



MANUFACTURER OF COMPRESSORS & EQUIPMENT

- Stationary **Oil Injected** Screw Compressors
- Stationary **Oil Free** Screw Compressors
- Portable Screw Compressors
- Turbo Compressors
- Downstream Equipment



- Powerful, Economic, Reliable
- Reduced Energy Consumption
- Easy to install
- Minimum Installation Costs
- Reliable and Productive
- Easy Maintenance
- Instant Monitoring and Control
- Low Noise Levels





## Industrial Compressors

- Technical data of compressors
- Q1 control system
- HECS XL control system
- Technical data of industrial oil injected screw compressors L Series (V-belt type)
- Technical data of industrial oil injected screw compressors LA Series (V-belt type)
- Technical data of direct drive compressors L & LA Series
- Technical data of oil free industrial screw compressors HS Series
- Technical data of turbo compressors



● **Air end you can rely on**

An oil injected twin screw compression self developed DV profile, manufactured on the latest CNC rotor grinders and accurately checked on coordinate measuring machines. (fig. 1)

● **A maintenance-free, operationally reliable and extremely effective drive concept**

The compression element is driven at optimum speed for the application, through a high efficiency V-belt or direct drive system.

- The motor and Air End are joined by the coupling and its housing to form a compact and durable unit.

The unique automatic belt tensioning system ensures:

- Automatically correct belt tension
- Reduced loading when off-load and during start-up, giving long service life of V-belts and bearings
- No maintenance required
- The self-adjustment minimises slippage and gives constant drive efficiency over the service life of the transmission
- V-belt drive designed for 25,000 hours operating life, with a safety factor of 1.4 and a warranty of 10,000 hours.(fig. 2)

**Highly efficient cooling system**

Cooling is achieved by an explosive, motor-driven fan. Cold air passes over the inside of the plant picking up radiant heat so there is no temperature build-up under the canopy. This allows for safe operation in the most difficult conditions. (fig. 3)

**A large surface after-cooler gives the benefits of :**

- Compressed air delivery temperatures to as low as 5 °C above ambient (dependent on model)
- Less water vapor in the compressed air leading to longer life for air system components
- Additional fans are not normally required when exhaust ducting is installed, reducing installation and operating costs.

**A large oil cooler** gives low system temperatures, resulting in longer life for oil, filters and seals.

Furthermore, the large cooler also gives :

- Lower pressure drop and improved efficiency
- Less possibility of fouling. (fig. 4)

As an option a heat recovery system can be incorporated into the oil circuit.

● **Enhanced oil system**

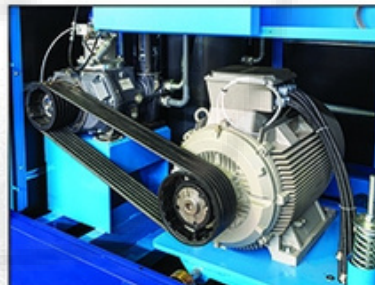
The use of large reclaimers with over-sized fine separator elements, large oil coolers and after coolers gives :

- Long life for service parts
- Low oil circulation rates, ensuring good lubrication quality and long oil life

Better temperature control with lower system temperature. (fig. 5)



( 1 )



( 2 )

● **Low noise levels**

The sound insulation and compressor design reduces noise to low levels, eliminating the need for a separate compressor house.

● **Low Service costs**

The innovative compressor design saves unnecessary service costs. All parts are designed for a long service life and the generously-sized suction filters, oil filters and fine separators ensure excellent compressed air quality. Quick access service points allow servicing to be conducted in minutes, minimising downtime and service costs.

● **Cost saving**

Automatic operation - the motor runs only when required

- Service intervals are monitored for optimised replacement of air intake, oil and separator filter elements
- Drive system protected by soft start
- Timed control of starting frequency
- Thermostatically controlled cooling fan - saves power in idle running mode.



(4)



(5)



(3)

● **Compressor sequence working system**

Compressor sequence working system without need to spend a lot of extra cost for providing a separated control panel. Just by adding a hard ware board on compressors will be able to control the eight compressors with the same control system on sequence made.

This system will be able to equalization of the working time of the compressors in a certain period of time and also programmable for daily, weekly and monthly functions and it can switch automatically the compressor has a fault to the compressor is standby.



● **Safety assured**

Automatic systems check prior to start-up  
Monitoring of all safety-related parameters  
Automatic re-start after power failure.

● **Pressure transducer**

Allows programming of pressure control within 0.2 bar. The lower the pressure differential, the higher the cost saving by not running at greater pressures than required.

● **Additional features**

- Remote start/stop facility
- Service history & fault memory
- The electronic system is able to control accessory equipment, such as dryers, condensate drains and filters
- Choice of five languages.

● **Intelligent control system**

Close operational control is essential to reduce running costs. All **I.D.Ç** rotary screw compressors are supplied with intelligent, fully electronic controllers with simple controls and a user-friendly menu. This system optimises performance to demand and monitors operating parameters of the unit. (fig. 6)



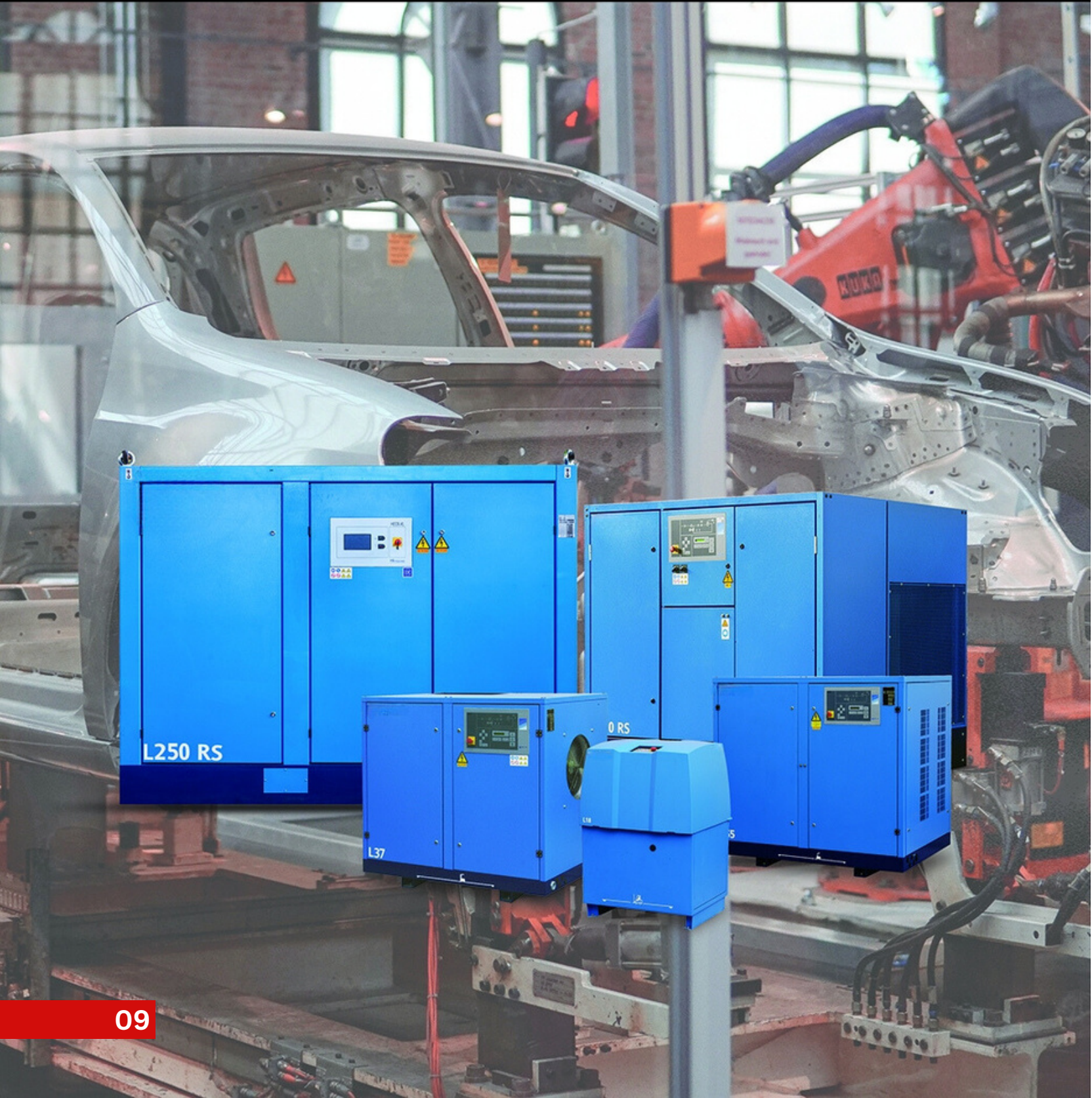
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Key: image	Key: Function
	Start
	Stop
	Reset
	Enter
	Up
	Down
	Escape

**Industrial Oil Injected Screw Compressors L Series (V-belt type)**



**Technical Specifications of L Series Compressors**

Model	Drive Motor[Kw]	Free Air Delivered [m3/min] at :			Dimensions [mm]			Noise dB(A)	Weight* [Kg]
		7.5 bar g	10 bar g	13 bar g	Length	Width	Height		
L15	15	2.47	2.10	1.68	823	696	1162	69	328
L18	18	3.07	2.60	2.22	823	696	1162	70	338
L22	22	3.46	3.04	2.58	823	696	1162	70	353
L22S	22	3.80	3.25	2.65	1500	1100	1410	72	680
L30	30	4.70	4.20	3.75	1500	1100	1410	74	750
L37	37	5.75	5.20	4.40	1500	1100	1410	74	780
L37S	37	6.68	5.61	4.80	1800	1200	1650	69(67)	1147
L45	45	7.52	6.20	5.60	1800	1200	1650	70(69)	1287
L55	55	9.04	7.82	6.75	1800	1200	1650	72(70)	1332
L75	75	10.00	9.41	8.30	1800	1200	1650	75(73)	1482
L75S	75	12.94	11.65	10.00	2074	1600	1904	70(71)	2520
L90	90	14.50	12.91	11.60	2074	1600	1904	70(71)	2580
L110	110	18.21	16.25	14.90	2074	1600	1904	71(72)	2790
L132C	132	20.4	20.10	16.3	2074	1600	1904	78(79)	3040
L132	132	24.20	21.00	17.60	2800	1920	2073	75(73)	3955
L160	160	28.40	25.60	21.30	2800	1920	2073	76(75)	4060
L200	200	36.60	31.00	27.20	2800	1920	2073	78(76)	4355
L250	250	42.70	38.00	33.20	2800	1920	2073	78(78)	4430

**Industrial Oil Injected Screw Compressors LA Series (V-belt type)**



**Technical Specifications of LA Series Compressors**

Model		Free Air Delivered [m3/min] at :				Dimensions [mm]			Noise* dB(A)	Weight* [Kg]
		7.5 bar g	9 bar g	10 bar g	13 bar g	Length	Width	Height		
LA22S	22	3.80	3.28	3.04	2.33	1,500	1,100	1,410	72	680
LA30	30	5.06	4.80	4.33	3.59	1,500	1,100	1,410	74	750
LA37	37	5.69	5.34	5.00	4.21	1,500	1,100	1,410	74	860
LA37S	37	6.54	5.99	5.62	4.69	1,800	1,200	1,650	68 (67)	1,147
LA45	45	7.73	7.30	6.78	5.61	1,800	1,200	1,650	69 (69)	1,287
LA55	55	9.31	8.64	8.20	6.70	1,800	1,200	1,650	71 (70)	1,332
LA75	75	10.67	9.57	9.42	8.12	1,800	1,200	1,650	74 (73)	1,482
LA75S	75	13.21	12.00	11.60	10.17	2,074	1,600	1,904	76/70 (71)	2,520
LA90	90	15.53	13.85	13.34	11.77	2,074	1,600	1,904	76/70 (71)	2,580
LA110	110	17.53	16.48	15.57	13.69	2,074	1,600	1,904	78/71 (72)	2,750
LA132C	132	23.40	21.93	20.56	16.79	2,074	1,600	1,904	87/78 (73)	2,930
LA132	132	23.40	21.93	20.56	16.79	2,800	1,920	2,073	79/75 (79)	3,865
LA160	160	27.49	25.82	24.36	20.25	2,800	1,920	2,073	81/76 (75)	3,910
LA200	200	36.67	33.78	31.51	25.44	2,800	1,920	2,073	82/77 (76)	4,260
LA250	250	-	38.49	38.29	33.39	2,800	1,920	2,073	82/78 (78)	4,260

