

CERAMIC PRESSURE DETECTOR

DESCRIPTION

The Fike ceramic explosion pressure detector is designed to continuously measure the pressures inside the protected hazards. The extremely fast response time of the pressure detector allows the Explosion Protection Controller (EPC) to take more than 4,000 samples every second. Using the same instantaneous speed, this information is then processed to determine if the pressure change is that of a developing explosion.

FEATURES AND BENEFITS

- Application Specific Integrated Circuit (ASIC) technology provides the detector with high accuracy through compensation of linearity and temperature errors
- Ceramic pressure sensing element
- Continuous pressure measurement, dynamic and threshold functionality and fast response time
- No oil filled diaphragm

SPECIFICATIONS

Sensing Principle:	Capacitive Ceramic
Pressure:	±4.35 psig (± 300 mbarg) (other ranges available on request)
Overpressure:	60 psig (4 bar)
Deflagration Overpressure:	175 psig (12 bar)*
Vacuum Resistance:	Full Vacuum
Pressure Connection:	G 1"
Material:	Wetted: Ceramic (Al ₂ O ₃), 316 SST (SST 1.4404), Viton O-ring (optional: Kalrez or Teflon®) Housing: 316L SST, optional HC-276 (SST 1.4404), Aluminum
Power Supply:	12 to 30 VDC (FM Approved: 20.4 to 26.4 VDC)
Temperature Range:	Process, Maximum: +215°F (+102°C) Cleaning Incidental: +300°F (+150°C) Ambient: 0 to 140°F (-20 to + 60°C) Storage: 0 to 140°F (-20 to + 60°C)
Output:	4 – 20 mA
Response Time:	Less than 1 msec
Accuracy:	±0.9% of span with EPC
Enclosure:	NEMA 4X / IP65
Humidity (non-condensing):	80% RH Maximum



Fike P/N 29945022-C-S SST
Fike P/N 02-11294 Hastelloy®

APPROVALS:

- FM Approved - Explosion Suppression System
- FM Hazardous
 - Class I, Div 1, 2, Group A, B, C, D
 - Class II, Div 1, 2, Group E, F, G
 - Class III, Div 1, 2
- CE
- ATEX Approved II 1/2 D/G EEx ia IIC T6
- NEMA 4X / IP65
- CSA Approved LR 159130



DIMENSIONS

