

# 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 10,152 psi (700 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
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## 0185 Piston pressure switches

10,152 psi <sup>1)</sup> (700 bar) <sup>1)</sup>	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.

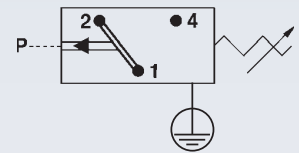
Your order number: 0185 - 460 XX - X - XXX

# M.2

hex 27 integrated



Socket device included in the delivery



<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

M.2  
hex 27 integrated



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 5,801 psi /400 bar)		-40 °F... +212 °F (-40 °C ... +100 °C)
	EPDM		-22 °F... +248 °F (-30 °C ... +120 °C)
	FFKM (Viton®) (in diaphragm pressure switch)		+23 °F... +248 °F (-5 °C ... +120 °C)
	FKM (in piston pressure switch)		+5 °F... +248 °F (-15 °C ... +120 °C)
	FKM (Viton®)		-4 °F... +248 °F (-20 °C ... +120 °C)
	Silicone		-40 °F... +248 °F (-40 °C ... +120 °C)
	HNBR		-22 °F... +248 °F (-30 °C ... +120 °C)
Burst pressure (diaphragm pressure switch, overpressure resistance 1,450psi)	2,900 psi (200 bar)		
Burst pressure (diaphragm pressure switch, overpressure resistance 1,450psi)	5,801 psi (400 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. 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	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			

○ Available as an option



# 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 (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
- 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.