**Direct Drive Compressors L & LA Series**



**Technical Specifications of Direct Drive L Series Compressors**

Compressor Model		L30	L30RS		L37RS		L45RS		L55	L55RS					
Nominal pressure	bar g	7.5	5	10	5	13	5	13	7.5	5	10				
Drive motor	kW	30	30		37		45		55	55					
FAD <sup>1</sup> at 7.5 bar g	m <sup>3</sup> /min	5.75	1.33	5.53	1.44	6.90	1.41	8.02	10.69	2.5	10.99				
Noise level <sup>2</sup> , 1 m	dB(A)	59	66		67		70		59	72					
Dimensions(L*W*H)	mm	1722x920x1659	1722x920x1659		1722x920x1659		1722x920x1659		2158x1223x1971	2159x1223x1971					
Compressor Model		L75		L75RS		L90RS		L110RS							
Nominal pressure	bar g	10	13	5	13	5	13	5	13						
Drive motor	kW	75		75		90		110							
FAD <sup>1</sup> at 7.5 bar g	m <sup>3</sup> /min	10.6	10.43	2.10	14.03	4.69	17.74	4.65	20.82						
Noise level <sup>2</sup> , 1 m	dB(A)	72		74		74		76							
Dimensions(L*W*H)	mm	2159 x 1223 x 1971		2159 x 1223 x 1971		2337 x 1368 x 2010		2337 x 1368 x 2010							
Compressor Model		L132		L132RS		L160		L160RS							
Nominal pressure	bar g	7.0		5		13		10		5		13			
Drive motor	kW	132		132		160		160		160					
FAD <sup>1</sup> at 7.5 bar g	m <sup>3</sup> /min	22.72		4.65		22.84		23.40		6.54		32.33			
Noise level <sup>2</sup> , 1 m	dB(A)	76		78		77		77		77					
Dimensions(L*W*H)	mm	2337 x 1368 x 2010		2337 x 1368 x 2010		3876 x 1920 x 2073		3876 x 1920 x 2073							
Compressor Model		L200		L200RS		L250RS		L290RS							
Nominal pressure	bar g	13		5		13		5		14					
Drive motor	kW	200		200		250		315							
FAD <sup>1</sup> at 7.5 bar g	m <sup>3</sup> /min	22.70		5.99		39.44		5.83		42.80		5.87		47.02	
Noise level <sup>2</sup> , 1 m	dB(A)	79		79		80		82							
Dimensions(L*W*H)	mm	3876 x 1920 x 2073		3876 x 1920 x 2073		3876 x 1920 x 2073		3876 x 1920 x 2073							

**Technical Specifications of Direct Drive LA Series Compressors**

Compressor Model		LA30D	LA37D	LA75D	LA90D	LA132D	
Nominal pressure	bar g	8	10	10	10	8	
Drive motor	kW	30	37	75	90	132	
FAD <sup>1</sup> at 7.5 bar g	m <sup>3</sup> /min	5.37	5.32	10.95	12.08	22.09	
Noise level <sup>2</sup> , 1 m	dB(A)	79	79	79	78	80	
Dimensions(L*W*H)	mm	1722 x 920 x 1659	1722 x 920 x 1659	2158 x 1223 x 1971	3876 x 1920 x 2073	3876 x 1920 x 2073	
Compressor Model		LA160D		LA200D		LA250D	LA315D
Nominal pressure	bar g	10	13	8	10	8	10
Drive motor	kW	160		200		250	315
FAD <sup>1</sup> at 7.5 bar g	m <sup>3</sup> /min	21.88	19.65	33.74	25.40	43.66	43.25
Noise level <sup>2</sup> , 1 m	dB(A)	76	80	80		80	80
Dimensions(L*W*H)	mm	3876 x 1920 x 2073		3876 x 1920 x 2073		3876 x 1920 x 2073	3876 x 1920 x 2073

## Oil free Industrial Screw Compressors

Installed motor power 45 - 500 kW/3 - 670 hp  
Free air delivery from 5.10 to 86.01 m<sup>3</sup>/min,  
Pressure 7 - 10.0 bar

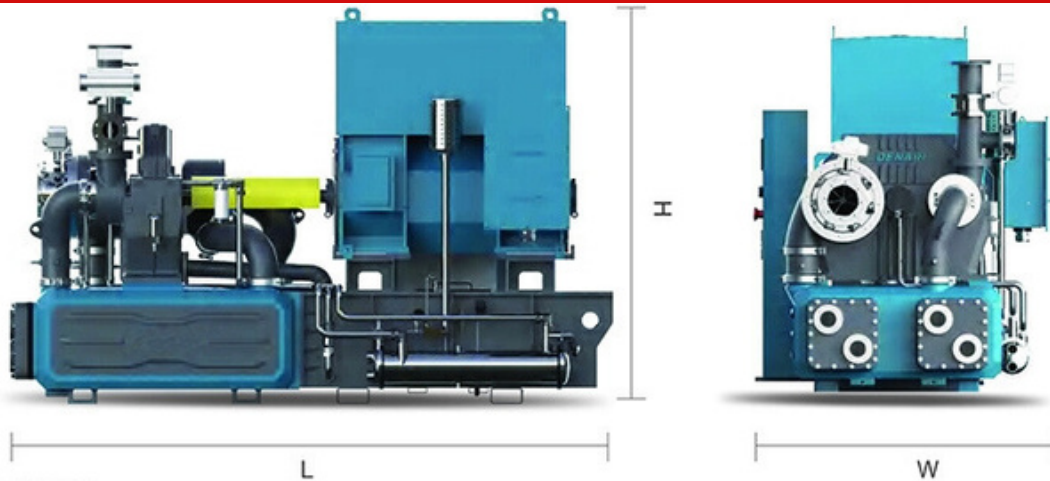




Model	Capacity FAD*			Installed motor power kW	Noise level** [dB(A)]	Dimensions(mm)			Weight kg	Air outlet pipe diameter
	50 Hz [m <sup>3</sup> /min]					L	W	H		
	Maximum working pressure bar(g)									
	7	8	10							
HS- 45	7.70	6.73	5.10	45	80	2500	1600	2080	2090	DN50
HS- 55	9.60	8.94	7.78	55	80	2500	1600	2080	2080	DN50
HS-75	12.12	12.10	11.10	75	82	2500	1600	2080	2080	DN50
HS-75W	12.12	12.10	11.10	75	82	2500	1600	1790	2850	DN50
HS-90	13.13	13.11	13.00	90	82	2500	1600	2080	3000	DN50
HS-90W	13.13	13.11	13.00	90	82	2300	1600	1790	2850	DN50
HS-110	19.50	18.31	16.00	110	85	2800	1800	1860	3300	DN65
HS-110W	19.50	18.31	16.00	110	85	2800	1800	1860	3300	DN65
HS-132	23.00	21.66	19.44	132	85	2800	1800	1860	3450	DN65
HS-132W	23.00	21.66	19.44	132	85	2800	1800	1860	3450	DN65
HS-160	26.30	26.23	23.00	160	85	2800	1800	1860	3550	DN65
HS-160W	26.30	26.23	23.00	160	85	2800	1800	1860	3550	DN65
HS-185	29.17	29.13	26.23	185	85	2800	1800	1860	3950	DN65
HS-185W	29.17	29.13	26.23	185	85	2800	1800	1860	3950	DN65
HS-200W	35.00	32.60	29.05	200	88	3400	1900	2200	4500	DN100
HS-220W	37.63	35.10	32.39	220	88	3400	1900	2200	5000	DN100
HS-250W	45.20	41.64	37.32	250	90	3400	1900	2200	5200	DN100
HS-280W	45.50	45.44	41.56	280	92	3400	1900	2200	6400	DN100
HS-315W	50.09	50.06	45.37	315	92	3400	1900	2200	6700	DN100
HS-355W	56.96	56.86	49.98	355	92	5000	2200	2500	9800	DN125
HS-400W	67.36	67.27	56.65	400	92	5000	2200	2500	9800	DN125
HS-450W	78.07	77.98	67.10	450	92	5000	2200	2500	9800	DN125
HS-500W	86.01	85.92	77.82	500	92	5000	2200	2500	9800	DN125

## Turbo Compressors





**DAC50-DAC450**

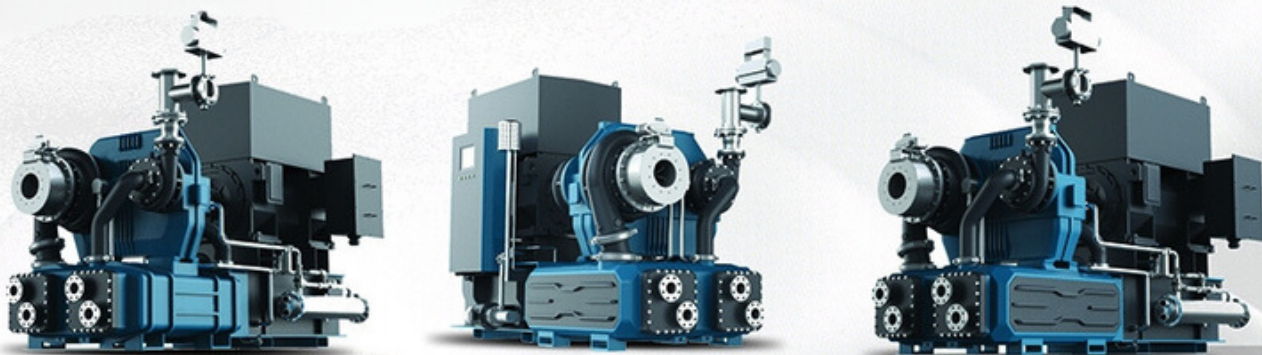
Model	Pressure range(barg)	Flow range (m <sup>3</sup> /min)	Motor power		Dimensions(mm)			Weight kg
			kW	hp	L	W	H	
DAC50	0.6-8.0	25-48	132-263	175-350	2650	1650	1850	3860
DAC80	0.6-10	40-85	225-450	300-600	3350	1860	2150	6500
DAC120	0.6-13	75-123	400-630	535-850	3850	2100	2250	8250
DAC200	0.6-13	115-208	618-1120	830-1500	4250	2150	2350	11500
DAC250	0.6-20	175-260	925-1375	1250-1850	4500	2250	2380	16000
DAC300	0.6-25	228-310	1225-1600	1650-2200	4650	2250	2450	17500
DAC350	0.6-25	283-360	1500-1850	2000-2500	4850	2250	2500	18500
DAC450	0.6-25	350-460	1800-2350	2400-3150	5250	2300	2950	21500

**DAC550-DAC3000**

Model	Pressure range(barg)	Flow range (m <sup>3</sup> /min)	Motor power		Dimensions(mm)			Weight kg
			kW	hp	L	W	H	
DAC550	0.6-25	430-586	2250-3150	3000-4200	6250	4550	3550	41500
DAC1000	0.6-25	550-1015	2850-5000	3800-6750	8350	4800	3850	45500
DAC1500	0.6-25	920-1650	4500-7850	6000-10500	12500	5150	4550	62500
DAC3000	0.6-25	1680-3000	7980-14500	10800-20000	14500	5850	5350	78500

**Turbocharger series**

Model	Inlet pressure range (barg)	Flow range (m <sup>3</sup> /min)	Outlet pressure range (barg)	Motor power		Dimensions(mm)			Weight kg
				kW	hp	L	W	H	
DAC550-HB	0.3-1.0	436-586	16-50	1214-1758	1628-2358	5250	3250	2850	25000
DAC1000-HB	0.3-1.0	550-1020	16-50	1925-3570	2581-2446	5850	3550	3150	32500
DAC1500-HB	0.3-1.0	920-1650	16-50	3220-5775	4318-7744	6500	4350	3550	42500
DAC3000-HB	0.3-1.0	1680-3000	16-50	5880-10500	7885-14080	7500	5350	4250	58500



