

QPress Pressure Transducer - QOM-COMPACT 3000 Series

Compact stainless-steel OEM pressure transducer with digital processing for industrial automation.

Certifications

Quality Lab Solutions data sheet R4



Applications

Hydraulic and pneumatic equipment;
Chemical dosing and utilities; Compressors
and pumps; Ink-jet printers and general
automation

Special Features

- Compact, integrated stainless-steel body for OEM integration
- Diffused-silicon sensor with digital signal processing for stable outputs
- Analogue outputs: 4–20 mA, 0–5 V, 0–10 V, 0.5–4.5 V (ratiometric and non-ratiometric)
- Pressure references: gauge, absolute and sealed gauge
- IP65 protection, EMC to IEC 61000-6-2/-6-3
- Vibration 20 g (25 Hz–2 kHz); shock 200 g / 1 ms; $\geq 1 \times 10^6$ pressure cycles
- Wide temperature envelope: ambient –20 to +85 °C; medium –30 to +105 °C
- Multiple process and electrical connections with common industrial thread forms



QOM-COMPACT 3000

Description

The QOM-COMPACT 3000 Series is a stainless-steel OEM pressure transducer designed for compact installations in automation, hydraulic and pneumatic systems. A diffused-silicon sensing element with digital processing delivers stable analogue outputs and dependable performance across a broad selection of ranges. The transmitter provides IP65 protection with proven EMC immunity, fast response and robust vibration/shock ratings for long-term reliability.

Specifications

TECHNICAL SPECIFICATIONS	
Pressure range	-1-0 bar (vacuum); 0-0.35 bar; 0-0.7 bar; 0-1 bar; 0-2.5 bar; 0-4 bar; 0-6 bar; 0-10 bar; 0-16 bar; 0-25 bar; 0-40 bar; 0-60 bar; 0-100 bar; 0-160 bar; 0-250 bar; 0-400 bar; 0-600 bar
Pressure reference	Gauge (G); Absolute (A); Sealed gauge (S)
Accuracy	±0.5 % FS (@ 25 ± 5 °C)
Hysteresis & repeatability	Hysteresis ±0.1 % FS; Repeatability ±0.1 % FS
Temp. drift	±2 % FS (0-60 °C at 35 kPa); otherwise ±1.5 % FS (-20 to +85 °C)
Response time	≤ 90 ms (to 90 % FS)
Service life	≥ 1×10 ⁶ cycles
Ambient temp.	-20 to +85 °C
Medium temp.	-30 to +105 °C
Storage temp.	-40 to +125 °C
EMC-interference	IEC 61000-6-3 (radiated)
EMC-immunity	IEC 61000-6-2
Insulation resistance	≥ 100 MΩ / 500 VDC (200 MΩ / 250 VDC)
Vibration resistance	Sine 20 g (25 Hz-2 kHz); random 7.5 grms (5 Hz-1 kHz)
Shock resistance	Shock 200 g / 1 ms; free fall 1 m
Protection	IP65
Wetted Parts	316L stainless steel
Net weight	120-150 g
Size of hexagon	HEX24
Approvals/Certification	EMC (CE) conformity; Intrinsically safe Ex ia IIC T6 (4-20 mA option)
Electrical Outputs	4-20 mA (B1); 0-5 V (B3); 0-10 V (B7); 0.5-4.5 V ratiometric (B6); 0.5-4.5 V non-ratiometric (B6N)
Process connections	G1/4 ; M14×1.5; NPT1/4 / Z1/4 ; R1/4 / PT1/4 / ZG1/4 ; M12×1.5-6g ; R1/2 / PT1/2 / ZG1/2 ; 7/16-20 UNF male ; 7/16-20 UNF female ; NPT1/8 / Z1/8
Anti-Vibration	Damper accessory available; recommended torque 15-25 Nm
Overpressure/Burst Pressure	150 % FS across listed ranges (see range table)
Housing Material	Stainless steel
Electrical connections	Cable outlet (J3); M12 (J4); Mini 4-pin (J6); Round Packard (J7)
Power Supply	12-36 VDC (B1/B3/B7); 5 VDC (B6/B6N)

