

Condensate technology | BEKOMAT® 12 | 13 | 14 | 16

Cost-effective and reliable: volume-controlled condensate discharge with the BEKOMAT®

During compressed air generation and processing, the optimum quality for the application should be achieved. It is important to remove contaminants and humidity from the compressed air as these can lead to quality problems, failures or loss of production.

Condensate discharge without compressed air loss

The BEKOMAT® drains off condensate without loss of compressed air, thus reducing energy costs and CO₂ emissions. This is made possible by the integrated capacitive sensor, smart electronics for volume-controlled condensate discharge and a proven pilot-controlled solenoid valve with a special discharge diaphragm.

Suitable models for all applications

The standard model is made in corrosion-resistant aluminium, making the BEKOMAT® particularly reliable and sturdy. A special silver-coloured coating protects the outside of the housing. For oil-free or aggressive condensate, we recommend the BEKOMAT® hard coated models that come in a in a glass bead blasted housing with a high-grade hard coating.



Aluminium
Standard model

CO - hard-coated housing
for oil-free and aggressive
condensates

› No loss of compressed air during draining

- › Low operating costs

› Outstanding reliability

- › Durable and resistant to dirt
- › Large valve diameters prevent the formation of emulsions
- › No delicate mechanical components
- › Suitable for up to +60 °C and 63 bar (gauge)

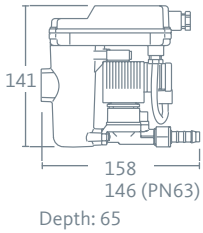
› Easy to install and virtually maintenance-free

- › Versatile connection options

› Automated operation and monitoring

- › Ready for integration into modern system monitoring installations
- › Automatic start of self-cleaning process based on dirt load

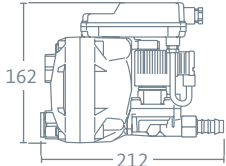
Dimensions in mm



Depth: 65

Technical data	BEKOMAT® 12		BEKOMAT® 12 CO			BEKOMAT® 12 CO PN 63	
Max. compressor capacity*	■ 8 m³/min ▲ 6.5 m³/min ● 4 m³/min						
Max. refrigeration dryer performance*	■ 16 m³/min ▲ 13 m³/min ● 8 m³/min						
Max. filter performance*	■ 80 m³/min ▲ 65 m³/min ● 40 m³/min						
Min./max. operating pressure	0.8 ... 16 bar (gauge)					1.2 ... 63 bar (gauge)	
Housing	aluminium		aluminium, hard-coated				
Diaphragm	FKM					FKM	
Ambient temperature	+1 °C ... +60 °C						
Weight (empty)	0.8 kg					0.9 kg	
Condensate inlet	1 x G½ (inside) [optional: NPT thread]						
Condensate discharge	1 x G¾ (outside); hose connector, hose Ø = 10-13 mm (inside)						
Operating voltage	230 / 200 / 115 / 100 / 48 / 24 VAC ± 10%, 50 ... 60 Hz / 24 VDC ± 10%						
Power consumption	P < 8.0 VA (W)						
Protection class	IP 65						
Wire cross-section (mains connection)	recommended 3 x 0.75 ... 1.5 mm² (AWG 16 ... 18)						
Protection	recommended for AC: 1 A slow / mandatory for DC: 1 A slow						
Contact load	max. AC 250 V, DC 30 V / 1A; min. DC 5V / 10 mA						
Condensate	oil-contaminated condensate		oil-contaminated condensate; oil-free, potentially aggressive condensate				
Discharge performance							
Operating pressure bar (gauge)	1 bar	2 bar	3 bar	4 bar	5 bar	6 bar	> 7 bar
Max. discharge rate (short-term) l/h	20	23	27			30	
Ø discharge rate l/h	0.95	1.10	1.29			1.43	

Dimensions in mm

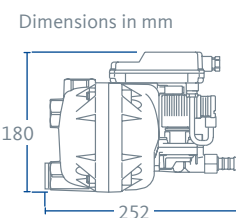


Depth: 93
Depth: 197 (PN25 | 40 | 50)

