Pressure and level transmitters

Ceramic Capacitive Refrigerant Transmitter, 4–20mA

Model CS-PT1801

Ceramic capacitive refrigerant pressure transmitter, -1–10bar...50bar sealed gage, with 4–20mA output, ±1.0%F.S total error and IP67 protection.



Range	Output
-1–12.8bar	**4–20mA**
Protection	Supply voltage
IP67	**8–30 VDC**

Features

- Ceramic capacitor cell
- Good linearity, small temperature drift
- Fully sealed, anti-condensation
- 8–30 VDC supply
- 7/16-20UNF-2B or ϕ6.35 copper pipe connection

Applications

Cold water screw units, Water source heat pump units, Ground source heat pump units

Specifications

Performance specifications

Reference conditions	Temperature 20°C~25°C; power supply 12VDC; relative humidity 45%~75%; ambient atmospheric pressure 86–106KPa
Pressure range	-1–10bar...50bar (Sealed Gage)
Standard range a	-1–12.8bar
Standard range b	-1–16bar
Standard range c	0–20bar
Standard range d	0–30bar
Standard range e	-1–40bar
Standard range f	0–50bar
Overload pressure	200%F.S
Burst pressure	300%F.S

Accuracy at 25°C	±1.0%F.S (±0.6% Optional) (include no-linearity, hysteresis, repeatability, and calibration error) Note 1
Total error accuracy	±2.5%F.S (include no-linearity, hysteresis, repeatability, and calibration error) Note 1
Long-term stability	±0.25%F.S/year
Response time	(10%~90%) ≤10ms

Electrical

Output signal	4–20mA
Supply voltage	8–30 VDC
Output load	≤ (U-8) / 0.023 Ω (Max: 600Ω)
Overvoltage	30VDC
Reverse voltage	-30VDC
Insulate resistance	≥100MΩ@500VDC
Insulate intensity	500VDC@1min (no spark, arc, no damage)
Electrical connection	Packard Metri-Pack

Environmental

Medium temperature	-35°C~120°C
Ambient temperature	-35°C~105°C
Storage temperature	-35°C~105°C
Random vibration	10g, 5–2000Hz
Shock	X/Y/Z, 20g, half-sine 11ms
Drop (any axis)	1m

EMC

ESD	Contact ±4kV, air ±8kV
EMC	EN 61000-6-2, EN 61000-6-3

Mechanical

IP rating	IP67
Pressure connector	7/16-20UNF-2B, ϕ6.35 Copper pipes
Connector material	Brass
Seal material	Neoprene
Applicable refrigerant medium	R12, R21, R22, R31, R32, R134a, R404a, R407C, R410a, R502, R507

Notes

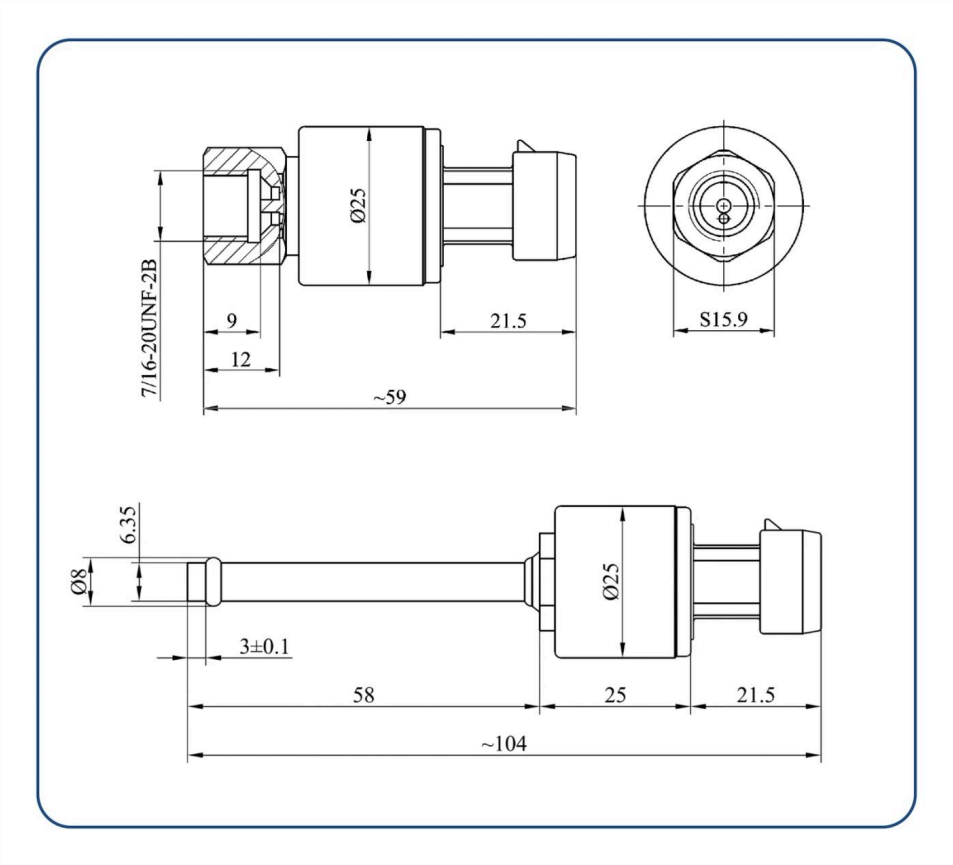
Note 1	0barG=101.325kPaA (define 1 atm as 0bar)

Ordering and support

Pricing, samples, lead time and custom versions: dwinsales@163.com, +86 181 0280 8901.

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Dimensions and wiring



Drawings are for reference. Dimensions in millimetres unless stated.