

Pressure switches hex 27 with integrated connector

M.2
hex 27 integrated



Technical details

Types:	0132-0137	0184 / 0185	0194 / 0195
Rated working voltage:	10 ... 48 VAC/DC	10 ... 250 VAC/DC	5 ... 24 VDC
Rated current: (resistive load, DC12 / AC12)	10 mA ... 4 A	10 mA ... 4 A	3 ... 50 mA
Temperature resistance of sealing materials:	NBR (diaphragm pressure switch, p _{max} = 400 bar)	-40 °C ... +100 °C	
	NBR (diaphragm pressure switch, p _{max} = 100 bar) (piston pressure switch)	-30 °C ... +100 °C	
	EPDM	-30 °C ... +120 °C	
	FKM (diaphragm pressure switch)	-5 °C ... +120 °C	
	FKM (piston pressure switch)	-15 °C ... +120 °C	
	FFKM	-20 °C ... +120 °C	
	Silicone	-40 °C ... +120 °C	
	HNBR	-30 °C ... +120 °C	
Burst pressure (diaphragm pressure switch, overpressure resistance 100 bar)	200 bar		
Burst Pressure (diaphragm pressure switch, overpressure resistance 400 bar)	700 bar (for threads M10, G 1/8, R 1/8 and NPT 1/8 up to max. 600 bar)		
Burst pressure (Piston pressure switch)	1,000 bar (for threads M10, G 1/8, R 1/8 and NPT 1/8 up to max. 600 bar)		
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:	≤ 1,000 bar/s		
Hysteresis: (can only be set at factory) ¹⁾ :	Adjustable average value 10 ... 30 % depending on type		
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 60068-2-27		
Weight:	approx. 100 g	approx. 130 g	approx. 130 g

Overview of maximum working voltage and current and contact materials

Type:	0132	0133	0134	0135	0136	0137	0184	0185	0194	0195
5 ... 24 VDC									●	●
10 ... 48 VAC/DC	●	●	●	●	●	●				
10 ... 250 VAC/DC							●	●		
3 ... 50 mA									●	●
10 mA ... 4 A	●	●	●	●	●	●	●	●		
Gold contacts	○	○	○	○	○	○			●	●
Silver contacts	●	●	●	●	●	●	●	●		
Adjustable hysteresis (can only be set at factory)	●	●	●	●	●	●	●	●	●	●
Connector type	AMP Superseal 1.5 [®]		M12x1 DIN EN 61076-2-101-A		Deutsch DT04-3P		DIN EN 175301			
Protection class	IP67		IP67		IP67, IP6K9K		IP65			

○ Available as an option

¹⁾ see notes on hysteresis in the technical explanations (page 15-16)



0132 / 0133 / 0134 / 0135 / 0136 / 0137

Diaphragm/piston pressure switches with integrated connector, maximum operating voltage up to 48 V

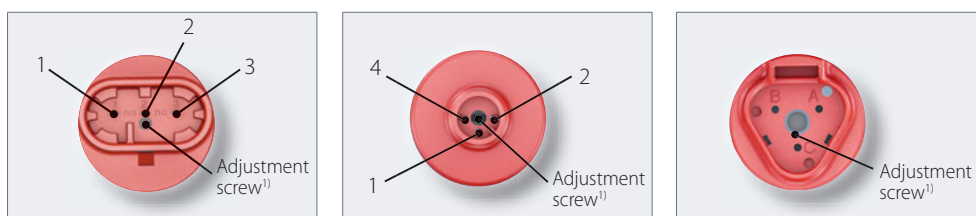
- Simple, quick and reliable electrical connection with easy-to-fit connectors
- Quick fitting with socket wrench (spanner)
- Changeover with silver contacts (gold contacts available as option)
- Hysteresis adjustable at factory
- Made of zinc-plated steel (CrVI-free, other housing materials available as option)

Model / type ▶

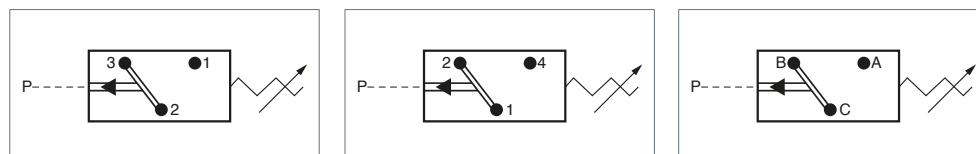
0132 / 0133	0134 / 0135	0136 / 0137
TE AMP Superseal 1.5® IP67	M12x1 EN 61076-2-101-A Contact assignment DIN 60947-5-2 IP67	Deutsch DT04-3P® IP67, IP6K9K
H ≈ 73 mm	H ≈ 65 mm	H ≈ 71 mm

Height without thread ▶

Contact assignments ▶



Circuit diagrams ▶



¹⁾ Blade of screwdriver max. 2 mm

Accessory ▶

Not included in the delivery.

