



## Compressed Air Preparation - Drain Valves

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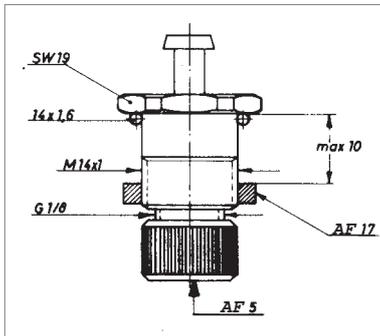
## Manual drain valve

Manually operated drain valves are integrated as standard equipment in all filter bowls or filter-pressure-regulator bowls. On plastic bowls or metal bowls with sight glass a plastic drain screw is used. A metal drain screw is used on metal bowls without sight glass, but if desired it can be optionally screwed into any other bowl with female port thread in place of the plastic drain screw.

Versions	Suitable for	Connection	Order No.
Drain plug (plastic) with bowl insert	Plastic- and metal bowl with sight glass	ø 14	<b>423-207</b>
Valve insert (metal) without bowl insert	Metal bowl without sight glass	G 1/8	<b>275-41</b>

### Spare parts

Drain plug (plastic)	Order No.
	<b>423-110</b>



### Technical data

<b>Max. operating pressure (p<sub>1</sub>)</b>	25 bar
<b>Operating temperature</b>	0°C up to +90°C
<b>Mounting position</b>	at lowest point of bowl
<b>Nominal size for condensate</b>	DN3
<b>Manual operation</b> through meaningful rotation:	clockwise - closed / counter clockwise - opened
<b>Tightening the nut</b>	max. 1,3Nm

### Remark:

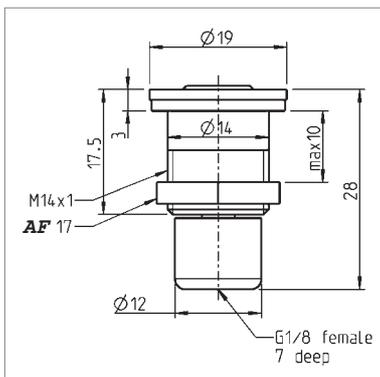
To change the drainscrew (423-110) unscrew and pull firmly downwards.



## Semi-automatic drain valve

Semi-automatic drain valves are open when there is no pressure (up to approx. 0,5 bar). At higher pressures they are opened manually. They are thus used in all situations where at least during the night the compressed air system is shut off and relieved. The manual operation is carried by pushing up the shell. A drainage tube for condensate can be installed if necessary.

Suitable for	Connection	Order No.
Plastic and metal bowls	ø 14	<b>495-100</b>



### Technical data

<b>Max. operating pressure (p<sub>1</sub>)</b>	25 bar
<b>Operating temperature</b>	0°C up to +90°C
<b>Min. operating pressure</b>	~ 0,5 bar (opened at lower pressure)
<b>Closing pressure flow (air)</b>	6 m <sup>3</sup> /h (100 l/min) (= airflow required for reaching closing pressure)
<b>Mounting position</b>	at lowest point of bowl
<b>Nominal size for condensate</b>	DN3,5
<b>Condensate drain</b>	G 1/8 female thread
<b>Manual operation</b>	push shell (knurled) upwards (above 10 bar more force necessary)
<b>Drain hose</b>	flexible
<b>Tightening the nut</b>	max. 1,3Nm



## Internal automatic drain valve

Fully automatic built-in drain valves ( $\varnothing 24$  mm) are suitable for installation in all plastic bowls with  $\varnothing 14$  mm hole and an WZ19 adaptor. The operating pressure range of the valves runs from approx. 1,5 to 12 bar. At pressures below 1,5 bar the valve is open. Between 1,5 and 12 bar when a certain condensation level is reached, a float activates a pneumatic servo valve and the drain valve is opened. Emergency manual operation is effected by pushing up the red ring.

