



Technical explanations

- *Connector types with different cable lengths according to customer needs for all switches of the hex 24 and hex 27 series.*
- *Degree of protection according to the connector specification of the manufacturer.*
- *Adjustable switching points that maintain their setting.*
- *0240 / 0241 also adjustable even after sealing.*
- *Factory pre-set pressure switching points are embossed on the switch body.*

Our pressure switches mostly have a degree of protection IP65. This may not be adequate for all applications. Especially for commercial vehicles, mobile hydraulics and similar applications where IP67 or IP6K9K may be required.

Ready-wired switches offer a maximum of protection against dust and water. This allows that the pressure switch itself can be used in any possible assembly position while the electrical connection can be transferred to climate-wise uncritical and vibration-free places.

SUCO is able to ready-wire all commercially available connectors attaching customized cable lengths. This not only ensures a great deal of flexibility but also the possibility to supply small quantities without claiming expensive tooling costs.





The technical data of ready-wired pressure switch types are substantially the same as those of the standard types. Differences in the technical data will be agreed with the customer and defined on a customer-specific drawing of the ready-wired pressure switch.

Ready-wired pressure switches hex 24 / hex 27

Customized finishing

- Many pressure switches series of hex series 24 and 27 can be individually wired according to customer needs.
- Let us advise you.

Standard ranges suitable for ready-wiring

			
0163 / 0166 0164 0167 0169	0168	0170 / 0171 0180 / 0181 0190 / 0191 0196 / 0197	0140 / 0141
See pages 16 bis 25 for technical data	See pages 16 / 17 and 22 for technical data	See pages 26 bis 37 for technical data	See pages 26 / 27 and 29 for technical data
The switching point is factory pre-set and cannot be changed subsequently. It is therefore essential that the switching point is stated when the order is placed.			The switching point is adjustable even after sealing.

- *SUCO has developed special solutions of pressure switches for pneumatic and gaseous applications. Please ask for individual technical advice with regard to your special application.*

A selection from the wide variety of connectors we can supply

Bayonet-connector acc. DIN 72585	
AMP Junior Timer	
Cannon connector	
AMP Superseal	
Packard connector (Weather Pack 2-wire)	
Packard connector (Weather Pack 3-wire)	
Deutsch connector (DT 06 - 2S)	
Deutsch connector (DT 04 - 2P)	
Deutsch connector (DT 04 - 3P)	

- *Further connectors available on request.*
- *We supply the type and length of cable you need.*



- With changeover switch and silver contacts
- Switching point can be adjusted after potting, degree of protection IP67
- Depending on connection, suitable for 42 V or 250 V

CE marking

SUCO pressure switches rated with an operating limit of 250 V are covered by the Low Voltage Directive 73/23/EC.

An EC Declaration of Conformity has been issued for these pressure switches and is on file at our offices. The corresponding switches bear the CE mark in our catalogue.



Degree of protection type IP67

The type approval does not apply without restriction to all environmental conditions. It is the responsibility of the user to check whether the electrical connection complies with regulations other than those stated and whether it can be used for special applications which could not be foreseen by us.

Oxygen warning!

When using oxygen, the relevant safety regulations must be observed. In addition, we recommend that a maximum operating pressure of 10 bar must not be exceeded.

Technical data

Voltage:	max. 42 V / 250 V depending on connection	
Current:	max. 2 Ampere	
Protection class:	2, protective insulation <input type="checkbox"/>	
Temperature resistance of the membrane / seal materials	NBR (Buna-N)	-40°C – +100°C
	EPDM	-30°C – +120°C
	FKM	-5°C – +120°C
	Silicone	-40°C – +120°C
	HNBR	-30°C – +120°C
Switching frequency:	200 / min.	
Mechanical life expectancy:	10 ⁶ cycles (for diaphragm pressure switches, life expectancy value only applicable for pressures up to max. 50 bar)	
Pressure rise rate:	≤ 1 bar / ms	
Hysteresis:	Average value of 10-20% (not adjustable)	
Vibration resistance:	10 g / 5 – 200 Hz sine wave	
Shock resistance:	294 m / s ² ; 14 ms half sine wave	
Materials:	Zinc-plated steel body Protective cover anodised aluminium	
Cable:	Standard length 2 m with wire end sleeves	
Degree of protection:	IP67	
Weight in grams:	approx. 100 g	

