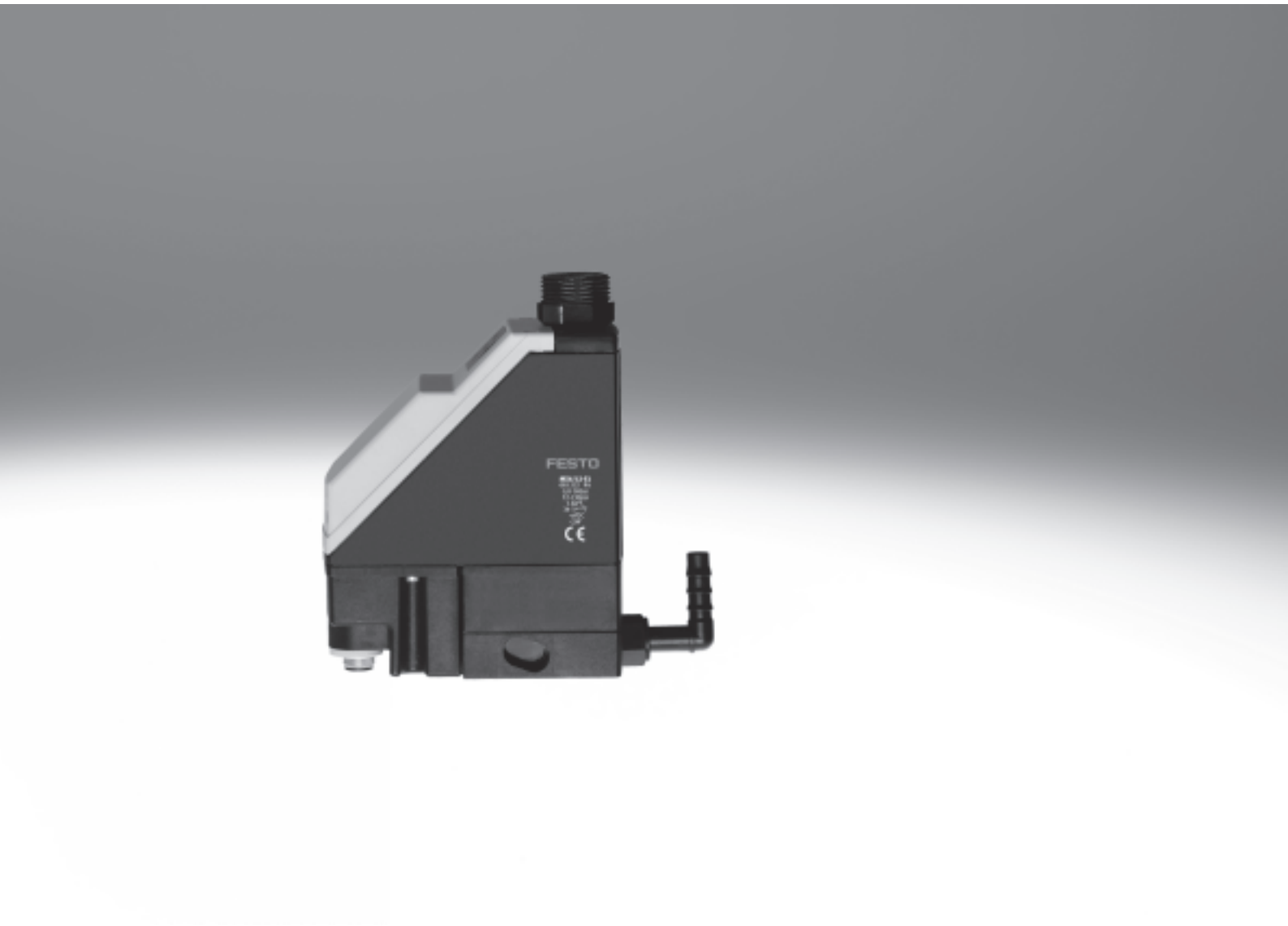
Condensate drains WA/PWEA

FESTO



Condensate drains WA

Technical data

FESTO

Function

Temperature range
0 ... +60 °C

Operating pressure
1.5 ... 16 bar

Note

In order to close, the automatic condensate drain 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		G¼	PK-4
Design		External, mechanically-operated, fully automatic condensate drain valve	
Measured variable		Filling level	
Type of mounting		In-line installation	
Mounting position		Vertical, ±10°	Vertical, ±5°
Valve function		2/2-valve, closed, monostable	2/2-valve, open, monostable
Manual override facility		Non-detenting	

