

Condensate drain WA/PWEA



Condensate drain WA

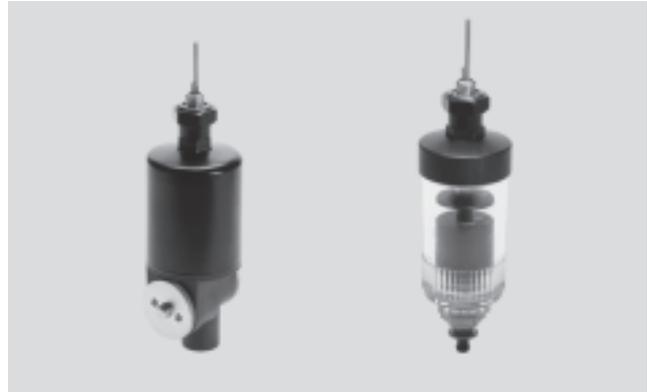
Technical data

FESTO

Function



-  - Temperature range
0 ... +60 °C
-  - Input pressure
0 ... 16 bar



-  - Note

In order to close, the automatic condensate drain type WA-2 requires a flow rate of 125 l/min; this sets in at approx. 1.5 bar.

For attachment to service units and compressed air networks/systems. Condensate present in the compressed air is separated in suitable filters. The condensate that accumulates must be emptied from time to time, as otherwise it would be drawn in and could lead to faults in the downstream elements. The devices shown perform this task automatically.

They contain a float which opens when a certain condensate level is achieved. The accumulated condensate is then emptied. With an additional, installed manual override, condensate emptying can also be performed manually.

- Automatic emptying after the max. fill level has been reached
- Automatic emptying after the operating pressure $p < 0.5$ bar is switched off
- Manual actuation during operation is possible

General technical data		
Type	WA-1-B	WA-2
Pneumatic connection	M9	M9
Condensate drain connection	G $\frac{1}{4}$	PK-4
Design	External, mechanically-operated, fully automatic condensate drain valve	
Operating medium	Water	
Type of mounting	In-line installation	
Mounting position	Vertical, $\pm 10^\circ$	Vertical, $\pm 5^\circ$
Input pressure [bar]	4 ... 16	0 ... 14
Valve function	2/2-way single solenoid valve, closed	2/2-way single solenoid valve, open
Manual override facility	Pushing	

Ambient conditions		
Type	WA-1-B	WA-2
Ambient temperature [°C]	0 ... +60	0 ... +50
Temperature of medium [°C]	0 ... +60	0 ... +50
Corrosion resistance CRC ¹⁾	2	

1) Corrosion resistance class 2 according to Festo standard 940 070

Components requiring moderate corrosion resistance. Externally visible parts with primarily decorative surface requirements which are in direct contact with a surrounding industrial atmosphere or media such as cooling or lubricating agents.

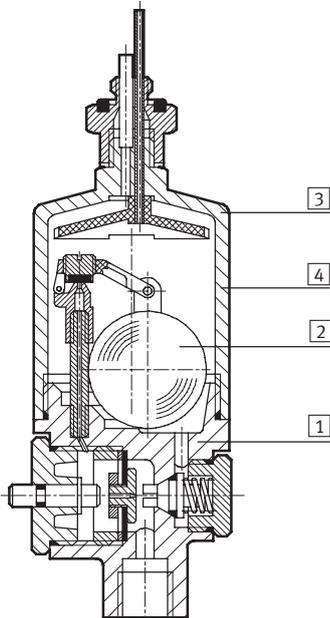
Weights [g]		
	WA-1-B	WA-2
Condensate drain	210	92

Condensate drain WA

Technical data

Materials

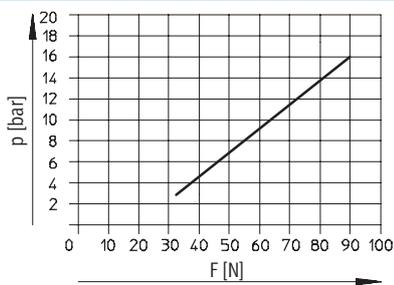
Sectional view



Condensate drain	WA-1-B	WA-2
1 Housing	Brass	Brass
2 Float	Polypropylene	Polyacetate
3 Cover	Polyamide	Wrought aluminium alloy
4 Bowl	-	Polycarbonate
- Seals	Nitrile rubber	Nitrile rubber

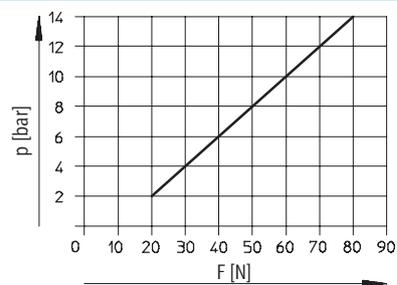
Actuating force F for manual actuation as a function of supply pressure p

