



Condensate Drainage

**BEKOMAT®**

intelligent condensate drainage with true zero air loss

Truth in Compressed Air.



# BEKOMAT® Condensate Drains

## At a Glance

Condensate is a by-product of the air compression process and can be aggressive, pollutant-loaded, and/or contain oil. It exists in every compressed air application and is something that must be continuously managed. Condensate drains remove the liquids and are an often overlooked component of the compressed air chain, yet when left unchecked can cause poor part quality, machine damage, and even bodily injury to employees. Drainage points are also one of the system areas where energy waste is highest.

## Features and Benefits

### + True Zero Air Loss

Patented operating principle guarantees maximum energy savings

### + Highest Reliability

Integrated sieve eliminates any concern about dirt, the need for a Y-strainer, and extra maintenance

### + Lowest Maintenance

Reduce overall time and costs and make maintenance fast and easy

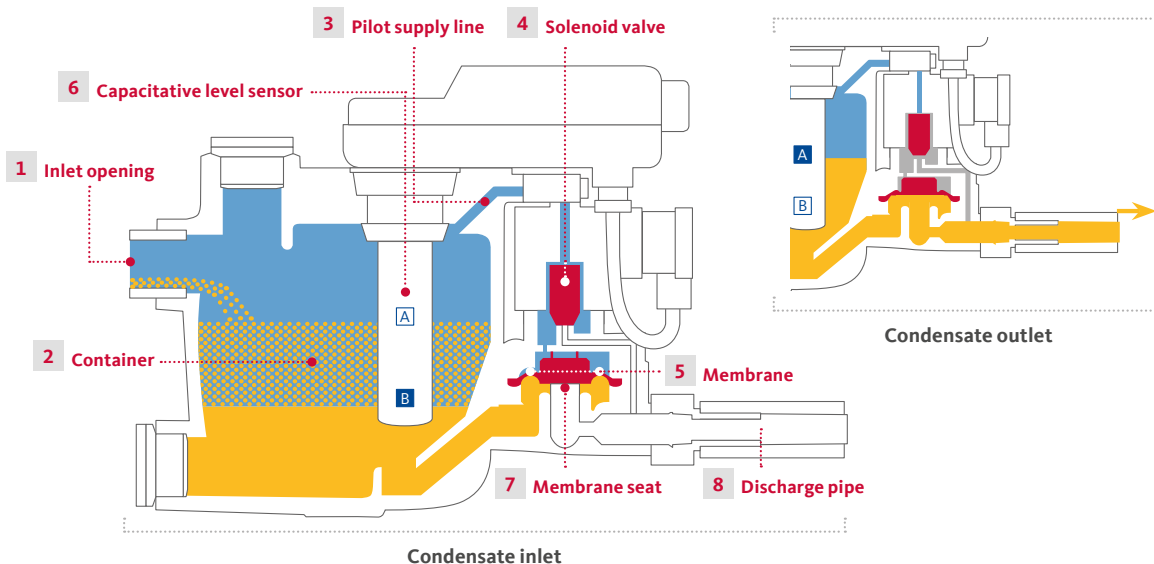
### + Sensor Controlled

Ensures intelligent operation at all times with the ability to automatically clear clogs and debris

### + Integrated Alarm

Visual status indication is given on the drain and can be wired for remote access

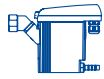
## How it Works



The condensate trickles through the inlet opening (1) and collects in the container (2). Initially, the valve is closed as, via the pilot supply line (3) and the solenoid valve (4), pressure differential above the membrane (5) is effected. The larger surface area above the membrane results in a high closing force. The membrane seat remains closed and leak-proof. When the container is filled with condensate, so that the capacitive level sensor (6) gets a signal at the maximum point A, the solenoid valve switches over and the area above the membrane is vented. As a result of the decreasing pressure above the membrane, the membrane lifts off the membrane seat (7) and the overpressure in the housing forces the condensate into the discharge pipe (8).

