- **-1 ... 16 bar Port size: G1/4 or flange**
- **Display of system pressure (unit bar, psi, mpa programmable)**
- **Easy programming of switchpoints and extra functions**
- **Economic solution for industrial applications**
- **Electronic lock**
- **Switching status indicated by LED**
- **With digital and analogue output**
- **UL-Approval**

c UL us LISTED

Technical features

Medium:
For filtered, lubricated or non lubricated compressed air and neutral gases
Pressure range:
-1 ... 1 bar (-14.5 ... 14.5) or
0 ... 16 bar (0 ... 232)
Switching pressure difference:
Programmable
Switching point:
Adjustable between
0 ... 100% of full scale (FS)
Reset point:
Adjustable between 0 ... 100% of full scale (FS)
(smallest adjustable pressure switching difference between switching point and reset point ≥ 0,5% of full scale (FS))

Display:
LCD 4 digits, illuminated, pressure unit programmable bar, psi, mpa (customer specific pressure unit available on request)
Mounting position:
Optional
Total accuracy:
±1,5% of full scale (FS) - without temperature sensitivity
Linearität:
±0,2% + 1 Display step size
Shockproof:
30 g, xyz, DIN EN 60068-2-27
Vibrationproof:
3 g, 5 ... 500 Hz, xyz,
DIN EN 60068-2-6
Degree of protection acc. to DIN 40050:
IP65 (with plug mounted)

Weight:
0,09 kg (0.19 lbs)
Temperature sensitivity:
Zero point: ±0,4% of final value (FS) pro 10° Kelvin
Range: ±0,4% of final value (FS) pro 10° Kelvin
Ambient/Media temperature:
Ambient:
-10 ... +60°C (14 ... +140°F)
Media:
-10 ... + 80°C (14 ... +176°F)
Air supply must be dry enough to avoid ice formation at temperature below +2°C (+35°F)

FS = full scale

Materials:
Housing:
Aluminium/Stainless steel
Sensor (fluid-affected parts):
Silizium/Aluminium

Electronical parameters

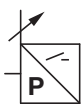
Electrical connection:
M12 x 1
Power supply:
UB = 10 ... 32 V d.c.
15 ... 32 V d.c. (analogue)
polarity safe
Permissible residual ripple:
10% (within UB)
Current consumption:
< 50 mA

Switching mode:
PNP, potential-bound open collector switching to + UB
Output signal:
Digital: UB minus 1.5 V
Analogue: 4 ... 20 mA
Contact rating:
Imax = 500 mA (short circuit proof)

Switching time:
< 10 ms
Signal delay:
On/off 0 ... 20 s
Service life:
Min. 100 million switching cycles
Switching logic:
NO/NC programmable

Operating mode:
Standard, hysteresis and window mode separately selectable for each output
Electromagnetic compatibility:
According to EN 61326-1

Technical data

Symbol	Port size	Switching pressure range (bar)	(psi)	Over pressure *1 (bar)	(psi)	Output signal	Model *1)
	G 1/4	- 1 ... 1	-14.5 ... 14.5	10	145	1 x PNP	0863012 *2)
	Flange	- 1 ... 1	-14.5 ... 14.5	10	145	1 x PNP	0863016
	G 1/4	0 ... 16	0 ... 232	30	435	1 x PNP	0863212 *2)
	Flange	0 ... 16	0 ... 232	30	435	1 x PNP	0863216
	G 1/4	- 1 ... 1	-14.5 ... 14.5	10	145	2 x PNP	0863022
	Flange	- 1 ... 1	-14.5 ... 14.5	10	145	2 x PNP	0863026
	G 1/4	0 ... 16	0 ... 232	30	435	2 x PNP	0863222 *2)
	Flange	0 ... 16	0 ... 232	30	435	2 x PNP	0863226
	G 1/4	- 1 ... 1	-14.5 ... 14.5	10	145	1 x PNP/4 ... 20 mA	0863042
	G 1/4	0 ... 16	0 ... 232	30	435	1 x PNP/4 ... 20 mA	0863242 *2)
	Flange	0 ... 16	0 ... 232	30	435	1 x PNP/4 ... 20 mA	0863246

*1) Short-term pressure peaks are not allowed to exceed this limit value during operation. Operative utilization of the limit value is not permitted. The limit value corresponds to the maximum testing pressure
*2) Preference type

Accessories

Pressure port reducing nipple	Surge damper
	
see below	see below
0574767 (brass)	0574773 (brass)
0550083 (stainless steel)	0553258 (stainless steel)

