

22IC Series / 26IC Series – CSA Intrinsically Safe Industrial Pressure Transducers

- ▶ Ex II 1G; Ex ia IIC T4 Ga
- ▶ Vacuum to 6,000 PSI (400 bar); Absolute or Gauge
- ▶ Voltage and 2 Wire 4-20mA Output Models
- ▶ All Stainless Steel Wetted Parts

Certified to the latest harmonized European standard (ATEX) the 22IC and 26IC Intrinsically safe pressure transmitters are designed to withstand the rigours of the most difficult applications with an all stainless steel construction, free from seals or oil barriers.

Incorporating Gems CVD Sensors and ASIC technology the 22IC and 26IC offer long term reliability, excellent performance and long term stability ensuring long service life without routine maintenance.

Available with a wide choice of pressure fittings units can be supplied to IP65 or fully immersible to IP68 200mWG and a variety of electrical connectors.

Specifications

| | |
|---------------------------------|--|
| Input | |
| Pressure Range | Vacuum to 6000 psi G (400 bar) 0-363 psi Absolute (0-25 bar) |
| Proof Pressure | 2 x Full Scale (FS) (1.5 x FS for ≥ 5000 psi, 400 bar) |
| Burst Pressure | >35 x FS ≤ 100 psi (6 bar); >20 x FS ≤ 1000 psi (60 bar); >5 x FS ≤ 6000 psi (400 bar) |
| Fatigue Life | Designed for more than 100 million FS cycles |
| Performance | |
| Long Term Drift | 0.2% FS/year (non-cumulative) |
| Accuracy | 0.25% FS typical (optional 0.15% FS) |
| Thermal Error | 1.5% FS typical (optional 1% FS) |
| Compensated Temperatures | -40°F to +180°F (-20°C to +80°C) |
| Operating Temperatures | -40°F to +260°F (-40°C to +125°C) for elec. codes A, B, C -5°F to +180°F (-20°C to +80°C) for elec. code G -5°F to +125°F (-20°C to +50°C) for elec. codes F, M, 3 |
| Zero Tolerance | 1% of span |
| Span Tolerance | 1% of span |
| Mechanical Configuration | |
| Pressure Port | See ordering chart |
| Wetted Parts | 17-4 PH Stainless Steel |
| Electrical Connection | See ordering chart |
| Enclosure | 316 ss, 17-4 PH ss IP65 for elec. codes A, B, C, G (with connector fitted) 3 IP67 for elec. code "F" IP68 for elec. codes M |
| Vibration | 35g peak sinusoidal, 5 to 2000 Hz |
| Acceleration | 100g steady acceleration in any direction 0.032% FS/g for 15 psi (1 bar) range decreasing logarithmically to 0.0007% FS/g for 6000 psi (400 bar) range. |
| Shock | Withstands free fall to IEC 68-2-32 procedure 1 |
| Approvals | Ex II 1G; Ex ia IIC T4 Ga, -4°F ≤ Ta ≤ +167°F (-20°C ≤ Ta ≤ +75°C) |
| Weight | Approx. 3.5 ounces (100 grams) (additional cable; 75 g/m) |

Series 22IC



Series 26IC



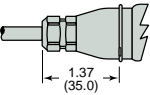
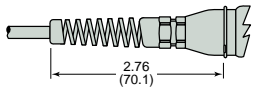


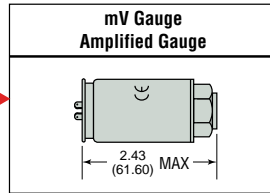
Individual Specifications

| | |
|-----------------------------------|---|
| Voltage Output units | |
| Output | see ordering chart |
| Supply Voltage (Vs) | 1.5 Vdc above FS output to 25.5 Vdc |
| Supply Voltage Sensitivity | 0.01% FS/Volt |
| Min. Load Resistance | (FS output / 2) Kohms |
| Current Consumption | approx 6 mA at 7.5V output |
| Current Output units | |
| Output | 4-20 mA (2 wire) |
| Supply Voltage (Vs) | 24 Vdc, (7-35 Vdc) above 212°F (100°C) supply |
| Supply Voltage Sensitivity | 0.01% FS/Volt |
| Max. Loop Resistance | (Vs-7) x 50 ohms |

