

# ATEX Conformant Valves Instructions for Use in a Potentially Explosive Atmosphere

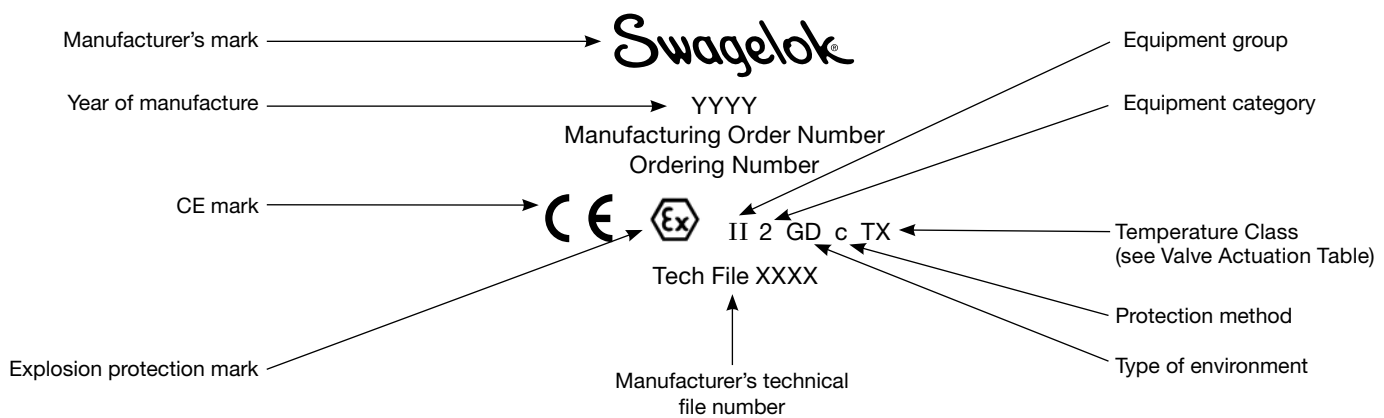
This instruction is provided according to the EU Directive 2014/34/EU (ATEX Directive). The assembly this accompanies consists of an actuated valve assembly. This instruction applies to the mechanical (non-electrical) components of the assembly. Some components of the assembly, including actuators, sensors, solenoids or switches, may be independently conformant to the ATEX Directive. Refer to the device manufacturer for instructions for these components.

## Safe Product Use

Follow any enclosed instructions and refer to the product catalog for detailed product information. When using a product, the total system design must be considered to ensure safe, trouble-free performance. Function, material compatibility, adequate ratings, proper installation, operation, and maintenance are the responsibilities of the system designer and user. **Improper selection and misuse of product may result in serious personal injury or property damage.**

## Description of Marking

The following information is marked on each piece of the assembly. The location of the marking may vary, depending on the product. For some products, the marking may be on a separate, attached tag. Other information, such as pressure and temperature ratings, may also be marked on the assembly.



Note:

1. ATEX Conformant DP series product with PTFE seats are also marked with temperature class T6.
2. Temperature class is not marked on other product series because the actual surface temperature depends on the operating conditions (such as system temperature) and the actuation cycle rate. See Valve Actuation Speed section below.

## Installation and Maintenance

### ⚠ WARNING

**Before servicing any installed valve, you must**

- depressurize system
- cycle valve
- purge the valve

### ⚠ WARNING

**Residual material may be left in the valve and system.**

### ⚠ WARNING

**Do not use this assembly in oxygen systems or oxygen-enriched atmospheres.**

For information about hazards and risks of oxygen-enriched systems, see the Swagelok *Oxygen System Safety* technical report, MS-06-13.

### ⚠ WARNING

**Do not operate pneumatic actuators with system fluids that are within their explosive range.**

### ⚠ WARNING

**Do not perform maintenance or repair of a valve while a potentially explosive atmosphere is present.**

Follow manufacturer's instructions for all installation and maintenance. Check local regulations for any special requirements for potentially explosive atmospheres.

## System Grounding

**⚠ The metal-to-metal contact of the valve end connections provide electrical continuity between the valve and system.**

System grounding is the responsibility of the user or system designer. Check local regulations for requirements for system grounding.

## Grounding Spring

**⚠ WARNING**

**If the valve is disassembled make sure electrical continuity is maintained upon re-assembly including ensuring that the grounding spring contacts both the valve body and the actuator coupling after assembly.**

The following products are provided with a grounding spring between the valve body and actuator coupling: 40, 60, 83, AFS, SK, and N series. The grounding spring bonds the stem to the body of the valve.

60 series valves include a second grounding spring between the coupling and the actuator. This grounding spring bonds the coupling to the actuator.

## Operation

**⚠ WARNING**

**Increases in external temperature due to rapid pressure changes, particularly gases, must be considered by the system designer and user.**

**⚠ WARNING**

**Keep the valve clean of dust that may insulate the valve or ignite.**

**⚠ WARNING**

**Isolate the valve from vibrations and/or pressure spikes.**

Follow all manufacturers' instructions for operation. Check local regulations for any special requirements for potentially explosive atmospheres.

## Valve Actuation Speed

To prevent heat buildup, do not cycle the valve continuously. For applications that require continuous valve cycling, do not exceed the speed in the following table.

Valve Series	Continuous Actuation Speed, minimum seconds between cycles	Temperature Class at Continuous Actuation Speed
40/40G	10	T4 T3 (for 67 and 68 Series)
60		
83		
AFS	10	T6
SK		
FKB	10	T5
N		
SSV		
DP, low pressure	0.5	T6
DP, high pressure	2	

For additional product information, see [www.swagelok.com](http://www.swagelok.com).

Translations available on [www.swagelok.com](http://www.swagelok.com).