

QPress Pressure Transducer - QLS-STAINLESS 2200 Series

Compact all-stainless industrial pressure transducer, 0–1000 bar, IP65.

Certifications

Quality Lab Solutions data sheet R4



Applications

- Process control
- Aerospace
- Automotive
- Medical equipment
- Pipeline systems
- HVAC

Special Features

- Oil-free, fully welded stainless-steel construction (316L diaphragm; 304 body)
- Pressure references: gauge, absolute, sealed gauge
- Ranges: 0–0.035 bar to 0–1000 bar; vacuum –1–0 bar
- Outputs: 4–20 mA; 0–5 V; 0–10 V; 0.5–4.5 V (ratiometric / non-ratiometric)
- Accuracy $\leq 0.5\%$ FS; repeatability $\leq 0.1\%$ FS
- Response time ≤ 90 ms
- EMC to IEC 61000-6-2 / 61000-6-3; ESD IEC 61000-4-2; surge ± 2 kV (IEC 61000-4-5)
- Vibration 20 g; random 7.5 grms; shock 20 g/1 ms
- IP65 ingress protection
- Optional damper mitigates water hammer and pressure peaks



QLS-STAINLESS 2200

Description

The QLS-STAINLESS 2200 is a compact, all-stainless pressure transducer for general industrial service. A glass-fused silicon sensing element with full temperature-compensation electronics provides stable measurement with $\leq 0.5\%$ FS accuracy and fast ≤ 90 ms response. Wetted parts are 316L with a 304 stainless housing for broad media compatibility. Gauge, absolute and sealed-gauge variants are available across ranges from 0–0.035 bar up to 0–1000 bar, plus vacuum –1–0 bar. IP65 protection, robust EMC compliance and high shock/vibration ratings ensure reliable operation in demanding environments.

Specifications

TECHNICAL SPECIFICATIONS	
Pressure range	0–0.035 bar; 0–0.07 bar; 0–0.1 bar; 0–0.25 bar; 0–0.6 bar; 0–10 bar; 0–16 bar; 0–25 bar; 0–60 bar; 0–100 bar; 0–250 bar; 0–400 bar; 0–600 bar; 0–1000 bar; –1–0 bar
Pressure reference	Gauge; Absolute; Sealed gauge
Accuracy	±0.5 % FS
Hysteresis & repeatability	Hysteresis ≤ 0.1 % FS; repeatability ≤ 0.1 % FS
Temp. drift	±2 % FS (0–60 °C) for very low ranges; ±1.5 % FS (–10 to 70 °C) for other ranges
Response time	≤ 90 ms (to 90 % FS)
Ambient temp.	–20 to 85 °C
Medium temp.	–30 to 105 °C
Storage temp.	–40 to 125 °C
EMC Radiation	IEC 61000-6-3
EMC-immunity	IEC 61000-6-2
Insulation resistance	100 MΩ at 250 VDC
Vibration resistance	Sine 20 g (25 Hz–2 kHz); random 7.5 grms (5 Hz–1 kHz)
Shock resistance	20 g/1 ms; 1 m free-fall
Protection	IP65
Wetted Parts	316L stainless-steel isolation diaphragm; 304 stainless process connection
Net weight	150–180 g
Size of hexagon	27 mm
Approvals/Certification	CE, UKCA, RoHS
Electrical Outputs	4–20 mA; 0–5 V; 0–10 V; 0.5–4.5 V (ratiometric); 0.5–4.5 V (non-ratiometric)
Process connections	M20×1.5; G1/2; G1/4; M14×1.5; NPT1/4; NPT1/2; Z1/4; Z1/2; M16×1.5; M18×1.5
Anti-Vibration	Yes
Overpressure/Burst Pressure	Typically 200 % FS; 150 % FS at ≥ 60 MPa
Housing Material	304 stainless steel
Electrical connections	DIN 43650 (Hirschmann); M12×1; cable outlet; Hirschmann with moulded cable
Power Supply	12–30 VDC (typ. 4–20 mA / 0–5 V / 0–10 V); 5 VDC (0.5–4.5 V)

