

0185

Piston 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 8,700 psi (600 bar)¹⁾
- Differential adjustable at factory

P _{max.} in psi (bar)	Adjustment range in psi (bar)	Tolerance in psi (bar) at room temperature	Male thread	Order number
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0185 Piston pressure switches

8,700 psi ¹⁾ (600 bar) ¹⁾	725 - 2,900 psi (50 - 200 bar)	± 72.5 psi (± 5.0 bar)	M 10x1 taper	0185 - 460 01 - X - 001
			1/4" BSPP	0185 - 460 03 - X - 003
			1/8" NPT	0185 - 460 04 - X - 304
			1/4" NPT	0185 - 460 09 - X - 303
			7/16-20 UNF	0185 - 460 20 - X - 301
			9/16-18 UNF	0185 - 460 21 - X - 302

Seal material – Application areas

Seal material	Application areas	Code
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

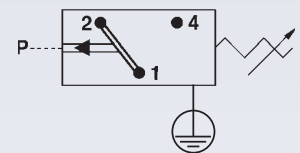
Refer to page 33 for the temperature range and application thresholds of sealing materials.



Your order number: 0185 - 460 XX - X - XXX



Socket device included in the delivery



¹⁾ 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:	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 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 ² ; 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	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 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			

M.2
hex 27 integrated



○ Available as an option

<p>Socket device</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 mm² (AWG 22 ... AWG 16), tightening torque for terminal screw 0.4 Nm</p> <p>With socket device fitted: IP65</p> <p>Suitable for voltages up to 250 V</p>	<p>Socket device</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 mm² (AWG 22 ... AWG 16), tightening torque for terminal screw 0.4 Nm</p> <p>With socket device fitted: IP65</p> <p>Suitable for voltage 24 or 250 V</p>	<p>Socket device</p> <p>M 12x1 DIN EN 61071-2-101 D Straight 4-pin</p> <p>Terminals for wire cross-section 0.75 mm² (AWG 18), tightening torque for terminal screw 0.4 Nm</p> <p>With socket device fitted: IP65</p> <p>Suitable for voltages up to 48 V</p>	<p>Socket device</p> <p>M 12x1 DIN EN 61071-2-101 D Angled 4-pin</p> <p>Terminals for wire cross-section 0.75 mm² (AWG 18), tightening torque for terminal screw 0.4 Nm</p> <p>With socket device fitted: IP65</p> <p>Suitable for voltages up to 48 V</p>
<p>suitable for series</p> <p>0150 / 0161 / 0162 / 0175 0184 / 0185 / 0194 / 0195</p>	<p>suitable for series</p> <p>0150 / 0161 / 0162 / 0175 0184 / 0185 / 0194 / 0195</p>	<p>suitable for series</p> <p>0122 / 0123 / 0124 / 0125 0134 / 0135 / 0424 / 0425</p> <p>and for all transmitters and electronic pressure switches with an M12 connector</p>	<p>suitable for series</p> <p>0122 / 0123 / 0124 / 0125 0134 / 0135 / 0424 / 0425</p> <p>and for all transmitters and electronic pressure switches with an M12 connector</p>
<p>Order number: 1-1-84-652-009</p>	<p>Order number: for 24 VDC: 1-1-84-652-011 for 250 VAC: 1-1-84-652-010</p>	<p>Order number: 1-6-00-652-016</p>	<p>Order number: 1-6-00-652-017</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 ¹⁾
- Very high overpressure safety
- The corresponding mating plugs are available as accessories (please refer to page 34)

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