



Condensate Management

Pneumatech's condensate management portfolio includes solutions for separating, draining, detecting and treating oily condensate.

Water separators can be used downstream of the compressor instead of - or together with - the air receiver. We offer three types of condensate drains depending on your needs: a timer drain, a mechanical zero loss float drain and an electronic zero loss drain. Also for condensate treatment we give you the choice, i.e. between the cost-competitive ECOBOX solution and our premium, patented OWS technology.

SW 1 - 12 - Water Separator

Features & Benefits

- ▶ Guaranteed 99% water removal efficiency
 - Unique centrifugal fin design
 - Bottom shield to avoid water re-entrainment
 - Guaranteed performance down to 25% of nominal flow
- ▶ Robust design
 - Rigid cast aluminum alloy with corrosion protection
 - Standard fitted with float operated automatic drain valves
 - Maintenance-free

General Specifications

- ▶ Water separators
- ▶ Max working pressure:
16 barg / 232 psig
- ▶ Operating temperature range:
2 - 120 °C / 35 - 248°F



The saturated, hot air at the outlet of the compressor will cool down along the cold piping network. This causes condensate to form that can result in corrosion, bad product quality or process malfunctioning. Having free water at the inlet also impacts the lifetime and performance of filters and dryers.

Pneumatech's SW water separators solve these problems by removing bulk water with 99% efficiency, thanks to the unique

centrifugal fin design. The shield at the bottom of the SW prevents re-entrainment of separated water and creates a calm zone allowing for drainage.

The SW range is available for flows up to 2550 m³/hr / 1500 cfm. For any size the water removal efficiency is guaranteed down to 25% of the nominal flow, making the WS ideal for variable speed compressors.

Technical specifications for SW 1-12

Variant Name → Technical Specification ↓	Unit	SW 1	SW 2	SW 3	SW 4	SW 5	SW 6	SW 7	SW 8	SW 9	SW 10	SW 11	SW 12	
Flow rate ⁽¹⁾	m ³ /hr	42	59	85	119	212	297	476	545	680	1189	1445	2549	
	cfm	25	35	50	70	125	175	280	320	400	700	850	1500	
Connections	inch	1/4	3/8	1/2	1/2	3/4	1	1¼	1½	1½	2	2½	3	
Dimensions	A	mm	70	70	70	100	100	100	122	122	146	146	210	210
	A	inch	2,76	2,76	2,76	3,94	3,94	3,94	4,80	4,80	5,75	5,75	8,27	8,27
	B	mm	25	25	25	35	35	35	42	42	52	52	67	67
	B	inch	0,98	0,98	0,98	1,38	1,38	1,38	1,65	1,65	2,05	2,05	2,64	2,64
	C	mm	191	191	191	276	276	276	460	460	482	482	595	595
	C	inch	7,52	7,52	7,52	10,87	10,87	10,87	18,11	18,11	18,98	18,98	23,43	23,43
	D	mm	90	90	90	110	110	110	150	150	180	180	200	200
	D	inch	3,54	3,54	3,54	4,33	4,33	4,33	5,91	5,91	7,09	7,09	7,87	7,87
Weight	kg	0,7	0,7	0,7	1,5	1,5	1,5	2,5	2,5	4	4	8,5	8,5	
	lbs	1,5	1,5	1,5	3,3	3,3	3,3	5,5	5,5	8,8	8,8	18,7	18,7	

1. Flow is referred to an absolute pressure of 1 barg and temperature of 20°C



WD - Water Detector

Features & Benefits

- ▶ 24/7 peace-of-mind at a reasonable cost
 - Water level as low as 3 cl detected
 - Can be installed at every critical application in the compressed air network
- ▶ Transparency of operation
 - Alarm message on control panel
 - Potential-free contact to trigger alarm in control room
 - Test button for manual drainage
- ▶ Easy mechanical and electrical installation

General Specifications

- ▶ Water detector
- ▶ Operating pressure range:
0,2-16 barg / 2,9-232 psig
- ▶ Operating temperature range:
1-60°C / 34-140°F
- ▶ Power supply: 230VAC 50/60Hz



Options:



Power supply cable (2m)