Connector M12 x 1			
4- or 5-pin, 90°	4-pin, 90°	4-pin, straight	4-pin, straight
			
0523058 (2 m cable,4-core)	0523056 (without cable)	0523057 (2 m cable, 4-core)	0523055 (without cable)
0523053 (5 m cable,4-core)		0523052 (5 m cable, 4-core)	
0250081 (5 m cable, 5-core, on PE-requirement *1)			

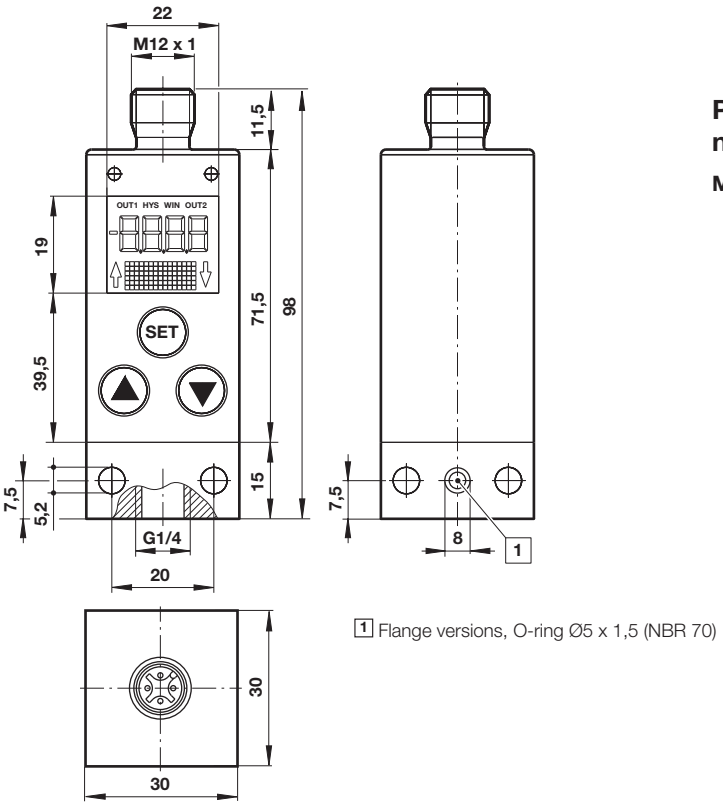
*1) Cable with screening

Electrical connection M12 x 1

PIN-No.	Signal	Cable
1	+ UB	brown
2	Out 2 (PNP) / analogue 4 ... 20 mA	white
3	0 Volt	blue
4	Out 1 (PNP)	black
5	PE (Protected Earth)	grey

Dimensions G1/4 and Flange Versions

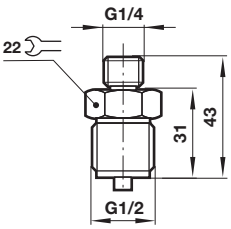
Dimensions in mm
Projection/First angle



1 Flange versions, O-ring Ø5 x 1,5 (NBR 70)

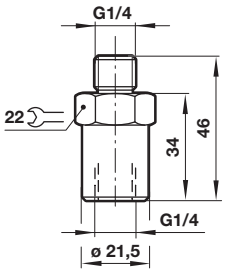
Pressure port reducing nipple

Model: 0574767 (brass)
0550083 (stainless steel)



Surge damper

Model: 0574773 (brass)
0553258 (stainless steel)



Warning

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IMI Precision Engineering, Norgren GmbH.

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

- **Port size: G1/8**
- **System pressure (unit bar, psi, Mpa, KPa, kgf/cm², mmHg, InHg or mmH_2O) selectable**
- **High accuracy and resolution**
- **Switching status indicated by LED**
- **Output: 2 x PNP or 2 x NPN**
- **Versions with analogue output signal on request**

Technical features

Medium:
Compressed air, filtered, lubricated or non-lubricated
Pressure range:
-1 ... 10 bar (-14,5 ... 145 psi)
-1 ... 1 bar (-14,5 ... 14,5 psi)
Display:
3 1/2 digit LED
Mounting position:
Optional
Repeatability (switch output):
⩽ ±0,2% of full scale (FS) ±1 digit - without temperature sensitivity

Response time:
±2,5 ms
Shockproof:
100 g (980 m/s²), xyz
Vibrationproof:
88 g, 10 - 55 Hz, xyz
Degree of protection acc. to DIN 40050:
IP65 (with mounted dust proof protector)
Weight:
83g

