

PULSE ISOLATOR



- 2 channels - 2 or 4 outputs
- Dual output
- 5-port 3.75 kVAC galvanic isolation
- Cable error detection
- Universal AC or DC supply



Application:

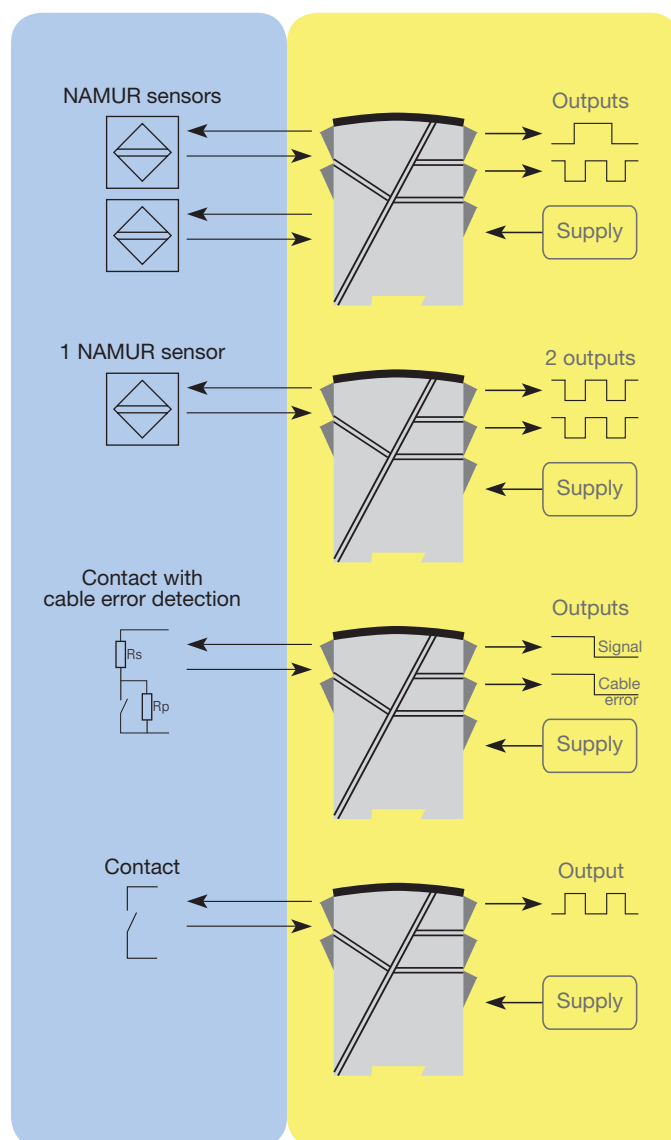
- Pulse isolator with safety barrier for the supply of NAMUR sensors installed in the hazardous area.
- Pulse isolator with safety barrier for the detection of mechanical contacts installed in the hazardous area.
- One input signal can be used on two separate outputs.
- A cable error alarm can be detected on a separate output.

Technical characteristics:

- PR5202B1 and 5202B2 have relays with change-over contacts or open NPN collectors available in the safe area.
- PR5202B4 has 4 SPST relays, which are activated simultaneously two and two, available in the safe area. Each relay can be programmed to the function N.O. or N.C.
- Inputs, outputs and supply are floating and galvanically separated.
- 5202B is designed according to strict safety requirements and is thus suitable for application in SIL 2 installations.

Mounting / installation:

- Mounted vertically or horizontally on a DIN rail. Up to 84 channels per metre can be mounted.



