594	9
NM-GEN 250	2"	2"	2"	2.253	960	1.000	613	10
NM-GEN 275	2"	2"	2"	2.253	960	1.000	631	11
NM-GEN 300	2"	2"	2"	2.253	960	1.000	650	12
NM-GEN 325	2"	2"	2"	2.253	960	1.000	860	13
NM-GEN 350	2"	2"	2"	2.253	960	1.000	879	14
NM-GEN 375	2"	2"	2"	2.253	960	1.000	897	15
NM-GEN 400	2"	2"	2"	2.253	960	1.000	916	16
NM-GEN 425	2"	2"	2"	2.253	960	1.000	934	17
NM-GEN 450	2"	2"	2"	2.253	960	1.000	953	18
NM-GEN 475	2"	2"	2"	2.253	960	1.000	971	19
NM-GEN 500	2"	2"	2"	2.253	960	1.000	990	20

PERFORMANCE													
Type	99,5 % purity		99 % purity		98 % purity		97 % purity		96 % purity		95 % purity		Heater power (kW)
	Inlet	Outlet	Inlet	Outlet	Inlet	Outlet	Inlet	Outlet	Inlet	Outlet	Inlet	Outlet	
NM-GEN 2	4,7	0,8	5,1	1,1	5,7	1,7	6,2	2,2	6,8	2,7	7,4	3,2	0,25
NM-GEN 4	8,0	1,4	8,6	1,9	9,6	2,8	10,6	3,6	11,5	4,5	12,4	5,4	0,25
NM-GEN 6	14,2	2,4	15,3	3,4	17,1	5,0	18,7	6,4	20,3	7,9	22,0	9,5	0,25
NM-GEN 10	23,3	4,0	25,1	5,5	28,0	8,1	30,7	10,5	33,4	12,9	36,2	15,5	0,25
NM-GEN 25	58,8	9,9	63,6	13,9	70,6	20,3	77,4	26,3	84,1	32,4	91,2	39,0	2,4
NM-GEN 50	117,6	19,8	127,2	27,8	141,2	40,6	154,8	52,6	168,2	64,8	182,4	78,0	2,4
NM-GEN 75	176,4	29,7	190,8	41,7	211,8	60,9	232,2	78,9	252,3	97,2	273,6	117,0	2,4
NM-GEN 100	235,2	39,6	254,4	55,6	282,4	81,2	309,6	105,2	336,4	129,6	364,8	156,0	2,4
NM-GEN 125	294,0	49,5	318,0	69,5	353,0	101,5	387,0	131,5	420,5	162,0	456,0	195,0	4,8
NM-GEN 150	352,8	59,4	381,6	83,4	423,6	121,8	464,4	157,8	504,6	194,4	547,2	234,0	4,8
NM-GEN 175	411,6	69,3	445,2	97,3	494,2	142,1	541,8	184,1	588,7	226,8	638,4	273,0	4,8
NM-GEN 200	470,4	79,2	508,8	111,2	564,8	162,4	619,2	210,4	672,8	259,2	729,6	312,0	4,8
NM-GEN 225	529,2	89,1	572,4	125,1	635,4	182,7	696,6	236,7	756,9	291,6	820,8	351,0	7,2
NM-GEN 250	588,0	99,0	636,0	139,0	706,0	203,0	774,0	263,0	841,0	324,0	912,0	390,0	7,2
NM-GEN 275	646,8	108,9	699,6	152,9	776,6	223,3	851,4	289,3	925,1	356,4	1.003	429,0	7,2
NM-GEN 300	705,6	118,8	763,2	166,8	847,2	243,6	928,8	315,6	1.009	388,8	1.094	468,0	7,2
NM-GEN 325	764,4	128,7	826,8	180,7	917,8	263,9	1.006	341,9	1.093	421,2	1.185	507,0	9,6
NM-GEN 350	823,2	138,6	890,4	194,6	988,4	284,2	1.083	368,2	1.177	453,6	1.277	546,0	9,6
NM-GEN 375	882,0	148,5	954,0	208,5	1.059	304,5	1.161	394,5	1.261	486,0	1.368	585,0	9,6
NM-GEN 400	940,8	158,4	1.017	222,4	1.129	324,8	1.238	420,8	1.345	518,4	1.459	624,0	9,6
NM-GEN 425	999,6	168,3	1.081	236,3	1.200	345,1	1.315	447,1	1.429	550,8	1.550	663,0	12,0
NM-GEN 450	1.058	178,2	1.144	250,2	1.270	365,4	1.393	473,4	1.513	583,2	1.641	702,0	12,0
NM-GEN 475	1.117	188,1	1.208	264,1	1.341	385,7	1.470	499,7	1.598	615,6	1.732	741,0	12,0
NM-GEN 500	1.176	198,0	1.272	278,0	1.412	406,0	1.548	526,0	1.682	648,0	1.824	780,0	12,0

For nitrogen flow capacity at other conditions please contact manufacturer.
Performance +/- 3%.
All flow rates valid for generator operation at compressed air temperature 55 °C and compressed air pressure 9 barg

O-GEN SERIES

PSA OXYGEN GENERATORS

5-6 barg
operating pressure

5 to 50 °C
operating temperature range

<-60 °C
dew points (atmospheric)

1,02 to 94,9 Nm³/h
capacity

up to 95 %
O_2 purity

DESCRIPTION

The O-GEN series 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, O-GEN 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.

APPLICATIONS

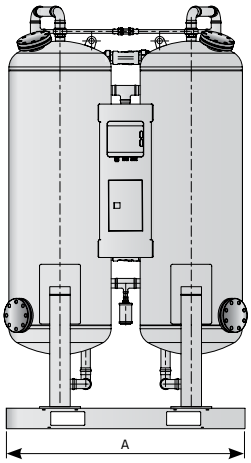
- Aquaculture
- Feed Gas for Ozone Generators
- Glass blowing
- Leaching
- NOx Reduction for Fuel Burners
- Oxygen Lancing
- Welding, Brazing
- Wellness

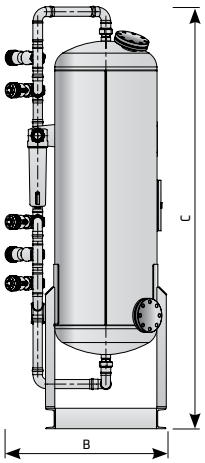
STANDARD EQUIPMENT

- Set of External Feed Air Filters
- Adsorber Vessels in Carbon Steel
- Long life Pneumatic Valves
- Internal Piping & Fittings in SS316
- Exhaust Mufflers
- Air and Oxygen flow Regulation
- Control System with SIEMENS PLC
- WebControl
- Pressure Transmitter for Automated Idle-Mode

OPTIONAL EQUIPMENT

- Oxygen Analyzer with Zirconium-Oxide Sensor
- Electronic Product Flow Meter
- Feed Air / Product Moisture Analyser
- Oxygen Booster with Cylinder Filling System
- Feed Air / Product Temperature Transmitters
- Touch screen or Semi-Graphical Operator Interface
- Sterile Filters





TECHNICAL DATA						
Type	Connection		Dimensions [mm]			Mass
	In	Out	A	B	C	kg
O-GEN 01	1/2"	1/2"	635	530	1650	130
O-GEN 02	1/2"	1/2"	685	530	1650	190
O-GEN 03	1/2"	1/2"	795	545	1655	230
O-GEN 04	1/2"	1/2"	795	585	1920	295
O-GEN 05	1/2"	1/2"	845	660	1975	410
O-GEN 06	1/2"	1/2"	950	720	2005	500
O-GEN 08	1/2"	1/2"	1040	780	2005	585
O-GEN 10	1"	1/2"	1100	780	2150	730
O-GEN 13	1"	1/2"	1150	795	2335	835
O-GEN 16	1"	1/2"	1250	850	2380	980
O-GEN 20	1"	1/2"	1330	890	2420	1120
O-GEN 23	1 1/4"	1/2"	1425	945	2480	1260
O-GEN 29	1 1/4"	1/2"	1550	1030	2520	1350
O-GEN 35	1 1/2"	1/2"	1680	1090	2580	1395
O-GEN 44	1 1/2"	1/2"	1805	1160	2615	1459
O-GEN 50	2"	1/2"	1900	1180	2680	1553
O-GEN 57	2"	1/2"	2070	1210	2720	1685
O-GEN 64	2"	1/2"	2180	1250	2750	1810
O-GEN 75	2"	1/2"	2255	1280	2780	1937
O-GEN 84	2 1/2"	1"	2480	1370	2850	2560
O-GEN 100	2 1/2"	1"	2720	1470	2880	3640

PERFORMANCE						
Type		Inlet press. [barg]	Dischar. p. [barg]	Oxygen purity [%]		
				90	93[1]	95
O-GEN 01	O_2 flow [Nm³/h]	6	4,5	1,07	1,02	0,97
			Feed air consumption [Nm³/h]	11,6	11,4	11,3
O-GEN 02	O_2 flow [Nm³/h]	6	4,5	1,80	1,71	1,63
			Feed air consumption [Nm³/h]	19,6	19,3	19,0
O-GEN 03	O_2 flow [Nm³/h]	6	4,5	2,88	2,75	2,62
			Feed air consumption [Nm³/h]	31,4	30,9	30,4
O-GEN 04	O_2 flow [Nm³/h]	6	4,5	3,56	3,40	3,24
			Feed air consumption [Nm³/h]	38,8	38,2	37,6
O-GEN 05	O_2 flow [Nm³/h]	6	4,5	5,07	4,84	4,61
			Feed air consumption [Nm³/h]	55,2	54,4	53,6
O-GEN 06	O_2 flow [Nm³/h]	6	4,5	6,50	6,21	5,92
			Feed air consumption [Nm³/h]	70,9	69,8	68,7
O-GEN 08	O_2 flow [Nm³/h]	6	4,5	8,11	7,74	7,38
			Feed air consumption [Nm³/h]	88,4	87,1	85,7
O-GEN 10	O_2 flow [Nm³/h]	6	4,5	10,00	9,55	9,10
			Feed air consumption [Nm³/h]	109,0	107,4	105,7
O-GEN 13	O_2 flow [Nm³/h]	6	4,5	13,29	12,69	12,09
			Feed air consumption [Nm³/h]	144,8	142,7	140,5
O-GEN 16	O_2 flow [Nm³/h]	6	4,5	16,00	15,28	14,56
			Feed air consumption [Nm³/h]	174,4	171,8	169,2
O-GEN 20	O_2 flow [Nm³/h]	6	4,5	19,50	18,62	17,75
			Feed air consumption [Nm³/h]	212,6	209,4	206,2
O-GEN 23	O_2 flow [Nm³/h]	6	4,5	23,28	22,23	21,19
			Feed air consumption [Nm³/h]	253,8	250,0	246,1
O-GEN 29	O_2 flow [Nm³/h]	6	4,5	29,0	27,7	26,39
			Feed air consumption [Nm³/h]	316,1	311,4	306,6
O-GEN 35	O_2 flow [Nm³/h]	6	4,5	35,0	33,43	31,85
			Feed air consumption [Nm³/h]	381,5	375,8	370,1
O-GEN 44	O_2 flow [Nm³/h]	6	4,5	43,77	41,8	39,83
			Feed air consumption [Nm³/h]	477,0	469,9	462,7
O-GEN 50	O_2 flow [Nm³/h]	6	4,5	50,0	47,75	45,5
			Feed air consumption [Nm³/h]	545,0	536,8	528,7
O-GEN 57	O_2 flow [Nm³/h]	6	4,5	57,0	54,44	51,87
			Feed air consumption [Nm³/h]	621,3	612,0	602,7
O-GEN 64	O_2 flow [Nm³/h]	6	4,5	64,0	61,12	58,24
			Feed air consumption [Nm³/h]	697,6	687,1	676,7
O-GEN 75	O_2 flow [Nm³/h]	6	4,5	74,92	71,54	68,17
			Feed air consumption [Nm³/h]	816,6	804,3	792,1
O-GEN 84	O_2 flow [Nm³/h]	6	4,5	84,0	80,22	76,44
			Feed air consumption [Nm³/h]	915,6	901,9	888,1
O-GEN 100	O_2 flow [Nm³/h]	6	4,5	99,4	94,93	90,46
			Feed air consumption [Nm³/h]	1083,5	1067,3	1051,0

OC-GEN SERIES

COMPACT PSA OXYGEN GENERATORS

2,5 - 4,3 barg
operating pressure

5 to 50 °C
operating temperature range

< -60 °C
dew point (at ambient pressure)

0,41 to 6,76 Nm^3/h
O_2 capacity

up to 95 %
O_2 purity

DESCRIPTION

OC-GEN PSA generators have been designed for continuous separation of oxygen from compressed air. Operation of the generator requires two columns operated alternately.

Separation takes place under pressure in the first column while the second column regenerates with a portion of already produced oxygen at ambient pressure. Generator consists from upper and lower control block, controller, two columns filled with adsorption material.

Whole generator is closed in compact stainless steel cabinet. Springs in the columns make sure that the adsorption material will not move during operation. Proven robust design enables efficient and reliable operation, fast installation and simple maintenance.

APPLICATIONS

- Aquaculture
- Feed Gas for Ozone Generators
- Glass blowing
- Aquaculture
- Wellness
- Food processing
- Welding, Brazing
- Laboratories

STANDARD EQUIPMENT

- Set of external feed air filters
- Adsorber vessels in aluminium
- Long life solenoid valves
- Internal piping
- Oxygen and air flow regulation
- Product pressure transmitters

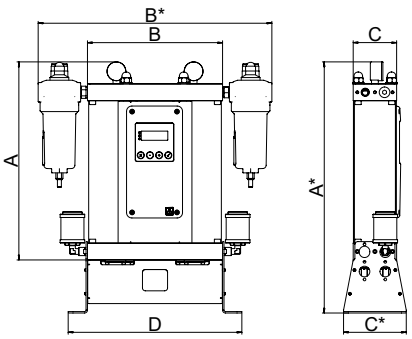
OPTIONAL EQUIPMENT

- Oxygen sterile filters
- Oxygen booster
- Oxygen cylinder filling system

TECHNICAL DATA										
Type	Connection		Dimensions [mm]							Mass
	In	Out	A	A*	B	B*	C	C*	D	kg
OC-GEN 0,5	G 3/8"	G 3/8"	573	715	280	480	100	130	354	13,5
OC-GEN 0,8	G 3/8"	G 3/8"	1041	1105	280	480	100	130	354	19,0
OC-GEN 1,1	G 3/8"	G 3/8"	1364	1495	280	480	100	130	354	27,5
OC-GEN 1,9	G 3/8"	G 3/8"	972	1105	370	570	148	170	434	45,0
OC-GEN 2,5	G 3/8"	G 3/8"	1167	1300	370	570	148	170	434	53,0
OC-GEN 3,4	G 3/8"	G 3/8"	1567	1700	370	570	148	170	434	70,0
OC-GEN 5,5	G 3/8"	G 3/8"	1345	1440	440	725	198	240	570	170,5
OC-GEN 6,5	G 3/8"	G 3/8"	1538	1655	440	725	198	240	570	182,2

PERFORMANCE						
Type		Inlet press. [barg]	Dischar. p. [barg]	Oxygen purity [%]		
				90	93(1)	95
OC-GEN 0,5	O_2 flow [Nm³/h]	6,0	4,3	0,46	0,43	0,41
			Feed air consumption [Nm³/h]	7,2	7,1	7,0
OC-GEN 0,8	O_2 flow [Nm³/h]	6,0	4,3	0,82	0,78	0,75
			Feed air consumption [Nm³/h]	13,0	12,8	12,6
OC-GEN 1,1	O_2 flow [Nm³/h]	6,0	4,3	1,21	1,16	1,10
			Feed air consumption [Nm³/h]	19,2	18,9	18,6
OC-GEN 1,9	O_2 flow [Nm³/h]	6,0	4,3	2,01	1,91	1,83
			Feed air consumption [Nm³/h]	31,7	31,2	30,7
OC-GEN 2,5	O_2 flow [Nm³/h]	6,0	4,3	2,34	2,52	2,41
			Feed air consumption [Nm³/h]	41,8	41,2	40,5
OC-GEN 3,4	O_2 flow [Nm³/h]	6,0	4,3	3,68	3,50	3,35
			Feed air consumption [Nm³/h]	58,1	57,2	56,3
OC-GEN 5,5	O_2 flow [Nm³/h]	6,0	4,3	5,7	5,43	5,19
			Feed air consumption [Nm³/h]	90,1	88,7	87,4
OC-GEN 6,5	O_2 flow [Nm³/h]	6,0	4,3	6,76	6,44	6,15
			Feed air consumption [Nm³/h]	106,9	105,3	103,7

All flow rates valid for generator operation at compressed air temperature max 35°C.
Performance ±5 %.



MEASURING EQUIPMENT

Compressed air is one of the most common but also one of the most expensive energy sources in industry. Quality and energy efficient air compressor is definitely the most important component of every compressed air system but without appropriate air treatment and measuring equipment it is not possible to provide quality and low cost compressed air.

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


OMEGA
AIR

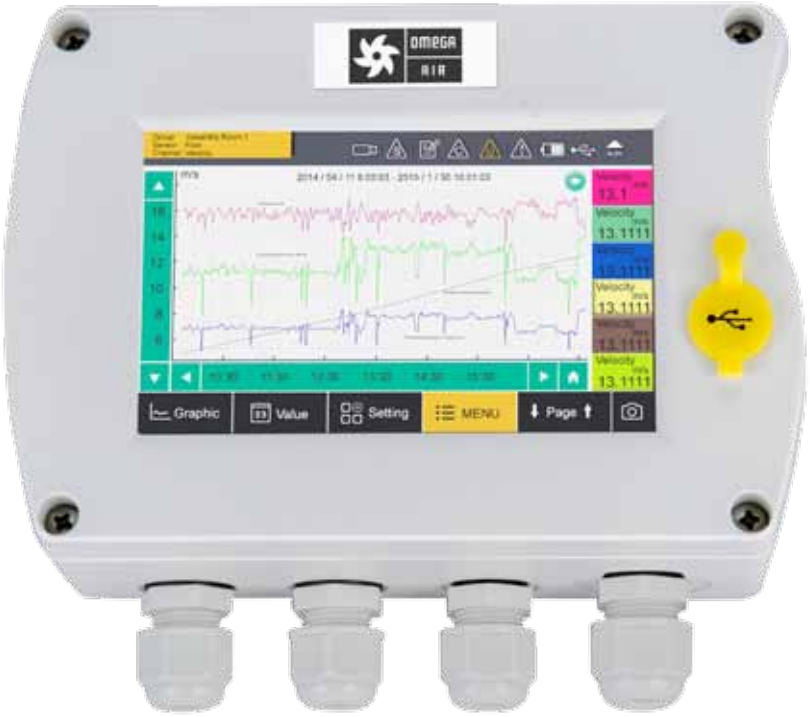
OS 330 & OS 331

DISPLAY / DATA LOGGER

5" touch display
display

2 digital inputs
digital inputs

2 analog inputs (option)
analog inputs



DESCRIPTION

The OS 330/331 is a very powerful yet cost effective new data logger and display solution. The high resolution 5" graphic display allows an easy operation where details are much sharper shown compared to many of the smaller low resolution displays.

The USB port works as a slave in combination with a PC, but also as a master when recorded data has to be transferred to a USB stick. It's versatility in regards of sensor inputs makes it a perfect solution for most measurement tasks.

APPLICATIONS

• General compressed air systems

	OS 330	OS 331
Casing	Size: 120 x 173 x 67 mm Protection class: IP65	
Display size	5" (Resolution: 800 x 480)	
Power supply	110 / 230 VAC	
Ambient temperature	0 to 50 °C	
Sensor inputs	2 inputs 4.200 mA (digital) 2 inputs for analog sensors - optional	
Communication interface	RS-485, Ethernet, USB	
Alarm	Red flashing display for preset alarm limit 2 alarm relay outputs	
Data logger (OS 331 only)	100 million values	
Sampling rate	1/s	
Accuracy	See sensor specification	
Included	Wall mountable casing	Wall mountable casing Internal data logger USB cable OSM-S Software for data analysis (requires internet connection)

NOTE: Power supply cable is not included.

OS 215 & OS 220

DEW POINT SENSOR

Option: OS MC - Measuring chamber

-20 to 50 °C (OS 215)
-100 to 0 °C (OS 220)
dew point measuring range

0 to 99,9%
relative humidity measuring range

-30 to 70 °C
temperature measuring range

DESCRIPTION

The dew point sensors OS 215/OS 220 provides reliable and long term stable dew point monitoring in industrial applications.

With these models dew point measurement in refrigerant dryers becomes affordable and can replace traditional temperature measurement which often couldn't tell the real dew point. OS 215/OS 220 outputs the measurement value through the loop powered 4-20 mA signal.

	OS 215	OS 220
APPLICATION:	Refrigeration dryers	Adsorption & Refrigeration dryers
Measuring range	Dew point: –20 to 50 °C Relative humidity: 0 to 99,9 % Temperature: -30 to 70 °C	Dew point: –100 to 0 °C Relative humidity: 0 to 99,99 % Temperature: -30 to 70 °C
Pressure range	–1 to 50 bar	0 to 16 bar
Accuracy	Dew point: ± 2 °C	
Response time t90	0 to –20 °C: 30 sec –20 to 0 °C: 10 sec	-80 to -20 °C: 20 sec -20 to -80 °C: 180 sec
Connection	M12, 5 pole	
Process connection	G 1/2" BSP	
Output signal	4 to 20 mA (digital), 2-wire	4 to 20 mA (digital), 3-wire or loop powered (2-wire)
Ambient temperature	-20 to 50 °C	0 to 50 °C
Protection class	IP65	
Casing	Process connection: stainless steel Casing: Zinc alloy	
Included	Power cable with M12 connector (for connection to external display)	

APPLICATIONS

- General compressed air systems
- Compressed air dryers and sensitive equipment
- Plastic injection process resin drying
- Blow moulding process
- Medical gases in hospitals

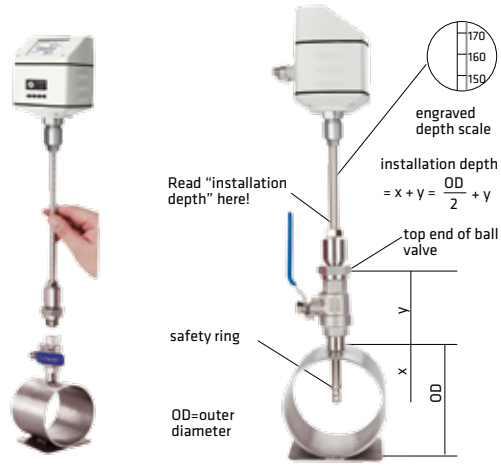
OS 401, 421

ECONOMIC FLOW / CONSUMPTION SENSOR

50 (16) bar
operating pressure

DN15 to DN300
tube diameters

-30 to 140 °C
fluid temperature



OS 401 insertion type - installation method.

