### **Features**

- 1-channel
- · DIN rail mount module
- For 30 V IS or Non-IS applications
- · Protects field or control circuit inputs
- Max. surge current (8/20) 20 kA
- Provides 500 V DC of isolation
- Uninterruptable operation (auto reset)

## **Function**

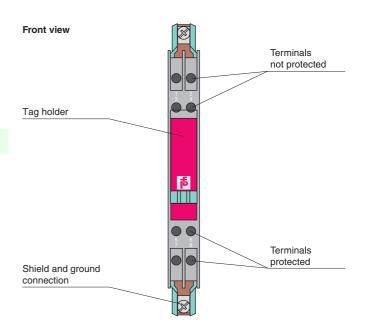
This Surge Protection Barrier limits induced transients of different origin (e. g. lightning stroke, switching impulse, etc.). This is achieved by diverting the transient current to ground and limiting the signal line voltage to a safe level for the duration of the surge.

This barrier provides low 45 V line-to-line and 500 V line-to-ground clamping voltage for the protected instruments. It also protects instruments that have more than 500 V isolation-to-ground, such as intrinsic safety isolated barriers, signal conditioners and most field instruments.

For additional information, refer to the manual and www.pepperl-fuchs.com.

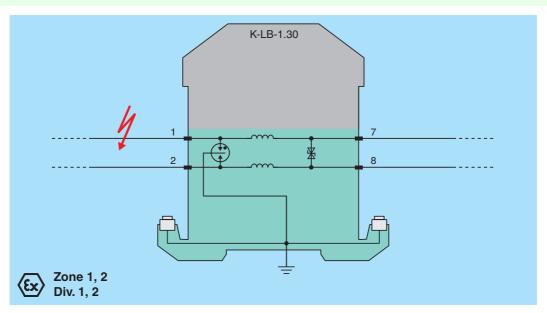
**Note:** Surge Protection Barriers must always be connected to a solid and effective ground and be at the same equipotential level as the instrument it is protecting. The ground system must comply with all applicable regulations.

## **Assembly**





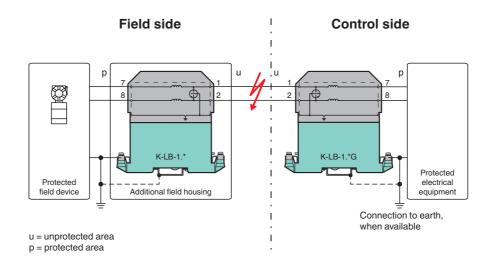
#### Connection

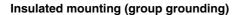


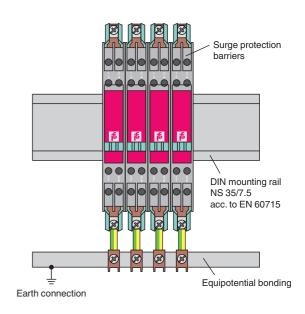
www.pepperl-fuchs.com

Supply		
Connection		protected area: terminals 7, 8
		unprotected area: terminals 1, 2
Rated voltage	Un	≤ 30 V
Rated current	I <sub>n</sub>	≤ 250 mA
Leakage current		≤5 µA
On-state voltage		≤ 45 V
Ground insulation		500 V breakdown voltage
Electrical specifications		
Nominal discharge current (8/20) I <sub>n</sub>		10 kA per core, 5 kA per core (10x)
Max. surge current (8/20)	I <sub>max</sub>	20 kA per core, 10 kA per core (1x)
Conformity		
Degree of protection		IEC 60529
Ambient conditions		
Ambient temperature		-30 80 °C (-22 176 °F) for Ex application, please observe EC-Type Examination Certificate
Mechanical specifications		
Degree of protection		IP20
Mass		approx. 100 g
Dimensions		12.5 x 114 x 110 mm (0.5 x 4.5 x 4.3 in)
Data for application in connection with Ex-areas		
EC-Type Examination Certificate		PTB 00 ATEX 2176X, for additional certificates see www.pepperl-fuchs.com
Group, category, type of protection, temperature class		⟨x⟩ II 2(1)G Ex ia IIC T6
Temperature class		T6 for ambient temperature ≤ 50 °C T5 for ambient temperature ≤ 70 °C T4 for ambient temperature ≤ 80 °C
Voltage	U <sub>i</sub>	30 V
Current	I <sub>i</sub>	250 mA
Nominal response time		
Symmetrical		1 ns
Asymmetric		100 ns
Series resistance		$\leq$ 0.3 $\Omega$ per conductor
Bandwidth		≥ 40 kHz
Directive conformity		
Directive 94/9/EC		EN 60079-0:2006, EN 60079-11:2007
International approvals		
CSA approval		
Control drawing		116-0187 (cCSAus)
IECEx approval		IECEx BAS 14.0010X
General information		
Supplementary information		EC-Type Examination Certificate, Statement of Conformity, Declaration of Conformity, Attestation of Conformity and instructions have to be observed where applicable. For information see www.pepperlfuchs.com.

# **Topology**







Insulated mounting (individual grounding)