

05.09.2017

EXS control system

The EXS control system is a complete ATEX-certified system providing extra safety when combined with JK-EXS or B-EXS rotary valves. The EXS rotary valve with control system is certified as an autonomous safety system in accordance with EU Directive 2014/34/EU.

The system is continually monitored using a pressure transmitter. At pressures exceeding 8000 Pa, supply to the rotary valve is cut off, and blocked at under 500 ms (total time). This ensures that flames and redhot materials cannot be transported through the rotary valve.

The control system is manually reactivated.

A checklist must be filled out if the control system is used.

Connection

Input: $3 \times 400 \text{ V} \text{ AC} + \text{N} + \text{PE}, 50 \text{ Hz}$

Start/stop - potential free contact

4 – 20 m A analogue signal from pressure transmitter (0-250 m bar)

Output: 3 x 400 V AC + PE, 50 Hz (supply for gear motor to rotary valve)

Alarm - potential free contact

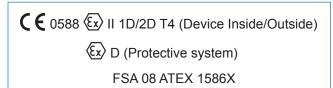
4 – $20~{\rm m}$ A analogue signal from pressure transmitter (0 - $250~{\rm m}$ bar) galvanically separated

Operating range

Max. operating temperature: 65°C Min. operating temperature: -25°C

Installation

EXS control system must be installed in zone 22. Pressure transmitter must be installed for measurement in zone 20 cf. ATEX Directive zone definitions. Pressure transmitter must be installed close to the sluice on the side from which flames/pressure are to be prevented. Transmitter is mounted on G1/2" thread.



JKF Industri

JKF Industri