Dimensions


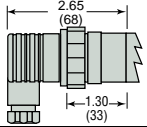
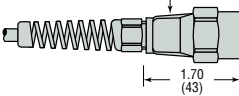
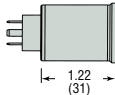
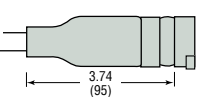
22IC Series

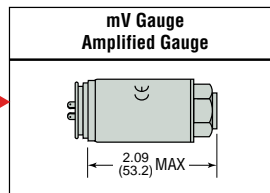
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| Mini 4 Pin - No Connector |
| Code B  |
| Mini 4 Pin - With Connector |
| Code A  |
| IP67 Cable (Waterproof) |
| Code F  1.37 (35.0) |
| IP65 or NEMA4 Cable |
| Code D or 2  2.76 (70.1) |












Maximum diameter 1.07" (27.3 mm)


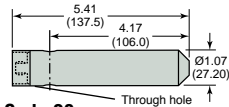
26IC Series

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|--|
| 10-6 or 8-4 Mil-C Connector |
| 10-6 Code C  |
| 8-4 Code 1 0.87 (22) |
| Large DIN 43650 Plug |
| Code G  2.65 (68) 1.30 (33) |
| Conduit Connector with Cable |
| Code 3 1/2" NPT  1.70 (43) |
| Conduit Connector with Flying Leads |
| Code T  1.22 (31) |
| Moulded, Immersible Cable |
| Code M  3.74 (95) |



Maximum diameter 1.07" (27.3 mm)

| |
|--|
| 1/8-27 NPT |
| Code 08  0.79 (20) |
| 1/4 - 1/8 NPT |
| Code 02  0.79 (20) |
| 7/16-20 UNF-2A |
| Code 04  0.75 (19) |
| G 1/8 Internal |
| Code 09  |
| G 1/4 Internal |
| Code 00  0.74 (19) |
| G 1/4 External |
| Code 01  0.66 (17) |
| G 1/4 Soft Seal |
| Code 05  0.67 (17) |
| G 1/2 Manometer |
| Code 03  0.87 (22.0) |
| R 1/4 |
| Code 0A  0.67 (17) |

| |
|---|
| Nose Cone - Black Acetal |
| Code 19  0.75 (19) |
| Nose Cone Sink Weight |
|  5.41 (137.5) 4.17 (106.0) Ø1.07 (27.20) Through hole Ø0.39 (10.0) |
| Code 29 |

inch (mm)

| Connection Code | | | Voltage units | | | | Current units (4-20mA) | | |
|-----------------|-------------------------|-----|---------------|-----|------|-------|------------------------|-----|-------|
| | | | IN+ | COM | OUT+ | EARTH | (+) | (-) | EARTH |
| A, B, G | Industrial DIN | PIN | 1 | 2 | 3 | 4 | 1 | 2 | 4 |
| C | "10-6 Bayonet" | PIN | A | C | B | E | A | B | E |
| D | Cable | | R | BK | W | DRAIN | R | BK | DRAIN |
| F | IP67 cable | | R | BK | W | DRAIN | R | BK | DRAIN |
| 1 | "8-4 Bayonet" | PIN | A | C | B | D | A | B | D |
| 3 | "conduit & cable" | | R | BK | W | DRAIN | R | BK | DRAIN |
| M | Immersible IP68 to 200m | | R | W | Y | DRAIN | R | BL | DRAIN |

