



# EXPLOSION PROTECTION CEREx™ DETECTOR

## DESCRIPTION

The Fike CEREx™ explosion pressure detector is designed to continuously measure the pressures inside the protected hazards. The extremely fast response time of the CEREx™ pressure detector allows the Explosion Protection Controller (EPC) to take more than four thousand 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.

The CEREx™ pressure detector utilizes a ceramic pressure sensing element. This ceramic element allows the detector to have high overload protection, corrosion resistance and long-term stability. With (Application Specific Integrated Circuit) ASIC technology, the detector is provided with high accuracy through compensation of linearity and temperature errors.

- Ceramic pressure element
- Continuous pressure measurement
- Dynamic and threshold functionality
- Extremely fast response time
- High overpressure rating
- Corrosion resistance
- Long term stability
- No oil filled diaphragm - Decreases sensitivity to orientation, shock and vibration



Fike P/N 29945022-S


# Data Sheet

## STANDARD FEATURES/SPECIFICATIONS

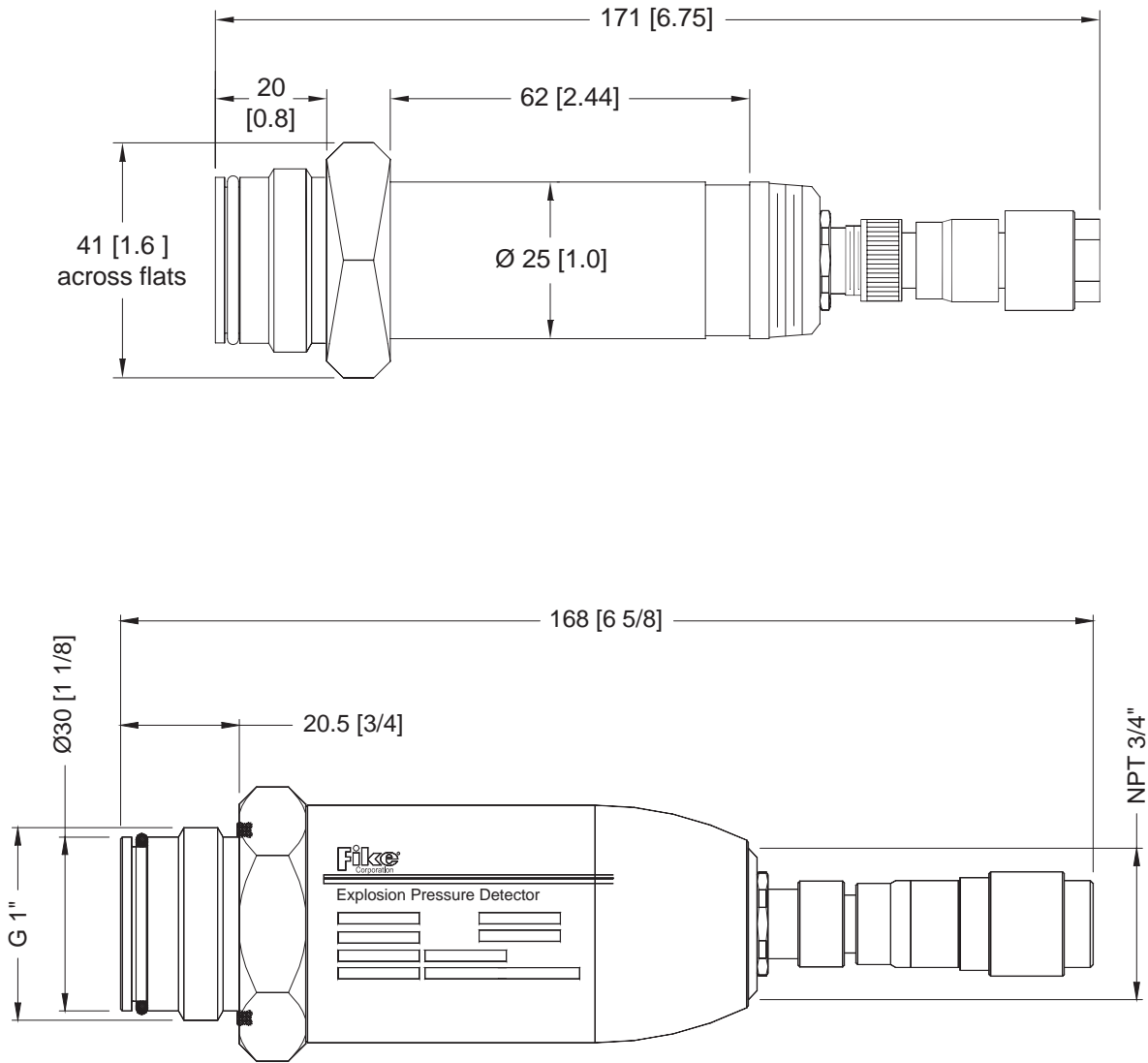
- Sensing principle: Capacitive Ceramic
- Pressure: -/+ 300 mbarg (-/+ 4.35 psig) (others available on request)
- Overpressure: 4 bar (60 psi)
- Deflagration overpressure: 12 bar (175 psi) \*
- Vacuum resistance: full vacuum
- Pressure connection: G 1"
- Material:
  - Wetted: Ceramic (Al<sub>2</sub>O<sub>3</sub>), SST 1.4404 (316 SST), Viton O-ring (Optional: Kalrez or Teflon)
  - Housing: SST 1.4404 (316L SST), Aluminum
- Power supply: 12 to 30 VDC
  - FM Approved: 20.4 to 26.4 VDC
- Temperature range:
  - Process, maximum: +102°C (+215°F)
- Cleaning incidental: +150°C (+300°F)
- Ambient: -20 to +60°C (0 to +140°F)
- Storage: -20 to +60°C (0 to +140°F)
- Output: 4 – 20 mA
- Response time: less than 1 msec.
- Accuracy: ±0.9% of span with EPC
- Electrical Connection: M12x1 screw type connector (suitable for cables 4 to 6 mm (0.16 to 0.25 in) (OD))
- Enclosure: NEMA 4X / IP 65\*
- Humidity (non-condensing): 80% RH maximum

\* Not validated by FM Approval

## APPROVALS

- FM Approved: Explosion Suppression System
- CE
- ATEX Approved  
 II 1/2 D/G EEx ia IIC T6
- NEMA 4X / IP65\*
- CSA Approval Pending

## Dimensions



*Note: Dimensions are nominal*