Operating and environmental conditions			
Type		WA-1-B	WA-2
Operating pressure	[bar]	4 ... 16	1.5 ... 14
Operating medium		Water	
Ambient temperature	[°C]	0 ... +60	0 ... +50
Temperature of medium	[°C]	0 ... +60	0 ... +50
Storage temperature	[°C]	–20 ... +60	–20 ... +60
Corrosion resistance class CRC[1)]		2	

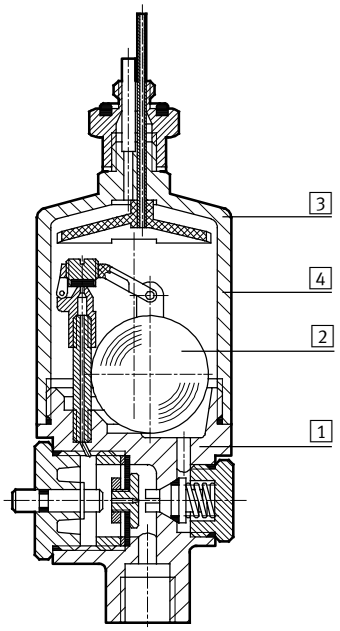
1) Corrosion resistance class 2 according to Festo standard 940 070
Components subject to moderate corrosion stress. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

Condensate drains WA

Technical data

Materials

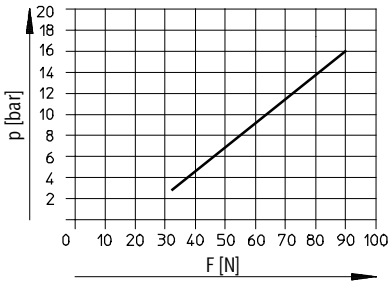
Sectional view



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
Note on materials	–	Contains PWIS (paint wetting impairment substances)

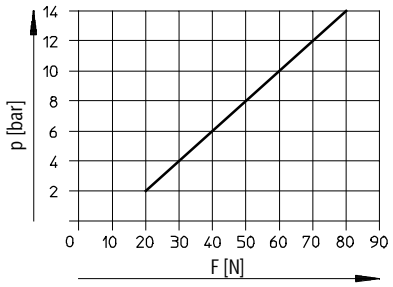
Actuating force F for manual actuation as a function of supply pressure p

WA-1-B



Primary pressure p1 = 7 bar

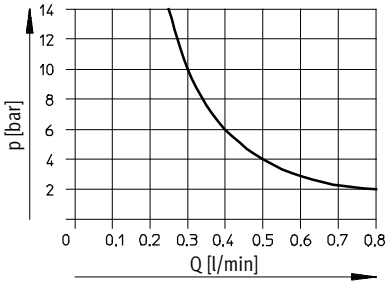
WA-2



Primary pressure p1 = 7 bar

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

WA-2



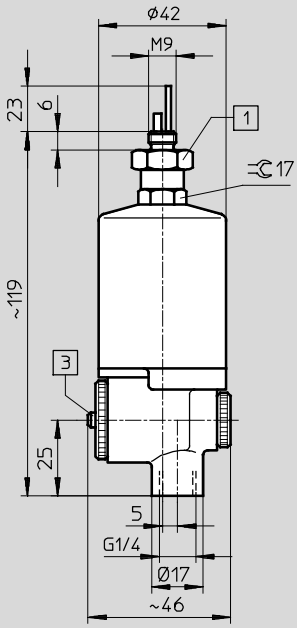
Primary pressure p1 = 7 bar

Condensate drains WA

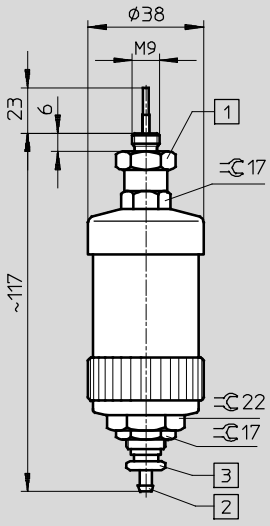
Technical data

Dimensions Download CAD data ➔ **www.festo.com**

WA-1-B



WA-2



1 Adapter SW17

2 Barbed fitting for plastic tubing PCN-4

3 Manual override facility

Ordering data

	Pneumatic connection	Valve function	Weight [g]	Part No.	Type
	M9	2/2-valve, closed, monostable	210	**158497**	**WA-1-B**
	M9	2/2-valve, open, monostable	92	**152810**	**WA-2**

