

QPress Pressure Transmitter - QOM-CERAMIC 5500 Series

Ceramic pressure transmitter for OEM duties, 0...10 to 0...60 bar, IP65.

Certifications

Quality Lab Solutions data sheet R4



Applications

- Water and air systems
- Oil pressure monitoring
- HVAC and refrigerants
- Food/medicine equipment
- Agricultural irrigation
- General OEM/industrial

Special Features

- Dry ceramic capacitive sensor with ASIC conditioning
- High-durability construction with anti-shock and anti-vibration design
- Outputs: 4–20 mA, 0.5–4.5 V, 1–5 V, 0–10 V and I2C
- IP65 ingress protection; broad choice of electrical and process connections
- Typical accuracy $\pm 1\%$ FS; start time ≤ 150 ms

Description

Compact ceramic pressure transmitter for liquids and gases. The dry ceramic capacitive element provides corrosion resistance and long-term stability. Ranges cover 0...10 to 0...60 bar in gauge or sealed reference. Analogue outputs and I2C digital are available. Operating and storage temperatures are $-20...70$ °C with IP65 ingress protection.



QOM-CERAMIC 5500

Specifications

TECHNICAL SPECIFICATIONS	
Pressure range	0...10 bar; 0...20 bar; 0...30 bar; 0...40 bar; 0...50 bar; 0...60 bar
Pressure reference	Gauge; Sealed
Accuracy	±1% FS (typical)
Zero Temp. drift	±2% FS
Start time	≤150 ms
Operating temp.	–20...70 °C
Storage temp.	–20...70 °C
Protection	IP65
Housing Material	304 Stainless-steel body
Wetted Parts	Ceramic diaphragm; 304 Stainless-steel pressure port
Size of hexagon	24 mm across flats
Approvals/Certification	UKCA ;CE ; RoHS
Electrical Outputs	0.5–4.5 V; 4–20 mA; 1–5 V; 0–10 V; I2C
Process connections	G1/4; 1/4 NPT; G1/8; 1/8 NPT; M12×1.5; M10×1; 7/16-20 UNF female
Anti-Vibration	Yes
Overpressure/Burst Pressure	Overload 150% FS / Burst 200% FS
Electrical connections	Packard; M12 4-pin; Cable outlet; Mini DIN 43650; GX12-3
Power Supply	0.5–4.5 V (4.75–5.25 VDC); I2C (3.3–5 VDC); 4–20 mA (8–30 VDC); 1–5 V (9–30 VDC); 0–10 V (12–30 VDC)
Acquisition frequency	2.4 kHz

Measuring Range (Gauge Pressure)

Range Code	Measuring Range	Overpressure	Accuracy
01	0-10 bar	150%FS	±1%FS
02	0-20 bar	150%FS	±1%FS
03	0-30 bar	150%FS	±1%FS
04	0-40 bar	150%FS	±1%FS
05	0-50 bar	150%FS	±1%FS
06	0-60 bar	150%FS	±1%FS

Measuring Range (Sealed Pressure)

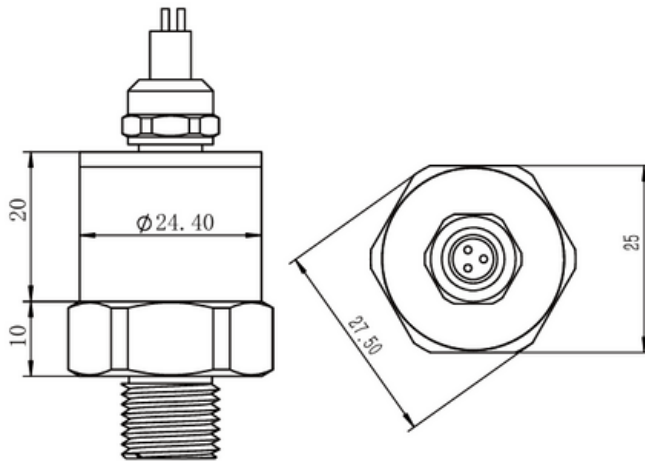
Range Code	Measuring Range	Overpressure	Accuracy
01	0-10 bar	150%FS	±1%FS
02	0-20 bar	150%FS	±1%FS
03	0-30 bar	150%FS	±1%FS
04	0-40 bar	150%FS	±1%FS
05	0-50 bar	150%FS	±1%FS
06	0-60 bar	150%FS	±1%FS

Output Signals

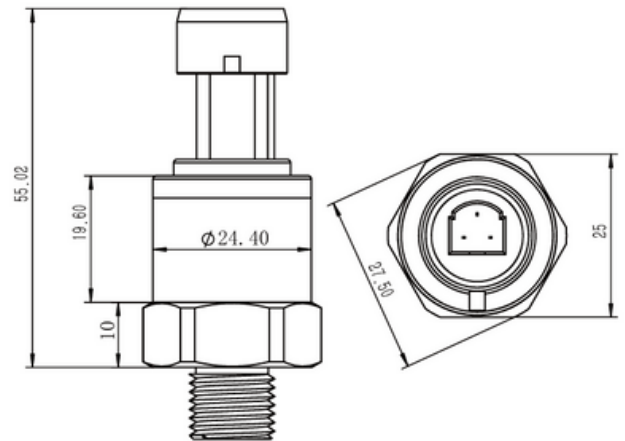
Code	Output	Power Supply	Load
I4	4-20 mA (2-wire)	8-30 VDC	(U-10)/0.02 Ω
V1	1-5 V (3-wire)	9-30 VDC	> 100 kΩ
VX	0-10 V (3-wire)	12-30 VDC	> 100 kΩ
VN	0.5-4.5 V (3-wire)	4.75-5.25 VDC	> 100 kΩ

