

# Pressure Switches Standard

## Vacuum switch for liquid, gas (VCM)



For monitoring vacuum of non-aggressive liquids and gaseous media.

<b>Kind of pressure</b>	vacuum, relative
<b>Pressure connection</b>	internal thread G1/4, external thread G1/2
<b>Electrical connection</b>	Plug DIN EN 175301
<b>IP class</b>	IP54
<b>Housing material</b>	rugged housing of seawater resistant aluminium die casting GD Al Si 12.
<b>Media temp.</b>	-25 ... 70 °C
<b>Media temp. limit</b>	temperatures up to 85 °C are allowable for short periods. Higher temperatures are possible, provided that the limit is safeguarded by suitable measures (e.g. water tube trap, see Accessories for Pressure Switches / Transmitters)
<b>Ambient temperature</b>	-25 ... 70 °C
<b>Ambient temp. limit</b>	at temperatures below 0 °C, ensure that no water condensation can arise in the sensor and in the switching device
<b>Switch function/capacity</b>	SPDT Microswitch 250 Vac; capacity 5 A inductive, 8 A resistive
<b>Optional functions</b>	add the type numbers below to the listed type numbers for extra functionality as described <ul style="list-style-type: none"> <li>• <b>-301</b>: terminal connection housing, IP65</li> <li>• <b>-307</b>: two microswitches, switching in parallel or in succession, fixed switching interval, terminal connection case (with the exception of VCM4156), IP65</li> <li>• <b>-217</b>: two microswitches, 1 plug, switching in succession, adjustable switching interval (with the exception of VCM4156)</li> <li>• <b>-213</b>: gold-plated contacts, switching capacity: max. 24 Vdc, 100 mA, min. 5 Vdc, 2 mA. And others not available with adjustable switching difference.</li> <li>• <b>-351</b>: protection class IP65 and switching housing with surface protection (chemical version)</li> <li>• <b>-513</b>: gold-plated contacts, switching differential permanent, IP65, switching capacity: max. 24 Vdc, 100 mA, min. 5 Vdc, 2 mA; suitable isolating switching amplifier necessary, degree of protection Ex-i</li> </ul>
<b>Certificates</b>	SIL2 according IEC 61508-2
<b>Medium type</b>	liquid or gas
<b>Scale calibration</b>	falling pressure

### Fixed pressure hysteresis

Pressure adjustment range bar	Adj. switching diff. bar	Switching diff. mbar	Max. pressure bar	Sensing element material	Type
-0.015 ... 0.006	-	2	1	Perbunan + Stainless Steel	<b>VCM4156</b>
-0.25 ... 0.1	-	25	1.5	Copper + Brass	<b>VCM301</b>
-1 ... 0.1	-	45	3	Copper + Brass	<b>VCM101</b>
-0.9 ... 0.5	-	50	3	Copper + Brass	<b>VCM095</b>
-1 ... 0.1	-	50	6	Stainless Steel	<b>VNM111</b>

### Adjustable pressure hysteresis

Pressure adjustment range bar	Adj. switching diff. bar	Switching diff. mbar	Max. pressure bar	Sensing element material	Type
-1 ... 0.1	0.08 ... 0.35	-	3	Copper + Brass	<b>VCMV101</b>
-0.9 ... 0.5	0.09 ... 0.4	-	3	Copper + Brass	<b>VCMV095</b>
-1 ... 0.1	0.09 ... 0.65	-	6	Stainless Steel	<b>VNMV111</b>

Syphon for high temperature, steel, U-shape (for more accessories, see Accessories for Pressure Switches / Transmitters)

**U430B**