

**Connector pin assignment Profibus-DP Encoder with PNO-Profile Class 2
Design with two-pole screw terminals (45°) and Preset**

General note:

If the encoder is the last station in the profibus line, the DIP switches *S3* and *S4* for the profibus terminator (switching-on of the terminal resistance) must be switched on. Otherwise they must be switched off. At the add-on connection of the terminal resistance the signals Profibus DataA_OUT and DataB_OUT are switched off, following bus stations aren't recognized by the master therefore any more.

The profibus also works when the encoder is removed. Is the encoder the last station in the profibus line, the reference potential of the terminator resistances is missing!

In order to enable a separate wiring of incoming and outgoing signals the profibus terminals and the terminals for the supply voltage have two connection possibilities.

TR-Electronic recommends for the operation to use only bus cables certified by the Profibus User Organization (PNO).

With the BCD address switches *S1* (10^1) and *S2* (10^0) the station address for the profibus is set from 3 to 99.

Print clamps:

2-pole, connection angle 45°, grid spacing 5 mm, screw M 2,6 x 5,3 mm, drilling \varnothing 1,3 mm, nominal cross-section 1,5 mm², connection up to 2,5 mm² (fixed or flexible), nominal voltage 250 V, rated current 15 A, according to VDE 0100.

Explanation of terms:

US: Supply voltage, 11-27 V DC
US-input: 1-level > +8V, 0-level < +2V, up to \pm 35V, 5 kOhm

X1 - screw clamp, 2-pin

Pin 1 US-input for Preset 2
Pin 2 US-input for Preset 1

X2 - screw clamp, 2-pin

Pin 1 Profibus DataA_IN
Pin 2 Profibus DataB_IN

X3 - screw clamp, 2-pin

Pin 1 US, supply voltage
Pin 2 GND, supply voltage 0 V

X4 - screw clamp, 2-pin

Pin 1 US, supply voltage
Pin 2 GND, supply voltage 0 V

X5 - screw clamp, 2-pin

Pin 1 Profibus DataA_OUT
Pin 2 Profibus DataB_OUT

