

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

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

A selection from the wide variety of connectors we can supply

Connector to DIN 72585-A1-4.1	
AMP Junior Timer®	
Cannon connector	
AMP Superseal 1.5°	
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)	

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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.

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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

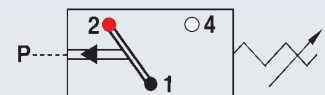
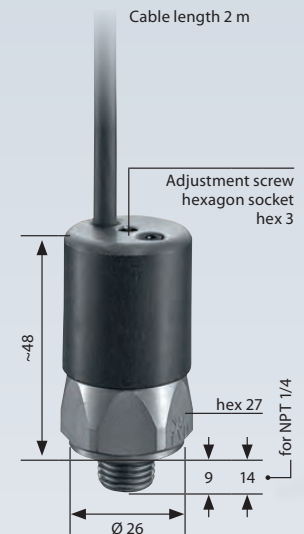
Refer to page 64 for the temperature range and application thresholds of sealing materials.

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.