

QPress Pressure Transducer — QUP-HP 3300 Series

Ultra high-pressure strain-gauge transducer for heavy equipment and hydraulic systems up to 5 000 bar.

Certifications

Quality Lab Solutions data sheet R4



Applications

Heavy equipment and machinery;
High-pressure hydraulics; Test rigs and
pressure boosting systems; Applications
with frequent overloads and impact

Special Features

- Foil strain-gauge sensing element with integrated elastic structure
- One-piece stainless-steel diaphragm/interface with 7° taper sealing surface
- Ranges 0–400 to 0–5 000 bar (gauge)
- Output 4–20 mA; supply 9–30 VDC
- Accuracy ± 0.5 % FS standard; optional ± 0.25 % FS
- Overpressure 125 % FS; burst 150 % FS
- Mechanical life $\geq 5,000,000$ pressure cycles
- Operating temperature $-40\ldots+85$ °C (option $-40\ldots+120$ °C)
- Hex 27 mm for installation



QOM-COMPACT 3300

Description

The QUP-HP 3300 Series is an ultra high-pressure transducer built for demanding hydraulic and heavy-equipment duties. A foil strain-gauge element and stainless-steel one-piece diaphragm/interface provide stability and robustness under high load and impact. The device offers a 4–20 mA output from a 9–30 VDC supply, with accuracy to ± 0.5 % FS as standard (± 0.25 % FS optional). Overpressure and burst ratings of 125 % FS and 150 % FS respectively, together with a 5-million-cycle mechanical life, support reliable service in applications with frequent overloads.

Specifications

TECHNICAL SPECIFICATIONS	
Pressure range	0–400 bar; 0–1 000 bar; 0–1 500 bar; 0–2 000 bar; 0–2 500 bar; 0–3 000 bar; 0–3 500 bar; 0–4 000 bar; 0–4 500 bar; 0–5 000 bar
Pressure reference	Heavy equipment and machinery; High-pressure hydraulics; Test rigs and pressure boosting systems; Applications with frequent overloads and impact
Accuracy	±0.5 % FS (±0.25 % FS option)
Temp. drift	Zero and span: ±0.5 % FS/10 °C
Service life	≥ 5×10 ⁶ cycles
Ambient temp.	–40 to +85 °C (option –40 to +120 °C)
Storage temp.	–40 to +125 °C
Insulation resistance	≥ 500 MΩ / 1000 VDC
Wetted Parts	Stainless steel (one-piece diaphragm/interface)
Size of hexagon	HEX27
Approvals/Certification	CE, UKCA, RoHS
Electrical Outputs	4–20 mA
Process connections	M20×1.5; G1/4
Overpressure/Burst Pressure	125 % FS
Housing Material	Stainless steel
Electrical connections	DIN 43650; Cable outlet
Power Supply	9–30 VDC

Measuring Range

Range Code	Measuring Range	Pressure Reference	Overpressure	Burst Pressure
01	0-400 bar	GP	125 %FS	150 %FS
02	0-1000 bar	GP	125 %FS	150 %FS
03	0-1500 bar	GP	125 %FS	150 %FS
04	0-2000 bar	GP	125 %FS	150 %FS
05	0-2500 bar	GP	125 %FS	150 %FS
06	0-3000 bar	GP	125 %FS	150 %FS
07	0-3500 bar	GP	125 %FS	150 %FS
08	0-4000 bar	GP	125 %FS	150 %FS
09	0-4500 bar	GP	125 %FS	150 %FS
10	0-5000 bar	GP	125 %FS	150 %FS

Output Signals

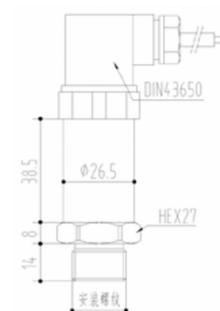
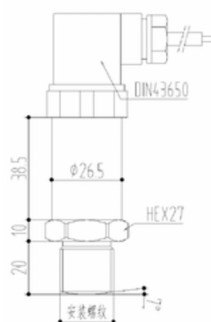
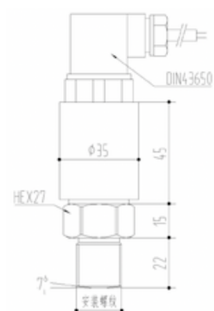
Code	Output	Power Supply
I4	4–20 mA (2-wire)	9-30 VDC

Electrical Connections

2-wire current (I4)	Pinout
E1 - Cable	Red: Supply +; Green: Current output
E5 - DIN 43650	Pin 1: Supply +; Pin 2: Current output

Process Connections/Drawings

Code	Thread / Port
P5	M20x1.5-6g
P2	G1/4



Order Guide

Segment	Your Code	Options
Product family	QUP-HP 3300 Series	QUP-HP 3300 Series
Range	01 ... 10	See "Measuring range & accuracy" (Range code)
Pressure Reference	GP	GP = Gauge; AP = Absolute; SP = Sealed
Output	I4	See Output table
Process Connection	P5 / P1	See Process Connections
Electrical Connection	E1 / E5	See Electrical Connections

Ordering Example 0-1000 bar GP, 4-20 mA, M20x1.5-6g, Cable outlet.

Family	Range	Ref	Output	Process	Electrical
QUP-HP 3300 Series	02	GP	I4	P5	E1

Notes

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