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## Portable Air Compressors

- Technical data of portable air compressors



Type		DACY-3/8	DACY-5/7	DACY-5/13	DACY-6/7	DACY-7/7	DACY-7/10	DACY-17/7	DACY-10/16
<b>Machine</b>									
Free air delivery*	m <sup>3</sup> /min	3.40	5.00	5.31	6.00	6.90	6.67	16.12	9.65
	cfm	120	177	187	212	244	236	570	341
Normal working pressure	bar(g)	8	7	13	7	7	10	7	16
	psi(g)	116	102	189	102	102	145	102	232
Maximum design pressure	bar(g)	8	7	13	13	10	10	7	16
	psi(g)	116	102	189	189	145	145	102	232
Dimensions(without towbar)	L(mm)	2263	2210	3120	3120	3120	3120	3740	3790
	W(mm)	1590	1410	1860	1860	1860	1860	2110	2110
	H(mm)	1543	1365	1800	1800	1800	1800	2240	2390
Weight	kg	900	900	1500	1500	1500	1500	3000	3200
Wheel qty		2	2	2	2	2	2	2	2
Size and No. of outlet valve		G 1/2"1 G 1"1	G 3/4"3	G 3/4"2 G 1-1/4"1	G 3/4"2 G 1-1/4"1	G 3/4"2 G 1-1/4"1	G 3/4"2 G 1-1/4"1	G 1"2 G 2"1	G 1"2 G 2"1
<b>Diesel engine</b>									
Manufacturer		Yangdong	Yanmar	Cummins	Cummins	Cummins	Cummins	Cummins	Cummins
Model		YSD490G	4TNV94L	4BTA3.9-C80	4BTA3.9-C80	4BTA3.9-C80	4BTA3.9-C80	6BT5.9-C150	6BTA5.9-C180
Rated power	kW	32	34.6	60	60	60	60	112	132
	hp	42	47	80	80	80	80	152	180
Type				Turbocharging, Charge air cooling					
Bore*Stroke*No. of cylinders	mm	90*100*4	94*110*4	102*120*4	102*120*4	102*120*4	102*120*4	102*120*6	102*120*6
Engine speed (nominal)	RPM	2200	2400	2200	2200	2200	2200	2450	2500
Engine speed (unloaded)	RPM	1400	1400	1400	1400	1400	1400	1400	1400
Engine oil capacity	L	7	7	9	9	9	9	16.3	16.3
Coolant capacity	L	15	8	20	20	20	20	30	35
Storage battery current CCA		450	670	670	670	670	670	670	670
Fuel tank capacity	L	52	70	80	80	80	80	190	190
<b>Compressor</b>									
Compressed air vessel capacity	L	27	30	48	48	48	48	155	155
	L	16	15	20	20	20	20	50	55
<b>Machine</b>									
Type		DACY-7/13	DACY-8/10	DACY-9/8	DACY-9/13	DACY-12/7	DACY-8/15	DACY-10/20	DACY-15/18
Free air delivery*	m <sup>3</sup> /min	6.38	8.36	8.83	8.65	11.05	8.01	12.16	12.90
	cfm	225	295	318	318	391	283	429	456
Normal working pressure	bar(g)	13	10	8	13	7	15	20	18
	psi(g)	189	145	116	189	102	218	290	261
Maximum design pressure	bar(g)	14	10	8	13	8	16	20	18
	psi(g)	203	145	116	189	116	232	290	261
Dimensions(without towbar)	L(mm)	3360	3360	3360	3360	3360	3740	3920	3920
	W(mm)	2010	2010	2010	2010	2010	2110	1800	1800
	H(mm)	2050	2050	2050	2050	2050	2240	2380	2380
Weight	kg	2000	2000	2000	2000	2000	3000	3700	3700
Wheel qty		2	2	2	2	2	2	4	4
Size and No. of outlet valve		G 1"2 G 1-1/2"1	G 1"2 G 1-1/2"1	G 1"2 G 1-1/2"1	G 1"2 G 1-1/2"1	G 1"2 G 1-1/2"1	G 1"2 G 2"1	G 1"1 G 2-1/2"1	G 1"1 G 2-1/2"1
<b>Diesel engine</b>									
Manufacturer		Cummins	Cummins	Cummins	Cummins	Cummins	Cummins	Cummins	Cummins
Model		4BTA3.9-C100	4BTA3.9-C100	4BTA3.9-C100	4BTA3.9-C125	4BTA3.9-C125	6BT5.9-C150	6CTA8.3-C215	6CTA8.3-C215
Rated power	kW	74	74	74	93	93	110	160	160
	hp	100	100	100	125	125	150	215	215
Type		Turbocharging, Charge air cooling							
Bore*Stroke*No. of cylinders	mm	102*120*4	102*120*4	102*120*4	102*120*4	102*120*4	102*120*6	114*135*6	114*135*6
Engine speed (nominal)	RPM	2200	2100	2200	2200	2200	2100	2100	2200
Engine speed (unloaded)	RPM	1400	1400	1400	1400	1400	1400	1400	1400
Engine oil capacity	L	9	9	9	9	9	16.3	27.6	27.6
Coolant capacity	L	30	30	30	30	30	30	50	50
Storage battery current CCA		670	670	670	670	670	670	720	720
Fuel tank capacity	L	126	126	126	126	126	190	360	360
<b>Compressor</b>									
Compressed air vessel capacity	L	80	80	80	80	80	155	189	189
Lubricant capacity	L	40	40	40	45	45	50	90	90
<b>Machine</b>									
Type		DACY-8/16	DACY-9/15	DACY-10/13	DACY-11/10	DACY-13/10	DACY-16/8	DACY-17/16	DACY-19/14
Free air delivery*	m <sup>3</sup> /min	8.01	8.82	9.84	11.47	12.26	15.04	16.15	17.87
	cfm	283	312	348	405	433	532	571	632
Normal working pressure	bar(g)	16	15	13	10	10	8	16	14.5
	psi(g)	232	218	189	145	145	116	232	210
Maximum design pressure	bar(g)	16	15	14	10	10	8	16	14
	psi(g)	232	218	203	145	145	116	232	203
Dimensions(without towbar)	L(mm)	3740	3740	3740	3740	3740	3740	3920	3920
	W(mm)	2110	2110	2110	2110	2110	2110	1800	1800
	H(mm)	2240	2240	2240	2240	2240	2240	2380	2380
Weight	kg	3000	3000	3000	3000	3000	3000	4400	4400
Wheel qty		2	2	2	2	2	2	4	4
Size and No. of outlet valve		G 1"2 G 2"1	G 1"2 G 2"1	G 1"2 G 2"1	G 1"2 G 2"1	G 1"2 G 2"1	G 1"2 G 2"1	G 1"1 G 2-1/2"1	G 1"1 G 2-1/2"1
<b>Diesel engine</b>									
Manufacturer		Cummins	Cummins	Cummins	Cummins	Cummins	Cummins	Cummins	Cummins
Model		6BT5.9-C150	6BT5.9-C150	6BT5.9-C150	6BT5.9-C150	6BT5.9-C150	6BT5.9-C150	6CTA8.3-C260	6CTA8.3-C260
Rated power	kW	112	112	112	112	112	112	194	194
	hp	152	152	152	152	152	152	260	260
Type		Turbocharging, Charge air cooling							
Bore*Stroke*No. of cylinders	mm	102*120*6	102*120*6	102*120*6	102*120*6	102*120*6	102*120*6	114*135*6	114*135*6
Engine speed (nominal)	RPM	2100	2300	2500	2300	2450	2300	1950	1820
Engine speed (unloaded)	RPM	1400	1400	1400	1400	1400	1400	1400	1400
Engine oil capacity	L	16.3	16.3	16.3	16.3	16.3	16.3	27.6	27.6
Coolant capacity	L	30	30	30	30	30	30	55	55
Storage battery current CCA		670	670	670	670	670	670	720	720
Fuel tank capacity	L	190	190	190	190	190	190	400	400
<b>Compressor</b>									
Compressed air vessel capacity	L	155	155	155	155	155	155	189	189
Lubricant capacity	L	50	50	50	50	50	50	90	90

DACY-12/13	DACY-16/10	DACY-17/8	DACY-18/7	DACY-18/18	DACY-20/16	DACY-22/14	DACY-27/10	DACY-28/8	DACY-22/20
11.85	15.19	16.37	16.46	19.91	19.81	21.87	25.24	27.82	20.76
419	537	579	582	703	700	773	892	983	734
13	10	8	7	18	16	14	10	8	20
189	145	116	102	261	232	203	145	116	290
13	10	8	7	18	16	14	10	8	20
189	145	116	102	261	232	203	145	116	290
3790	3790	3790	3790	4150	4150	4150	4150	4150	4700
2110	2110	2110	2110	1960	1960	1960	1960	1960	2300
2390	2390	2390	2390	2450	2450	2450	2450	2450	2750
3200	3200	3200	3200	4500	4500	4500	4500	4500	5500
2	2	2	2	4	4	4	4	4	4
G 1**2	G 1**2	G 1**2	G 1**2	G 1**1	G 1**1	G 1**1	G 1**1	G 1**1	G 1**1
G 2**1	G 2**1	G 2**1	G 2**1	G 2-1/2**1	G 2-1/2**1	G 2-1/2**1	G 2-1/2**1	G 2-1/2**1	G 2-1/2**1
Cummins	Cummins	Cummins	Cummins	Cummins	Cummins	Cummins	Cummins	Cummins	Cummins
6BTA5.9-C180	6BTA5.9-C180	6BTA5.9-C180	6BTA5.9-C180	6LTAA8.9-C325	6LTAA8.9-C325	6LTAA8.9-C325	6LTAA8.9-C325	6LTAA8.9-C325	6LTAA9.5-C360
132	132	132	132	239	239	239	239	239	264
180	180	180	180	325	325	325	325	325	360
Turbocharging, Charge air cooling									
102*120*6	102*120*6	102*120*6	102*120*6	114*145*6	114*145*6	114*145*6	114*145*6	114*145*6	116.5*148*6
2400	2350	2500	2500	2100	2050	2150	2150	2200	2200
1400	1400	1400	1400	1400	1400	1400	1400	1400	1400
16.3	16.3	16.3	16.3	27.6	27.6	27.6	27.6	27.6	27.6
35	35	35	35	60	60	60	60	60	65
670	670	670	670	830	830	830	830	830	830
190	190	190	190	590	590	590	590	590	640
155	155	155	155	185	185	185	185	185	215
55	55	55	55	110	110	110	110	110	115
DACY-17/13	DACY-18/12	DACY-21/8	DACY-23/8	DACY-27/12	DACY-32/10	DACY-26/25	DACY-34/25	DACY-45/10	DACY-33/35
15.79	16.33	21.36	21.83	25.73	27.73	26.00	34.00	44.15	33.00/39.00
558	577	754	771	909	980	918	1200	1560	1165/1377
13	12	8	8	12	10	25	25	10	35/25
189	174	116	116	174	145	363	363	145	508/363
13	12	8	8	12	10	25	25	10	35/25
189	174	116	116	174	145	363	363	145	508/363
3920	3920	3920	3920	4700	4700	4700	4700	4412	5000
1800	1800	1800	1800	2300	2300	2100	2100	2160	2200
2380	2380	2380	2380	2750	2750	2900	2900	2900	2900
3700	3700	3700	3700	5500	5500	4800	6800	7000	7200
4	4	4	4	4	4	4	4	4	4
G 1**1	G 1**1	G 1**1	G 1**1	G 1**1	G 1**1	G 2**1	G 2**1	G 1**1	G 2**1
G 2-1/2**1	G 2-1/2**1	G 2-1/2**1	G 2-1/2**1	G 2-1/2**1	G 2-1/2**1	G 3/4**1	G 3/4**1	G 3**1	G 3/4**1
Cummins	Cummins	Cummins	Cummins	Cummins	Cummins	Cummins	Cummins	Cummins	Cummins
6CTA8.3-C215	6CTA8.3-C215	6CTA8.3-C215	6CTA8.3-C215	6LTAA9.5-C360	6LTAA9.5-C360	QSZ13-C550	QSZ13-C550	QSZ13-C550	KTA19-P700
160	160	160	160	264	264	410	410	410	522
215	215	215	215	360	360	550	550	550	700
Turbocharging, Charge air cooling									
114*135*6	114*135*6	114*135*6	114*135*6	116.5*148*6	116.5*148*6	130*163*6	130*163*6	130*163*6	159*159*6
2050	2100	2050	2100	2200	2200	1800	1800	1850	1800
1400	1400	1400	1400	1400	1400	1300	1300	1350	1300
27.6	27.6	27.6	27.6	27.6	27.6	35	35	35	38
50	50	50	50	65	65	160	160	160	160
720	720	720	720	830	830	930	930	930	300Ah
360	360	360	360	640	640	600	600	660	800
189	189	189	189	215	215	247	247	247	247
90	90	90	90	115	115	140	140	140	140
DACY-20/13	DACY-21/10	DACY-23/10	DACY-25/8						
19.69	21.73	22.21	23.57						
696	767	785	833						
13	10	10	8						
189	145	145	116						
13	10	10	8						
189	145	145	116						
3920	3920	3920	3920						
1800	1800	1800	1800						
2380	2380	2380	2380						
4400	4400	4400	4400						
4	4	4	4						
G 1**1	G 1**1	G 1**1	G 1**1						
G 2-1/2**1	G 2-1/2**1	G 2-1/2**1	G 2-1/2**1						
Cummins	Cummins	Cummins	Cummins						
6CTA8.3-C260	6CTA8.3-C260	6CTA8.3-C260	6CTA8.3-C260						
194	194	194	194						
260	260	260	260						
Turbocharging, Charge air cooling									
114*135*6	114*135*6	114*135*6	114*135*6						
1900	2100	2150	2000						
1400	1400	1400	1400						
27.6	27.6	27.6	27.6						
55	55	55	55						
720	720	720	720						
400	400	400	400						
189	189	189	189						
90	90	90	90						





## Downstream Equipment

- Refrigeration compressed air dryer RDP Series
- Heatless regeneration adsorption dryers HAD Series
- Heatless regeneration adsorption compressed air dryer A-DRY Series
- Vacuum regeneration with ambient air dryer R-DRY BVA Series
- Cooling with purge air dryer R-DRY BP Series
- Vacuum regeneration with closed loop air dryer R-DRY BVL Series
- Membrane compressed air dryers M-DRY Series
- Activated carbon tower TAC Series
- Aluminium compressed air micro filters AF Series
- Carbon steel compressed air filter BF series
- Stainless steel compressed air filter WFIT series
- Aluminium condensate separators CKL-B Series
- Condensate separators CS/CS SS Series
- Compressed air vessels
- Custom made pressure vessels



