

BOGE cyclone separator

Maximum flexibility for increased efficiency

BOGE Z-2 series high-performance cyclones operate according to the principle of inertia to efficiently and reliably remove large quantities of liquids from compressed air in the form of droplets or wall flow.

Their innovative design delivers optimised flow control with the lowest possible pressure losses at outstanding efficiencies of up to 99% – guaranteed to keep operating costs constantly low.

The Z-2 series has been designed for use between intercoolers and aftercoolers, buffer tanks which handle large quantities of condensate or to protect downstream coalescing filters from heavy fluid contamination.

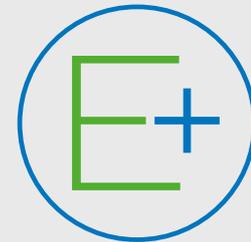


**MAXIMUM
EFFICIENCY**



Designed for efficiency

Efficient pre-separation ensures reliable elimination of condensate and solid particles from compressed air. Guaranteed efficiency factors of between 92% and 99% – based on particles sizes of $>10\ \mu\text{m}$ – ensure excellent results. In addition, a nominal power range of 25% to 125%, even for speed-controlled, continuously variable compression, guarantee highly effective performance.



Certified for use with foodstuffs

According to the Food Contact Materials – Regulation (EC) 1935/2004, all BOGE cyclone separators and 2nd generation BOGE filters have an exemption certificate from applicable EU regulations. They are all certified for use in sensitive applications, meaning they are suitable for use in the drinks, food and pharmaceutical industries.



Cleverly combined

The combination of cyclone separator with up to two filters without cross-section constriction makes the assembly with a wall bracket and/or coupling kit more space-saving and simple than ever. As an option, the cyclone separator can also be fitted with a BEKOMAT or CCD electronically level-controlled condensate drain to discharge the condensate safely and without any drop in pressure.



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The highest quality in every detail

A black powder epoxy coating protects the cyclone separator housing made of high-quality chromate-coated aluminium, meaning it will stay protected against corrosion even over several years.

BOGE cyclone separators strike the perfect balance between air quality and efficiency, guaranteeing optimum water separation at minimum operating costs.



Specially widened housing inflow with 90° angle to optimise flow

Separator insert for guaranteed efficiency of $\geq 92\%$

Housing made of chromate-coated aluminium with 10-year guarantee against housing corrosion

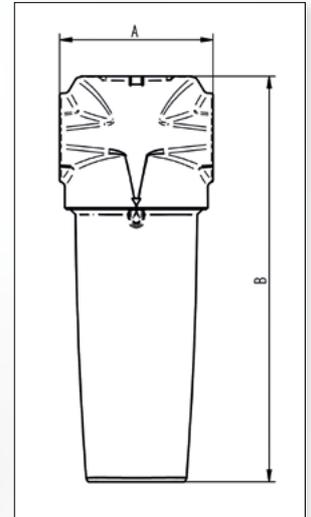
Overview of cyclone separator according to ISO 228-1:2000

Five different sizes of BOGE cyclone separator housing are available.

A wide range of connection sizes between 1/2- 3" guarantee maximum flexibility.

BOGE model	Flow rate ¹⁾ m ³ /min at				Connection	Weight kg	Dimensions in mm	
	7 bar	8 bar	10 bar	13 bar			A	B
Z 6-2 A	0.6	0.64	0.71	0.79	1/2"	0.6	76	180
Z 24-2 A	2.4	2.55	2.82	3.16	1/2"	1.2	89	238
Z 24-2 B	2.4	2.55	2.82	3.16	3/4"	1.2	89	238
Z 66-2 C	6.6	7.02	7.76	8.68	1"	2.2	120	277
Z 66-2 D	6.6	7.02	7.76	8.68	1 1/2"	2.7	120	277
Z 210-2 D	21.0	22.34	24.71	27.63	1 1/2"	6.9	164	440
Z 210-2 E	21.0	22.34	24.71	27.63	2"	7.3	164	440
Z 210-2 F	21.0	22.34	24.71	27.63	2 1/2"	7.1	164	440
Z 480-2 G	48.0	51.06	56.47	63.16	3"	15.3	192	517

¹⁾ At +20°C and 1 bar absolute pressure.



Classification according to connection size

Label	A	B	C	D	E	F	G
Compressed air connection	G 1/2	G 3/4	G 1	G 1 1/2	G 2	G 2 1/2	G 3

Conversion factor f at different operating pressures

Operating pressure [bar]	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Correction factor [f]	0.25	0.38	0.50	0.63	0.75	0.88	1.00	1.06	1.12	1.17	1.22	1.26	1.32	1.37	1.41	1.47

Example: Pressure [P]: 8 bar; Volumetric flow rate [V]: 4.8 m³/min, Correction factor [f]: 1.06

$$\frac{\text{Volumetric flow rate [V]} \ 4.8 \text{ m}^3/\text{min}}{\text{Correction factor [f]} \ 1.06} = 4.53 \text{ m}^3/\text{min} \rightarrow \text{Z 66-2}$$