

- > Port size: 1/4" (ISO G/NPT)
- > Advanced electronic control
- > Explosion proof/ Intrinsically Safe
- Complete electronics modularity for ease of maintenance
- Jack Socket for on-site monitoring

Technical features Medium:

Oil free, dry media, min filtered to 50 µm; internal in-built filter

Output pressure:

0,2 ... 1 bar (3 ... 15 psi) 0,2 ... 2 bar (3 ... 30 psi)

Supply pressure:

1,2 ... 10,3 bar (18 ... 150 psi)

Flow capacity:

up to 300 NL/min

Air Consumption:

< 2,5 NL/min at 50% signal

Linearity independent:

Typically <0.1%, guaranteed <0.2%

Hysteresis & deadband:

Typically <0.1%, guaranteed <0.2%

Response time:

 $<\!1$ second (from 0 ... 90% or 90 ... 10% of output pressure into a 0,5 litre load)

Temperature sensitivity:

Typically <0,06% span/°C between -40 ... +85°C (-40 ... +185°F)

- Fail-Safe (unit pressure falls to zero on signal failure)
- > Field replaceable filter
- > Weatherproof (IP 66 or Type 4X)
- High performance and accuracy
- > Fast response and minimal temperature effect
- > Large flow capacity

Supply sensitivity:

<0,1% of span for full supply pressure range

Port sizes:

Main ports: G1/4 or 1/4 NPT Integral gauges: G1/4 or 1/4 NPT Exhaust port: 1/8 NPT

Calibration:

Independent user adjustment of 0% and 100% calibration points. Independent adjustment of tight shut off point. Adjustable by potentiometers up to 20% of output range. Unit is factory calibrated to within 1% of span.

Ambient/Media Temperature:

-40 ... +85 °C (-40 ... +185 °F) Air supply must be dry enough to avoid ice formation at temperatures below +2°C (+35°F).



IP 66, NEMA Type 4X

Maintenance:

Modular Electronics and in-built filter offered as field replaceable parts

Mounting position:

Integral bracket allows for flat surface or 2" (50 mm) pipe mounting in any orientation. Designed for mounting with 57 ... 73 mm pitch U bolts.

Vibration effect:

Output pressure changes less than 3% for vibration amplitude 4 mm 5 ... 15 Hz, 2g15 ... 150 Hz,

1g150 ... 1000 Hz Leak sensitivity:

<0,875% of span for up to 3,0 scfm downstream leakage









Materials:

Body: aluminium and zinc diecasting Diaphragms: NBR Black epoxy powder coating standard

Technical data - standard models

| Symbol | Certification | Port size | Output pressure | Conduit Entry | Weight (kg) | Model Multi certified units only – IS/Exd |
|--------|--------------------------------------|-----------|-----------------|------------------|----------------|---|
| | Cenelec only | G1/4 | 0,2 1 bar | M20 x 1,5 | 2,07 | EX14001BJ4LE2 |
| | | G1/4 | 3 15 psi | M20 x 1,5 | 2,07 | EX14001PJ4LE2 |
| | Triple certification / Triple agency | 1/4 NPT | 0,2 1 bar | 1/2 NPT | 2,07 | EX14001BK4EE1 |
| | | 1/4 NPT | 3 15 psi | 1/2 NPT | 2,07 | EX14001PK4EE1 |

Standard models: conduit entry 1/2 NPT

Options available: conduit entry M20, output pressure monitoring gauge

Electrical parameters

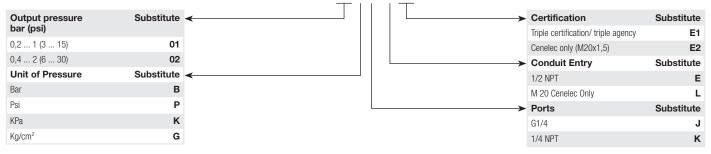
| Input Signal | $4\dots 20$ mA (two wire) Terminal voltage <6.5 V at 20 mA |
|-----------------------|--|
| Failure Mode | Pressure falls to below 15 mbar (0,2 psi) in < 2 sec when input signal fails |
| Overload Protection | 100 mA max overload current |
| Insulation Resistance | $>$ 100 $M\Omega$ at 850 V d.c., electrical terminals to chassis |
| Connections | 1/2 NPT or M20; internal terminal block with capacity up to 2,5 mm ² conductor |
| Span/Zero | Independently adjustable tight shut off point adjustable up to 4,5 mA. |
| Input Impedance | The impedance changes with applied current, because it's terminal voltage remains fairly constant, therefore 4 mA = approx 1370 Ω ; 12 mA = approx 470 Ω ; 20 mA = approx 290 Ω |





