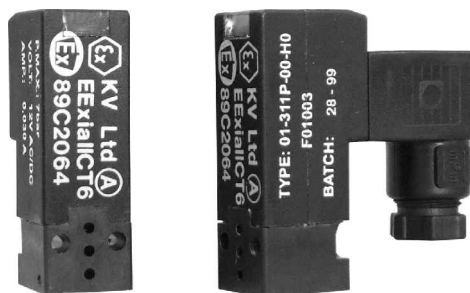




E Ex ia IIC T6 E Ex ia IIC T4 Intrinsically Safe Valves



Features

- ◆ 3/2 and 5/2 valves as standard
- ◆ Approved to international standards for use in hazardous environments - Zone 0, 1 and 2
- ◆ Sub-base mounted and body ported valves
- ◆ Manifold options

Materials for Pilot Solenoid Valve

Body:	Ryton®-PPS
Plunger:	Stainless Steel 303
Springs:	Stainless Steel 430F
Seals:	NBR
Mounting:	Factory assembled to relevant spool valve body - see pneumatic valve section

Technical Specifications

Voltage options:	DC 12V, AC 12V
Voltage tolerance:	-10% to +25%
Power:	DC 0.55W AC 46mA
Frequency:	AC 50/60Hz
Cycles per minute:	2000 cpm max
Duty cycle:	100%
Temperature range:	- 10°C to + 40°C (ambient) for T6 surface temperature rating - 10°C to + 60°C (ambient) for T4 surface temperature rating

Insulation class:	F (155°C)
Protection:	IP 6 5
Electrical apparatus code:	CENELEC E Ex ia IIC T6 CENELEC E Ex ia IIC T4
Connection socket:	PG7
Manual override:	Standard
LED indicator:	Standard

Ordering Information:
Consult Technical Sales

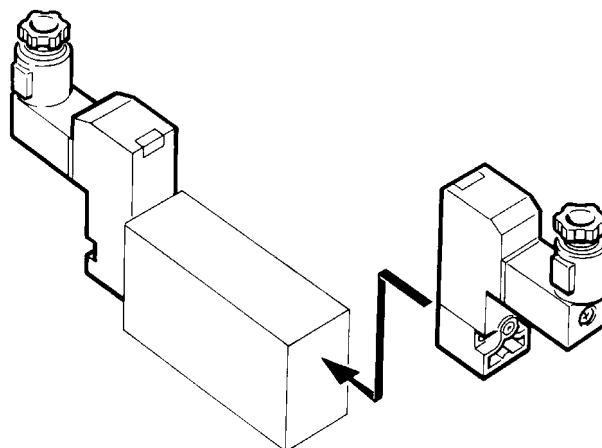
Description

These special CENELEC approved solenoid pilot valves can be factory assembled to a variety of KV spool valves.

This enables the spool valve/pilot valve assembly to be used in designated hazardous environments.

For specific pneumatic valve data refer to pneumatic valve section of this catalogue.

For more detailed product information consult KV technical sales.



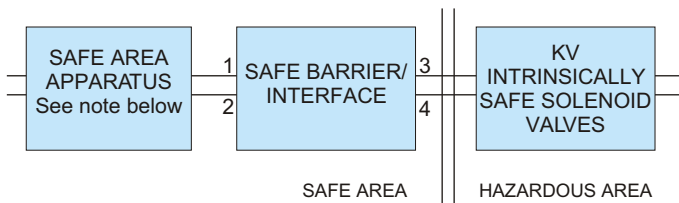
Intrinsically safe pilot solenoid operator - Ex ia

Intrinsic safety: ia

The design principle of intrinsically safe circuits is to control the electrical energy to a level below that required to ignite the hazard.

To achieve this a **Safety Barrier/Interface** is required in the safe area with **all** electrical connections to the hazardous area being made through this Barrier/Interface.

Intrinsically safe system principle



Safe area apparatus

This is unspecified except that it must not be supplied from, or contain, under normal and abnormal conditions, a source of potential with respect to earth in excess of 250 volts RMS or 250 volts DC.

Safety interface

The safety interface is designed to maintain the integral safety of the hazardous area under both normal and fault conditions and must be specified to drive the Hazardous Area Apparatus.

The pilot solenoid operator contains a CENELEC apparatus code explained below.

CENELEC electrical apparatus code for intrinsically safe solenoid valves from KV Certificate number Ex 89C2064

- E** = European certified
- Ex** = Explosion protected apparatus
- ia** = Method of protection
Intrinsically safe, Zone 0
- II** = Surface industry
- C** = Gas group
Hydrogen, Most Severe Hazard
- T6** = Temperature class
85°C, Most Severe Hazard

The CENELEC apparatus code designates the units suitable for use in hazardous areas, zones 0, 1 and 2, when used with appropriate safety interface.

For full technical details and applications advice please consult KV technical centre.

Attention

All KV# Ex intrinsically safe solenoid valves require a safety interface device.

Zone	Method of protection	Code letter
0	Intrinsic safety 'a' (2 faults)	ia
1	Any method of protection suitable for Zone 0 and the following:	
	Encapsulation	*m
	Increased safety	*e
	Flameproof	d
	Intrinsic safety 'b' (1 fault)	ib
	Special protection	p
2	Any method of protection suitable for Zone 0 or 1 and the following:	
	N-type	n
	Oil filled	o
	Sand filled	q
* Methods of protection offered through KV Ltd Solenoid valves		