

QPress Pressure Transducer - QOM-CR2 5200 Series

PTFE-bodied corrosion-resistant pressure transmitter with ceramic sensor and IP65 protection.

Certifications

Quality Lab Solutions data sheet R4



Applications

- Chemical processes (acids/alkalis)
- Metallurgy
- Power generation
- Smoke/boiler control
- Hydraulic control
- Environmental protection systems
- Air-conditioning and purification equipment

Special Features

- Oil-free, fully welded construction with PTFE wetted surfaces for aggressive media
- Glass-fused silicon sensor element with high stability
- Full temperature compensation electronics
- Outputs: 4–20 mA, 0–10 V, 0–5 V, 1–5 V, RS485
- Optional local display (LCD for analogue; 8-segment for RS485)
- Over-voltage and short-circuit protection; reverse-polarity protection (implied by design practice)
- IP65 ingress protection; DIN plug, cable or M20×1.5 electrical interface
- Anti-vibration and anti-shock design

Description

Compact industrial transducer for pressure measurement of corrosive liquids and gases. A ceramic piezoresistive sensing element and PTFE wetted path provide robust chemical resistance. Analogue (4–20 mA or voltage) or RS485 outputs are available across a wide choice of ranges from –1...0 bar to 0...16 bar, with an optional local indicator. Operating and medium temperatures are –20...85 °C with compensation over 0...70 °C. Ingress protection is IP65.



QOM-CR2 5200

Specifications

TECHNICAL SPECIFICATIONS	
Pressure range	−1...0bar; −1...1bar; −1...10bar; 0...0.1bar; 0...0.2bar; 0...0.3bar; 0...0.5bar; 0...1bar; 0...6bar; 0...10bar; 0...16bar; other ranges on request up to 20 bar.
Pressure reference	Gauge; Absolute; Sealed
Accuracy	±0.5% FS (±1.0% FS option)
Temp. drift	±3% FS (0...70 °C compensation span)
Response time	≤10 ms (analogue to 90% FS); ≤100 ms (RS485 to 90% FS)
Ambient temp.	−20...85 °C
Medium temp.	−20...85 °C
Storage temp.	−40...85 °C
Connector material	PTFE; aluminium alloy (M20×1.5 plug)
Insulation resistance	20 MΩ at 250 VDC
Protection	IP65
Wetted Parts	PTFE; ceramic sensor
Dimensions	Overall height ≈84 mm (137.8 mm with display); hex 34 mm; body width 48 mm
Size of hexagon	34 mm (across flats, per drawing)
Electrical Outputs	4–20 mA; 0–10 V; 0–5 V; 1–5 V; RS485
Process connections	M20×1.5; G1/2; G1/4; NPT1/2
Anti-Vibration	Yes
Overpressure	200% FS
Housing Material	PTFE (DIN/cable versions); aluminium alloy (M20×1.5 plug)
Electrical connections	DIN (Hirschmann) plug; Cable; M20×1.5 plug
Power Supply	4–20 mA: 10–32 VDC; 0–10 V: 12–32 VDC; 0–5 V / 1–5 V / RS485: 8–32 VDC; 4–20 mA with LCD: 17–32 VDC; RS485 with 8-segment display: 5–28 VDC

Measuring Range (Gauge Pressure)

Range Code	Measuring Range	Overpressure	Accuracy
01	-0.10...0 bar	200%FS	±0.5%FS / ±1.0%FS
02	-0.10...+0.10 bar	200%FS	±0.5%FS / ±1.0%FS
03	-0.10...+1 bar	200%FS	±0.5%FS / ±1.0%FS
04	0-0.10 bar	200%FS	±0.5%FS / ±1.0%FS
05	0-0.20 bar	200%FS	±0.5%FS / ±1.0%FS
06	0-0.30 bar	200%FS	±0.5%FS / ±1.0%FS
07	0-0.50 bar	200%FS	±0.5%FS / ±1.0%FS
08	0-1 bar	200%FS	±0.5%FS / ±1.0%FS
09	0-6 bar	200%FS	±0.5%FS / ±1.0%FS
10	0-10 bar	200%FS	±0.5%FS / ±1.0%FS
11	0-16 bar	200%FS	±0.5%FS / ±1.0%FS

Measuring Range (Absolute Pressure)

Range Code	Measuring Range	Overpressure	Accuracy
01	0.9...1 bar	200%FS	±0.5%FS / ±1.0%FS
02	0.9...1.1 bar	200%FS	±0.5%FS / ±1.0%FS
03	0.9...2 bar	200%FS	±0.5%FS / ±1.0%FS
04	1-1.1 bar	200%FS	±0.5%FS / ±1.0%FS
05	1-1.2 bar	200%FS	±0.5%FS / ±1.0%FS
06	1-1.3 bar	200%FS	±0.5%FS / ±1.0%FS
07	1-1.5 bar	200%FS	±0.5%FS / ±1.0%FS
08	1-2 bar	200%FS	±0.5%FS / ±1.0%FS
09	1-7 bar	200%FS	±0.5%FS / ±1.0%FS
10	1-11 bar	200%FS	±0.5%FS / ±1.0%FS
11	1-17 bar	200%FS	±0.5%FS / ±1.0%FS

Measuring Range (Sealed Pressure)

