QPress Pressure Transducer - QOM-COMPACT 3000 Series

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

Certifications

CE UKCA RoHS compliant

Applications

- Hydraulic and pneumatic equipment
- Chemical dosing and utilities
- Compressors and pumps
- Ink-jet printers and general automation
- Oxygen and medical gas equipment (oxygen-cleaned option)

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; ≥ 1×10^6 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
- Oxygen-cleaned build (ISO 15001 / ASTM G93) with fluorinated oil fill, for oxygen and medical gas service



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. An oxygen-cleaned build with fluorinated oil fill is available for oxygen and medical gas equipment, where wetted parts must be free of oil, grease and particulate contamination.

Specificiations

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)
Oxygen service	Option OX: oxygen-cleaned per ISO 15001 / ASTM G93, fluorinated oil fill.

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

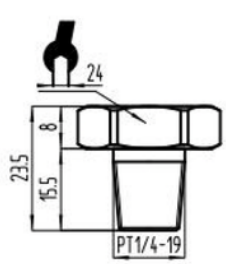
Code	Output	Power Supply
I4	4–20 mA (2-wire)	12–36 VDC
V5	0–5 V	12–36 VDC
VX	0–10 V	12–36 VDC
VR	0.5–4.5 V ratiometric	5 VDC
VN	0.5–4.5 V non-ratiometric	5 VDC

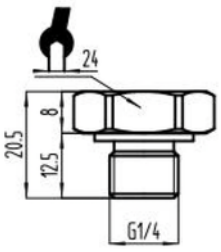
Electrical Connections

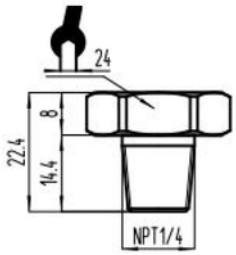
2-wire current (I4)	Pinout
E1 – Cable	Red: Supply +; Green: Current output
E2 M12	Pin 1: Supply +; Pin 2: Current output
E3 - Mini 4 - pin	Pin 1: Supply +; Pin 2: Current output
E4 - Round Packard	Pin 1: Supply +; Pin 2: Current output
3-wire voltage (V5/VX/VR/VN)	**Pinout**
E1 - Cable	Red: Supply +;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

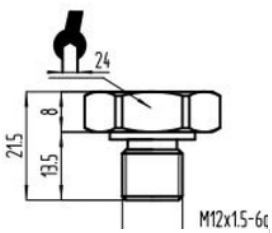
Process Connections/Drawings

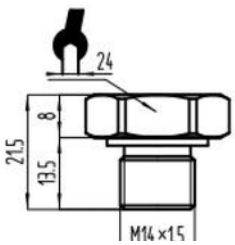
Code	Thread / Port
P1	G1/4
P2	M14×1.5
P3	NPT1/4, Z1/4
P4	R1/4, PT1/4, ZG1/4
P5	M12x1.5-6g
P6	R1/2, PT1/2, ZG1/2
P7	7/16-20UNF male
P8	7/16-20UNF female
P9	NPT1/8, Z1/8

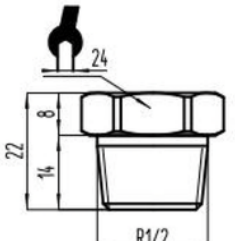


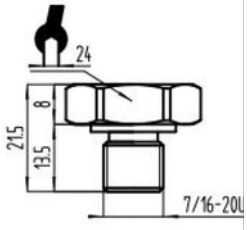


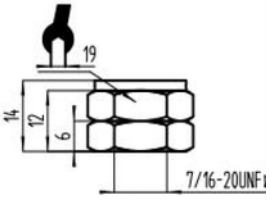


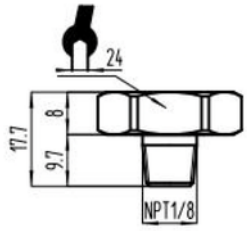












Options

Code	Description
N	Standard build
OX	Oxygen-cleaned per ISO 15001 / ASTM G93, fluorinated oil fill

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
Options	N / OX	See Options

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