

QPress Pressure Transducer - QHP-MELT-01 4100 Series

High-temperature melt pressure transducer for polymer extrusion lines

Certifications

Quality Lab Solutions data sheet R4



Applications

- Polymer extrusion
- Blown film
- Sheet and profile extrusion
- Compounding
- Fibre spinning

Special Features

- High-temperature melt diaphragm for polymer media up to 350 °C
- Pressure ranges from 0–50 bar to 0–1000 bar
- Outputs: 4–20 mA; 0–10 V; 0–5 V
- Standard melt threads: 1/2-20 UNF; M18×1.5
- Accuracy up to ± 0.5 % FS; repeatability $\leq \pm 0.2$ % FS
- All-stainless construction; IP65 electrical interface



QHP-MELT-01 4100

Description

QHP-MELT-01 4100 is a high-performance melt pressure transducer designed for continuous measurement of polymer melt pressure on extrusion, film and fibre lines. A bonded strain gauge on a high-temperature diaphragm provides stable output at elevated media temperatures. Stainless-steel wetted parts and a choice of standard melt threads support straightforward installation. Outputs include 4–20 mA and voltage types to integrate with common PLCs. The device maintains accuracy and repeatability across the operating envelope and meets typical industrial EMC and ingress requirements.

Specifications

TECHNICAL SPECIFICATIONS	
Pressure range	0–50 bar; 0–100 bar; 0–200 bar; 0–500 bar; 0–700 bar; 0–1000 bar
Accuracy	±1.0 %FS
Operating temperature (electronics)	-20 to 85 C
Diaphragm temperature (max)	320 C
Input voltage	24 VDC (12–36 VDC)
Bridge resistance	350 ohm
Diaphragm material	15-5PH
Mounting torque (max)	40 N·m
Ingress protection	IP65
Process connection	M14x1.5
Temperature measurement (optional)	J / K / E thermocouple or Pt100 RTD
E-Connection	5-pin standard aviation connector
Zero Temp Drift	0.005MPa/°C

Measuring Range

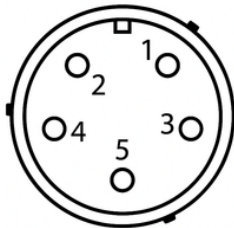
Range Code	Measuring Range	Overpressure
01	0-100 bar	150%FS
02	0-200 bar	150%FS
03	0-350 bar	150%FS
04	0-500 bar	150%FS
05	0-700 bar	150%FS
06	0-1000 bar	150%FS

Output Signals

Code	Output	Power Supply
I4	4-20 mA	12-36 VDC
VX	0-10 V	12-36 VDC
V5	0-5 V	12-36 VDC

Electrical Connections

2-wire current (I4)	Pinout
E7 - 5-pin aviation	Pin 1: E- (Blue); Pin 2: E+ (Red); Pin 3: N/C ; Pin 4: CAL (Yellow); Pin 5: CAL (Black)
3-wire voltage (V5/VX)	Pinout
E7 - 5-pin aviation	Pin 1: S+ (Blue); Pin 2: E+ (Red); Pin 3: S- (White); Pin 4: E- (Yellow); Pin 5: CAL (Black)



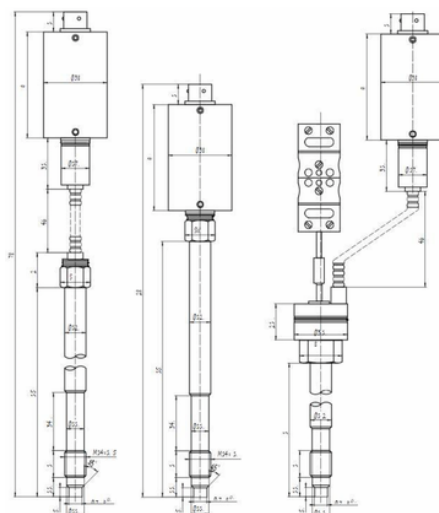
5 Pin Connector

Temperature Measurement Type

Code	Thread / Port
J	Type J Thermocouple
K	Type K Thermocouple
E	Type E Thermocouple
PT100	PT100 RTD

Process Connections/Drawings

Code	Thread / Port
P1	1/2-20 UNF
P2	M14x1.5
P3	M18x1.5
P4	M22x1 (movable screw thread)



Order Guide

Segment	Your Code	Options
Product family	QHP-MELT-01 4100	QHP-MELT-01 4100
Range	01 ... 06	See "Measuring range & accuracy" (Range code)
Output	I4 / VX / V5	See Output table
Process Connection	P1 ... P4	See Process Connections
Electrical Connection	E7	See Electrical Connections
Temperature Measurement	J / K / E / PT100	See Temperature Measurement Type

Ordering Example 0–350 bar, 4–20 mA, M14x1.5, 5-pin aviation, K-type thermocouple

Family	Range	Output	Process	Electrical	Temperature
QHP-MELT-01 4100	03	I4	P2	E7	K

Notes

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