

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

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

Applications

- Mechanical engineering
- Plant construction
- Low vacuum

Adjustment ranges	Overload limit (bar)	Repeatability (bar) ¹⁾	Max. hysteresis	Measurement principle	Switching function
(bar) ²⁾					Change over contact
-0.85+1	20	±0.02	0.10.2 bar	Diaphragm	S4415B114001

¹⁾ The repeatability refers to 20°C.

Model: S4415

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

Technical data

Technical data	Machanian wasawa switch		
	Mechanical pressure switch		
Model	S4415		
Execution	negative over pressure		
Media	air; filtered 50µm, oiled or not oiled		
Process connection			
standard	G1/4		
optional	G1/8, M10x1, 1/8NPT, 1/4NPT		
Measuring principle	spring loaded diaphragm		
Materials			
Measuring element			
standard	NBR		
Thread			
standard	Zinc plated steel		
optional	stainless steel		
Switching outputs			
Number	1		
Switching function	SPDT		
Switching element	microswitch		
Adjustment			
standard	in situ, with adjustment screw		
option	factory adjusted		
Hysteresis	0.10.2 bar		
Power rating ¹⁾			
DC to 28 V	max. 2A		
AC to 50 V	max. 4A		
Load cycles	max. 100/min		
Temperature ranges	-10°C+80°C		
Electrical connection			
standard	flat connector 3 x 6.3 x 0.8		
optional	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.