**14 bar**

max. operating pressure

**1,5 to 45 °C**

operating ambient temperature

**3°C**

pressure dew point

**20 to 13.200 Nm<sup>3</sup>/h**

flow rate

**R134a (R407c)**

refrigerant

**air cooled**

type of cooling

## **RDP** SERIES

**REFRIGERATION COMPRESSED AIR DRYERS**

REFRİJERANT

### **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 pre-cooled 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



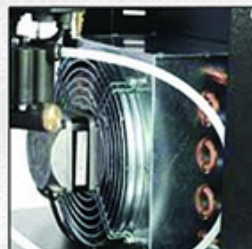
TECHNICAL DATA							
Type	Air flow	Power supply	Dimensions			Power input	Air connection
	Nm/h	Ph / V / Hz	W (mm)	L (mm)	H (mm)	W	
RDP 20	20	1/230/50	358	455	604	150	G 3/8" BSP-F
RDP 35	35	1/230/50	358	455	604	150	G 3/8" BSP-F
RDP 50	50	1/230/50	358	455	604	180	G 3/4" BSP-F
RDP 75	75	1/230/50	358	455	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



**4 to 13 bar**  
operating pressure

**1,5 to 50°C**  
inlet air temperature range

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

**4 to 90 m<sup>3</sup>/min**  
flow rate

**15-20%**  
avg. comp. air consumption

## **HAD 40-900** SERIES Heatless Regeneration Adsorption Dryers



**Correction factors:**

Our dryers are rated at 35 °C inlet air temperature, 7 bar (g) pressure and 100% relative humidity at the inlet. For other operating conditions correction factors from the table below apply.

**Pressure [Bar (g)]**

4	5	6	7	8	9	10	11	12	13	14
0.6	0.75	0.85	1	1.1	1.2	1.35	1.5	1.6	1.7	2

**Temperature [ °C ]**

20	25	30	35	40	45	50
1	1	1	1	0.8	0.7	0.5

**Inlet capacity and Dimensions [mm]**

Model	m3/min	L	W	H	Connections
HAD40	4	855	580	2240	R 1"
HAD70	7	1080	760	2150	R 1-1/2"
HAD100	10	1270	900	2300	DN50 (2")
HAD140	14	1270	900	2600	DN50 (2")
HAD180	18	1524	960	2400	DN65 (2-1/2")
HAD220	22	1524	960	2701	DN80 (3")
HAD260	26	1630	1048	2657	DN80 (3")
HAD300	30	1630	1048	2875	DN80 (3")
HAD350	35	1802	1100	2585	DN100 (4")
HAD400	40	1847	1180	2998	DN100 (4")
HAD500	50	1966	1360	2968	DN100 (4")
HAD900	90	3000	1312	3647	DN150 (6")



**Features (optional supply)**

- Dewpoint dependant operation mode
- Dewpoint sensor
- Pressure transducers
- Dryer/compressor synchronized operation (purge air return path)
- Water separator, pre and post filter.
- Bypass

**Features (standard supply)**

- ASME/API code vessels
- Safety valves
- Pressure gauges
- Unique controller module jointly developed with CMC Belgium

**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 600 Nm<sup>3</sup>/h**  
flow rate

**RAL 5012 / RAL 7040**  
standard / optional colour

**15-20%**  
avg. comp. air consumption

## DESCRIPTION

A-DRY 6-600 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 Nm<sup>3</sup>/h to 600 Nm<sup>3</sup>/h.

An innovative new 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.

## APPLICATIONS

- Compressed air systems

# A-DRY 6-600 SERIES

HEATLESS REGENERATION ADSORPTION COMPRESSED AIR DRYERS



## 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.

**INCLUDED**

- pre-filter with automatic drain AOK 16B and manometer PDI 16
- after-filter with manual drain MCD and manometer PDI 16
- controller includes standard connection for dew point sensor (sensor is not included).

**TECHNICAL DATA & PRICES**

A-DRY MODEL	CODE	Connection IN/OUT [inch]	Nominal volume flow		Dimensions							Mass kg
			Inlet <sup>1</sup> [Nm <sup>3</sup> /h]	Outlet <sup>2</sup> [Nm <sup>3</sup> /h]	A [mm]	A* [mm]	B [mm]	B* [mm]	C [mm]	C* [mm]	D [mm]	
A-DRY 06	12000289	G3/8"	6	4.7	339	520	280	480	100	130	354	10.5
A-DRY 12	12000294	G3/8"	12	9.5	573	715	280	480	100	130	354	13.5
A-DRY 24	12000306	G3/8"	24	19	1041	1105	280	480	100	130	354	19
A-DRY 36	12000307	G3/8"	36	28.4	1509	1495	280	480	100	130	354	27.5
A-DRY 60	12000308	G1/2"	60	47.4	1041	1105	370	570	148	170	434	45
A-DRY 75	12000309	G1/2"	75	59.3	1275	1300	370	570	148	170	434	53
A-DRY 105	12000310	G3/4"	105	83	1743	1700	370	570	148	170	434	70
A-DRY 150	12000356	G1"	150	118.5	1345	1440	440	725.5	198	240	570	170.5
A-DRY 200	12000357	G1"	200	158	1538	1655	440	725.5	198	240	570	182.2

(<sup>1</sup>) 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

(<sup>2</sup>) 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.

**OPERATING PRESSURE - CORRECTION FACTORS - CoP**

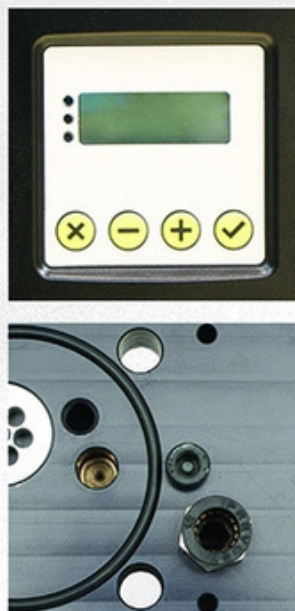
Operating pressure [bar]	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Operating pressure [psi]	29	44	58	72	87	100	115	130	145	160	174	189	203	218	232
Correction factor	0.38	0.5	0.63	0.75	0.88	1	1.13	1.25	1.38	1.5	1.63	1.75	1.88	2	2.13

**OPERATING TEMPERATURE - CORRECTION FACTORS - CoT**

Inlet temperature [°C]	25	30	35	40	45	50
Correction factor	1	1	1	0.97	0.87	0.80

**DEW POINT - CORRECTION FACTORS - CoD**

[°C]	-25	-40	-70
CoD	1.1	1	0.7



**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 Nm<sup>3</sup>/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

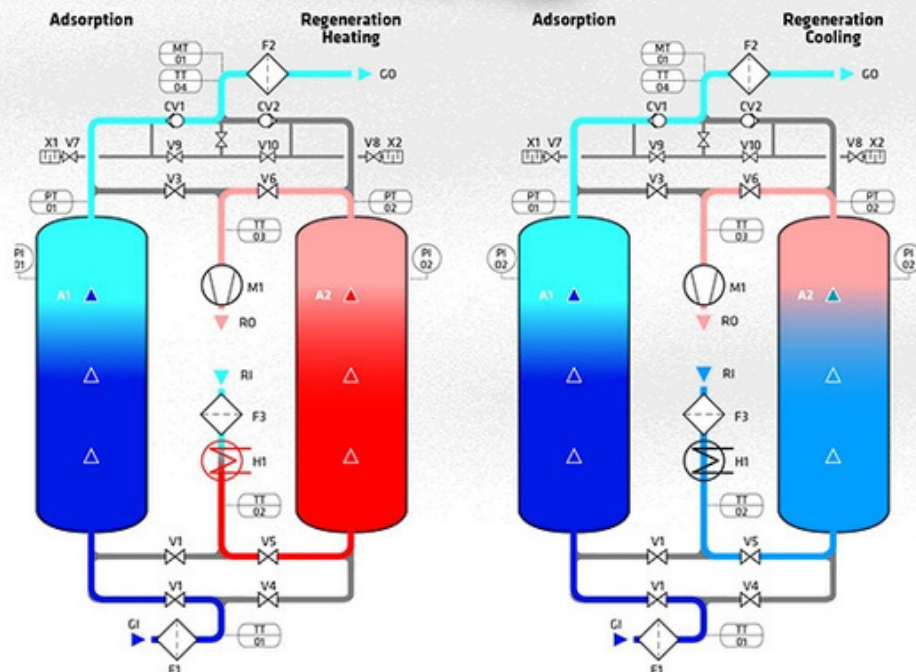
- Compressed air systems

## R-DRY BVA SERIES

VACUUM REGENERATION WITH AMBIENT AIR



- 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 dewpoint transducer
- M1 blower
- H1 heater
- F3 regeneration air filter
- GI air inlet
- GO air outlet
- RI regeneration air inlet
- RO regeneraton air outlet
- ES1-2 ekspansion silencer





**INCLUDED**

- pre-filter\* with automatic drain AOK 16B and manometer MDM 40 (R-DRY BVA 400-2500), with AOK20B and MDA 60 (R-DRY BVA 3000-20000),
- after-filter\* with manual drain MCD and manometer MDM 40 (R-DRY BVA 400-2500), MDA 60 (R-DRY BVA 3000- 20000),
- Siemens Simatic S7 controller.

\*Filters are not mounted.

**TECHNICAL DATA & PRICES**

R-DRY MODEL	Connection IN/OUT (2)	Nominal volume flow (1)	Dimensions			Mass kg
			A (mm)	B (mm)	C (mm)	
R-DRY 400 BVA	DN50	390	1,200	850	2,250	1,000
R-DRY 600 BVA	DN50	590	1,300	900	2,350	1,400
R-DRY 780 BVA	DN50	780	1,300	1,000	2,450	1,800
R-DRY 1000 BVA	DN50	930	1,450	1,250	2,450	1,900
R-DRY 1200 BVA	DN80	1,150	1,450	1,100	2,450	2,200
R-DRY 1600 BVA	DN80	1,600	1,550	1,350	2,500	2,600
R-DRY 2000 BVA	DN100	1,950	1,600	1,150	2,600	3,400
R-DRY 2500 BVA	DN100	2,530	2,050	1,150	2,750	3,800
R-DRY 3000 BVA	DN100	2,990	2,050	1,550	2,750	4,000
R-DRY 3600 BVA	DN100	3,680	2,150	1,350	2,850	4,800
R-DRY 4100 BVA	DN125	4,100	2,350	1,350	2,850	5,100
R-DRY 5000 BVA	DN125	4,990	2,500	1,450	2,950	5,900
R-DRY 6500 BVA	DN150	6,550	2,600	1,750	3,050	7,200
R-DRY 7700 BVA	DN150	7,700	2,900	2,000	3,100	7,900
R-DRY 10000 BVA	DN200	10,250	3,200	2,200	3,500	12,000
R-DRY 12000 BVA	DN200	11,700	4,200	2,500	3,500	14,200
R-DRY 14000 BVA	DN200	14,800	4,500	2,600	3,650	16,800
R-DRY 16000 BVA	DN250	16,000	5,500	3,200	3,650	18,500
R-DRY 18000 BVA	DN250	18,200	6,000	3,500	4,200	20,000
R-DRY 20000 BVA	DN250	20,200	6,000	3,500	4,350	23,000

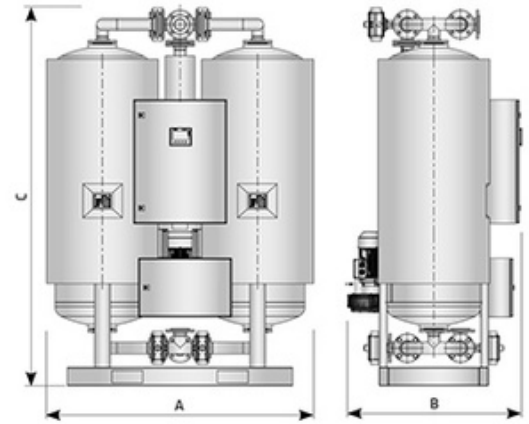
(1) Refers to 1 bar(a) and 20 °C at 7 bar operating pressure, inlet temperature 35 °C and pressure dew point at outlet -40 °C

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

\* 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.

**REMARK**

- Standard dew point is -40 °C. - Dew points -25 °C and -70 °C on request.

