

Filtration | CLEARPOINT[®] W water separator

CLEARPOINT[®] W water separator Highest separation rate, lower costs

Everything in flux: flow-optimised condensate separation

When compressed air is used for cooling in after coolers of compressors or in refrigeration dryers, the water produces condensate. If this water is not removed from the compressed air system, then expensive consequential damage can result: Pipes corrode, pneumatic valves, cylinders and tools wear prematurely and the performance capability of the compressed air system is lowered. The result is poor process safety and rising costs for compressed air technology.

Flow without resistance

The CLEARPOINT[®] W water separator from **BEKO** TECHNOLOGIES extracts the condensate economically from compressed air. Decisive is the reduction of the flow resistance. The lower the flow resistance, the lower the operating costs.

The CLEARPOINT[®] W operates with an extremely low pressure difference and achieves the highest separation percentages.

Highest possible separation percentages

Another benefit is the intelligent housing design. The characteristics of the interior of the housing, with the swirl insert disc developed by **BEKO** TECHNOLOGIES. The innovative rectifier, enable an increase for the homogeneous velocity profile at different volume flow rates with the highest separator performance. In contrast to conventional cast housings, the CLEARPOINT[®] W water separator consists of highly compressed, smooth and seawater-resistant anodised aluminium. The reliable corrosion protection prevents a change in the housing inside surface over the complete service life of the CLEARPOINT[®]W.

> Energy efficiency

- Flow-optimised construction
- > Extremely low pressure difference
- Effective corrosion protection

> Process safety

- Process-safe particle and condensate separation
- Over 99% separation percentage in one wide performance range
- Optimal combinable with intelligent BEKOMAT[®] condensate drain

> Validated quality





CLEARPOINT[®] W with threaded filter connection



Connection of (1)

The connections are adapted to the pipe dimensions of the compressors. The flow-optimised inlet leads to a reduced through flow resistance.

Internal spinner insert (2)

After the compressed air has entered the CLEARPOINT[®] W, it then comes into contact with special internal spinner insert disc which sets the incoming air flow into a high-speed rotational movement. The consequence: The outwardly aligned centrifugal forces hurl the condensate droplets onto the separator wall, from where they flow downwards into the collection space.

Effective corrosion protection (3)

Accumulating condensate is almost always aggressive and leads to corrosion on unprotected surfaces. CLEARPOINT[®] W-filter housings are manufactured from seawater resistant aluminium, additionally completely anodised and powder coated on the outside. Corrosion is effectively and permanently prevented.

More safety (4)

The secure locking mechanism provides 100% control when opening the filter housing. If the housing is opened under pressure, then a warning signal sounds. Furthermore, it prevents a release with vibrations.

Rising pipe (5)

A specially designed rising pipe prevents particle transfer to the upwards aligned rotational flow of largely condensate-free compressed air.

Rectifier (6)

The innovative rectifier directs the compressed air to the outlet and reduces flow losses to a minimum.

Shielded collection space (7)

The shielding of the collecting space, by dividing the separator, calms the air flow in this area. This effectively prevents swirling and entrainment of already separated condensates.

BEKOMAT® (8)

More than 60% of the condensate already falls into the water separator. The electronic level-controlled BEKOMAT[®] ensures reliable discharge.





	Water separator (threaded version)										Water separator (flange design)									
Model:	S040	S050	S075	M010	M015	M020	M022	M025	M030	L080	L100	L102	L150	L156	L200	L204	L254	L304		
Connection (inches)	3/8 (1/2)**	1/2	3/4 (1)**	1	1 1/2 (2)**	2	2	2 1/2 (3)**	3	DN80	DN100	DN100	DN150	DN150	DN200	DN200	DN250	DN300		
Volume flow rate at 7 bar [ü]* (m³/h)	46	130	195	325	545	1015	1325	2100	3120	1580	3160	4740	6320	11060	12640	15800	22120	34680		
Max. operating pressure (bar [g])	16 1															10 (1	10 (16 bar optional available)			
Pressure difference (bar)	ø 0,06																			
Volume (l)	0.25	0.31	0.87	1.12	2.52	3.40	4.23	13.88	19.51	12.5	27.6	40.5	57.5	82.1	147	196	380	650		
Weight (kg)	0.75	0.85	1.70	2.10	4.10	5.10	6.10	19.90	25.90	23	42	53	75	95	140	155	210	330		
Class according to DGRL 2014/68/EU Fluid group 2	_	_	_	_	_	I	I	11	11	I	11	11	11	111	111	IV	IV	IV		
Dimensions																				
A (mm)	75	75	100	100	146	146	146	260	260	370	480	480	535	535	700	700	800	900		
B (mm)	28	28	34	34	48	48	48	77	77	126	166	198	212	222	278	288	332	370		
C1 (mm)	395	425	495	565	580	683	780	886	1010	915	1135	1195	1515	1625	1995	2015	2375	2725		
C2 (mm)	180	210	280	350	365	468	565	671	895	700	910	970	1290	1310	1680	1700	2070	2420		
D (mm)	150	150	150	150	160	160	160	200	200	325	315	480	480	470	465	450	450	430		

*At a deviating operating pressure please multiply the indicated volume flow at 7 bar by the corresponding correction factor. **Available as an option, same price standard connection.

* In case of deviating operating pressure, please multiply the stated volume flow with the corresponding correction factor.

bar [ü]	0.3	0.6	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Correction factor	0.21	0.29	0.38	0.53	0.65	0.76	0.84	0.92	1	1.07	1.13	1.19	1.25	1.31	1.36	1.41	1.46	1.51

The Complete Concept for Individual Requirements: CLEARPOINT[®]-compressed-air filter, water separator and discharge



The CLEARPOINT[®] compressed-air filter is a part of the integrated whole concept for professional compressed air processing. It provides you with all the benefits from BEKO TECHNOLOGIES for more efficiency and added-value capabilities for function-optimised components in conjunction with compromise-free quality.

Higher performance under high pressure

CLEARPOINT®high-pressure filters are available for an operating pressure of up to 50 bar as well as for 100 to 500 bar. The construction of the filter housing is designed in every detail for the special challenges in high pressure systems and ensures optimum separation efficiency.

Visit us at



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Efficient condensate management

CLEARPOINT[®] water separators for use on after coolers and refrigeration dryers achieve an efficiency of up to 99% over a wide volume due to their flow-optimised design. As a result, they guarantee the highest possible separation percentages at the lowest cost.

Optimal in double pack

The electronic level-controlled BEKOMAT[®] 20 FM condensate drain has been specially designed for use in connection with CLEARPOINT[®] compressed-air filters. In addition to the well-known reliable separation functions of a BEKOMAT[®], this results in additional benefits such as an integrated filter service life time monitoring or transmission of fault indications via a potential-free contact.