# BEKOMAT® Condensate Drains

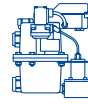
## Compare



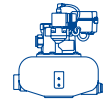
Standard Series



PN and E Series



CV, NLV and V Series



Specialty Series

### Standard Minimum / Maximum Operating Pressure

12 - 232 psig

12 - 912 psig

0 - 360 psig

12 - 232 psig

### Standard Minimum / Maximum Operating Temperature

33 - 140 °F

33 - 140 °F

33 - 140 °F

33 - 140 °F

### Compressor Flow Rate

100 - 50,000 scfm

280 - 50,000 scfm

2,000 - 50,000 scfm

4,500 - 50,000+ scfm

### Typical Application Areas

At the compressor, dryer, and filter

High pressure systems or with highly aggressive condensate

For use with centrifugal compressors or vacuum systems

Explosive atmospheres, moisture indication, and level sensing

### Diaphragm Material

Viton®

Viton®

Viton®

Viton®

### Maintenance Part Type

Service Unit

Wearing Parts Kit

Wearing Parts Kit

Wearing Parts Kit

### Available Options

Heater, Insulation sleeve or shell, Cover3More extended warranty

Heater, Insulation sleeve or shell, Cover3More extended warranty

Heater, Cover3More extended warranty

12 Vdc intrinsically safe power supply, Isolation amplifier, Heater, Cover3More extended warranty

## Product Family



BEKOMAT® Standard Units



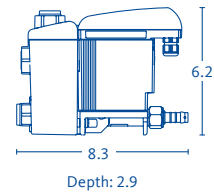
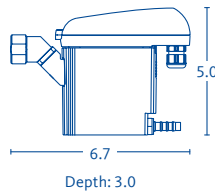
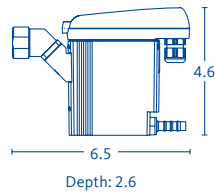
BEKOMAT® Specialty Units

## Technical Details

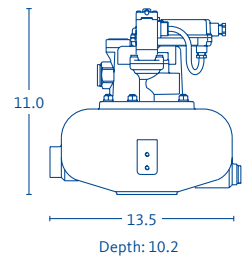
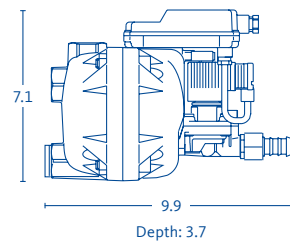
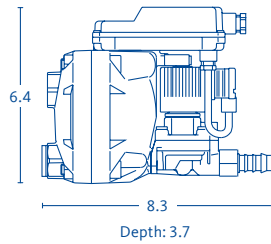
### BEKOMAT® Standard Condensate Drains

for standard pressure

- › Automatic zero loss drain
- › Standard Viton® diaphragm
- › UL/CSA approved
- › Min. / max. operating temperature: 33 °F / 140 °F
- › Standard voltage:
  - BEKOMAT® 31-33: 95-240 VAC 50/60 Hz
  - BEKOMAT® 13-16: 115 VAC
- › Optional voltages:
  - BEKOMAT® 31-33: 18 - 72 VDC, 24 - 48 VAC, 100 - 125 VDC
  - BEKOMAT® 13-16: 24 VAC/DC, 48 VAC, 230 VAC 50/60 Hz



	Aluminum housing - without dry contact	Aluminum housing	Aluminum housing	Aluminum housing + hard coating
BEKOMAT®	31	32	33	33 CO
Connection (NPT)	1 x 1/2"	1 x 1/2"	3 x 1/2"	3 x 1/2"
Min. / Max. Pressure (psig)	12 / 232	12 / 232	12 / 232	12 / 232
Compressor Flow Rate (scfm)	100	225	500	500
Dryer Flow Rate (scfm)	200	450	1000	1000
Filter Flow Rate (scfm)	1000	2250	5000	5000