Technical data	BEKOMAT® 13		BEKOMAT® 13 CO			BEKOMAT® 13 CO PN 25 40 50	
Max. compressor performance*	■ 35 m³/min ▲ 30 m³/min ● 20 m³/min						
Max. refrigeration dryer performance*	■ 70 m³/min ▲ 60 m³/min ● 40 m³/min						
Max. filter performance*	■ 350 m³/min ▲ 300 m³/min ● 200 m³/min						
Min./max. operating pressure	0.8 ... 16 bar (gauge)					1.2 ... 25 or 40 bar or 50 bar (gauge)	
Housing	aluminium		aluminium, hard-coated				
Diaphragm	FKM					FKM	
Ambient temperature	+1 °C ... +60 °C						
Weight (empty)	2 kg					2.2 kg	
Condensate inlet	2 x G½ (inside) [optional: NPT thread]						
Condensate discharge	1 x G½ (outside); hose connector, hose Ø = 13 mm (inside)					1 x G¾ (inside); hose connector, hose Ø = 13 mm (inside)	
Operating voltage	230 / 200 / 115 / 100 / 48 / 24 VAC ± 10%, 50 ... 60 Hz / 24 VDC ± 10%						
Power consumption	P < 8.0 VA (W)						
Protection class	IP 65						
Wire cross-section (mains connection)	recommended 3 x 0.75 ... 1.5 mm² (AWG 16 ... 18)						
Protection	recommended for AC: 1 A slow / mandatory for DC: 1 A slow						
Contact load	max. AC 250 V, DC 30 V / 1A; min. DC 5V / 10 mA						
Condensate	oil-contaminated condensate		oil-contaminated condensate; oil-free, potentially aggressive condensate				
Discharge performance							
Operating pressure bar (gauge)	1 bar	2 bar	3 bar	4 bar	5 bar	6 bar	> 7 bar
Max. discharge rate (short-term)** l/h	50	60	80	90	100	120	
Ø discharge rate l/h	3.17	4.12	5	5.7	6.35	7.61	

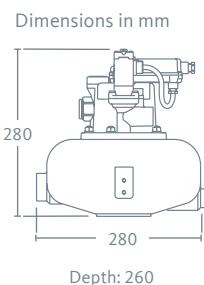
* For more information on climate zones (■ | ▲ | ●) see reverse
** Short-term peak volume can only be achieved if the device is correctly installed according to the operating manual.
If in doubt, install a venting line.

Technical data	BEKOMAT® 14		BEKOMAT® 14 CO			BEKOMAT® 14 CO PN 25	
Max. compressor capacity*	■ 150 m³/min ▲ 130 m³/min ● 90 m³/min						
Max. refrigeration dryer performance*	■ 300 m³/min ▲ 260 m³/min ● 180 m³/min						
Max. filter performance*	■ 1500 m³/min ▲ 1300 m³/min ● 900 m³/min						
Min./max. operating pressure	0.8 ... 16 bar (gauge)					1.2 ... 25 bar (gauge)	
Housing	aluminium		aluminium, hard-coated				
Diaphragm	FKM					FKM	
Ambient temperature	+1 °C ... +60 °C						
Weight (empty)	2.9 kg					3.1 kg	
Condensate inlet	3 x G¾ (inside) [optional: NPT thread]						
Condensate discharge	1 x G½ (outside); hose connector, hose Ø = 13 mm (inside)					1 x G¾ (inside); hose connector, hose Ø = 13 mm (inside)	
Operating voltage	230 / 200 / 115 / 100 / 48 / 24 VAC ± 10%, 50 ... 60 Hz / 24 VDC ± 10%						
Power consumption	P < 8.0 VA (W)						
Protection class	IP 65						
Wire cross-section (mains connection)	recommended 3 x 0.75 ... 1.5 mm² (AWG 16 ... 18)						
Protection	recommended for AC: 1 A slow / mandatory for DC: 1 A slow						
Contact load	max. AC 250 V, DC 30 V / 1A; min. DC 5V / 10 mA						
Condensate	oil-contaminated condensate		oil-contaminated condensate; oil-free, potentially aggressive condensate				
Discharge performance							
Operating pressure bar (gauge)	1 bar	2 bar	3 bar	4 bar	5 bar	6 bar	> 7 bar
Max. discharge rate (short-term)** l/h	170	250			350		
Ø discharge rate l/h	29.10	31.74			33.33		