Temperature sensitivity:
⩽ 2% of full scale (FS) of detected pressure (+25°C, +77°F)
Ambient/Media temperature:
0 ... +50°C (32 ... +122°F)
Storage temperature:
-20 ... +60°C (-4 ... +140°F)
No condensation or freezing
Air supply must be dry enough to avoid ice formation at temperature below +2°C (+35°F)
FS = full scale

Materials:
Body: PC

Electronical parameters

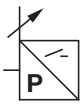
Electrical connection:
M12 x 1
Power supply:
12 ... 24 V d.c.
24 V d.c. (PNP) maximum
30 V d.c. (NPN) maximum
Residual voltage:
⩽ 1 V (load current 80 mA)

Permissible residual ripple:
10% or less (P-P)
Current consumption:
⩽ 50 mA
Load current:
80 mA maximum (with output short circuit protection)

Switching mode:
PNP or NPN
Indicator:
Green LED (OUT1),
Red LED (OUT2)

Insulation resistance:
50 MΩ min (at 500 V d.c. (between case and lead wire))
Electromagnetic compatibility:
According to EN 61326-1

Technical data

Symbol	Port size	Switching pressure range (bar)	(psi)	Over pressure *1) (bar)	(psi)	Output signal	Model
	G1/8	-1 ... 10	-14,5 ... 145	15	217	2 x PNP	0860810
	G1/8	-1 ... 10	-14,5 ... 145	15	217	2 x NPN	0860815
	G1/8	- 1 ... 1	-14,5 ... 14,5	3	43	2 x PNP	0860820
	G1/8	- 1 ... 1	-14,5 ... 14,5	3	43	2 x NPN	0860825

*1) Short-term pressure peaks are not allowed to exceed this limit value during operation. Operative utilization of the limit value is not permitted. The limit value corresponds to the maximum testing pressure.

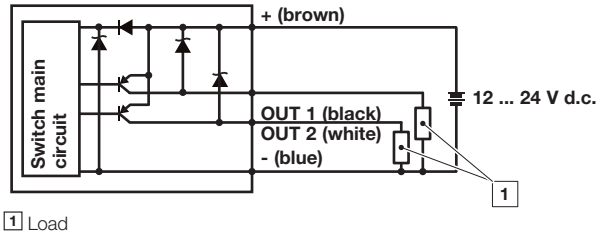
Accessories

Mounting bracket (wall mounting)	Mounting bracket (bottom mounting)	Panel mounting kit	Mounting (DIN rail clip)	ISO G - Expanding connector G1/8 ... G1/4
				
Page 3	Page 3	Page 3	Page 4	Page 4
0860000	0860001	0860002 + 0860003	0860007	160231828

Electrical connection M12 x 1

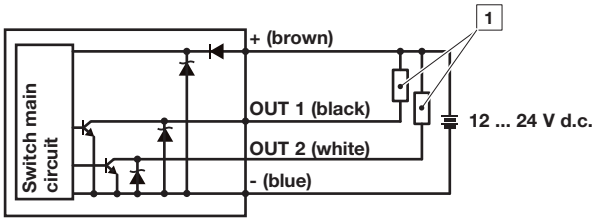
PIN-No.	Signal	Cable
1	+ UB	brown
2	Out 2	white
3	-	blue
4	Out 1	black