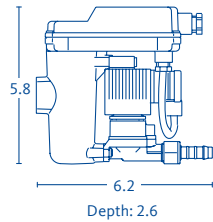


	Aluminum housing	Aluminum housing + hard coating	Aluminum housing	Aluminum housing + hard coating	Aluminum housing + hard coating
BEKOMAT®	13	13 CO	14	14 CO	16 CO
Connection (NPT)	2 x 1/2"	2 x 1/2"	3 x 3/4"	3 x 3/4"	2 x 3/4" / 1 x 1"
Min. / Max. Pressure (psig)	12 / 232	12 / 232	12 / 232	12 / 232	12 / 232
Compressor Flow Rate (scfm)	1300	1300	5400	5400	50000
Dryer Flow Rate (scfm)	2600	2600	10800	10800	100000
Filter Flow Rate (scfm)	13000	13000	54000	54000	500000

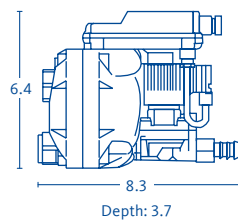
## ■ Technical Details

### BEKOMAT® PN and E Series Condensate Drains for high pressure systems

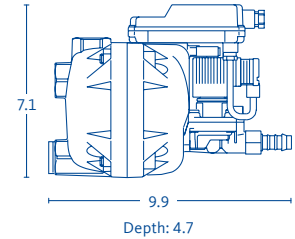
- › Automatic zero loss drain
- › Standard Viton® diaphragm
- › Min. / max. operating temperature: 33 °F / 140 °F
- › Standard voltage: 115 VAC
- › Optional voltages:  
24 VAC/DC, 48 VAC,  
230 VAC 50/60 Hz



Aluminum housing  
+ hard coating & high pressure

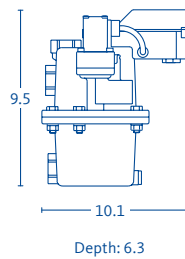


Aluminum housing  
+ hard coating & high pressure

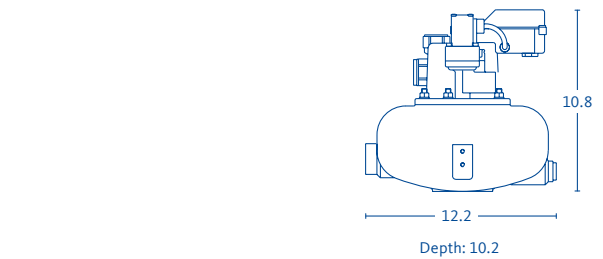


Aluminum housing  
+ hard coating & high pressure

BEKOMAT®	12 CO PN 63	13 CO PN 50	14 CO PN 25
Connection (NPT)	1 x 1/2"	2 x 1/2"	3 x 3/4"
Min. / Max. Pressure (psig)	12 / 912	12 / 725	12 / 360
Compressor Flow Rate (scfm)	280	1300	5400
Dryer Flow Rate (scfm)	560	2600	10800
Filter Flow Rate (scfm)	2800	13000	54000



Stainless Steel housing  
+ high pressure



Stainless Steel housing  
+ high pressure

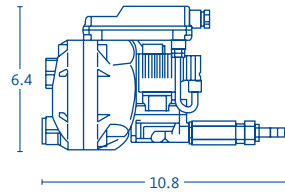
Stainless Steel housing  
+ high pressure

BEKOMAT®	3 E 25	3 E 63	6 E 25
Connection (NPT)	3 x 3/4"	3 x 3/4"	2 x 3/4" / 1 x 1"
Min. / Max. Pressure (psig)	12 / 360	12 / 912	12 / 360
Compressor Flow Rate (scfm)	4500	4500	50000
Dryer Flow Rate (scfm)	9000	9000	100000
Filter Flow Rate (scfm)	45000	45000	500000

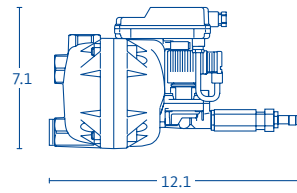
## ■ Technical Details

### BEKOMAT® CV and NLV Series Condensate Drains for centrifugal compressors

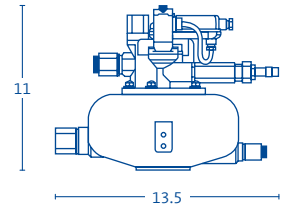
- › Automatic zero loss drain
- › Standard Viton® diaphragm
- › Min. / max. operating temperature: 33 °F / 140 °F
- › Standard voltage: 115 VAC
- › Optional voltages:  
24 VAC/DC, 48 VAC,  
230 VAC 50/60 Hz