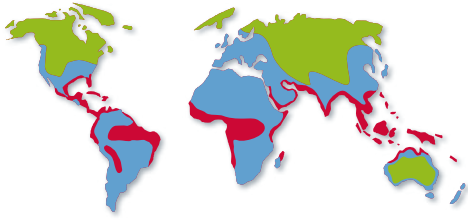


Depth: 120
Depth: 242 (PN25)

Technical data	BEKOMAT® 16 CO						
Max. compressor performance*	■ 1700 m³/min ▲ 1400 m³/min ● 1000 m³/min						
Max. refrigeration dryer performance*	■ 3400 m³/min ▲ 2800 m³/min ● 2000 m³/min						
Max. filter performance*	- - -						
Min./max. operating pressure	0.8 ... 16 bar (gauge)						
Housing	aluminium, hard-coated						
Diaphragm	FKM						
Ambient temperature	+1 °C ... +60 °C						
Weight (empty)	5.9 kg						
Condensate inlet	2 x G¾ (inside), 1 x G1 (inside) [optional: NPT adapter]						
Condensate discharge	1 x G½ (inside)						
Operating voltage	230 / 200 / 115 / 100 / 48 / 24 VAC ± 10%, 50 ... 60 Hz / 24 VDC ± 10%						
Power consumption	P < 8.0 VA (W)						
Protection class	IP 65						
Wire cross-section (mains connection)	recommended 3 x 0.75 ... 1.5 mm² (AWG 16 ... 18)						
Protection	recommended for AC: 1 A slow / mandatory for DC: 1 A slow						
Contact load	max. AC 250 V, DC 30 V / 1A; min. DC 5V / 10 mA						
Condensate	oil-contaminated condensate / oil-free, potentially aggressive condensate / aggressive condensate from compressed air compressors (after prior testing)						
Discharge performance							
Operating pressure bar (gauge)	1 bar	2 bar	3 bar	4 bar	5 bar	6 bar	> 7 bar
Max. discharge rate (short-term)** l/h	950	1150	1400		1700		
Ø discharge rate l/h	226	243	263		274		



Climate – a key factor



The general climate and the ambient temperature are important factors for the formation of condensate in compressed air systems. That is why we quote separate performance data of our BEKOMAT® models for three climate zones:

- e.g. Northern Europe, Canada, Northern USA, Central Asia
- ▲ e.g. Central and Southern Europe, Central America
- e.g. South-East Asian coastal regions, Oceania, Amazon and Congo regions

Temperature range: 1 to + 60 °C

Matching maintenance kit

Like all high-performance devices, the BEKOMAT® needs to be serviced from time to time. Our maintenance kits make this an easy task. If you require assistance, contact our service technicians, who are also qualified to examine and assess your entire compressed air system for further optimisation.



For BEKOMAT®	12	12 CO	12 CO PN 63	13	13 CO	13 CO PN 25 40 50	14	14 CO	14 CO PN 25	16 CO
Wearing parts kit	2000049	2000049	2000748	2000067	2000067	2000366	2000731	2000731	2002556	2000087

Do you have questions about the best way of processing your compressed air?

We have the answers! We offer efficient solutions for any type of processing chain. Please contact us with all your queries. We would be delighted to tell you more about our condensate

treatment, filtration, drying, measuring and process technology, and our comprehensive services.

Visit us at



BEKO TECHNOLOGIES GMBH
Im Taubental 7 | D-41468 Neuss

Tel. +49 2131 988 - 1000
info@beko-technologies.com
www.beko-technologies.de