Measuring units	m^3/h, m^3/min, l/min, cfm, m/s, kg/min, kg/h, kg/s
Accuracy	1.5% of reading ±0.3% full scale
Stated accuracy at	Ambient/process temperature 23 ° C ±3° C Ambient/process humidity < 90 %, Process pressure at 0.6 MPa
Repeatability	± 0.25% of reading
Medium	Air, gas (non-corrosive gas)
Operating temperature	-30 ... 140 °C fluid temperature -30 ... 70 °C casing -10 ... 50 °C casing with local display
Operating pressure	Up to 50 bar (OS 401); up to 16 bar (OS 421)
Analogue output	Signal: 4 ... 20 mA Scaling: 0 ... max flow Max. load: ≤250 R
Pulse output	1 pulse per m^3, isolated switch output, max 30 VDC, 20 mA, normally open (pulse length: 10-120 ms, depends on flow rate)
Power supply	15 ... 30 VDC, 200 mA
Principle of measurement	Thermal mass flow
Sensor	Glass coated resistive sensor
Display:	2.4" colour graphics display with keypad
Transport temperature	without display: -30 ... 70 ° C with display: -10 ... 50 ° C

DESCRIPTION

OS 401/OS 421 are flow sensors, suitable for consumption measuring in different compressed air systems.

The version with display shows the volumetric flow and the total compressed air consumption. Via the keyboard tube diameters and the consumption counter can be set.

Various settings such as gas type, flow unit, reference standards, can be set.

Option:
Built-in display and external power supply

APPLICATIONS

- General compressed air systems

OS 421: Shortened inlet section!
Recommended inlet section length is:
l = 15 x inner pipe diameter

OS 415, OS 418

THERMAL MASS FLOW METER

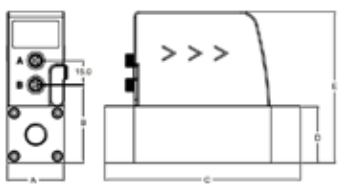
0 - 10 bar
operating pressure

0 to +50 °C
operating temperature

		OS 415		OS 418	
		Nm^3/h	scfm	Nm^3/h	scfm
Measuring range *	DN8	15	8.8	15	8.8
	DN15	60	35.3	60	35.3
	DN20	120	70.6	120	70.6
	DN25	210	123.6	210	123.6
Accuracy		3% of reading		1.5% of reading	
Turndown ratio		50:1		100:1	
Pressure range		0 ... 10 bar 0 ... 145 psi			
Measured gas		Air, N_2		Non-corrosive gases	
Ambient conditions		0 ... 50°C			
Transport temperature		-30 ... +70°C			
Response time – T_{90}		1 s		0.1 s	
Power supply		18 ... 30 VDC / 120 mA			
Electrical connection		2 x M8, 4 poles			
Output signal (only one)		4 ... 20 mA and pulse (isolated), RS-485 (Modbus RTU)			
Casing		Aluminium alloy, PC + ABS			
Classification		IP54			
Interface		Wireless (Service App)		Wireless (Service App), USB for logger read out	
Data logger	Samples	/		10 000 000	
	Channels			Up to 3	
	Sampling rate			1 s ... 1 h	
Pressure option	Range	/		0 ... 10 bar	
	Accuracy			1% F.S.	

* Stated flow values are at standard conditions of P=0.1 MPa(a) and T=20°C with medium air
** Sensors are calibrated in air. On request calibration can be performed in other gases.

	A	B	C	D	E
DN8 / DN 15	35	48	120	35	93
DN20 / DN25	48	61	178	48	106



DESCRIPTION

OS 415/418 is based on the thermal mass flow principle. It measures flow and consumption directly at the point of use independent of pressure and temperature. Both versions come standard with Service App to help the user quickly and easily to check the readings or adjust the settings.

APPLICATIONS

- Compressed air systems

OS 16 & OS 40

PRESSURE SENSOR

-30 to +100 °C
media temperature

DESCRIPTION

- High accurate and affordable industrial pressure sensor with excellent anti-interference capability.

APPLICATIONS

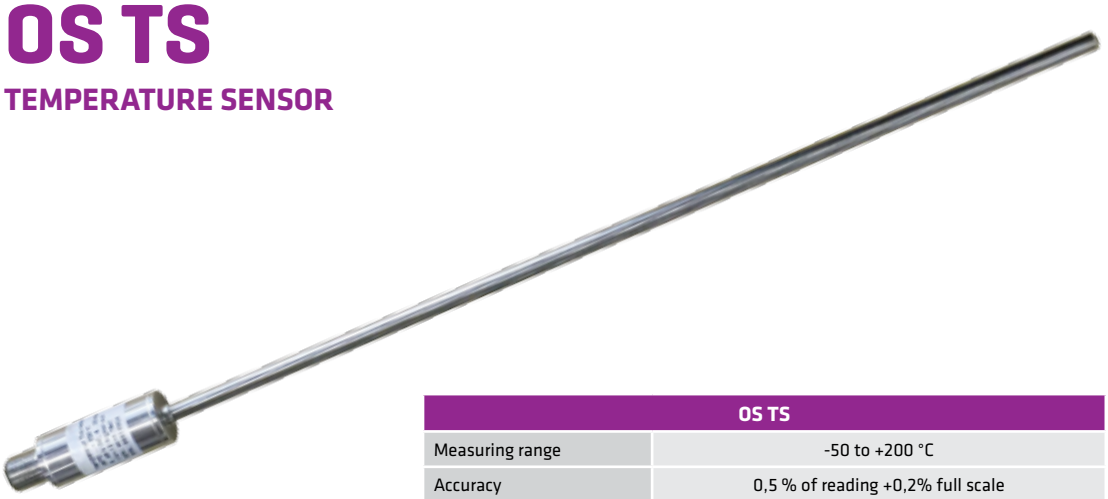
- General compressed air systems
- Industrial equipment
- Hydraulic systems
- Pneumatic systems
- Industrial engines
- HVAC/R equipment
- Spraying systems
- Pumps
- Cooling systems

	OS 16	OS 40
Measuring/pressure range	Up to 16 bar	Up to 40 bar
Measuring range - media	-30 to 100 °C	
Accuracy	0,5 % full scale	
Process connection	G 1/4" thread	
Output	4 to 20mA (digital), 2 wire	
Operating temperature	–30 to 80 °C	
Protection class	IP67	
Casing	Stainless steel 304L	
Included	Power cable (for connection to external display)	

OS TS

TEMPERATURE SENSOR

-50 to +200 °C
measuring range



DESCRIPTION

OS TS is temperature transmitter designed to measure the temperature of liquid, vapour, compressed air and gases. Principle of operation is measurement of resistance of a platinum element.

APPLICATIONS
General compressed air systems, temperature measurement in liquids, gases and vapours

APPLICATIONS

- General compressed air systems
- Temperature measurement in liquids, gases and vapours
- Inlet / outlet temperature of dryers
- Outlet temperature of compressors

OS TS	
Measuring range	-50 to +200 °C
Accuracy	0,5 % of reading +0,2% full scale
Sensor type	Pt 1000, class A
Output signal	4...20 mA (digital), 2 wire loop powered
Power supply	16...24 VDC
Connection type	M12
Ambient temperature	-40 °C ... +90 °C
Protection class	IP 67
Tube material	Stainless steel 1.4571
Sensor diameter	6 mm
Sensor length	150 mm / 300 mm
Scaling	4 mA -> -50°C 20 mA -> +200°C

OS 120

RESIDUAL OIL SENSOR

0,003 to 10,00 mg/m³
measuring range

3 to 15 bar
operating pressure

DESCRIPTION

The oil vapour sensor OS120 monitors oil contents of compressed air and gases permanently or for spot checks. The simple installation and the outstanding performance makes OS 120 the ideal choice when oil vapour contents needs to be measured and monitored.

Oil free compressed air is not an easy task to be achieved. Monitoring is a must in many industries and applications to avoid contaminations in products and risks for health of humans. OS 120 makes this monitoring task affordable and reliable.

For best accuracy and long term stability, the sensor applies an automatic calibration. Sensor contaminations and sensor life time are monitored and will be indicated to the user. An over range detection will remove the sampling air from the sensor to protect it against contamination.

OS 120	
Measuring range	Concentration: 0,003 ... 10,00 mg/m³,
	Gas temperature: -20 °C to +50 °C
	Pressure: 3 ... 15 barg
	Relative humidity: < 40 % RH, no condensation
Sample flow rate	< 2 l/min, measuring gas is released to ambient
Accuracy	5 % of reading ± 0.003 mg/m³
Gas connection	6 mm quick connection
Output signal	4 ... 20 mA (0 ... 10 mg/m³) RS-485, Modbus/RTU
Ambient temperature	-20 °C...+50 °C
Protection class	IP 65
Casing dimensions	PC, Al alloy, 271 X 205 X 91 mm
Display / data logger	5" touch screen, 100 million values
Power supply	24 VDC ± 5 %, 8 W
Sensor type:	PID (photoionization detector)

APPLICATIONS

- General compressed air systems
- Downstream of activated carbon filters
- Downstream of oil-free compressors
- Wherever upstream drying and filtration is applied

OS 130

LASER PARTICLE COUNTER

0 - 40 °C
measuring gas temperature

3-8 bar
system pressure

DESCRIPTION

OS 130 is a new generation laser particle counter optimized for applications in compressed air or compressed gases. With quality in mind and with the knowledge of customers needs this instrument is designed for continuous operation 24 hours, 7 days a week. Depending on the selected model there is sensitivity available from 0.1 µm up to 5.0 µm.

OS 130 can fulfill the requirements stipulated in the compressed air standard ISO 8573-4. The measurement values represent the particle counts per ft^3, l or m^3 or alternatively in $\mu g/m^3$. Settings can be done through the integrated display, an external display or through the service software.

APPLICATIONS

- General comp. air systems
- Medical air
- Pharmaceuticals
- Breathable air
- Marine air
- Food and beverage
- Medical engineering
- High speed trains
- Semiconductor fabs
- Conveyance of hygroscopic food
- High tech processes
- Electronics industry

OS 130			
Measuring range	System pressure:		3 ... 8 bar
	Gas temperature:		0 °C ... +40 °C (at inlet)
	Ambient temperature:		10 °C ... +40 °C
	Particle size:	OS 130 A	2 channels: 0.3 - 0.5 µm, >0.5 µm
		OS 130 B	4 channels: 0.2 - 0.3 µm, 0.3 - 0.5 µm, 0.5 - 1.0 µm, >1.0 µm
		OS 130 C	4 channels: 0.5 - 1.0 µm, 1.0 - 3.0 µm, 3.0 - 5.0 µm, >5.0 µm
		OS 130 D	2 channels: 0.5 - 5.0 µm, >5.0 µm
		OS 130 E	4 channels: 0.3 - 0.5 µm, 0.5 - 1.0 µm, 1.0 - 5.0 µm, >5.0 µm
Counting efficiency	50 %		
Sample flow rate	2.83 l/min		
Gas connection	6 mm quick connection		
Sampling rate	One sample per minute		
Output signal	RS-485, Modbus/RTU, 4 ... 20 mA		
Protection class	IP 65		
Casing dimensions	271 X 205 X 91 mm		
Display / data logger	5" touch screen, 100 million values		
Power supply	24 VDC, 5 W		
Transport temperature	-30 °C ... +70 °C		

OS 600

COMPRESSED AIR PURITY ANALYZER

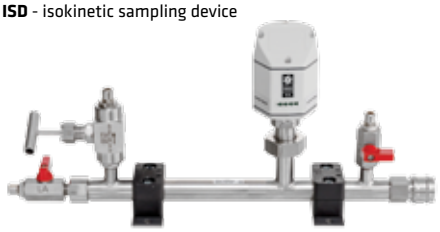
0,3 - 5,0 µm
particles

0,003 - 10.000 mg/m³
oil vapor

+100 to +20 °C
dew point

3 to 15 bar
operating pressure

Option:
OS ISD - isokinetic sampling device



DESCRIPTION

The OS 600 combines latest sensor technology, software-guided measurements and a time-saving setup into a handy, touchscreen-controlled multi-tool.

With our OS 600 you will finish measurement runs in much less time than with your traditional method.

OS 600			
Measuring range	**Sensor type**	**Range**	**Accuracy**
Particles	Laser optical detection	0,3 ... 0,5 µm 0,5 ... 1,0 µm 0,3 ... 0,5 µm	50 % @ 0,3 ... 0,4 µm per JIS 100 % @ 0,4 ... 5,0 µm per JIS
Oil vapor	Photoionisator detector PID	0,003 ... 10.000 mg/m³	5 % of value ± 0.003 mg/m³
Dew point	Dual-sensor technology (QCM + Polymer)	-100 °C ... +20 °C	±2°C

Meduim humidity	< 40 % relative humidity, no condensation
Medium temperature	0 °C ... +40 °C
Operating pressure	3 - 15 bar
Process connection	6 mm quick connection
Casing & Weight	PC, Al alloy, total product weight < 10 kg
Main power supply adaptor	AC/DC In: 100 ... 240 VAC, 50/60 Hz, 1,4A
Display / data logger	5'' touch screen, 100 million values

APPLICATIONS

Portable multi-tool for compressed air purity measurements. Measures, records and validates quality parameters like particles, dew point, oil vapour contents, temperature and the pressure of compressed air systems.

OS 551-P6 SET

PORTABLE DATA LOGGER, FLOW, DEW POINT, PRESSURE SENSORS

DESCRIPTION

OS 551 - P6 is the ideal data logger for energy analyses (ISO 50001) and air audits (ISO 11011).

Measuring set consists of:

- 1 x OS 551 portable data logger
- 1 x OS 400 portable flow sensor
- 1 x OS 220 portable dew point sensor with measuring chamber
- 2 x OS 16 portable pressure sensor
- 4 x connection cables

APPLICATIONS

• Compressed air systems

OS 551-P6	
Casing	Size: 365 x 270 x 169 mm Weight: 4 kg Protection class: IP65
Power supply	230 VAC / 50 Hz (standard) 110 VAC / 60 Hz (on demand)
Battery	Internal rechargeable battery / up to 8 hour operations (depends on connected sensors)
Ambient temperature	0 to 45 °C
Sensor inputs	2 inputs for OS flow/dew point sensors 2 inputs for pressure sensors
Communication interface	USB, Ethernet
Accuracy	See sensor specification
Included	6 channel data recorder, USB cable OSM-S Software for data analysis included (requires internet connection)

OS 530

PORTABLE LEAK DETECTOR FOR PRESSURIZED SYSTEMS

40 kHz ±2 kHz
operating frequency

0 to +40 °C
operating temperature

DESCRIPTION

Leaks in compressed air systems can cause thousands of Euro losses. The detection of leaks is an important maintenance requirement which traditionally can be done by soap water, but now by an US detector like OS 530.

When gases are leaking through tubes and tanks an ultrasonic sound is produced which can be detected by OS 530 even from several meter distance.

OS 530 transforms these inaudible signals into a frequency which can be easily heard by using the supplied noise isolated headset. The integrated laser pointer helps to spot the leak from distance. In unpressurized systems an ultrasonic tone generator can be used whose sound will leak through small openings.

OS 530				
Measuring range (detection distance)			Diameter	
			0,1 mm	0,2 mm
	Pressure	0,5 bar	2 m	2 m
		5,0 bar	8 m	14 m
Operating frequency	40 kHz ±2 kHz			
Battery life	Internal NiMH rechargeable, 4-6 hours of operation			
Included	Noise isolated headset, focus tube and focus tip, battery charger, transport case			

APPLICATIONS

- Leak detection in compressed air, refrigerants, simply of any gas!
- Insulation test of doors and windows
- Detection of partial electrical discharges causing damages on insulations

OS 505

PORTABLE DEW POINT SENSOR

1 to 15 bar
operating pressure

-100 to -30 °C
temperature range sensor A

-50 to +50 °C
temperature range sensor B

DESCRIPTION

OS 505 is a combination of next generation measurement technology with modern user interface design. The experienced user knows that dew point measurement also requires the measurement of line pressure (according to ISO 8573), since dew point is pressure dependent. With the OS 505 the line pressure is measured in combination with the dew point, so the user can be confident that the calculation is accurate and free from human error.

OS 505 comes with two sensor units:

Sensor A uses the new QCM technology which provides fast and accurate measurement results at dew points below –30 °C down to –100 °C.

Sensor B is for high moisture applications from -50 °C to +50°C where the polymer sensor is more suitable. Both sensors can be easily exchanged.

APPLICATIONS

- Compressed air systems

OS 505 set	
Measuring range	Dew point sensor A: –100 ... –30 °C Dew point sensor B: –50 ... 50 °C Temperature: –30 ... 50 °C
Operating pressure	1 to 15 bar (g)
Accuracy	Dew point: ±2 °Ctd @ –50 °Ctd Temperature: ± 0,3 °C Pressure: ± 0,05 bar
Response time t90	-50 to -10 °C: 10s -10 to -50 °C: 300 s
Process connection	Quick coupling
Battery life	6 hours
Included	Parking/Measuring chamber, Teflon hose with quick connector, data logger, SD card, Bluetooth, USB Charger with USB cable, Portable printer, Transport case, OSM-S Software

OMEGA AIR

Air and Gas

PRESSURE VESSELS

Compressed air receiver is an essential part of every compressed air system. It acts as a buffer and a storage medium between the compressor and the consumption system.

Air receivers are much more than just buffers. Their purpose is also:
- Reducing excessive compressor cycling,
- Eliminating pulsations from discharge line,
- Collecting condensate and water in the air after the compressor,
- Reducing energy costs by minimizing excessive starting of the compressor motor,
- Help reducing dew point and temperature spikes...

Omega Air d.o.o is also a producer of custom made pressure vessels according to PED or ASME standards. Each of our pressure vessels is calculated, assembled, tested and guaranteed to conform standards and to withstand the process necessary for your application.

Custom made pressure vessels can include a diverse range of:
- Sizes and volumes,
- Horizontal or vertical designs,
- Modular or packaged systems,
- Special alloys and materials,
- High or low pressure ratings,
- Heating and cooling options,
- Accessory valves and piping,
- Ladders and platforms,
- Anticorrosion protection...

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

PV PED

PRESSURE VESSELS - PED

11 bar
operating pressure

-10 to **+120** °C
operating temperature range

DESCRIPTION

Pressure vessels are tanks, designed to store compressed air. On request Pressure vessels can also be designed for any other technical gas. Volume of pressure vessel depends on compressor capacity and on consumption of compressed air.

The supply of pressure vessel includes:
- Anticorrosion protection (external painting or hot dip galvanizing)
- CE certificate (PV 200-900) PED (PV 1000-10000)
- Inspection opening (PV 1000-10000)
- Supporting legs
- Connections for optional equipment

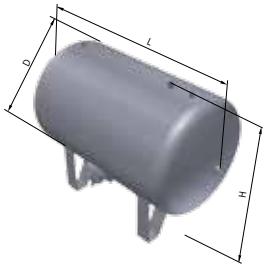
APPLICATIONS

- Compressed gases
- Standard: Fluid group 2
- On request: Fluid group 1

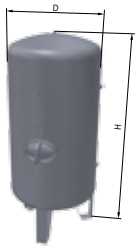
Pressure vessels are designed and manufactured according to the European Directive and International Standard:

STANDARD:
- Directive 2014/68/EU PED Pressure Equipment

OPTION:
- Directive 2014/29/EU Simple Pressure Vessel
- ASME "U" Designator (The American Society of Mechanical Engineers (section VIII div. 1)
- NATIONAL BOARD REGISTRATION (Boiler and Pressure Vessel)
- CRN Canadian Registration Number
- EAC - REGULATIONS Customs Union "On the safety equipment of high pressure" (TR TC 032/2013)
- EAC - REGULATIONS Customs Union "On the safety on machines and equipment" (TR CU 010/2011)
- Lloyd's Register for ship - Fusion Welded Class 2.1
- SII – The Standards Institutions of Israel
- DGM / DPP Algeria (ex ARH)
- Tunisia
- UKR Ukraine
- MHLW Japan
- DOSH Malaysia
- AS 1210 Australian Standard
- MOM Singapore
- NR13 Brazil
- Serbia AAA
- TUV
- Bureau Veritas
- Rina
- SGS
- DNV – GL
- ABS American Bureau of Shipment



Horizontal pressure vessels



Vertical pressure vessels

For any nonstandard pressure vessel (based on operating media, design pressure, design temperature, standard, ...) please contact producer or your local distributor.

