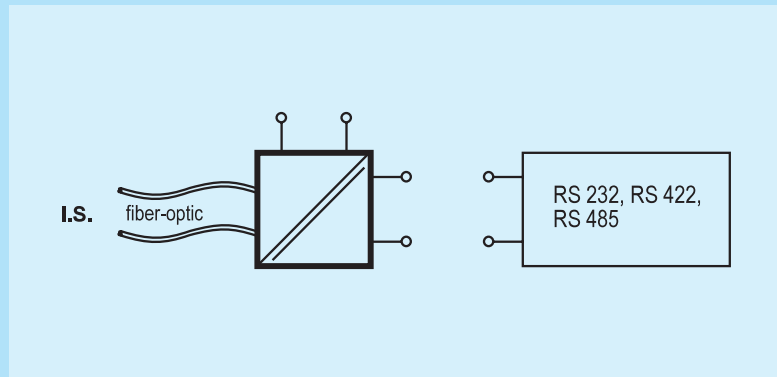


**I.S. Isolators
(DIN Rail Mounting)
Fieldbus Isolating Repeater
(Fiber-Optic)
Type 9372/21**

- Intrinsically safe optical interface EEx ia IIC/IIB
- Electrical interface designed as RS 232 RS 422 and RS 485
- Transmission speed between 1.2 kBit/s and 1.5 MBit/s selectable
- Galvanic isolation between RS 232, RS 422, RS 485 and power supply
- Power supply 18...35 V DC, 24 V AC
- Installation in Zone 2 (Div 2) possible
- EMC tested, CE marking
- Available from 2nd quarter 1999



Basic function: fiber-optic repeater for communication signals.
I.S. isolator for converting RS 232, RS 422 or RS 485 to an intrinsically safe fiber-optic interface.



Selection table	
Version	Ordering code
Fieldbus isolating repeater (fiber-optic)	9372 / 21 - 11 - 10

Safety data for optical interface	
Certifications	PTB (Europe) applied for, USA in preparation
Marking (ATEX)	II (1) G [EEx ib] IIC/IIB
Classification	associated electrical apparatus

Technical data	
Power supply	
Rated voltage U_N	24 V DC, 24 V AC
Voltage range	18 .. 35 V DC
Voltage tolerance	± 15 % AC
Residual ripple within voltage range	5 V_{SS}
Rated current I_N for U_N	50 mA
Max. power consumption	1.4 W
Indication	LED green
Polarity reversal protection	yes

Signal transmission

The communication signal at the intrinsically safe electrical interface is converted into an intrinsically safe optical signal. This optical signal is sent to the receiver via a fiber-optic cable. The receiver converts the optical signal back into an electrical communication signal.

The transmission speed is selectable between 1.2 Bit/s and 1.5 MBit/s.

Electrical interface	
RS 232 to EIA RS-232-C	
Connection	9-way Sub-D connector
Transmission line length	15 m
Transmission speed in kBit/s	1.2; 2.4; 4.8; 9.6; 19.2; 38.4; 57.6
RS 422 to EIA RS-422-A	
Connection	screwed terminals
Termination resistor	can be switched
Transmission line length	depending on transmission speed and cable, see table
Transmission speed in kBit/s	1.2; 2.4; 4.8; 9.6; 19.2; 38.4; 57.6 93.75; 187.5; 375; 500; 1000; 1500 $T \leq (11 \times \text{bit time})$
Transmission enable time TxD RS 422	
RS 485 to EIA RS-485-A	
Connection	9-way Sub-D connector or screwed terminals
Line termination network	can be switched
Transmission line length	depending on transmission speed and cable, see table
Transmission speed in kBit/s	1.2; 2.4; 4.8; 9.6; 19.2; 38.4; 57.6 93.75; 187.5; 375; 500; 1000; 1500 $T \leq (11 \times \text{bit time})$
Turn off time, transmitter RS 485	

Transmission speed	
Transmission speed in Bit/s	Twisted pair \varnothing 0,34 mm ² (EN 50 170) – RS 485
1.2 k - 93.75 k	≤ 1200 m
187.5 k	≤ 1000 m
500 k	≤ 400 m
1.5 M	≤ 200 m

Optical Interface	
Connection	ST® / BFOC (2,5) socket
Transmission line length	≤ 2000 m
Wave length	850 nm
Recommended fiber-optic cables	G 50/125, G 62,5/125, HCS

Dimensions (Casing type F), mechanical data, ambient conditions and accessories see page 3/58f.

