

9001/02-016-150-111 Art. No. 158685



- For the intrinsically safe operation of a wide range of devices, such as HART transmitters, solenoid valves, sensors, zero-potential contacts and many more
- Compact, space-saving devices that are easy to install on a DIN rail
- Quick to install as barriers can be simultaneously snapped onto rail and connected to PE

WebCode **9001A**



The 9001 series INTRINSPAK single-channel safety barriers enable the intrinsically safe operation of virtually all field devices. The comprehensive portfolio and the combination of safety barriers cover a wide variety of signals. The devices are incredibly robust and require little space. The back-up fuse is a convenient feature as it is standardised for all variants.

Technical Data

Explosion Protection

Application range (zones)	2 22
Ex interface zone	0 1 2 20 21 22
Certificate IECEX Gas	IECEX PTB 09.0001X
Certificate ATEX Gas	PTB 01 ATEX 2088 X
Certificate IECEX Dust	IECEX PTB 09.0001X
Certificate ATEX Dust	PTB 01 ATEX 2088 X
Gas explosion protection IECEX	Ex nA [ia Ga] IIC/IIB T4 Gc
Gas explosion protection ATEX	Ex II 3 (1) G Ex nA [ia Ga] IIC/IIB T4 Gc
Dust explosion protection IECEX	[Ex ia Da] IIIC
Dust explosion protection ATEX	Ex II (1) D [Ex ia Da] IIIC
Certificates	ATEX (PTB), Brazil (ULB), Canada (CSA), EAC (STV), IECEX (PTB), Korea (KGS), USA (FM), USA (UL)
EAC certificate	TS RU S-DE.GB04.B.00132
Installation	in Zone 2, Division 2 and in safe area

Safety Data

Max. voltage U_o	1.6 V
Max. current I_o	150 mA
Max. power P_o	60 mW
Max. permissible external capacitance C_o for IIC	100 μ F
Max. permissible external capacitance C_o for IIB	1000 μ F

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Safety Data

Max. permissible external inductance L_o for IIC	1.3 mH
Max. permissible external inductance L_o for IIB	7 mH
Further information	see respective certificate and operating instructions

Electrical Data

Number of channels	1
DC rated operational voltage	0.7 V
Power supply	Controlled, nominal voltage
Nominal voltage	$\pm 0,7$ V
Maximum resistance R_{max}	20.1 Ω
Minimum resistance R_{min}	19.9 Ω
Maximum output current I_{max}	35 mA
Potential	Alternative potential
Ohm.curr.lim.usingfreq.>= 50mA	≤ 100 kHz
Ohm.curr.lim.usingfreq<= 50 mA	≤ 50 kHz
Ileak leakage current for U_n	≤ 10 μ A

Ambient Conditions

Min. ambient temperature	-20 °C
Max. ambient temperature	+60 °C
Ambient temperature	-20 °C ... +60 °C
Min. storage temperature	-20 °C
Max. storage temperature	+75 °C
Storage temperature	-20 °C ... +75 °C
Maximum relative humidity	95% on av., no condensation
Temperature influence	$\leq 0,25$ %/10K

Mechanical Data

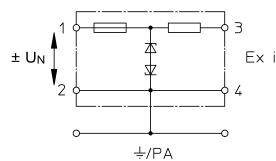
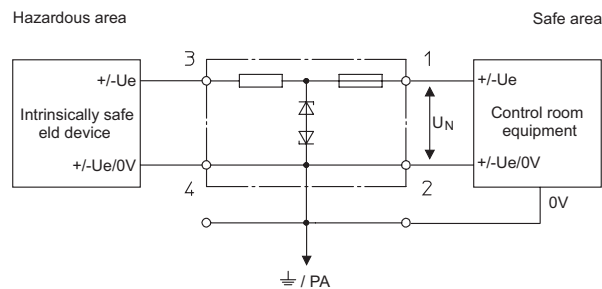
Degree of protection (IP)	IP40
Type of protection note	according to IEC 60529
Degree of protection (IP) Terminals	IP20
Enclosure material	Polyamide 6GF
Number of connection terminals	4
Max. clamping range	1.5 mm ²
Connection cross-section	4 mm ²
Type of connection cable	Finely stranded Solid
Width	103 mm
Length	12 mm
Mounting depth	72 mm
Weight	0.11 kg