Model	Volume	Max. press.	Connections number and dimensions									Dimensions			Mass
	l	bar	3/8 "	1/2 "	3/4 "	1 "	1 1/4 "	1 1/2 "	2"	3"	4"	H (mm)	D (mm)	L (mm)	kg
PRESSURE VESSELS - VERTICAL - PAINTED															
PV 50 V 11 P	50	11	1	3	-	-	-	-	-	-	-	926	300	-	19
PV 100 V 11 P	100	11	1	1	4	-	-	-	-	-	-	1.153	370	-	28
PV 150 V 11 P	150	11	1	1	-	1	-	-	-	-	-	1.364	400	-	43
PV 200 V 11 P	200	11	1	-	5	-	-	-	2	-	-	1.530	430	-	50
PV 270 V 11 P	270	11	1	-	5	-	-	-	2	-	-	1.685	500	-	60
PV 500 V 11 P	500	11	1	-	1	-	2	4	-	-	-	2.077	600	-	130
PV 725 V 11 P	725	11	1	-	1	-	2	4	-	-	-	1.863	790	-	167
PV 900 V 11 P	900	11	1	-	1	-	2	-	4	-	-	2.213	790	-	186
PV 1000 V 11 P	1.000	11	1	-	1	-	2	-	4	-	-	2.345	790	-	204
PV 1500 V 11 P	1.500	11	1	-	1	-	2	-	4	-	-	2.305	1.000	-	278
PV 2000 V 11 P	2.000	11	1	-	1	-	2	-	4	-	-	2.805	1.000	-	352
PV 3000 V 11 P	3.000	11	1	-	1	-	2	-	-	4	-	2.965	1.300	-	537
PV 4000 V 11 P	4.000	11	1	-	1	-	2	-	-	4	-	3.070	1.450	-	802
PV 5000 V 11 P	5.000	11	1	-	1	-	2	-	-	4	-	3.570	1.450	-	932
PV 6000 V 11 P	6.000	11	1	-	1	-	2	-	-	4	-	4.070	1.450	-	1.057
PV 8000 V 11 P	8.000	11	1	-	-	-	2	-	-	-	4	4.135	1.650	-	1.352
PV 10000 V 11 P	10.000	11	1	-	-	-	2	-	-	-	4	5.135	1.650	-	1.694
PRESSURE VESSELS - VERTICAL - GALVANIZED															
PV 50 V 11 G	50	11	1	2	-	1	-	-	-	-	-	926	300	-	19
PV 100 V 11 G	100	11	1	-	4	-	-	-	1	-	-	1.153	370	-	28
PV 150 V 11 G	150	11	1	-	-	4	-	-	1	-	-	1.364	400	-	43
PV 200 V 11 G	200	11	1	-	3	-	-	-	2	-	-	1.530	430	-	50
PV 270 V 11 G	270	11	1	-	3	-	-	-	2	-	-	1.685	500	-	60
PV 500 V 11 G	500	11	1	-	1	-	2	2	-	-	-	2.077	600	-	130
PV 725 V 11 G	725	11	1	-	1	-	2	2	-	-	-	1.863	790	-	167
PV 900 V 11 G	900	11	1	-	1	-	2	-	2	-	-	2.213	790	-	186
PV 1000 V 11 G	1.000	11	1	-	1	-	2	-	2	-	-	2.345	790	-	204
PV 1500 V 11 G	1.500	11	1	-	1	-	2	-	2	-	-	2.305	1.000	-	278
PV 2000 V 11 G	2.000	11	1	-	1	-	2	-	2	-	-	2.805	1.000	-	352
PV 3000 V 11 G	3.000	11	1	-	1	-	2	-	-	2	-	2.965	1.300	-	537
PV 4000 V 11 G	4.000	11	1	-	1	-	2	-	-	2	-	3.070	1.450	-	802
PV 5000 V 11 G	5.000	11	1	-	1	-	2	-	-	2	-	3.570	1.450	-	932
PV 6000 V 11 G	6.000	11	1	-	1	-	2	-	-	2	-	4.070	1.450	-	1.057
PV 8000 V 11 G	8.000	11	1	-	-	-	2	-	-	-	2	4.135	1.650	-	1.352
PV 10000 V 11 G	10.000	11	1	-	-	-	2	-	-	-	2	5.135	1.650	-	1.694
PRESSURE VESSELS - HORIZONZAL - PAINTED															
PV 50 H 11 P	50	11	1	1	-	-	-	-	-	-	-	352	300	774	19
PV 100 H 11 P	100	11	2	2	1	-	-	-	-	-	-	447	370	1.010	28
PV 150 H 11 P	150	11	2	2	1	-	-	-	-	-	-	470	400	1.224	43
PV 500 H 11 P	500	11	1	2	-	1	1	-	-	-	-	670	600	1.860	140
PV 900 H 11 P	900	11	1	-	1	-	1	-	4	-	-	905	790	1.970	195
PV 1000 H 11 P	1.000	11	2	-	2	1	1	-	-	-	-	905	790	2.180	210
PV 1500 H 11 P	1.500	11	1	-	1	-	1	-	4	-	-	1.160	1.000	2.160	278
PV 2000 H 11 P	2.000	11	1	-	1	-	1	-	4	-	-	1.160	1.000	2.660	352
PV 3000 H 11 P	3.000	11	1	-	1	-	1	-	-	4	-	1.340	1.200	2.815	537
PV 4000 H 11 P	4.000	11	1	-	1	-	1	-	-	4	-	1.620	1.450	1.920	802
PV 5000 H 11 P	5.000	11	1	-	1	-	1	-	-	4	-	1.620	1.450	3.420	932
PV 6000 H 11 P	6.000	11	1	-	1	-	1	-	-	4	-	1.620	1.450	3.920	1.057
PV 8000 H 11 P	8.000	11	1	-	1	-	1	-	-	-	4	1.790	1.650	4.025	1.352
PV 10000 H 11 P	10.000	11	1	-	1	-	1	-	-	-	4	1.790	1.650	5.025	1.694
PRESSURE VESSELS - HORIZONZAL - GALVANIZED															
PV 50 H 11 G	50	11	1	-	-	1	-	-	-	-	-	352	300	774	19
PV 100 H 11 G	100	11	2	1	1	-	-	-	1	-	-	447	370	1.010	28
PV 150 H 11 G	150	11	2	1	1	-	-	-	1	-	-	470	400	1.224	43
PV 500 H 11 G	500	11	1	2	-	1	-	-	-	-	-	670	600	1.860	140
PV 900 H 11 G	900	11	1	-	-	-	-	-	4	-	-	905	790	1.970	195
PV 1000 H 11 G	1.000	11	2	-	2	1	-	-	-	-	-	905	790	2.180	210
PV 1500 H 11 G	1.500	11	1	-	1	-	-	-	4	-	-	1.160	1.000	2.160	278
PV 2000 H 11 G	2.000	11	1	-	1	-	-	-	4	-	-	1.160	1.000	2.660	352
PV 3000 H 11 G	3.000	11	1	-	1	-	-	-	-	4	-	1.340	1.200	2.815	537
PV 4000 H 11 G	4.000	11	1	-	1	-	-	-	-	4	-	1.620	1.450	1.920	802
PV 5000 H 11 G	5.000	11	1	-	1	-	-	-	-	4	-	1.620	1.450	3.420	932
PV 6000 H 11 G	6.000	11	1	-	1	-	-	-	-	4	-	1.620	1.450	3.920	1.057
PV 8000 H 11 G	8.000	11	1	-	1	-	-	-	-	-	4	1.790	1.650	4.025	1.352
PV 10000 H 11 G	10.000	11	1	-	1	-	-	-	-	-	4	1.790	1.650	5.025	1.694

HPV PED

HIGH PRESSURE VESSELS - PED

up to 48 bar
operating pressure

-10 to +120 °C
operating temperature range

DESCRIPTION

HPV pressure vessels are designed for high pressure compressed air applications. The design, construction with approved welding procedures and assessment of vessels conformity are regulated by European Directive 2014/68/EU PED.

The supply of pressure vessel includes:
- Anticorrosion protection (external painting or hot dip galvanizing)
- Supporting legs
- Connections for optional equipment

APPLICATIONS

- Compressed gases
- Standard: Fluid group 2
- On request: Fluid group 1

Pressure vessels are designed and manufactured according to the European Directive and International Standard:

STANDARD:
- Directive 2014/68/EU PED Pressure Equipment

OPTION:
- Directive 2014/29/EU Simple Pressure Vessel
- ASME "U" Designator (The American Society of Mechanical Engineers (section VIII div. 1)
- NATIONAL BOARD REGISTRATION (Boiler and Pressure Vessel)
- CRN Canadian Registration Number
- EAC - REGULATIONS Customs Union "On the safety equipment of high pressure" (TR TC 032/2013)
- EAC - REGULATIONS Customs Union "On the safety on machines and equipment" (TR CU 010/2011)
- Lloyd's Register for ship - Fusion Welded Class 2.1
- SII – The Standards Institutions of Israel
- DGM / DPP Algeria (ex ARH)
- Tunisia
- UKR Ukraine
- MHLW Japan
- DOSH Malaysia
- AS 1210 Australian Standard
- MOM Singapore
- NR13 Brazil
- Serbia AAA
- TUV
- Bureau Veritas
- Rina
- SGS
- DNV – GL
- ABS American Bureau of Shipment

TECHNICAL DATA												
Model		Volume	Max. pressure	Connections number and dimensions						Dimensions		Mass
		l	bar	1/4"	3/8 "	3/4 "	1 1/4 "	2"	3"	H (mm)	D (mm)	kg
16 bar - HIGH PRESSURE VESSELS - VERTICAL												
PAINTED	**GALVANIZED**											
HPV 500 V 16 P	**HPV 500 V 16 G**	500	16	-	1	1	2	2	-	2.120	600	160
HPV 1000 V 16 P	**HPV 1000 V 16 G**	1.000	16	-	1	1	2	2	-	2.365	790	280
HPV 1500 V 16 P	**HPV 1500 V 16 G**	1.500	16	-	1	1	-	4	-	2.310	1.000	405
HPV 2000 V 16 P	**HPV 2000 V 16 G**	2.000	16	-	1	1	-	4	-	2.810	1.000	490
HPV 3000 V 16 P	**HPV 3000 V 16 G**	3.000	16	-	1	1	-	2	2	2.965	1.200	620
HPV 4000 V 16 P	**HPV 4000 V 16 G**	4.000	16	-	1	1	-	2	2	3.110	1.430	905
HPV 5000 V 16 P	**HPV 5000 V 16 G**	5.000	16	-	1	1	-	2	2	3.610	1.430	1.055
21 bar - HIGH PRESSURE VESSELS - VERTICAL												
PAINTED	**GALVANIZED**											
HPV 475 V 21 P	**HPV 475 V 21 G**	475	21	-	1	1	2	2	-	2.135	600	220
HPV 1000 V 21 P	**HPV 1000 V 21 G**	1.000	21	-	1	1	-	4	-	2.385	790	352
HPV 1500 V 21 P	**HPV 1500 V 21 G**	1.500	21	-	1	1	-	4	-	2.470	1.000	555
HPV 2000 V 21 P	**HPV 2000 V 21 G**	2.000	21	-	1	1	-	4	-	2.810	1.000	715
HPV 3000 V 21 P	**HPV 3000 V 21 G**	3.000	21	-	1	1	-	4	-	2.950	1.200	950
HPV 4000 V 21 P	**HPV 4000 V 21 G**	4.000	21	-	1	1	-	4	-	3.130	1.430	1.400
HPV 5000 V 21 P	**HPV 5000 V 21 G**	5.000	21	-	1	1	-	4	-	3.630	1.430	1.750
32 bar - HIGH PRESSURE VESSELS - VERTICAL												
PAINTED	**GALVANIZED**											
HPV 500 V 32 P	**HPV 475 V 32 G**	500	32	-	1	1	-	4	-	2.140	600	245
HPV 1000 V 32 P	**HPV 1000 V 32 G**	1.000	32	-	1	1	-	4	-	2.390	790	505
HPV 1500 V 32 P	**HPV 1500 V 32 G**	1.500	32	-	1	1	-	4	-	2.500	1.000	710
HPV 2000 V 32 P	**HPV 2000 V 32 G**	2.000	32	-	1	1	-	4	-	2.850	1.000	875
HPV 3000 V 32 P	**HPV 3000 V 32 G**	3.000	32	-	1	1	-	4	-	2.950	1.200	1.170
HPV 4000 V 32 P	**HPV 4000 V 32 G**	4.000	32	-	1	1	-	4	-	3.100	1.430	1.700
HPV 5000 V 32 P	**HPV 5000 V 32 G**	5.000	32	-	1	1	-	4	-	3.600	1.430	1.950
42 bar - HIGH PRESSURE VESSELS - VERTICAL												
PAINTED	**GALVANIZED**											
HPV 120 V 42 P	**HPV 120 V 42 G**	120	42	1	-	-	2	2	-	1.300	400	135
HPV 500 V 42 P	**HPV 500 V 42 G**	500	42	-	1	1	-	4	-	2.135	600	340
HPV 1000 V 42 P	**HPV 1000 V 42 G**	1.000	42	-	1	1	-	4	-	2.385	790	605
HPV 1500 V 42 P	**HPV 1500 V 42 G**	1.500	42	-	1	1	-	4	-	2.470	1.000	755
HPV 2000 V 42 P	**HPV 2000 V 42 G**	2.000	42	-	1	1	-	4	-	2.810	1.000	1.025
HPV 3000 V 42 P	**HPV 3000 V 42 G**	3.000	42	-	1	1	-	4	-	2.950	1.200	1.450
HPV 4000 V 42 P	**HPV 4000 V 42 G**	4.000	42	-	1	1	-	4	-	3.130	1.430	2.190
HPV 5000 V 42 P	**HPV 5000 V 42 G**	5.000	42	-	1	1	-	4	-	3.630	1.430	2.515
48 bar - HIGH PRESSURE VESSELS - VERTICAL												
PAINTED	**GALVANIZED**											
HPV 1000 V 48 P	**HPV 1000 V 48 G**	790	48		1	1		4		2.400	790	725
HPV 2000 V 48 P	**HPV 2000 V 48 G**	1.000	48		1	1		4		2.810	1.000	1.195
HPV 3000 V 48 P	**HPV 3000 V 48 G**	1.200	48		1	1		4		2.970	1.200	1.685

CUSTOM MADE PV

CUSTOM MADE PRESSURE VESSELS

on request
operating pressure

on request
operating temperature range

on request
design

DESCRIPTION

Pressure vessels are tanks, designed to store compressed air. Pressure vessels can also be designed for any other technical gas. Volume of pressure vessel depends on compressor capacity and on consumption of compressed air.

The supply of pressure vessel includes:
- Anticorrosion protection with basic colour painting and final painting
- Revision openings
- Supporting legs
- Connections for optional equipment

APPLICATIONS

- Compressed gases
- Fluid group 1 and 2

U UM

Design codes/certification on request:

2014/68/EU
2014/29/EU
EN13445
AD2000
ASME Sec. VIII, Div.1
National Board
CRN
EAC (TR TC 032/2013)
ARH
AS1210
NR13
DNV
GL
ABS
BV Marine
AAA

COMPRESSED AIR EQUIPMENT

Compressed air equipment is a category, where all other devices and elements are included, which can't be classified into previous groups. This equipment helps to improve air quality and energy efficiency of compressed air system.

Painting air filtration system is designed to provide high-quality compressed air for paint shop and the removal of harmful substances, which has a detrimental impact on the quality of performance of the manufacturing process. This is the system for quality and pressure control of compressed air.

Not only the manufacturing process, the health of the worker should also be protected. Omega Air produce several systems for breathing air treatment, which provide safety breathing air in harmful working conditions. Gas concentration analysers constantly monitor CO, CO_2 and O_2 concentrations and trigger an alarm if concentrations of standard compliant values are exceeded.


airwatt

PP SERIES

PAINTING AIR FILTRATION SYSTEMS

16 bar
operating pressure

1,5 to 65 °C
operating temperature range

1/2"
connections

78 to 120 Nm³/h
flow rate

RAL 9005
standard colour

DESCRIPTION

PP pro paint system is specifically designed for purifying compressed air from solid, liquid and partially gaseous components. Protecting air equipment in addition to providing clean air for worker health protection. PP pro paint system is easy for wall mount.

Available modular combinations:

1. Comp. air for lower quality demands (down to 15 µm)
2. Comp. air for basic quality demands (down to 0,1 µm)
3. Comp. air for high quality demands (down to 0,01 µm)
4. Technical absolutely clean air (down to 0,1 µm, activated carbon)
5. Technical and breathable air
6. Compressed air for highest demands (all in one unit)

APPLICATIONS

- Chemical
- Petrochemical
- Paint
- General industrial applications
- Breathing air

TECHNICAL DATA							Separator CKL-PP	Microfilter M 0,1µm	Microfilter S 0,01µm	Active carbon A	Sterile filter with active carbon SFA	Adsorption dryer A-DRY 105	Pressure regulator	Quick coupling No.
Model	Pipe size	Flow rate at 7 bar(g), 20 °C		Dimensions (mm)										
	inch	Nm³/h	scfm	A	B	C								
PP-107	1/2"	78	46	270	135	276	✓						✓	2
PP-110	1/2"	120	71	270	135	345	✓						✓	2
PP-207	1/2"	78	46	380	135	276	✓	✓					✓	2
PP-210	1/2"	120	71	380	135	345	✓	✓					✓	2
PP-307	1/2"	78	46	490	135	276	✓	✓	✓				✓	2
PP-310	1/2"	120	71	490	135	345	✓	✓	✓				✓	2
PP-407	1/2"	78	46	580	135	276		✓	✓	✓			✓	4
PP-410	1/2"	120	71	580	135	345		✓	✓	✓			✓	4
PP-507	1/2"	78	46	612	135	370		✓	✓		✓		✓	4
PP-510	1/2"	120	71	612	135	440		✓	✓		✓		✓	4
PP-607	1/2"	78	46	1150	335	917		✓	✓		✓	✓	✓	4
PP-610	1/2"	120	71	1150	335	917		✓	✓		✓	✓	✓	4

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

B-AIR SERIES

BREATHING AIR FILTRATION SYSTEMS

16 bar
operating pressure

1,5 to 65 °C
operating temperature range

1/2" to 1 1/2"
connections

78 to 780 Nm³/h
flow rate

RAL 1016
standard colour

DESCRIPTION

B-AIR™ point of use filter set is designed for high efficient preparation of top quality breathing air. On request B-AIR™ filter set can be supplied with wall mounting brackets, pressure regulator and quick couplings.

WARNING!
Breathing air filter set B-AIR is not declared as CO_2 and CO removal filter.
Despite that B-AIR comprises filter element which can reduce CO content.

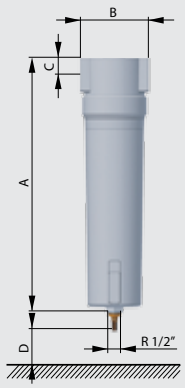
APPLICATIONS

- Breathing air





TECHNICAL DATA									FILTER ELEMENTS		
Filter model	Pipe size	Flow rate [2] at 7 bar(g), 20 °C		Dimensions [mm]				Mass	S Microfilter 0,01 µm	H^2 catalyst (hopcalite)	A^2 adsorption (act. carbon)
	inch	Nm^3/h	scfm	A	B	C	D	kg			
B-AIR 0076	1/2"	78	46	187	88	20	60	3x0,47	07050 S	07050 H^2	07050 A^2
B-AIR 0106	3/4"	120	70	257	88	20	80	3x0,6	14050 S	14050 H^2	14050 A^2
B-AIR 0186	1"	198	116	263	125	32	100	3x1,57	12075 S	12075 H^2	12075 A^2
B-AIR 0306	1"	335	197	363	125	32	120	3x2,2	22075 S	22075 H^2	22075 A^2
B-AIR 0476	1 1/2"	510	300	461	125	32	140	3x2,8	32075 S	32075 H^2	32075 A^2
B-AIR 0706	1 1/2"	780	459	640	125	32	160	3x3,9	50075 S	50075 H^2	50075 A^2



	S Microfilter 0,01 µm	H^2 catalyst (hopcalite)	A^2 adsorption (act. carbon)
quality class - solids (ISO 8573-1)	1	1	1 [1]
quality class - oils (ISO 8573-1)	1	-	0/1
residual oil content	<0,01 mg/m^3	-	<0,005
pressure drop - new element-dry [mbar / psi]	80 / 1,160	see spec.	see spec.
pressure drop - new element-wet [mbar / psi]	190 / 2,756	-	-
change filter element at pressure drop [mbar / psi]	3 months		
filter media	borosilicate microfibes	borosilicate microfibes, hopcalite	borosilicate microfibes, activated carbon
min. operating temperature (°C / °F)	1,5 / 35	1,5 / 35	1,5 / 35
max. operating temperature (°C / °F)	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] Valid if "S" filter cartridge is installed upstream.
[2] For optimum flow refer to technical data sheet

B-AIR plus SERIES

PORTABLE BREATHING AIR FILTRATION SYSTEMS

16 bar
operating pressure

1,5 to 40 °C
operating temperature range

quick couplings
connections

120 Nm³/h
flow rate

RAL 1016
standard colour

DESCRIPTION

B-AIR PLUS system is specifically designed for applications where high quality breathing air and monitoring of breathing air supply are needed. B-AIR PLUS is a combination of our B-AIR 0106 breathing air filter set combined with gas concentration analysers, fitted with pressure regulator and quick couplings, all packed in a compact and robust casing.

Gas concentration analysers constantly monitor CO, CO_2 and O_2 concentrations and trigger an alarm if concentrations exceed the EN12021 and BS4275:1997 standard compliant values. In this way B-AIR PLUS can safely provide high quality breathing air for up to 5 people.

Small dimensions and low weight enable the use of B-AIR PLUS in many applications as it can be transported and set up with ease.

