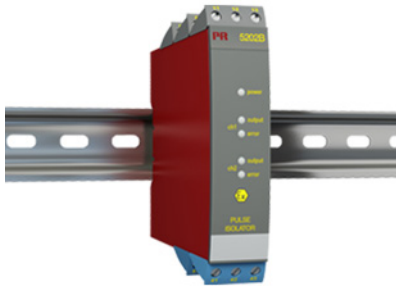


Pulse isolator



5202B

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



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.

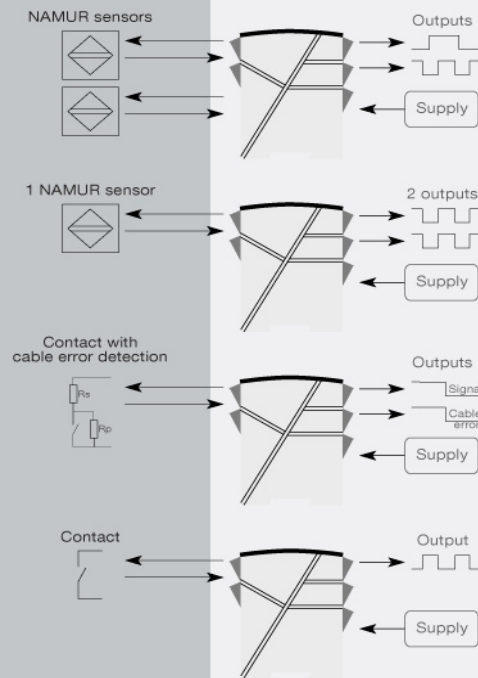
Technical characteristics

- 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 therefore suitable for application in SIL 2 installations.

Mounting / installation

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

Applications



Order:

| Type | Output |
|-------|------------------------|
| 5202B | Open collector NPN : 1 |
| | 2x1 relay : 2 |
| | 2x2 relays : 4 |

Environmental Conditions

| | |
|------------------------------|----------------------|
| Operating temperature..... | -20°C to +60°C |
| Calibration temperature..... | 20...28°C |
| Relative humidity..... | < 95% RH (non-cond.) |
| Protection degree..... | IP20 |

Mechanical specifications

| | |
|----------------------------|---------------------------------------|
| Dimensions (HxWxD)..... | 109 x 23.5 x 130 mm |
| Weight approx..... | 230 g |
| Wire size..... | 1 x 2.5 mm ² stranded wire |
| Screw terminal torque..... | 0.5 Nm |

Common specifications**Supply**

| | |
|---------------------------------|---|
| Supply voltage, universal..... | 21.6...253 VAC, 50...60 Hz or 19.2...300 VDC |
| Fuse..... | 400 mA SB / 250 VAC |
| Max. required power..... | ≤ 1.5 W (2 channels), 5202B1 and 5202B2 |
| Max. required power..... | ≤ 2.0 W (2 channels), 5202B4 |
| Internal power dissipation..... | ≤ 1.5 W (2 channels), 5202B1 and 5202B2 |
| Internal power dissipation..... | ≤ 2.0 W (2 channels), 5202B4 |

Isolation voltage

| | |
|---|---------------------|
| Isolation voltage, test / working..... | 3.75 kVAC / 250 VAC |
| PELV/SELV..... | IEC 61140 |

Auxiliary supplies

| | |
|--|--------------|
| NAMUR supply..... | 8 VDC / 8 mA |
| EMC immunity influence..... | < ±0.5% |
| Extended EMC immunity: NAMUR NE 21, A criterion, burst..... | < ±1% |

Input specifications

| | |
|------------------------------|--|
| Sensor types..... | NAMUR according 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 fault..... | < 0.1 mA, > 6.5 mA |

Output specifications**Relay output**

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

NPN outputs

| | |
|-----------------------------------|----------------|
| Max. switching frequency..... | 5 kHz |
| Min. pulse length..... | > 0.1 ms |
| Max. load, current / voltage..... | 80 mA / 30 VDC |

| | |
|---------------------------------------|------------------------|
| Voltage drop at 25 mA / 80 mA..... | < 0.75 VDC / < 2.5 VDC |
|---------------------------------------|------------------------|

Observed authority requirements

| | |
|----------|------------|
| EMC..... | 2014/30/EU |
| LVD..... | 2014/35/EU |

Approvals

| | |
|----------------------------|---|
| ATEX 2014/34/EU..... | DEMKO 99ATEX127186, II (1) GD [EEx ia] IIC |
| UL..... | UL 913, UL 508 |
| EAC..... | TR-CU 020/2011 |
| EAC Ex TR-CU 012/2011..... | RU C-DK.GB08.V.00410 |