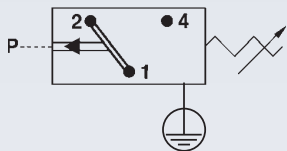


# M.2

hex 27 integrated



Socket device included in the delivery



# 0184

Diaphragm pressure switches up to 250 V

- Made of zinc-plated steel (CrVI-free, other housing materials available as option)
- Socket device similar to DIN EN 175301 (DIN 43650)
- Snap action with silver contacts
- Overpressure safety up to 1,450 / 4,350 psi (100 / 300 bar)<sup>1)</sup>
- Differential adjustable at factory

P <sub>max.</sub> in psi (bar)	Adjustment range in psi (bar)	Tolerance in psi (bar) at room temperature	Male thread	Order number
-----------------------------------	----------------------------------	---	-------------	--------------

### 0184 Diaphragm pressure switches

1,450 psi <sup>1)</sup> (100 bar) <sup>1)</sup>	4.35 - 21.75 psi (0.3 - 1.5 bar)	± 2.90 psi (± 0.2 bar)	M 10x1 taper	0184 - 457 01 - X - 001
			1/4" BSPP	0184 - 457 03 - X - 003
			1/8" NPT	0184 - 457 04 - X - 318
			1/4" NPT	0184 - 457 09 - X - 314
			7/16-20 UNF	0184 - 457 20 - X - 301
			9/16-18 UNF	0184 - 457 21 - X - 302

	14.5 - 145 psi (1 - 10 bar)	± 7.25 psi (± 0.5 bar)	M 10x1 taper	0184 - 458 01 - X - 040
			1/4" BSPP	0184 - 458 03 - X - 042
			1/8" NPT	0184 - 458 04 - X - 343
			1/4" NPT	0184 - 458 09 - X - 340
			7/16-20 UNF	0184 - 458 20 - X - 341
			9/16-18 UNF	0184 - 458 21 - X - 342

4,350 psi <sup>1)</sup> (300 bar) <sup>1)</sup>	145 - 725 psi (10 - 50 bar)	± 43.5 psi (± 3.0 bar)	M 10x1 taper	0184 - 459 01 - X - 007
			1/4" BSPP	0184 - 459 03 - X - 009
			1/8" NPT	0184 - 459 04 - X - 320
			1/4" NPT	0184 - 459 09 - X - 311
			7/16-20 UNF	0184 - 459 20 - X - 305
			9/16-18 UNF	0184 - 459 21 - X - 306

	145 - 1,450 psi (10 - 100 bar)	± 43.5 - 72.5 psi (± 3.0 - 5.0 bar)	M 10x1 taper	0184 - 461 01 - X - 010
			1/4" BSPP	0184 - 461 03 - X - 012
			1/8" NPT	0184 - 461 04 - X - 321
			1/4" NPT	0184 - 461 09 - X - 312
			7/16-20 UNF	0184 - 461 20 - X - 307
			9/16-18 UNF	0184 - 461 21 - X - 308

### Seal material – Application areas

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

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



Your order number: **0184 - XXX XX - X - XXX**



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

# Pressure switches hex 27 with integrated connector

## Technical data

Types:	<b>0132 – 0137</b>	<b>0184 / 0185</b>	<b>0194 / 0195</b>
Rated working voltage:	10 ... 48 VAC/DC	10 ... 250 VAC/DC	5 ... 24 VDC
Rated current: (resistive load, DC12 and AC12)	10 mA ... 4 A	10 mA ... 4A	3 ... 50 mA
Temperature resistance of sealing materials:	NBR (BunaN) (Overpressure safety up to 1,450 psi /100 bar)	-22 °F... +212 °F (-30 °C ... +100 °C)	
	NBR (BunaN) (Overpressure safety up to 4,350 psi /300 bar)	-40 °F... +212 °F (-40 °C ... +100 °C)	
	EPDM	-22 °F... +248 °F (-30 °C... +120 °C)	
	FKM (Viton®) (in diaphragm pressure switch)	+23 °F... +248 °F (-5 °C ... +120 °C)	
	FKM (Viton®) (in piston pressure switch)	+5 °F... +248 °F (-15 °C ... +120 °C)	
	Silicone	-40 °F... +248 °F (-40 °C ... +120 °C)	
	HNBR	-22 °F... +248 °F (-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. 725 psi (50 bar))		
Pressure rise rate:	≤ 14.5 psi/ms (≤ 1 bar/ms)		
Differential: (can only be set at factory)	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 <sup>2</sup> ; 14 ms half sine wave; DIN EN 60068-2-27		
Weight:	approx. 3.52 oz (100 g)	approx. 4.58 oz (130 g)	approx. 4.58 oz (130 g)