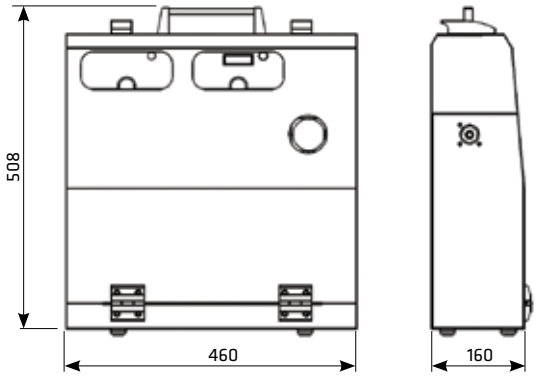
APPLICATIONS

- Breathing air

TECHNICAL DATA	
Operating pressure range	0 - 16 bar (0 - 232 psi)
Operating temperature range	1,5 - 40 °C (35 - 104°F)
Connection (inlet/outlet)	INLET (male), OUTLET (female)
Flow rate (7 bar ,20 °C)	120 Nm^3/h (71 scfm)
Quality class - solids	ISO 8573-1
Quality class - oils	ISO 8573-1
Filtration stage S	Solid and liquid particle filtration down to 0,01 µm
Filtration stage H^2	CO removal
Filtration stage A^2	Oil particle filtration down to 0,1 µm
GAS ANALYSERS	
Electrical connection	230 VAC, 50/60 Hz
Power consumption	<10 W
CO monitoring	Warning 3 ppm, alarm 5 ppm
CO_2 monitoring	Alarms (increasing intensity) at 500 ppm/1500 ppm
O_2 monitoring	Alarm at O_2 concentration <19,5 %
Analyser approval	EN 50270:1999 EN 61000-6-3:2001+A11:2004 BS EN 61010-1:2001 IEC 61010-1 (2ed) AS 61610.1-2003 (Australia & New Zealand)
Protection class of sensors	IP 65
Dimensions	508 x 460 x 160 mm
Weight	12 kg

ADVANTAGES

- ✓ High quality breathing air for up to 5 people
- ✓ Air quality monitoring (EN 12021, BS 4275:1997)
- ✓ Compact & light weight



AIRWATT SERIES

HEAT RECOVERY UNITS

10 to 100 kW
heat capacity

15 to 132 kW
for compressor capacity

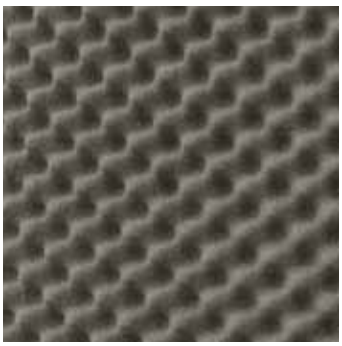
DESCRIPTION

Classical systems of the screw compressor have a regulated air cooling of the lubricating oil, which means that the excess heat is discharged into the ambient by the fan. In this way the heat is completely lost.

External heat recovery unit - AirWatt is designed to efficiently exploit the waste heat, generated during compression of air in rotary screw compressors. Sometimes this represents more than 70 % of energy consumed by the rotary screw compressor for the operation. This heat can then be used to heat domestic water or for heating, at almost no additional costs. This does not only help save money, but is also environmentally friendly. Unit has two separate piping systems with counter flow. Energy exchange from compressor to sanitary water occurs in plate heat exchanger, where compressor oil and sanitary water meets. Unit is controlled by thermostatic valve, which prevents compressor system getting to cold and damaging compressor.

APPLICATIONS

- Heat recovery in oil lubricated rotary screw compressors



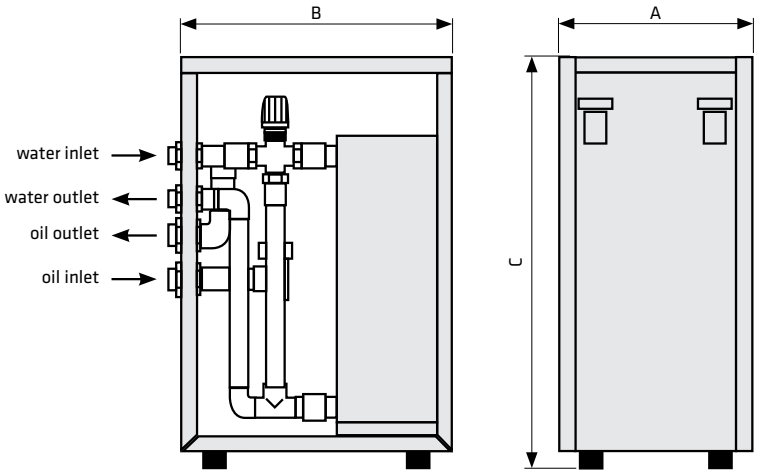
TECHNICAL DATA

Type	Motor power	Heat capacity	Oil connection	Water connection	Dimensions [mm]			Mass
	kW	kW	G	G	A	B	C	kg
AirWATT 22	15-22	12-17,6	1 1/4"	1"	360	500	760	33
AirWATT 37	26-37	20,8-29,6	1 1/4"	1"	360	500	760	35
AirWATT 75	45-75	36-60	1 1/4"	1"	360	500	760	42
AirWATT 100	90-132	72-100	2"	2"	450	600	860	58

TECHNICAL SPECIFICATIONS

Operating pressure (oil)	1 – 16 bar
Maximum water pressure	10 bar
Operating temperature	5 °C – 120 °C
Max. outlet water temperature	70 °C
Pressure drop (oil)	~ 100 mbar
Ambient temperature	5 °C – 45 °C
Water temperature indicator	Analog mechanical

Type	Classification according to Pressure Equipment Directive PED 97/23 / CE (fluid group 2)
AirWATT 22	not necessary
AirWATT 37	not necessary
AirWATT 75	not necessary
AirWATT 100	not necessary



BS 12-3,5

PETROL STATION EQUIPMENT

max 12 bar
operating pressure

up to 45 °C
operating temperature range

350 Nl/min
flow rate (ISO 1217)

DESCRIPTION

BS 12-3.5 (Air-water supply) unit is an ideal solution for every gas/petrol station. It offers top quality supply with compressed air and water.

High quality piston compressor with pressure vessel is integrated into vandal protected stainless steel housing.

Integrated AWS-C controller assures precise and user friendly inflating of tyres.

MAIN COMPONENTS

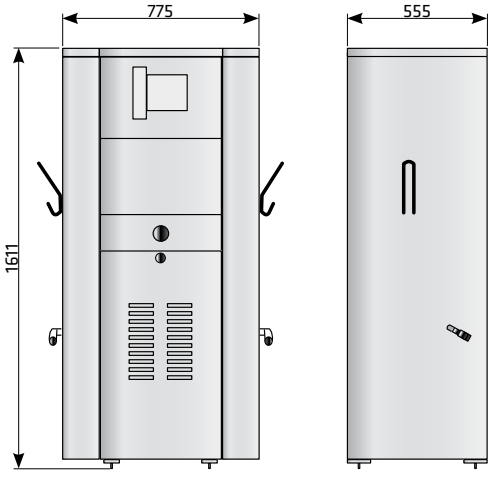
- Robust stainless steel housing,
- Integrated compressor,
- Integrated pressure gauge,
- Integrated pressure gauge which shows current pressure in pressure vessel,
- Hose (drive over) for compressed air supply,
- Hose (drive over) for water supply,
- Standard DIN connector,
- Noise protection / isolation,
- Quick coupling,
- Handy pipe for water supply
- Vandal protection.

APPLICATIONS

- Filling tyres with compressed air
- Water supply

BS12-3.5 series can be used in variety of applications. For applications not listed please contact producer or your local distributor.

TECHNICAL DATA	BS12-3,5
Operating pressure	max. 12 bar(g) (max. 174 psi)
Operating temperature range *	-15 to +45 °C (5 to 113 °F)
Flow capacity (ISO 1217)	350 Nl/min
Power supply	230 V / 50 Hz
Electric motor power	1,8 kW
Sound level (A) 1m	67 ± 2 dB
Electric heater power	Optional
Hose length	8 m
Mass	136 kg
Housing material	Stainless steel (INOX)
Pressure vessel material	Carbon steel
Pressure vessel capacity	25 l



* If temperatures below 1,5 °C are expected please contact producer or your local distributor.

AWS

PETROL STATION EQUIPMENT

max 10 bar
operating pressure

up to 45 °C
operating temperature range

170 Nl/min
flow rate (ISO 1217)

MAIN COMPONENTS

- Robust stainless steel housing,
- Integrated compressor,
- Integrated pressure gauge,
- Hose (drive over) for compressed air supply,
- Hose (drive over) for water supply,
- Standard DIN connector,
- Noise protection / isolation,
- Quick coupling,
- Handy pipe for water supply,
- Vandal protection.

DESCRIPTION

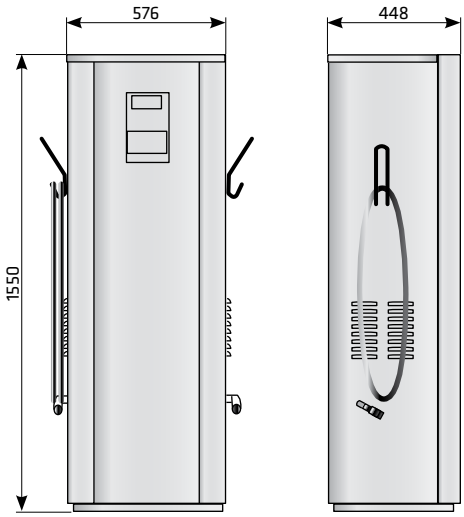
AWS (Air-water supply) unit is an ideal solution for every gas/petrol station. It offers top quality supply with compressed air and water.

High quality piston compressor with pressure vessel is surrounded by vandal protected stainless steel housing.

Integrated AWS-C controller assures precise inflating of tyres and is user friendly.

TECHNICAL DATA	AWS
Operating pressure	max. 10 bar(g) (max. 145 psi)
Operating temperature range *	-15 to +45 °C (5 to 113 °F)
Flow capacity (ISO 1217)	170 Nl/min
Power supply	230 V / 50 Hz
Electric motor power	1,5 kW
Sound level (A) 1m	68 ± 2 dB
Electric heater power	Optional
Hose length	8 m
Mass	87 kg
Housing material	Stainless steel (INOX)
Pressure vessel material	Carbon steel
Pressure vessel capacity	17 l

* If temperatures below 1,5 °C are expected please contact producer or your local distributor.



APPLICATIONS

- Filling tyres with compressed air
- Water supply

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

PETRO-PACK

PETROL STATION EQUIPMENT

max 12 bar
operating pressure

up to 45 °C
operating temperature range

350 Nl/min
flow rate (ISO 1217)

DESCRIPTION

PETRO-PACK unit is a compressor designed for petrol station applications. It is perfect solutions for stations where is no place for inside installation. It offers top quality supply with compressed air.

All connections are ground mounted. High quality piston compressor with pressure vessel is surrounded by vandal protected stainless steel housing.

MAIN COMPONENTS

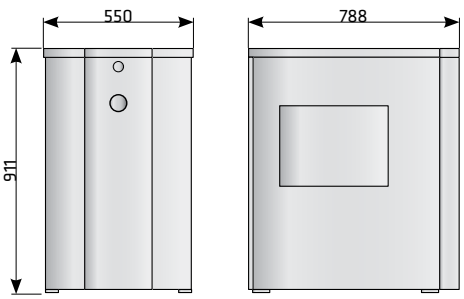
- Robust stainless steel housing,
- Integrated compressor,
- Noise protection / isolation,
- Vandal protection.

APPLICATIONS

- Filling tyres with compressed air
- Water supply

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

TECHNICAL DATA	PETRO-PACK
Operating pressure	max. 12 bar(g) (max. 174 psi)
Operating temperature range *	-15 to +45 °C (5 to 113 °F)
Flow capacity (ISO 1217)	350 Nl/min
Power supply	400 V / 50 Hz
Electric motor power	2,2 kW
Sound level (A) 1m	67 ± 2 dB
Electric heater power	Optional
Mass	108 kg
Housing material	Stainless steel (INOX)
Pressure vessel material	Carbon steel
Pressure vessel capacity	25 l



* If temperatures below 1,5 °C are expected please contact producer or your local distributor.

BS TOWER

PETROL STATION EQUIPMENT

max 12 bar
operating pressure

up to 45 °C
operating temperature range

DESCRIPTION

BS tower (Air-water supply) unit is an ideal solution for every gas/petrol station. It offers top quality supply with compressed air and water where compressed air and water systems are supplied from dislocated source.

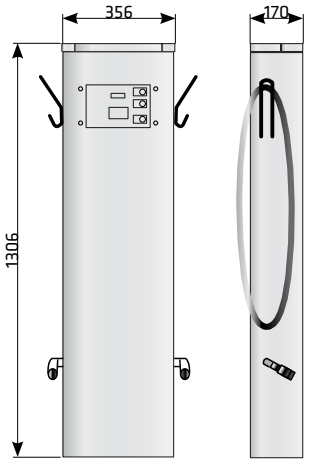
Integrated AWS-C controller assures precise inflating of tyres and is user friendly.

MAIN COMPONENTS

- Robust stainless steel housing,
- Integrated pressure gauge,
- Hose (drive over) for compressed air supply,
- Hose (drive over) for water supply,
- Standard DIN connector,
- Quick coupling,
- Handy pipe for water supply.

TECHNICAL DATA	BS TOWER
Operating pressure	max. 12 bar(g) (max. 174 psi)
Operating temperature range *	-15 to +45 °C (5 to 113 °F)
Electric heater power	Optional
Hose length	8
Housing material	Stainless steel (INOX)

* If temperatures below 1,5 °C are expected please contact producer or your local distributor.



APPLICATIONS

- Filling tyres with compressed air
- Water supply

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

INDUSTRIAL WATER CHILLERS

A chiller is a machine that removes heat from a liquid via a vapor-compression or absorption refrigeration cycle. This liquid can then be circulated through a heat exchanger to cool equipment, or another process stream (such as air or process water). As a necessary by product, refrigeration creates waste heat that must be exhausted to ambient or, for greater efficiency, recovered for heating purposes.

Chilled water is used to cool and dehumidify air in mid- to large-size commercial, industrial, and institutional facilities. Water chillers can be water-cooled, air-cooled, or evaporatively cooled. Water-cooled systems can provide efficiency and environmental impact advantages over air-cooled systems.

Industrial water chillers are used in a variety of applications. Suppliers of air treatment solutions to the industrial and commercial sectors include the sale of industrial water chillers with their compressors eliminating impure and unwanted condensate from the compressed air system. Industrial water chillers are the perfect solution for hot humid and dusty environments.

Industrial water chillers are in place to maximize your control on your chilled water supply. They combine advanced design features that include energy saving scroll compressors and sophisticated microprocessors. Productivity increases and your industrial applications are optimized delivering you a reduction in costs.

OBE SERIES

AIR-COOLED WATER CHILLERS WITH AXIAL FANS

2,55 to 23,11 kW
cooling capacity

1/2" to 1"
water connections diameter

R407C
refrigerant

DESCRIPTION

The new range of OBE chillers has been designed specifically to meet industrial requirements and provide accurate control of the chilled water temperature with the absolute reliability of continuous operation (with the option of hot bypass valve). It is particularly suitable for process cooling during the moulding and extrusion of plastic, laser cutting, precision engineering, pharmaceutical and food industry etc...

The range consists of 12 models with cooling capacities from 3-25 kW and is designed for outdoor installation (OBE002 excluded and OBE003 ÷ 007 optional). All units are equipped with:

- Hermetic rotary or scroll compressors,
- Ecological refrigerant R407C;
- Microprocessor controller (electronic thermostat for OBE002);
- Atmospheric pressure tank;
- Water pump

APPLICATIONS

- Process cooling during the moulding
- Extrusion of plastic
- Laser cutting
- Precision engineering
- Pharmaceutical
- Food industry

COOLING CIRCUIT
Manufactured from high quality materials by skilled personnel according to strict procedures of brazing, and conforms to Directive 97/23.
It comprises of:
- rotary (OBE002 ÷ 012 models) or scroll (OBE014 ÷ 025 models) compressor;
- Copper Coaxial evaporator made from AISI 316 stainless steel brazed plate;
- Micro channel condenser in aluminium with epoxy coating;
- Filter dryer;
- Flow sight glass with moisture indicator (OBE008 ÷ 025 models);
- External equalisation thermostatic expansion valve (except OBE002 model); The thermostatic expansion valve regulates the injection of liquid refrigerant into the evaporator. The injection is a response to the refrigeration requirements. The range of thermostatic valves are designed for specific applications and are connected to the circuit via bi-metal brazing
- High pressure switch with manual reset;
- Low pressure switch to semi-automatic reset (OBE008 ÷ 025 models);
- High and low pressure gauges (OBE008 ÷ 025 models);
- Pressure connections for checks and maintenance.

HYDRAULIC CIRCUIT
Composed of:
- Atmospheric pressure collection tank, thermally insulated manufactured from ABS (OBE002-007) and PVC (OBE008-25;
- Water pipes in copper and PVC
- Electric pump, thermally insulated, made with non-ferrous materials (steel, brass or plastic material, mechanical seals NBR or EPDM depending on the model);
- Calibrated water bypass (prevents incidents caused by the erroneous closure of the stop valves);
- Water differential pressure switch (OBE008 ÷ 025 models);
- Water manometer;
- Drain valve;
- Filling unit.

All models in the OBE range have, as standard, the hydraulic circuit made from non-ferrous materials, which is necessary for industrial applications.
All units in the range can be used with mixtures of water and ethylene glycol up to 30 %.






Model **OBE**		002(5)	003	004	005	006(2)	007(2)	008(5)	009(5)	012	014	020	025	005 3Ph	006 3Ph	007 3Ph
Cooling capacity (1)	[kW]	2,55	2,74	3,51	4,28	5,21	6,21	8,16	10,11	12,73	16,22	21,02	23,11	5,23	6,08	7,01
Compressors power input (1)	[kW]	0,48	0,49	0,71	0,86	1,22	1,76	1,49	2,09	2,81	2,54	3,76	4,87	1,22	1,71	2,29
Total power input (1) (2)	[kW]	0,79(5)	0,99	1,21	1,36	1,72(2)	2,26(2)	2,80(5)	3,40(5)	4,12	4,32	5,99	7,1	1,73	2,21	2,8
Total absorbed current (1) (2)	[A]	4,44(5)	5,38	6,45	7,22	9,01(2)	11,31(2)	5,97(5)	6,88(5)	8,19	8,14	10,97	12,9	5,55	6,15	7,35
EER (pump excluded) (1)	---	4,16	4,43	4,19	4,32	3,85	3,29	4,53	4,21	4,09	4,89	4,63	4,09	3,86	3,3	2,89
Water flow (1)	[l/h]	438	471	604	736	897	1068	1404	1739	2190	2790	3615	3975	900	1046	1206
Available pressure (1)	[kPa]	146	287	261	248	215	181	235	210	222	188	217	199	215	185	153
Maximum power input (total) (2) (3)	[kW]	1,3(5)	1,5	1,8	2	2,5(2)	3,0(2)	3,8(5)	4,9(5)	5,8	6,8	8,6	10	2,4	3	3,7
Maximum absorbed current (total) (2) (3)	[A]	6,6(5)	7,5	9,1	10,4	12,6(2)	14,4(2)	7,7(5)	9,5(5)	10,8	12,1	15,9	17,5	6,4	7,3	8,7
Starting current (2) (3)	[A]	21,3(5)	22,1	26,1	34,2	39,2(2)	55,2(2)	34,2(5)	42,2(5)	44,2	62,7	78,3	89,3	22,9	18,9	25,9
Fan power	[kW]	0,13	0,13	0,13	0,13	0,13	0,13	0,31	0,31	0,31	0,78	0,78	0,78	0,14	0,14	0,14
Fan current	[A]	0,65	0,65	0,65	0,65	0,65	0,65	1,2	1,2	1,2	1,7	1,7	1,7	0,38	0,38	0,38
Number of fans	[#]	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
P3 Pump power input	[kW]	0,18(5)	0,37	0,37	0,37	0,37(2)	0,37(2)	1,00(5)	1,00(5)	1	1	1,45	1,45	0,37	0,37	0,37
P3 Pump absorbed current	[A]	1,60(5)	2,5	2,5	2,5	2,50(2)	2,50(2)	2,00(5)	2,00(5)	2	2	2,6	2,6	2,5	2,5	2,5
Power supply	[V/Ph/Hz]	230/1/50						400/3/50								
IP protection class	---	IP40	IP40	IP40	IP40	IP40	IP40	IP44	IP44	IP44	IP44	IP44	IP44	IP44	IP44	IP44
Refrigerant	---	R407C														
Compressor type	---	Rotary								Screw				Reciprocating		
Evaporator type	---	Coaxial						Brazed plates						Coaxial		
Condenser type	---	Microchannel														
N° of compressors	[#]	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
N° of refrigerant circuits	[#]	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Air flow	[m³/h]	2.200	2.200	2.200	2.200	2.200	2.200	4.800	4.800	5.000	5.500	5.500	5.500	2.500	2.500	2.500
Sound pressure level (4)	[dbA]	46	46	46	46	46	46	49	49	49	49	49	49	46	46	46
Water connections diameter	[inch]	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1"	1"	1"	1"	1"	1"	1/2"	1/2"	1/2"
Width	[mm]	718	718	718	718	718	718	1.004	1.004	1.004	1.004	1.004	1.004	718	718	718
Depth	[mm]	678	678	678	678	678	678	753	753	753	753	753	753	678	678	678
Height	[mm]	668	668	668	668	668	668	1.257	1.257	1.257	1.257	1.257	1.257	668	668	668
Weight	[kg]	82	85	88	92	95	100	235	240	245	255	255	255	92	95	100
Tank capacity - Option	[dm³]	25	25	25	25	25	25	90	90	90	90	90	90	25	25	25
P3 Input pump power- Option	[kW]							1,60	1,60	1,60	1,60	0,75	0,75			
P3 Absorbed pump current - Option	[A]							1,90	1,90	1,90	1,90	2,5	2,5			
P5 Input pump power - Option	[kW]		0,55	0,55	0,55	0,55	0,55	0,75	0,75	0,75	0,75	0,9	0,9	0,55	0,55	0,55
P5 Absorbed pump current - Option	[A]		6,2	6,2	6,2	6,2	6,2	2,5	2,5	2,5	2,5	2,6	3	6,2	6,2	6,2

(1)Data referred to following conditions: water temperature in/out: 20/15 °C - ambient air temperature: 25 °C – (2) Data referred to unit with pump P3 – (3) Data related to most heavy condition allowed by safety devices fitted on the unit – (4) Referred at 10 m and at an height of 1,5 m in free field – (5) Data referred to unit with pump P2 – (6) Maximum room temperature 45 °C – (7) Maximum inlet temperature 30 °C. – (8) Minimum water outlet temperature - 10 °C (with 30 % ethylene glycol) at 5 °C according to the model. Friulair S.r.l. reserves the right to make technical changes without prior notice, errors and omissions execepted.