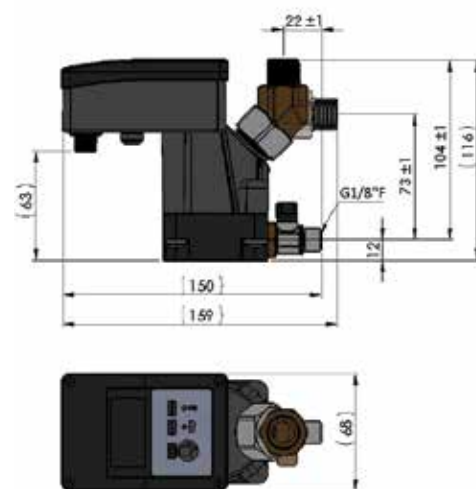
Voltage-free contact cable (5m)

Despite all efforts to make dryers, water separators and drains reliable, a failure can never be ruled out. The consequence of condensate water in your pipe network and operations can be dramatic: from corrosion and ice formation to bad product quality and process malfunctioning.

The installation of a Pressure Dew Point (PDP) sensor downstream brings a solution, but is often a too large investment.

Pneumatech's Water Detector (WD) provides peace-of-mind at an affordable cost. The WD gives an alarm as soon as a 3cl water level is detected. This alarm message is visible, audible and can be routed to a control room thanks to the potential-free contact. The ball valve at the outlet is meant to release water after an alarm situation and is closed during normal operation.

Technical Specifications for WD	
General characteristics	WD
First alarm level (cl)	3
Second alarm level (cl)	6,7
Max. power consumption (W)	10
Electrical connection	Solenoid plug type B - 2+PE
Potential free contact connection	M12 connector A-coding 4-pole Both Normally Open (NO) and Normally Closed (NC) possible
IP Protection	IP65
Physical characteristics	WD
Length (mm / inch)	160 / 6,3
Width (mm / inch)	69 / 2,71
Height (mm / inch)	116 / 4,5
Weight (kg / Lbs)	0,6 / 1,32
Connections	WD
Inlet	G1/2", horizontal + vertical
Outlet	Ball valve for condensate removal
Features	WD
Test button	Yes
Indicative LEDs	Yes
Potential free alarm	Yes



LD 100 - 204 - Zero loss drains

Features & Benefits

- ▶ No loss of compressed air
 - Automatic controlled drainage of condensate without any compressed air leak
- ▶ Maximum reliability
 - Integrated filter to prevent dirt from entering the valve diaphragm
 - Auto-repair algorithm: forced opening/closing cycles of the valve in case of malfunction
- ▶ Transparency of operation
 - Alarm message on control panel when drain is blocked
 - Potential-free contact to trigger alarm in control room
 - Test button for manual drainage
- ▶ Easy installation and maintenance
 - Straightforward mechanical and electrical connections
 - Wear kits available



General Specifications

- ▶ Zero-loss drain
- ▶ Operating pressure range:
0,2-16 barg / 2,9-232 psig
- ▶ Operating temperature range:
1-60°C/34-140°F
- ▶ Compressor capacity:
from 180 up to 9500 m³/hr
- ▶ Power supply:
230VAC 50/60Hz
24VAC 50/60Hz
115VAC 50/60Hz

Options:



Mounting kits



Wear kits



Power supply cable (2m)



Voltage-free contact cable (5m)



The series of LD zero-loss drains permit a controlled drainage of condensate without any compressed air leaks. All LD drains are equipped with an integrated storage tank, inside which a level sensor has been mounted. The sensor is controlled by an intelligent electronic circuit based on an 8-bit microprocessor logic. All drain functions are displayed on the control panel*. A test push button is available on the control panel for manual drainage. A built-in filter prevents the solenoid valve from clogging.

In case of trouble, the control circuit unlocks the drain pipes by carrying out a series of forced opening/closing cycles of the solenoid valve. If this is not enough, the malfunction is reported outside by an alarm with potential-free contact to draw the attention of maintenance staff*.

The LD drains are produced in 10 different models with different flow rates. All versions are suitable for working with any type of condensate water.

