

Electronic pressure switches

50D pneumatic

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



Easy to use pressure switch with clear display and intuitive programming
Fast error detection via multi-colour display
Flexible mounting - DIN Rail or wall mounting
Optional connection; rear or base
LABS free materials, conforming to RoHS.
ATEX conforming to Zone 2, gases (Cat. II 3G, Ex nA II T6 X) and Zone 22, dusts (Cat. II 3G, Ex tD A22 IP65 T80°C X).

TECHNICAL DATA

Medium:

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

Mounting:

Optional

Pressure range:

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

Temperature:

Fluid: 0°C ... +60°C
Ambient: 0°C ... +60°C

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

Accuracy:

± 2% FS* (incl. temperature drift)
± 1,5% (+10 ... 30°C)

Switching pressure difference/hysteresis:

Programmable

Repeatability:

± 0,2% FS*

Switching point:

Adjustable up to 100% FS*

Reset point:

Adjustable up to 100% FS*

Display:

Pressure units bar, psi, kPa, InHg Vacuum

Linearity analogue port:

± 0,5% FS*

Degree of protection conforming to EN 60529:

IP65 (with plug mounted)

Shockproof:

30 g, xyz, DIN EN 60068-2-27 (11 ms)

Vibrationproof:

5 g, 10 ... 150 Hz, syz, DIN EN 60068-2-6

Weight:

0,05 kg

* full scale [FS]

Standard variants

Pressure switch

Pressure range	Output signal	Port size	MODELS
0 ... 6 bar	2 x PNP	Push-In fitting Ø 4 mm G 1/4	DS-E1P06P4B2PR00 DS-E1P06F4B2PR00
0 ... 10 bar	2 x PNP	Push-In fitting Ø 4 mm G 1/4	DS-E1P10P4B2PR00 DS-E1P10F4B2PR00
0 ... 6 bar	1 x PNP + 1 x analogue	Push-In fitting Ø 4 mm G 1/4	DS-E1P06P4BPAR00 DS-E1P06F4BPAR00
0 ... 10 bar	1 x PNP + 1 x analogue	Push-In fitting Ø 4 mm G 1/4	DS-E1P10P4BPAR00 DS-E1P10F4BPAR00

Vacuum switch

Pressure range	Output signal	Port size	MODELS
-1 ... 0 bar	2 x PNP	Push-In fitting Ø 4 mm G 1/4	DS-E1V10P4B2PR00 DS-E1V10F4B2PR00
-1 ... 1 bar	2 x PNP	Push-In fitting Ø 4 mm G 1/4	DS-E1V11P4B2PR00 DS-E1V11F4B2PR00

Electrical specification

Electrical connection: M 12 x 1

Power supply:

U_B = 24 V d.c. (17 ... 30 V d.c.)

Current consumption < 50 mA

Allowed load resistance:

≤ 600 Ω (analog power output)

Contact rating:

I_{max} = 200 mA (short-circuit proof)

Switching time: < 5 ms

Electromagnetic compatibility:

Emission EN 61000-6-3 [2007]

Immunity EN 61000-6-2 [2005]

Electrical connection M12 x 1



PIN-No.	Signal	Cable colour
1	+UB 24 V d.c.	brown
2	Out 2 (PNP; NPN; analogue 4-20 mA/0-10 V)	white
3	0 V	blue
4	Out 1 (PNP; NPN)	black

OPTIONS SELECTOR

DS-E1★★★★★B★★R00

Pressure range (bar)	Substitute	Output signal	Substitute
1 ... 0	V10	2 x PNP	2P
-1 ... 1	V11	2 x NPN	2N
0 ... 6	P06	PNP + analogue	PA
0 ... 10	P10	NPN + analogue	NA





Port size	Substitute
G1/4	F4
∅ 4 mm Push-In fitting	P4





Ordering example

Electronic pressure switch, pressure range 0 ... 6 bar,
port size G 1/4, output signal 2 x PNP

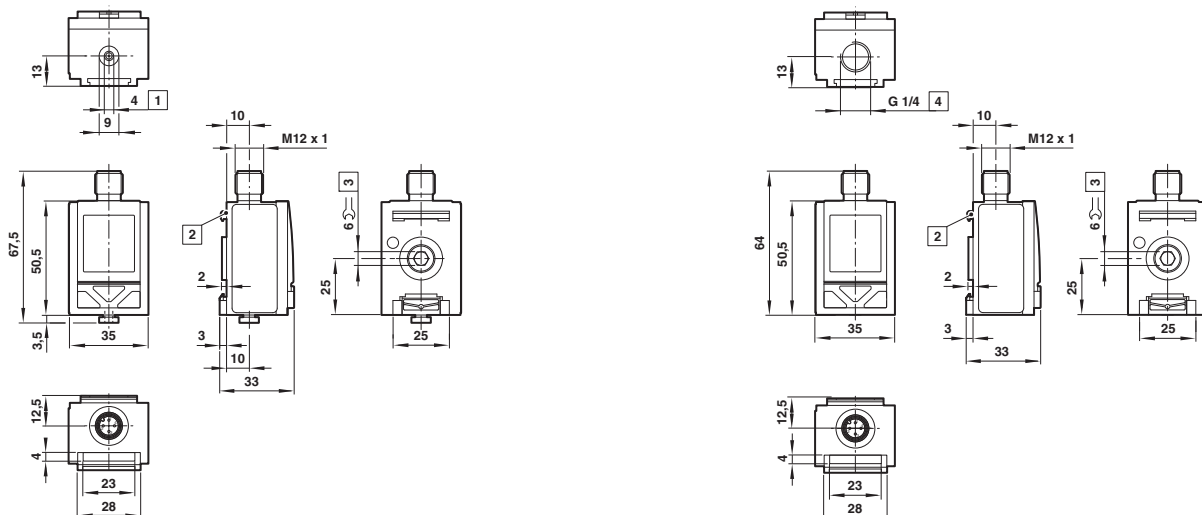
Model: DS-E1P06F4B2PR00

ACCESSORIES

Wall clip	DIN rail (35 x 7,5)	Adaptor	NPT-adaptor
			
0523962 (plastic)	V10009-C00 (1 m)	0523951 (G1/4 ... G1/4) 0523950 (G1/4 ... G1/8)	0523953 (G1/4 ... 1/4 NPTF) 0523952 (G1/4 ... 1/8 NPTF)

Connector M 12 x 1 90°	Connector M 12 x 1 90°	Connector M 12 x 1 straight	Connector M 12 x 1 straight
			
0523058 (2 m cable, 4-pin) 0523053 (5 m cable, 4-pin)	0523056 (without cable)	0523057 (2 m cable, 4-pin) 0523052 (5 m cable, 4-pin)	0523055 (without cable)

BASIC DIMENSIONS



- 1 Integrated PNEUFIT push-in fitting
- 2 Wall clip for DIN panel DIN EN 60715 (35 x 7,5; 35 x 15)
- 3 Optional fluid ports G1/4, 9,5 deep, maximum starting torque for threaded inserts: 2,0 ±0,5 Nm
- 4 Fluid port, 9,5 deep
- 5 The bolts for the wall clip conform to DIN EN ISO4762 (M5 x 20), delivery included

Wall clip

