

QPress Pressure Transducer - QOM-MOBILEHP 3600 Series

Automotive common-rail pressure transducer, up to 2000 bar, 0.5–4.5 V, IP65.

Certifications

Quality Lab Solutions data sheet R4



Applications

- Automotive common-rail diesel fuel systems
- Engine ECU fuel-rail pressure feedback
- High-pressure injection test rigs

Special Features

- Integrated one-piece construction with leak-free design
- 0.5–4.5 V ratiometric output; 5 V supply
- Pressure ranges up to 2000 bar (gauge)
- Overload 200 % FS; burst 400 % FS
- -40 to 140 °C operating temperature
- Vibration resistance 10 g (50–2000 Hz)
- EMC immunity up to 100 V/m; IP65 protection
- Wetted parts: 17-4PH stainless steel; 304 housing
- Durable design with $\geq 5,000,000$ pressure cycles
- Compact plug-in automotive connector



QOM-MOBILEHP 3600

Description

Compact OEM pressure transducer for automotive common-rail systems. It provides a ratiometric 0.5–4.5 V output from a 5 V supply and covers ranges up to 2000 bar (gauge). A stainless-steel construction with a 17-4PH sensing element and IP65 protection ensures durability. The device maintains a response time of ≤ 10 ms, overload capability of 200 % FS (burst 400 % FS), and stable operation from -40 to 140 °C with immunity to strong RF fields.

Specifications

TECHNICAL SPECIFICATIONS	
Pressure range	0–1500 bar; 0–1800 bar; 0–2000 bar
Pressure reference	Gauge
Accuracy	±1 % FS @ 25 °C; ±2 % FS (–40 to 140 °C)
Response time	≤ 10 ms
Ambient temp.	–40 to 85 °C
Medium temp.	–40 to 140 °C
Storage temp.	–40 to 140 °C
Vibration resistance	10 g (50–2000 Hz)
Protection	IP65
Wetted Parts	17-4PH stainless steel; 304 stainless steel Housing
Approvals/Certification	CE, UKCA, RoHS, REACH
Electrical Outputs	0.5–4.5 V ratiometric
Process connections	M12×1.5; M18×1.5
Anti-Vibration	Yes
Overpressure/Burst Pressure	200 % FS Overload/ 400 % FS Burst
Electrical connections	Plug-in connector
Power Supply	5 V DC (±0.25 V)
EMC(512MHz-1GHz)	100V/m
EMC(1MHz-512MHz)	50V/m
Reverser voltage	-14VDC (voltage output type)
Output response time	≤10mS

Measuring Range

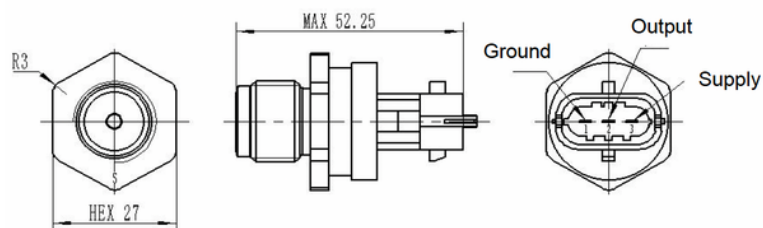
Range Code	Measuring Range	Pressure Reference	Overpressure	Burst Pressure
01	0-1500 bar	GP	200%FS	400%FS
02	0-1800 bar	GP	200%FS	400%FS
03	0-2000 bar	GP	200%FS	400%FS

Output Signals

Code	Output	Power Supply
VR	0.5-4.5 V ratiometric	5 VDC

Electrical Connections

3-wire voltage (VR)	Pinout
E1 - Automotive 3-pin	Supply +; Ground; Voltage output



Process Connections/Drawings

Code	Thread / Port
P1	M12x1.5
P2	M18x1.5

Order Guide

Segment	Your Code	Options
Product family	QOM-MOBILEHP 3600	QOM-MOBILEHP 3600
Range	01 ... 03	See "Measuring range & accuracy" (Range code)
Pressure Reference	GP	GP = Gauge
Output	VR	See Output table
Process Connection	P1 ... P2	See Process Connections
Electrical Connection	E1	See Electrical Connections

Ordering Example 0-2000 bar gauge, 0.5-4.5 V ratiometric, M18x1.5, 3-pin automotive connector

Family	Range	Ref	Output	Process	Electrical
QOM-MOBILEHP 3600	03	GP	VR	P2	E1

Notes

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