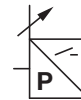


34D Pneumatic/Hydraulic/Allfluid - electronic pressure sensor

- > -14.5...8702 psi in different pressure ranges
- > Port size G1/4 or flange mounting with adapter
- > Two output options; 2x digital outputs or 1x digital and 1x Analog (both options IO-Link configurable)
- > Multicolor 4-digit display with configurable color change (red/green) at set point
- > Upper body can be rotated 345° relative to the process connection for easy alignment of the display
- > Suitable for harsh industrial and process control environments
- > High overpressure resistance
- > UL-listed



Technical features

Medium:

For neutral and aggressive, gaseous and liquid fluids

Pressure range:

-14.5 ... 14.5 psi (-1 ... 1 bar)
 -14.5 ... 145 psi (-1 ... 10 bar)
 0 ... 232 psi (0 ... 16 bar)
 0 ... 580 psi (0 ... 40 bar)
 0 ... 1450 psi (0 ... 100 bar)
 0 ... 2320 psi (0 ... 160 bar)
 0 ... 3626 psi (0 ... 250 bar)
 0 ... 5801 psi (0 ... 400 bar)
 0 ... 8702 psi (0 ... 600 bar)

Pressure type:

Relative pressure

Switching pressure difference:

Programmable

Weight:

0.57 lbs (0.26 kg)

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 \geq 0.5% of full scale (FS))

Display:

Alphanumeric display, 4-digit (red/green), programmable pressure units: bar, PSI, Mpa

Mounting position:

Optional

Total accuracy:

\pm 0.5% of full scale (FS) - without temperature sensitivity

Linearity:

\pm 0.25% + 1 display step size

Shock proof:

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

Vibration proof:

20 g, 10 ... 2000 Hz, DIN EN 60068-2-6

Degree of protection acc.

DIN EN 60529:
 IP67 (with plug mounted)

Temperature sensitivity:

Zero-point: \pm 0,2% of maximum operating pressure range (FS) per 10 Kelvin
 Pressure range: \pm 0,2% of maximum operating pressure range (FS) per 10 Kelvin

Ambient/Media temperature:

Ambient:
 -13 ... +176°F (-25 ... +80°C)
 Media:
 -13 ... +176°F (-25 ... +80°C)
 Air supply must be dry enough to avoid ice formation at temperature below +35°F (+2°C)

Materials:

Housing:
 Stainless steel (1.4404 / 316L); PBT+PC-GF30; PBT-GF20; PC
 Wetted parts: Stainless steel (1.4404 / 316L); Al2O3 (ceramics); FKM

Electrical parameters

Electrical connection:

M12 x 1 (contacts gold plated)

Power supply:

UB = 18 ...30 VDC
 reverse-polarity protected (according to EN 50178 SELV/PELV)

Switching time: < 3 ms

Permissible residual ripple:

10% (within UB)
 Current consumption: < 35 mA

Switching mode:

PNP/NPN

Output signal:

Switching signal; IO-Link (configurable)

Contact rating:

I_{max}
 150 mA / -13...+176°F
 200 mA / -13...+140°F
 250 mA / -13...+104°F

Signal delay: On/Off 0 ... 50 s

Service life:

Min. 100 million switching cycles

Switching logic:

NO/NC programmable

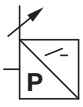
Operating mode:

Hysteresis and window mode separately selectable for each output


Electromagnetic compatibility:

EN 61000-6-2; EN 61000-6-3

Technical data - Output Signal 2 x PNP (1 x IO-Link, configurable)