Measuring Range

Range Code	Measuring Range	Pressure Reference	Overpressure	Burst Pressure
01	0-0.35 bar	Gauge / Absolute	150 %FS	500 %FS
02	0-0.7 bar	Gauge	150 %FS	500 %FS
03	0-1 bar	Gauge / Absolute	150 %FS	300 %FS
04	0-2.5 bar	Gauge / Absolute	150 %FS	300 %FS
05	0-4 bar	Gauge / Absolute	150 %FS	300 %FS
06	0-6 bar	Gauge / Absolute	150 %FS	300 %FS
07	0-10 bar	Gauge / Absolute / Sealed	150 %FS	300 %FS
08	0-16 bar	Gauge / Sealed	150 %FS	300 %FS
09	0-25 bar	Gauge / Sealed	150 %FS	300 %FS
10	0-40 bar	Sealed	150 %FS	300 %FS
11	0-60 bar	Sealed	150 %FS	300 %FS
12	0-100 bar	Sealed	150 %FS	300 %FS
13	0-160 bar	Sealed	150 %FS	300 %FS
14	0-250 bar	Sealed	150 %FS	300 %FS
15	0-400 bar	Sealed	150 %FS	300 %FS
16	0-600 bar	Sealed	150 %FS	200 %FS

Output Signals

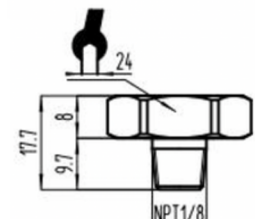
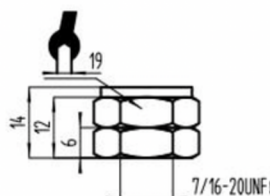
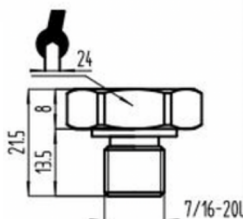
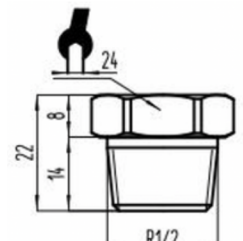
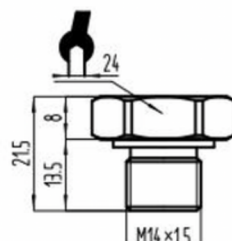
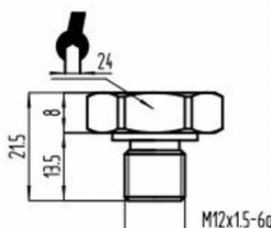
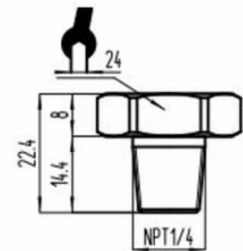
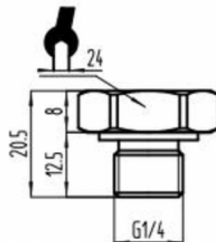
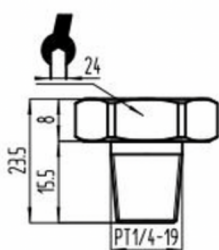
Code	Output	Power Supply
I4	4–20 mA (2-wire)	12–36 VDC
V5	0–5 V	12–36 VDC
VX	0–10 V	12–36 VDC
VR	0.5–4.5 V ratiometric	5 VDC
VN	0.5–4.5 V non-ratiometric	5 VDC

Electrical Connections

2-wire current (I4)	Pinout
E1 – Cable	Red: Supply +; Green: Current output
E2 M12	Pin 1: Supply +; Pin 2: Current output
E3 - Mini 4 - pin	Pin 1: Supply +; Pin 2: Current output
E4 - Round Packard	Pin 1: Supply +; Pin 2: Current output
3-wire voltage (V5/VX/VR/VN)	Pinout
E1 - Cable	Red: Supply +; Green: Ground; Yellow: Voltage output
E2 - M12	Pin 1: Supply +; Pin 2: Voltage output; Pin 3: Ground
E3 - Mini 4 - pin	Pin 1: Supply +; Pin 2: Ground; Pin 3: Voltage output
E4 - Round Packard	Pin 1: Supply +; Pin 2: Ground; Pin 3: Voltage output

Process Connections/Drawings

Code	Thread / Port
P1	G1/4
P2	M14×1.5
P3	NPT1/4, Z1/4
P4	R1/4, PT1/4, ZG1/4
P5	M12x1.5-6g
P6	R1/2, PT1/2, ZG1/2
P7	7/16-20UNF male
P8	7/16-20UNF female
P9	NPT1/8, Z1/8



Order Guide

Segment	Your Code		Options		
Product family	QOM-COMPACT 3000 Series		QOM-COMPACT 3000 Series		
Range	01 ... 16		See "Measuring range & accuracy" (Range code)		
Pressure Reference	GP / AP / SP		GP = Gauge; AP = Absolute; SP = Sealed		
Output	I4 / V5 / VX / VR / VN		See Output table		
Process Connection	P1 ... P9		See Process Connections		
Electrical Connection	E1... E4		See Electrical Connections		

Family	Range	Ref	Output	Process	Electrical
QOM-COMPACT 3000 Series	08	SP	I4	P1	E2