

Signal Conditioner MUW Connecting Instructions

1. Preparing the connecting cable

We recommend using 3- or 4-wire twisted cable (0,25 mm² ≈ AWG 24) with braided shielding and an outside diameter of 4 to 10 mm (0,16 to 0,4 in). Release the plastic screw of the conduit gland from the connector box and push it over the end of the cable with the plain washer and the gland inset. Strip 30 mm of the cable sheathing and 5 mm of the stranded wires insulation. Twist the braided shielding if necessary. Use end sleeves for strands (0,5 mm² and 0,75 mm² for the shielding). In case of 4- wire cable, both ground wires for terminal B must be crimped together into a common end sleeve for strands. Push the shrink sleeve lying inside the box over the shielding.

2. Opening the connector box

While the cover is completely closed, pull out the fastening screw entirely from the connector box.
Lift off the cover.

3. Connecting the cable

Remove the strain relief tab (2 cross recessed head screws) inside the box. Feed the cable prepared according to instructions under (1.) into the connector box. Connect the stranded wires as indicated in the connection diagram (see below) to the terminal strip. Push the cable forward far enough to allow the cable sheathing to reach the cable strain relief. Mount the strain relief tab (turn over for cable diameters less than 5 mm). Push the gland inset and the plain washer into the connector box and screw it tight using the plastic screw.

4. Turning the socket terminal inset

If necessary, it is possible to change the orientation of the cable by turning the socket terminal inset as follows: Open the connector box as described under (2.). Push the socket terminal inset downwards through the hole in the centre of the circuit board. Turn the socket terminal inset to the required position. When inserting, take care not to jam any of the stranded wires. The inset comes to rest recessed approximately 1 mm into the box.

5. Fastening the connector box to the transducer

Close the cover of the connector box and insert the fastening screw. Put the inserted seal at the plug, plug on the connector box and screw it tight using the fastening screw.

6. Exchanging polarity

If you wish to alter the assignment of the output signal to the direction of movement of the transducer, proceed as follows: remove the socket terminal inset as described under (4.). Exchange the wires 1 (black) and 3 (blue) at the socket terminal inset. Reassemble as described under (4.).

7. Adjusting (only applies to MUW250)

At first adjust to zero: Move the transducer's wiper to the start position, paying particular attention to the wiper staying within the electrical measurement range of the sensor.

For **types MUW250-0 and MUW250-1** now adjust the output signal by turning the trimming potentiometer next to terminal D to 0 V. Do not turn beyond 0 V. Move the transducer's wiper to the end position, also paying particular attention to the electrical measurement range of the sensor. Now adjust the output signal by means of the trimming potentiometer next to terminal A to 10 V.

For **type MWU250-4** please proceed as follows: Move the transducer's wiper to the start position. Adjust the output current by turning the trimming potentiometer next to terminal D to 0 mA. Now move the wiper to the end position. Now adjust the current using the trimming potentiometer next to terminal A to 16 mA. Move the wiper to the start position and adjust the output current using the trimming potentiometer next to terminal D to 4 mA. Check the value at the end position and reiterate the process if necessary.

Connection diagram:

