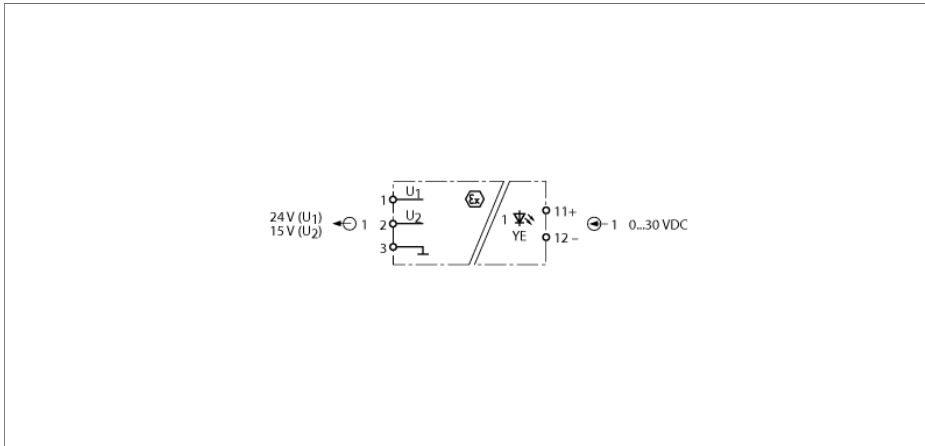


**Valve control module  
1-channel  
IM72-11EX/L**



The solenoid drivers of series IM72-11EX/L feature an intrinsically safe output with limited current and voltage. Thus making direct connection to loads in the Ex-area possible.

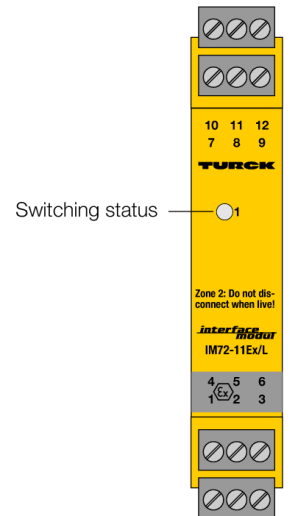
Within the area of applicability of the European directive 94/9/EC (ATEX) it is permitted to operate connected loads in potentially explosive atmospheres caused by dust or gas, provided they comply with the applicable regulations.

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 differ with respect to the no-load voltage indication (see output curve on next page) and are adapted to the valves of different manufacturers.

The loads can be controlled when power is applied.

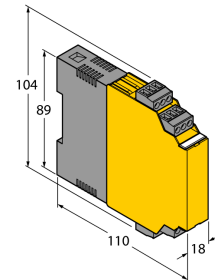
The switching status of the output is indicated by a yellow LED.

- Intrinsically safe output circuits EEx ia
- Application area acc. to ATEX: II (1) GD; II 3 G
- Installation in zone 2
- Voltage input max. 30 VDC
- Voltage output 15 VDC resp. 24 VDC
- Output current  $\leq 40$  mA
- Switching frequency  $\leq 500$  Hz
- SIL3
- Removable terminal blocks
- Galvanic separation of input and output circuit

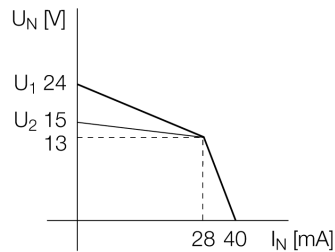


**Valve control module  
1-channel  
IM72-11EX/L**

**Dimensions**



<b>Type code</b>	IM72-11EX/L
Ident no.	7520703
<b>Nominal voltage</b>	Loop-powered
Power consumption	≤ 1.5 W
<b>0-signal</b>	0...5 VDC
1-signal	19...30 VDC
Current	40 mA
Voltage input	max. 30 VDC
Current input	45 mA
Input delay	≤ 2 ms
<b>Output circuits</b>	
Output circuits	intrinsically safe acc. to EN 60079
Output current	40 mA
Output voltage	U1=24 V
Output voltage	U2=15 V
Output curve	
<b>Limit frequency</b>	≤ 500 Hz
<b>Galvanic separation</b>	
Test voltage	2.5 kV



**Valve control module  
1-channel  
IM72-11EX/L**

<b>Ex approval acc. to conformity certificate</b>	TÜV 05 ATEX 2846 X															
Application area	II (1) GD															
Protection type	[EEx ia] IIC															
Max. output voltage $U_o$	≤ 27 V															
Max. output current $I_o$	≤ 96 mA															
Max. output power $P_o$	≤ 678 mW															
Rated voltage	250 V															
Characteristic	Trapezoidal															
Internal inductance/capacitance L/C,	negligibly small															
External inductance/capacitance L <sub>e</sub> /C <sub>e</sub> ,																
	<table border="1"> <thead> <tr> <th>EEx ia</th> <th colspan="2">IIC</th> <th colspan="2">IIB</th> </tr> </thead> <tbody> <tr> <td>Lo [mH]</td> <td>0.68</td> <td>0.5</td> <td>13</td> <td>2</td> </tr> <tr> <td>Co [nF]</td> <td>62</td> <td>70</td> <td>260</td> <td>300</td> </tr> </tbody> </table>	EEx ia	IIC		IIB		Lo [mH]	0.68	0.5	13	2	Co [nF]	62	70	260	300
EEx ia	IIC		IIB													
Lo [mH]	0.68	0.5	13	2												
Co [nF]	62	70	260	300												
Max. output voltage $U_o$	≤ 17.6 V															
Max. output current $I_o$	≤ 96 mA															
Max. output power $P_o$	≤ 678 mW															
Characteristic	trapezoidal															
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Co [μF]	0.13	0.15	0.47	1.1												
<b>Ex approval acc. to conformity certificate</b>	TÜV 06 ATEX 553388 X															
Application area	II 3 G															
Protection type	Ex nA [nL] IIC/IIB T4															
max. Output voltage $U_o$	≤ 27 V															
max. Output current $I_o$	≤ 96 mA															
max. Output power $P_o$	≤ 678 mW															
Characteristic	Trapezoidal															
Innere Induktivität/Kapazität Li/Ci	negligibly small															
External inductance/capacitance Lo/Co																
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Lo [mH]	1.2	0.5	13	2.0												
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<b>Approval</b>	SIL 3															
MTTF	300 years acc. to SN 29500 (Ed. 99) 40 °C															
<b>Indication</b>																
Switching state	yellow															
<b>Protection class</b>	IP20															
Ambient temperature	-25...+70 °C															
Storage temperature	-40...+80°C															
Dimensions	104x 18x 110 mm															
Weight	127 g															
Mounting instruction	For mounting on DIN rail or mounting panel															
Housing material	Polycarbonate/ABS															
Electrical connection	4 x 3-pole removable terminal blocks, reverse polarity protected, screw connection															
Terminal cross-section	1 x 2.5 mm <sup>2</sup> / 2 x 1.5 mm <sup>2</sup>															
Tightening torque	0.5 Nm															

**Accessories**

Type code	Ident no.	Description	Dimension drawing
IM-CC-3X2BU/2BK	6900475	Cage clamp terminals for IM modules (Ex devices; width 18 mm); 2 blue/2 black, 3-pin, included in delivery.	