Electrical Connections

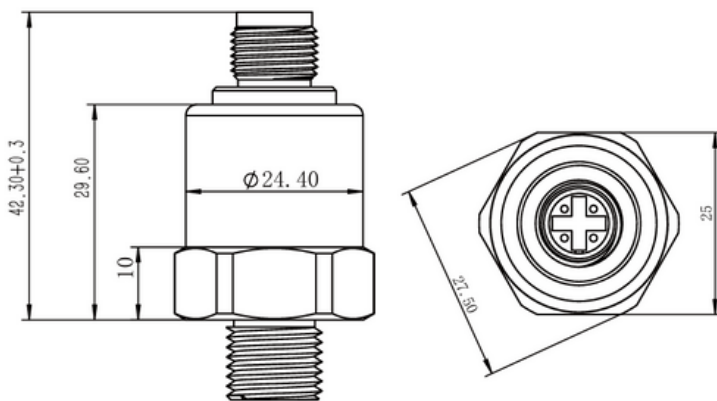
Code	Description	Pinout
E3	Packard 3-pin	2-wire current (I4): Pin1 Red VCC; Pin2 Black GND 3-wire voltage (V1/VX/VN): Pin1 Red VCC; Pin2 Black GND; Pin3 Yellow VOUT
E2	M12 4-pin	2-wire current (I4): Pin1 Brown VCC; Pin2 White GND; Pin3 NC; Pin4 Black (Shield) 3-wire voltage (V1/VX/VN): Pin1 Brown VCC; Pin2 White VOUT; Pin3 Blue GND; Pin4 Black (Shield)
E1	Cable outlet	2-wire current (I4): Red VCC; Black GND 3-wire voltage (V1/VX/VN): Red VCC; Yellow VOUT; Black GND
E5	Mini DIN43650	2-wire current (I4): Pin1 Red VCC; Pin2 Black GND 3-wire voltage (V1/VX/VN): Pin1 Red VCC; Pin2 Black GND; Pin3 Yellow VOUT



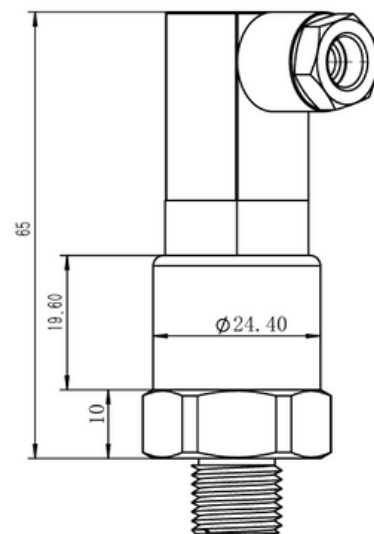
E1 – Cable outlet



E3 – Packard 3-Pin



E2 – M12



E5 – DIN 43650

Power Supply

Code	Supply
PS1	4.75-5.25 VDC (0.5-4.5 V)
PS2	8-30 VDC (4-20 mA)
PS3	9-30 VDC (1-5 V)
PS4	12-30 VDC (0-10 V)

Construction Materials

Code	Diaphragm	Pressure Port	Housing
M1	Ceramic	SS304	SS304

Cable Length

Code	Length
N	None
CL01	1 m
CL15	1.5 m
CL20	2 m

Accuracy options

Code	Accuracy
A10	±1%FS

Process Connections/Drawings

Code	Thread / Port
P01	G1/4 male
P02	1/4 NPT male
P03	G1/8 male
P04	1/8 NPT male
P05	M12x1.5 male
P06	M10x1 male
P07	7/16-20 UNF female

Certification

Code	Description
CE	EMC/CE
RO	RoHS
UK	UKCA

Order Guide

Segment	Your Code	Options
Product family	QOM-CERAMIC 5500	QOM-CERAMIC 5500
Pressure Reference	GP / SP	GP=gauge; SP=sealed
Range	01..06	See Measuring Range
Accuracy	A10	See Accuracy options
Output	I4 / V1 / VX / VN	See Output Signals
Power Supply	PS1 / PS2 / PS3 / PS4	See Power Supply
Construction Materials	M1	See Construction Materials
Process Connection	P01..P07	See Process Connections & Drawings
Electrical Connection	E1 / E2 / E3 / E5	See Electrical Connections
Cable Length	N/ CL01 / CL15 / CL20	See Cable length (E1 only)
Certification	CE / RO / UK	See Certification

Ordering Example Gauge 0-20 bar, ±1%FS, 4-20 mA (8-30 VDC), ceramic diaphragm, G1/4 male, M12 4-pin, CE

Family	Ref	Range	Accuracy	Output	Power Supply	Construction Materials	Process Connection	Electrical Connection	Cable Length (E1 only)	Certification
QOM-CERAMIC 5500	GP	02	A10	I4	PS2	M1	P01	E2	-	CE

Notes

Ensure media compatibility with wetted parts. Torque depends on gasket, mating material and lubrication.
Bespoke options available contact us with your specifications

