

Profibus-DP Repeater



REP-DP-0002

- Extend Network Length
- Extend Drop Lengths
- Allows More Than 32 Stations on Network
- Isolate Communication Segments

Electrical

- Operating Current: <60 mA

Power Distribution

- Station: Auxiliary power supply (U_B)

Mechanical

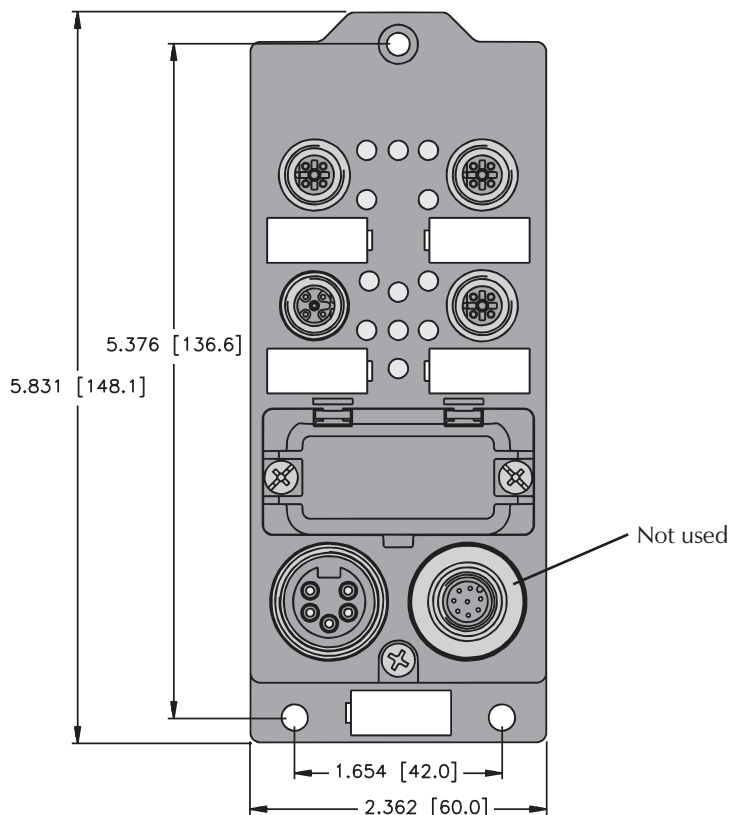
- Operating Temperature: 0 to +55°C (+32 to +131°F)
- Protection: NEMA 1,3,4,12,13 and IEC IP 67
- Vibration: 50 g @ 10-500 Hz

Material

- Connectors: Nickel-plated brass
- Housing: Nylon 6

Diagnostics (Physical)

- LEDs indicate communication status for each segment and power supply



PROFIBUS eurofast® Pinouts

Male	Female
5-Pin	5-Pin

- 1 = 5 VDC*
- 2 = BUS_A
- 3 = Gnd
- 4 = BUS_B
- 5 = Shield
- * Female connector only

