

0 to 10 bar, 0 to 6 bar  
-1 to 0 bar, -1 to 1 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, conforming to RoHS**



## Technical data

Medium:

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

Mounting:

Optional

Pressure ranges:

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

Temperature:

Fluid

Ambient

0 ... + 60°C

0 ... + 60°C

(please consult our technical service for use below +2°C)

Accuracy:

± 2% FS\*1) [incl. temperature drift]

± 1,5% (+10 ... 30°C)

Repeatability:

± 0,2% FS\*1)

Switching point:

Reset point:

Adjustable up 0 ... 100% FS\*1) Adjustable up 0 ... 100% FS\*1)

Display:

Pressure units bar, psi, kPA, InHg Vakuum

Linearity analogue port:

± 0,5% FS\*1)

Degree of protection acc. to DIN 40050 (EN60529):

IP65 (with plug mounted)

Shockproof:

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

Vibrationproof:

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

Weight:

0,05 kg

## Materials:

Housing and display: PC

Seals: NBR

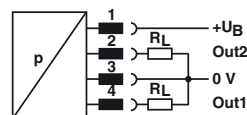
Connector (M12 x 1): nickel plated brass

\*1) full scale

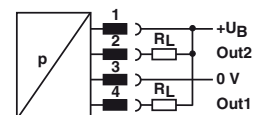
## Ordering information

See page 2

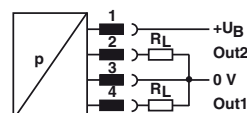
2 X PNP



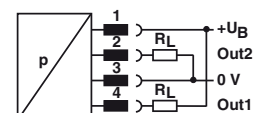
2 X NPN



1 x PNP, 1 x analogue



1 x NPN, 1 x analogue



### Electrical parameters

Electrical connection:  
M 12 x 1

Power supply:  
U<sub>B</sub> = 24 V d.c. (17 ... 30 V d.c.)

Current consumption:  
< 50 mA

Allowed load resistance:  
≤ 600 Ω (analog power output)

Contact rating:  
I<sub>max</sub> = 200 mA (short-circuit proof)

Switching time:  
< 5 ms

Electromagnetic compatibility:  
Emission EN 61000-6-3 (2007)  
Immunity EN 61000-6-2 (2005)

### Standard variants

#### Pressure switch

Pressure range	Output signal	Port size	Model
0 ... 6 bar	2 x PNP	Push-In fitting ø 4 mm	DS-E1P06P4B2PR00
		G1/4	DS-E1P06F4B2PR00
	2 x NPN	Push-In fitting ø 4 mm	DS-E1P06P4B2NR00
		G1/4	DS-E1P06F4B2NR00
0 ... 10 bar	2 x PNP	Push-In fitting ø 4 mm	DS-E1P10P4B2PR00
		G1/4	DS-E1P10F4B2PR00
	2 x NPN	Push-In fitting ø 4 mm	DS-E1P10P4B2NR00
		G1/4	DS-E1P10F4B2NR00
0 ... 6 bar	1 x PNP + 1 x analogue	Push-In fitting ø 4 mm	DS-E1P06P4BPAR00
		G1/4	DS-E1P06F4BPAR00
	1 x NPN + 1 x analogue	Push-In fitting ø 4 mm	DS-E1P06P4BNAR00
		G1/4	DS-E1P06F4BNAR00
0 ... 10 bar	1 x PNP + 1 x analogue	Push-In fitting ø 4 mm	DS-E1P10P4BPAR00
		G1/4	DS-E1P10F4BPAR00
	1 x NPN + 1 x analogue	Push-In fitting ø 4 mm	DS-E1P10P4BNAR00
		G1/4	DS-E1P10F4BNAR00

#### Vacuum switch

Pressure range	Output signal	Port size	Model
-1 ... 0 bar	2 x PNP	Push-In fitting ø 4 mm	DS-E1V10P4B2PR00
		G1/4	DS-E1V10F4B2PR00
	2 x NPN	Push-In fitting ø 4 mm	DS-E1V10P4B2NR00
		G1/4	DS-E1V10F4B2NR00
-1 ... 1 bar	2 x PNP	Push-In fitting ø 4 mm	DS-E1V11P4B2PR00
		G1/4	DS-E1V11F4B2PR00
	2 x NPN	Push-In fitting ø 4 mm	DS-E1V11P4B2NR00
		G1/4	DS-E1V11F4B2NR00

