



BEKO Products

CLEARPOINT W



Filtration



CLEARPOINT

WATER SEPARATOR

ENSURING PROCESS RELIABILITY AND FLOW OPTIMIZATION





Everything is in flow: Optimised condensate separation

When compressed air cools down in the aftercoolers of compressors, or in refrigeration dryers, condensed moisture is a by-product. This can lead to costly consequential damage: pipes corrode, pneumatic valves, cylinders and tools wear prematurely, and the efficiency of the compressed air system is reduced. This results in increasing costs for the compressed air technology, and in reduced process efficiency.

Flow without resistance

CLEARPOINT W from BEKO removes the condensate from compressed air - with a high separation efficiency, and in a cost-effective manner. Flow resistance is decisive in this respect. With a share of more than 90%, it has a major influence on the cost profile of a water separator. The lower the flow resistance is, the lower the operating costs are. For this reason, CLEARPOINT W water separators are designed to

deliver the lowest flow resistance possible under all conditions.

Highest separation rates

Another benefit is the intelligent housing construction of the threaded filters. The characteristics of the inside of the housing, with the swirl disc developed by BEKO and the innovative rectifier, enables the development of a homogeneous velocity profile at varying flow rates.

Because of this technology advantage, CLEARPOINT W achieves the highest separation rates. Moreover, in contrast to conventional cast housings with rough surfaces that are not protected against corrosion, our CLEARPOINT W housing consists of high density smooth, and saltwater proof anodised aluminium pressure & die castings.

