

# Pressure switches

A comprehensive range of Pressure Switches, providing a range of different options for converting pressure changes into an electrical signal. The range includes electro-mechanical and electronic switches suitable for pneumatic and hydraulic applications. Also showcased is our newest Pressure Switch 50D (page 168) as well as the classic Herion 8D product (page 170). Catalogue pages show comprehensive data with pdf datasheets available online, see the reference at the bottom of each page.



# Fast Find Guide

## ELECTRO-MECHANICAL PRESSURE SWITCHES

### 18D Pneumatic

-1 ... 30 bar



Page 165

### 18D Hydraulic

5 ... 420 bar



Page 166

### 20D

Low pressure, Allfluid and ATEX

-0,025 ... 100 bar



Page 167

## ELECTRONIC PRESSURE SWITCHES

### 50D Pneumatic

0 ... 10 bar, 0 ... 6 bar,  
-1 ... 0 bar, -1 ... 1 bar



Page 168

### 33D

Pneumatic/Allfluid

-1 ... 400 bar



Page 169

## CLASSIC PRODUCTS

### 8D Pneumatic & Hydraulic

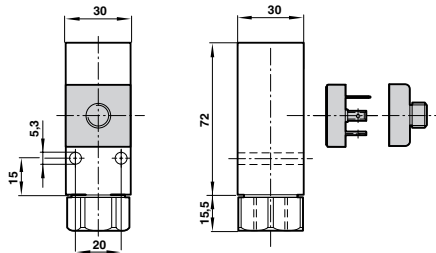


Page 170

# ELECTRO-MECHANICAL PRESSURE SWITCH

## 18D Pneumatic

-1 ... 30 bar



- Gold-plated contacts
- High cycle life
- Vibration resistant to 15 g
- Microswitch approved by UL and CSA
- Intrinsically safe operation
- Direct interface to Excelon air line units

### TECHNICAL DATA

#### Medium:

Neutral, gaseous and liquid fluids

#### Operation:

Diaphragm

#### Ambient temperature:

-10°C ... +80°C

Consult our Technical Service for use below +2°C.

#### Repeatability:

±3%, of full scale

### Models

STANDARD Model	Pressure range (bar)	Fluid connection	Electrical connection	Switching pressure difference	Max over pressure (bar)	Plug	Electrical connector M12 x 1 Straight x 2 m long	90° x 2 m long
	-1 ... 0	G1/4	DIN EN 175301-803 Form A	0,15 ... 0,18	80	-	-	-
	-1 ... 1	G1/4	DIN EN 175301-803 Form A	0,25 ... 0,35	80	-	-	-
	0,2 ... 2	G1/4	DIN EN 175301-803 Form A	0,20 ... 0,35	80	-	-	-
	0,5 ... 8	G1/4	DIN EN 175301-803 Form A	0,35 ... 0,85	80	-	-	-
	1 ... 16	G1/4	DIN EN 175301-803 Form A	0,40 ... 1,20	80	-	-	-
	1 ... 30	G1/4	DIN EN 175301-803 Form A	1,00 ... 5,00	80	-	-	-
	1 ... 30	1/4 NPT	DIN EN 175301-803 Form A	1,00 ... 5,00	80	-	-	-
	0,2 ... 4	G1/4	DIN EN 175301-803 Form A	0,20 ... 0,35	80	0570110000000000	-	-
	0,5 ... 8	G1/4	DIN EN 175301-803 Form A	0,35 ... 0,85	80	0570110000000000	-	-
	1 ... 16	G1/4	DIN EN 175301-803 Form A	0,40 ... 1,20	80	0570110000000000	-	-
	-1 ... 0	Flange	DIN EN 175301-803 Form A	0,15 ... 0,18	80	-	-	-
	0,2 ... 2	Flange	DIN EN 175301-803 Form A	0,20 ... 0,35	80	-	-	-
	0,5 ... 8	Flange	DIN EN 175301-803 Form A	0,35 ... 0,85	80	-	-	-
	1 ... 16	Flange	DIN EN 175301-803 Form A	0,40 ... 1,20	80	-	-	-
	-1 ... 0	G1/4	M12 x 1	0,15 ... 0,18	80	-	0523057000000000	0523058000000000
	0,2 ... 2	G1/4	M12 x 1	0,20 ... 0,35	80	-	0523057000000000	0523058000000000
	0,5 ... 8	G1/4	M12 x 1	0,35 ... 0,85	80	-	0523057000000000	0523058000000000
	1 ... 16	G1/4	M12 x 1	0,40 ... 1,20	80	-	0523057000000000	0523058000000000
<b>MODELS FOR WATER APPLICATIONS</b>								
	0,5 ... 8	G1/4	DIN EN 175301-803 Form A	0,35 ... 0,85	80	-	-	-
<b>MODELS CONFORMING TO ATEX - ZONE 2 AND 22 (Ex II 3G/D)</b>								
	0,2 ... 2	G1/4	DIN EN 175301-803 Form A	0,20 ... 0,35	80	-	-	-
	0,5 ... 8	G1/4	DIN EN 175301-803 Form A	0,35 ... 0,85	80	-	-	-
	1 ... 16	G1/4	DIN EN 175301-803 Form A	0,40 ... 1,20	80	-	-	-

