

### **General Information**

The bus connector connects  $\mathsf{PROFIBUS}$  user knots or complete  $\mathsf{PROFIBUS}$  net components to the  $\mathsf{PROFIBUS}$  line.

Each connector has switchable terminating resistors. Dependent of the type of connector, a PD/diagnosis socket as well as a controller with 4 LED indicators are additionally integrated.

Each connector is identified by a label with its hardware-release and included firmware-version:

H/FFF: H:hardware-release FFF: firmware-version → 5/107: release 5, firmware V1.07

## Features

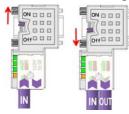
- Cable diagnosis functions via LEDs
- Switchable terminating resistors
- Integrated controller for transfer rates up to 12Mbit/s
- Metal casing with lose-protected "single-screw-mounting"
- Fast connection via insulation cutting clamps

### Diagnosis via LEDs

Switch	PWR	TxD	Term	ERR	Description	
ON/OFF	green	green	green	yellow		
Х	•	х	х	х	Power is OK (+5V ±5%)	
Х	¢	х	х	х	Power is out of +5V ±5%	
Х	\	х	х	¢	Short-circuit of bus wire possible	
Х	х	0	х	х	No bus activity of participant	
Х	х	¢	х	х	Bus activity of participant	
Х	х	•	х	х	Bus activity, RTS (pin 4) of RS485 is not connected	
OFF	х	х	0	х	Termination is switched off	
OFF	х	х	\	х	Internal terminating resistor faulty	
ON	х	х	•	х	Termination is activated	
х	х	х	х	0	No errors detected	
OFF	х	¢	0	•	Bus is not terminated	
OFF	х	0	0	•	Bus is open	

on: ● off: ○ blinking (5Hz): ☆ not relevant: x

# Switchable terminating resistors



The switchable terminating resistors are activated by a slide switch, easily accessible from both sides right and rear.

Class 2, Ta: 0°C\_ +60°C

RoHS

Hereby shutoff of the outgoing bus line is possible. Also for testing purposes the following PROFIBUS components connected via "OUT" can be switched off without removing the connector.

Please make sure to terminate the last participants on the bus at both ends and to connect them to the bus cable via "IN".

# Stripping the cable (tool example)

**Connecting the PROFIBUS cable** 

(3)



(4)



 Measure wire length on template:



- Insert end of cable and push fixing slider as far as it goes
- Rotate stripping tool repeatedly around the cable
- Pull off stripper (in closed state)
- Remove cut-off wire/core
  insulations remainder
- Loosen the screw
- Lift contact-cover
- Insert both wires into the ducts provided (watch for the correct line color as below!)
- Please take care that you do not cause a short circuit between screen and data lines!
- Close the contact cover
- Tighten screw

## Please note: the green line must be connected to A, the red line to B!

Measures in mm:									
0°	45	5°	90°						
			B						
	0°	45°	90°						
A	64	61	66						
В	34	53	40						

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Technical data			
Power supply	DC 4.75 5.25V		
by end device			
Current	10 30mA		
PROFIBUS	SubD-male-9pole		
Plugging cycles jack	min. 200		
Cable diameter	8 mm		
Casing	Zinc-Diecast		
Degree of protection	IP20		
Temperature range	-20°C +75°C		
Fixing screws /	4-40 UNC/		
max. tightening torque	0.4Nm		
Stripping Lengths			
Outside cover/shielding	17mm / 6mm		
Connecting technique	Insulation cutting clamps		
Bus cable	Type A (EN50170)		

#### Note!

С

Starting with release 5 also highly flexible bus cable may be used: Lapp cable order no.: 2170222, 2170822, 2170322.

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