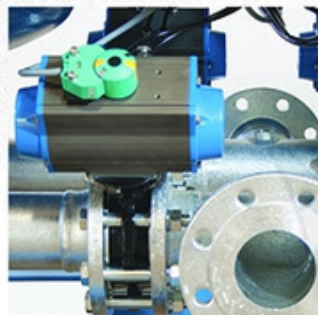
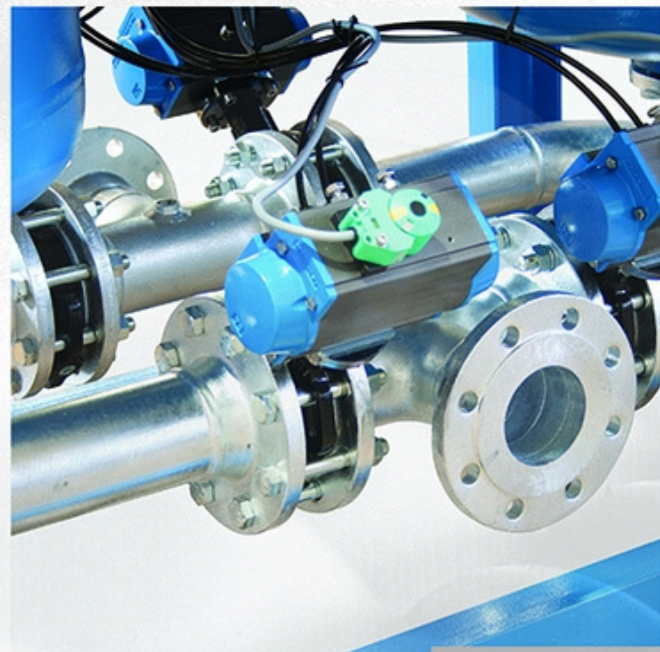


**OPERATING TEMPERATURE - CORRECTION FACTORS - Cor**

Inlet temperature [°C]	25	30	35	40	42.5
Inlet temperature [F]	77	86	95	104	108
Correction factor	1	1	1	0.70	0.52

**OPERATING PRESSURE - CORRECTION FACTORS - Cor**

Operating pressure [bar]	4	5	6	7	8	9	10	11
Operating pressure [ps]	58	72	87	100	115	130	145	160
Correction factor	0.63	0.75	0.88	1	1.13	1.25	1.38	1.50



**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 Nm<sup>3</sup>/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

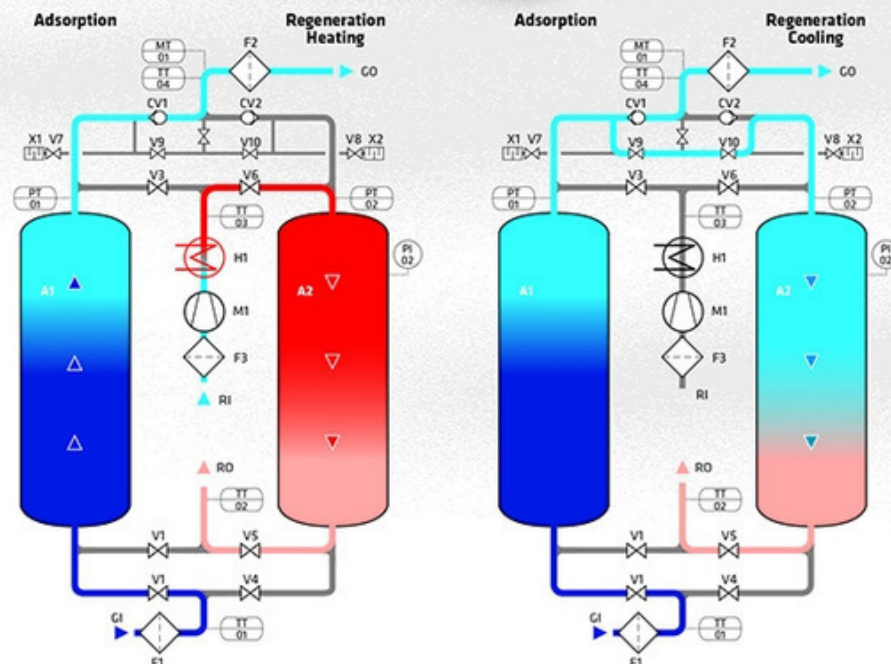
- Compressed air systems

## R-DRY BP SERIES

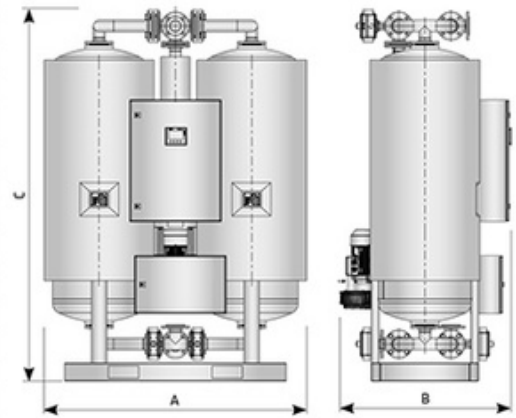
COOLING WITH PURGE



- 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 dewpoint 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 <sup>(1)</sup>	Nominal volume flow Inlet <sup>(2)</sup>	Dimensions			Mass kg	Blower power kW	Heater power kW	Filter type
			A (mm)	B (mm)	C (mm)				
R-DRY 400 BP	DN50	390	1.200	850	2.250	1000	1,3	3,5	AF 0476
R-DRY 600 BP	DN50	590	1.500	900	2.350	1400	1,6	5,5	AF 0706
R-DRY 780 BP	DN50	780	1.750	1.000	2.450	1800	1,6	7	AF 0706
R-DRY 1000 BP	DN50	930	1.750	1.250	2.450	1900	1,6	8	AF 0946
R-DRY 1200 BP	DN80	1.150	1.900	1.100	2.450	2200	1,6	10	AF 1506
R-DRY 1600 BP	DN80	1.600	1.900	1.350	2.500	2600	4	14	AF 1756
R-DRY 2000 BP	DN100	1.950	2.200	1.150	2.600	3400	4	17	AF 2006
R-DRY 2500 BP	DN100	2.530	2.350	1.150	2.750	3800	7,5	22	AF 2406
R-DRY 3000 BP	DN100	2.990	2.500	1.150	2.750	4000	8,5	26	BF 300
R-DRY 3600 BP	DN100	3.680	2.800	1.350	2.850	4800	8,5	32	BF 450
R-DRY 4100 BP	DN125	4.100	3.000	1.350	2.850	5100	8,5	35	BF 450
R-DRY 5000 BP	DN125	4.990	3.200	1.450	2.950	5900	15	45	BF 600
R-DRY 6500 BP	DN150	6.550	3.520	1.750	3.050	7200	15	56	BF 900
R-DRY 7700 BP	DN150	7.700	3.700	2.000	3.100	7900	15	70	BF 900
R-DRY 10000 BP	DN200	10.250	4.300	2.200	3.550	12000	22	95	BF 1200
R-DRY 12000 BP	DN200	11.700	4.400	2.500	3.550	14200	-	-	BF 1200
R-DRY 14000 BP	DN200	14.800	4.800	2.600	3.650	16800	-	-	BF 1500
R-DRY 16000 BP	DN250	16.000	5.000	3.200	3.650	18500	-	-	BF 1800
R-DRY 18000 BP	DN250	18.200	5.200	3.500	4.200	20000	-	-	BF 1800
R-DRY 20000 BP	DN250	20.200	6.000	3.500	4.350	23000	-	-	BF 2500



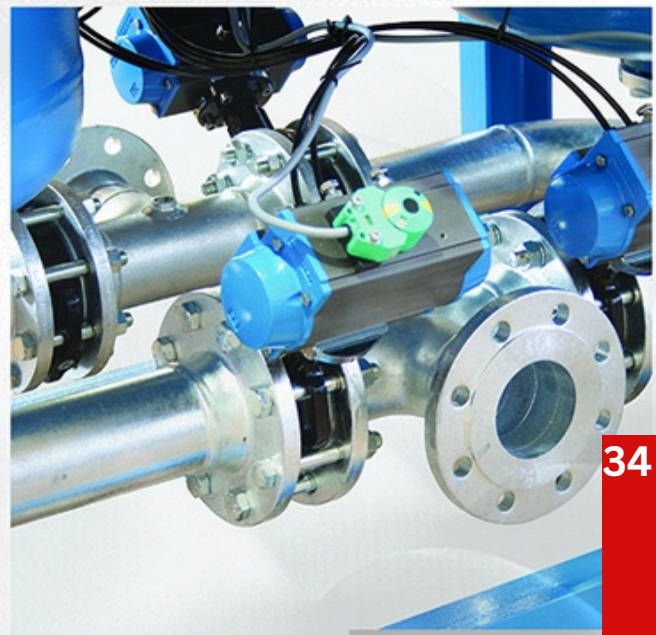
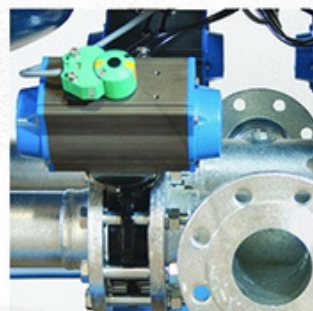
OPERATING PRESSURE - CORRECTION FACTORS - C <sub>op</sub>								
Operating pressure [bar]	4	5	6	7	8	9	10	11
Operating pressure [psi]	58	72	87	100	115	130	145	160
Correction factor C <sub>op</sub>	0,63	0,75	0,88	1	1,13	1,25	1,38	1,50

OPERATING TEMPERATURE - CORRECTION FACTORS - C <sub>ot</sub>					
Operat. temperature [°C]	25	30	35	40	42,5
Operat. temperature [F]	77	86	95	104	108
Correction factor C <sub>ot</sub>	1	1	1	0,7	0,52

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

<sup>(2)</sup> 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



**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

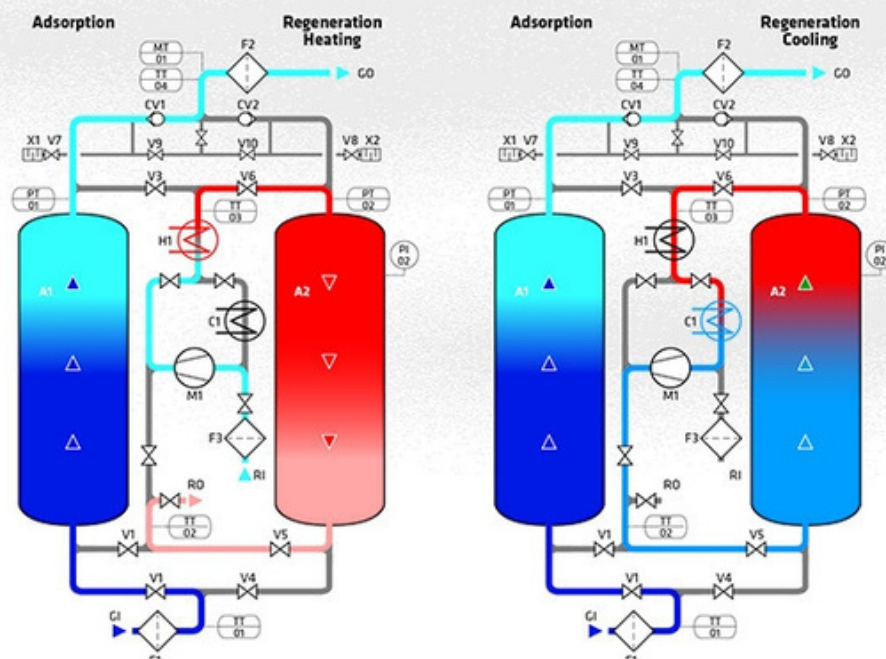
- Compressed air systems

## R-DRY BVL SERIES

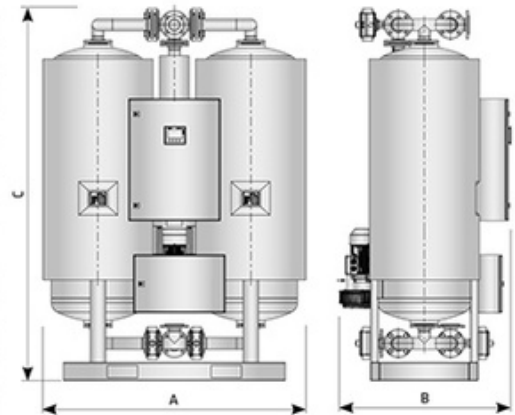
### VACUUM REGENERATION WITH CLOSED LOOP



- 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
- DI1 dewpoint transducer
- M1 blower
- H1 heater
- F3 regeneration air filter
- CI air inlet
- CO air outlet
- RI regeneration air inlet
- RO regeneration air outlet
- ESI-2 expansion silencer
- C1 water cooled heat exchanger



TECHNICAL DATA									
Type	Connection IN/OUT <sup>(1)</sup>	Nominal volume flow Inlet <sup>(2)</sup>	Dimensions			Mass kg	Blower power kW	Heater power kW	Filter type
			A (mm)	B (mm)	C (mm)				
	DN	[Nm <sup>3</sup> /h]							
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