\* Switch is LABS free, plug needs to be ordered separately

# ELECTRO-MECHANICAL PRESSURE SWITCH

## 18D Hydraulic

5 ... 420 bar

- Microswitch with gold plated contacts
- High number of switching cycles
- Vibration resistant to 15 g
- Microswitch approved by UL and CSA
- Intrinsically safe operation

### TECHNICAL DATA

#### Medium:

For neutral, self lubricating fluids, e.g. hydraulic oil, lube oil, light fuel oil

#### Operation:

Piston type sensor system

#### Temperature:

Fluid/Ambient -10 ... +80°C

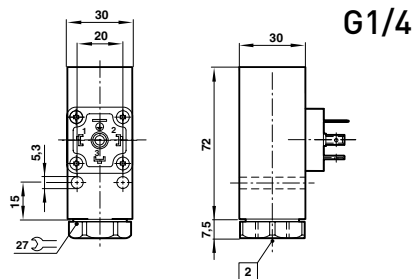
Consult our Technical Service for use below +2°C.

#### Operating viscosity:

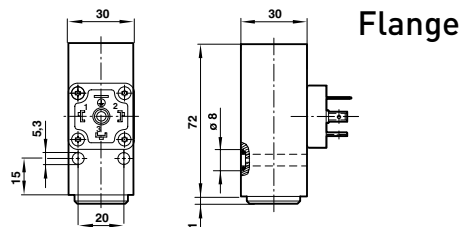
Up to 1000 mm<sup>2</sup>/s

#### Repeatability:

±3%, of full scale



G1/4



Flange

### MATERIALS

#### Housing:

Aluminium/steel, zinc diecast/brass

#### Sealing:

Teflon, perbunan, delrin

### Models

Model	Pressure range (bar)	Fluid connection	Electrical connection	Switching pressure difference	Max. over pressure (bar)
0882100000000000	5 ... 70	G1/4	DIN EN 175301-803 Form A	10,5 ... 15	400
0882200000000000	10 ... 160	G1/4	DIN EN 175301-803 Form A	11 ... 17	400
0882300000000000	25 ... 250	G1/4	DIN EN 175301-803 Form A	11 ... 17	400
0882400000000000	40 ... 420	G1/4	DIN EN 175301-803 Form A	17 ... 38	400
0883100000000000	5 ... 70	Flange	DIN EN 175301-803 Form A	10,5 ... 15	400
0883200000000000	10 ... 160	Flange	DIN EN 175301-803 Form A	11 ... 17	400
0883300000000000	25 ... 250	Flange	DIN EN 175301-803 Form A	11 ... 17	400
0883400000000000	40 ... 420	Flange	DIN EN 175301-803 Form A	17 ... 38	600

Note: Plug included in scope of supply

# ELECTRO-MECHANICAL PRESSURE SWITCH

## 20D Series

20D ATEX



20D Allfluid



Allfluid: -1 ... 100 bar  
ATEX Allfluid: -1 ... 63 bar  
Low Pressure -0,025 ... 1,6 bar

- High accuracy
- Robust metal housing (Standard and Low pressure)
- Robust metal housing in weather-resisting version (ATEX)

### TECHNICAL DATA

**Medium:**

For neutral, aggressive (Standard only), non-flammable gases and fluids

**Operating pressure:**

- 1 ... 100 bar (Standard)
- 1 ... 63 bar (ATEX)
- 0,025 ... 1,6 bar (Low pressure)

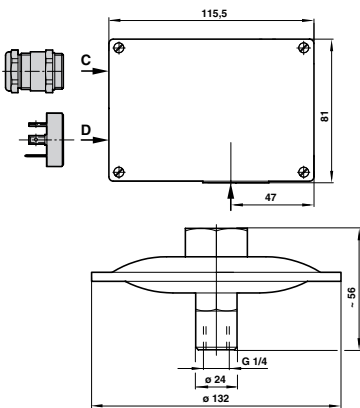
**Temperature:**

- |                |                                           |
|----------------|-------------------------------------------|
| Fluid          | Ambient                                   |
| -10 ... +100°C | -25 ... +80°C (Standard and Low pressure) |
| -10 ... +75°C  | -10 ... +75°C (ATEX)                      |

**Repeatability:**

±1% of final value

20D Low pressure



### Models

ALLFLUID Model	Pressure range (bar)	Fluid connection	Electrical connection	Switching pressure difference	Range - Switching pressure difference (bar)			Max. over pressure (bar)
					Lower	Upper & min.	Upper max.	



