

22CS Series / 26CS Series – CSA Intrinsically Safe Industrial Pressure Transmitters

- ▶ Ranges from 7.5 to 6000psi (0.5 to 400 bar) and 0-300psi (0-25 bar) Absolute
- ▶ Voltage and 2 Wire 4-20mA output models
- ▶ All stainless steel wetted parts

Certified by CSA for Canada and USA, the 22CS and 26CS Series intrinsically safe pressure transmitters are designed to withstand the rigors of the most difficult applications. An all-stainless steel construction, eliminates the need for seals and oil barriers that can deteriorate over time.

Incorporating Gems CVD Sensors and ASIC technology the 22CS and 26CS Series 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 and electrical connections rated from IP65 to fully immersible (IP68 200m WG).

Specifications

Input	
Pressure Range	Vacuum to 6000 psi G (400 bar); 300 psi Absolute (0-25 bar)
Proof Pressure	2 x Full Scale (FS) (1.5 x FS for 400 bar, ≥ 5000 psi)
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. codes 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, 3 and G (with DIN connector fitted) 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	CSA Certified Class I, Division 1, Groups A, B, C, D Class II, Division 1, Groups E, F, G Class III When used in conjunction with a Zener safety barrier
Weight	Approx. 3.5 ounces (100 grams) (additional cable; 75 g/m)

Series 22CS



Series 26CS



Individual Specifications

Voltage Output units	
Output	See ordering chart
Supply Voltage (Vs)	1.5 VDC above FS output to 28 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, (7-28 VDC)
Supply Voltage Sensitivity	0.01% FS/Volt
Max. Loop Resistance	(Vs-7) x 50 ohms

Electrical Connections

	Connection Code	mA Output			Voltage Output			
		+VE	-VE	EARTH	-VE	COMMON	EARTH	EARTH
22CS	A, B	1	2	E	1	2	2	4
	2, D, F	R	BK	DRAIN	R	BK	W	DRAIN
26CS	1	A	B	D	A	B	C	D
	C	A	B	E	A	B	C	E
	G	1	3	E	1	2	3	E
	3 (Cable)	R	BK	DRAIN	R	BK	W	DRAIN
	F (Leads)	R	BK	GR	R	BK	W	GR
	M	R	BL	DRAIN	R	W	Y	DRAIN

Electromagnetic Capability

Meets the requirement for CE marking of EN50081-2 for emissions and EN50082-2 for susceptibility.

Test Data:


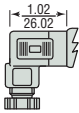
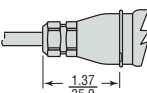
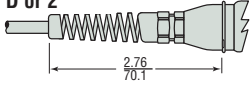
- EN61000-4-2 Electrostatic Discharge. 8kV air discharge, 4kV contact discharge. Unit survived.
- ENV50140 Radiated RF Susceptibility. 10V/m, 80MHz-1GHz, 1kHz mod. Maximum recorded output error was $<\pm 1\%$
- ENV50204 Radiated RF Susceptibility to Mobile Telephones. 10V/m, 900MHz. Maximum recorded output error was $<\pm 1\%$.
- EN61000-4-4 Fast Burst Transient. 2kV, 5/50ns, 5kHz for 1 minute. Unit survived.
- ENV50141 Conducted RF Susceptibility. 10Vms, 1kHz mod, 150kHz - 80MHz. Maximum recorded output error was $<\pm 1\%$

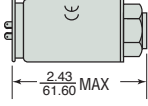
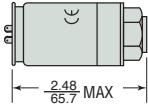
Cable Legend:

R = Red
 BK = Black
 W = White
 G = Green
 BL = Blue
 Y = Yellow

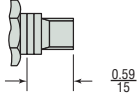
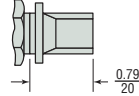
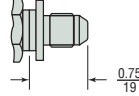

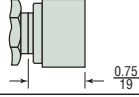
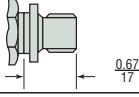
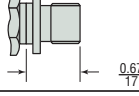
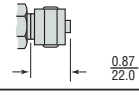
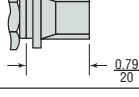
Dimensions

22CS Series


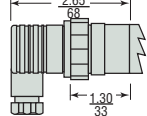
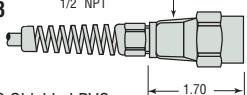