Option selector

EX140★★★4★★

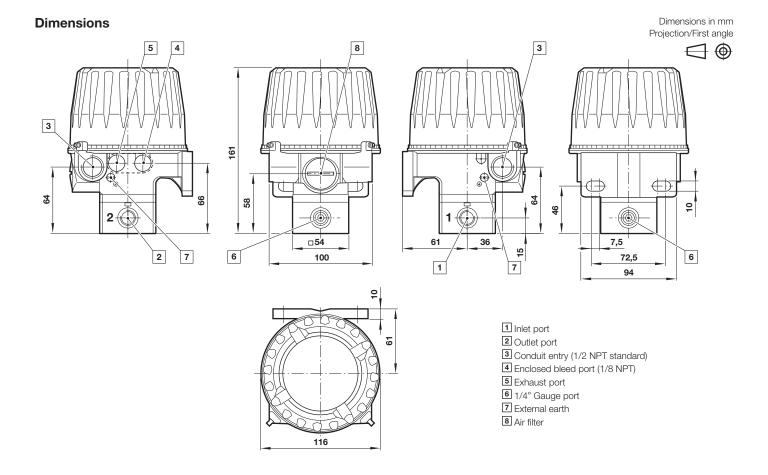


Accessories



Certification

| Certification agency | Flame Proof / Explosion Proof | Intrinsically Safe | Non-Incendive | others |
|------------------------------|---|--|--|--|
| SIRA (CENELEC ATEX approved) | Sira 01ATEX1006 Ex d IIC T4 Gb (Ta = -20 +40°C) Ex d IIB+H2 T5 Gb (Ta = -20 +80°C) Ex d IIB+H2 T6 Gb (Ta = -20 +65°C) Ex d IIB-H2 T6 Gb (Ta = -20 +65°C) Umax = 30 V d.c. 2GD | Sira 01ATEX2007X Ex ia IIC T4 Ga Ex ia IIIC Da T95°C (Ta = -40 +85°C) Ui = 30 V d.c. Ii = 110 mA Pi = 0.84 W Ci = 6 nF Li = 100 µH 1GD | | |
| FACTORY MUTUAL FM APPROVED | Class I, Division 1, Group BCD. T6 Ta = 75°C, T5 Ta = 85°C. | Class I, II & III, Division 1, Group ABCDEFG. T4 Ta = 85° C. Vmax = 30 V d.c. Imax = 110 mA Ci = 0.006 µF Li = 100 µH | Class I, Division 2, Group ABCD. T6 Ta = 75°C, T5 Ta = 85°C. | Dust Ingress Protection: Class II & III, Division 1, Group EFG. T6 Ta = 75°C, T5 Ta = 85°C. Suitable for: Class II, III Division 2, Group FG, T6 Ta = 75°C, T5 Ta = 85°C; |
| CSA C US | Class I, Division 1, Group BCD. Class II, Groups EFG Class III Ta = -40 +85°C; T5 Ta = -40 +65°C; T6 | Ex ia, Class I, Division 1, Group ABCD. Class II, Groups EFG, CL III $Ta = -40 \dots +85^{\circ}\text{C}; T4$ $Vmax = 30 \text{ V d.c.}$ $Imax = 100 \text{ mA}$ $Pmax = 0.75 \text{ W}$ $Ci = 10.5 \text{ nF}$ $Li = 100 \mu\text{H}$ $(30 \text{ V d.c. } max, 300 \text{ Ohms}).$ | Class I, Division 2, Group ABCD. Class II, Division 2, Group EFG, Class III $Ta = -40 \dots +85^{\circ}C; T5$ $Ta = -40 \dots +75^{\circ}C; T6$ $Ta = -40 \dots +75^{\circ}C; T6$ $Ta = -40 \dots +75^{\circ}C; T6$ | |



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 features/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

IMI Precision Engineering, Norgren Ltd.

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.