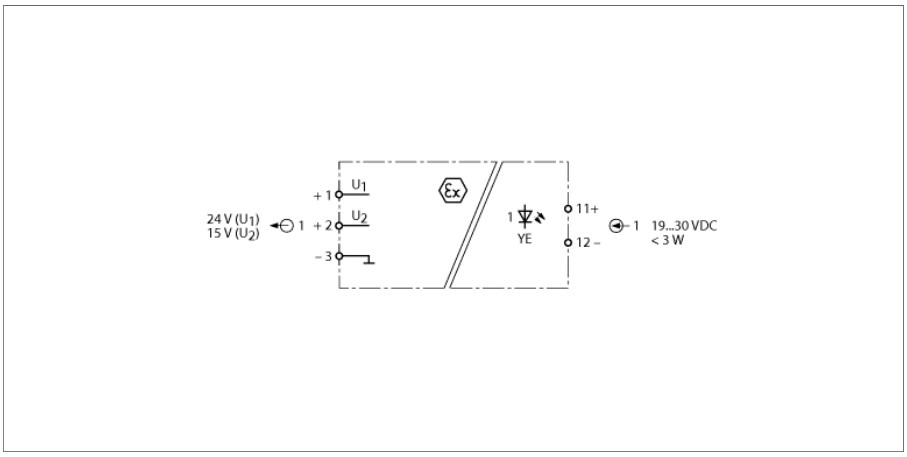
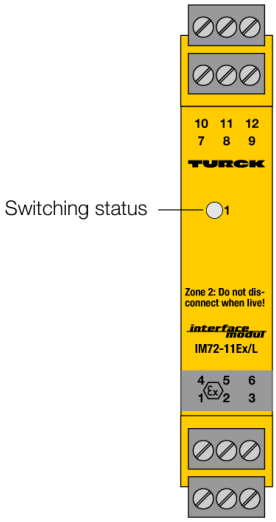
Solenoid Driver
1-channel
IM72-11EX/L





The IM72-11EX/L solenoid driver provides an intrinsically safe output voltage limited in current and voltage. Loads in the Ex area can thus be supplied directly.

Within the area of applicability of the European directive 2014/34/EU (ATEX) it is permitted to operate connected loads in potentially explosive atmospheres caused by dust or gas, provided they comply with the applicable regulations.

Typical applications are the control of Ex i pilot valves as well as the supply of displays and transmitters. The output values of the two connections U1 and U2 per channel differ in terms of their no-load voltage and are adapted to the valves of different manufacturers (see output curve on next page).

The loads are actuated by applying the operating voltage.

A yellow LED indicates the switching state of the associated output.

- Voltage input max. 30 VDC
- Voltage outuput 15 VDC resp. 24 VDC
- Output current ≤ 40 mA
- Switching frequency ≤ 500 Hz
- SIL3
- Removable terminal blocks
- Galvanic isolation between input circuits and output circuits
- ATEX, IECEx, UL, $_{c}$FM$_{us}$ TR CU,NEPSI, INMETRO, Kosha
- Installation in zone 2

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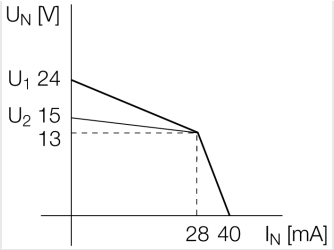
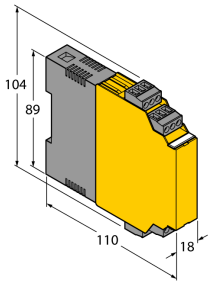
Type	IM72-11EX/L
ID	7520703
Nominal voltage	24 VDC loop-powered
Power consumption	≤ 1.5 W
Power dissipation, typical	≤ 0.75 W
0-signal	0…5 VDC
1-signal	19…30 VDC
Voltage input	Max. 30 VDC
Input current	45 mA
Input delay	≤ 2 ms
Output circuits	
Output circuits	intrinsically safe acc. to EN 60079
Output current	40 mA
Output voltage	U1 = 24 V
Output voltage	U2 = 15 V
Output curve	
Response characteristic	
Limit frequency	≤ 500 Hz
Galvanic isolation	
Test voltage	2.5 kV RMS
Important note	For Ex-applications the values specified in the corresponding Ex certificates (ATEX, IECEx, UL, etc.) apply.
Ex approval acc. to conformity certificate	TÜV 05 ATEX 2846 X
Application area	II (1) GD
Ignition protection category	[EEx ia] IIC
Ex approval acc. to conformity certificate	TÜV 06 ATEX 553388 X
Application area	II 3 G
Ignition protection type	Ex nA [nL] IIC/IIB T4
Characteristic	trapezoidal
Characteristic	trapezoidal
Important note	If the device is used in applications to achieve functional safety according to IEC 61508, the safety manual must be used. Information in the data sheet are not valid for functional safety.
Approval	SIL 3 acc. to EXIDA FMEDA
Use in SIL safety circuits	SIL 3 acc. to IEC 61508
Displays/Operating elements	
Switching state	Yellow

Dimensions



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Mechanical data	
Protection class	IP20
Flammability class acc. to UL 94	V-0
Ambient temperature	-25…+70 °C
	-25 ... +60 °C für UL, FM
Storage temperature	-40…+80 °C
Dimensions	104 x 18 x 110 mm
Weight	137 g
Mounting instructions	DIN rail (NS35) or panel
Housing material	Plastic, Polycarbonate/ABS
Electrical connection	4 × 3-pin removable terminal blocks, reverse polarity protected, screw terminal
Terminal cross-section	1 × 2.5 mm²/2 × 1.5 mm²
Tightening torque	0.5 Nm

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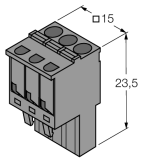
Accessories

Type code	Ident no.		Dimension drawing
IM-CC-3X2BU/2BK	6900475	Cage clamp terminals for IM modules (Ex-devices with 18 mm overall width); includes: 2 pcs. 3-pin blue terminals and 2 pcs. 3-pin black terminals.	

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