

Mechanical vacuum switch S4415

Diaphragm switch with changeover contact



Description

The new mechanical vacuum switch in model series S4415 with a switching output converts vacuums into an electrical switching signal. The switch operates in an extremely precise way and is characterised by its simple and robust design.

This vacuum switch is mainly used in low vacuums (technical vacuums).

An adjusting screw allows setpoints to be easily adjusted, even in situ. The setpoint may optionally be factory preadjusted.

The switch is supplied in zinc plated steel with a G1/4" screw thread and a spade connector as standard. Many other thread versions and customer-specific electrical connections are optionally available. This low-cost version with a flat connector has been designed for use in encapsulated devices. A protection cap for increasing the protection type to IP54 is available as an accessory.

Versions for special ambient conditions such as shock, vibration, moisture and an extended temperature range are available on request.

Features

- Change-over contact
- Many thread variants
- Customer-specific electrical connections
- Overload safety up to 20 bar

Applications

- Mechanical engineering
- Plant construction
- Low vacuum

Adjustment ranges (bar) ²⁾	Overload limit (bar)	Repeatability (bar) ¹⁾	Max. hysteresis	Measurement principle	Switching function
					Change over contact
-0.85...+1	20	±0.02	0.1...0.2 bar	Diaphragm	S4415B114001

¹⁾ The repeatability refers to 20°C.

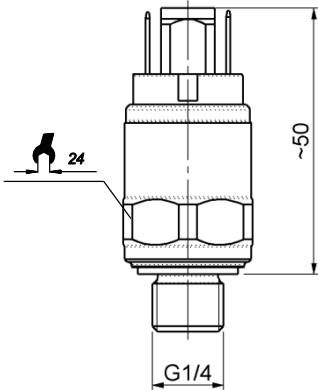
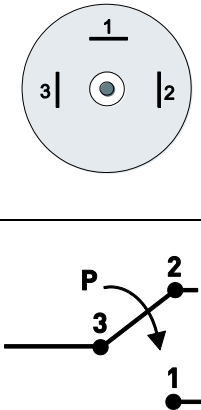
²⁾ The pressure difference between the setpoint and the reset point must be at least 0.2 bar.

Model: S4415

Technical data

	Mechanical pressure switch
Model	S4415
Execution	negative over pressure
Media	air; filtered 50µm, oiled or not oiled
Process connection standard optional	G1/4 G1/8, M10x1, 1/8NPT, 1/4NPT
Measuring principle	spring loaded diaphragm
Materials Measuring element standard Thread standard optional	NBR Zinc plated steel stainless steel
Switching outputs Number Switching function Switching element Adjustment standard option	1 SPDT microswitch in situ, with adjustment screw factory adjusted
Hysteresis	0.1...0.2 bar
Power rating¹⁾ DC to 28 V AC to 50 V	max. 2A max. 4A
Load cycles	max. 100/min
Temperature ranges	-10°C...+80°C
Electrical connection standard optional	flat connector 3 x 6.3 x 0.8 cabel outlet via PG screw fitting M12x1 (3 pin) AMP-Junior-Power-Timer
Protection type	IP00
Mounting position	any
Weight	~ 0.1 kg

¹⁾ All specification for ohmic load.

Dimensions (in mm)	Electrical connection
	SPDT
	

Subject to technical alternations