Connection	Order No.
$\varnothing 14$	441.1

### Accessories

Accessories	Order No.
Quiet disk for airvision bowls size I	419-80
Quiet disk for airvision and variobloc bowls size II	419-81

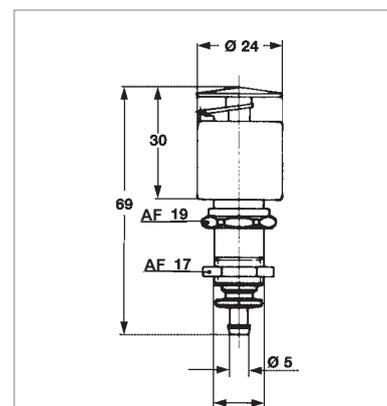


### Technical data

Max. operating pressure (p <sub>1</sub> )	12 bar
Critical range	10 to 12 bar
Operating temperature	0°C up to +50°C
Min. operating pressure	~ 1,5 bar (opened at lower pressure)
Closing pressure flow (air) (= airflow required for reaching closing pressure)	7,5 m <sup>3</sup> /h (125 l/min)
Mounting position	vertically facing downwards
Nominal size for condensate	DN4
Manual emergency operation	push red disk upwards
Darin hose	5 mm flexible
Tightening the nut	max. 1,3 Nm

### Remark:

Mounting on pressure tanks or water pockets without significant pressure variation not recommended because proper function cannot always be guaranteed (water doesn't flow into the valve).



## External automatic drain valve B

Fully automatic drain valves can be fitted on all filters or filter pressure regulators in the ewo-programme instead of manually operated or semi-automatic ones. On bowls with G<sup>1/8</sup> female thread the installation is possible at any time. The working pressure range runs from about 1,5 bar to 12 bar. At pressures below 1,5 bar the valve is open. When a certain condensation level is reached (1,5 - 12 bar), a float activates a pneumatic servo valve and the drain valve is opened. After brief draining the valve closes again. Emergency manual operation is carried out by pressing the red disc upwards.

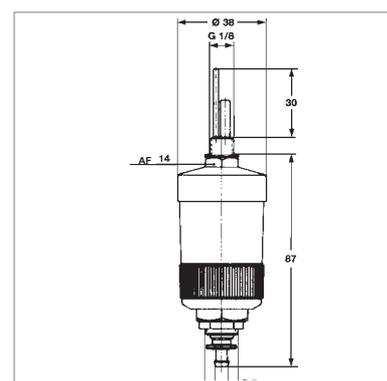
Type	Connection	Order No.
Float gauge in sight	G <sup>1/8</sup>	441.11

### Remark:

Mounting on pressure tanks or water pockets without significant pressure variation not recommended because proper function cannot always be guaranteed (water doesn't flow into the valve).

### Technical data

Max. operating pressure (p <sub>1</sub> )	12 bar
Operating temperature	0°C up to +50°C
Min. operating pressure	~ 1,5 bar (opened at lower pressure)
Mounting position	vertically facing downwards
Nominal size for condensate	DN4
Manual emergency operation	push red disk upwards
Condensate drain	5 mm flexible





5370.4

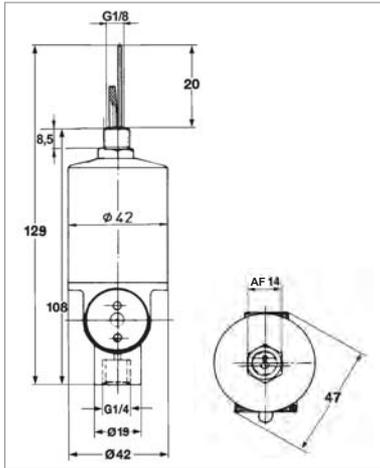
## External automatic drain valve A

Fully automatic drain valves can be fitted on all filters or filter pressure regulators in the ewo-programme instead of manually operated or semi-automatic ones. On bowls with G 1/8 female thread the installation is possible at any time. The working pressure range runs from about 4 bar to 16 bar. At pressures below 4 bar the valve is closed and the automatic function turned off. Between 4 and 16 bar when a certain condensation level is reached, a float activates a pneumatic servo valve and the drain valve is opened. After brief draining the valve closes again. Emergency manual operation is carried out by pressing in a horizontally protruding pin.

Model	Connection	Order No.
Housing and hood made of brass	G 1/8	<b>5370.3</b>
Housing PA, hood brass	G 1/8	<b>5370.4</b>

### Remark:

Mounting on pressure tanks or water pockets without significant pressure variation not recommended because proper function cannot always be guaranteed (water doesn't flow into the valve).