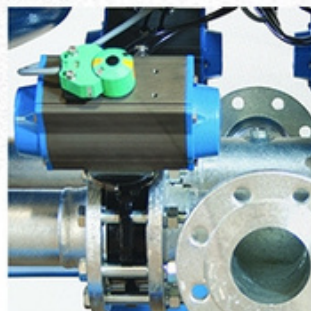
OPERATING PRESSURE - CORRECTION FACTORS - C <sub>op</sub>								
Operating pressure [bar]	4	5	6	7	8	9	10	11
Operating pressure [psi]	58	72	87	100	115	130	145	160
Correction factor C <sub>op</sub>	0,63	0,75	0,88	1	1,13	1,25	1,38	1,50

OPERATING TEMPERATURE - CORRECTION FACTORS - C <sub>ot</sub>					
Operat. temperature [°C]	25	30	35	40	42,5
Operat. temperature [F]	77	86	95	104	108
Correction factor C <sub>ot</sub>	1	1	1	0,7	0,52

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

<sup>(2)</sup> 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



**12 bar**  
operating pressure

**1,5 to 60 °C**  
operating temperature range

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

**3 to 180 Nm<sup>3</sup>/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.

## M-DRY SERIES

### MEMBRANE COMPRESSED AIR DRYERS



TECHNICAL DATA								
Model	Pipe size	Operating pressure	Flow rate *		Dimensions [mm]			
	inch		bar	Nm <sup>3</sup> /h	scfm	A	B	C
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 %	
	Nm <sup>3</sup> /h	scfm	Nm <sup>3</sup> /h	scfm	Nm <sup>3</sup> /h	scfm	Nm <sup>3</sup> /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

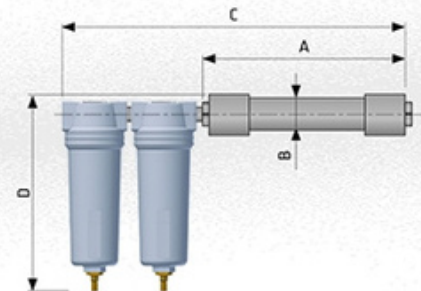
CORRECTION FACTORS									
Operating pressure [bar]	4	5	6	7	8	9	10	11	12
Operating pressure [psi]	58	72	87	100	115	130	145	160	174
Correction factor - C <sub>wp</sub>	0.41	0.56	0.76	1	1.22	1.48	1.76	1.86	2.22

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/m <sup>3</sup>

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

## APPLICATIONS

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



- 16 bar**  
operating pressure
- 1,5 to 45 °C**  
inlet air temperature range
- 3/8" to DN125**  
connections
- 6 to 6500 Nm<sup>3</sup>/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.

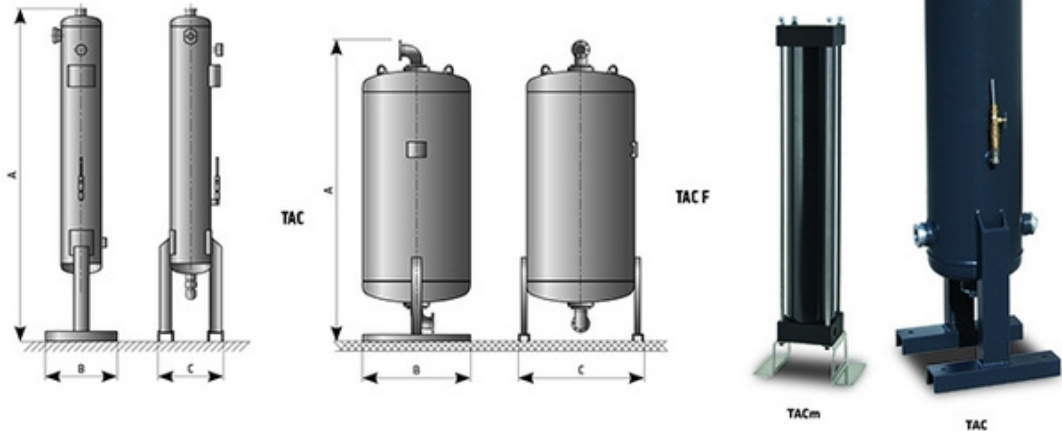
Stainless steel version available on request.

Fluid group 1 on request.

### APPLICATIONS

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

## TAC SERIES ACTIVATED CARBON TOWER



### TECHNICAL DATA & PRICES

TAC MODEL	Pipe size inch	Oper. press. bar/psi	Flow rate at 7 bar(g), 20 °C		Dimensions			Mass kg
			Nm <sup>3</sup> /h	scfm	A [mm]	B [mm]	C [mm]	
TACm 6	3/8	16	6	3.5	492	164	130	4
TACm 12	3/8	16	12	7	687	164	130	5.5
TACm 23	3/8	16	24	14.1	1077	164	130	8.2
TACm 35	3/8	16	36	21.1	1466	164	130	11.1
TACm 56	1/2	16	60	35.3	1082	212	160	17.4
TACm 70	1/2	16	75	41.1	1277	212	160	20.3
TACm 105	1/2	16	117	61.8	1677	212	160	26
TACm 150	1	16	150	88.9	1393	328	240	50
TACm 200	1	16	200	117.7	1608	328	240	57.5
TAC 110	1	16	100	86	1522	350	252	45
TAC 150	1	16	150	117	1766	350	252	52
TAC 200	1	16	200	157	1532	400	303	71
TAC 250	1	16	260	204	1784	400	303	83
TAC 300	1 1/2	16	320	251	1551	450	357	97
TAC 400	1 1/2	16	410	321	1798	450	357	114
TAC 600	1 1/2	16	590	462	1893	650	424	160
TAC 800	2	16	770	603	1877	650	468	201
TAC 1000	2	16	1000	784	1961	650	506	242
TAC 1200 F	DN50	16	1200	936	2170	550	550	280
TAC 1500 F	DN65	16	1500	1170	2210	620	620	355
TAC 2000 F	DN65	16	2000	1560	2330	700	700	420
TAC 2500 F	DN80	16	2500	1950	2260	760	760	510
TAC 3000 F	DN80	16	3000	2340	2400	800	800	595
TAC 3750 F	DN100	16	3750	2925	2490	920	920	745
TAC 5000 F	DN100	16	5000	3900	2600	1050	1050	960
TAC 6500 F	DN125	16	6500	5070	2730	1150	1150	1300

#### REMARK

\*At 7 bar, inlet dew point 35 °C, outlet dew point 15 °C. - TACm does not includes OCI. - TAC/TAC F includes OCI.

### 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	1.5	1.63	1.75	1.88	2	2.13

### CORRECTION FACTORS

Operating pressure [bar]	20	25	30	35	40	45	50
Correction factor	1	0.98	0.97	0.92	0.86	0.75	0.60

**16 bar**  
operating pressure

**60 to 2.760 Nm<sup>3</sup>/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, A<sup>2</sup>, H<sup>2</sup> and MS<sup>2</sup>).

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

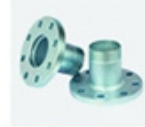
## APPLICATIONS

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

## AF SERIES ALUMINIUM COMPRESSED AIR FILTERS



**FA**



**WB**



**AK**



**AK AF**



**B 15 µm**



**P 3 µm**



**R 1 µm**



**M 0,1 µm**



**S 0,01 µm**



**A activated carbon**



**A<sup>2</sup> 0,1 µm**



**H<sup>2</sup> 0,1 µm**



**MS<sup>2</sup> 0,1 µm**



**EMD**



**ECD-B**



**IED**



**TD 16M**



**AOK 13PA**



**AOK 20B**



**AOK 16B**



**MCD-B**

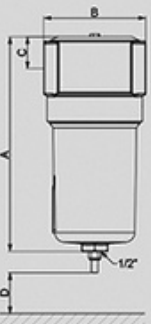


**MCD**





TECHNICAL DATA										FILTER ELEMENTS									
Filter housing size	Pipe size	Max. oper. press.	Flow rate at 7 bar(g), 20 °C		Dimensions [mm]				Mass						A activated carbon	A <sup>1)</sup> adsorption (act. carbon)			
	inch		[bar/psi]	Nm <sup>3</sup> /h	scfm	A	B	C											D
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 A <sup>2)</sup>	07050 H <sup>2)</sup>	07050 MS <sup>2)</sup>	
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 A <sup>2)</sup>	14050 H <sup>2)</sup>	14050 MS <sup>2)</sup>	
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 A <sup>2)</sup>	12075 H <sup>2)</sup>	12075 MS <sup>2)</sup>	
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 A <sup>2)</sup>	22075 H <sup>2)</sup>	22075 MS <sup>2)</sup>	
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 A <sup>2)</sup>	32075 H <sup>2)</sup>	32075 MS <sup>2)</sup>	
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 A <sup>2)</sup>	50075 H <sup>2)</sup>	50075 MS <sup>2)</sup>	
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 <sup>3)</sup>	1 <sup>3)</sup>	1 <sup>3)</sup>	
										residual oil content (mg/m <sup>3</sup> )	-	-	-	<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]	9	350 / 5,07	350 / 5,07	350 / 5,07	350 / 5,07	6 months <sup>2)</sup>	6 months <sup>2)</sup>	6 months <sup>2)</sup>	
										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	

<sup>1)</sup> "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.  
<sup>2)</sup> Filter elements "A, A<sup>1)</sup>, H<sup>2)</sup>", must be changed periodically to suit application, but at least every 6 months. Activated carbon filters must not operate in oil saturated conditions.  
<sup>3)</sup> Valid if "S" filter cartridge is installed upstream.  
<sup>4)</sup> For elements A<sup>1)</sup>, H<sup>2)</sup> and MS<sup>2)</sup> it is necessary to reduce the flow according to technical data sheet specification.



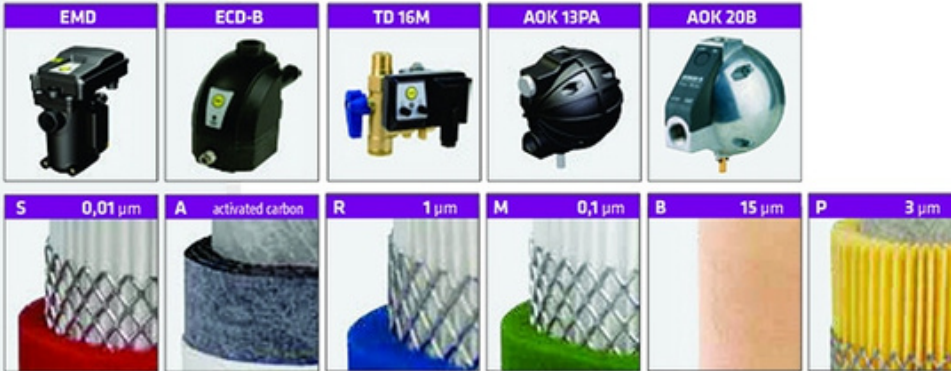
**16 bar**  
operating pressure

**1.680 to 31.400 Nm<sup>3</sup>/h**  
volume flow rate

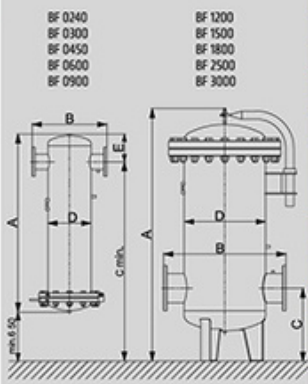
**DN80 to DN300**  
connections

**1,5 to 65 °C**  
operating temperature range

**BF SERIES**  
WELDED CARBON STEEL COMPRESSED AIR FILTERS



TECHNICAL DATA										FILTER ELEMENTS						
Filter housing size	Pipe size	Max.oper. pressure	Flow rate at 7 bar(g), 20 °C		Dimensions (mm)					Mass	B	P	R	M	S	A
	DN		bar/psi	Nm <sup>3</sup> /h	scfm	A	B	C	D		E	kg	sintered 15 µm	prefilter 3 µm	prefilter 1 µm	microfilter 0,1 µm
BF 0240	80	16/232	1.680	989	1145	450	1640	219	157	71	1×76090 B15	1×76090 P	1×76090 R	1×76090 M	1×76090 S	1×76090 A
BF 0300	100	16/232	3.150	1.853	1330	560	1780	324	208	110	2×76090 B15	2×76090 P	2×76090 R	2×76090 M	2×76090 S	2×76090 A
BF 0450	125	16/232	4.700	2.765	1330	560	1780	324	206	115	3×76090 B15	3×76090 P	3×76090 R	3×76090 M	3×76090 S	3×76090 A
BF 0600	150	16/232	6.300	3.706	1360	620	1780	368	241	154	4×76090 B15	4×76090 P	4×76090 R	4×76090 M	4×76090 S	4×76090 A
BF 0900	150	16/232	9.400	5.530	1420	680	1810	405	261	195	6×76090 B15	6×76090 P	6×76090 R	6×76090 M	6×76090 S	6×76090 A
BF 1200	200	16/232	12.550	7.382	1850	792	525	508	-	340	8×76090 B15	8×76090 P	8×76090 R	8×76090 M	8×76090 S	8×76090 A
BF 1500	200	16/232	15.700	9.235	1890	918	545	610	-	497	10×76090 B15	10×76090 P	10×76090 R	10×76090 M	10×76090 S	10×76090 A
BF 1800	250	16/232	18.850	11.088	1920	955	555	610	-	367	12×76090 B15	12×76090 P	12×76090 R	12×76090 M	12×76090 S	12×76090 A
BF 2500	250	16/232	25.100	14.765	2030	1042	685	711	-	643	16×76090 B15	16×76090 P	16×76090 R	16×76090 M	16×76090 S	16×76090 A
BF 3000	300	16/232	31.400	18.481	2130	1085	680	711	-	656	20×76090 B15	20×76090 P	20×76090 R	20×76090 M	20×76090 S	20×76090 A
quality class - solids (ISO 8573-1)											7	6	3	2	1	1 <sup>1)</sup>
residual oil content (mg/m <sup>3</sup> )											-	-	-	<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)											0	350 / 5,07	350 / 5,07	350 / 5,07	350 / 5,07	6 months <sup>2)</sup>
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

<sup>1)</sup> "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.  
<sup>2)</sup> 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.  
<sup>3)</sup> 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.