- Made of zinc-plated steel (Cr VI-free)
- Overpressure safe to 300 / 600 bar¹⁾
- Switching point adjustable during operation
- Safety class 2, safety insulation



p _{max.} in bar	Adjustment range in bar	Tolerance at room temperature	Thread	Order number:
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0240 Diaphragm pressure switches

300 ¹⁾	0.3 – 1.5	± 0.2	G 1/4	0240	457 03	X	003
			NPT 1/8	0240	457 04	X	300
			NPT 1/4	0240	457 09	X	305
			7/16-20 UNF	0240	457 20	X	310
			9/16-18 UNF	0240	457 21	X	315
	1 – 10	± 0.5	G 1/4	0240	458 03	X	006
			NPT 1/8	0240	458 04	X	301
			NPT 1/4	0240	458 09	X	306
			7/16-20 UNF	0240	458 20	X	311
			9/16-18 UNF	0240	458 21	X	316
	10 – 20	± 1.0	G 1/4	0240	459 03	X	009
			NPT 1/8	0240	459 04	X	302
			NPT 1/4	0240	459 09	X	307
			7/16-20 UNF	0240	459 20	X	312
			9/16-18 UNF	0240	459 21	X	317
	20 – 50	± 2.0	G 1/4	0240	461 03	X	012
			NPT 1/8	0240	461 04	X	303
			NPT 1/4	0240	461 09	X	308
			7/16-20 UNF	0240	461 20	X	313
			9/16-18 UNF	0240	461 21	X	318

0241 Piston pressure switches

600 ¹⁾	50 – 150	± 5.0	G 1/4	0241	460 03	X	003
			NPT 1/8	0241	460 04	X	304
			NPT 1/4	0241	460 09	X	309
			7/16-20 UNF	0241	460 20	X	314
			9/16-18 UNF	0241	460 21	X	319

Diaphragm / seal material – areas of application

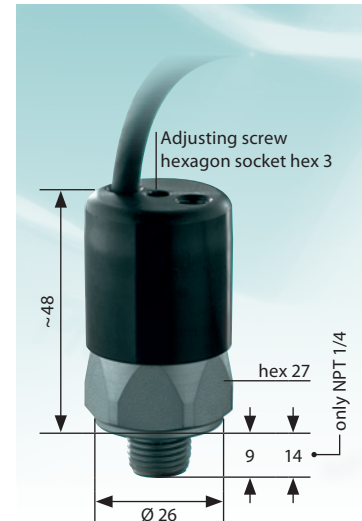
NBR	Hydraulic / machine oil, heating oil, air, nitrogen etc.	1
EPDM	Brake fluid, ozone, acetylene, hydrogen etc.	2
FKM	Hydraulic fluids (HFA, HFB, HFD), petrol/gasoline etc.	3

Temperature ranges of diaphragm / seal materials see page 40

Order number:	024X - XXX XX - X - XXX
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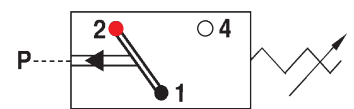
Piston pressure switches are only to a limited extent suitable for use with gases.
See explanation on page 9.

With male thread



Contact assignment:

- 1 = black
- 2 = red
- 4 = white



Options:

- other cable lengths and connectors on request
- fixed pre-set switching point

- We offer other body materials and connecting threads upon request.

- Other diaphragm- / seal materials are available on request, e.g. HNBR or silicone for diaphragm pressure switches.

¹⁾ Static value. Dynamic value is 30-50% lower. The values refer to the hydraulic or pneumatic part of the pressure switch.