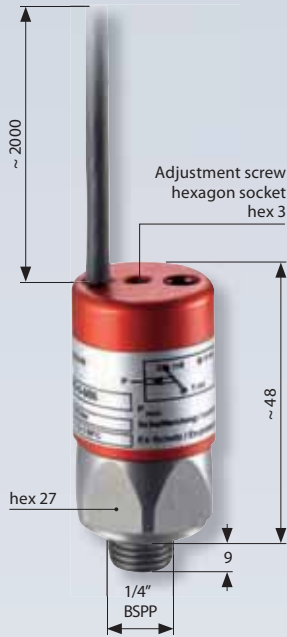


# 0340 / 0341

Diaphragm / piston pressure switches up to 250 V

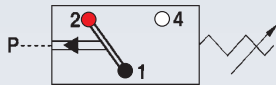
ATEX  $\text{CE}$   $\text{II 3D IP65 T90}^\circ\text{C}$  (dust protection zone 22)

- Zinc-plated steel housing (CrVI-free), with anodised aluminium protective cap
- Snap action with silver contacts
- Operation voltage up to 250 V, protection class 2, protective insulation  $\square$
- Overpressure safety up to 4,350 / 8,700 psi (300 / 600 bar)<sup>1)</sup>



### Contact assignment:

- 1 = black
- 2 = red
- 4 = white



P <sub>max.</sub> in psi (bar)	Adjustment range in psi (bar)	Tolerance in psi (bar) at room temperature	Thread	Order number
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### 0340 Diaphragm pressure switches

4,350 psi <sup>1)</sup> (300 bar) <sup>1)</sup>	4.35 - 21.75 psi (0.3 - 1.5 bar)	± 2.90 psi (± 0.2 bar)	1/4" BSPP	0340 - 457 03 - X - 003
	14.5 - 145 psi (1 - 10 bar)	± 7.25 - 14.5 psi (± 0.5 - 1.0 bar)		0340 - 458 03 - X - 006
	145 - 290 psi (10 - 20 bar)	± 14.5 psi (± 1.0 bar)		0340 - 459 03 - X - 009
	290 - 725 psi (20 - 50 bar)	± 29 psi (± 2.0 bar)		0340 - 461 03 - X - 012

### 0341 Piston pressure switches

8,700 psi <sup>1)</sup> (600 bar) <sup>1)</sup>	725 - 2,175 psi (50 - 150 bar)	± 72.5 psi (± 5.0 bar)	1/4" BSPP	0341 - 460 03 - X - 003
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### 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

Refer to page 82 for the temperature range and application thresholds of sealing materials



Your order number: **034X - XXX 03 - X - XXX**

**Piston pressure switches only have limited suitability for use with gases (refer to Page 14 for explanations).**

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

# Explosion-protected pressure switches

## Technical data

Type:	<b>0165</b>	<b>0340 / 0341</b>	
ATEX protection zone:	1 and 2	22	
Combustible Material:	Gases and vapours	Dusts	
Rated working voltage:	10 ... 250 VAC	10 ... 250 VDC	10 ... 250 VAC
Rated working current:	10 mA ... 1 A	10 mA ... 250 mA	10 mA ... 2 A
Temperature resistance:	NBR (BunaN)	-4 °F... +176 °F (-20 °C... +80 °C)	
	EPDM	-4 °F... +176 °F (-20 °C... +80 °C)	
	FKM (Viton®) (in diaphragm pressure switch)	+23 °F... +176 °F (-5 °C... +80 °C)	
	FKM (Viton®) (in piston pressure switch)	+5 °F... +176 °F (-15 °C... +80 °C)	
Switching frequency:	200 / min.		
Mechanical life expectancy:	1,000,000 cycles		
Pressure rise rate:	≤ 14.5 psi/ms (≤ 1 bar/ms)		
Differential:	10 ... 30 % (depending on type, non-adjustable)		
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		
Cable length:	Standard length approx. 6.5 ft (2 m) with wire end sleeve, also available in lengths of approx. 16 ft (5 m).		
Cable cross-section:	3 x 0.75 mm <sup>2</sup>	3 x 0.5 mm <sup>2</sup>	
Housing material:	Aluminium	Zinc-plated steel (CrVI-free) anodised aluminium	
Protection class:	IP65		
Weight:	approx. 13.5 oz (380 g)		approx. 8.2 oz (230 g)

# Explosion-protected pressure switches

## Technical data

M.8

ATEX



### Technical explanations

Explosion-protected pressure switches are classified according to the respective combustible material type. This division is:

<b>Gases and vapours</b> <b>0165</b>	<b>Dusts</b> <b>0340 / 0341</b>	<b>Methane dust</b> <b>not suitable</b>
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**Our pressure switches are generally designed for use with gases, vapours or dust.**

**Our explosion-protected pressure switches are not approved for use with methane dust (mining applications).**

The table provides an overview of the zone divisions, equipment groups and equipment categories.

### Conditions in potentially explosive atmosphere

Com- bustible materials	Temporary behaviour of combustible materials in potentially explosive area	Categori- sation of potentially explosive areas	Marking required on equipment to be used	
			Equipment group	Equipment category
Gases Vapours	are present continually, frequently or for long periods	Zone 0	II	1G
	occur occasionally	Zone 1	II	2G or 1G
	are unlikely to occur, and if so, are then only seldom or for short periods	Zone 2	II	3G or 2G or 1G
Dusts	are present continually, frequently or for long periods	Zone 20	II	1D
	occur occasionally	Zone 21	II	2D or 1D
	occur if accumulated dust is whirled up, and then only seldom or for short periods	Zone 22	II	3D or 2D or 1D
Methane dust	-	Mining industry	I	M1
	-	Mining industry	I	M1 or M2



# Explosion-protected pressure switches

To ATEX standard



- ATEX-certification for use in potentially explosive areas
- Switching point can be easily adjusted by the user whilst system is in operation
- Compact design
- Excellent price/performance ratio