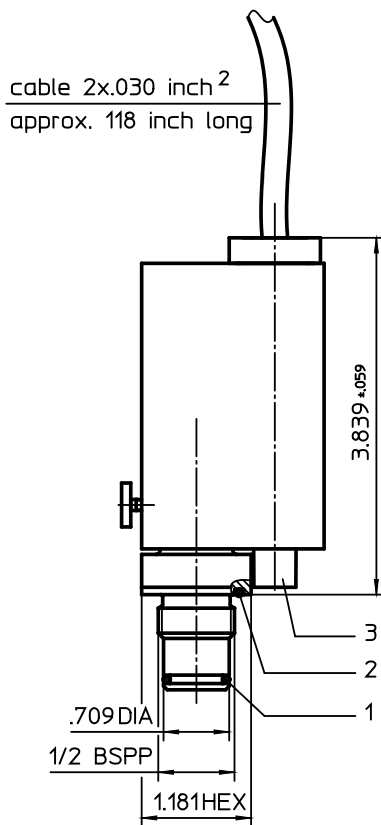
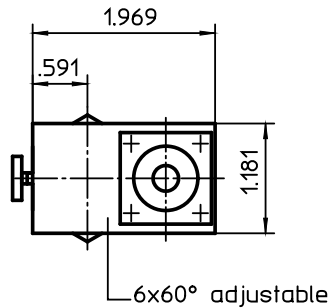


# CLOGGING INDICATOR

## Series AE (electrical) explosion-proof

Sheet No.  
**1625 E**



### 1. Type index: (ordering example)

**AE. 10. 1,5. P. VA. Ex**

1	2	3	4	5	6
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- 1 | **series:**  
AE = clogging indicator electrical
- 2 | **contact:**  
10 = contact maker
- 3 | **indicator-pressure difference:  $\Delta p$  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

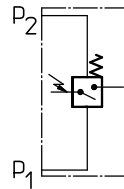
### 2. Technical data:

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: 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

## 5. Description:

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

The differential pressure indicator can be fitted to all pressure filters  $p \leq 6000$  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.