Condensate drains PWEA

Technical data

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Function

Temperature range
+1 ... +60 °C

Operating pressure
0.8 ... 16.0 bar

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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 controller
- Interface for communicating with master control device
- Reliable thanks to non-contacting 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				
Type		PWEA-AC-6A	PWEA-AC-7A	PWEA-AC-3D
Pneumatic connection		G½		
Condensate drain connection		PK-8		
Design		Fully automatic condensate drain valve with electrical control interface		
Measured variable		Filling level		
Type of mounting		In-line installation		
Mounting position		Vertical ±5°		
Valve function		3/2-way single solenoid valve, closed		
Manual override		Non-detenting		

Electrical data				
Type		PWEA-AC-6A	PWEA-AC-7A	PWEA-AC-3D
Electrical connection		Screw terminal PG9		
Nominal operating voltage	[V AC]	110	230	–
	[V DC]	–	–	24
Mains frequency	[Hz]	50/60		
Nominal power of condensate drain	[VA]	2	2	–
	[W]	–	–	2
Operating elements		Touch-sensitive keypad with test button		
Ready status display/switching status display		LED		
Alarm output		Contacting		
Protection class (IEC 60529)		IP65		
Protection class		II	II	III

Condensate drains PWEA

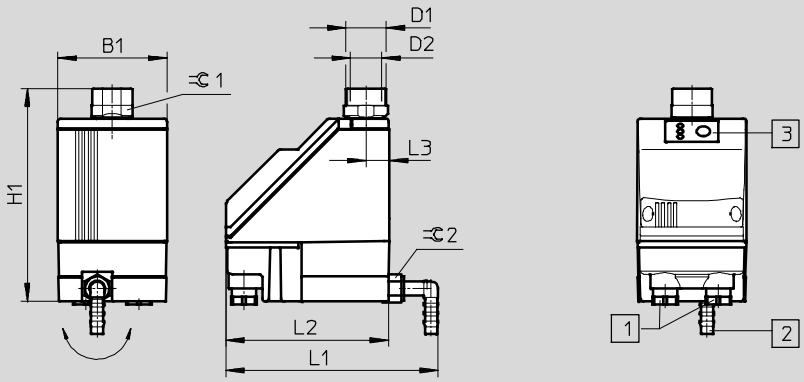
Technical data

Operating and environmental conditions		
Operating pressure	[bar]	0.8 ... 16.0
Operating medium		Compressed air in accordance with ISO 8573-1:2010 [–:–:–]
Ambient temperature	[°C]	+1 ... +60
Temperature of medium	[°C]	+1 ... +60
Storage temperature	[°C]	+10 ... +60
Corrosion resistance class CRC[1)]		2

1) Corrosion resistance class 2 according to Festo standard 940 070
Components subject to moderate corrosion stress. 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.

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

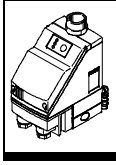
Dimensions Download CAD data ➔ **www.festo.com**



1 Screw terminal PG9
2 Connection for plastic tubing PUN-H-12x2, can be swivelled through 360°
3 Touch-sensitive keypad with LED display

B1	D1	D2	H1	L1	L2	L3	⌀1	⌀2
72	G¾	G½	140	140	108	15	27	16

Ordering data

	Electrical connection	Nominal operating voltage [V AC]	Nominal operating voltage [V DC]	Weight [g]	Part No.	Type
	Screw terminal PG9	110	–	700	**538679**	**PWEA-AC-6A**
		230	–	700	**538680**	**PWEA-AC-7A**
		–	24	700	**538681**	**PWEA-AC-3D**