1801505000000000	0,5 ... 6	G1/2	Gland Pg 13,5	Adjustable	0,80	0,90	5,00	20
1801605000000000	0,5 ... 10	G1/2	Gland Pg 13,5	Adjustable	0,90	1,90	8,00	20
1801615000000000	0,5 ... 10	G1/2	M20 x 1,5	Adjustable	0,90	1,90	8,00	20
1801715000000000	1 ... 16	G1/2	M20 x 1,5	Adjustable	1,70	2,00	12,00	50
1811505000000000	0,5 ... 6	G1/2	Gland Pg 13,5	Fixed	0,30	0,35	-	20
1811605000000000	0,5 ... 10	G1/2	Gland Pg 13,5	Fixed	0,30	0,40	-	20
1811615000000000	0,5 ... 10	G1/2	M20 x 1,5	Fixed	0,30	0,40	-	20
1811715000000000	1 ... 16	G1/2	M20 x 1,5	Fixed	0,70	0,80	-	50

### ATEX ALLFLUID

1841615000000000	0,5 ... 10	G1/2	M20 x 1,5	Fixed	0,70	0,90	-	20
1851615000000000	0,5 ... 10	G1/2	M20 x 1,5	Adjustable	0,70	0,90	8,00	20

### LOW PRESSURE

1812500000000000	0 ... 0,025	G1/4	DIN EN 175301-803 Form A	Fixed	0,003	0,004	-	0,5	0570110000000000	0574772000000000
1812600000000000	0 ... 0,06	G1/4	DIN EN 175301-803 Form A	Fixed	0,004	0,006	-	0,5	0570110000000000	0574772000000000
1812700000000000	0,004 ... 0,16	G1/4	DIN EN 175301-803 Form A	Fixed	0,004	0,008	-	0,5	0570110000000000	0574772000000000
1812800000000000	0 ... 0,25	G1/4	DIN EN 175301-803 Form A	Fixed	0,004	0,009	-	0,5	0570110000000000	0574772000000000

Note: Other pressure ranges available. Contact your Express Team.

### Accessories



Plug	Bracket - Steel
-	0574772000000000
-	0574772000000000
-	0574772000000000
-	0574772000000000
-	0574772000000000
-	0574772000000000
-	0574772000000000
-	0574772000000000
-	0574772000000000

# ELECTRONIC PRESSURE SWITCH

## 50D Pneumatic

-1 ... 0 bar, -1 ... 1 bar, 0 ... 6 bar, 0 ... 10 bar

Fast error detection through changing colour displays

Easy to use pressure switch with clear display and intuitive programming

Flexible assembly with DIN panel or wall mounting

User selected connection; rear or base

LABS free materials



### TECHNICAL DATA

#### Medium:

Compressed air, filtered (40 µm), lubricated and non-lubricated

#### Temperature:

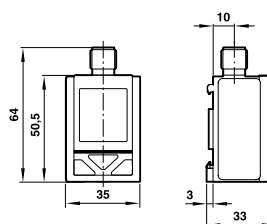
Fluid 0°C ... +60°C

Ambient 0°C ... +60°C

Please consult our technical service for use below +2°C

#### Display:

Pressure units bar, psi, kPa, InHg Vacuum



### Electrical parameters





Electrical connection: M12 x 1  
Power supply: UB = 24 V d.c. (17 ... 30 V d.c.)

### Electrical connection M12 x 1




PIN-No.	Signal	Cable colour
1	Supply voltage	brown
2	Out 2 (PNP; NPN; analogue)	white
3	0 V	blue
4	Out 1 (PNP; NPN)	black



### Models

Model	Pressure range (bar)	Over pressure (bar)	Fluid connection	Output signal	Wall mounting clip	Electrical Connector M12 x 1	90°
						Straight x 2 m long	x 5 m long
	-1 ... 0	5	G1/4	2 x PNP			
DS-E1V10P4B2PR00	-1 ... 0	5	4 mm Dia. PIF	2 x PNP			
DS-E1V11F4B2PR00	-1 ... +1	5	G1/4	2 x PNP			
DS-E1V11P4B2PR00	-1 ... +1	5	4 mm Dia. PIF	2 x PNP			
DS-E1P06F4B2PR00	0 ... 6	15	G1/4	2 x PNP			
DS-E1P06P4B2PR00	0 ... 6	15	4 mm Dia. PIF	2 x PNP			
DS-E1P06F4BPAR00	0 ... 6	15	G1/4	1 x PNP + 1 x analogue			
DS-E1P06P4BPAR00	0 ... 6	15	4 mm Dia. PIF	1 x PNP + 1 x analogue			
DS-E1P10F4B2PR00	0 ... 10	15	G1/4	2 x PNP			
DS-E1P10P4B2PR00	0 ... 10	15	4 mm Dia. PIF	2 x PNP			
DS-E1P10F4BPAR00	0 ... 10	15	G1/4	1 x PNP + 1 x analogue			
DS-E1P10P4BPAR00	0 ... 10	15	4 mm Dia. PIF	1 x PNP + 1 x analogue			