+ The advantages at a glance

Process reliable particle and condensate separation

99% separation rate over a broad range of performance

Effective corrosion protection

Flow optimised construction

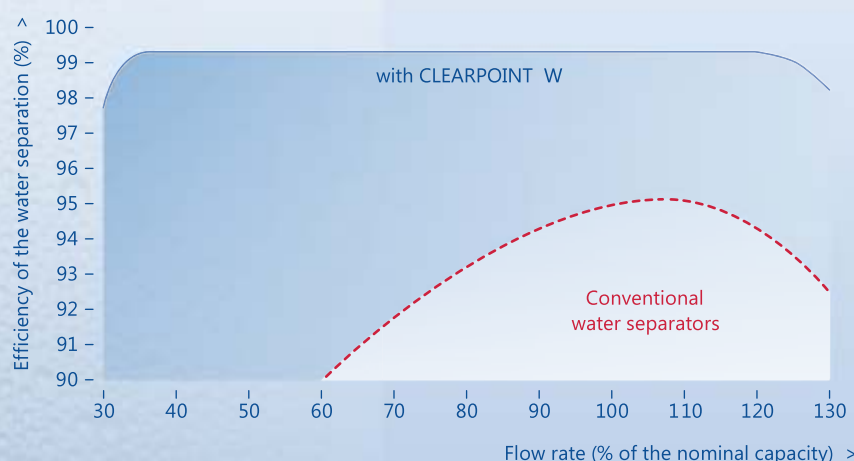
Very low pressure difference

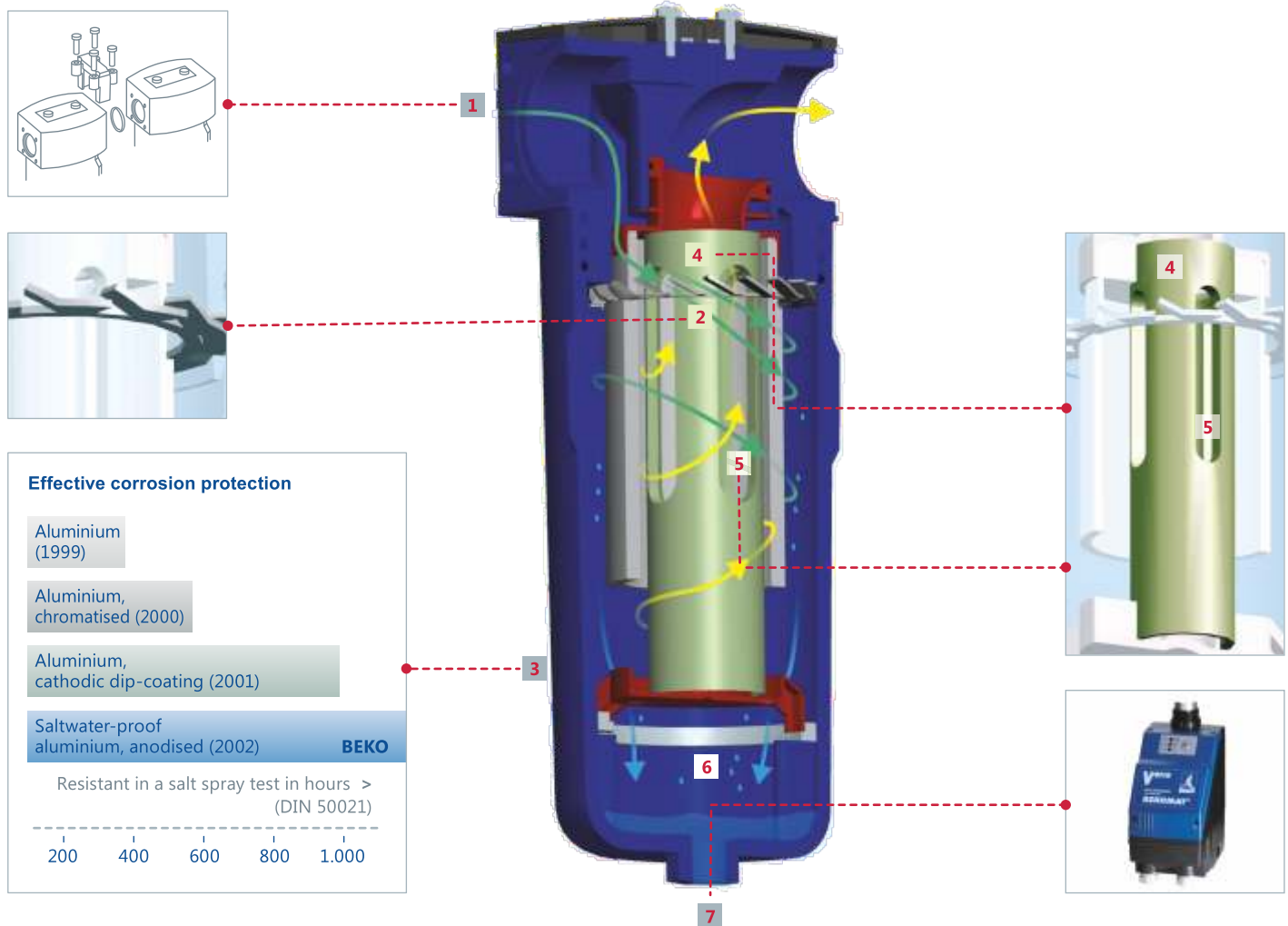
BEKOMAT® for optimum condensate drainage



Efficiency CLEARPOINT W water separators

Through the flow optimised design, an efficiency of up to 99% is achieved over a broad range of performance. This results in the highest separation rates at the lowest costs.





Effective corrosion protection

Aluminium
(1999)

Aluminium,
chromatised (2000)

Aluminium,
cathodic dip-coating (2001)

Saltwater-proof
aluminium, anodised (2002)

BEKO

Resistant in a salt spray test in hours >
(DIN 50021)

200 400 600 800 1.000

CLEARPOINT W with a threaded filter connection

1 Connections

The connections are perfectly matched to the outlet of the compressor. The flow-optimised inlet leads to reduced flow resistance.