minifast® Power Pinouts

Male
5-Pin

- 1 = Gnd
- 2 = Gnd
- 3 = PE
- 4 = U_B
- 5 = NC

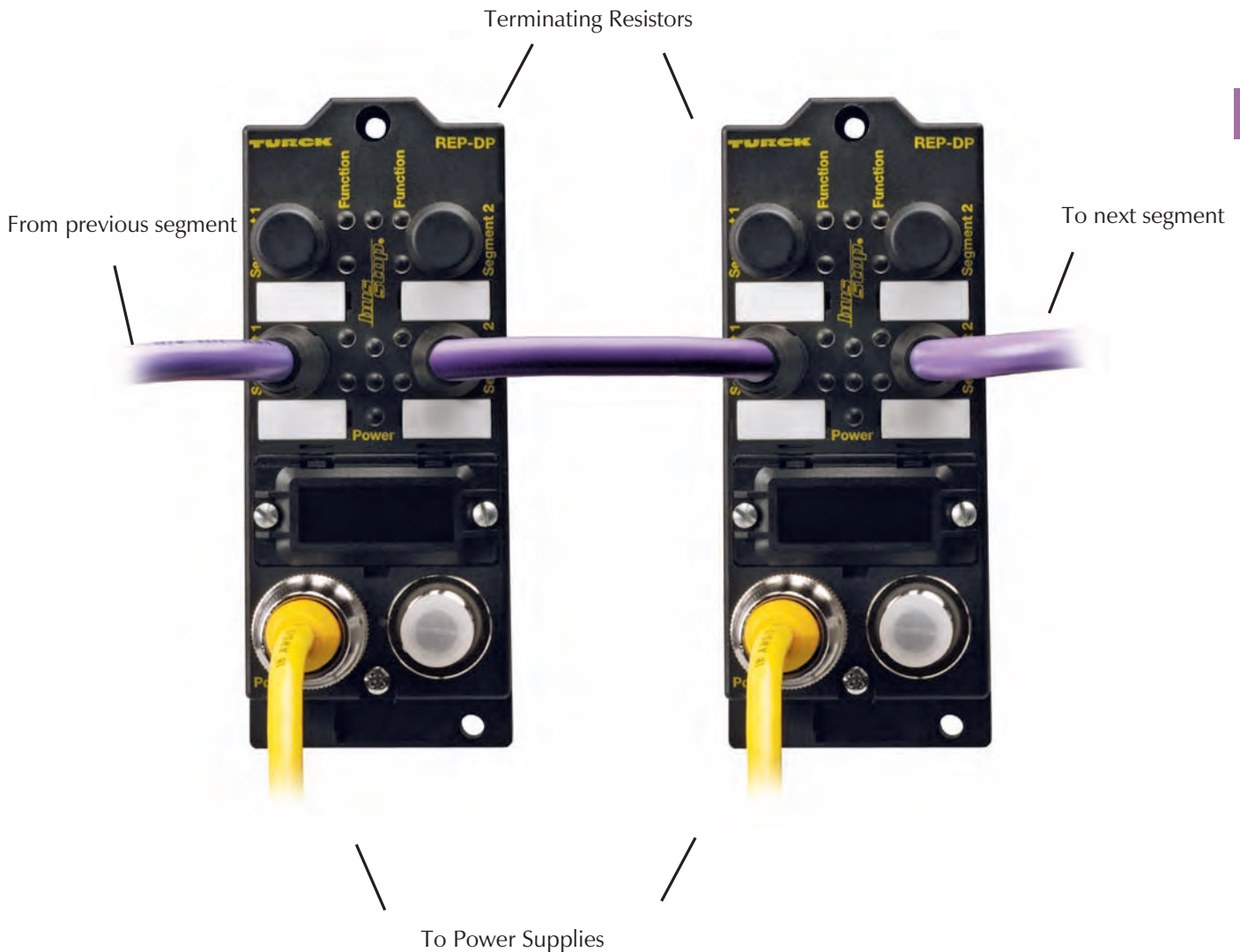
PROFIBUS[®]-DP Repeater

The **REP-DP** repeater serves to assemble two galvanically isolated PROFIBUS-DP segments in RS-485 technology with 32 participants each, and provides IP 67 protection. Up to four repeaters can be connected in series, so that up to 127 nodes can be operated via a single master; thus PROFIBUS networks can be extended significantly by using repeaters (depending on the baud rate).

The transmission rate is detected automatically (up to 12 Mbaud), and the signals are regenerated in amplitude. If there are faulty protocols in one of the segments (a wire-break, short-circuit in the bus line or by a defective node), that segment is decoupled and an error indication is provided by the LED.

Connection:

Individual PROFIBUS segments are connected via M12 connectors (see technical guidelines for PROFIBUS connection technology). The repeater is equipped with three female and one male connector; unused connections must be terminated with a terminating resistor (type: RSSW 45-TR). The shield of the PROFIBUS cable can be grounded directly via a grounding screw (internally the shield is coupled capacitively with the ground). Power (24 VDC) is supplied via standard 7/8 inch connectors.



PROFIBUS-DP