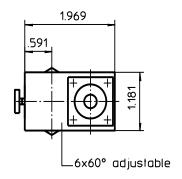
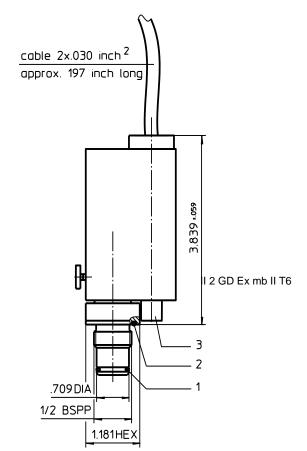
# Sheet No. **1625 F**

# **CLOGGING INDICATOR**

# Series AE (electrical) explosion-proof





# 1. Type index: (oredering example)

**AE. 10. 1,5. P. VA. Ex**1 | 2 | 3 | 4 | 5 | 6 |

1 series:

AE = clogging indicator electrical

2 contact:

10 = contact maker

indicator-pressure difference: Δp nominal 1,5 = 22 PSI; 2,5 = 36 PSI; 5,0 = 73 PSI

4 sealing material:

P = Nitrile (NBR) V = Viton (FPM)

5 material:

VA = stainless steel

6 execution:

Ex = explosion-proof

#### 2. Technical data:

permissible fluid temperature: -40°F to +176°F permissible ambient temperature: -40°F to +140°F max. operating pressure: 6000 PSI max. pressure difference: 2320 PSI

#### 3. Electrical limit facts:

execution:

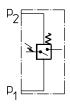
V DC/V AC 200/250 V, max. 30 Watt

switch contact: protection:

contact maker  $\langle Ex \rangle$  II 2 GD Ex mb II T6

KEMA 00ATEX 1112 X

# 4. Symbol:



contact maker

### 5. Spare parts:

item	qty.	designation	dimension	article-no.
1	1	O-ring	14 x 2	304342 (NBR)
				304722 (FPM)
2	1	O-ring	22 x 2	304708 (NBR)
		_		304721 (FPM)
3	1	switch explosion-proof		315461

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Designs and performance values are subject to change.



# 5. Description:

The AE 10 pollution indicator is an electrical differential pressure indicator.

The differential pressure indicator can be fitted to all pressure filters  $p \le 6000$  PSI for which there is a corresponding assignment on the relevant dimension drawing. As the degree of pollution of the filter element rises, so the difference between the entry pressure  $p_1$  and the exit pressure  $p_2$  of the filter increases. Depending on this pressure difference and irrespective of the operating pressure, an electrical signal on the AE 10 pollution indicator will be released.

A metering piston subjected to the entry and exit pressure moves against a metering spring according to the pressure differential. Depending on the path a permanent magnet integrated in the metering piston activates a reed contact (electromagnetic switch) and triggers the electrical signal. The electrical indication is effected as a digital signal at the given switching pressure.

At the AE 10 pollution indicator the closed condition signalizes that the change of the filter element is necessary.

# 6. Operating instructions:

Normally filters are supplied with mounted clogging indicator. When retrofitting - the filter is to be discharged of the operating pressure.

- dismantling the screw plug out of the bare hole which is foreseen for the clogging indicator
- screw in the clogging indicator into the bare hole (starting torque 92.18 lb.-ft.).

It is necessary to make sure the availability and the right positioning of sealing parts

- O-ring 22 x 2 and
- O-ring 14 x 2

as well as a dirt-free mounting. The electrical contacts are to be connected according to the graphical symbol shown on the type plate of the clogging indicator.

#### 7. Maintenance:

The device is maintenance-free, however, note that no cleaning fluids and solvents get on the housing and the cable of the switch.