OWT SERIES

AIR-COOLED WATER CHILLERS WITH ROTARY AND SCROLL COMPRESSORS

7 to 128 kW
cooling capacity

1" to 2"
water connections diameter

R410A
refrigerant

DESCRIPTION

The OWT water chiller range is intended for the air conditioning and industrial processes cooling sector.
The range is designed for outdoor installation and specifically designed to meet the industry application requirements, to provide accurate control of the chilled water temperature with continuous operation and absolute reliability. The range is air cooled with axial fans. It is composed of 16 basic models, covering cooling capacities from 7 to 128 kW.
All units are equipped with:
• hermetic rotary or scroll compressors;
• R410A ecological refrigerant gas;
• plate evaporator;
• aluminium micro channel finned coils;
• fans with continuous speed control;
• microprocessor controller;
• ventilated electrical panel;
• integrated storage tank;
• hydraulic pump;
• stainless steel condensers filters;
• filter and shut-off valves for water;

APPLICATIONS

• Air conditioning and industrial processes cooling sector.

REFRIGERANT CIRCUIT
This is manufactured from top quality materials by skilled personnel according to strict procedures of brazing, compliant with Directive 97/23. It is composed of:
• rotary (OWT007 and OWT010 models) and scroll compressors designed for use with R410A;
• evaporator assembled from AISI 316 stainless steel brazed plate,
• condenser assembled from micro channel aluminium ;
• filter dryer;
• flow sight glass with moisture indicator
• external equalisation thermostatic expansion valve. The thermostatic expansion valve regulates the injection of liquid refrigerant into the evaporator. The injection is a response to the refrigerant overheating. The range of thermostatic valves that we use are designed for specific applications and are connected to the circuit via bi-metal brazing;
• unidirectional valves (only for multi-compressor units);
• high pressure switch with manual reset and low pressure switch with automatic reset;
• high and low pressure manometers;
• pressure connections for checks and maintenance.

HYDRAULIC CIRCUIT
This consists of an evaporator and interior piping to the machine, it also includes:
• an storage tank made of carbon steel and thermally insulated;
• an electric stainless steel, thermally insulated pump;
• a water bypass to prevent incidents
• caused by the erroneous closure of the stop valves;
• expansion vessel;
• safety valve;
• automatic vent valve;
• water-level sensor
• water differential pressure switch;
• stop ball valves;
• inlet unit water filter;
• manometer;
• drain valve.






Model **OWT**		007	010	015	018	020	025	030	038	040	045	055	065	075	090	110	130
Cooling capacity (1)	[kW]	7	10,31	14,54	18,9	21,31	23,3	28,11	37,8	42,7	45,1	56,7	64	75,61	89,79	113,41	128,11
Compressors power input (1)	[kW]	1,45	2,26	3,54	4,11	4,69	5,22	6,92	7,92	9,16	10,00	12,79	14,49	15,47	17,71	24,19	27,81
Total power input (1) (2)	[kW]	2,51	3,32	4,6	5,71	6,29	6,82	8,52	10,82	12,06	12,9	15,55	17,25	21,27	23,51	30,69	35,31
Total absorbed current (1) (2)	[A]	5,08	6,48	8,7	11,30	12,75	13,06	16,07	20,30	23,29	23,96	28,19	32,55	37,26	42,72	54,22	64,88
EER (pump excluded) (1)	---	3,76	3,86	3,68	3,93	3,96	3,94	3,69	4,06	4,04	3,96	4,03	4,06	3,96	4,21	4,1	4,09
Water flow (1)	[l/h]	1.204	1.773	2.501	3.251	3.665	4.008	4.834	6.502	7.345	7.758	9.753	11.009	13.004	15.444	19.506	22.035
Available pressure (1)	[kPa]	252	246	315	323	324	311	302	327	331	335	278	259	227	227	263	307
Maximum power input (total) (2) (3)	[kW]	3,3	4,4	5,9	7,7	8,5	9,4	11,4	15,1	16,8	17,5	21,1	23,6	30,3	33,5	43,2	49,1
Maximum absorbed current (total) (2) (3)	[A]	6,7	8,1	10,9	14,7	16,3	17,3	20,8	27,7	30,8	31,5	37,9	42,6	52,5	58,7	75,8	86,9
Starting current (2) (3)	[A]	35,6	47,6	55,6	74,3	94,3	49,8	65,5	87,2	108,8	76,3	97,5	120,6	112	136,7	135,3	164,9
Fan power	[kW]	0,41	0,41	0,41	0,7	0,7	0,7	0,7	0,7	0,7	0,7	0,63	0,63	1,8	1,8	1,75	1,75
Fan current	[A]	1,8	1,8	1,8	2,9	2,9	2,9	2,9	2,9	2,9	2,9	2,7	2,7	3	3	3,3	3,3
Number of fans	[#]	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2
P3 Pump power input	[kW]	0,65	0,65	0,65	0,9	0,9	0,9	0,9	1,5	1,5	1,5	1,5	1,5	2,2	2,2	3	4
P3 Pump absorbed current	[A]	1,6	1,6	1,6	2,6	2,6	2,6	2,6	3,4	3,4	3,4	3,4	3,4	4,6	4,6	6,3	8,1
Power supply	[V/Ph/Hz]	400/3/50															
IP protection class	---	IP44															
Refrigerant	---	R410A															
Compressor type	---	Rotary			Screw												
Evaporator type	---	Brazed plates															
Condenser type	---	Microchannel															
N° of compressors	[#]	1	1	1	1	1	2	2	2	2	3	3	3	4	4	6	6
N° of refrigerant circuits	[#]	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2
Air flow	[m³/h]	4.346	4.346	4.531	8.179	8.179	8.049	8.049	15.399	15.399	15.399	18.791	18.791	32.931	32.931	44.185	44.185
Sound pressure level (4)	[dbA]	43	43	43	50	50	50	50	53	53	53	49,5	49,5	58,5	58,5	52	52
Water connections diameter	[inch]	1"	1"	1"	1"	1"	1"	1"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	2"	2"	2"	2"
Width	[mm]	662	662	662	662	662	662	662	752	752	832	832	832	1.110	1.110	1.210	1.210
Depth	[mm]	991	991	991	1.305	1.305	1.305	1.305	1.635	1.635	1.850	1.850	1.850	2.025	2.025	2.230	2.230
Height	[mm]	1.335	1.335	1.335	1.425	1.425	1.425	1.425	1.535	1.535	1.700	1.700	1.700	1.900	1.900	2.255	2.255
Weight	[kg]	210	215	260	265	275	315	325	400	410	500	500	515	720	770	980	1000
Tank capacity - Option	[dm³]	95	95	95	95	95	95	95	135	135	135	135	135	205	205	205	205
Expansion vessel capacity	[dm³]	5	5	5	5	5	5	5	8	8	8	8	8	12	12	12	12
P5 Input pump power- Option	[kW]	0,75	0,75	0,75	1,3	1,3	1,3	1,3	2,2	2,2	2,2	2,2	2,2	4	4	4	4
P5 Absorbed pump current - Option	[A]	2,5	2,5	2,5	3,5	3,5	3,5	3,5	4,6	4,6	4,6	4,6	4,6	8,1	8,1	8,1	8,1
Available pressure (1) (5)	[kPa]	452	445	415	521	518	502	483	530	527	532	452	421	432	424	426	372

(1) Data referred to following conditions: water temperature in/out: 20/15 °C - ambient air temperature: 25 °C – (2) Data referred to unit with standard P3 pump – (3) Data related to most heavy condition allowed by safety devices fitted on the unit – (4) Referred at 10 m and at an height of 1,5 m in free field – (5) Data referred to unit with P5 pump (optional) – (6) For models from OWT007 to OWT065 with additional loading tank, length increases by 300mm.

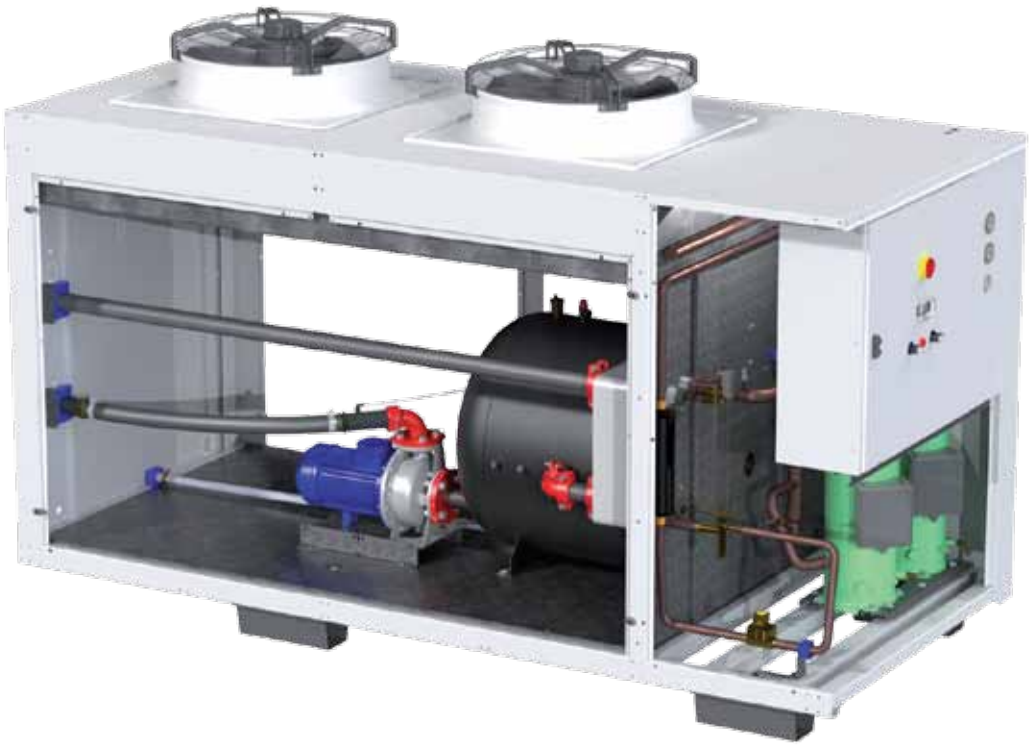
OWE/HWE SERIES

AIR-COOLED WATER CHILLERS AND HEAT PUMPS WITH SCROLL COMPRESSORS

14 to 135 kW
cooling capacity

1" to 2" VIC
water connections diameter

R410A
refrigerant



DESCRIPTION

The new range of OWE/ HWE water chillers and heat pumps are air-cooled with axial fans and consist of 19 basic models, with cooling capacities from 13 to 141 kW each designed for outdoor installation.
They are designed to specifically meet industry application requirements and provide accurate control of chilled and hot water temperatures with absolute reliability of continuous operation.

All units are equipped with:
- hermetic scroll compressors;
- ecological R410A refrigerant;
- Plate evaporator;
- finned tubes condensers;
- fans with step control;
- microprocessor controller;
- stainless steel filters for condensers;
- water inlet filter for the evaporator

APPLICATIONS

- Industrial cooling processes

REFRIGERANT CIRCUIT
Manufactured from top quality materials by skilled personnel according to strict procedures of brazing, and conforms to Directive 97/23. It comprises:
- Scroll compressors designed for R410A;
- Evaporator made from AISI 316 stainless steel brazed plate,
- copper and aluminium condensers;
- Filter dryer;
- Flow sight glass with moisture indicator;
- External equalisation thermostatic expansion valve which regulates the injection of liquid refrigerant into the evaporator. The injection is a response to the refrigerant overheating. The range of thermostatic valves that we use are designed for specific applications and are connected to the circuit via bi-metal brazing;
- High pressure switch with manual reset;
- Low pressure transducer with semi-automatic reset;
- Gauges for high and low pressure;
- Pressure connections for checks and maintenance.

HYDRAULIC CIRCUIT
The hydraulic circuit consists of an internal evaporator and pipework. It features a differential pressure monostat that protects the evaporator in case of a no water flow. All units can be equipped with an optional multi stage centrifugal pump with steel impeller. All parts which are in contact with the fluid are AISI 304 stainless steel with mechanical seals in carbon/ceramic/ EPDM (standard) which makes it possible to use water containing up to 30 % ethylene glycol. The motor is asynchronous 2 poles ventilated with insulation class F, and IP55 protection. It is possible to select pumps with three different levels of pressure head (P2, P3 and P5). Double circulation pumps are also available. The water tank is available for all models in both atmospheric and pressurised versions and with the option of stainless steel.

Model OWE/HWE		013	021	026	036	041	046	053	068	075	076	085	086	100	110	111	125	126	140	141
Cooling capacity [1]	[kW]	13,77	19,68	25,58	4,28	39,49	49,32	52,50	65,97	72,41	70,05	78,29	82,31	92,11	106,18	109,86	123,87	124,12	134,82	134,91
Compressors power input [1]	[kW]	3,48	5,01	7,12	0,86	10,05	10,34	12,70	17,22	16,05	15,49	18,65	21,68	20,71	23,89	26,62	27,98	29,10	33,21	33,68
Total power input [1] [2]	[kW]	3,75	5,28	7,74	1,36	11,99	12,28	14,64	19,16	17,29	16,73	19,89	22,92	21,95	25,77	28,50	29,86	30,98	35,09	35,56
Total absorbed current [1] [2]	[A]	6,74	9,77	15,18	7,22	20,09	20,73	24,98	31,85	28,37	27,98	32,84	36,93	36,30	43,49	46,47	49,70	52,83	57,57	58,66
EER (pump excluded) [1]	---	3,67	3,73	3,31	4,32	3,29	3,77	3,58	3,44	4,19	4,19	3,94	3,59	4,20	4,12	3,85	4,15	4,01	3,84	3,79
Water flow [1]	[l/h]	2.368	3.385	4.400	736	6.792	7.968	9.030	11.346	12.454	12.049	13.466	14.157	15.843	18.263	18.896	21.306	21.348	23.189	23.204
Pressure drop [1]	[kPa]	47	64	62	248	62	84	75	84	55	52	64	70	49	64	68	43	43	50	50
Maximum power input (total) [2] [3]	[kW]	5,1	7,2	9,7	14,8	16,3	19,6	18,6	24,1	24,1	23,4	26,9	31,8	29,9	35,1	39,9	40,7	44,8	46,2	48,3
Total absorbed current [2] [3]	[A]	9,0	12,7	17,7	24,2	26,6	30,7	30,7	39,2	38,4	37,8	43,1	50,6	48,1	57,0	64,3	65,5	73,7	74,1	78,3
Starting current [2] [3]	[A]	53,8	90,8	100,4	144,9	148,9	179,9	179,9	215,9	144,5	214,5	163,8	212,5	170,3	206,2	290,4	244,5	270,4	250,7	301,4
Fan power	[kW]	0,14	0,14	0,31	0,97	0,97	0,97	0,97	0,97	0,62	0,62	0,62	0,62	0,62	0,94	0,94	0,94	0,94	0,94	0,94
Fan current	[A]	0,38	0,38	1,20	1,93	1,93	1,93	1,93	1,93	1,25	1,25	1,25	1,25	1,25	1,70	1,70	1,70	1,70	1,70	1,70
Number of fans	[#]	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Power supply	[V/Ph/hz]	400/3/50																		
IP protection class	-	IP54	IP54	IP54	IP54	IP54	IP54	IP54	IP44	IP54	IP54	IP54	IP54	IP54	IP54	IP54	IP54	IP54	IP54	IP54
Refrigerant	---	R410A																		
Compressor type	---	Scroll																		
Evaporator type	---	Brazed plates																		
Condenser type	---	Tube&fins																		
N° of compressors	[#]	1	1	1	1	1	1	1	1	2	1	2	1	2	2	1	2	1	2	1
N° of refrigerant circuits	[#]	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Air flow	[m³/h]	5.100	4.800	4.800	14.000	17.300	17.300	15.900	14.800	19.500	19.500	19.500	19.500	18.950	23.000	18.950	27.000	23.000	27.000	27.000
Sound pressure level [4]	[dbA]	43,5	43,5	43,5	55,0	55,0	55,0	55,5	56,0	54,0	53,0	54,0	51,0	55,0	59,5	59,0	60,0	59,0	60,0	59,5
Water connections diameter	[inch]	1"	1"	1"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	2" VIC	2" VIC	2" VIC	2" VIC	2" VIC	2" VIC	2" VIC	2" VIC	2" VIC	2" VIC	2" VIC
Width	[mm]	680	680	680	925	925	925	925	925	1.380	1.380	1.380	1.380	1.380	1.380	1.380	1.380	1.380	1.380	1.380
Depth	[mm]	1.550	1.550	1.550	1.890	1.890	1.890	1.890	1.890	2.590	2.590	2.590	2.590	2.590	2.590	2.590	3.090	2.590	3.090	3.090
Height	[mm]	1.405	1.405	1.405	1.580	1.580	1.580	1.580	1.580	1.960	1.960	1.960	1.960	1.960	1.960	1.960	1.960	1.960	1.960	1.960
Weight	[kg]	250	270	270	380	380	400	420	420	650	650	670	670	700	730	730	820	820	850	850
Tank capacity - Option	[dm³]	110	110	110	200	200	200	200	200	400	400	400	400	400	400	400	400	400	400	400
Expansion vessel capacity - Option	[dm³]	8	8	8	12	12	12	12	12	18	18	18	18	18	18	18	18	18	18	18
P2 Pump power input - Option	[kW]	0,68	1,00	1,00	1,60	1,60	1,60	1,45	1,45	2,22	2,22	2,22	2,22	2,22	2,22	2,22	2,87	2,87	2,87	2,87
P2 Pump absorbed current - Option	[A]	1,40	2,00	2,00	1,90	1,90	1,90	2,60	2,60	4,30	4,30	4,30	4,30	4,30	4,30	4,30	5,00	5,00	5,00	5,00
P3 Pump power input - Option	[kW]	1,60	1,45	1,45	2,09	2,09	2,09	2,87	2,87	2,87	2,87	2,87	2,87	2,87	2,87	2,87	6,70	6,70	6,70	6,70
P3 Pump absorbed current - Option	[A]	1,90	2,60	2,60	4,00	4,00	4,00	5,00	5,00	5,00	5,00	5,00	5,00	5,00	5,00	5,00	11,80	11,80	11,80	11,80
P5 Pump power input - Option	[kW]	0,75	1,30	1,30	2,20	2,20	2,20	2,20	2,20	3,00	3,00	3,00	3,00	4,00	4,00	4,00	11,00	11,00	11,00	11,00
P5 Pump absorbed current - Option	[A]	2,50	3,50	3,50	4,60	4,60	4,60	4,60	4,60	6,30	6,30	6,30	6,30	8,10	8,10	8,10	18,80	18,80	18,80	18,80

(1) Data referred to: water temp. in/out: 20/15 °C – Ambient air temp. 25 °C – (2) Data referred to unit without pump – (3) Data related to most heavy condition allowed by safety devices – (4) Referred at 10 m and at an height of 1,5 m in free field.

OWB SERIES

AIR-COOLED WATER CHILLERS WITH AXIAL FANS AND SCROLL COMPRESSORS

142 to 574 kW
cooling capacity

2 1/2" to 3"
water connections diameter

R410A
refrigerant

DESCRIPTION

The OWB range consists of Air cooled water chillers with axial fans for outdoor installation. The OWB family comprises of 12 basic models with cooling capacities ranging from 140 to 570 kW. This allows flexibility of the unit selection, its accessories and the final installation operating conditions.

OWB units are particularly suitable for installations where continuous chilled water production is required even for applications in low external ambient temperatures. In this case, it is necessary to use the option of EC condenser fans.

The optional free-cooling feature, available in the 160-280 kW models, allows the free cooling of the water using a coil cooled by the ambient air.

APPLICATIONS

- Continuous chilled water production
- Applications in low external ambient temperatures

REFRIGERANT CIRCUIT
The cooling circuit is manufactured by skilled technicians using quality materials and brazing procedures that comply with Directive 97/22/EC. This applies to all models and includes the following components (except those listed above): dehydrating filter, sight glass and humidity indicators, high and low pressure manostats (fixed setting), the high and low pressure gauges, pressure taps for checks and maintenance, evaporation and condensation pressure transducers, refrigerant temperature probes and air / water probes.
For the models from OWB270 to OWB570, the evaporator has a double refrigerant circuit and a single water circuit. Compared to solutions with independent evaporators, this configuration is particularly effective for partial load applications.

HYDRAULIC CIRCUIT
The hydraulic circuit consists of an internal evaporator and pipework. It features a differential pressure monostat that protects the evaporator in the event of a loss of water flow.