*not applicable for the smallest model LD100

Technical specifications for LD 100 - 204										
Pneumatech Variant → Specifications ↓	LD100	LD101	LD 101 Compact	LD 101 L	LD200	LD200 L	LD202	LD202 L	LD203	LD204
General characteristics										
Drain capacity (l/h)	1.6	4.03	3.3	5	8.07	10	16.14	20	85	200
Compressor capacity (m ³ /hr) ⁽¹⁾	180	450	378	450	900	900	1800	1800	9500	18000
Compressor capacity (cfm) ⁽¹⁾	106	265	222	265	530	530	1059	1059	5591	10594
Max. power consumption (W)	10									
Electrical connection	Solenoid plug type B – 2+PE									
Potential free contact connection	/ M12 connector A-coding 4-pole									
IP Protection	IP65	IP65	IP65	IP65	IP 65	IP 65	IP 65	IP 65	IP 65	IP 65
Physical characteristics										
Length (mm)	136	163	160	163	163	163	163	163	188	247
Length (inch)	5.4	6.4	6.3	6.4	6.4	6.4	6.4	6.4	7.4	9.7
Width (mm)	60	69	69	69	69	69	69	69	130	130
Width (inch)	2.4	2.7	2.7	2.7	2.7	2.7	2.7	2.7	5.1	5.1
Height (mm)	120	140	120	140	155	155	214	214	230	230
Height (inch)	4.7	5.5	4.7	5.5	6.1	6.1	8.4	8.4	9.1	9.1
Weight (kg)	0.42	0.6	0.5	0.6	0.7	0.7	1.2	1.2	2.8	3.45
Weight (Lbs)	0.9	1.3	1.1	1.3	1.5	1.5	2.6	2.6	6.2	7.6
Connections										
Inlet	G1/2"	G1/2"	G1/2" (F)	G1/2" (F)	G1/2" (F)	2 x G1/2" (F)	G1/2" (F)	2 x G1/2" (F)	2 x G1/2" (F)	2 x G1/2" (F) + 1 x G3/4" (F)
Outlet	1 x Ø12	1 x Ø12	1 x Ø12	1 x Ø12	1 x Ø12	1 x Ø12	1 x Ø12	1 x Ø12	1 x Ø12	1 x Ø12
Features										
Test button	Yes									
Indicative LEDs	No	Yes								
Potential free alarm	No	Yes (NC/NO)								

1. The calculation of compressor capacity is based on the maximum condensate drainage of a compressor aftercooler in moderate climate conditions.

TD - Timer Drain

Features & Benefits

- ▶ Guaranteed reliability
 - Robust solenoid, made in Europe
 - Integrated Y-filter to prevent dirt from entering the valve
 - Large cross-section openings
- ▶ Endless flexibility
 - No limitations in air flow
 - Cycle and valve opening intervals can be set independently of each other
- ▶ IP65 enclosed
- ▶ Transparency of operation
 - Test button and operation indicator

Pneumatech's TD condensate drains discharge the condensate automatically, based on pre-set time intervals. The opening and closing times can be set with high flexibility, which make the drains suitable for almost all capacities. TD drains are selected in heavy-duty operations, where the large cross-section opening and the simplicity of the drain are highly valued.

High-pressure TD drains are available on request.



Technical specifications	
Pressure range	0-16 barg/ 0-232 psig
Supply voltage	24VAC 50/60Hz & 230VAC 50/60Hz (CE)
Electrical connection	DIN43650A
Inlet/outlet connections	G 1/2" (CE) NPT 1/2" (UL)
Environmental protection	IP65
Max. compressor capacity	No limit
Min/Max operating temperature	1-50°C/ 34-122°F
Timer cycle	On: 0,5 – 10 s; Off: 0,5 – 45 min. including test feature
Valve type	2/2 direct acting
Valve orifice	4.5 mm- 0,177"
Valve seal	FKM

MD - Mechanical zero-loss float drain

Pneumatech's MD drain discharges the condensate automatically and without compressed air losses up to 16 barg. A floating body rises and falls with the condensate level in a collecting chamber; and opens/closes a mechanical drain valve. The condensate collecting chamber is closed off from the compressed air flow when the drain is depressurized.

The drain is equipped with an integrated venting function, which prevents the risks of possible air slots. The MD has a well-proven, rugged metal design with threaded connections at inlet and outlet.