Aluminum housing  
+ check-valve set

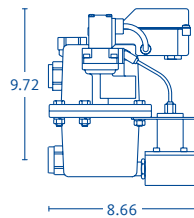


Aluminum housing  
+ check-valve set



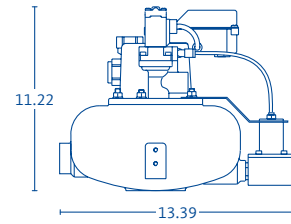
Aluminum housing  
+ check-valve set & hard coating

BEKOMAT®	13 CV	14 CV	16 CO CV
Connection (NPT)	2 x 1/2"	3 x 3/4"	2 x 3/4" / 1 x 1"
Min. / Max. Pressure (psig)	12 / 232	12 / 232	12 / 232
Compressor Flow Rate (scfm)	2000	8000	50000
Dryer Flow Rate (scfm)	4000	16000	100000
Filter Flow Rate (scfm)	20000	80000	500000



Depth: 6.30

Aluminum housing  
+ no load valve & hard coating



Depth: 10.24

Aluminum housing  
+ no load valve & hard coating

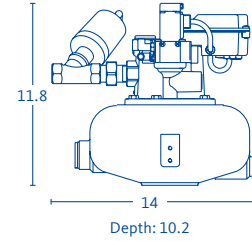
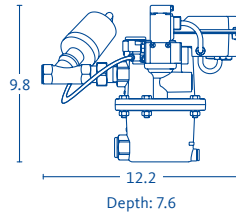
BEKOMAT®	3 CO NLV	6 CO NLV
Connection (NPT)	3 x 3/4"	2 x 3/4" / 1 x 1"
Min. / Max. Pressure (psig)	0 / 360	0 / 232
Compressor Flow Rate (scfm)	6000	50000
Dryer Flow Rate (scfm)	12000	100000
Filter Flow Rate (scfm)	60000	500000

## ■ Technical Details

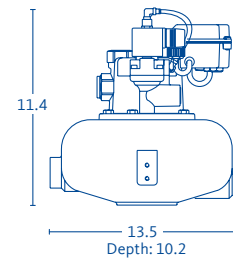
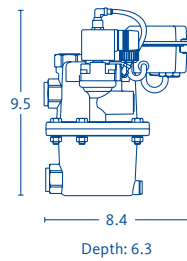
### BEKOMAT® Specialty Condensate Drains

for low pressure and vacuum systems, and explosive atmospheres

- › Automatic zero loss drain
- › Standard Viton® diaphragm
- › Min. / max. operating temperature: 33 °F / 140 °F
- › Standard voltage: 115 VAC or 12 VDC (EX series only)
- › Optional voltages:
  - 24 VAC/DC, 48 VAC,
  - 230 VAC 50/60 Hz