### Options selector

DS-E1★★★★★B★★R00

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

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

### Ordering information

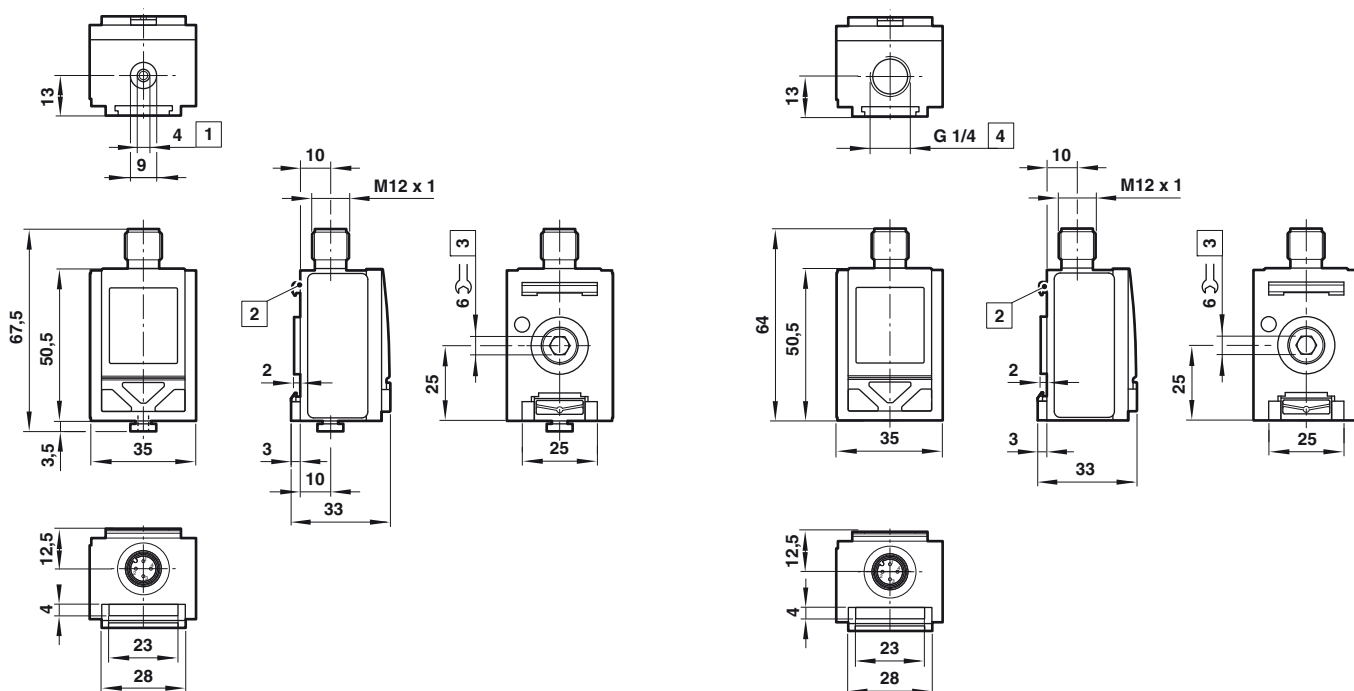
Electronic pressure switch,  
pressure range 0 to 6 bar,  
port size G 1/4, output signal 2 x PNP

**Quote: DS-E1P06F4B2PR00**

### Accessories

Wall clip	DIN rail (35 x 7,5)	Connector M 12 x 1 90°	Connector M 12 x 1 straight 4-core	4-core
0523962	V10009-C00 (1 m)	0523058 (2 m cable length, 4-core) 0523053 (5 m cable length, 4-core)	0523056 (without cable) 0523057 (2 m cable length, 4-core) 0523052 (5 m cable length, 4-core)	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

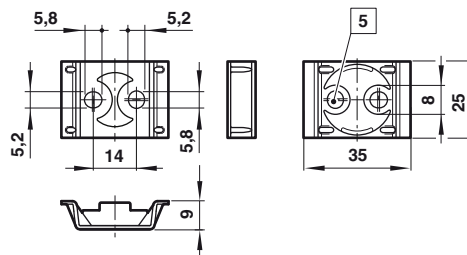
**Electrical connection M 12 x 1**



Electrical connection M 12 x 1		Cable colour
PIN-No.	Signal	
1	+U <sub>B</sub> 24 V DC	brown
2	Out 2 (PNP; NPN; analogue 4-20 mA/0-10 V)	white
3	0 V	blue
4	Out 1 (PNP; NPN)	black

**Accessories**

**Wall clip**  
Material: plastic



- 5** Bolts acc. to DIN EN ISO4762 (M5 x 20) included in scope of delivery

**Warning**

These products are intended for use in industrial compressed air systems only. Do not use these products where pressures and temperatures can exceed those listed under **Technical Data**.

Before using these products with fluids other than those specified, for non-industrial applications, life-support systems, or other applications not within published specifications, consult NORGREN. Through misuse, age, or malfunction, components used in fluid power systems can fail in various modes.

The system designer is warned to consider the failure modes of all component parts used in fluid power systems and to provide adequate safeguards to prevent personal injury or damage to equipment in the event of such failure.

**System designers must provide a warning to end users in the system instructional manual if protection against a failure mode cannot be adequately provided.**

System designers and end users are cautioned to review specific warnings found in instruction sheets packed and shipped with these products.