Features & Benefits

- ▶ No loss of compressed air
 - Automatic controlled drainage of condensate without any compressed air leak
- ▶ Plug-and-play solution
 - No power supply needed
 - No programming or calibration
- ▶ Guaranteed reliability
 - Large cross-section openings
 - Well-proven, rugged aluminum design
 - Integrated venting function to prevent air slots
- ▶ Transparency of operation
 - Manual drain valve for system discharge and operational check

Technical specifications

Pressure range	0-16 barg / 0-232 psig
Inlet/outlet connections	G ½" (CE)
Max. water discharge capacity	250 l/h @ 7 barg / 0,147 cfm @ 101 psig 360 l/h @ 16 barg / 0,212 cfm @ 232 psig
Max compressor capacity (without dryer)	5.400 m ³ /hr / 3178 cfm
Length	156 mm / 6,14"
Width	108 mm / 4,25"
Height	111 mm / 4,37"
Weight	0,9 kg / 2 lbs

ECOBIX 1 - Small oil water separator

Features & Benefits

- ▶ Excellent performance
 - 2-stage filtration with advanced adsorption media
 - After separation, water contains oil levels below 15 ppm⁽¹⁾
- ▶ Environmentally friendly - all materials are 100% recyclable
- ▶ Compact footprint - compact and lightweight design, optimized for small compressor installations
- ▶ Quick and easy installation and replacement – by means of a wall or plate mounting bracket
 - Optional sampling kit to verify outlet concentration on a regular base
- ▶ DIBT certified



Options:



Sampling Kit



The Pneumatech ECOBOX offers a compressor condensate cleaning solution with excellent performance for compressed air systems up to 100 m³/hr (60 cfm). It is designed to remove the oil traces from compressor condensate via 2-stage adsorption. The ECOBOX is able to clean the compressor condensate to

oil concentrations below 15 ppm¹ by using a new, advanced filter medium. General country legislations for oil in water contamination are 20 ppm¹. It is specifically designed to offer an affordable condensate cleaning solution for piston compressor and small screw compressor installations.

Technical specifications for ECOBOX			
Capacity	15 l/s - 51 m ³ /hr - 30 cfm	25 l/s - 85 m ³ /hr - 50 cfm	30 l/s - 100m ³ /hr - 60 cfm
Oil Residual	15 ppm	15 ppm	15 ppm
Expected Life Time - Cold Climate ⁽²⁾⁽³⁾	6000	4000	3000
Expected Life Time - Normal Climate ⁽²⁾⁽³⁾	6000	4000	-
Expected Life Time - Hot Climate ⁽²⁾⁽³⁾	4000	-	-
Suitable compressor	Piston Compressor 2-7,5 hp	Screw Compressor 3-10 hp	Screw Compressor 15 hp

Type	Rated Flow ⁽²⁾				Connections				Weight		Dimensions					
	l/s	m ³ /hr	l/min	cfm	Inlet	Outlet	kg	lbs	mm			inch				
									A	B	C	A	B	C		
ECOBOX	<30	<100	<1800	<60	6 mm	1/4"	10 mm	3/8"	1	2.2	240	140	140	9.5	5.5	5.5

- 15ppm is generally well below the acceptance level for disposal in the sewage, but due to strongly varying international and local regulations, it is the user's responsibility to consult local waste water discharge regulations and ensure compliance.
- In tropical climates (high ambient temperatures and humidity levels), the air generally contains more water vapor. The extra condensate, generated during the compression and cooling process of the air, shortens the contact time in the device, leaving less time for the media to absorb the oil. Climatic conditions used in the table above are defines as follows:
 - Cold climate conditions: average ambient temperature of 20°C/ 68°F- relative humidity of 50 %
 - Normal climate conditions: average ambient temperature of 25°C/ 75°F - relative humidity of 60%
 - Hot climate conditions: average ambient temperature of 35°/ 95°F - relative humidity of 70 %
- Pneumatech assumes as well maintained compressor plant and reasonable operating conditions. Performance on mineral or mineral-based lubricants should be as above, irrespective of compressor type, condensate drain technology or climate,provided the condensate produced is not a stable emulsion.



ECOBIX 2 - 4 - Oil water separators

Features & Benefits

- ▶ Excellent performance
 - 2-stage filtration with advanced adsorption media
 - After separation, water contains oil levels below 15 ppm⁽¹⁾
 - Emulsion treatment possible (on request)
- ▶ Eliminating potential health issues
 - No standing or stagnant water
- ▶ Plug-and-play installation and service
 - Connection points at inlet
 - Compact footprint
 - No pre-soaking required
- ▶ Time-based service indicator and sampling kit (standard) to verify outlet concentration on a regular base.



