

QPress Pressure Transmitter - QOM-COMBO 1200 Series

Economical combo sensor: pressure + NTC temperature, up to 40 bar.

Certifications

Quality Lab Solutions data sheet R4



Applications

- EV thermal-management circuits
- Automotive/HVAC systems
- Compressors & refrigerant loops
- General OEM pressure & temperature monitoring

Special Features

- Combined pressure (diffused-silicon) and NTC temperature sensing
- Low-cost 0.5–4.5 V ratiometric output; 5 V supply with protection
- Gauge, absolute or sealed pressure; ranges 0...5 to 0...40 bar
- All-welded construction; metal-sheathed NTC for vibration/corrosion resistance
- Factory calibrated $\pm 1\%$ FS; total error band $\pm 3\%$ FS from $-30...130\text{ }^{\circ}\text{C}$



QOM-COMBO 1200

Description

Compact OEM transducer measuring both pressure and temperature in one body. The diffused-silicon oil-filled pressure cell delivers stable 0.5–4.5 V output, while a metal-sheathed NTC provides reliable temperature feedback without contacting the process medium. Gauge, absolute and sealed references are available with ranges from 0...5 to 0...40 bar. Designed for cost-sensitive HVAC and EV thermal management applications with over-voltage and reverse-polarity protection.

Specifications

TECHNICAL SPECIFICATIONS	
Pressure range	0...5 bar; 0...10 bar; 0...20 bar; 0...40 bar
Pressure reference	Gauge; Absolute; Sealed
Accuracy	±1% FS (linearity, hysteresis, repeatability, calibration); Total error band ±3% FS (–30...130 °C)
NTC Accuracy	±1%FS
NTC Type	NTC: R25=10 kΩ ±1%; B25/85=3435 ±1% (per R/T table)
Operating temp.	–40...130 °C
Storage temp.	–50...135 °C
Vibration Resistance	Metal-sheathed NTC; design resists vibration
Wetted Parts	304 stainless-steel temperature probe & housing; oil-filled pressure cell
Size of hexagon	≈22 mm AF
Approvals/Certification	UKCA; CE; RoHS
Electrical Outputs	0.5–4.5 V ratiometric (10–90% Vcc)
Process connections	G1/4; M12×1.5; M10×1
Anti-Vibration	Yes
Overpressure/Burst Pressure	Overload: 1.5–2 × calibrated range / Burst: 100bar
Housing Material	Stainless-steel body with welded construction
Electrical connections	TE 1-967640-1; Custom options available
Power Supply	4.75–5.25 VDC (reverse polarity; overvoltage protection to 32 VDC)

Measuring Range (Gauge Pressure)

Range Code	Measuring Range	Overpressure	Accuracy
01	0-5 bar	150–200%FS	±1%FS
02	0-10 bar	150–200%FS	±1%FS
03	0-20 bar	150–200%FS	±1%FS
04	0-40 bar	150–200%FS	±1%FS

Measuring Range (Absolute Pressure)

Range Code	Measuring Range	Overpressure	Accuracy
01	1-6 bar	150–200%FS	±1%FS
02	1-11 bar	150–200%FS	±1%FS
03	1-21 bar	150–200%FS	±1%FS
04	1-41 bar	150–200%FS	±1%FS

Measuring Range (Sealed Pressure)

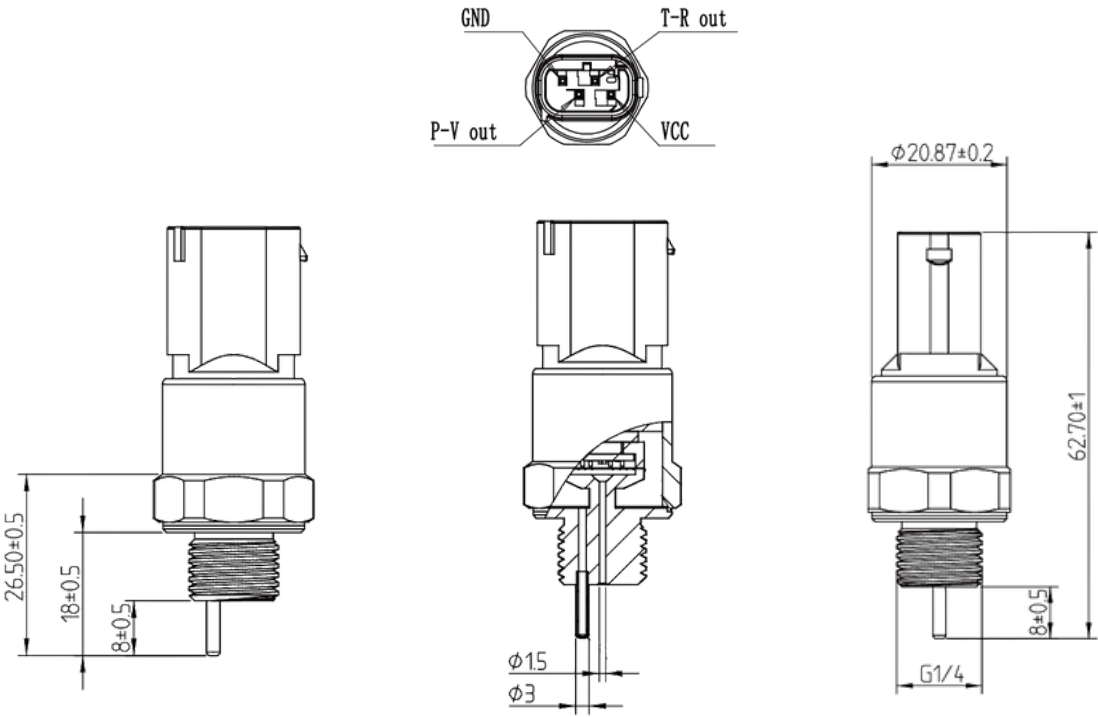
Range Code	Measuring Range	Overpressure	Accuracy
01	0-5 bar	150–200%FS	±1%FS
02	0-10 bar	150–200%FS	±1%FS
03	0-20 bar	150–200%FS	±1%FS
04	0-40 bar	150–200%FS	±1%FS