14 bar  
operating pressure

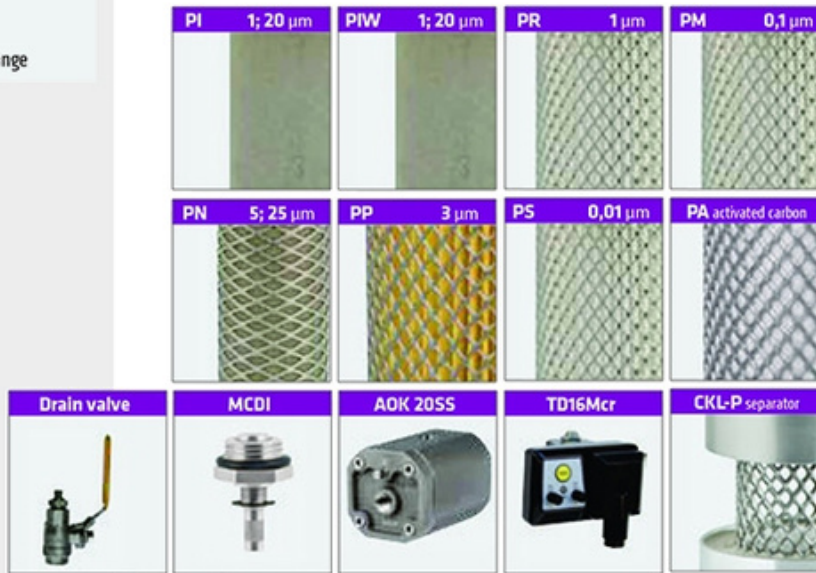
75 to 3600 Nm<sup>3</sup>/h  
volume flow rate

1/4" to 3"  
connections

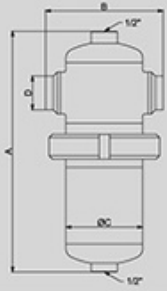
up to +150 °C  
operating temperature range

## WFIT SERIES

WELDED STAINLESS STEEL COMPRESSED AIR FILTERS - THREADED CONNECT.



TECHNICAL DATA									FILTER ELEMENTS								
Filter housing size	Pipe size D	Operat. press.	Flow rate at 7 bar(g), 20°C		Dimensions [mm]			Mass kg	PI prefilter 1; 20 µm	PIW prefilter 1; 20 µm	PN prefilter 5; 25 µm	PP prefilter 3 µm	PR prefilter 1 µm	PM microfilter 0,1 µm	PS microfilter 0,01 µm	PA activated carbon	CKL-P
	inch		bar/psi	Nm <sup>3</sup> /h	scfm	A	B		C								
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 <sup>0</sup>	-
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	

**16 bar**  
operating pressure

**60 to 2160 Nm<sup>3</sup>/h**  
volume flow rate

**3/8" to 3"**  
connections

**1,5 to 65°C**  
operating temperature range

**RAL 9005**  
standard colour

## CKL-B SERIES

### ALUMINIUM CONDENSATE SEPARATORS



TECHNICAL DATA											
Model	Pipe size	Max oper. pressure	Flow rate at 7 bar(g), 20 °C		Temperature oper. range		Dimensions (mm)				Mass
	inch		bar/psi	Nm <sup>3</sup> /h	SCFM	°C	°F	A	B	C	
CKL 005 B	3/8"	16/232	60	35	1.5 - 65	35 - 149	187	88	20	60	0.7
CKL 007 B	1/2"	16/232	78	46	1.5 - 65	35 - 149	187	88	20	60	0.7
CKL 010 B	3/4"	16/232	120	70	1.5 - 65	35 - 149	257	88	20	80	0.8
CKL 018 B	1"	16/232	198	116	1.5 - 65	35 - 149	263	125	32	100	1.8
CKL 047 B	1 1/2"	16/232	510	300	1.5 - 65	35 - 149	461	125	32	140	2.5
CKL 094 B	2"	16/232	1000	588	1.5 - 65	35 - 149	684	163	43	520	5.1
CKL 150 B	2 1/2"	16/232	1500	882	1.5 - 65	35 - 149	684	163	43	520	5.1
CKL 200 B	3"	16/232	2160	1270	1.5 - 65	35 - 149	795	240	59	630	12.9



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]	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Operating pressure [psi]	29	44	58	72	87	100	115	130	145	160	174	189	203	218	232
Correction factor	0.38	0.50	0.63	0.75	0.88	1	1.13	1.25	1.38	1.50	1.63	1.75	1.88	2.00	2.13

**16 bar**  
operating pressure

**840 to 14280 Nm<sup>3</sup>/h**  
volume flow rate

**DN65 to DN300**  
connections

**1,5 to 65°C**  
operating temperature range

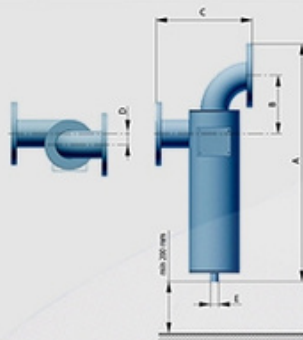
**RAL 9005**  
standard colour CS series

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

**CS/CS SS SERIES**  
WELDED CONDENSATE SEPARATORS



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	bar/psi	Nm <sup>3</sup> /h	SCFM	°C	°F	A	B	C	D	E	kg
CS 14	CS SS 14	65	16/232	840	495	1,5 - 65	35 - 149	613	153	302	45	1/2"	21
CS 28	CS SS 28	80	16/232	1710	1005	1,5 - 65	35 - 149	745	182	302	35	1/2"	26
CS 62	CS SS 62	125	16/232	3720	2190	1,5 - 65	35 - 149	1041	280	390	37	1/2"	56
CS 88	CS SS 88	150	16/232	5280	3110	1,5 - 65	35 - 149	1298	330	489	50	1/2"	94
CS 124	CS SS 124	200	16/232	7440	4380	1,5 - 65	35 - 149	1506	436	619	52	1/2"	147
CS 238	CS SS 238	300	16/232	14280	8404	1,5 - 65	35 - 149	1673	504	805	91	1/2"	290



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	

**Max. 13 bar**  
operating pressure

**-10 to +55°C**  
operating temperature

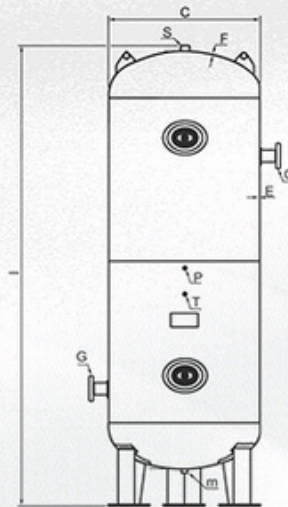
## Compressed Air Vessels (500-10000 Lit)

- Sandblast SAE 2.5
- Zinc Rich Epoxy Primer 50µm
- Epoxy Inter mediate Coat 50µm
- Epoxy Polyamide cured Top Coat 50µm
  
- Sandblast 2.5
- Epoxy Polyamide Cured Zinc Phosphate Primer 50µm
- Epoxy Polyamide Cured Inter mediate Coat 50µm
- Polyurethane 5015 50µm

Volume [Liter]	500	1000	2000	3000	4000	5000	6000	
C [mm]	600	800	1150	1150	1400	1400	1600	
E [mm]	6	8	10	10	10	10	10 / 12	
F [mm]	6	8	10	10	10	10	10 / 14	
G [G/DN]	G 1"	G 1 1/2"	G 2"	DN 80	DN 100	DN 100	DN 100	
I [mm]	2223	2437	2509	3509	3200	3880	3666	
Safety Valve [S]	1"	1"	1"	1"	1"	1"	1"	
Pressure Gauge [P]	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	
Thermometer [T]	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	
Auto Drain [m]	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	
Test Pressure	20 bar	20 bar	20 bar	20 bar	18 bar	18 bar	18 / 20	
Design Pressure	15 bar	15 bar	15 bar	15 bar	13.5 bar	13.5 bar	12 / 15	
Working Pressure	13 bar	13 bar	13 bar	13 bar	11.5 bar	11.5 bar	10 / 13	



	7000	8000	9000	10000
	1600	1600	1600	1600
	10 / 12	10 / 12	10 / 12	10 / 12
	10 / 14	10 / 14	10 / 14	10 / 14
	DN 100	DN 100	DN 100	DN 100
	4166	4666	5166	5666
	1"	1"	1"	1"
	1/2"	1/2"	1/2"	1/2"
	1/2"	1/2"	1/2"	1/2"
	1/2"	1/2"	1/2"	1/2"
	18 / 20	18 / 20	18 / 20	18 / 20
	12 / 15	12 / 15	12 / 15	12 / 15
	10 / 13	10 / 13	10 / 13	10 / 13



**Max. 13 bar**  
operating pressure

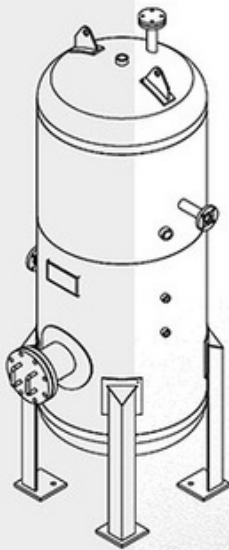
**-10 to +65°C**  
operating temperature

## Custom Made Pressure Vessels

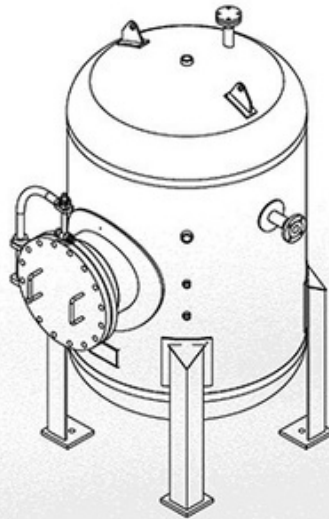
company is able to design and manufacturing air vessels according to the specifications and requirements of various projects, the vessels below are examples of our provided vessels to projects.

We can meet your requirement in following items:

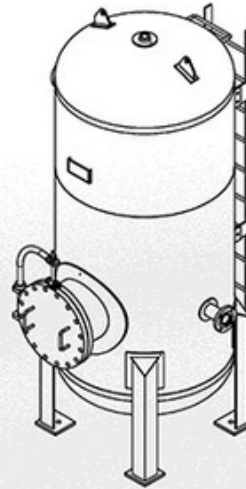
- working/design/test pressure
- working/design temperature
- nozzle sizes/places/service
- extra connections/ladders/platforms/cages
- extra supports for any purposes (like piping)



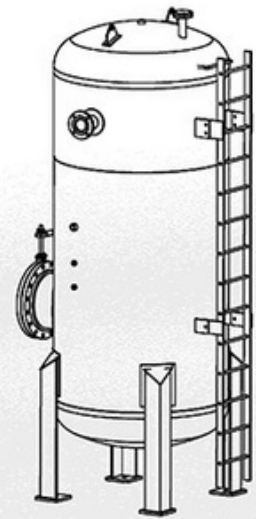
1000 Lit.



