

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	-5°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

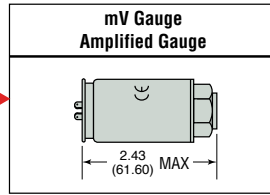
Dimensions

22IC Series

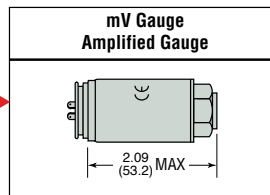
Mini 4 Pin - No Connector	
Code B	
Mini 4 Pin - With Connector	
Code A	
IP67 Cable (Waterproof)	
Code F	
IP65 or NEMA4 Cable	
Code D or 2	

26IC Series

10-6 or 8-4 Mil-C Connector	
10-6 Code C	
8-4 Code 1	
Large DIN 43650 Plug	
Code G	
Conduit Connector with Cable	
Code 3	
Conduit Connector with Flying Leads	
Code T	
Moulded, Immersible Cable	
Code M	



Maximum diameter 1.07" (27.3 mm)



Maximum diameter 1.07" (27.3 mm)

1/8-27 NPT	
Code 08	
1/4 - 1/8 NPT	
Code 02	
7/16-20 UNF-2A	
Code 04	
G 1/8 Internal	
Code 09	
G 1/4 Internal	
Code 00	
G 1/4 External	
Code 01	
G 1/4 Soft Seal	
Code 05	
G 1/2 Manometer	
Code 03	
R 1/4	
Code 0A	

Nose Cone - Black Acetal	
Code 19	
Nose Cone Sink Weight	
Code 29	Through hole Ø0.39 (10.0)

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.

NOTES

A large grid of dashed red lines for taking notes, occupying the majority of the page.