

M.5

hex 24 / 27
Ready-wired

hex 24 / hex 27 ready-wired pressure switches

Custom designs



- Ready-wired pressure switches hex 24 and hex 27, available with all commercial plug-in types and individual cable length.
- The technical details of ready-wired pressure switch types correspond to those of the same standard pressure switch types. Different technical details will be agreed with the customer.
- Pressure switches usually have protection class IP65. Our ready-wired pressure switches attain IP67 or IP6K9K. This is a requirement particularly in commercial vehicle construction, mobile hydraulics and similarly demanding applications.
- Ready-wired pressure switches enable plug connectors to be moved in climatically non-critical and low-vibration areas.
- The modular layout also enables the production of lower volumes.
- The switching point for ready-wired pressure switches is factory-set to a fixed value.
Exception: The switching point of the 0240/0241 can be adjusted on site even after the sealing process.

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Custom designs

All hex 24 and hex 27 pressure switches can be individually wired according to customer needs.

Standard types suitable for ready-wiring

<p>0163 / 0166 0164 0167 0169</p>	<p>0168</p>	<p>0170 / 0171 0180 / 0181 0190 / 0191 0196 / 0197</p>	<p>0140 / 0141</p>
			
<p>Technical details page 41</p>	<p>Technical details page 41</p>	<p>Technical details page 53</p>	<p>Technical details page 53</p>
<p>The switching point is factory preset and cannot be changed subsequently, so please state the switching point when ordering.</p>			<p>The switching point is adjustable even after sealing.</p>

A selection from the wide variety of connectors we can supply

<p>Connector to DIN 72585-A1-4.1</p>	
<p>AMP Junior Timer®</p>	
<p>Cannon connector</p>	
<p>AMP Superseal 1.5®</p>	
<p>Packard connector (Weather Pack® 2-wire)</p>	
<p>Packard connector (Weather Pack® 3-wire)</p>	
<p>Deutsch connector (DT 06 - 2S)</p>	
<p>Deutsch connector (DT 04 - 2P)</p>	
<p>Deutsch connector (DT 04 - 3P)</p>	

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Please note our detailed information on

- CE marking
- protection class
- custom applications

in the general technical explanations on page 14, and the technical explanations on mechanical pressure switches on page 17.

0240 / 0241

Diaphragm / piston pressure switches, hex 27

Technical data

Refer to page 54 for electrical values

Rated working voltage:	max. 42 V / 250 V depending on connection
Rated working current:	max. 2 A
Protection class:	2, protective insulation
Temperature resistance of sealing materials:	NBR -40°C ... +100°C
	EPDM -30°C ... +120°C
	FKM (in diaphragm pressure switch) -5°C ... +120°C
	FKM (in piston pressure switch) -15°C ... +120°C
	Silicone -40°C ... +120°C
	HNBR -30°C ... +120°C
Switching frequency:	200 / min.
Mechanical life expectancy:	1,000,000 cycles (for diaphragm pressure switches, life expectancy value only applies for switching pressures to max. 50 bar)
Pressure rise rate:	≤ 1 bar/ms
Hysteresis:	Average value 10 – 20 % (not adjustable)
Vibration resistance:	10 g / 5 – 200 Hz sine wave, DIN EN 60068-2-6
Shock resistance:	294 m/s ² ; 14 ms half sine wave, DIN EN 60068-2-6
Materials:	Housing material: zinc-plated steel Protective cap: anodised aluminium
Protection class:	IP67
Cable:	Standard length 2 m with wire end sleeves
Weight:	approx. 120 g

Options for 0240 / 0241

- Other cable lengths and plug-in systems
- Fixed switching point, factory-set, set point embossed on housing
- Alternative housing materials and connection threads
- Other sealing materials, such as silicone for diaphragm pressure switches

0240 / 0241

Diaphragm / piston pressure switches, hex 27

- Zinc-plated steel (CrVI-free)
- Overpressure safety up to 300 / 600 bar ¹⁾
- Switching point can also be adjusted during use
- Protection class 2, protective insulation

p _{max.} in bar	Adjustment range in bar	Tolerance in bar at room temperature	Male 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

Seal material – Application areas

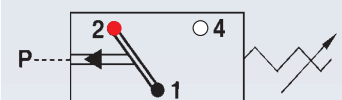
NBR	Hydraulic/machine oil, heating oil, air, nitrogen, etc.	1
EPDM	Brake fluid, hydrogen, oxygen, acetylene, etc.	2
FKM	Hydraulic fluids (HFA, HFB, HFD), petrol/gasoline, etc.	3
HNBR	Hydraulic/machine oil, ester-based bio-oils	9

Refer to page 64 for the temperature range and application thresholds of sealing materials.

Your order number: **024X – XXX XX – X – XXX**

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Contact assignment:

- 1 = Black
- 2 = Red
- 4 = White



¹⁾ Static value. Dynamic value is 30-50 % lower. Values pertain to the hydraulic/pneumatic part of the pressure switch.