

QPress Pressure Transducer - QOM-CORE 1100 Series

Compact OEM pressure transducer with glass-fused silicon sensor and multiple analogue outputs.

Certifications

Quality Lab Solutions data sheet R4



Applications

- Hydraulics
- Pneumatics
- Pumps and compressors
- OEM machinery
- Water treatment
- HVAC and refrigeration

Special Features

- All-stainless, fully welded construction
- Glass-fused silicon sensor element for long-term stability
- Outputs: 4–20 mA; 0–10 V; 1–5 V; 0–5 V; 0.5–4.5 V; 0.5–2.5 V
- Gauge or sealed gauge reference
- Operating temperature –20 to 125 °C; storage –40 to 125 °C
- Overpressure 200 %FS (≤ 60 MPa); 150 %FS (> 60 MPa)
- Protection class IP65/IP67
- Vibration resistance 20 g (25 Hz–2 kHz)



QOM-CORE 1100

Description

OEM pressure transducer for general industrial use. The device employs a glass-fused silicon sensing element housed in a fully welded stainless-steel body. It provides stable measurement of liquids and gases with low contamination. Multiple analogue outputs are available to suit embedded controllers. Gauge and sealed-gauge references are supported. The unit maintains accuracy of ± 0.5 %FS across the compensated range and withstands 200 %FS overpressure (150 %FS above 600 bar). Ingress protection is IP65 or IP67 depending on connector.

Specifications

TECHNICAL SPECIFICATIONS	
Pressure range	-1-0 bar; 0-10 bar up to 0-1000 bar
Pressure reference	Gauge; Sealed gauge
Accuracy	±0.5 %FS
Ambient temp.	-20 to 125 °C
Medium temp.	-20 to 125 °C
Storage temp.	-40 to 125 °C
Insulation resistance	≥ 100 MΩ (250 VDC)
Protection	IP65
Wetted Parts	17-4PH stainless steel (pressure sensor material); stainless-steel wetted parts
Approvals/Certification	CE, UKCA, RoHS
Electrical Outputs	4-20 mA; 0-10 V; 1-5 V; 0-5 V; 0.5-4.5 V; 0.5-2.5 V
Process connections	G1/8; G1/4; G1/2; NPT 1/4; NPT 1/2; R 1/4; R 1/2; M20×1.5
Overpressure/Burst Pressure	200 %FS (≤ 60 MPa); 150 %FS (> 60 MPa)
Housing Material	Stainless steel
Electrical connections	DIN 43650; Packard; M12; Mini 4-pin; Cable outlet
Power Supply	5 VDC; 3.3 VDC; 9-36 VDC; 12-36 VDC

Measuring Range

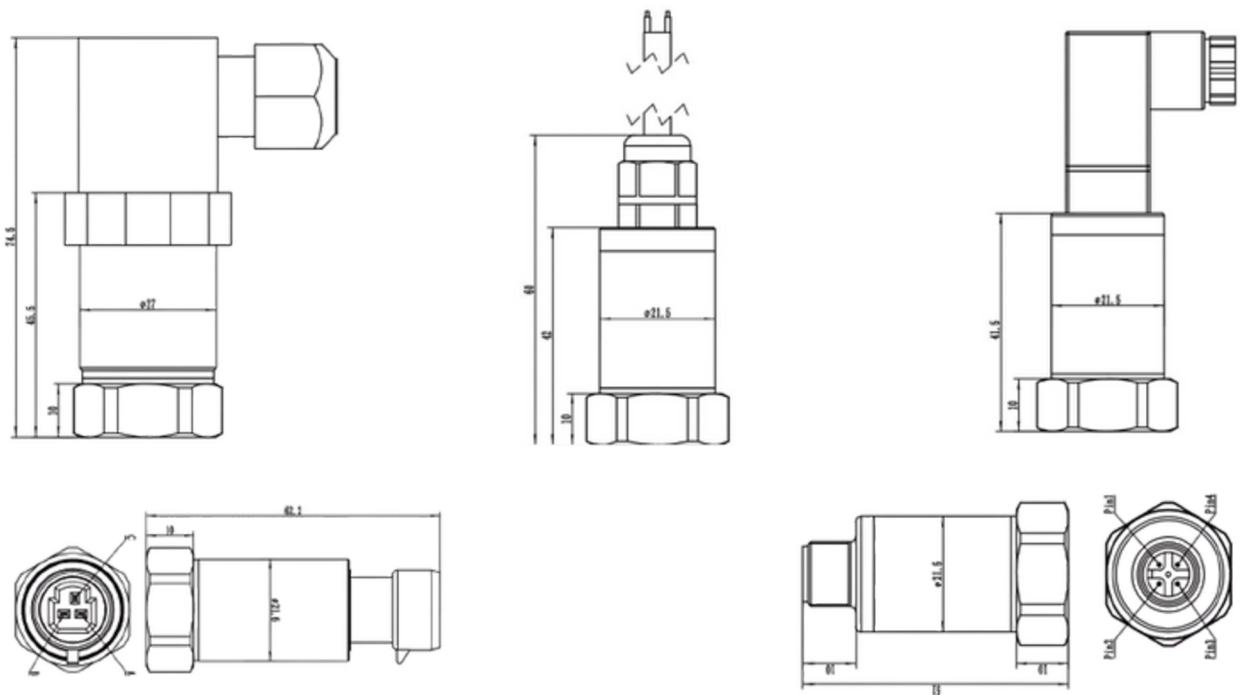
Range Code	Measuring Range	Pressure Reference	Overpressure
01	0-10 bar	GP / SP	200%FS
02	0-16 bar	GP / SP	200%FS
03	0-25 bar	GP / SP	200%FS
04	0-40 bar	GP / SP	200%FS
05	0-60 bar	GP / SP	200%FS
06	0-100 bar	GP / SP	200%FS
07	0-160 bar	GP / SP	200%FS
08	0-250 bar	GP / SP	200%FS
09	0-400 bar	GP / SP	200%FS
10	0-600 bar	GP / SP	200%FS
11	0-1000 bar	GP / SP	150%FS
12	-1-0 bar	GP	150%FS