WA-1-B



Primary pressure $p_1 = 7$ bar

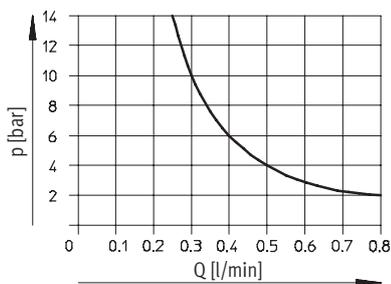
WA-2



Primary pressure $p_1 = 7$ bar

Max. possible condensate flow rate Q as a function of input pressure p

WA-2



Primary pressure $p_1 = 7$ bar

Condensate drain WA

Technical data

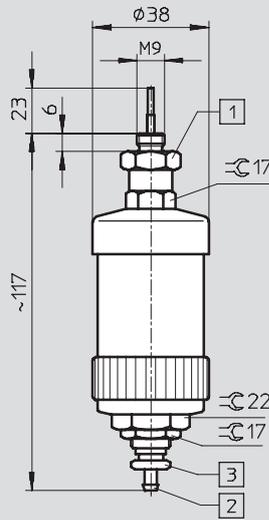
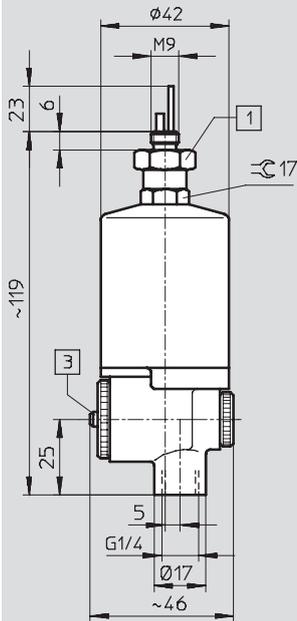
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Dimensions

Download CAD data → www.festo.com

WA-1-B

WA-2



1 Adapter SW17

2 Barbed fitting for plastic tubing
type PCN-4

3 Manual override facility

Ordering data

Part No. Type

158 497 WA-1-B

152 810 WA-2

Condensate drain PWEA

Technical data

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Function



-  - Temperature range
+1 ... +60 °C

-  - Operating pressure
0.8 ... 16.0 bar



Condensate passes through the port in the bottom of the filter bowl into the attached condensate drain valve, where it is collected in a reservoir. A capacitive sensor detects once the maximum filling level is reached. The condensate escapes into the atmosphere

via the opening diaphragm valve through the discharge line. The diaphragm valve closes again after a specified response time. A residual amount of condensate remains in the reservoir so that no compressed air can escape into the discharge line.

- Fully automatic condensate drain with integrated electrical control system
- Interface for communicating with master control device
- Reliable thanks to contactless capacitive sensor

- Can be used with service units or simply in piping systems
- Operated via touch-sensitive keys or electrical interface
- Ready status and switching status indicated via LEDs and electrical interface

General technical data						
		PWEA-AP-3D	PWEA-AC-6A	PWEA-AC-7A	PWEA-AC-3D	
Pneumatic connection		G1/2				
Condensate drain connection		PK-8				
Design		Fully automatic condensate drain valve with electrical control interface				
Operating medium		Compressed air				
Type of mounting		In-line installation				
Mounting position		Vertical ±5°				
Operating pressure [bar]		0.8 ... 16.0				
Valve function		3/2-way single solenoid valve, closed				
Manual override facility		Pushing				
Electrical						
Nominal operating voltage		[V DC]	24	-	-	24
		[V AC]	-	110	230	-
Electrical connection		M12x1 plug, 5-pin		Cable conduit fitting Pg9		
Nominal power of condensate drain [W]		2				
Alarm output		Contacting				
Protection class (IEC 60529)		IP65				
Electrical protection class		III	II	II	III	

Ambient conditions		
Ambient temperature [°C]		+1 ... +60
Temperature of medium [°C]		+1 ... +60
Corrosion resistance class CRC ¹⁾		2

1) Corrosion resistance class 2 according to Festo standard 940 070
Components requiring moderate corrosion resistance. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

Condensate drain PWEA

Technical data

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Materials	
Housing	Plastic
Condensate reservoir	Wrought aluminium alloy
Seals	Nitrile rubber, fluorocarbon rubber
Note on materials	Free of copper, PTFE and silicone

Weight [g]	
PWEA	700

Dimensions Download CAD data → www.festo.com

PWEA-AC-6A
PWEA-AC-7A
PWEA-AC-3D

PWEA-AP-3D

- 1 M12x1 plug, 5-pin for SIM-M12-5GD-...
- 2 Plug screw
- 3 Cable conduit fitting Pg9
- 4 Connection 360° rotatable for plastic tubing PUN-H-12x2-...
- 5 Touch-sensitive keypad with LED display

Ordering data	
Part No.	Type
538 678	PWEA-AP-3D
538 679	PWEA-AC-6A
538 680	PWEA-AC-7A
538 681	PWEA-AC-3D

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