Options:



Extra 4 Port Kit



Pneumatech extends its cost-competitive ECOBOX condensate cleaning solution with 3 more models, up to 1400 m³/hr. The models are designed according to the same success factors: reliable double adsorption with recycled glass media, compact footprint, and easy installation and service.

Additionally the ECOBOX 2 - 4 has 4 connections points at the inlet; and a sample test point at the outlet.

Technical specifications for ECOBOX 2-4				
		ECOBOX 2	ECOBOX 3	ECOBOX 4
Maximum rated flow - normal climate ⁽²⁾	l/s	53	158	389
	m ³ /hr	190	570	1400
	cfm	112	335	824
Connections	Inlet	4x 12mm	4x 12mm	4x 12mm
		4x 1/2"	4x 1/2"	4x 1/2"
	Outlet	12mm	20mm	20mm
		1/2"	3/4"	3/4"
Weight	kg	2,7	3,6	14,8
	lbs	6,0	7,9	32,6
Dimensions	Length (mm)	215	345	432
	Length (inch)	8,46	13,58	17,01
	Width (mm)	257	282	495
	Width (inch)	10,12	11,10	19,49
	Height (mm)	500	654	989
	Height (inch)	19,69	25,75	38,94
Service life for filter ⁽³⁾		4,000 Operating Hrs	4,000 Operating Hrs	4,000 Operating Hrs

- 15ppm is generally well below the acceptance level for disposal in the sewage, but due to strongly varying international and local regulations, it is the user's responsibility to consult local waste water discharge regulations and ensure compliance.
- In tropical climates (high ambient temperatures and humidity levels), the air generally contains more water vapor. The extra condensate, generated during the compression and cooling process of the air, shortens the contact time in the device, leaving less time for the media to absorb the oil. Climatic conditions used in the table above are defines as follows:
 - Cold climate conditions: average ambient temperature of 20°C/ 68°F- relative humidity of 50 %
 - Normal climate conditions: average ambient temperature of 25°C/ 75°F - relative humidity of 50%
 - Hot climate conditions: average ambient temperature of 35°/ 95°F - relative humidity of 70 %
- Pneumatech assumes as well maintained compressor plant and reasonable operating conditions. Performance on mineral or mineral-based lubricants should be as above, irrespective of compressor type, condensate drain technology or climate, provided the condensate produced is not a stable emulsion.

OWS 75 - 5000 - Oil Water Separators

Features & Benefits

- ▶ Stable and reliable performance thanks to patented multistage filtration technology
 - Filtering all types of condensate & most condensate emulsions
 - No use of rotating equipment
 - No risk of spillage thanks to large capacity chamber design
- ▶ Eliminating all potential health issues
 - No standing or stagnant water
 - Optional anti-bacteria kit
- ▶ Accurate and quick indication of filter replacement thanks to maintenance indicator, blockage indicator and sampling kit
- ▶ DIBT certified
- ▶ Hassle-free maintenance with genuine service kits



General Specifications

- ▶ Oil Water Separator
- ▶ Designed outlet oil content : 15 mg/l
- ▶ Flow range at mild ambient conditions:
127-8500 m³/hr/ 75-5003 cfm

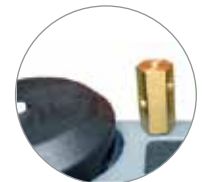
Options:



Low temperature kit



Photo Electric sensor & switch



Multiple inlet manifold



Anti-Bactria Kit



Pneumatech offers a patented way to turn oily condensate into harmless water that can be drained away, while capturing the oil to be easily disposed of in an environmentally friendly manner. The multi-stage separation process, using both buoyant oleophilic filters and activated carbon ensures exceptional performance, lower disposal costs and trouble free operation.

The OWS range eliminates oil through multi-stage filtration rather than the conventional gravity systems which have limitations on the type of condensate that can be treated. As a result, the OWS separator capacity is not linked to the type of emulsion collected since it can treat the same volume of condensate whether saturated with mineral oil, semi-synthetic oil or polyglycol.