Please order separately.

Mating plug with 2 m cable ²⁾

TE AMP Superseal 1.5®	M 12x1 EN 61076-2-101-LF	Deutsch DT06-3S®
3 x 0,5 mm ² Radox cable / IP65	4 x 0,34 mm ² PUR cable / IP67	3 x 0,5 mm ² PUR cable / IP67
1-1-32-653-158	1-1-00-653-162	1-1-36-653-160

Cable cross-section / IP protection ▶

Article number ▶

²⁾ For the pin assignment of the wires please refer to chapter M.10 Accessories (page 91)

0132 / 0133 / 0134 / 0135 / 0136 / 0137

Diaphragm/piston pressure switches with integrated connector,
maximum operating voltage up to 48 V

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p_{max} in bar	Adjustment range in bar	Tolerance at room temperature in bar	Thread	Article number
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0132 / 0134 / 0136 Diaphragm pressure switches

100 ¹⁾	0.3 - 1.5	± 0.2	G 1/4	013X - 457 03 - X - 003	
			M 10x1 con.	013X - 457 01 - X - 001	
			M 12x1.5 cyl.	013X - 457 02 - X - 002	
			NPT 1/8	013X - 457 04 - X - 318	
			NPT 1/4	013X - 457 09 - X - 314	
			7/16-20 UNF	013X - 457 20 - X - 301	
			9/16-18 UNF	013X - 457 21 - X - 302	
400 ¹⁾	1 - 10	± 0.5	G 1/4	013X - 458 03 - X - 042	
			M 10x1 con.	013X - 458 01 - X - 040	
			M 12x1.5 cyl.	013X - 458 02 - X - 041	
			NPT 1/8	013X - 458 04 - X - 343	
			NPT 1/4	013X - 458 09 - X - 340	
			7/16-20 UNF	013X - 458 20 - X - 341	
				9/16-18 UNF	013X - 458 21 - X - 342
	10 - 50	± 3.0	G 1/4	013X - 459 03 - X - 009	
			M 10x1 con.	013X - 459 01 - X - 007	
			M 12x1.5 cyl.	013X - 459 02 - X - 008	
			NPT 1/8	013X - 459 04 - X - 320	
			NPT 1/4	013X - 459 09 - X - 316	
7/16-20 UNF			013X - 459 20 - X - 305		
			9/16-18 UNF	013X - 459 21 - X - 306	
10 - 100	$\pm 3.0 - 5.0$	G 1/4	013X - 461 03 - X - 012		
		M 10x1 con.	013X - 461 01 - X - 010		
		M 12x1.5 cyl.	013X - 461 02 - X - 011		
		NPT 1/8	013X - 461 04 - X - 321		
		NPT 1/4	013X - 461 09 - X - 317		
		7/16-20 UNF	013X - 461 20 - X - 307		
			9/16-18 UNF	013X - 461 21 - X - 308	

0133 / 0135 / 0137 Piston pressure switches

700 ^{1) 2)}	50 - 200	5.0	G 1/4	013X - 460 03 - X - 003
			M 10x1 con.	013X - 460 01 - X - 001
			M 12x1.5 cyl.	013X - 460 02 - X - 002
			NPT 1/4	013X - 460 09 - X - 303
			7/16-20 UNF	013X - 460 20 - X - 301
			9/16-18 UNF	013X - 460 21 - X - 302

Seal material – Application areas

NBR	Hydraulic/machine oil, air, nitrogen, etc.	1
EPDM	Brake fluid, hydrogen, oxygen, acetylene, etc.	2
FKM	Hydraulic fluids (HFA, HFB, HFD), petrol/gasoline, etc.	3
FFKM	Hot water, chemical acids, diluted alkalis, ketones, esters, alcohols	6
HNBR ³⁾	Hydraulic/machine oil, ester-based bio-oils	9

Refer to page 33 for the temperature range and application thresholds of sealing materials.

Article number: **013 X - XXX XX - X - XXX**

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

²⁾ Excluding the thread sizes G 1/8, R 1/8, NPT 1/8 and M 10x1 cylindrical/conical.

³⁾ HNBR diaphragm not available for pressure ranges 0.3 - 1.5 bar.

