

MV2A Thermocouple Controller

Part Number: 2-7900-071

Operating Specifications ¹	
Operating Range	1 x 10 ⁻³ Torr to 20 Torr
Communications	N/A
Analog Output	0 V DC to 5 V DC
Programmable Set Points	2
Set Point 1	Relay
Set Point 2	Relay
Supply Voltage	115 V AC, 60 Hz
Maximum Power	8 W
Calibration Medium	Dry air or nitrogen
Overpressure	150 psi
Digital Output Resolution	1 or 2 significant digits
Analog Output Resolution	12 bits
Operating Temperature	0 °C to 50 °C
Storage Temperature	-20 °C to 60 °C
Bakeout Temperature	
Response Time	≤ 2 s
Accuracy	
1 mTorr to 10 mTorr	±1 mTorr
10 mTorr to 100 mTorr	±10% of reading
100 mTorr to 1 Torr	±20% of reading
Analog Output	±10 mV
Display Readable Distance	3 m (10 ft)

Physical Characteristics	
Housing	Aluminum
Electrical Connections	D-Sub 15-pin male
Weight with Sensor (typical)	517 g (1.14 lbs)
Weight without Sensor	320 g (0.70 lbs)
Dimensions	See dimensional drawings

Benefits

- Competitively priced
- Very compact design
- Easy to read color OLED display
- Excellent resolution and repeatability
- Superior unit to unit performance
- Excellent customer support
- Designed and manufactured in the United States of America

Description

The MV2A is a thermocouple vacuum sensor controller with a range of 1 x 10⁻³ Torr to 20 Torr. It utilizes a Televac 2A thermocouple vacuum sensor. It has a red, three-digit, seven segment LED display that displays pressure in units of mTorr and Torr. The MV2A has 2 set points relays, and a 0-5 Volt analog output.

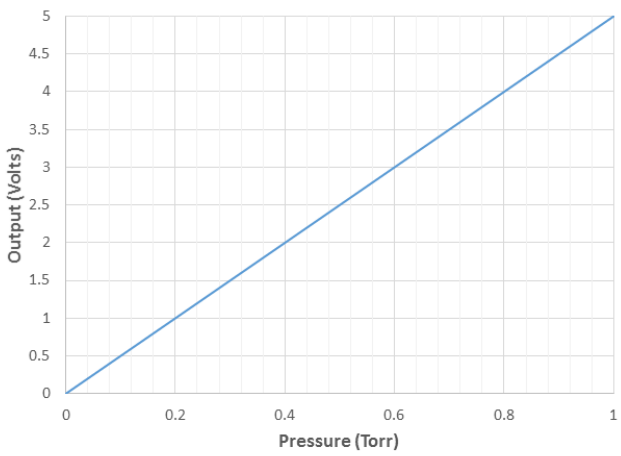


Applications

- Freeze drying
- Thin film deposition and coating processes
- Cryogenics
- Pharmaceutical product processes

Visit the Televac website at www.televac.com for a full list of applications.

Analog Output Behavior



Ratings and Compliance

- IP40

¹ See the Televac website at www.televac.com for a list of definitions for terms used in the operating specifications. All test data was acquired at 23 °C.

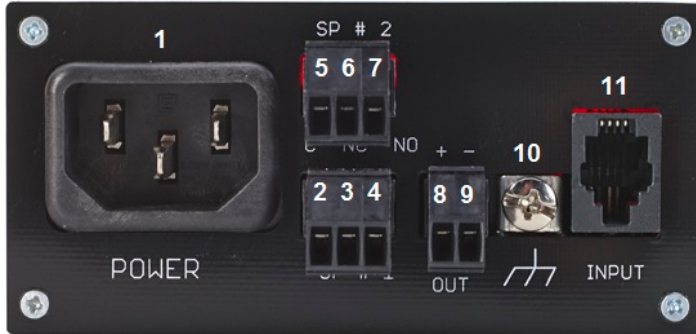




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Electrical Connections



Label	Description
1	AC Input
2	SP1 C
3	SP1 NC
4	SP1 NO
5	SP2 C
6	SP2 NC
7	SP2 NO
8	Analog Out + (0 to 5) V
9	Analog Out - (0 to 5) V
10	Earth Ground
11	Sensor Input

Materials Exposed to Vacuum

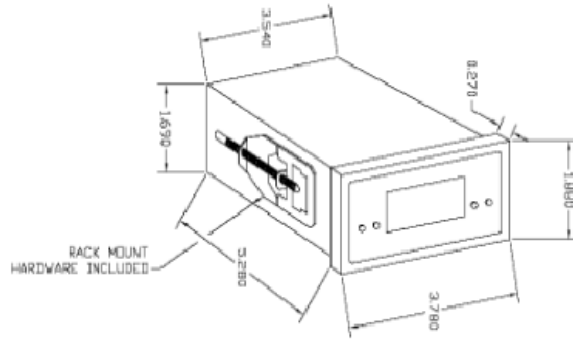
Nickel Plated Brass Sensors	Stainless Steel Sensors
Nickel	Nickel
Glass	Glass
Gold	Gold
Tophet	Tophet
Cupron	Cupron
Solder	Stainless Steel

Related Products

Compact 2A Thermocouple Controller –The Compact 2A is a thermocouple vacuum sensor controller with a range of 1×10^{-3} Torr to 20 Torr. It utilizes a Televac 2A thermocouple vacuum sensor. It has an easy-to-read analog display that indicates pressure in units of mTorr. The Compact 2A has a 0-10 Volt analog output.

Visit the Televac website at www.televac.com for a full list of products.

Dimensional Drawings



Ordering Information

MV2A Thermocouple Controller	2-7900-071
2A Brass Sensor Part Number	2-2100-YYY
1/8" NPT Nickel Plated Brass	10
NW16 (DN16 ISO-KF) Nickel Plated Brass	016
NW25 (DN25 ISO-KF) Nickel Plated Brass	025
2A Stainless Steel Sensor Part Number	2-2126-0YY
1/8" NPT Stainless Steel	01
1/2" Straight Stainless Steel	11
NW16 (DN16 ISO-KF) Stainless Steel	30
NW25 (DN25 ISO-KF) Stainless Steel	31
NW40 (DN40 ISO-KF) Stainless Steel	32
1.33" CF (DN16 ISO-CF-F) Stainless Steel	50
2.75" CF (DN40 ISO-CF-F) Stainless Steel	52
Sensor Cable Part Number	2-9800-0YY
10 ft	77
20 ft	78
35 ft	79
50 ft	80

Contact Us

Televac
 A Fredericks Company
 2400 Philmont Avenue
 Huntingdon Valley, PA 19006
 tel: +1 215 947 2500
 email: sales@televac.com
 web: www.televac.com

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