Technical specifications for OWS 75 – OWS 5000										
Installation Type	Pneumatech Variant → Specifications ↓	Units	OWS 75	OWS 200	OWS 300	OWS 750 ⁷	OWS 1280 ⁷	OWS 1750 ⁷	OWS 2500 ⁷	OWS 5000 ⁷
Complete installation ⁽¹⁾ With Dryer ⁽²⁾	Cold Climate ³	m ³ /hr ⁽⁶⁾	234	649	972	2396	4142	5583	7996	15993
		cfm ⁽⁶⁾	138	382	572	1410	2438	3286	4706	9413
	Mild Climate ⁴	m ³ /hr ⁽⁶⁾	127	342	522	1279	2180	2972	4251	8500
		cfm ⁶	75	201	307	753	1283	1749	2502	5003
	Hot Climate ⁵	m ³ /hr ⁽⁶⁾	61	161	251	612	1045	1441	2052	4123
		cfm ⁽⁶⁾	36	95	148	360	615	848	1208	2427
Complete installation ⁽¹⁾ Without Dryer ⁽²⁾	Cold Climate ³	m ³ /hr ⁽⁶⁾	379	1009	1495	3728	6483	8682	12428	24840
		cfm ⁽⁶⁾	223	594	880	2194	3816	5110	7315	14620
	Mild Climate ⁴	m ³ /hr ⁽⁶⁾	161	425	630	1566	2737	3673	5241	10483
		cfm ⁽⁶⁾	95	250	371	922	1611	2162	3085	6170
	Hot Climate ⁵	m ³ /hr ⁽⁶⁾	71	178	272	685	1189	1585	2270	4538
		cfm ⁽⁶⁾	42	105	160	408	700	933	1336	2671
Connections	inlet (BSP/NPT)		1x1/2"	2x1/2"	2x1/2"	2x3/4"	2x3/4"	2x3/4"	2x3/4"	2x3/4"
	outlet (BSP/NPT)		1x1/2"	1x1/2"	1x1/2"	1x3/4"	1x3/4"	1x3/4"	1x3/4"	1x1"
Dimensions	Length	mm	470	680	680	750	750	945	945	945
		inch	18,5	27	27	30	30	37	37	37
	Width	mm	165	255	255	546	546	650	695	1185
		inch	6,5	10	10	21,5	21,5	26	27	47
	Height	mm	610	762	762	889	1041	1092	1092	1092
		inch	24	30	30	35	41	43	43	43
	Weight	kgs	4	13	15	25	26	28	30	60
		lbs	9	29	33	55	57	62	66	132

1. Complete installation includes filters & air receiver.
2. All capacities are based on outlet oil content of 15 ppm and 12h operation. Derating needs to be proportionally applied.
3. Cold climate refers to ambient temperature of 15°C/ 59°F and relative humidity of 60%.
4. Mild climate refers to ambient temperature of 25°C/ 77°F and relative humidity of 60%.
5. Hot climate refers to ambient temperature of 35°C/ 95°F and relative humidity of 70%.
6. For poly-glycol based condensates, the capacity of each unit should be halved.
7. OWS -750 and larger are 3 tower units.

Note: Capacity is based on the compressor running at 7 barg / 100 psig for 12 hours per day, with all condensate from the compressor, the air receiver, the filters and fridge dryer being piped into the unit.

CA - Air cooled aftercoolers

Features & Benefits

- ▶ Highly efficient axial fans
- ▶ Cooling down to 10°C/18°F above ambient
- ▶ Negligible pressure drop
- ▶ Robust construction and compact design
- ▶ Easy to dismantle for cleaning

General Specifications

- ▶ Air cooled aftercooler
- ▶ Max. operating pressure: 15 barg / 218 psig
- ▶ Operating temperature: 170°C / 338°F
- ▶ Approach above ambient temperature: 10°C / 18°F
- ▶ Flow Rate: 66 to 4500 Nm³/hr (39 to 2649 cfm)



Compressed air will always be 100% saturated with water when it leaves a compressor. But also the outlet temperature has an important influence on the water load downstream the compressor. In order to minimize the load – and thus size – of the downstream refrigeration or adsorption dryer, it is therefore recommended to install a highly efficient aftercooler between the compressor and the dryer.

axial fan with supreme efficiency. The fan forces ambient air over the copper tubes and aluminum fins of the heat exchanger. Hence the compressed air is cooled down to only 10°C/18°F above ambient temperature.