### Accessories

Wall mounting clip	Electrical Connector M12 x 1	90°	
	Straight x 2 m long	x 5 m long	x 2 m long
			
0523962000000000	0523057000000000	0523052000000000	0523058000000000
0523962000000000	0523057000000000	0523052000000000	0523058000000000
0523962000000000	0523057000000000	0523052000000000	0523058000000000
0523962000000000	0523057000000000	0523052000000000	0523058000000000
0523962000000000	0523057000000000	0523052000000000	0523058000000000
0523962000000000	0523057000000000	0523052000000000	0523058000000000
0523962000000000	0523057000000000	0523052000000000	0523058000000000
0523962000000000	0523057000000000	0523052000000000	0523058000000000
0523962000000000	0523057000000000	0523052000000000	0523058000000000
0523962000000000	0523057000000000	0523052000000000	0523058000000000
0523962000000000	0523057000000000	0523052000000000	0523058000000000
0523962000000000	0523057000000000	0523052000000000	0523058000000000





# ELECTRO-MECHANICAL PRESSURE SWITCH

## Herion 8D Series – pneumatic and hydraulic

**Pneumatic**  
Diaphragm actuated  
Switching pressure range 0,02 ... 30 bar

**Hydraulic**  
Piston actuated  
Switching pressure range 5 ... 250 bar



### TECHNICAL DATA

**Medium:**

Air, gas, water, hydraulic oil, lubricating oil and light fuel oil (pneumatic)

Oil treated compressed air, hydraulic oil and other fluids with good anti-friction properties (hydraulic)

**Working viscosity:**

Up ... 1,000 mm<sup>2</sup>/s

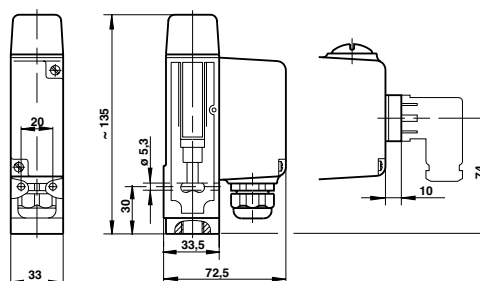
**Repeatability:**

± 2%

**Ambient temperature:**

-10°C ... +80°C (pneumatic)

0°C ... +80°C (hydraulic)



### Models

PNEUMATIC SWITCHES								Plug
Model	Pressure range	Fluid connection	Electrical connection	Adjustment method	Switching pressure difference (bar)	Max. over pressure (bar)		
0820150000000000	0,2 ... 12	G1/4	Gland pg 13,5	Allen screw – cover	0,9 ... 1,4	50	-	
0820155000000000	0,2 ... 12	G1/4	DIN EN 175301-803 Form A	Allen screw – cover	0,9 ... 1,4	50	0570110000000000	
0820160000000000	0,2 ... 12	G1/4	Gland pg 13,5	Rotary knob	0,9 ... 1,4	50	-	
0820750000000000	0,5 ... 30	G1/4	Gland pg 13,5	Allen screw – cover	1,0 ... 2,0	50	-	
0820850000000000	0,5 ... 30	Flange	Gland pg 13,5	Allen screw – cover	1,0 ... 2,0	50	-	
0820760000000000	0,5 ... 30	G1/4	Gland pg 13,5	Rotary knob	1,0 ... 2,0	50	-	

HYDRAULIC SWITCHES								Plug
Model	Pressure range	Fluid connection	Electrical connection	Adjustment method	Switching pressure difference (bar)	Max. over pressure (bar)		
0821051000000000	5 ... 70	G1/4	Gland pg 13,5	Hex. screw & cover	7 ... 12	250	-	
0821055000000000	5 ... 70	G1/4	DIN EN 175301-803 Form A	Hex. screw & cover	7 ... 12	250	0570110000000000	
0821050000000000	10 ... 160	G1/4	Gland pg 13,5	Hex. screw & cover	9 ... 18	250	-	
0821150000000000	10 ... 160	Flange	Gland pg 13,5	Hex. screw & cover	9 ... 18	250	-	
0821060000000000	10 ... 160	G1/4	Scaled rotary knob	Rotary knob	9 ... 18	250	-	
0821097000000000	50 ... 250	G1/4	Gland pg 13,5	Hex. screw & cover	12 ... 16	340	-	

### Accessories