Installation Instructions F28300-2-en, August 2023 | 1

SpaceLogic[™] MP125

Proportional/Modulating Actuator

The SpaceLogic MP125 is a proportional thermo-electric valve actuator for continuous control of heating and cooling systems.

Regulatory Compliance and Safety Information

Electrical equipment should be installed, operated, serviced, and maintained only by qualified personnel. No responsibility is assumed by Schneider Electric for any consequences arising out of the use of this material.

Carefully read these instructions and all information relevant to this product before trying to install it.

The technical literature and declarations of conformity can be accessed by searching for the part number on the Schneider Electric website, www.schneider-electric.com. Contact your local Schneider Electric sales office for a hard copy of the documentation or for additional information.

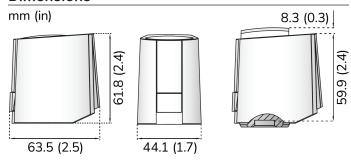
Part Numbers

Product	Part Numbers
0-10 V Normally Closed, 24 Vac ^a	MP125NC24M
0-10 V, Normally Open, 24 Vac ^a	MP125NO24M
0-10 V, Normally closed, 24 Vdc ^a	MP125NC24DCM

 Includes adapter for the VP228E/VP229E/TRV-4 valves, 1 m cable, and installation instructions.

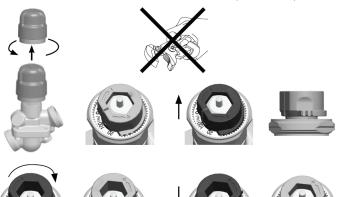
Accessories	Part Numbers	
Adaptor for VZ22, VZ32, VZ42 – 20 pcs	MP125ADZ80	
10 m cable – 5 pcs	MPCAB10M	

Dimensions

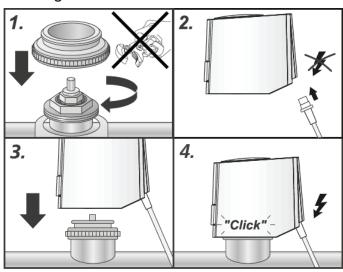


Pre-Assembly: PIBCV Flow Setting

The flow must be set on the SpaceLogic VP228E/VP229E Pressure Independent Balancing and Control Valve (PIBCV) before the actuator is mounted and first powered up.



Installing the Actuator



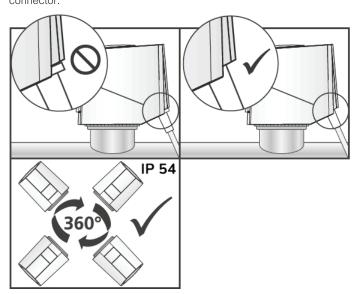
NOTICE

RISK OF IMPAIRED PERFORMANCE

- The flow must be set on PIBCV valves before the actuator is mounted.
- Do not power up the actuator before it is mounted on the valve

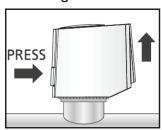
Failure to follow these instructions can result in impaired device performance.

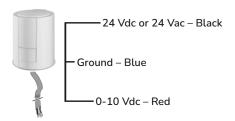
Make sure the cable is properly oriented and fully inserted into the connector:



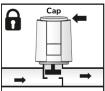
Models	Adapter
VP228E, VP229E	Factory-supplied adapter
TRV-4	Factory-supplied adapter
VZ22, VZ32, VZ42	MP125ADZ80 (supplied in 20 pcs kits)
	VP228E, VP229E TRV-4

Removing the Actuator





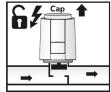
First-Open and Calibration Function





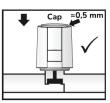


From factory delivery, the actuator should mount to the valve and allow the valve to be partially opened.





After power is first applied to the actuator, wait at least 25 minutes for the actuator to calibrate.





A successful calibration (NC Type) is indicated by the height of the cap from the top surface, which will be 0.5 mm.

The NC actuator will close the valve on 0 V or when powered

Antitheft Device



The MP125 actuator can be protected against unauthorized disassembly by removing the locking latch.

Recalibrating the Actuator

The actuator can and should be recalibrated if the flow settings on the PIBCV valve are ever adjusted. Once the flow settings have been confirmed and the actuator remounted onto the valve.

- Disconnect and reapply the power supply with the control signal fixed at 0 Vdc for a minimum of 60 minutes.
- Change the control signal to 10 Vdc for a minimum of 60 minutes.

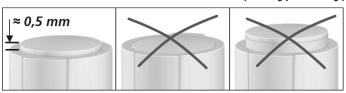
New flow settings are recorded after 8 hours of continuous power.

General Specifications

Operating voltage, AC	24 Vac, -10% to +20 %, 50-60 Hz
Operating voltage, DC1	24 Vdc +/- 15%
Max. inrush current	< 320 mA for max. 2 min.
Operating power	1.2 W
Max. stroke	6.5 mm (0.3 in)
Calibrated stroke range	1.0 to 6.5 mm (0.04 to 0.3 in)
Actuating force	125 N
Storage temperature	-25 to 60 °C (-13 to 140 °F)
Ambient temperature	0 to 60 °C (32 to 140 °F)
Degree of protection	IP 54 ²
Electrical conformity	EN/UL 60730

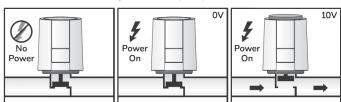
- Any switch power supply must be in accordance with EN 61558-2-16 with a maximum output power of 100 VA
- in all installation positions with cable fully inserted

Visual Check: Successful Calibration (NC Types Only)

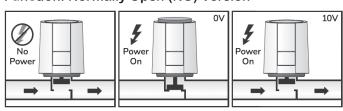


NO Types: ~ 2mm

Function: Normally Closed (NC) Version



Function: Normally Open (NO) Version



Characteristic Curve

Actuator Travel