### Technical data

<b>Max. operating pressure (p<sub>1</sub>)</b>	16 bar
<b>Operating temperature</b>	0 °C up to +90 °C
<b>Min. operating pressure</b>	~ 4 bar (closed at lower pressure)
<b>Mounting position</b>	vertically facing downwards
<b>Nominal size for condensate</b>	DN 4
<b>Manual emergency operation</b>	press pin in (above 6 bar harder to press)
<b>Condensate drain</b>	G 1/4 - female thread



5370.5

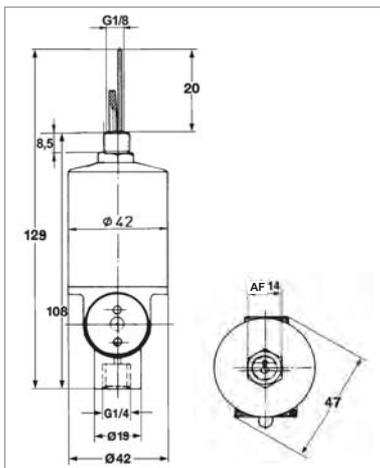
## External automatic drain valve, stainless steel

Fully automatic drain valves can be fitted on all filters or filter pressure regulators in the ewo-programme instead of manually operated or semi-automatic ones. On bowls with G 1/8 female thread the installation is possible at any time. The working pressure range runs from about 4 bar to 16 bar. At pressures below 4 bar the valve is closed and the automatic function turned off. Between 4 and 16 bar when a certain condensation level is reached, a float activates a pneumatic servo valve and the drain valve is opened. After brief draining the valve closes again. Emergency manual operation is carried out by pressing in a horizontally protruding pin.

Model	Connection	Order No.
Housing and hood made of stainless steel	G 1/8	<b>5370.5</b>

### Remark:

Mounting on pressure tanks or water pockets without significant pressure variation not recommended because proper function cannot always be guaranteed (water doesn't flow into the valve).



### Technical data

<b>Max. operating pressure (p<sub>1</sub>)</b>	16 bar
<b>Operating temperature</b>	0 °C up to +90 °C
<b>Min. operating pressure</b>	~ 4 bar (closed at lower pressure)
<b>Mounting position</b>	vertically facing downwards
<b>Nominal size for condensate</b>	DN 4
<b>Manual emergency operation</b>	press pin in (above 6 bar harder to press)
<b>Condensate drain</b>	G 1/4 - female thread



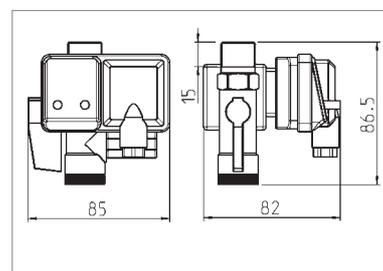
## External timer controlled drain valve

Timer controlled external-automatic drain valve (solenoid). The condensate drain adjusted frequency controlled or individually timed. No moving parts. Reliable operating without clogging and unsensible to outside conditions. Test button, warning LED light for condensate disposal phase.

<b>Connection</b>	<b>Order No.</b>
230V AC	5370.100

### Technical data

<b>Min./max. operating pressure (p<sub>1</sub>)</b>	0-16bar
<b>Min./max. operating temperature</b>	1,5°C up to 65°C
<b>Input connection</b>	G <sup>1</sup> / <sub>2</sub>
<b>Output connection</b>	G <sup>1</sup> / <sub>4</sub>
<b>Output pipe diameter</b>	6-8mm
<b>Capacity at 10bar</b>	0,2-114l/h
<b>Opening time</b>	0,5-6sek.
<b>Interval time</b>	0,5-30min.
<b>Electrical connection</b>	
- voltage AC	230V +/-10%
- frequency	50-60Hz
- power	18W
- protection	IP54
- cable	3x 0,75mm <sup>2</sup>
<b>Weight</b>	560g



## External electronic drain valve



Electronic drain valve of the new generation is used for the automatic discharge of accumulated condensate from compressed air systems. The basic principle is contactless measurement of accumulated condensate which is discharged without the loss of valuable compressed air.

Condensate flow constantly flushes debris out of the valve. That's why uninterrupted operating is guaranteed. Incorrect plunger position is first sign of debris blocking the valve. By detecting incorrect position, blocked plunger release procedure is started. This procedure assures safety and reliable plunger operating. No staff intervention is needed. This procedure starts automatically.

