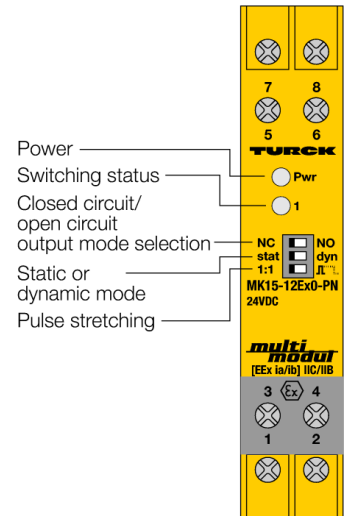
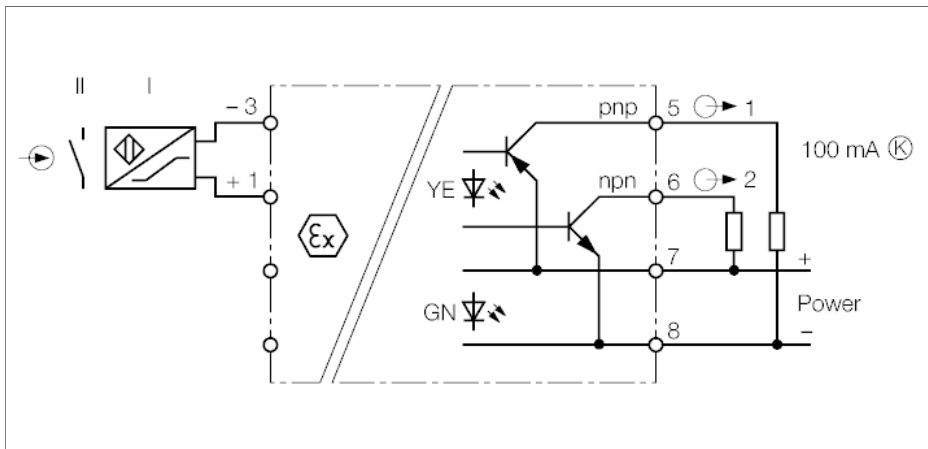


**Isolating switching amplifier
single-channel
MK15-12EX0-PN/24VDC**



The isolating switching amplifier type MK15-12Ex0-PN/24VDC is a 1-channel special coupler which is particularly suited to transfer high pulse rates (e.g. turbine rotor monitoring).

Sensors according to EN 60947-5-6 (NAMUR), variable resistances or potential-free contactors can be connected to the device.

The isolating switching amplifier features a pnp/npn transistor output.

The functions output performance (NO/NC mode), pulse stretching and input pulse processing (static or dynamic) are adjusted via three front panel switches. If the pulse stretching function is active the output pulse is stretched to 10ms.

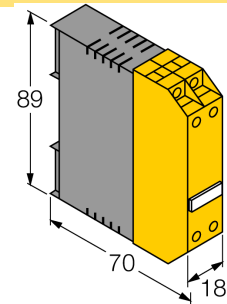
In static pulse processing mode NAMUR switching thresholds of 0...5 kHz are monitored. Dynamic pulse processing should be activated if there are sinusoidal or rectangular input signals, the switching thresholds of which do not accord to the absolute values of the NAMUR standard. A signal shift (current shift) of approx. 0.5 mA in an operating range of 1.5...3.5 mA will trigger the output to switch.

The green LED indicates operational readiness. The yellow LED indicates the switching status of the output (LED illuminated - transistor conducting).

- Intrinsically safe input circuits EEx ia
- Application area according to ATEX : II (1) GD
- Static and dynamic pulse processing
- Two transistor outputs, PNP or NPN, short-circuit proof
- Galvanically separated input and output circuits

**Isolating switching amplifier
single-channel
MK15-12EX0-PN/24VDC**

Dimensions



Type	MK15-12EX0-PN/24VDC															
Ident-No.	7541316															
Nominal voltage	24 VDC															
Operating voltage range	10...30 VDC															
Power consumption	≤ 0.5 W															
NAMUR	EN-60947-5-6															
No-load voltage	8.2 VDC															
Short-circuit current	8.2 mA															
Input resistance	1 kΩ															
Cable resistance	≤ 50 Ω															
Switch-on threshold:	1.55 mA															
Switch-off threshold:	1.75 mA															
Wire breakage threshold	≤ 0.1 mA															
Short-circuit threshold	≥ 6 mA															
Switching frequency	≤ 5000 Hz															
Voltage drop	≤ 2.5 V															
Semiconductor output circuit(s)																
Output circuits (digital)	2 x transistors (1 x pnp and 1 x npn, short-circuit protected)															
Switching voltage	≤ 30 VDC															
Switching current per output	≤ 100 mA															
Switching frequency	≤ 5000 Hz															
Ex approval acc. to conformity certificate	TÜV 03 ATEX 2121															
Application area	II (1/2) GD															
Protection type	[EEx ia] IIC															
Max. output voltage U _o	≤ 11.3 V															
Max. output current I _o	≤ 14 mA															
Max. output power P _o	≤ 39 mW															
Rated voltage	250 V															
Characteristic	linear															
External inductance/capacitance L _o /C _o	<table border="1"> <thead> <tr> <th></th> <th colspan="3">EEx ia IIC</th> <th>EEx ia IIB</th> </tr> </thead> <tbody> <tr> <td>Lo [mH]</td> <td>1,0</td> <td>2,0</td> <td>5,0</td> <td>5,0</td> </tr> <tr> <td>Co [nF]</td> <td>610</td> <td>520</td> <td>430</td> <td>2400</td> </tr> </tbody> </table>		EEx ia IIC			EEx ia IIB	Lo [mH]	1,0	2,0	5,0	5,0	Co [nF]	610	520	430	2400
	EEx ia IIC			EEx ia IIB												
Lo [mH]	1,0	2,0	5,0	5,0												
Co [nF]	610	520	430	2400												
Indication																
Operational readiness	green															
Switching state	yellow															
Mechanical Data																
Protection class	IP20															
Ambient temperature	-25...+70 °C															
Storage temperature	-40...+80 °C															
Dimensions	89 x 18 x 70 mm															
Weight	95 g															
Mounting instruction	Mounting on DIN rail or mounting panel															
Housing material	Polycarbonate/ABS															
Electrical connection	4 x 2-pole flat terminals with self-lifting pressure plates															
Terminal cross-section	1 x 2.5 mm ² / 2 x 1.5 mm ²															