Output Signals

Code	Output	Power Supply
VR	0.5–4.5 V (ratiometric, 3-wire)	4.75–5.25 VDC
VZ	10%–90% Vcc (alias of 0.5–4.5 V)	4.75–5.25 VDC

Electrical Connections

Code	Description	Pinout
E7	TE 1-967640-1 (4-pin)	3-wire voltage (VR): Pins include VCC; GND; Pressure Vout (P-V out). Temperature NTC on separate pin (T-R out).



Power Supply

Code	Supply
PS1	4.75–5.25 VDC

Construction Materials

Code	Diaphragm	Pressure Port	Housing
M1	Metal diaphragm (oil-filled)	304 stainless steel	304 stainless steel

Process Connections

Code	Thread / Port
P1	G1/4 male
P2	M12x1.5 male
P3	M10x1 male

Certification/ Approvals

Code	Description
NA	None
CE	CE
RO	RoHS
UK	UKCA

Accuracy options

Code	Accuracy
A10	±1%FS

NTC

Code	Type	Signal	R25	B25/85	Notes
T1	NTC thermistor	Resistance (separate pin)	10 kΩ ±1%	3435 K ±1%	Metal case; not wetted; see R/T table

R/T Table

Temp (°C)	R_Min (kΩ)	R_Nom (kΩ)	R_Max (kΩ)
-40	184.7267	192.1904	199.9358
-30	109.7976	113.6351	117.5951
-20	67.1905	69.1948	71.2517
-10	42.2611	43.3184	44.3977
0	27.2091	27.7660	28.3315
10	17.8075	18.0944	18.3840
20	11.9519	12.0956	12.2398
25	9.9000	10.0000	10.1000
30	8.1764	8.2746	8.3732
40	5.6919	5.7810	5.8709
50	4.0446	4.1218	4.2001
60	2.9271	2.9926	3.0592
70	2.1533	2.2082	2.2642
80	1.6068	1.6526	1.6994
90	1.2173	1.2553	1.2945
100	0.9345	0.9662	0.9990
110	0.7264	0.7530	0.7805
120	0.5707	0.5930	0.6161
125	0.5080	0.5284	0.5496

Order Guide

Segment	Your Code	Options
Product family	QOM-COMBO 1200	QOM-COMBO 1200
Pressure Reference	GP / AP / SP	GP=gauge; AP=absolute; SP=sealed
Range	01..04	See Measuring Range
Accuracy	A10	See Accuracy options
Output	VR	See Output Signals
Power Supply	PS1	See Power Supply
Construction Materials	M1	See Construction Materials
Process Connection	P1 / P2 / P3	See Process Connections & Drawings
Electrical Connection	E7	See Electrical Connections
Certification	NA / CE / RO / UK	See Certification
Temperature Output	T1	See Temperature Output

*****Custom options available contact us with your enquiry.

Ordering Example Absolute 1–11 bar (from 0–10 bar GP); ±1%FS; 0.5–4.5 V (5 V ratiometric); 304 SS housing; G1/4 male; TE 1-967640-1 connector; CE; NTC 10k output

Family	Ref	Range	Accuracy	Output	Power Supply	Construction Materials	Process Connection	Electrical Connection	Certification	Temperature Output
QOM-COMBO 1200	AP	02	A10	VR	PS1	M1	P1	E7	CE	T1

Note

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

