

QPress Pressure Transducer — QSF-FLUSHPRO 3400 Series

Non-cavity flush-diaphragm pressure transducer for viscous and paste-like media.

Certifications

Quality Lab Solutions data sheet R4



Applications

Viscous liquids and slurries; Food and process fluids; Oilfield and general process control; Equipment integration where flush measurement is required

Special Features

- Non-cavity flush measuring diaphragm for viscous media
- Foil strain-gauge sensing element with optimised installation structure
- Stainless-steel 17-4PH wetted parts
- Accuracy ± 0.5 % FS (typical)
- Zero and span temperature error ± 0.5 % FS per 10 °C
- Overpressure 135 % FS (≤ 150 bar) or 120 % FS (> 150 bar)
- Burst 200 % FS (≤ 100 bar) or 150 % FS (> 100 bar)
- Mechanical life $\geq 5,000,000$ pressure cycles
- Operating $-40 \dots +85$ °C (option to $+120$ °C)
- Output 4–20 mA; supply 9–30 VDC



QSF-FLUSHPRO 3400

Description

The QSF-FLUSHPRO 3400 Series is a flush-diaphragm pressure transducer designed for reliable measurement of high-viscosity liquids. A high-precision foil strain-gauge element and a non-cavity front face minimise clogging and simplify cleaning.

Temperature-compensated electronics maintain stability across the operating range, and the robust construction supports frequent cleaning and high mechanical loading in process environments.

Specifications

TECHNICAL SPECIFICATIONS	
Pressure range	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; 0–1 000 bar; 0–1 500 bar
Pressure reference	Sealed gauge
Accuracy	±0.5 % FS (typical)
Temp. drift	Zero/span ±0.5 % FS per 10 °C
Service life	≥ 5×10 ⁶ pressure cycles
Ambient temp.	–40 to +85 °C (option –40 to +120 °C)
Medium temp.	–40°C - 85°C and -40°C - 120°C options
Storage temp.	–40 to +125 °C
Insulation resistance	≥ 200 MΩ / 500 VDC
Protection	4–20 mA
Wetted Parts	Stainless steel 17-4PH
Size of hexagon	HEX27
Approvals/Certification	CE, UKCA, RoHS
Electrical Outputs	4–20 mA
Process connections	M20×1.5; G1/2
Anti-Vibration	Strong anti-vibration capacity
Overpressure/Burst Pressure	135 % FS (≤ 150 bar); 120 % FS (> 150 bar)
Housing Material	Stainless steel
Electrical connections	DIN 43650; Cable outlet; 2088 housing; 2088 housing with display
Power Supply	9–30 VDC

Measuring Range

Range Code	Measuring Range	Pressure Reference	Overpressure	Burst Pressure
01	0-16 bar	SP	135%FS	200%FS
02	0-25 bar	SP	135%FS	200%FS
03	0-40 bar	SP	135%FS	200%FS
04	0-60 bar	SP	135%FS	200%FS
05	0-100 bar	SP	135%FS	200%FS
06	0-160 bar	SP	120%FS	150%FS
07	0-250 bar	SP	120%FS	150%FS
08	0-400 bar	SP	120%FS	150%FS
09	0-600 bar	SP	120%FS	150%FS
10	0-1000 bar	SP	120%FS	150%FS
11	0-1500 bar	SP	120%FS	150%FS

Output Signals

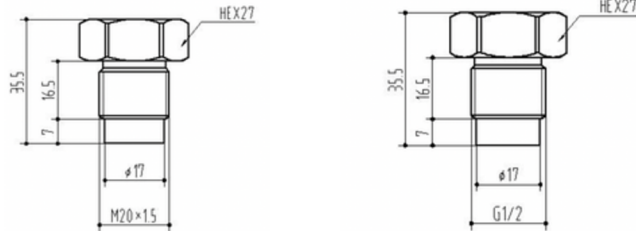
Code	Output	Power Supply
I4	4-20 mA (2-wire)	9-30 VDC

Electrical Connections

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

Process Connections/Drawings

Code	Thread / Port
P1	M20x1.5-6g
P2	G1/2



Order Guide

Segment	Your Code	Options
Product family	QSF-FLUSHPRO 3400	QSF-FLUSHPRO 3400
Range	01 ... 11	See "Measuring range & accuracy" (Range code)
Pressure Reference	SP	GP = Gauge; AP = Absolute; SP = Sealed
Output	I4	See Output table
Process Connection	P1, P2	See Process Connections
Electrical Connection	E1 / E2 / E5 / E6	See Electrical Connections

Ordering Example 0-400 bar sealed gauge, 4-20 mA, M20x1.5-6g, M12.

Family	Range	Ref	Output	Process	Electrical
QSF-FLUSHPRO 3400	08	SP	I4	P1	E2

Notes

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