QPress Pressure Transmitter — QLS-CORE 2000 Series

General-purpose stainless-steel industrial pressure transmitter with fast response.

Certifications

CE UKCA RoHS compliant

Applications

- Air compressors
- Hydraulic and pneumatic equipment
- Servo valves and drives
- Air-conditioning and HVAC systems
- General piping and utility monitoring
- Oxygen and medical gas equipment (oxygen-cleaned option)



QLS-CORE 2000 Series

Special Features

- All-stainless, compact construction for general industrial use
- Pressure types: gauge, absolute and sealed gauge
- Outputs: 4–20 mA, 0–10 V, 0.5–4.5 V (ratiometric)
- Accuracy ±0.5 % FS (typ.); repeatability and hysteresis ≤ ±0.1 % FS
- Fast response < 25 ms; ≥ 1×10^6 pressure cycles
- IP65 protection; EMC to IEC 61000-6-2/-6-3
- Vibration 20 g (25 Hz–2 kHz); shock 10 g / 11 ms; free fall 1 m
- Operating temperatures: ambient −20 to +80 °C; medium −30 to +105 °C
- Oxygen-cleaned build (ISO 15001 / ASTM G93) with fluorinated oil fill, for oxygen and medical gas service

Description

The QLS-CORE 2000 Series is a general-purpose industrial pressure transmitter for air, water and utility services. A diffused-silicon sensing element with digital compensation provides stable measurement with fast response. Multiple analogue outputs and common process threads simplify integration with compressors, pumps and pneumatic systems. The 316L diaphragm and IP65 enclosure support reliable operation across a broad temperature range. 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	0–0.35 bar; 0–0.7 bar; 0–1 bar; 0–1.6 bar; 0–2.5 bar; 0–4 bar; 0–6 bar; 0–10 bar; 0–15 bar; 0–16 bar; 0–25 bar; 0–60 bar; 0–100 bar
Pressure reference	Gauge; Absolute; Sealed gauge
Accuracy	±0.5 % FS (typ.); ±1 % FS (max.)
Hysteresis & repeatability	Hysteresis ≤ ±0.1 % FS; Repeatability ≤ ±0.1 % FS
Temp. drift	≤ ±1.5 % FS (−20 to +85 °C)
Response time	< 25 ms
Service life	≥ 1×10^6 cycles
Ambient temp.	−20 to +80 °C
Medium temp.	−30 to +105 °C
Storage temp.	−40 to +120 °C
EMC-interference	IEC 61000-6-3
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	10 g / 11 ms; free fall 1 m
Protection	IP65
Wetted Parts	316L stainless steel (AISI 316L)
Net weight	50–90 g
Size of hexagon	HEX22
Approvals/Certification	CE, UKCA, RoHS
Electrical Outputs	4–20 mA; 0–10 V; 0.5–4.5 V (ratiometric)
Process connections	G1/4; NPT 1/4-18; 7/16-20 UNF; 7/16-20 UNF female; NPT 1/8
Anti-Vibration	Damper accessory available (torque guidance 15–25 Nm)
Overpressure/Burst Pressure	200–300 % FS (range-dependent)
Housing Material	304 stainless steel (AISI 304)
Electrical connections	Cable outlet; M12; Mini 4 pin; Round Packard
Power Supply	12–30 VDC (4–20 mA and 0–10 V); 5 VDC (0.5–4.5 V ratiometric)
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	GP	300 %FS	600 %FS
02	0–0.7 bar	GP	300 %FS	600 %FS
03	0–1 bar	GP / AP	200 %FS	500 %FS
04	0–1.6 bar	GP	200 %FS	500 %FS
05	0–2.5 bar	GP / AP	200 %FS	500 %FS
06	0–4 bar	GP	200 %FS	500 %FS
07	0–6 bar	GP	200 %FS	500 %FS
08	0–10 bar	GP	200 %FS	500 %FS
09	0–15 bar	SP	200 %FS	500 %FS
10	0–16 bar	SP	200 %FS	500 %FS
11	0–25 bar	SP	200 %FS	500 %FS
12	0–60 bar	SP	200 %FS	300 %FS
13	0–100 bar	SP	200 %FS	300 %FS

Output Signals

Code	Output	Power Supply
I4	4–20 mA (2-wire)	12–30 VDC
VX	0–10 V	12–30 VDC
VR	0.5–4.5 V ratiometric	5 VDC

Electrical Connections

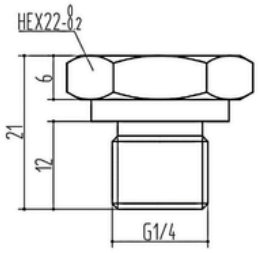
2-wire current (I4)	Pinout
E1 – Cable	Red: Supply +; Green: Current output
E2 – M12	Pin 1: Supply +; Pin 2: Current output
E3 - Mini 4-pin	Pin 1: Supply +; Pin 2: Current output
E4 - Round Packard	Pin 1: Supply +; Pin 2: Current output
3-wire voltage (VX/VR)	**Pinout**
E1 - Cable	Red: Supply +; Green: Ground; Yellow: Voltage output
E2 - M12	Pin 1: V+; Pin 2: Voltage output; Pin 3: Ground
E5 - Mini 4-pin	Pin 1: V+; Pin 2: Ground; Pin 3: Voltage output
E6 - Round Packard	Pin 1: V+; Pin 2: Ground; Pin 3: Voltage output

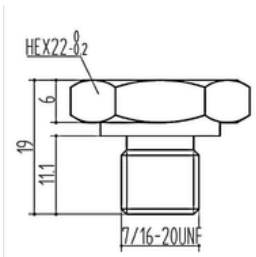
Process Connections/Drawings

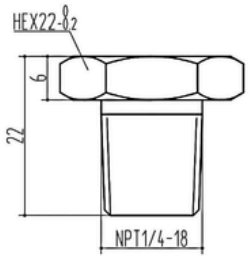
Code	Thread / Port
P1	G1/4
P3	NPT1/4-18
P7	7/16-20 UNF (male)
P8	7/16-20 UNF (female)
P5	NPT1/8

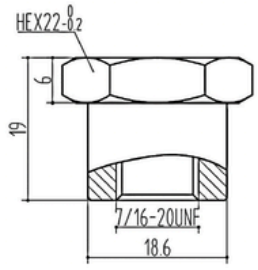
Options

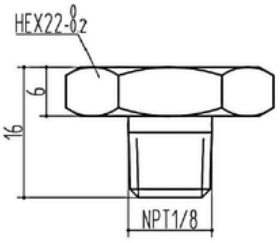
Code	Description
N	Standard build
OX	Oxygen-cleaned per ISO 15001 / ASTM G93, fluorinated oil fill











Order Guide

Segment	Your Code	Options
Product family	QLS-CORE 2000	QLS-CORE 2000
Range	01 … 13	See “Measuring range & accuracy” (Range code)
Pressure Reference	GP / AP / SP	GP = Gauge; AP = Absolute; SP = Sealed
Output	I4 / VX / VR	See Output table
Process Connection	P1 / P3 / P7 / P8 / P9	See Process Connections
Electrical Connection	E1 / E2 / E3 / E4	See Electrical Connections
Options	N / OX	See Options

Ordering Example *0–16 bar sealed gauge, 4–20 mA, G1/4, M12.*

Family	Range	Ref	Output	Process	Electrical	Option
QLS-CORE 2000	10	SP	I4	P1	E2	N

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