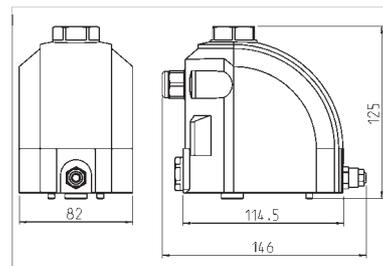
The housing is made of aluminum with plastic cover, which protects electronics inside the device from outside harmful conditions.

Robust aluminum housing eloxated, integrated filter mesh, compact design, two-way connections, contactless measuring, direct acting self cleaning valve (patented), blocked plunger release procedure, operating diagnostic monitoring, test button, warning LED light for drain operating and alarm.

<b>Connection</b>	<b>Order No.</b>
230V AC	5370.200

### Technical data

<b>Min./max. operating pressure (p<sub>1</sub>)</b>	0-16bar
<b>Min./max. operating temperature</b>	1,5°C up to 65°C
<b>Inlet connection</b>	G <sup>1</sup> / <sub>2</sub> (top)
<b>Alternative: inlet connection</b>	G <sup>1</sup> / <sub>2</sub> (backside down and vent up)
<b>Outlet connection</b>	G <sup>1</sup> / <sub>8</sub>
<b>Drain capacity at 7 bar</b>	15l/h
<b>Volume</b>	0,15l
<b>Electrical connection</b>	
- voltage AC	230V +/-10%
- frequency	50-60Hz
- power	24VA
- protection	IP54
- cable	3x 0,75mm <sup>2</sup>
<b>Material</b>	
- housing	aluminum anodized
- cover	plastic
<b>Weight</b>	900g





## External automatic drain valve – 20bar



The external automatic drain valve is used larger amounts of condensate (up to 300l/h) must be automatically discharged from filters, pressure vessels and cyclone separators. It ensures reliable operating up to 20 bar. When the condensate exceeds the discharge level, the float rises, opens the discharge aperture and discharges condensate from the system. No power supply required.

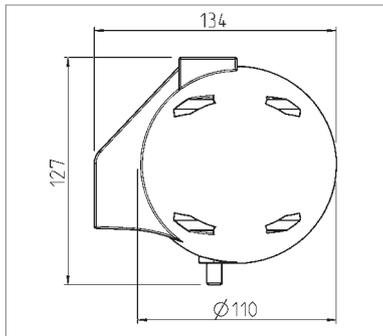
A manual drain plug is available.

To optimize performance, we recommend the installation of the inlet nipple, especially when they are incurred higher flowrates!

Version	Order No.
Up to 20bar operating pressure	<b>5370.300</b>



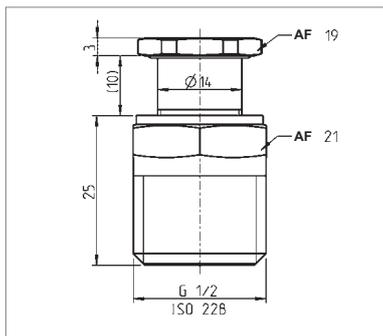
Accessories	Order No.
Inlet nipple	<b>5370-301</b>



### Technical data

<b>Min./max. operating pressure (p<sub>1</sub>)</b>	0 - 20bar
<b>Min./max. operating temperature</b>	1,5 °C up to 65 °C
<b>Input connection</b>	G <sup>1</sup> / <sub>2</sub>
<b>Output connection</b>	G <sup>1</sup> / <sub>2</sub>
<b>Capacity</b>	to 300l/h
<b>Material</b> - housing	aluminum alloy
- o-ring	resistant to conventional compressor oils
<b>Weight</b>	680g

## Adapter kit for external drain valves



### For installation into the ewo condensate bowl.

This G<sup>1</sup>/<sub>2</sub> connection is needed for mounting the external drain valve to the ewo condensate bowls (except all metal bowls of our standard line).

Suitable for	Order No.
<b>Drain valve with G<sup>1</sup>/<sub>2</sub> female</b>	<b>5370-400</b>
<b>Drain valve with G<sup>1</sup>/<sub>2</sub> male</b>	Sleeve 185.113 is necessary. Don't forget to order!
	<b>+ 185.113</b>