PNP



1 Load

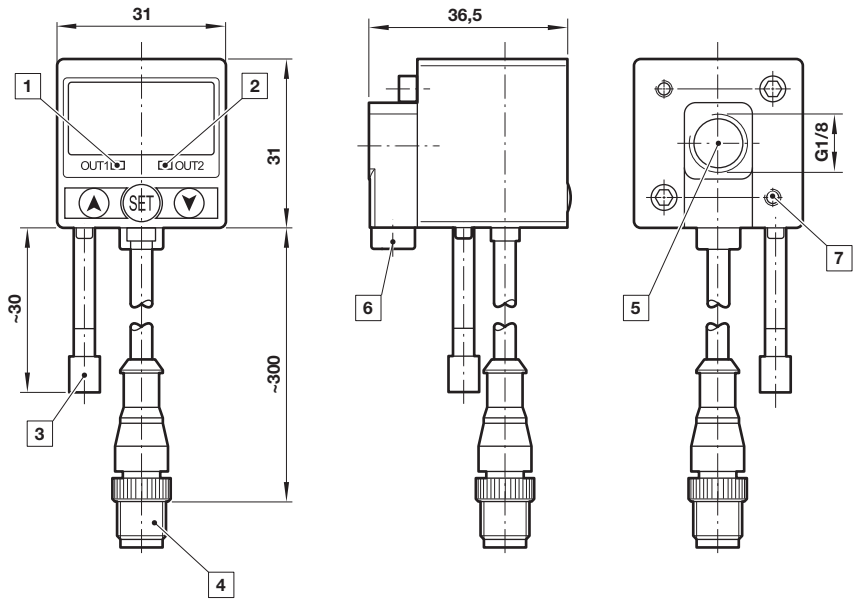
NPN



1 Load

Drawing - Pressure switch

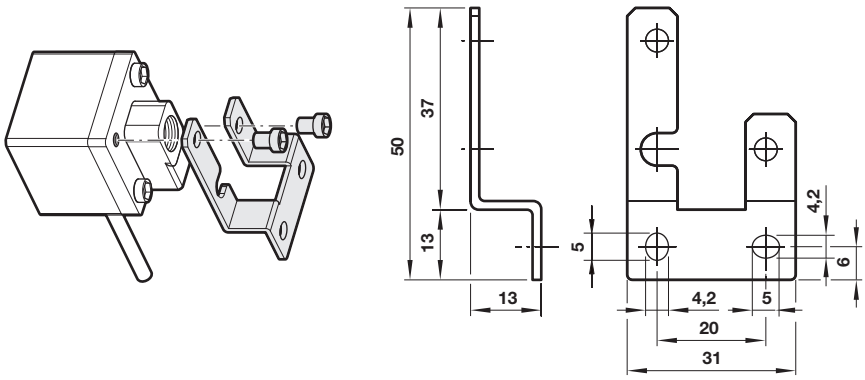
Dimensions in mm
Projection/First angle



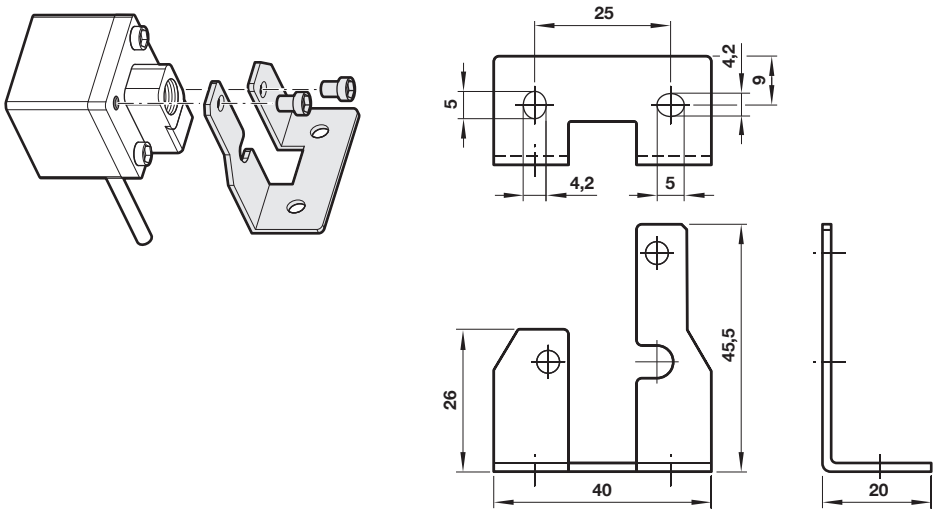
1 Switch OUT 1, green LED
2 Switch OUT 2, red LED
3 Dustproof protector
4 Connector M12 x 1
5 Inlet port
6 Alternative inlet port G1/8 plugged
7 Thread for mounting screw

Dimensions in mm
Projection/First angle

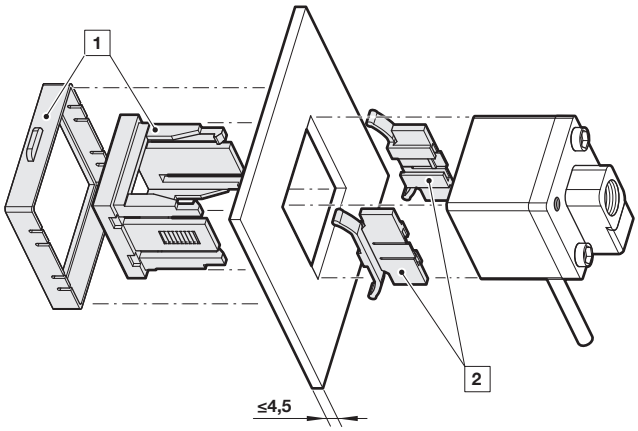
Drawing - Mounting bracket (wall mounting)