Cable Legend:
 R = Red
 BL = Blue
 BK = Black
 W = White
 Y = Yellow

How to Order

Use the **bold** characters from the chart below to construct a product code

22IC B G A60 01 A B U A

Series **22IC** **26IC** Performance Code

Output **B** - 4-20mA **C** - 1-6V **J** - 0.5-5.5V Accuracy/Thermal
D - 1-11V **R** - 0-5V **H** - 1-5V **A** - .25%/1.5%
S - 0-10V **B** - .15%/1.0%


Pressure Datum **A** - Absolute **G** - Gauge Cable Length³
U - No Cable Fitted
D - 3 feet (1 Meter)
E - 9 feet (3 Meters)
F - 16 feet (5 Meters)
G - 32 feet (10 Meters)
H - 49 feet (15 Meters)
J - 65 feet (20 Meters)
K - 82 feet (25 Meters)
L - 98 feet (30 Meters)
M - 131 feet (40 Meters)
N - 164 feet (50 Meters)
P - 246 feet (75 Meters)
Q - 328 feet (100 Meters)
R - 410 feet (125 Meters)
S - 492 feet (150 Meters)

Pressure Range¹ - psi **F15** - 0-15 **G60** - 0-600 **Vac** = -15 psi
F30 - 0-30 **H10** - 0-1,000 **1F5** - Vac-0
F60 - 0-60 **H15** - 0-1,500 **3F0** - Vac-15
G10 - 0-100 **H20** - 0-2,000 **6F0** - Vac-45
G15 - 0-150 **H30** - 0-3,000 **1G0** - Vac-85
G20 - 0-200 **H40** - 0-4,000 **1G5** - Vac-135
G30 - 0-300 **H50** - 0-5,000 **2G0** - Vac-185
G50 - 0-500 **H60** - 0-6,000 **3G0** - Vac-285

Pressure Range¹ - bar **A10** - 0-1 **B25** - 0-25 **Vac** = -1 bar
A16 - 0-1.6 **B40** - 0-40 **1A0** - Vac-0
A25 - 0-2.5 **B60** - 0-60 **1A6** - Vac-0.6
A40 - 0-4 **C10** - 0-100 **2A5** - Vac-1.5
A60 - 0-6 **C16** - 0-160 **4A0** - Vac-3
B10 - 0-10 **C25** - 0-250 **6A0** - Vac-5
B16 - 0-16 **C40** - 0-400 **1B0** - Vac-9
1B6 - Vac-15
2B5 - Vac-24
4B0 - Vac-39

Pressure Port² **01** - G1/4 External **08** - 1/8-27 NPT External
02 - 1/4-18 NPT External **09** - G1/8 Internal
03 - G1/2 Manometer **00** - G1/4 Internal
04 - 7/16-20 UNF to SAE J514 **0A** - R1/4 External
05 - G1/4 Ext. Soft Seal **19** - Nose Cone (26IC Only)

Electrical Connection
22IC Series
A - Industrial DIN Mating Connector Supplied
B - Industrial DIN Mating Connector Not Supplied
F - Cable Gland Metal IP67
26IC Series
C - Fixed Plug Size 10-6 Mating Plug Not Supplied
G - Fixed Plug To DIN 43650 Mating Plug Supplied
M - Immersible Max. depth 656 feet (200 meters)
1 - Fixed Plug Size 8-4 Mating Plug Not Supplied
3 - Conduit Connector 1/2NPT Ext. 1M Cable

Apparatus Protection **B** - Intrinsically safe, zener barrier, Gauge only
G - Intrinsically safe, galvanic barrier Gauge or Absolute
 II 1G
 Ex ia IIC T4 Ga, -4°F ≤ Ta ≤ 167°F (-20°C ≤ Ta ≤ +75°C)

- Notes:
1. Additional intermediate ranges available. Please consult factory.
 2. Addition Pressure Ports available. Please consult factory.
 3. Max length on 22IC-32 feet (10 Meters).
 4. Intrinsically safe transducers are available with amplified outputs only.