2000 Lit.

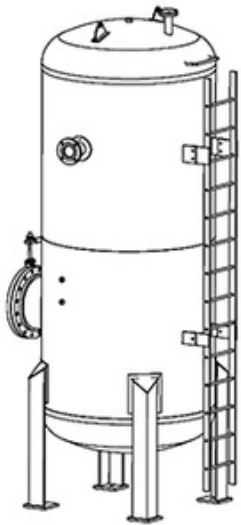


3000 Lit.

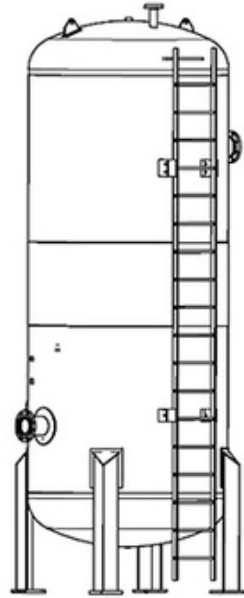


5000 Lit.

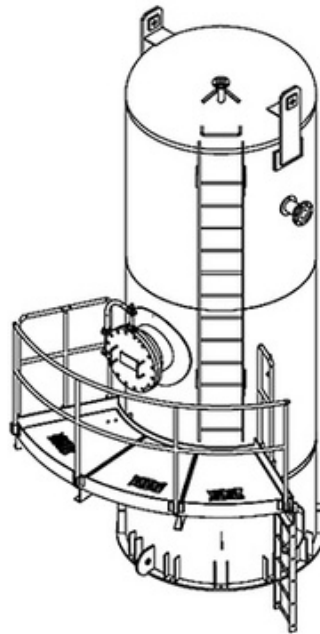




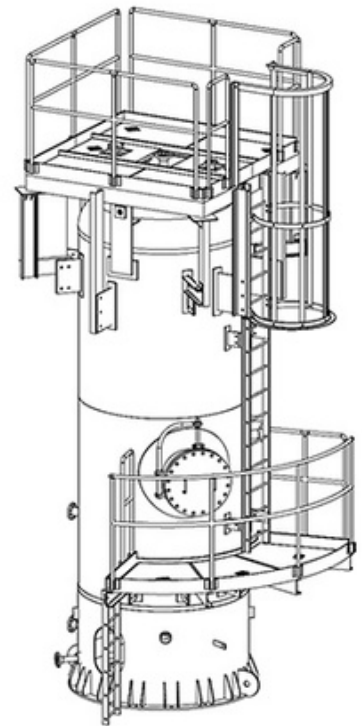
6000 Lit.



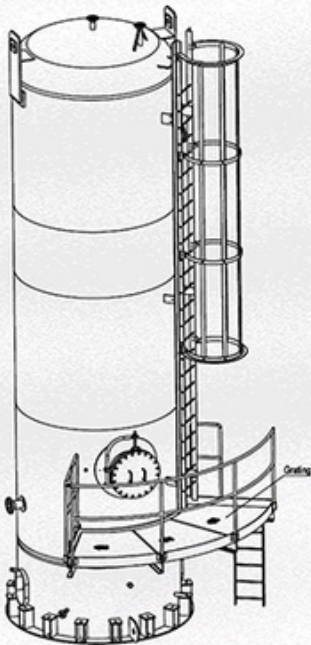
10000 Lit.



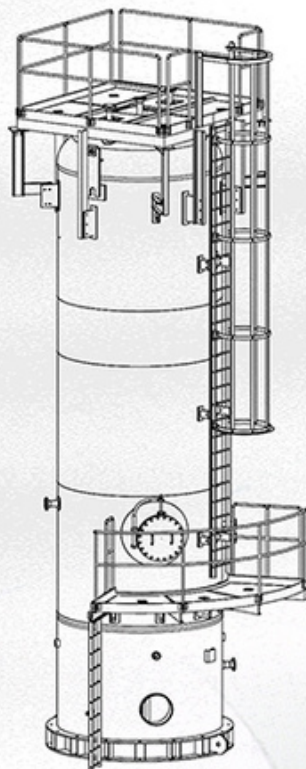
12000 Lit.



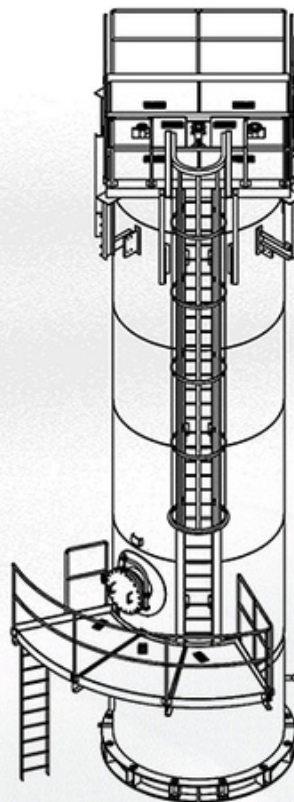
15000 Lit.



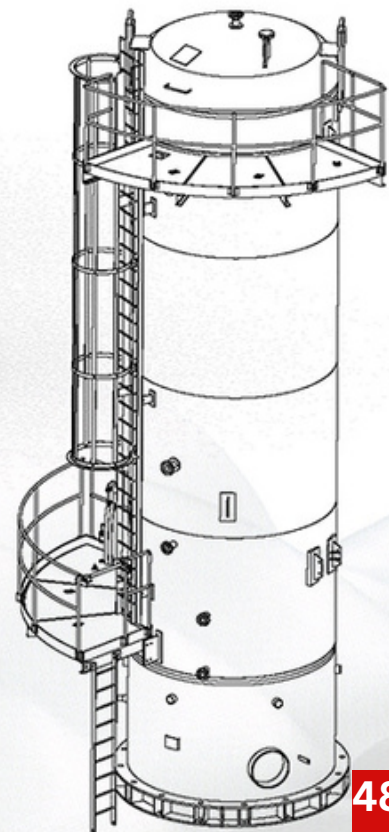
30000 Lit.



35000 Lit.



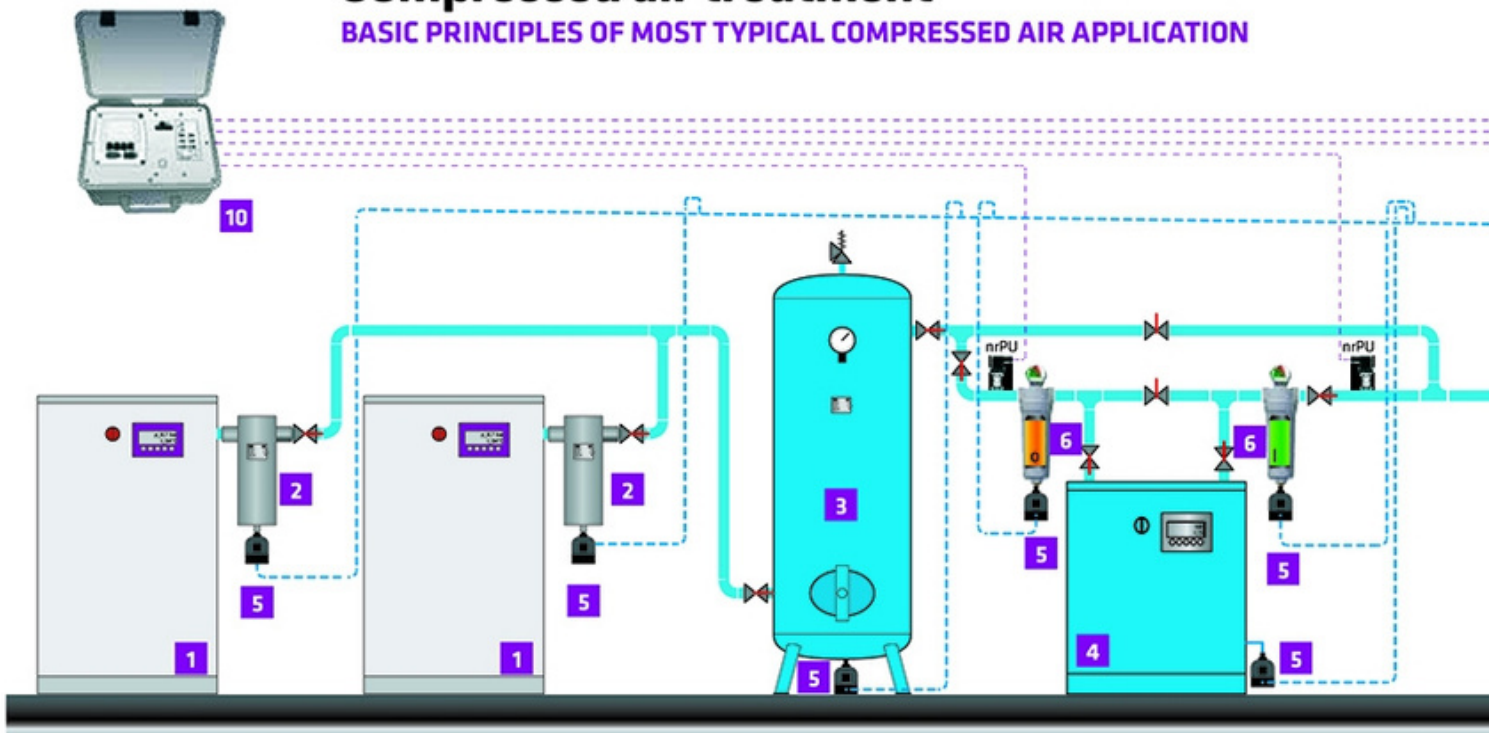
39000 Lit.



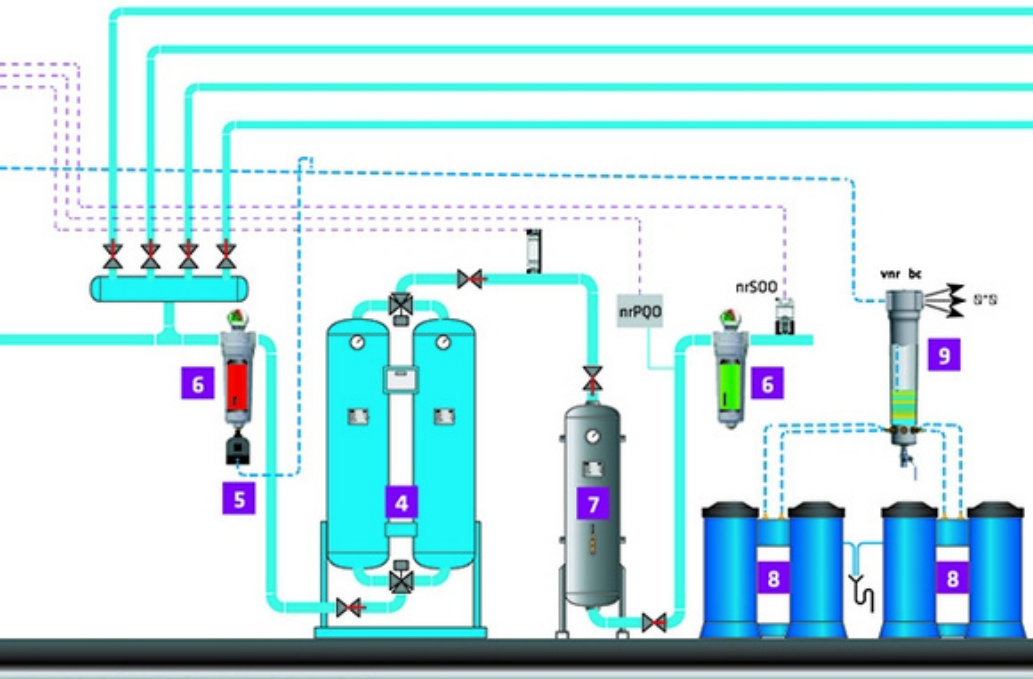
52000 Lit.

## Compressed air treatment

BASIC PRINCIPLES OF MOST TYPICAL COMPRESSED AIR APPLICATION



1 COMPRESSOR	2 CYCLONE CONDENSATE SEPARATOR	3 PRESSURE VESSEL	4 COMPRESSED AIR DRYER
<p>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.</p> <p>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.</p> <p>There are three major types, namely, reciprocating, rotary, and centrifugal compressor.</p>	<p>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.</p> <p>They are installed following aftercoolers to remove the condensed moisture.</p>	<p>Pressure vessel plays very important role in compressed air system:</p> <ul style="list-style-type: none"> <li>• damping pulsations caused by reciprocating compressors,</li> <li>• providing a location for free water and lubricant to settle from the compressed air stream,</li> <li>• supplying peak demands from stored air without needing to run an extra compressor,</li> <li>• reducing load/unload or start/stop cycle frequencies to help screw compressors run more efficiently and reduce motor starts,</li> <li>• slowing system pressure changes to allow better compressor control and more stable system pressures.</li> </ul>	<p>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.</p> <p>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.</p> <p>Common types:</p> <ul style="list-style-type: none"> <li>- refrigerant</li> <li>- desiccant</li> <li>- membrane</li> </ul>



## 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.

### 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. They are able to absorb oil carry-over (both liquid and vapour) to provide the plant with technically oil-free compressed air.

### 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. Multi-stage separation process using oleophilic filters and activated carbon, ensures exceptional performance and trouble free operation.

### 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 CONTROL SYSTEM

It is always good to know the parameters value of your compressor air station. The control system with integrated sensors records and controls all important parameters:

- pressure
- temperature
- Dew point
- flow

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# CONTACT US

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