Model OWB		140	160	190	220	270	300	320	380	420	450	510	570
Cooling capacity (1)	[kW]	142,37	166,11	193,06	224,25	270,55	293,84	318,38	386,82	423,69	458,07	526,44	574,08
Compressors power input (1)	[kW]	31,93	43,53	38,45	50,98	52,67	62,54	74,26	73,30	87,75	103,02	105,15	122,70
Total power input (1) (2)	[kW]	36,05	47,65	44,63	57,16	60,91	70,78	82,50	85,66	100,11	115,38	121,63	139,18
Total absorbed current (1) (2)	[A]	59,90	76,72	74,60	94,16	103,14	117,93	134,65	140,93	164,73	189,89	212,16	232,79
EER (pump excluded) (1)	---	3,95	3,49	4,33	3,92	4,44	4,15	3,86	4,52	4,23	3,97	4,33	4,12
Water flow (1)	[l/h]	24.488	28.570	33.207	37.571	46.535	50.541	54.761	66.532	72.874	78.789	90.547	98.742
Pressure drop (1)	[kPa]	55	73	51	67	53	62	71	51	60	70	67	79
Maximum power input (total) (2) (3)	[kW]	54,4	65,2	69,4	82,2	85,8	97,0	113,6	134,5	149,6	164,5	188,0	202,0
Total absorbed current (2) (3)	[A]	88,1	103,8	112,6	133,3	139,5	156,5	181,6	215,2	241,0	266,6	311,5	332,6
Starting current (2) (3)	[A]	257,8	265,7	349,0	359,3	318,4	333,2	352,0	377,1	473,5	492,6	508,2	555,0
Fan power	[kW]	20,6	2,06	2,06	2,06	2,06	2,06	2,06	2,06	2,06	2,06	2,06	2,06
Fan current	[A]	3,80	3,80	3,80	3,80	3,80	3,80	3,80	3,80	3,80	3,80	3,80	3,80
Number of fans	[#]	2	2	3	3	4	4	4	6	6	6	6	6
Power supply	[V/Ph/hz]	400/3/50											
IP protection class	-	IP54											
Refrigerant	---	R410A											
Compressor type	---	Scroll											
Evaporator type	---	Brazed plates											
Condenser type	---	Microchannel											
N° of compressors	[#]	2	2	2	2	4	4	4	4	4	4	4	4
N° of refrigerant circuits	[#]	1	1	1	1	2	2	2	2	2	2	2	2
Air flow	[m³/h]	44.000	44.000	66.000	66.000	88.000	88.000	88.000	132.000	88.000	132.000	176.000	176.000
Sound pressure level (4)	[dbA]	58,0	56,6	58,0	58,0	60,5	60,5	59,5	59,5	60,5	60,5	59,5	61,5
Water connections diameter	[inch]	2 1/2"	2 1/2"	2 1/2"	2 1/2"	3"	3"	3"	3"	3"	3"	3"	3"
Width	[mm]	1.104	1.104	1.104	1.104	2.204	2.204	2.204	2.204	2.204	2.204	2.204	2.204
Depth	[mm]	3.004	3.004	4.002	4.002	3.004	3.004	3.004	4.004	4.004	4.004	5.004	5.004
Height	[mm]	1.977	1.977	1.977	1.977	1.977	1.977	1.977	1.977	1.977	1.977	1.977	1.977
Weight	[kg]	1.170	1.180	1.290	1.300	1.810	1.830	1.850	2.250	2.270	2.290	2.650	2.650
Tank capacity - Option	[dm³]	470	470	470	470	600	600	600	600	600	600	600	600
Expansion vessel capacity - Option	[dm³]	18	18	18	18	18	18	18	18	18	18	18	18
P2 Pump power input - Option	[kW]	3,75	3,75	3,75	3,75	5,10	5,10	5,10	6,70	6,70	6,70	9,10	9,10
P2 Pump absorbed current - Option	[A]	6,50	6,50	6,50	6,50	9,20	9,20	9,20	11,80	11,80	11,80	15,70	15,70
P3 Pump power input - Option	[kW]	6,70	6,70	6,70	6,70	9,10	9,10	9,10	9,10	9,10	9,10	13,10	13,10
P3 Pump absorbed current - Option	[A]	11,80	11,80	11,80	11,80	15,70	15,70	15,70	15,70	15,70	15,70	22,00	22,00
P5 Pump power input - Option	[kW]	11,00	11,00	11,00	11,00	16,58	16,58	16,58	17,50	17,50	17,50	13,10	13,10
P5 Pump absorbed current - Option	[A]	18,80	18,80	18,80	18,80	27,20	27,20	27,20	30,00	30,00	30,00	22,00	30,00

(1) Data referred to: water temp. in/out: 20/15 °C – Ambient air temp. 25 °C – (2) Data referred to unit without pump – (3) Data related to most heavy condition allowed by safety devices – (4) Referred at 10 m and at an height of 1,5 m in free field.

PRODUCT SELECTION SOFTWARE

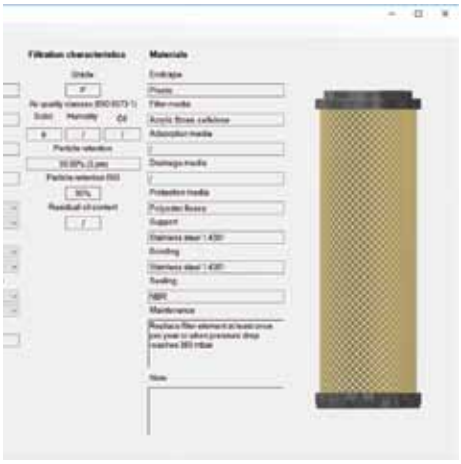
The **AirSys** is selection software designed by Omega Air.

It is being developed for fast and user friendly selection of Omega Air products.

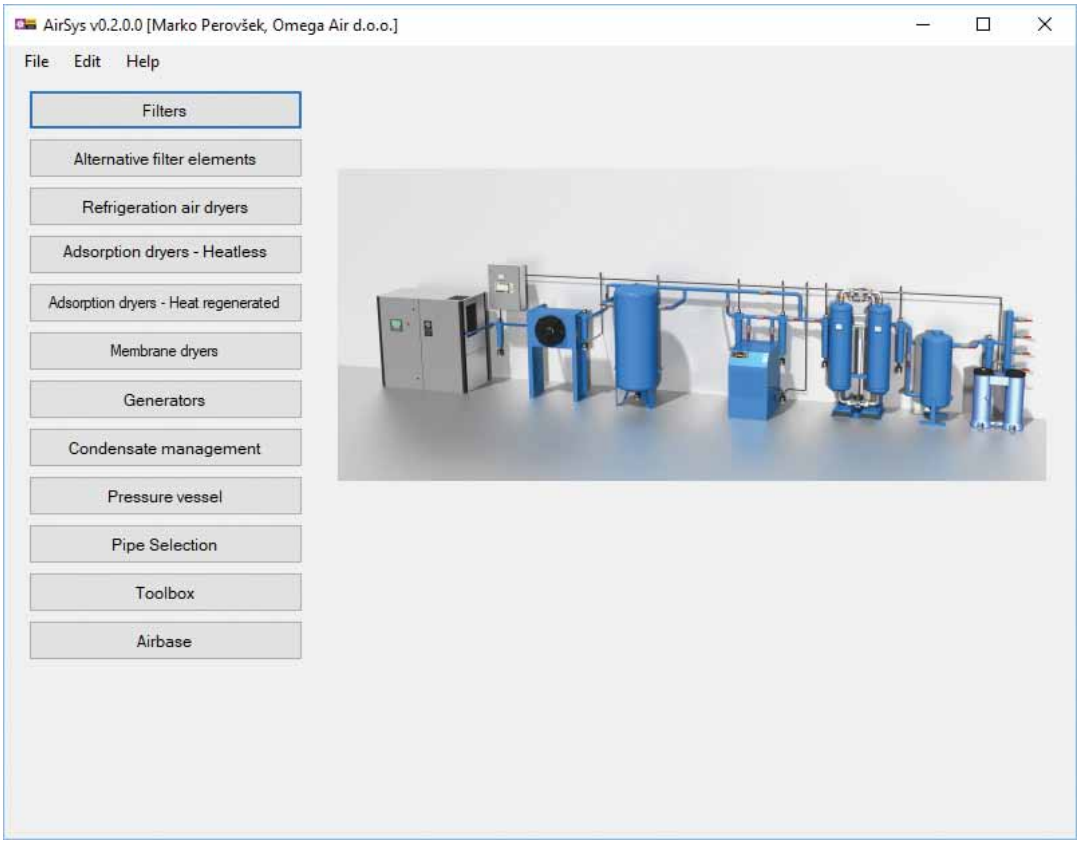
The **AirSys** software provides suggestions for components which enables the user to select the best suited component based on several deciding parameters such as operating pressure, operating temperature, flow capacities...

With **AirSys** you can easily select proper filters, filter elements, drains, dryers etc.


PSA filtrogen generator
N-GEN
N-GEN 85
10
bar
5 - 35
°C
40
°C
2"
1/2"
115.4
Nm³/h
210
Nm³/h
241.5
Nm³/h
553.438
1470.588
1688 x 860 x
mm
1170
kg




AIRBASE
Sign in


AirSys v0.2.0.0 [Marko Perovšek, Omega Air d.o.o.]
File
Edit
Help
Filters
Alternative filter elements
Refrigeration air dryers
Adsorption dryers - Heatless
Adsorption dryers - Heat regenerated
Membrane dryers
Generators
Condensate management
Pressure vessel
Pipe Selection
Toolbox
Airbase

AirSys

COMPRESSED AIR TREATMENT SIZING SOFTWARE

APPLICATIONS

Filters: ..... select a proper filter housing for your specifications
Filter elements: ..... find a proper filter element for the system
Refrigeration dryers: ..... select a proper refrigeration dryer based on your specifications
Adsorption dryers (heat and heatless regeneration): select a proper adsorption dryer based on your specifications
Membrane dryers: ..... membrane dryer selection
Generators: ..... select a proper nitrogen/oxygen generator based on your specifications
Condensate management: ..... select a proper condensate drain and condensate processing unit
Pressure vessel: ..... calculate a volume of a pressure vessel
Pipe selection: ..... dimensioning of a piping system
Toolbox: ..... (ISO 8573-1, Air properties, Unit converter, Pressure Equipment Directive PED): Everything to know about the air
Airbase: ..... base of knowledge and data

DESCRIPTION

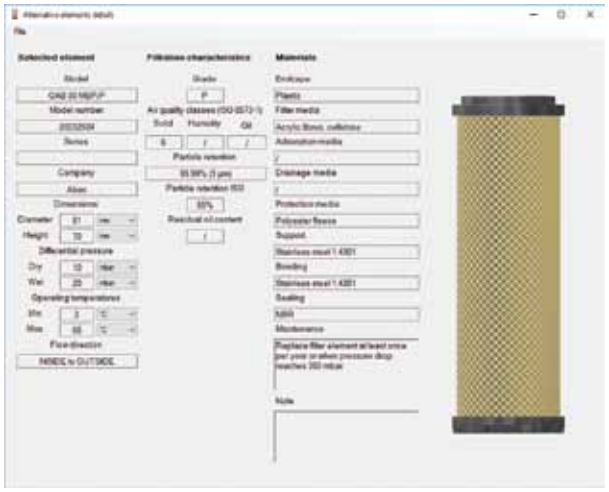
The **AirSys** is selection software designed by Omega Air.

It is being developed for fast and user friendly selection of Omega Air products.

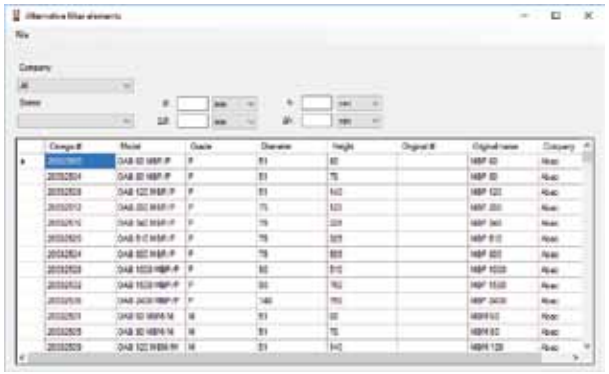
The **AirSys** software provides suggestions for components which enables the user to select the best suited component based on several deciding parameters such as operating pressure, operating temperature, flow capacities...

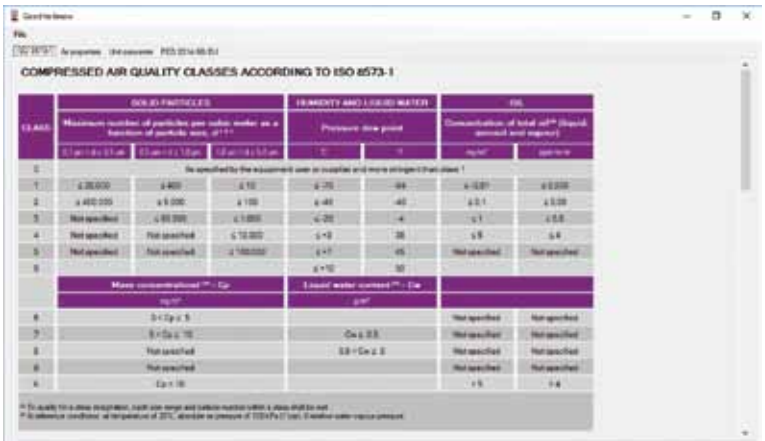
With **AirSys** you can easily select proper filters, filter elements, drains, dryers etc.


AIRBASE




AOK 200
AOK 200
AOK 160
EMD 12
MCD
1x WOS 20




COMPRESSED AIR QUALITY CLASSES ACCORDING TO ISO 8573-1

INDUSTRIAL ENGINEERING

Industrial engineering is a branch of engineering which deals with the optimization of complex processes, systems or organizations. Industrial engineers find the most effective way to turn the basic factors of production – people, materials, machines, time, energy, and money – into almost every product and service we consume. The best engineers also optimize the organization of a business.

To maximize efficiency, industrial engineers study product requirements carefully and then design manufacturing and information systems to meet those requirements. They also design or improve systems for the physical distribution of goods and services and determine the most efficient plant locations.

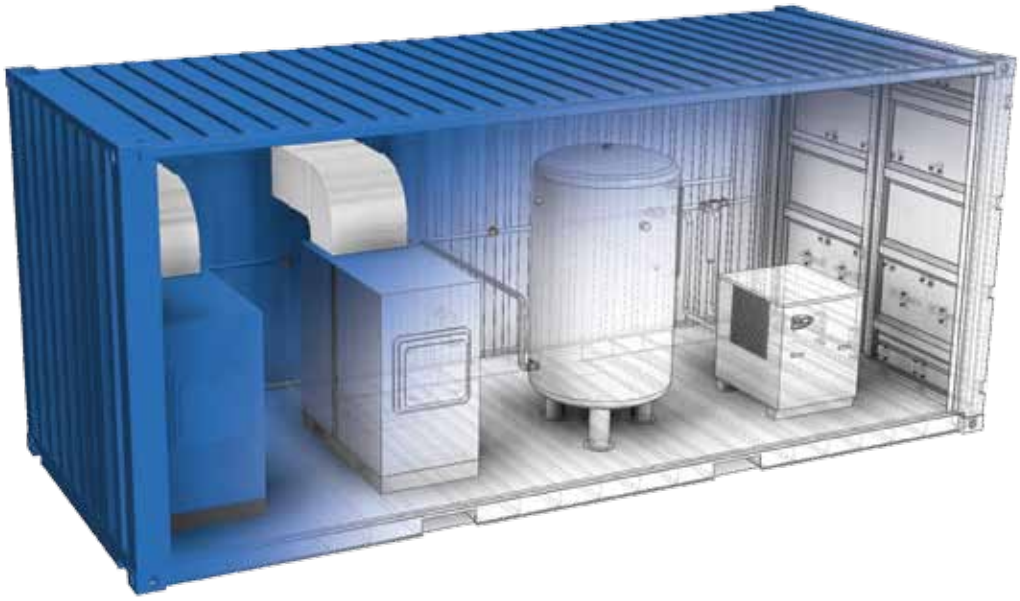
OMEGA AIR customers need high quality and long-lived products. Good products do not arise by chance. They result from a harmony between the departments of marketing, development, and production controlling.
Team work of highly motivated development engineers ensures excellent execution of projects and meet even the most demanding customers' orders.
The relevant safety procedures to avoid irregularities are already built in development and production stages, so the highest product quality is guaranteed.

- Biogas plants
- Air jet system
- Gas generators: N_2, O_2
- Moulds for plastic injection moulding
- Moulds for aluminium die casting
- Cogeneration
- CNG filling station


CTXU

COMPRESSED AIR STATIONS

CUSTOM MADE SOLUTIONS



DESCRIPTION

Our speciality is the design and construction of compressor stations according to specific requirements of our customers.

We carry out measurements of production process requirements on the basis of which the compressed air station project is made.

Professional approach to the project ensures reliable operation, maximum space utilization and high energy performance. Only high quality devices and materials are used.

APPLICATIONS

- General industrial applications
- Automotive
- Electronics
- Food and beverage
- Petrochemical
- Plastics
- Paint
- Packing industry
- Biotechnology
- Breweries
- Chemical industry
- Dairies
- Fermentation processes
- Pharmaceutical industry
- Hospitals...

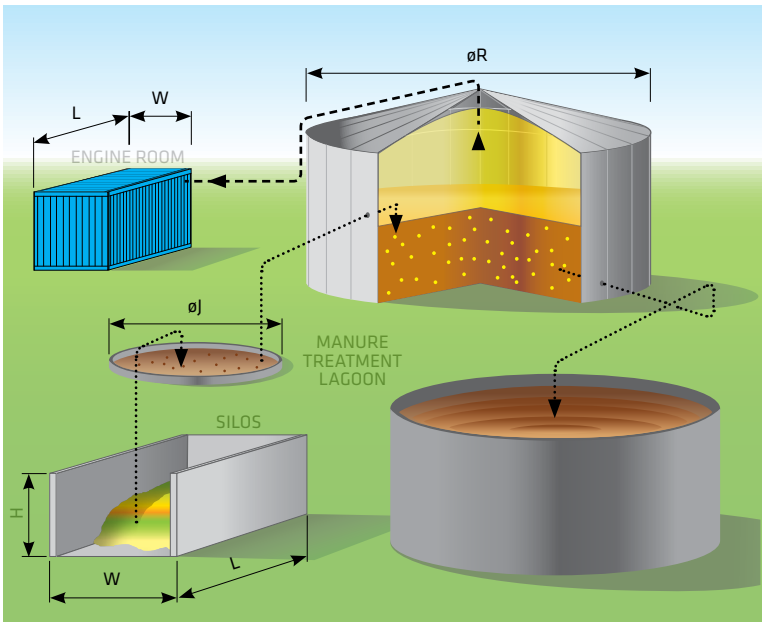
MIBP and BP

BIOGAS PLANTS

Type *	Electrical power	Heat power	Number of large livestock	Volume part of maize silage	Annual production of electrical energy
	kW	kW	pcs	%	MWh
MiBP 5	5	15,5	70	0	38
MiBP 10	7	18	90	0	49
MiBP 15	16	33	110	8	105
MiBP 20	22	43	110	12,5	139
MiBP 30	30	65	150	14,5	227
MiBP 40	43	63	180	16	305
MiBP 50	50	79	230	15,9	442
MiBP 60	64	103	270	15,6	524
MiBP 75	70	109	300	15,7	606
BP 100	105	138	400	15,7	820
BP 150	143	207	600	13,9	1144
BP 250	252	321	1000	14,2	1990
BP 300	307	360	1500	11,3	2441
BP 375	375	421	2000	9,3	2970

* Each biogas plant is a specific project which is adjusted according to the type and size of farm. OMEGA AIR is designer and producer of biogas plants to size 375 kW.

DIMENSIONS OF TYPICAL BIOGAS PLANTS		
	Type of biogas plant	
Dimensions [m]	MiBP 30 (30 kW)	MiBP 50 (50 kW)
L	6 m	6 m
B	2,5 m	2,5 m
øJ	4 m	5 m
øR	12,8 m	14,6 m
reactor height	4,4 m	4,4 m
gas storage height	1,5 m	1,5 m
end lagoon diameter	19,2 m	23,8 m
end lagoon height	7,3 m	5,8 m
silos (L×W×H)	6×30×3 m	8×30×3,5 m



DESCRIPTION

The slurry and other organic waste produced on livestock farms can be prepared in preparation tank for pumping into the bioreactor.

Bioreactor is a tank in which a process of anaerobic degradation takes place. Anaerobic digestion is a microbiological process of decomposition of organic matter, in the absence of oxygen. At this process a gas mixture - biogas is produced, which is stored in biogas storage before used.

Cogeneration unit combust clean biogas for electricity and heat production. Heat as a side product of electricity production is send trough heat exchanger coolant/water and stored in heat storage. Heat is used for heating bioreactor and for domestic hot water.

Produced electricity is used for powering the electrical equipment on the farm. The excesses of electrical energy are sold to electricity distributor.

The substrate mixture continuously flows into the bioreactor and the same volume digestate flows through the outlet to the end lagoon. During spreading of processed digestate to the fields there are significantly less unpleasant odours as in the case of the slurry.

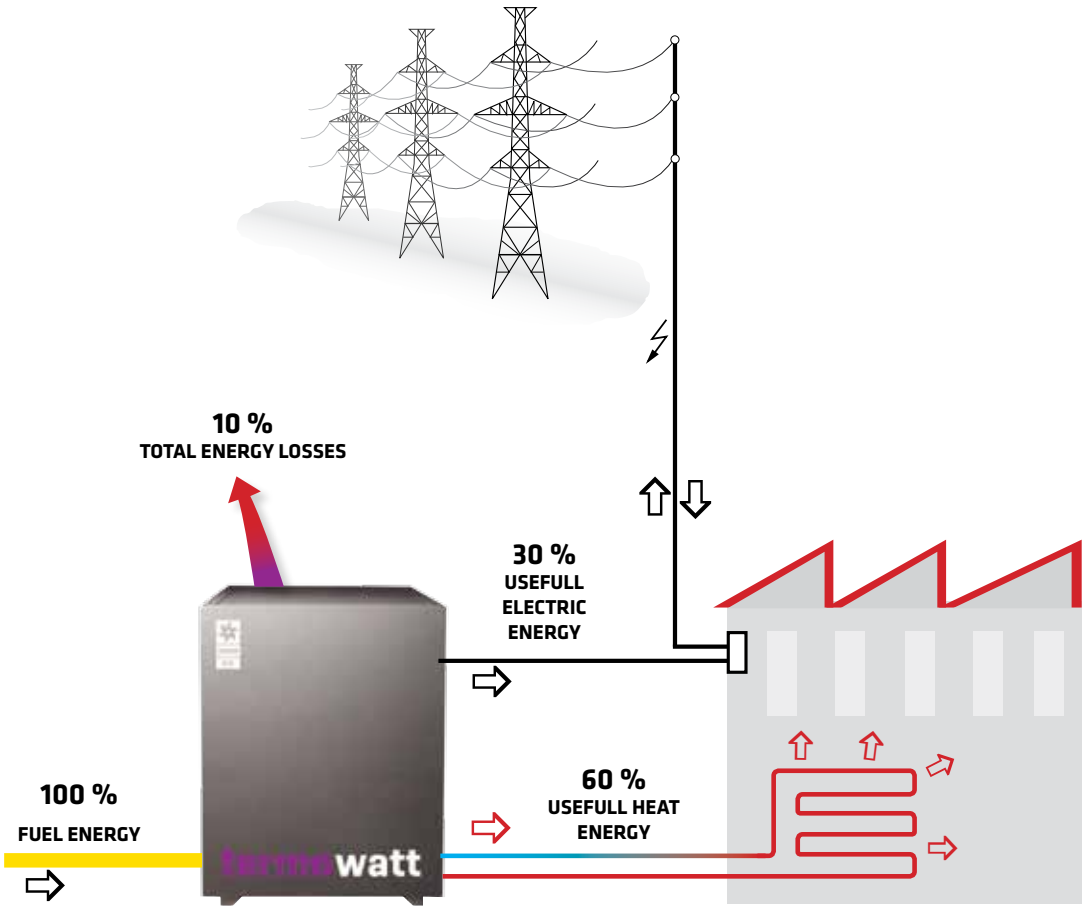
The engine room (cogeneration unit, heat storage tank, heat exchangers, automatics...) is closed in heat and sound proof ISO container. Only bioreactor tank is installed separately near to the engine room.