Drawing - Mounting bracket (bottom mounting)

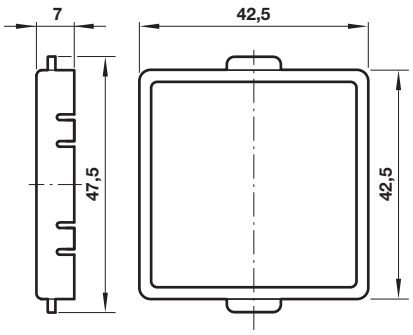


Drawing - Panel mounting kit

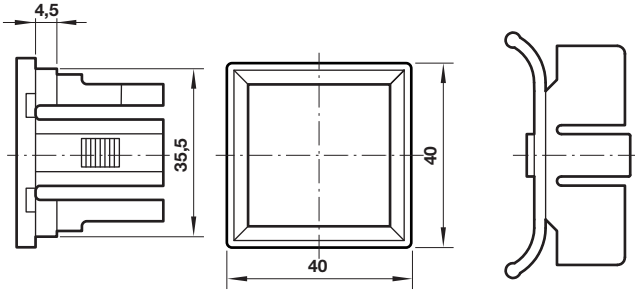


1 Front protection lid + Panel adaptor (0860003)
2 Safety adaptors (0860002)

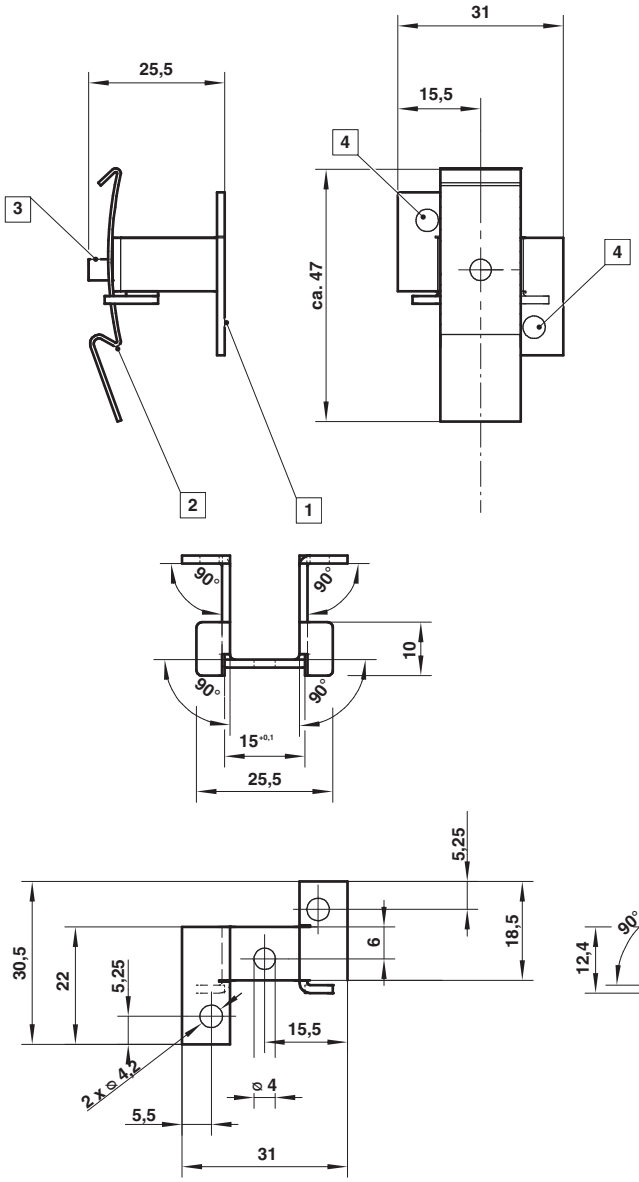
Drawing - Front protective lid



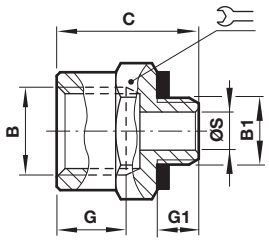
Drawing - Panel adapter



Drawing - Mounting (DIN rail clip)



Drawing - Expanding connector



B	B1	C	G	G1	Ø S		Model
G1/4	G1/8	20,5	12	6	5,5	17	160231828

1 Mounting angel
2 DIN-Mounting bracket
3 Fastening screw
4 Fastening screw (pressure switch)

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