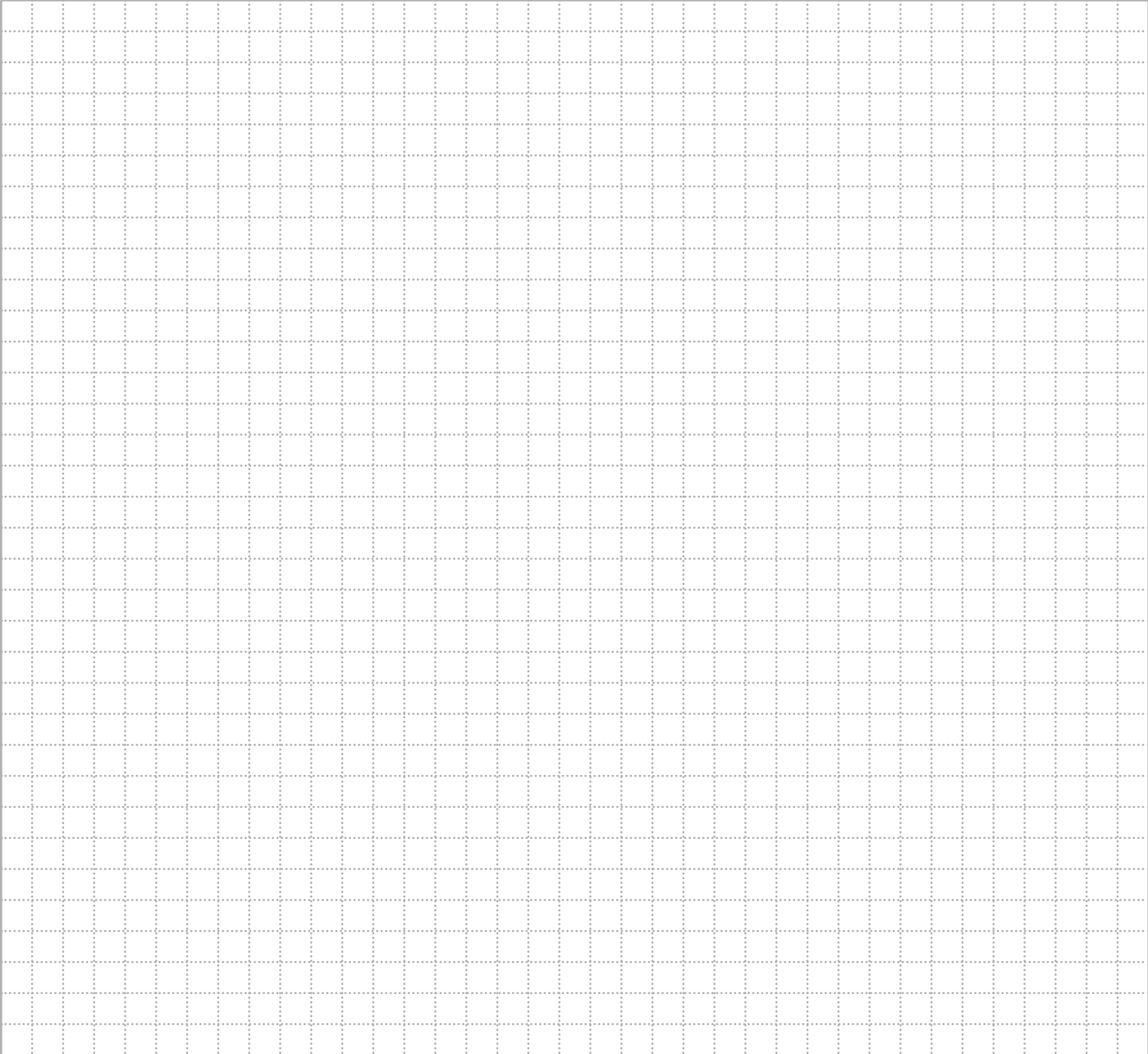
	Aluminum housing + hard coating	Stainless steel	Aluminum housing + hard coating	Stainless steel
BEKOMAT®	3 CO V	3EV	6 CO V	6EV
Connection (NPT)	3 x 3/4"	3 x 3/4"	3 x 3/4"	3 x 3/4"
Min. / Max. Pressure (psia)	1.45 / 26	1.45 / 26	1.45 / 26	1.45 / 26
Compressor Flow Rate (scfm)	4500	4500	50000	50000
Dryer Flow Rate (scfm)	9000	9000	100000	100000
Filter Flow Rate (scfm)	45000	45000	500000	500000



	Aluminum housing + hard coating	Stainless Steel housing	Aluminum housing + hard coating	Stainless Steel housing
BEKOMAT®	3 CO EX	3 E EX	6 CO EX	6 E EX
Connection (NPT)	3 x 3/4"	3 x 3/4"	2 x 3/4" / 1 x 1"	2 x 3/4" / 1 x 1"
Min. / Max. Pressure (psig)	12 / 232	12 / 232	12 / 232	12 / 232
Compressor Flow Rate (scfm)	4500	4500	50000	50000
Dryer Flow Rate (scfm)	9000	9000	100000	100000
Filter Flow Rate (scfm)	45000	45000	500000	500000

Reliable | Efficient | Innovative

What can we do for you?



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