

2A VacuMini Thermocouple Sensor

Part Number: 2-2100-102



Operating Specifications ¹	
Operating Range	1 x 10 ⁻³ to 20 Torr
Analog Output	Controller-dependent
Supply Voltage	Controller-dependent
Maximum Voltage	5 V
Maximum Power	55 mW
Maximum Filament Temperature	250° C
Mounting Orientation	Any
Calibration Medium	Dry air or nitrogen
Overpressure	250 PSI
Analog Output Resolution	Controller-dependent
Operating Temperature	-20° to +70° C
Storage Temperature	-40° to +85° C
Bakeout Temperature	140° C
Response Time	≤ 1 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

Physical Characteristics	
Electrical Connections	4-Pin Mates w/Bendix PC-06A-8-4S SR
Weight	28 g (0.062 lbs) (without tether)
Dimensions	See dimensional drawings

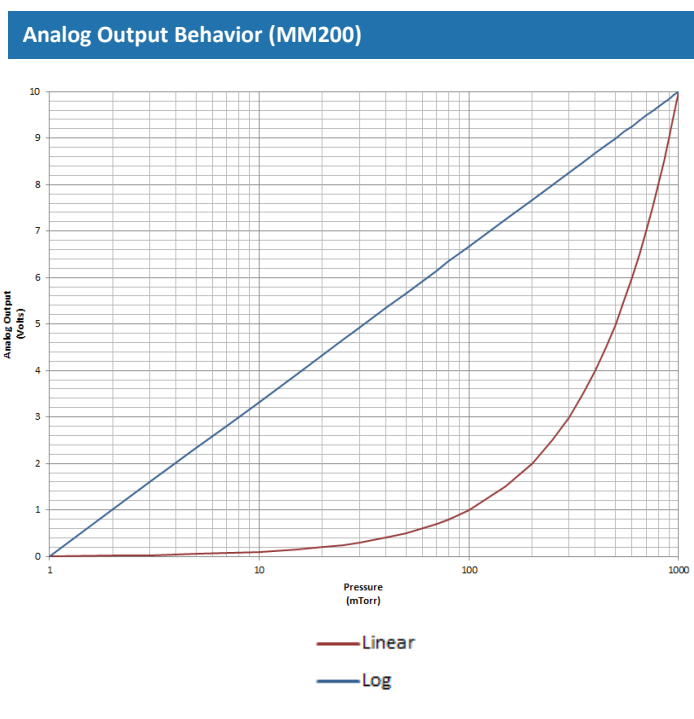
Materials Exposed to Vacuum	
Gold	
Glass	
Stainless Steel	
Tophet	
Cupron	

- ### Benefits
- Competitively priced
 - Compact design
 - Gasketed and tethered military grade weather cap
 - Operation in any physical orientation
 - Rugged and simple construction
 - Excellent customer support
 - Designed and manufactured in the United States of America

Description

The VacuMini is a commercial version of Televac's 2A NASA sensor. This thermocouple sensor has a measurement range from 1 x 10⁻³ up to 20 Torr. It indirectly measures absolute pressure by detecting the thermal dissipation of a filament. It includes a tethered cap that provides IP67 protection for the recessed electrical pins. It also has less than 25% of the internal volume of the Televac 2A vacuum sensor.

The VacuMini can be operated by several Televac controllers, including the MM200, MC300, B2A, Compact 2A, Vacuguard, and MV2A.



- ### Ratings and Compliance
- RoHS compliant

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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Ordering Information

2A VacuMini Sensor 1/8" NPT Stainless Steel	2-2100-102
Coiled Cable, 10 ft (3 m)	2-9800-082
VacuGuard Controller Kit	2-3001-104

Visit the Televac website at www.televac.com for a full list of compatible controllers and ordering information.

Related Products

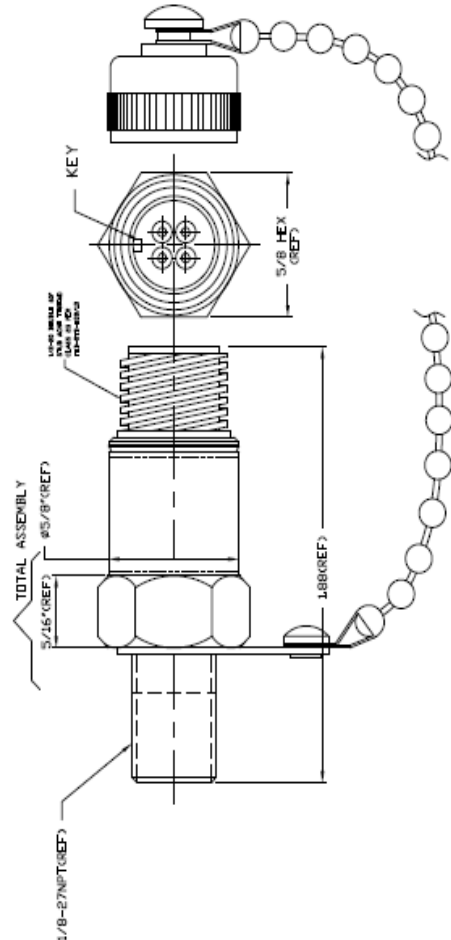
4A Convection Sensor – The 4A convection sensor has a measurement range from 1×10^{-4} up to 1000 Torr. The sensor features a rapid response time when compared to typical thermal sensors. It indirectly measures absolute pressure by detecting the thermal dissipation of a filament. The 4A can be operated by several Televac controllers, including the MM200, MC300, and MX4A.

VacuGuard Thermocouple Sensor Controller - This portable controller is designed to operate all Televac 2A series and non-Televac DV4/DV6 type thermocouple sensors. The VacuGuard is powered by a 1.5V battery and features a large, bright LED display making it easy to read. This controller is available with a carrying case for convenience.

MM200 Vacuum Sensor Controller – The MM200 controls any Televac vacuum sensor including cold cathode, convection, diaphragm, hot ion, and thermocouple sensors. It also has optional features including up to 8 relay set points and RS-232/RS-485 communications. The large, bright LED display makes it easy to read from a distance. The MM200 is a modular unit, allowing customers to choose a vacuum sensing solution specific to their needs.

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

Dimensional Drawings



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