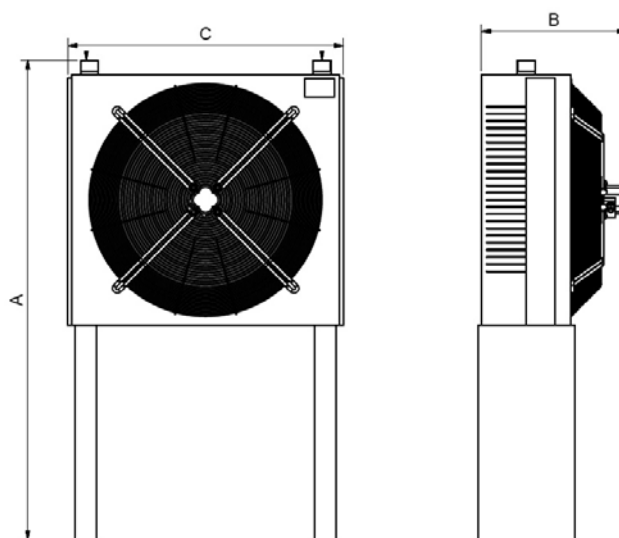
In this way, the CA is a simple product, but with a major impact on the investment and lifecycle cost of your downstream equipment!

Pneumatech's air cooled aftercoolers CA 1-14 consist of a reliable

Technical specifications for air cooled aftercoolers CA 1-14

Pneumatech Variant → Specifications ↓	Units	CA 1	CA 2	CA 3	CA 4	CA 5	CA 6	CA 7	CA 8	CA 9	CA 10	CA 11	CA 12	CA 13	CA 14
Flow ⁽¹⁾	m ³ /hr	66	126	222	294	390	522	774	990	1260	1560	1890	2520	3090	4500
	cfm	39	74	131	173	230	307	456	583	742	918	1112	1483	1819	2649
Connections	inch	G1"	G1"	G1 1/2"	G1 1/2"	G2"	G2"	G2"	G2 1/2"	DN100	DN100	DN100	DN100	DN125	DN125
Power Supply	Ph / VAC / Hz	1/230/50	1/230/50	3/400/50	3/400/50	3/400/50	3/400/50	3/400/50	3/400/50	3/400/50	3/400/50	3/400/50	3/400/50	3/400/50	3/400/50
Fan	Ø mm -W	Ø250-45W	Ø250-45W	Ø350-110W	Ø400-130W	Ø500-540W	Ø500-540W	Ø630-370W	Ø630-370W	Ø800-1470W	Ø800-1470W	Ø800-1470W	Ø800-1470W	2xØ800-1470W	2xØ800-1470W
Dimensions	A (mm)	850	850	990	990	1175	1175	1325	1325	1800	1800	1800	2000	2090	2300
	A (inch)	33.5	33.5	39.0	39.0	46.3	46.3	52.2	52.2	70.9	70.9	70.9	78.7	82.3	90.6
	B (mm)	300	300	310	310	440	440	490	490	660	660	790	795	830	850
	B (inch)	11.8	11.8	12.2	12.2	17.3	17.3	19.3	19.3	26.0	26.0	31.1	31.3	32.7	33.5
	C (mm)	715	715	845	845	980	980	1130	1130	1590	1590	1560	1740	1850	2010
	C (inch)	28.1	28.1	33.3	33.3	38.6	38.6	44.5	44.5	62.6	62.6	61.4	68.5	72.8	79.1
Weight	Kg	19	20	27	29	44	48	61	66	127	143	148	166	212	315
	Lbs	41.9	44.1	59.5	63.9	97.0	105.8	134.5	145.5	280.0	315.3	326.3	366.0	467.4	694.5

1. Flow refers to 1 barg and 20°C at 7 barg operating pressure.



Note : In- and outlet connections can be chosen freely in the 4 corners of the heat exchanger

CW 1 - 17 - Water cooled aftercoolers

Features & Benefits

- ▶ Close temperature approach thanks to counter-current heat exchange
- ▶ Robust shell-and-tube design: stainless steel tubes within coated shell
- ▶ Negligible pressure drop
- ▶ Compact design
- ▶ Detailed calculations available on request

General Specifications

- ▶ Water cooled aftercooler
- ▶ Operating pressure of compressed air: 0-16 barg / 0-232 psig
- ▶ Operating temperature of compressed air: 2-200°C / 35-392°F
- ▶ Flow Rate: 132 to 45570 Nm³/hr / 78 to 26821 cfm