Output Signals

Code	Output	Power Supply
I4	4-20 mA (2-wire)	9-36 VDC
V5	0-5 V	9-36 VDC
V1	1-5 V	9-36 VDC
VX	0-10 V	12-36 VDC
VR	0.5-4.5 V ratiometric	5 VDC
VN	0.5-4.5 V non-ratiometric	5 VDC

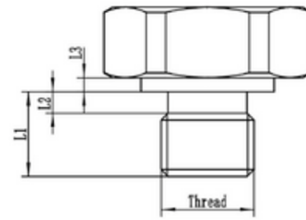
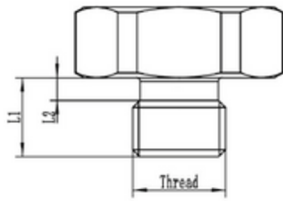
Electrical Connections

2-wire current (I4)	Pinout
E5 - DIN43650	Pin 1: Power supply (Red); Pin 2: Output (Black)
E3 - Mini 4-pin	Pin 1: Power supply (Red); Pin 2: Output (Black)
E1 - Cable outlet	Red: Power supply; Black: Output
E2 - M12	Pin 1: Power supply (Brown); Pin 3: Output (Blue)
E4 - Packard	B: Power supply; A: Output
3-wire voltage (V5/V1/VX/VR/VN)	Pinout
E5 - DIN43650	Pin 1: Power + (Red); Pin 2: Power - (Black); Pin 3: Output (Green)
E3 - Mini 4-pin	Pin 1: Power + (Red); Pin 2: Power - (Black); Pin 3: Output (Green)
E1 - Cable outlet	Red: Power +; Black: Power -; Green: Output
E2 - M12	Pin 1: Power + (Brown); Pin 2: Output (White); Pin 3: Power - (Blue)
E4 - Packard	B: Power +; A: Power -; C: Output



Process Connections/Drawings

Code	Thread / Port
P1	M10x1
P2	M12x1.5
P3	M14x1.5
P4	M16x1.5
P5	M20x1.5
P6	G1/8
P7	G1/4
P8	G1/2
P9	NPT1/4
P10	NPT1/2
P11	R1/4
P12	R1/2



Order Guide

Segment	Your Code	Options
Product family	QOM-CORE 1100	QOM-CORE 1100
Range	01 ... 12	See "Measuring range & accuracy" (Range code)
Pressure Reference	GP / SP	GP = Gauge; AP = Absolute; SP = Sealed
Output	I4 / V5 / V1 / VX / VR / VN	See Output table
Process Connection	P1 ... P12	See Process Connections
Electrical Connection	E1 / E2 / E3 / E4 / E5	See Electrical Connections

Ordering Example 0-16 bar sealed gauge, 4-20 mA, G1/4, M12

Family	Range	Ref	Output	Process	Electrical
QOM-CORE 1100	02	SP	I4	P7	E2

Notes

Ensure media compatibility with wetted parts. Torque depends on gasket, mating material and lubrication.