Measuring Range

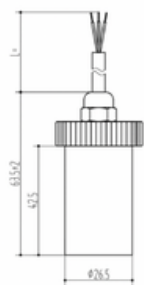
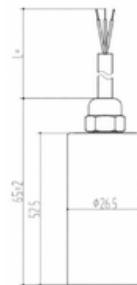
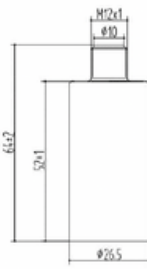
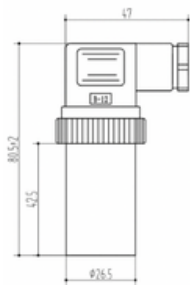
Range Code	Measuring Range	Pressure Reference	Overpressure	Burst Pressure
01	0-0.35 bar	GP/AP	300%FS	600%FS
02	0-0.7 bar	GP	200%FS	500%FS
03	0-1 bar	GP/AP	200%FS	500%FS
04	0-2.5 bar	GP/AP	200%FS	500%FS
05	0-6 bar	GP/AP	200%FS	500%FS
06	0-10 bar	GP/AP	200%FS	500%FS
07	0-16 bar	GP/AP/SP	200%FS	500%FS
08	0-25 bar	SP	200%FS	500%FS
09	0-60 bar	SP	200%FS	400%FS
10	0-100 bar	SP	200%FS	400%FS
11	0-250 bar	SP	200%FS	400%FS
12	0-400 bar	SP	200%FS	400%FS
13	0-600 bar	SP	150%FS	300%FS
14	0-1000 bar	SP	150%FS	300%FS
15	-1-0 bar	GP	150%FS	300%FS

Output Signals

Code	Output	Power Supply
I4	4-20 mA (2-wire)	12-30 VDC
V5	0-5 V	12-30 VDC
VX	0-10 V	12-30 VDC
VR	0.5-4.5 V ratiometric	5 VDC
VN	0.5-4.5 V non-ratiometric	5 VDC

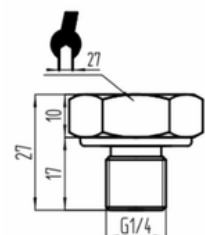
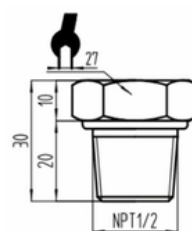
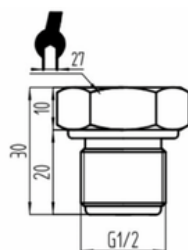
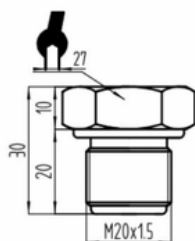
Electrical Connections

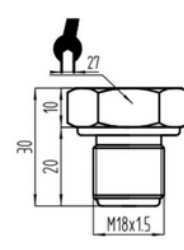
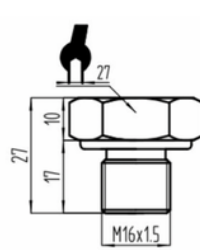
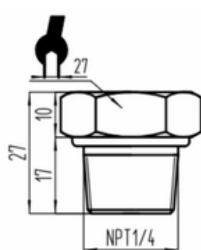
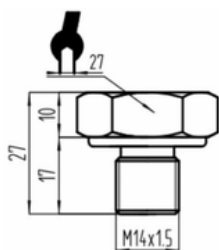
2-wire current (I4)	Pinout
E1 – Cable outlet	Red: Supply +; Green: Current output
E2 – M12	Pin 1: Supply +; Pin 2: Current output
E5 – DIN 43650	Pin 1: Supply +; Pin 2: Current output
E6 – Hirschmann with cable	Red: Supply +; Green: Current output
3-wire voltage (V5/VX/VR/VN)	Pinout
E1 – Cable outlet	Red: Supply +; Green: Ground; Yellow: Voltage output
E2 – M12	Pin 1: Supply +; Pin 2: Ground; Pin 3: Voltage output
E5 – DIN 43650	Pin 1: Supply +; Pin 2: Ground; Pin 3: Voltage output
E6 – Hirschmann with cable	Red: Supply +; Green: Ground; Yellow: Voltage output



Process Connections/Drawings

Code	Thread / Port
P1	M20x1.5-6g
P2	G1/2
P3	G1/4
P4	M14x1.5
P5	NPT1/4 or Z1/4
P6	NPT1/2
P7	M16x1.5
P8	M18x1.5





Order Guide

Segment	Your Code	Options
Product family	QLS-STAINLESS 2200	QLS-STAINLESS 2200
Range	01 ... 15 (+ vacuum)	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 ... P8	See Process Connections
Electrical Connection	E1 / E2 / E5 / E6	See Electrical Connections

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

Family	Range	Ref	Output	Process	Electrical
QLS-STAINLESS 2200	07	SP	I4	P3	E2

Notes

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