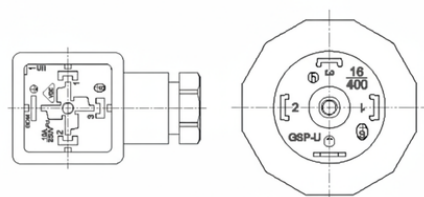
Range Code	Measuring Range	Overpressure	Accuracy
01	-0.10...0 bar	200%FS	±0.5%FS / ±1.0%FS
02	-0.10...+0.10 bar	200%FS	±0.5%FS / ±1.0%FS
03	-0.10...+1 bar	200%FS	±0.5%FS / ±1.0%FS
04	0-0.10 bar	200%FS	±0.5%FS / ±1.0%FS
05	0-0.20 bar	200%FS	±0.5%FS / ±1.0%FS
06	0-0.30 bar	200%FS	±0.5%FS / ±1.0%FS
07	0-0.50 bar	200%FS	±0.5%FS / ±1.0%FS
08	0-1 bar	200%FS	±0.5%FS / ±1.0%FS
09	0-6 bar	200%FS	±0.5%FS / ±1.0%FS
10	0-10 bar	200%FS	±0.5%FS / ±1.0%FS
11	0-16 bar	200%FS	±0.5%FS / ±1.0%FS

Output Signals

Code	Output	Power Supply	Load
I4	4-20 mA (2-wire)	10-32 VDC	$\leq (U-10V)/0.02A$
VX	0-10 V (3-wire)	12-32 VDC	$\geq 5\text{ k}\Omega$
V5	0-5 V (3-wire)	8-32 VDC	$\geq 5\text{ k}\Omega$
V1	1-5 V (3-wire)	8-32 VDC	$\geq 5\text{ k}\Omega$
RS	RS485 (Modbus)	8-32 VDC	

Electrical Connections

Code	Description	Pinout
E5	DIN 43650 (Hirschmann)	2-wire current (I4): Pin 1: Supply +; Pin 2: Current output 3-wire voltage (V5/V1/VX): Pin 1: Supply +; Pin 2: Ground; Pin 3: Voltage output
E1	Cable outlet	-
E9	M20x1.5 electrical plug (2088 housing)	-



E5 – DIN 43650



E1 – Cable outlet

Power Supply

Code	Supply
PS1	10-32 VDC (I4)
PS2	12-32 VDC (0-10 V)
PS3	8-32 VDC (0-5 V / 1-5 V / RS485)
PS4	17-32 VDC (I4 with LCD display)

Cable Length

Code	Length
CL0	0 m
CL2	2 m
CL5	5 m
CL10	10 m

Construction Materials

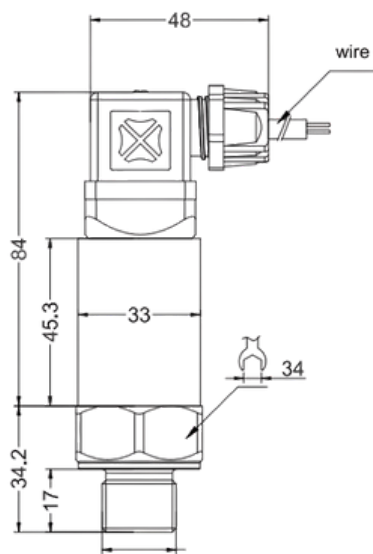
Code	Diaphragm	Pressure Port	Housing
M1	Ceramic	PTFE	PTFE
M2	Ceramic	PTFE	Aluminum alloy (2088)

Accuracy options

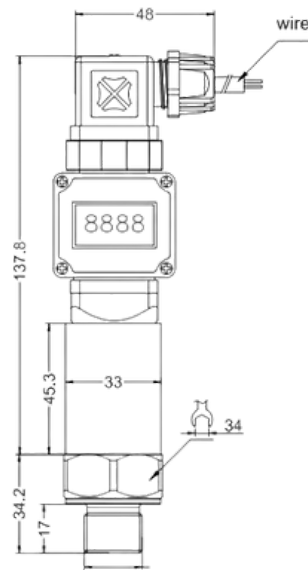
Code	Accuracy
A05	±0.5%FS
A10	±1.0%FS

Process Connections/Drawings

Code	Thread / Port
Code	Thread / Port
P01	M20x1.5 male
P02	G1/2 male
P03	G1/4 male
P04	NPT1/2 male



E5 – DIN 43650 without display



E5 – DIN 43650 with display

Connection Seal

Code	Seal type
CS1	Fluororubber (FKM)

Accessory

Code	Description
D1	LCD 4-digit display head (I4)
D2	4-digit 8-segment display (RS485)

Certification

Code	Description
NA	None
CE	EMC/CE
UK	UKCA
RO	RoHS

Order Guide

Segment	Your Code	Options
Product family	QOM-CR2 5200	QOM-CR2 5200
Pressure Reference	GP / AP / SP	GP=gauge; AP=absolute; SP=sealed
Range	01..11	See Measuring range
Accuracy	A05 / A10	See Accuracy options
Output	I4 / V5 / V1 / VX / RS	See Output Signals
Power Supply	PS1 / PS2 / PS3 / PS4	See Power Supply
Construction Materials	M1 / M2	See Construction Materials
Process Connection	P01..P04	See Process Connections & Drawings
Connection Seal	CS1	See Connection Seal
Electrical Connection	E1 / E5 / E9	See Electrical Connections
Cable Length	CL0 / CL2 / CL5 / CL10	See Cable Length
Certification	NA / CE / RO / UK	See Certification
Accessories	D1 / D2	See Accessory

Ordering Example *Absolute 1-2 bar (from 0-1 bar gauge), $\pm 0.5\%$ FS, 4-20 mA (10-32 VDC), ceramic/PTFE/PTFE, G1/2 port, FKM seal, DIN 43650, CE, LCD display head*

Family	Ref	Range	Accuracy	Output	Power Supply	Construction Materials	Process Connection	Connection Sealing	Electrical Connection	Cable Length (E1 only)	Certification	Accessories
QOM-CR2 5200	AP	08	A05	I4	PS1	M1	P02	CS1	E5	-	CE	D1

Notes

Ensure media compatibility with wetted parts.
Not suitable for hydrofluoric acid.