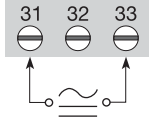
Order: 5202B

Type	Output
5202B	Open collector NPN : 1
	2 x 1 Relay : 2
	2 x 2 Relays : 4

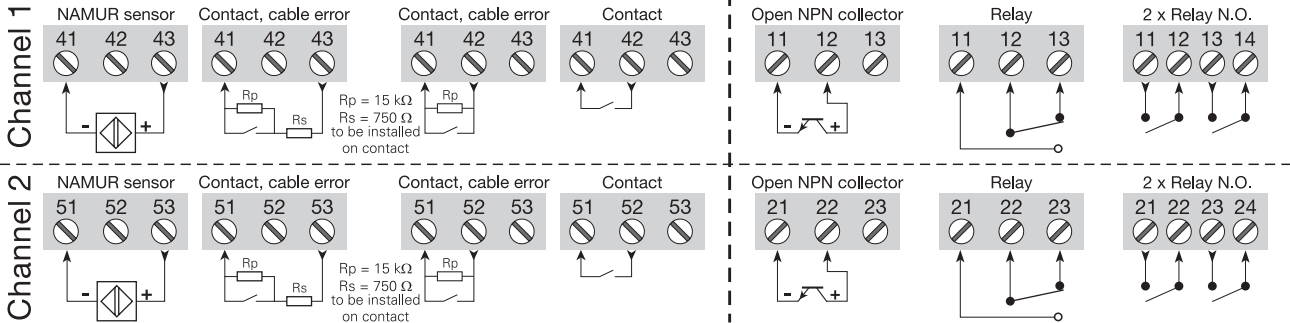
Connections:

All connection options are shown in the user manual.

Supply:



Inputs:



Outputs:

Electrical specifications:

Specifications range:

-20 to +60°C

Common specifications:

- Supply voltage, universal 21.6...253 VAC, 50...60 Hz
19.2...300 VDC
- Internal consumption, 5202B1 and 5202B2 ≤ 1.5 W (2 channels)
- Max. consumption, 5202B1 and 5202B2 ≤ 1.5 W (2 channels)
- Internal consumption, 5202B4 ≤ 2.0 W (2 channels)
- Max. consumption, 5202B4 ≤ 2.0 W (2 channels)
- Fuse 400 mA SB / 250 VAC
- Isolation voltage, test / operation 3.75 kVAC / 250 VAC
- Calibration temperature 20...28°C

EMC immunity influence	< ±0.5%
Extended EMC immunity: NAMUR NE 21, A criterion, burst	< ±1%

Auxiliary voltage:

- NAMUR supply 8 VDC / 8 mA
- Max. wire size 1 x 2.5 mm² stranded wire
- Screw terminal torsion 0.5 Nm
- Relative humidity < 95% RH (non-cond.)
- Dimensions (HxWxD) 109 x 23.5 x 130 mm
- DIN rail type DIN 46277
- Protection degree IP20
- Weight 230 g

Input:

- Sensor types:
- NAMUR acc. to EN 60947-5-6
- Mechanical contact
- Frequency range 0...5 kHz
- Pulse length > 0.1 ms
- Input resistance 1 kΩ
- Trig level, signal < 1.2 mA, > 2.1 mA
- Trig level, cable error < 0.1 mA, > 6.5 mA

Outputs:

Relay outputs:

- Max. frequency 20 Hz
- Max. voltage 250 VRMS
- Max. current 2 A / AC
- Max. AC power 100 VA
- Max. load at 24 VDC 1 A

Open NPN collector outputs:

- Max. frequency 5 kHz
- Pulse length > 0.1 ms
- Load, max. current / voltage 80 mA / 30 VDC
- Voltage drop at 25 mA / 80 mA < 0.75 VDC / < 2.5 VDC

EEx / I.S. approval:

- DEMKO 99ATEX127186 II (1) GD
[EEx ia] IIC
- Applicable for zone 0, 1, 2, 20, 21 or 22

Ex / I.S. data, ATEX:

- Terminal 41...43, (51...53)
- U_m : 250 V
- U_o : 10.6 VDC
- I_o : 13.8 mADC
- P_o : 0.038 W
- L_o : 160 mH
- C_o : 1.9 μF
- UL IS, Cl. I, Div. 1, Gr. A, B, C, D
IS, Cl. I, zone 0 / 1, Gr. IIC
IS, Cl. II, Div. 1, Gr. E, F, G
- UL Control Drawing No. 5202QU01

GOST R approval:

- VNIIFTRI, Cert. No. See homepage

Observed authority requirements: Standard:

- EMC 2004/108/EC EN 61326-1
- LVD 2006/95/EC EN 61010-1
- PELV/SELV IEC 364-4-41
and EN 60742
- ATEX 94/9/EC EN 50014, EN 50020 and
EN 50281-1-1
- UL UL 913, UL 508