2 Internal swirl insert

When the compressed air has entered the CLEARPOINT W separator housing, it reaches a special internal swirl insert that makes the entering compressed air flow experience a special rotary motion with high velocity. The consequence: the outwardly directed rotational forces lead the condensate droplets to the separator wall, from where they flow into the collecting zone.

3 Effective corrosion protection

Condensate accumulating during compressed air filtration is almost always aggressive, so that unprotected housings corrode. CLEARPOINT W filter housings are made of saltwater proof aluminium and, in addition, are fully anodised and their outside is powder coated.

4 Rising pipe

A specially designed rising pipe avoids particle transfer to the upwardly directed rotational flow of the already purified compressed air.

5 Rectifier

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

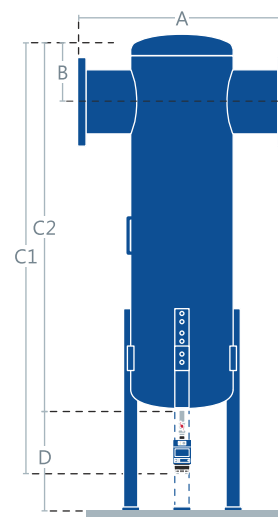
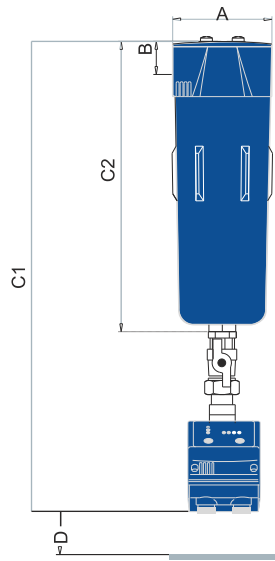
6 Shielded collecting zone

The shielding of the collecting zone settles the air flow in this area in order to effectively avoid the dispersion and re-entrainment of already separated liquids.

7 BEKOMAT®

More than 60% of the total amount of condensate already accumulates in the water separator. The electronically level controlled BEKOMAT® ensures reliable drainage.

CLEARPOINT Water separator



Threaded filters (SI040 – MI022)

Flanged filters (L065 – L304)

Model	SI040	SI050	SI075	MI010	MI015	MI020	MI022	L065	L080	L100	L102	L150	L156	L200	L204	L254	L304
Connection (In-Out)	¾"	½"	¾"	1"	1½"	2"	2"	DN65	DN80	DN100	DN100	DN150	DN150	DN200	DN200	DN250	DN300
Volume flow (m³/h)	46	130	195	325	545	1015	1325	1420	1580	3160	4740	6320	11060	12640	15800	22120	34680
Volume (l)	0.30	0.40	1.10	1.40	3.10	4.20	5.12	12.5	12.50	27.60	40.50	57.50	82.1	147	196	380	650
Weight (kg)	0.80	0.90	1.90	2.30	4.75	5.30	6.65	21	23	42	53	75	95	140	155	210	330
Category in accordance with PED97/23/EC	–	–	–	–	–	I	I	I	I	II	II	II	III	III	III	IV	IV

Dimensions in mm

A	75	75	100	100	146	146	146	360	370	480	480	535	535	700	700	800	900
B	28	28	34	34	48	48	48	126	126	166	198	212	222	278	288	332	370
C1	407	437	507	575	586	691	789	915	915	1135	1195	1515	1625	1995	2015	2375	2725
C2	192	222	292	360	371	476	574	700	700	910	970	1290	1310	1680	1700	2070	2420
D	150	150	150	150	160	160	160	325	325	315	480	480	470	465	450	450	430

Standard with

Condensate drain	BEKOMAT® 20	BEKOMAT® Vario 20	BEKOMAT® 14	BEKOMAT® 16
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Flow enhanced housing made of saltwater proof aluminium or steel | The outside is additionally powder coated |
Max. operating pressure 16 bar | Difference pressure ≤ 0,06 bar

At a different operating pressures, please multiply the indicated volume flow by the corresponding correction factor.

bar	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



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