Mounting / Installation

Connection type	2 PA
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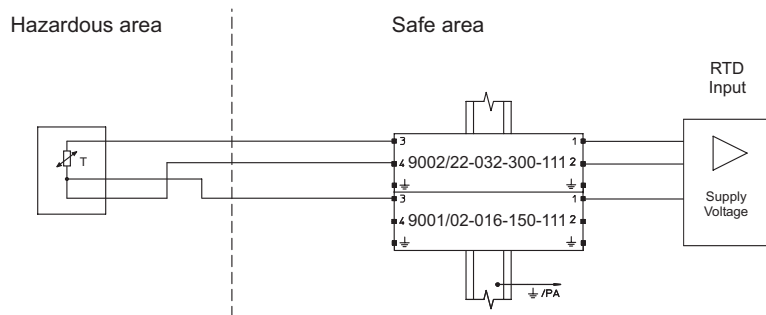
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Technical Drawings



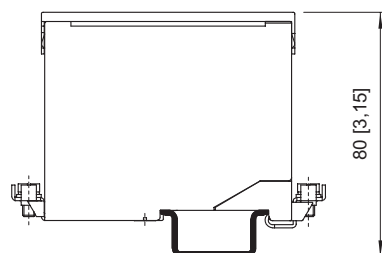
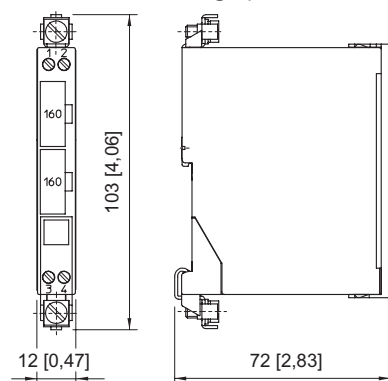
Picture F

Single-Channel Safety Barriers for Alternating Polarity

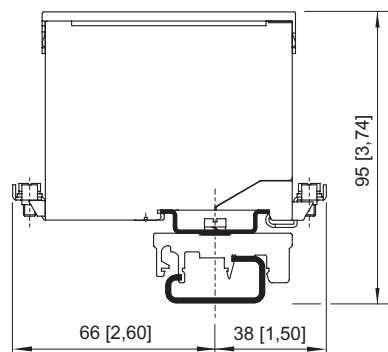


Application: Pt100, 3-wire circuit field circuit unearthed

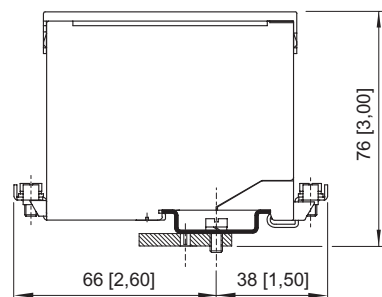
Dimensional Drawings (All Dimensions in mm [inches]) – Subject to Alterations



Mounting on DIN rail NS 35/15



Mounting on DIN rail NS 32 by means of adaptor and mounting attachment, moulded plastic



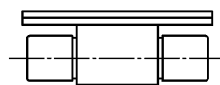
Mounting on mounting plate by means of adaptor

Accessories and Spare Parts

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Back-up fuse

Art. No.



For all safety barriers Series 9001, 9002 and 9004
unit: 5 pcs.

158964

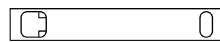
Holder for label

Art. No.



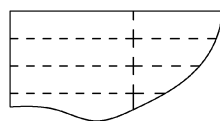
Transparent cover for labelling

158977



Labelling paper

Art. No.



Perforated, for typing
Format: DIN A4
Packaging unit: 80 pieces

158973

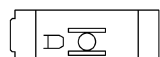
Adaptor

Art. No.



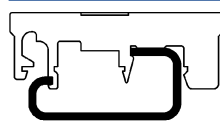
Adaptor allows installation of a safety barrier Series 900x on a mounting plate of a previous series.

158826



Mounting attachment moulded plastic

Art. No.

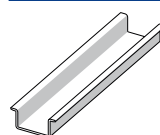


Enables mounting of safety barrier on a G-rail.

165283

DIN rail

Art. No.

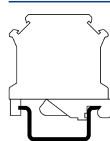


NS35/15 (meter length)

103714

Earth terminal

Art. No.



USLKG 5 (wire range 4 mm²)
Terminal enables connection of protective conductors to DIN rail. Colour green-yellow.

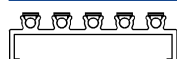
112760

USLKG 6 N (wire range 6 mm²)
Terminal enables connection of protective / earthing conductors to DIN rail. Colour green-yellow.

112599

Fuse holder

Art. No.



Fuse holder is snapped onto the side of the safety barrier and can be equipped with up to 5 back-up fuses (replacement).

158834



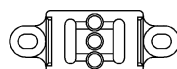
Insulating stand off

Art. No.



Suitable for DIN rail NS35/15, allows electrically insulated mounting of DIN rail from mounting plate.

158828



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We reserve the right to make alterations to the technical data, dimensions, weights, designs and products available without notice. The illustrations cannot be considered binding.