5.6 Bus Connectors

Purpose of the Bus Connector

The bus connector is used to connect the PROFIBUS-DP bus cable to the MPI or PROFIBUS-DP interface. In this way, you establish the connection to other nodes.

There are two different bus connectors:

- Bus connector without PG connector

  6ES7972-0BA12-0XA06

  6ES7972-0BA41-0XA0

  6ES7972-0BA50-0XA0

  6ES7972-0BA60-0XA0

  6ES7972-0BA30-0XA0

- Bus connector with PG connector

  6ES7972-0BB12-0XA0

  6ES7972-0BB41-0XA0

  6ES7972-0BB50-0XA0

  6ES7972-0BB60-0XA0

Appearance (6ES7972-0B.20 ...)

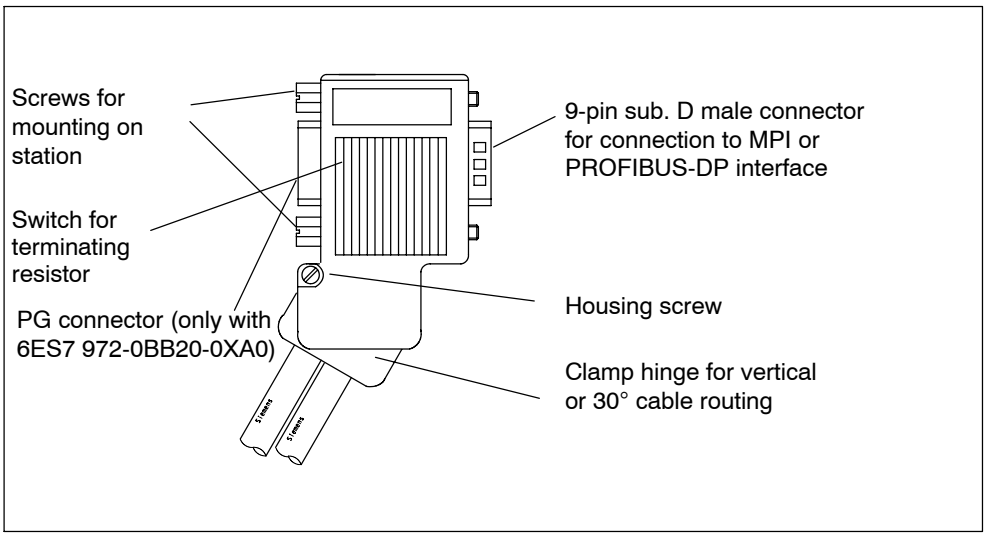

Figure 5-11 Bus connector

Connecting Bus Cables to Bus Connectors (6ES7972-0B.20 ...)

For detailed information on how to connect a bus cable to a bus connector, refer to the *SIMATIC NET Profibus Networks* manual.

Connecting the Bus Connector

To connect the bus connector, proceed as follows:

1. Plug the bus connector into the module.
2. Screw the bus connector into the module.
3. If the bus connector is located at the beginning or end of a segment, you must switch on the terminating resistor.

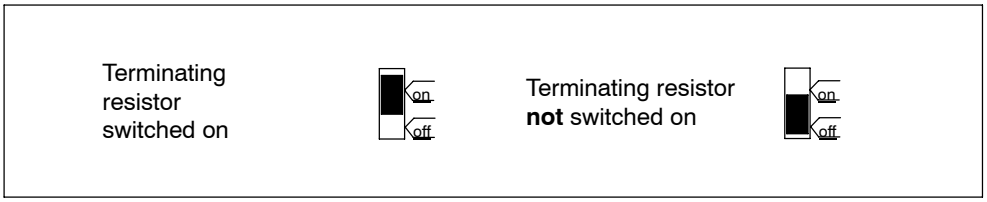

Figure 5-12 Switch on terminating resistant

Ensure that power is always applied to the stations at which the terminating resistor is situated, during startup and operation.

Removing the Bus Connector

With a **looped-through bus cable** you can remove the bus connector from the PROFIBUS-DP interface at any time, without interrupting data traffic on the bus.



Warning

Interference to the data traffic on the bus is possible.

A bus segment must always be terminated with the terminating resistor at both ends. This is not the case, for example, when the last slave with bus connector is not under power. Since the bus connector is powered by the station, the terminating resistor has no effect.

Ensure that the stations at which the terminating resistor is switched on are always under power.