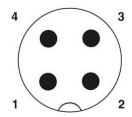
| Symbol | Port size | Pressure range (psi) | Pressure range (bar) | Over pressure*1 (psi) | Over pressure (bar) | Output Signal | Model |
|---|-----------|----------------------|----------------------|-----------------------|---------------------|---------------|------------------|
|  | G1/4 | -14.5 ... 14.5 | -1 ... 1 | 145 | 10 | 2 x PNP | 34D-V101G-DD1-AA |
| | G1/4 | -14.5 ... 145 | -1 ... 10 | 1090 | 75 | 2 x PNP | 34D-V110G-DD1-AA |
| | G1/4 | 0 ... 232 | 0 ... 16 | 1225 | 85 | 2 x PNP | 34D-P016G-DD1-AA |
| | G1/4 | 0 ... 580 | 0 ... 40 | 2900 | 200 | 2 x PNP | 34D-P040G-DD1-AA |
| | G1/4 | 0 ... 1450 | 0 ... 100 | 4350 | 300 | 2 x PNP | 34D-P100G-DD1-AA |
| | G1/4 | 0 ... 2320 | 0 ... 160 | 5075 | 350 | 2 x PNP | 34D-P160G-DD1-AA |
| | G1/4 | 0 ... 3625 | 0 ... 250 | 7250 | 500 | 2 x PNP | 34D-P250G-DD1-AA |
| | G1/4 | 0 ... 5800 | 0 ... 400 | 11580 | 800 | 2 x PNP | 34D-P400G-DD1-AA |
| | G1/4 | 0 ... 8700 | 0 ... 600 | 11580 | 800 | 2 x PNP | 34D-P600G-DD1-AA |

Technical data - Output Signal 1 x PNP (1 x IO-Link, configurable), 1 x Analog

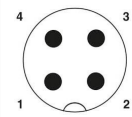
| Symbol | Port size | Pressure range (psi) | Pressure range (bar) | Over pressure*1 (psi) | Over pressure (bar) | Output Signal | Model |
|---|-----------|----------------------|----------------------|-----------------------|---------------------|----------------------|------------------|
|  | G1/4 | -14.5 ... 14.5 | -1 ... 1 | 145 | 10 | 1 x PNP / 1 x Analog | 34D-V101G-DA1-AA |
| | G1/4 | -14.5 ... 145 | -1 ... 10 | 1090 | 75 | 1 x PNP / 1 x Analog | 34D-V110G-DA1-AA |
| | G1/4 | 0 ... 232 | 0 ... 16 | 1225 | 85 | 1 x PNP / 1 x Analog | 34D-P016G-DA1-AA |
| | G1/4 | 0 ... 580 | 0 ... 40 | 2900 | 200 | 1 x PNP / 1 x Analog | 34D-P040G-DA1-AA |
| | G1/4 | 0 ... 1450 | 0 ... 100 | 4350 | 300 | 1 x PNP / 1 x Analog | 34D-P100G-DA1-AA |
| | G1/4 | 0 ... 2320 | 0 ... 160 | 5075 | 350 | 1 x PNP / 1 x Analog | 34D-P160G-DA1-AA |
| | G1/4 | 0 ... 3625 | 0 ... 250 | 7250 | 500 | 1 x PNP / 1 x Analog | 34D-P250G-DA1-AA |
| | G1/4 | 0 ... 5800 | 0 ... 400 | 11580 | 800 | 1 x PNP / 1 x Analog | 34D-P400G-DA1-AA |
| | G1/4 | 0 ... 8700 | 0 ... 600 | 11580 | 800 | 1 x PNP / 1 x Analog | 34D-P600G-DA1-AA |

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

Electrical connection M12 x 1 (2 x PNP)

| | PIN-No. | Signal | Cable |
|---|---------|----------------------|-------|
|  | 1 | + UB | brown |
| | 2 | Out 2 (PNP) | white |
| | 3 | 0 Volt | blue |
| | 4 | Out 1 (PNP)/ IO-Link | black |

Electrical connection M12 x 1 (1 x PNP, 1 x analog)

| | PIN-No. | Signal | Cable |
|---|---------|----------------------------|-------|
|  | 1 | + UB | brown |
| | 2 | Analog 4 ... 20 mA/0...10V | white |
| | 3 | 0 Volt | blue |
| | 4 | Out 1 (PNP)/ IO-Link | black |

Option selector

34D-*****-***1-AA

| Pressure range (psi) | Substitute |
|----------------------|------------|
| -14.5 ... 14.5 | V101G |
| -14.5 ... 145 | V110G |
| 0 ... 232 | P016G |
| 0 ... 580 | P040G |
| 0 ... 1450 | P100G |
| 0 ... 2320 | P160G |
| 0 ... 3626 | P250G |
| 0 ... 5801 | P400G |
| 0 ... 8702 | P600G |

| Analog-type | Substitute |
|------------------------|------------|
| IO-Link, configurable | 1 |
| Output Signal | Substitute |
| 2 x PNP | DD |
| 1 x PNP/ 1 x Analog | DA |

Mounting accessories

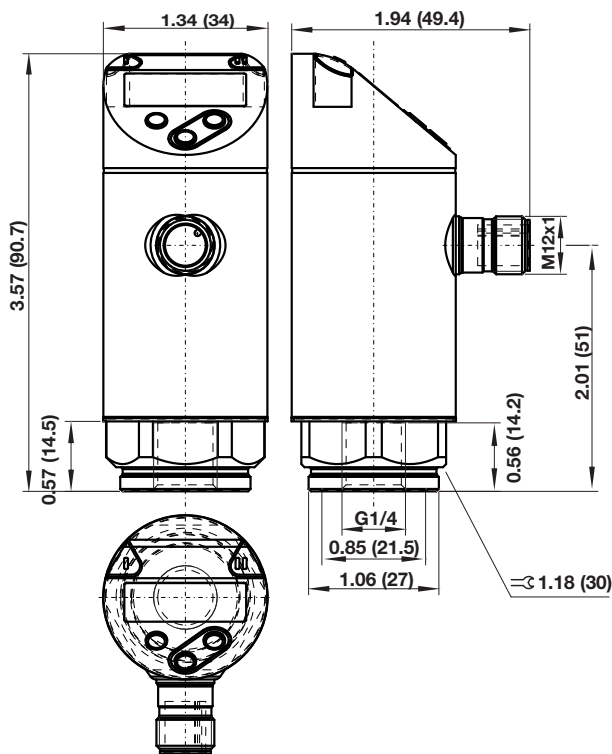


34D-14G-NPT-FADP

Accessories

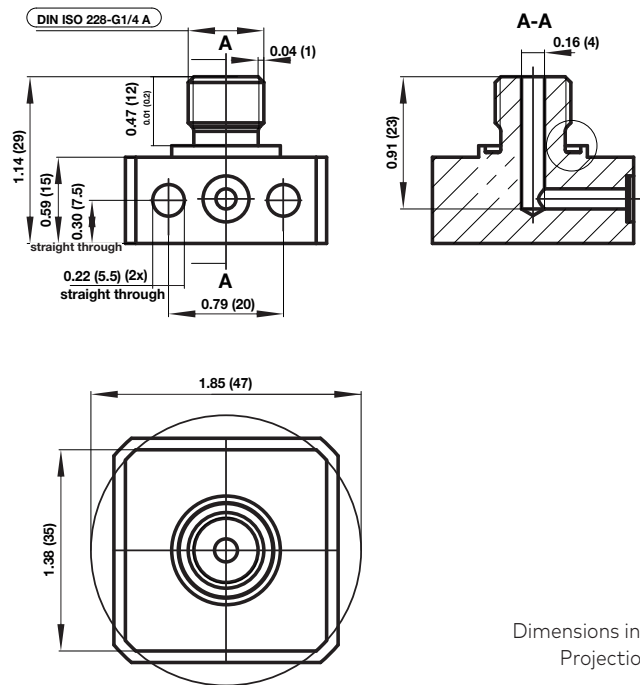


Dimensions pressure switch



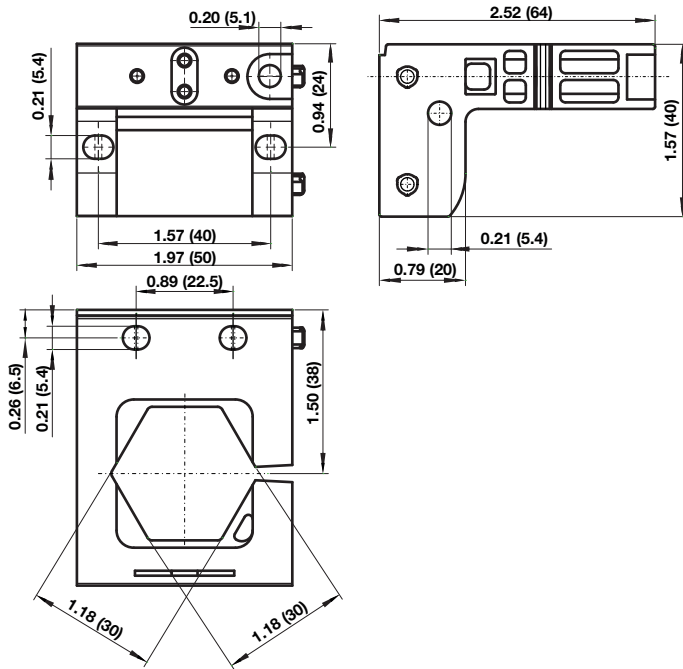
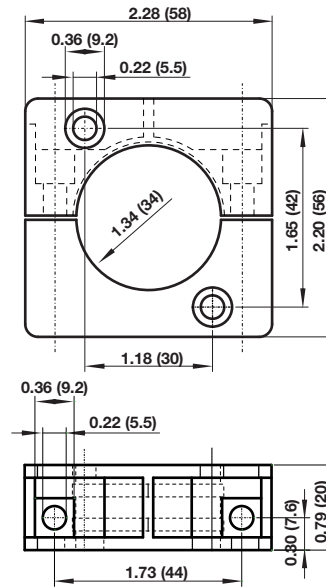
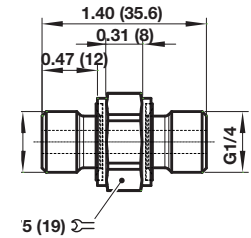
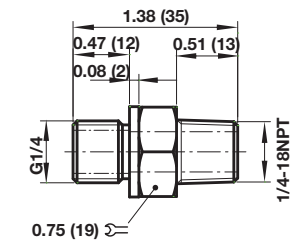
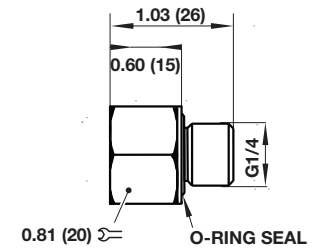
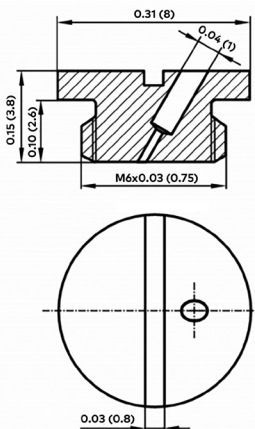
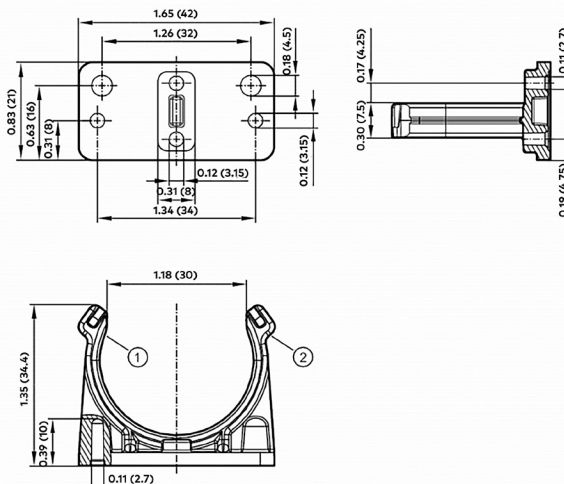
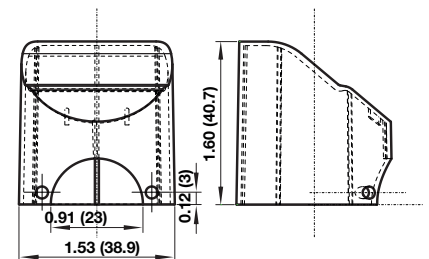
Dimensions accessories

Flange adapter 34D-FLANGE-ADPT



Dimensions in inches (mm)
Projection/First angle




**Wall mounting kit
34D-BRKT-ANGLED**

**Mounting clamp
34D-BRKT-BODY**

**Adapter
34D-14G-G-ADPT**

**Adapter
34D-14G-NPT-ADPT**

**Adapter
34D-14G-NPT-FADP**

**Throttle screw
34D-DAMPING-SCRW**

**Label tag holder
34D-LABEL-TAG**

**Cover protection
34D-COVER-PROTEC**

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.