

2A Thermocouple Sensor

Part Number: 2-2100-10, 2-2100-0XX, and 2-2126-0XX

Operating Specifications

Operating Range	1 x 10 ⁻³ to 20 Torr 1 x 10 ⁻⁴ to 1000 Torr (MX2A)
Analog Output	Controller-dependent
Maximum Filament Temperature	250° C
Mounting Orientation	1 x 10 ⁻³ to 20 Torr: Any 20 to 1000 Torr: Vertical
Calibration Medium	Dry air or nitrogen
Overpressure	150 PSI
Analog Output Resolution	Controller-dependent
Operating Temperature	0 °C to 50 °C
Storage Temperature	-40 °C to 85 °C
Maximum Bakeout Temperature	120° C (brass) 200° C (stainless steel)
Response Time	≤ 2 s
Accuracy	
1 to 10 mTorr	±1 mTorr
10 to 100 mTorr	±10% of reading
100 mTorr to 1 Torr	±20% of reading
1 to 20 Torr	Indication only
Analog Output	±10 mV
Accuracy (MX2A)	
0.1 to 1 mTorr	0.1 mTorr resolution
1 to 10 mTorr	±1 mTorr
10 mTorr to 10 Torr	±10% of reading
10 to 100 Torr	±30% of reading
100 to 1000 Torr	±10% of reading
Analog Output	±10 mV

Physical Characteristics

Electrical Connections	Octal male
Weight	126 g (0.28 lbs) (NW25)
Dimensions	See dimensional drawings

Materials Exposed to Vacuum

2A P/N: 2-2100-10, 2-2100-0XX	2A P/N: 2-2126-0XX
Gold	Gold
Solder	Glass
Glass	Alloy 52
Alloy 52	304 Stainless Steel
Nickel	Tophet
Tophet	Cupron
Cupron	

Ratings and Compliance

- RoHS compliant

Description

The 2A thermocouple sensor has a measurement range from 1 x 10⁻⁴ up to 1000 Torr. It indirectly measures absolute pressure by detecting the thermal dissipation of a filament. This sensor is available in Brass and Stainless Steel with a variety of fittings to fit your system's requirement.

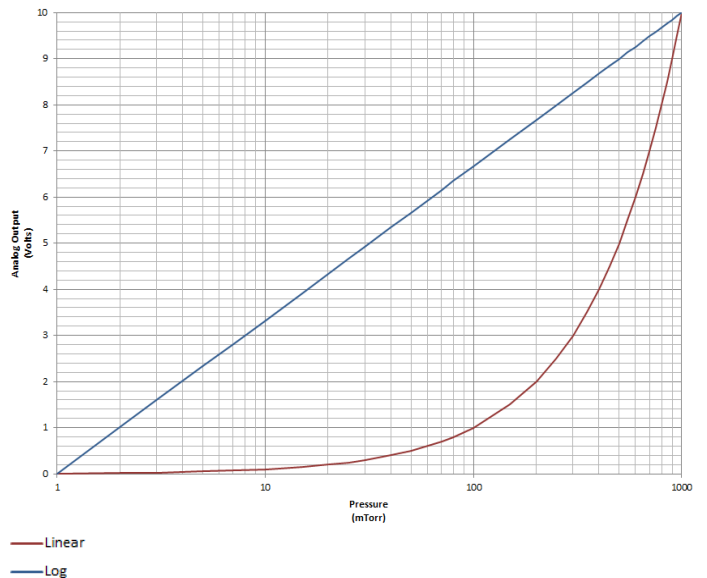
The 2A can be operated by a variety of Televac controllers and active gauges, see page 2 under Related Products for a full list of products including part numbers.



Benefits

- Competitively priced
- Compact, robust design
- Numerous fittings available
- Excellent resolution and repeatability
- Minimal sensor to sensor output variation
- Excellent customer support
- Designed and manufactured in the United States of America

Analog Output Behavior (MM200)





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Ordering Information

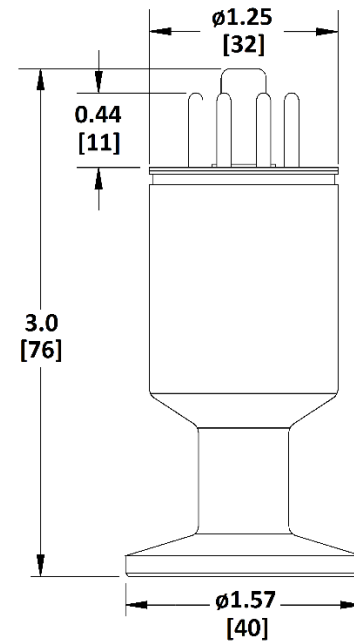
2A Sensor 1/8" NPT Nickel-plated Brass	2-2100-10
2A Sensor NW16 (DN16 ISO-KF) Nickel-plated Brass	2-2100-016
2A Sensor NW25 (DN25 ISO-KF) Nickel-plated Brass	2-2100-025
2A Sensor Stainless Steel	2-2126-0XX
Vacuum Fittings	XX
1/8" NPT	01
NW16 (DN16 ISO-KF)	30
NW25 (DN25 ISO-KF)	31
8-VCO Male	40
8-VCO Female	41
8-VCR Male	42
8-VCR Female	43
4-VCR Male	44
4-VCR Female	45
1.33" CF (DN16 ISO-CF-F)	50
2.75" CF (DN40 ISO-CF-F)	52

Related Products

Description	Part Number
MX2A Active Gauge	2-8910-1XX
MM200 Vacuum Controller	2-7900-20
MC300 Vacuum Controller	2-4502-301
MV2A Controller	2-7900-071
Compact 2A Controller	2-3014-042
Vacuguard Portable Controller	2-3001-102
B2A Portable Controller	2-3001-100

Visit our website at www.frederickscompany.com for a full list of compatible instruments.

Dimensional Drawings



*NW25 SS Fitting

Contact Us

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