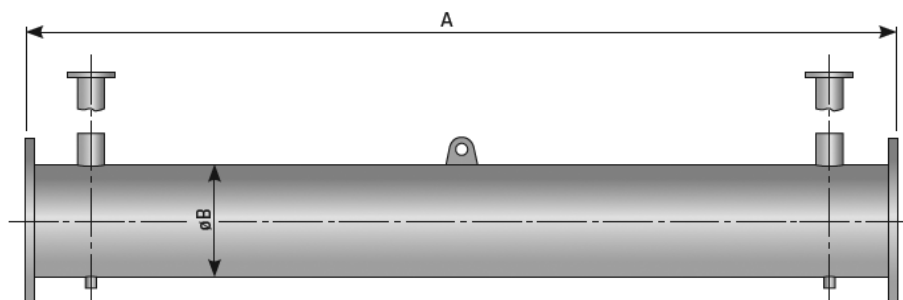


Compressed air will always be 100% saturated with water when it leaves a compressor. But also the outlet temperature has an important influence on the water load downstream the compressor. In order to minimize the load – and thus size – of the downstream refrigeration or adsorption dryer, it is therefore recommended to install a highly efficient aftercooler between the compressor and the dryer.

Pneumatech's water cooled aftercoolers CW 1-17 are robust shell-and-tube heat exchangers with excellent efficiency. Hot compressed air or gas passes through the stainless steel tubes while cooling water flows in counter-current around the tubes. This results in a minimal temperature difference between the outgoing compressed air and the incoming cooling water. Detailed design calculations are available on request.

Technical specifications for CW 1-17																		
Pneumatech Variant → Specifications ↓	Units	CW 1	CW 2	CW 3	CW 4	CW 5	CW 6	CW 7	CW 8	CW 9	CW 10	CW 11	CW 12	CW 13	CW 14	CW 15	CW 16	CW 17
Flow ⁽¹⁾	m ³ /hr	132	235	367	661	955	1323	2205	3087	3969	7056	8967	11025	16170	22050	26460	33810	45570
	cfm	78	138	216	389	562	779	1298	1817	2336	4153	5278	6489	9517	12978	15574	19900	26821
Connections Air side	inch	DN 50	DN 50	DN 50	DN 50	DN 50	DN 80	DN 80	DN 125	DN 125	DN 200	DN 200	DN 250	DN 300	DN 400	DN 400	DN 450	DN 500
Connections Water side	inch	DN 20	DN 20	DN 20	DN 20	DN 20	DN 20	DN 20	DN 32	DN 32	DN 50	DN 65	DN 80	DN 80	DN 100	DN 150	DN 200	DN 200
Operating Pressure	barg	0-16	0-16	0-16	0-16	0-16	0-16	0-16	0-16	0-16	0-16	0-16	0-10	0-10	0-10	0-10	0-10	0-10
	psig	0-232	0-232	0-232	0-232	0-232	0-232	0-232	0-232	0-232	0-232	0-232	0-232	0-232	0-232	0-232	0-232	0-232
Dimensions	A (mm)	806	816	816	870	870	1500	1510	1300	1300	1300	1300	1300	1300	1300	1300	1300	1300
	A (inch)	31.7	32.1	32.1	34.3	34.3	59.1	59.4	51.2	51.2	51.2	51.2	51.2	51.2	51.2	51.2	51.2	51.2
	B (mm)	60.3	60.3	60.3	60.3	60.3	88.9	88.9	139.7	139.7	219	219	273	323.9	406	406	457	508
	B (inch)	2.4	2.4	2.4	2.4	2.4	3.5	3.5	5.5	5.5	8.6	8.6	10.7	12.8	16.0	16.0	18.0	20.0

1. Refers to 1 barg and 20°C at 7 barg operating pressure and inlet temperature of 120°C.



The importance of defining the right purity

Purity has a substantial impact on the sizing and the energy efficiency of a gas generator. In order to increase purity, air needs to stay longer in contact with the adsorbent, meaning that the outlet flow needs to be reduced substantially.

It is thus very important to define the right purity for the right application. High purity levels are often recommended by gas companies to make the business case for on-site gas generators look worse and to defend their own business. There are however few applications requiring purity levels above 99,9% nitrogen purity.