TERMOWATT

MICRO COGENERATION STATIONS

47 to **1500** kW
electric power

63 to **1848** kW
heat power



DESCRIPTION

- Low electricity and heat energy costs,
- Low operating costs,
- Greater energy efficiency,
- Increased reliability of energy supply,
- Use of energy independent of the public network,
- Large primary energy savings,
- Production of environmental friendly energy,
- Reducing of greenhouse gas emissions (CO_2) and emissions of other harmful gases (CO, SO_2, NO_x),
- Ecological resources fuels (natural gas, liquefied petroleum gas, fuel or vegetable oil, biodiesel, biomass).

APPLICATIONS

- Simultaneous production of electric and heat energy

TECHNICAL DATA

Type	Fuel power	Electric power	Heat power	Electric efficiency	Thermal efficiency	Total efficiency
Termowatt 5G	22 kW	5,5 kW	15,5 kW	25 %	70,5 %	>90 %
Termowatt 7G	26 kW	7,0 kW	18 kW	27 %	69,3 %	>90 %
Termowatt 15G	51 kW	16 kW	33 kW	31 %	64,7 %	>90 %
Termowatt 22G	68 kW	22 kW	43 kW	32 %	63,2 %	>90 %
Termowatt 30G	99 kW	30 kW	65 kW	30 %	65,6 %	>90 %
Termowatt 50G	145 kW	50 kW	90 kW	34 %	62,1 %	>90 %
C-LGE 70 MAN	204 kW	69 kW	109 kW	33,8 %	53,3 %	90 %
C-LGE 105 MAN	282 kW	105 kW	138 kW	37,1 %	49,1 %	88,1 %
C-LGE 200 MAN	538 kW	200 kW	263 kW	37,1 %	48,9 %	87,9 %

MJ SERIES
MICRO CNG STATIONS

5 to 70 Nm³/h
capacity

280 to 3360 l
storage capacity

	MJ Compact 05	MJ Variant	MJ Variant Plus	MJ Compact Plus	MJ SAT
Intended use	Slow filling	Fast filling	Fast filling	Fast filling	Public filling station
Number of compressors	1 x MJ05	1 - 4 x MJ05	1 - 4 x MJ05	1-2	1-4
Compressors capacity	5 m³/h	5 - 20 m³/h	5 - 20 m³/h	20 - 60 m³/h	> 70 m³/h
Annual capacity	15.000 m³/year	20 - 60.000 m³/year	20 - 60.000 m³/year	60 - 270.000 m³/year	200.000 m³/year
Annual mileage	20.000 - 200.000 km	200.000 - 800.000 km	200.000 - 800.000 km	800.000 - 3.600.000 km	-
Vehicle filling time	Overnight	2 - 3 min	2 - 3 min	2 - 3 min	2 - 3 min
Max. number of simultaneously filled cars	2	1	1	1	1
CNG storage tanks	Option	280 - 1260 l	840 - 1680 l	up to 3360 l	> 3360 l
Max. CNG storage tanks pressure	235 bar	250 bar	250 bar	250 bar	250 bar
Installed motor power	2,2 kW	2,2 - 8,8 kW	2,2 - 8,8 kW	7,5 - 15 kW	Depends on version
Dispenser (option)	No	Yes	Yes	Yes	Yes
Paying terminal (option)	No	Yes	Yes	Yes	Yes
Size of vehicles fleet	1 - 5	5 - 20	5 - 20	20 - 80	Public filling station
Equipment	- integrated gas meter with pulse counter, - gas leakage sensor, - integrated gas dryer and filter, - automatic filling process (B&R control unit), - safety alarms, - breakaway coupling, - one or two NGV1 filling terminals, depends on version,	- 2 pressure sections of CNG storage tanks, - manual filling control or automatic filling control (with integrated dispenser), - safety coupling, - NGV 1 filling terminal, - pressure overload protection, - pressure manometers	- gas leakage sensor, - integrated gas dryer - 2 pressure sections of CNG storage tanks, (low/high pressure), - manual filling control or automatic filling control (with integrated dispenser), - safety coupling, - NGV 1 filling terminal	- gas leakage sensor, - integrated gas dryer, - 2 pressure sections of CNG storage tanks, (low/high pressure), - manual filling control or automatic filling control (with integrated dispenser), - safety coupling, - NGV 1 filling terminal	- CNG temperature sensors, - integrated CNG storage tank, 3 pressure sections, - steel or concrete container, - intake pressure control (min. and max.), - humidity control, - gas leakage sensor, - stainless steel pipes and fittings on high pressure sections, - integrated gas dryer, - control panel heating, - oil preheating, - open door detection, - many other options

DESCRIPTION

CNG (compressed natural gas) filling stations are used for filling of CNG powered vehicles. In CNG filling station compressor compresses the natural gas from pressure of 0,02-0,2 bar (domestic gas supply system) to 200-250 bar which is used to fill a storage tank in vehicle.
There are two different technologies used in CNG filling stations.
Slow filling station use compressor to compress the natural gas directly into the car CNG tank. This technology is used in small fleet of vehicles that are not used constantly.
In fast filling station the compressor compresses the natural gas to pressure storage tank. Compressing of natural gas to storage tank is made before filling of the car therefore storage tank is constantly full and available for filling. This technology is used in a larger fleet of vehicles and in public filling stations.

SKIDS

SKID/CONTAINER BASED PACKAGES

0 - 420 bar
operating pressure

on request
operating temperature range

on request
connections

on request
flow capacity

DESCRIPTION

Omega Air manufactures wide range of compressed air and gas treatment products (cyclone separators, filters, dryers, condensate drains, gas generators, pressure vessels...).

Our industrial engineering division is able to integrate standard or custom made products into a skid/container based packages according to specific project requirements. Skids can be designed according to variety of design codes (PED, ASME, DNV, ABS, NR13, AS1210 ...).

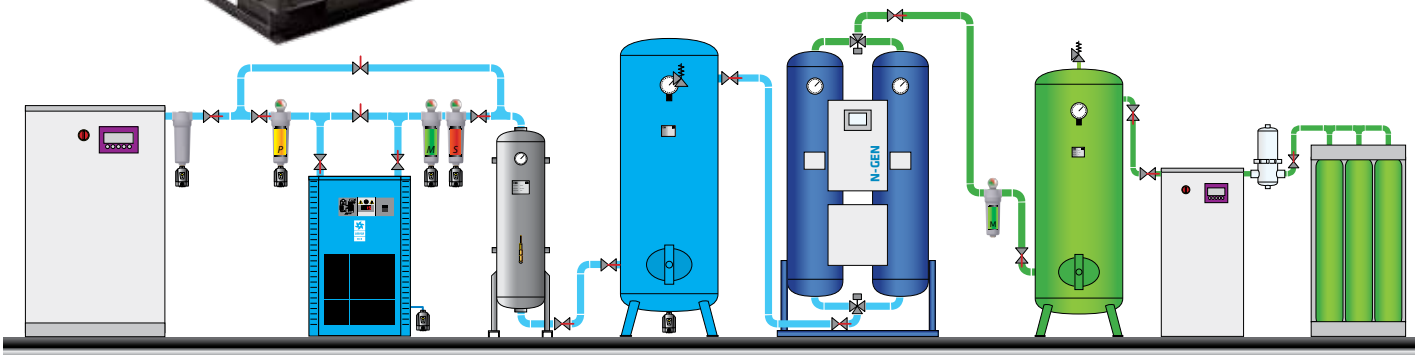
SKID - NGEN40 - 828 - 12

Size

Capacity in Nm³/h

SYS = delivered as standalone components
SKID = delivered mounted on a skid
CONT = delivered mounted into a container

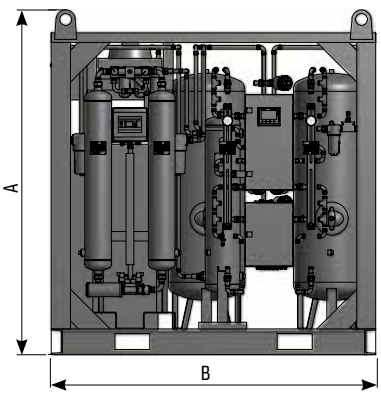
ATU1 = Adsorption Dryer PDP -70°C, Filter 0,01 µm (Class 1 acc. to ISO 8573-1)
ATU2 = Adsorption Dryer PDP -40°C, Filter 0,0 1µm (Class 2 acc. to ISO 8573-1)
ATU3 = Adsorption Dryer PDP -20°C, Filter 0,01 µm (Class 3 acc. to ISO 8573-1)
ATU4 = Refrigerat. Dryer PDP +3°C, Filter 0,01 µm (Class 3 acc. to ISO 8573-1)
NGEN10 = Nitrogen generator (purity 99%), Filter 0,01 µm
NGEN20 = Nitrogen generator (purity 99,5%), Filter 0,01 µm
NGEN30 = Nitrogen generator (purity 99,9%), Filter 0,01 µm
NGEN40 = Nitrogen generator (purity 99,99%), Filter 0,01 µm
NGEN50 = Nitrogen generator (purity 99,999%), Filter 0,01 µm
OGEN10 = Oxygen generator (purity 90%), Filter 0,01 µm
OGEN20 = Oxygen generator (purity 93%), Filter 0,01 µm
OGEN30 = Oxygen generator (purity 95%), Filter 0,01 µm

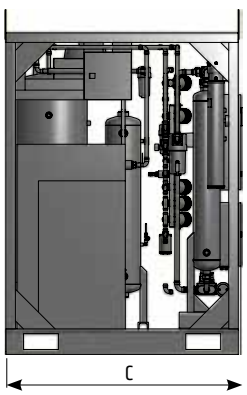


Compressor | Refrigeration dryer | Activated carbon tower | Pressure vessel | Nitrogen generator | N_2 receiver | N_2 high pressure compressor | N_2 high pressure receiver

TECHNICAL DATA			
Model	Connection	Total power	Outlet flow*
	In/Out	kW	Nm³/h
SIZE 1	G 3/4"	5,5	40
SIZE 2	G 3/4"	7,5	57
SIZE 3	G 3/4"	11	90
SIZE 4	G 3/4"	15	120
SIZE 5	1"	18,5	150
SIZE 6	1"	22	177
SIZE 7	1"	30	251
SIZE 8	G 1 1/4"	37	339
SIZE 9	G 1 1/4"	45	366
SIZE 10	G 2"	55	570
SIZE 11	G 2"	75	636
SIZE 12	G 2"	90	828
SIZE 13	on request	up to 315 kW	on request

*Refers to 1 bar_a and 20°C for compressor outlet flow at 10 bar_g. Final compressed air/nitrogen/oxygen supply depend on speciffic configuration. For detailed specification please contact us.





SERVICE PARTS / SPARE PARTS for compressed air treatment

- FILTER ELEMENTS
- Service kits
- SORBEO Adsorbents

SERVICE PARTS

FOR COMPRESSED AIR TREATMENT

ORIGINAL FILTER ELEMENTS

ALTERNATIVE FILTER ELEMENTS

SERVICE KITS FOR ADSORPTION COMPRESSED AIR DRYERS AND GAS GENERATORS

REPLACEMENT ADSORBENT MATERIALS

SORBEO MS 3A - Molecular sieve
SORBEO MS 4A - Molecular sieve
SORBEO MS 10A - Molecular sieve
SORBEO AA - Activated Alumina
SORBEO SGWS - Water resistant Silica Gel
SORBEO SGW - Silica Gel
SORBEO SGR - Silica Gel
SORBEO AC - Activated Carbon
SORBEO HC - Catalyst
SORBEO CMS - Carbon Molecular Sieve
SORBEO SGC - Silica gel
SORBEO SL - Soda lime
SORBEO BTN - Bentonite

INITIAL COMMISIONING OF DEVICES

OMEGA AIR GROUP

OMEGA AIR

OMEGA AIR production plant in Ljubljana, Slovenia

PRODUCTION

OMEGA AIR

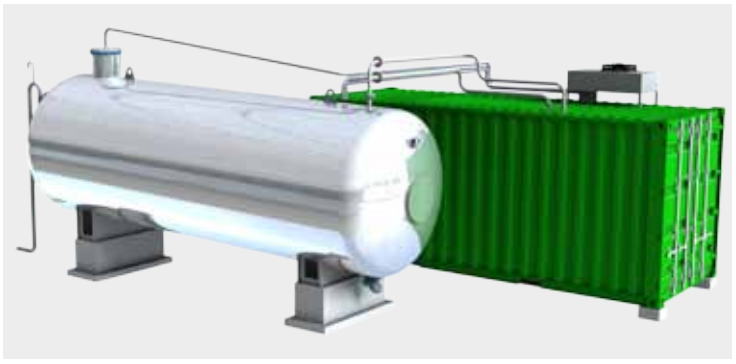
Modern production, contemporary CNC machining centres, strict internal control, external quality assessment system and prescribed procedure compliance monitoring, ensures that production lines produce only products of the highest quality.

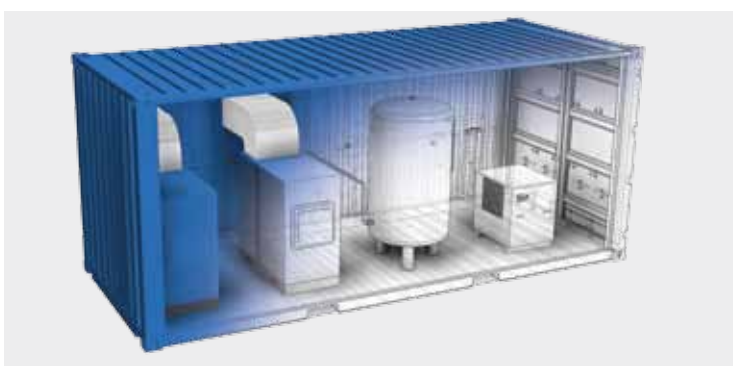
We also manage all the product's phases, from its concept to final production. Only a small fraction is made by contractors which strictly follows demands of services and supply of materials

- Toolroom dept.
- Plastics dept.
- Machining dept.
- Welding dept.
- Filtration dept.
- Assembly dept

RESEARCH AND DEVELOPMENT

OMEGA AIR





Our experts develop tailored solutions for our clients, no matter how demanding their requirements are. Wide range of experiences, technical know-how and innovations are key features, making the best solutions possible. Introducing new technologies and permanent investing in development give optimal solutions.

Our people work closely with the business to develop solutions that enable them and their clients to stay ahead of their game. Technology is a place where communication and innovation allow us to provide an unbeatable service to our clients.

Our team works closely with our clients to invent, develop and build real-world technology solutions to some of their hardest problems, as well as providing professional support services for those solutions throughout their operational lives. Through the system testing and optimization we try to achieve the reduction of device operating costs.

SERVICE

OMEGA AIR

The service centre is at a separate location in Logatec. It is responsible for servicing all equipment purchased in our company. The wide range of spare parts ensures the shortest possible downtime of your production plant. The replacement equipment - as much as the entire mobile compressor station - is available in case of major annual servicing.

Every member of service staff has their own service vehicle equipped with spare parts for the implementation of basic services, as well as all the necessary.

Customer service provides 24/7 customer support.

Service covers the following areas:
- Compressors and compressor equipment
- Air conditioning and industrial cooling processes
- Humidifiers and air heaters
- Pneumatic tools

MARKETING

OMEGA AIR

One of the important features of our company is excellent marketing support for our customers.

Many catalogues, brochures, leaflets and other marketing materials arise in our marketing department, which responsibility is also the excellent execution of events such as fairs, conferences, meetings and education.

Catalogues are available in a number of world languages, which will undoubtedly facilitate your understanding of our products. All catalogues and brochures are also available on our AIRBASE website.

You can also order promotional materials from us, which will help you to promote yourself effectively at trade shows and presentations of products to your customers.

BEST PRACTICES

QUALITY, CERTIFICATES

OMEGA AIR

Obtained quality certificates and standards compliance are proof that we know how to produce quality products. We are proudly introducing these at the most prestigious fairs all over the World.

We are satisfied that knowledge about our products and systems from our product range is not hidden behind a wall. Our training centre provides all necessary information about our product programme.

Certificates
- ISO 9001:2008
- ASME U code
- CE-PED-H1
- CE-PED-H1D
- GOST

Fairs
- ComVac, Hannover (D)
- ITFM, Moscow (RUS)
- PCV Expo, Moscow (RUS)
- HPS, Katowice (PL)
- PTC Asia, Shanghai (PRC)
- MDA India (IN)
- PLOVDIV FAIR (BG)
- Energetics, Celje (SLO)
- MOS, Celje (SLO)
- AGRA, Gornja Radgona (SLO)
- Formatool, Celje (SLO)
- Car and maintenance, Celje (SLO)

TRANSPORT AND LOGISTICS

OMEGA AIR

Good flow of raw materials and products is provided with our own transport capacities, as well as contractual partners and services for fast delivery.

- 3 heavy goods vehicles (26t)
- 1 cargo trailer (8,5t)
- 1 cargo trailer (13t)
- 17 vans
- 29 company cars
- 18 forklifts (10t, 6t, 2x 3.5t 3t, 3 x 2t, 10 x 1.2t)
- 4000 m^2 of warehouses (cca. 2.200 pallets)
- Logistics centre in Logatec

SHOPS

OMEGA AIR SHOPS

On the store shelves you can find a wide range of quality products for compressed air.

Professionally trained staff will help you to find the perfect choice.

Products selection can also be reached through a sales catalogue and online store.

- Sales catalogue
- Web catalogue

MEGA AIR

MEGA AIR BRAND
















In order to supply customers with the most sophisticated customized solutions, innovation in technology and engineering is necessary, but it is not enough. Research and company development must always be customer care oriented. This is the difference between a standard supplier of products and a real partnership with solutions.

Mega Air's technical support and its skilled team carry out a steady consulting and assistance activity for each customer, both when a supply starts and when it ends: analysis of a customer's specific needs, consulting as to the best and most suitable product choice, after-sales customer care with skilled and committed staff.

Mega Air is flexibly structured and dynamically oriented to ensure that customers are always advised according to their needs.

"Always There" is no empty promise. At Mega Air we make it a priority to deliver the finest follow-up service, a full complement of maintenance parts, and other customized aftermarket solutions for optimal tools performance.

Scope of supply:
- Screw compressors
- Piston compressors
- Portable compressors
- Pneumatic tools
- Pneumatic equipment/ fasteners
- Maintenance equipment

PROINS

MECHANICAL INSTALLATIONS

PROINS is a company for the professional execution of mechanical installations in industrial and commercial buildings.

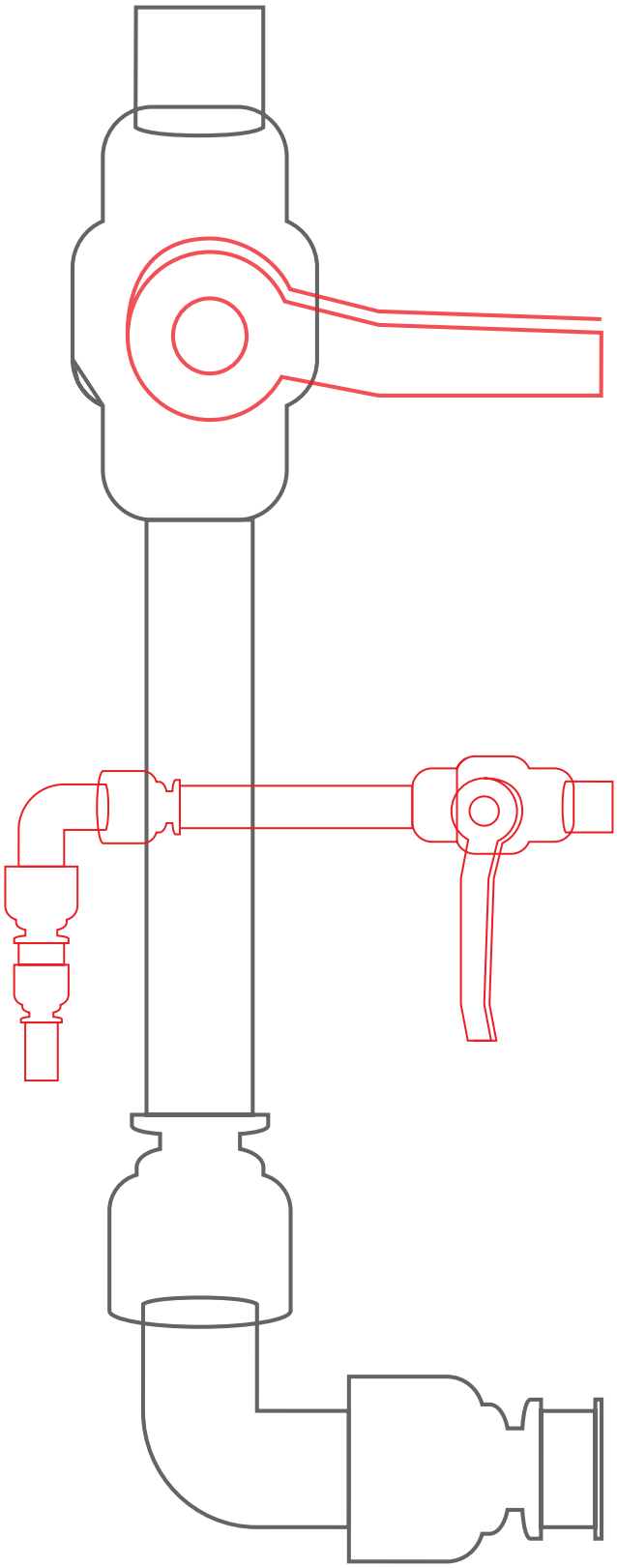
We offer comprehensive solutions for consulting, designing and implementation of mechanical installations, where our main principle is the highest quality and embedded materials.