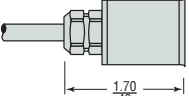
Industrial DIN Connector
Code B 
Industrial DIN Connector (mate supplied)
Code A 
IP67 Cable
Code F 
24 AWG Shielded PVC
IP65 or NEMA4 Cable
Code D or 2 
24 AWG Shielded PVC

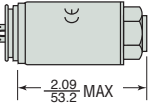
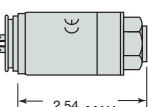
Amplified Gauge 
Amplified Absolute 

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 
G1/8 Internal
Code 09 
G1/4 Internal
Code 00 
G1/4 External
Code 01 
G1/4 Soft Seal
Code 05 
G1/2 Manometer
Code 03 
R1/4
Code 0A 

26CS Series

10-6 or 8-4 Mil-C Connector
10-6 Code C 
8-4 Code 1
Large DIN 43650 Plug (mate supplied)
Code G 
Conduit Connector with Cable
Code 3 
24 AWG Shielded PVC
Conduit Connector with Flying Leads
Code M 
Code F 

Amplified Gauge 
Amplified Absolute 

Maximum diameter 1.07" (27.3 mm)

inch
mm

How to Order

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

			22CS	B	G	A60	01	A	C	U	A	
Series											Performance Code	
	22CS	26CS									Accuracy/Thermal	
Output											A - .25%/1.5%	
	B - 4-20mA	C - 1-6V	J - 0.5-5.5V									B - .15%/1.0%
		D - 1-11V	R - 0-5V									
		H - 1-5V	S - 0-10V									
		G - 0.2-10.2V	F - 0.1-5.1V									
Pressure Datum	A - Absolute		G - Gauge								Cable Length	
											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 - 50 feet (15 Meters)	
											J - 65 feet (20 Meters)	
											K - 82 feet (25 Meters)	
											L - 98 feet (30 Meters)	
											M - 132 feet (40 Meters)	
											N - 164 feet (50 Meters)	
											P - 246 feet (75 Meters)	
											Q - 328 feet (100 Meters)	
											R - 410 feet (125 Meters)	
											S - 525 feet (160 Meters)	
Pressure Range ¹ - psi											Apparatus Protection	
	F15 - 0-15	G60 - 0-600			Vac = -15 psi						C - CSA Approved Intrinsically Safe	
	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 Range ¹ - bar											Electrical Connection	
	A10 - 0-1	B25 - 0-25			Vac = -1 bar						22CS Series	
	A16 - 0-1.6	B40 - 0-40			1A0 - Vac-0						A - Industrial DIN Mating Connector Supplied	
	A25 - 0-2.5	B60 - 0-60			1A6 - Vac-0.6						B - Industrial DIN Mating Connector Not Supplied	
	A40 - 0-4	C10 - 0-100			2A5 - Vac-1.5						F - Cable Gland Metal IP67	
	A60 - 0-6	C16 - 0-160			4A0 - Vac-3						2 - IP65 - NEMA4 Cable	
	B10 - 0-10	C25 - 0-250			6A0 - Vac-5						D - IP65 - NEMA4 Cable	
	B16 - 0-16	C40 - 0-400			1B0 - Vac-9						26CS Series	
					1B6 - Vac-15						C - Fixed Plug Size 10-6 Mating Plug Not Supplied	
					2B5 - Vac-24						G - Fixed Plug To DIN 43650 Mating Plug Supplied	
					4B0 - Vac-39						M - Immersible Max. Depth 200 Meters	
Pressure Port ²											1 - Fixed Plug Size 8-4 Mating Plug Not Supplied	
	01 - G1/4 External	08 - 1/8-27 NPT External									3 - Conduit Connector 1/2 NPT Ext. 1M Cable	
	02 - 1/4-18 NPT External	09 - G1/8 Internal									F - Cable Gland Metal IP67	
	03 - G1/2 Manometer	00 - G1/4 Internal										
	04 - 7/16-20UNF to SAE J514	0A - R1/4 External										
	05 - G1/4 Ext. Soft Seal											

Notes:

1. Additional Pressure Ranges are available. Please consult factory.
2. For other Pressure Ports, please consult factory.