### Overview of maximum working voltage and current and contact materials

Type	<b>0132</b>	<b>0133</b>	<b>0134</b>	<b>0135</b>	<b>0136</b>	<b>0137</b>	<b>0184</b>	<b>0185</b>	<b>0194</b>	<b>0195</b>
5 ... 24 VDC									●	●
10 ... 48 VAC/DC	●	●	●	●	●	●				
10 ... 250 VAC/DC							●	●		
3 ... 50 mA									●	●
10 mA ... 4 A	●	●	●	●	●	●	●	●		
Gold contacts	○	○	○	○	○	○			●	●
Silver contacts	●	●	●	●	●	●	●	●		
Adjustable differential (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

# M.2

hex 27 integrated



M

<p><b>Socket device</b></p> <p>to DIN EN 175301-803-A (DIN 43650)</p> <p>PG9 screw fitting (tightening range 6 – 9 mm) terminals for wire cross-sections: 0.34 ... 1.5 mm<sup>2</sup> (AWG 22 ... AWG 16), tightening torque for terminal screw 0.4 Nm</p> <p><b>With socket device fitted: IP65</b></p> <p>Suitable for voltages up to 250 V</p>	<p><b>Socket device</b></p> <p>With indicator lamp to DIN EN 175301-803-A (DIN 43650)</p> <p>PG9 screw fitting (tightening range 6 – 9 mm) terminals for wire cross-sections: 0.34 ... 1.5 mm<sup>2</sup> (AWG 22 ... AWG 16), tightening torque for terminal screw 0.4 Nm</p> <p><b>With socket device fitted: IP65</b></p> <p>Suitable for voltage 24 or 250 V</p>	<p><b>Socket device</b></p> <p>M 12x1 DIN EN 61071-2-101 D Straight 4-pin</p> <p>Terminals for wire cross-section 0.75 mm<sup>2</sup> (AWG 18), tightening torque for terminal screw 0.4 Nm</p> <p><b>With socket device fitted: IP65</b></p> <p>Suitable for voltages up to 48 V</p>	<p><b>Socket device</b></p> <p>M 12x1 DIN EN 61071-2-101 D Angled 4-pin</p> <p>Terminals for wire cross-section 0.75 mm<sup>2</sup> (AWG 18), tightening torque for terminal screw 0.4 Nm</p> <p><b>With socket device fitted: IP65</b></p> <p>Suitable for voltages up to 48 V</p>
<p>suitable for series</p> <p><b>0150 / 0161 / 0162 / 0175 0184 / 0185 / 0194 / 0195</b></p>	<p>suitable for series</p> <p><b>0150 / 0161 / 0162 / 0175 0184 / 0185 / 0194 / 0195</b></p>	<p>suitable for series</p> <p><b>0122 / 0123 / 0124 / 0125 0134 / 0135 / 0424 / 0425</b></p> <p>and for all transmitters and electronic pressure switches with an M12 connector</p>	<p>suitable for series</p> <p><b>0122 / 0123 / 0124 / 0125 0134 / 0135 / 0424 / 0425</b></p> <p>and for all transmitters and electronic pressure switches with an M12 connector</p>
<p>Order number: <b>1-1-84-652-009</b></p>	<p>Order number: for 24 VDC: <b>1-1-84-652-011</b> for 250 VAC: <b>1-1-84-652-010</b></p>	<p>Order number: <b>1-6-00-652-016</b></p>	<p>Order number: <b>1-6-00-652-017</b></p>

## Pressure switches hex 27 with integrated connector

Snap action switch with silver or gold contacts



- Large selection of electrical plug-in types for quick attachment and reliable connection
- Differential adjustable at factory
- High protection class (up to IP67 or IP6K9K)
- Compact and rugged design in industrial environments like construction and agricultural machinery or commercial vehicles
- Switching point can be set on site with adjusting screw <sup>1)</sup>
- Very high overpressure safety
- The corresponding mating plugs are available as accessories (please refer to page 34)

<sup>1)</sup> Pressure switches can also be supplied preset at factory.  
The switching point is embossed onto pressure switches preset at factory.