Solutions that strive for low energy consumption over the period of use of facilities require considerable attention. In cooperation with our partners, we also offer integrated solutions for control and regulation segments (intelligent installation of facilities, integration of individual control units, etc.), which additionally contribute to the excellent energy efficiency of facilities.

We can be proud of our professional and quality services, up-to-date and flexibility in the performance of services, especially for small businesses.

Our performance is professional, quality and at competitive prices.

We provide services in the following areas:
- Plumbing installations,
- Gas installations,
- Heating installations,
- Chilling,
- Sewer,
- Ventilation,
- Adaptations,
- Service and maintenance, and
- Technical advice.



REFERENCES

REFERENCE PROJECTS

R-DRY 10000 BP - ADSORPTION COMP. AIR DRYER - Heat regener. - purge air cooling

Quantity:	**1 pc**
Project:	**Custom made dryer for Paper ind.**
Design Code:	**PED**
Approval:	**CE**
Year of production:	**2017**
Operating pressure :	**6 barg**
Nominal flow:	**5.100 m³/h**
Inlet temperature:	**40°C**
Dew point :	**-40°C**

R-DRY 3600 BVA- ADSORPTION COMP. AIR DRYER - Heat regeneration in vacuum mode

Quantity:	**1 pc**
Application:	**Dairy**
Design Code:	**PED**
Approval:	**CE**
Year of production:	**2016**
Operating pressure :	**7 barg**
Nominal flow:	**3600 Nm³/h**
Temp. operat. range:	**Icewater cooled compressed air**
Dew point:	**< -40°C**

R-DRY 1600 BVL - ADSORPTION COMP. AIR DRYER - Heat regeneration - closed loop

Quantity:	**1 pc**
Application:	**Production of viscose**
Design Code:	**PED**
Approval:	**CE**
Year of production:	**2017**
Operating pressure :	**7 bar**
Nominal flow:	**1200 Nm³/h**
Inlet temperature:	**35°C**
Pressure Dew Point:	**-40°C**

B-DRY 250 - HEATLESS ADSORPTION COMPRESSED AIR DRYER - Marine application

Quantity:	**2 pcs**
Application:	**Offshore - Cameroon - Marine painting, modified piping, purge optimization**
Design Code:	**PED, CE**
Year of production:	**2019**
Operating pressure :	**7-9 bar**
Nominal flow:	**230 Nm³/h**
Inlet temperature:	**20-35°C**
Pressure Dew Point:	**-40°C**

R-DRY 7700 BVA - ADSORPTION COMP. AIR DRYER - Heat regeneration in vacuum mode

Quantity:	**1 pc**
Application:	**Wood production**
Design Code:	**PED, CE**
Year of production:	**2018**
Operating pressure :	**7 bar**
Nominal flow:	**7680 Nm³/h**
Inlet temperature:	**35°C**
Pressure Dew Point:	**-40°C**

REFERENCES

REFERENCE PROJECTS

F-DRY 3750 - ADSORPTION COMP. AIR DRYER - Heatless regen. - Purge air (only 5,5% losses due to pre-dried air)

Quantity:	**1 pc**
Application:	**Wood industry**
Design Code:	**PED, CE**
Year of production:	**2016**
Operating pressure :	**7 bar**
Nominal flow:	**3000 Nm³/h**
Inlet temperature:	**20°C (predried to PDP +3°C)**
Pressure Dew Point:	**-40°C**

HP-DRY 650 - HIGH PRESSURE ADSORPTION DRYER - Heatless regeneration - Purge air

Quantity:	**1 pc**
Application:	**Dryer for oil rick in Norwegian sea**
Design Code:	**PED, CE**
Year of production:	**2015**
Operating pressure :	**270 bar**
Nominal flow:	**650 Nm³/h**
Inlet temperature:	**1,5 to 50 °C**

X-DRY 300 - MODULAR ADSORPTION DRYER

Quantity:	**2 pc**
Application:	**Dryer for railway**
Design Code:	**PED, CE**
Year of production:	**2017**
Operating pressure :	**16 bar**
Nominal flow:	**300 Nm³/h**
Inlet temperature:	**1,5 to 50 °C**
Pressure Dew Point:	**-40° (-25°C / -70°C)**

N-GEN 300 - NITROGEN GENERATOR

Quantity:	**1 pc**
Application:	**Coffee production**
End client:	**Atlantic grupa Beograd**
Year of production:	**2018**
N_2 purity:	**99,5 %**
Capacity:	**256 Nm³/h**

O-GEN 05 - OXYGEN GENERATOR

Quantity:	**1 pc**
Application:	**Water treatment**
End client:	**n.a.**
Year of production:	**2018**
Purity:	**95% (+/- 1%)**
Min. inlet pressure:	**6 bar**
Max. oper. pressure:	**10 bar**
FAD:	**1,15 m³/min.**
Ambient temp:	**10°C - 35°C**

REFERENCES

REFERENCE PROJECTS

HORIZONTAL OIL SEPARATOR

Quantity:	**6 pcs**
Project:	**Biogas compressors**
Design Code:	**ASME Sec.VIII Div.1**
Approval:	**PED-CE (Fluid group 1)**
Year of production:	**2015**
Operating pressure :	**20 bar/10 bar**
Material:	**Carbon steel**

DRAINAGE TANK UNIT

Quantity:	**2 pcs**
Project:	**LNG PLANT**
Design Code:	**ASME Code Sec.VIII Div.1; GOST-R 52630**
Approval:	**EAC**
Year of production:	**2017**
Operating pressure :	**Hydrostatic**
Temp. operat. range:	**-50° to +80°C**
Connections:	**DN50, DN100, DN150, DN800**
Material:	**ASME Code Sec.II; Carbon steel**

FILTER FOR FLARE GAS SYSTEM

Quantity:	**2 pcs**
Project:	**Kaombo project**
Design Code:	**ASME Sec.VIII Div.1**
Approval:	**ASME-U; BV Marine**
Year of production:	**2015**
Operating pressure :	**3,5 bar / FV**
Material:	**Carbon steel (ASME)**

TANK FOR TURBO WASHING UNIT

Quantity:	**4 pcs**
Project:	**YAMAL LNG Plant**
Design Code:	**ASME Code Sec.VIII Div.1; GOST-R 52630**
Approval:	**ASME U + EAC**
Year of production:	**2017**
Operating pressure :	**7 bar**
Temp. operat. range:	**-50°C to +100°C**
Connections:	**DN25, DN40, DN50**
Material:	**ASME Code Sec.II; Stainless steel Grade 304**

LUBE OIL SERVICE TANK UNIT 5000 L

Quantity:	**2 pcs**
Project:	**LNG Plant**
Design Code:	**ASME Code Sec.VIII Div.1; GOST-R 52630**
Approval:	**EAC**
Year of production:	**2017**
Operating pressure :	**Hydrostatic**
Capacity:	**5000 Liters**
Temp. oper. range:	**-50°C to +80°C**
Connections:	**DN40, DN50, DN80**
Material:	**Stainless steel 304 (ASME)**

REFERENCES

REFERENCE PROJECTS

SKID F-DRY 2000 + ACA 094

Quantity:	**6 pcs**
Application:	**N2 drying**
Year of production:	**2018**
Inlet pressure:	**5 bar**
Nominal flow:	**975 Nm³/h**
Pressure dew point:	**down to -40°C**

COM-DRY 1200 SKID - REFRIGERANT + ADSORPTION DRYER

Quantity:	**1 pc**
Application:	**Custom made dryer for oil-free application**
Design Code:	**PED**
Approval:	**CE**
Year of production:	**2018**
Operating pressure :	**6 bar**
Nominal flow:	**1260 Nm³/h**
Pressure dew point:	**down to -40°C**

VESSEL 1500

Quantity:	**2 pc**
Application:	**YAMAL LNG Plant**
Design Code:	**ASME Code Sec.VIII Div.1 + GOST-R 52630**
Year of production:	**2017**
Operating pressure :	**3 bar**
Fluid:	**Glycolated water**
Connections:	**DN15, DN20, DN40, DN50, DN600**
Material:	**ASME Code Sec.II; Carbon steel**

EXPANSION TANK FOR HEATING CIRCUIT

Quantity:	**4 pcs**
Project:	**YAMAL LNG Plant**
Design Code:	**ASME Code Sec.VIII Div.1; GOST-R 52630**
Approval:	**EAC**
Year of production:	**2017**
Operating pressure :	**0,5 bar**
Temp. operat. range:	**-50°C to +100°C**
Connections:	**DN50, DN500**
Material:	**ASME Code Sec.II; Carbon steel SA-516 Gr.70**

COM-DRY 1000 - REFRIGERANT + ADSORPTION DRYER

Quantity:	**2 pc**
Application:	**Sugar factory**
End client:	**Cristal Union**
Design Code:	**PED**
Approval:	**CE**
Year of production:	**2017**
Operating pressure :	**7 bar**
Nominal flow:	**1000 Nm³/h**
Pressure dew point:	**down to -40°C**

REFERENCES

REFERENCE PROJECTS

HIGH PRESSURE FILTER 300 bar

Quantity:	**150 pcs**
Project:	**LNG project**
End client:	**PSN Kazstroj**
Design Code:	**ASME Sec.VIII Div.1**
Approval:	**ASME-U**
Year of production:	**2014-2016**
Operating pressure :	**300 bar**
Material:	**Stainless steel SA-479 gr. 304**

STAINLESS STEEL PROCESS FILTERS

Quantity:	**4 pcs**
Project:	**Hassi Messaoud Project**
End client:	**Sonatrach**
Design Code:	**ASME Code Sec.VIII Div.1;**
Approval:	**ASME-U; ARH**
Year of production:	**2015**
Operating pressure :	**11 bar**
Temp. operat. range:	**-10°C to +93°C**
Connections:	**DN80**
Material:	**SS SA-312 TP316L**

CARBON STEEL FILTERS

Quantity:	**8 pcs**
Project:	**Midyan gas processing facilities**
End client:	**Saudi Aramico**
Design Code:	**ASME Sec.VIII Div.1**
Approval:	**ASME-U**
Year of production:	**2015**
Operating pressure :	**9 bar**
Material:	**Carbon Steel SA-106 Gr. B**

STRIPPING COLUMN

Quantity:	**2 pcs**
Project:	**Nuclear power Plant**
End client:	**NEK Krško**
Design Code:	**ASME Code Sec.VIII Div.1;**
Approval:	**ASME U**
Year of production:	**2014**
Operating pressure :	**10 bar**
Material:	**Stainless steel 304 (ASME)**

MIXING PIPE

Quantity:	**4 pcs**
Project:	**YAMAL LNG Plant**
End client:	**Yamgaz SNC**
Design Code:	**ASME Code Sec.VIII Div.1;** **GOST-R 52630**
Approval:	**ASME-U+EAC**
Year of production:	**2017**
Operating pressure :	**16 bar**
Temp. oper. range:	**-50°C to +50°C**
Material:	**ASME Code Sec.II; Carbon steel**

CUSTOMISED PRODUCTS

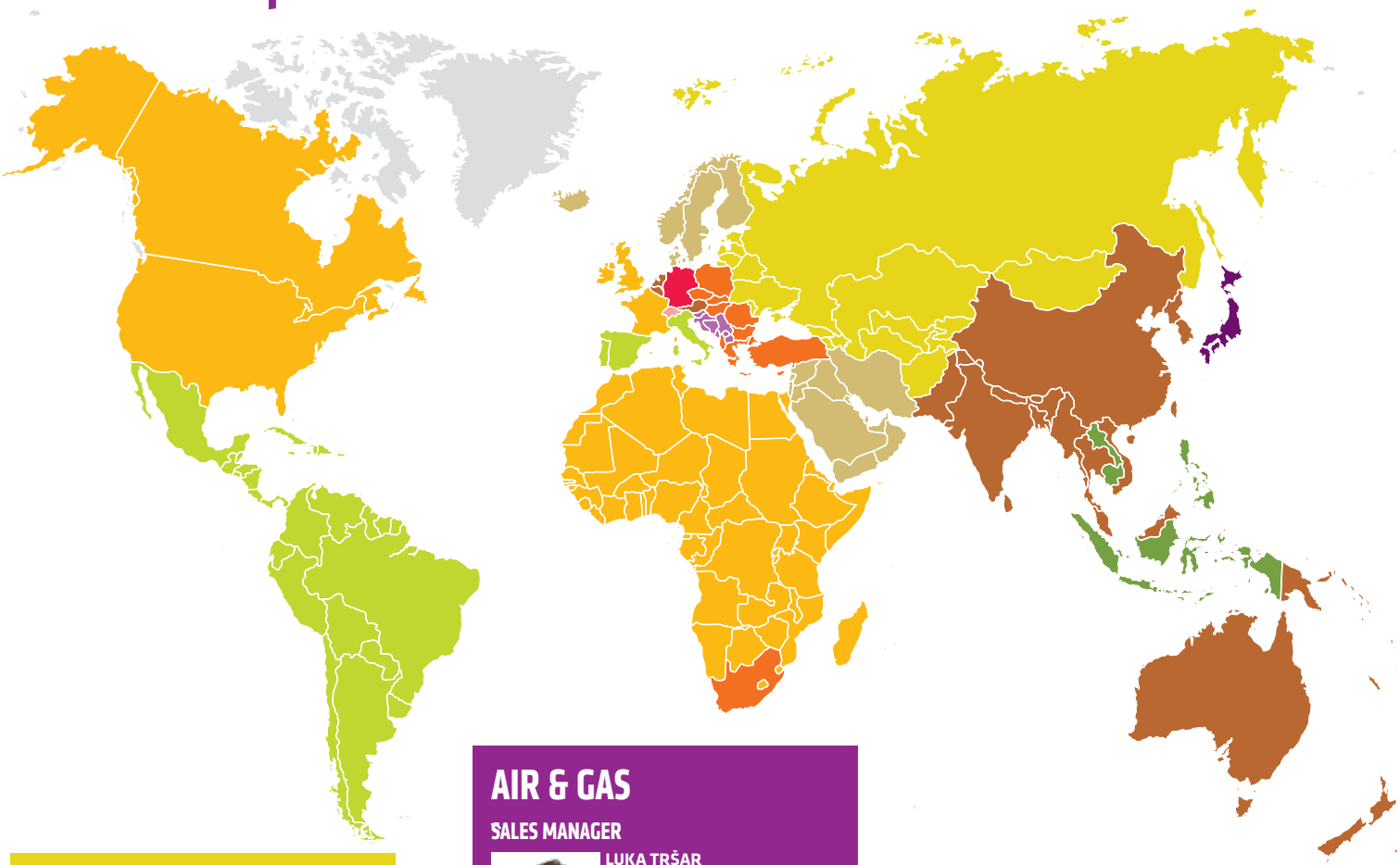
A large part of our manufacturing capacity is suited for customized products. We take part in the developing of the products together with our customers.
If you have a project in our range of products and need a co-operating partner do not hesitate to contact us.

GENERAL TERMS OF SALES

General conditions:	Exclusively valid "The general sales conditions" of company Omega Air d.o.o. Ljubljana.
Terms of delivery:	Incoterms EXW Ljubljana, Slovenia, packing included.
Terms of payment:	Payment in advance if not otherwise agreed. Currency is EUR.
Warranty:	One year from date of delivery. Warranty valid only if the product is used in accordance with its instruction manual. Other costs such as labour costs are not included.
Changes:	We reserve the right for typing errors and right to change the prices, conditions and technical specifications of the products without previous announcement.
Packing and packing waste:	The customer in the recipient country is responsible for the recycling of packaging and disposal of waste electrical equipment in accordance with local directives.
Right of ownership:	Delivered products remain in our possession until full payment has been settled.

The above mentioned sales terms and conditions are only for information and are published on our website www.omega-air.si.
All other details are defined in written agreement between contract parties.

AIR & GAS department - Team



AIR & GAS

SALES MANAGER

LUKA TRŠAR
T +386 1 200 68 13
M +386 30 362 190
F +386 1 200 68 53
luka.trsar@omega-air.si
Languages:

CIS Countries, Baltic

AREA SALES MANAGER

EKATERINA BERNIK
T +386 1 200 68 68
M +386 30 362 192
F +386 1 200 68 53
ekaterina.bernik@omega-air.si
Languages:

SALES ASSISTANT

ŽANNA LAPINA NABERGOJ
T +386 1 200 68 15
M +386 30 478 808
F +386 1 200 68 53
zanna.lapina@omega-air.si
Languages:

SALES ASSISTANT

SABINA KOŽAR
T +386 1 330 42 25
F +386 1 200 68 53
sabina.kozar@omega-air.si
Languages:

SALES ADMINISTRATOR

JANJA BOGATAJ
T +386 1 200 68 04
F +386 1 200 68 53
janja.bogataj@omega-air.si
Languages:

Benelux, Austria, Asia, Oceania

AREA SALES MANAGER

MARTIN SOJER
T +386 1 200 68 39
M +386 30 362 191
F +386 1 200 68 53
martin.sojer@omega-air.si
Languages:

SALES ADMINISTRATOR

TANJA TRŠAR
T +386 1 200 68 43
F +386 1 200 68 53
tanja.trsar@omega-air.si
Languages:

SALES ADMINISTRATOR

ANJA ŠAVS
T +386 1 200 68 46
F +386 1 200 68 53
anja.savs@omega-air.si
Languages:

France, Canada, USA, Africa, UK

AREA SALES MANAGER

BAPTISTE CALVET
T +386 1 200 68 61
M +386 30 362 197
F +386 1 200 68 53
baptiste.calvet@omega-air.si
Languages:

SALES ASSISTANT

MAJA GRAMPOVČAN
T +386 1 200 68 69
F +386 1 200 68 53
maja.grampovcan@omega-air.si
Languages:

SALES ADMINISTRATOR

VESNA PRIJATELJ
T +386 1 200 68 30
F +386 1 200 68 53
vesna.prijatelj@omega-air.si
Languages:

East Europe, Greece, South Africa

AREA SALES MANAGER

ŠPELA PERC
T +386 1 200 68 69
M +386 30 362 194
F +386 1 200 68 53
spela.perc@omega-air.si
Languages:

SALES ADMINISTRATOR

MARTA FURLAN
T +386 1 200 68 19
F +386 1 200 68 53
marta.furlan@omega-air.si
Languages:

Middle East, Scandinavia

AREA SALES MANAGER

UROŠ OGRIN
T +386 1 200 68 38
M +386 30 478 820
F +386 1 200 68 53
uros.ogrin@omega-air.si
Languages:

SALES ASSISTANT

VESNA BOŽIDAR
T +386 1 330 42 22
F +386 1 200 68 53
vesna.bozidar@omega-air.si
Languages:

OMEGA AIR Japan

PROCURATOR

HIRO HANAWA
T +81 (0) 45 228 5118
M +81 (0) 90 5336 0303
hiro.hanawa@jp.omega-air.si
Languages:

OMEGA AIR South East Asia

PROCURATOR

BRIAN HERBERT
T +62 21 2953 8856
+62 812 9779 0982
brian.herbert@sea.omega-air.si
Languages:

Slovenia, Croatia, Serbia, Bosnia and Herzegovina, Montenegro, FYROM

SALES MANAGER - domestic sales

GREGOR OSTRONIČ
T +386 1 200 68 22
M +386 30 362 126
gregor.ostronic@omega-air.si
Languages:

OMEGA AIR GMBH - distribution

PROCURATOR

DR. WALTER STEUDLE
M +49 (0) 173 7142726
walter.steudle@omega-air.de
Languages:

AREA SALES MANAGER - NORTH/NORTH-EAST GERMANY

OLAF LISSEL
T +49 (0) 5341 3988782
M: +49 (0) 172 3900640
olaf.lissel@omega-air.de
Languages:

AREA SALES MANAGER - CENTRAL/WEST GERMANY

CHRISTIAN BRAUCKMANN
T: +49 (0) 1525 2880989
christian.brauckmann@omega-air.de
Languages:

Germany (OEM), Switzerland

AREA SALES MANAGER

ERIK KRUŠEC
T +386 1 200 68 60
M +386 30 362 140
F +386 1 200 68 53
erik.krusec@omega-air.si
Languages:

SALES ASSISTANT

ANDRAŽ MASEL ŠTEMBAL
T +386 1 200 68 25
M +386 30 478 811
F +386 1 200 68 53
andraz.masel-stembal@omega-air.si
Languages:

SALES ADMINISTRATOR

ANICA GRKOVIČ
T +386 1 200 68 03
F +386 1 200 68 53
anica.grkovic@omega-air.si
Languages:

Italy, Spain, Portugal, South America

AREA SALES MANAGER

TILEN LOVREČIČ
T +386 1 200 68 62
M +386 30 362 180
F +386 1 200 68 53
tilen.lovrecic@omega-air.si
Languages:

SALES ASSISTANT

ROSMERY IDINA MÉNDEZ
T +386 1 200 68 05
M +386 30 478 807
F +386 1 200 68 53
rosmery.idinamendez@omega-air.si
Languages:

SALES ASSISTANT

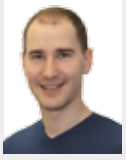
ANDRES LENARČIČ
T +386 1 200 68 76
F +386 1 200 68 53
andres.lenarcic@omega-air.si
Languages:

SALES ADMINISTRATOR

POLONA ŽAGAR AKYOL
T +386 1 330 42 28
F +386 1 200 68 53
polona.akyol@omega-air.si
Languages:

Sales support

SALES MARKETING



MARKO ŠKULJ
T +386 1 200 68 99
F +386 1 200 68 53
marko.skulj@omega-air.si
Languages:

LOGISTIC & CUSTOMS

NIKA ZORC
T +386 1 200 68 98
F +386 1 200 68 53
nika.zorc@omega-air.si
Languages:

OMEGA AIR

Air and Gas

OMEGA AIR d.o.o. Ljubljana

T +386 (0)1 200 68 00
F +386 (0)1 200 68 50

info@omega-air.si

Cesta Dolomitskega odreda 10
SI-1000 Ljubljana, Slovenia
www.omega-air.fr

950373 - 04/2019