

Installation / Operation notes



Due to the standardisation of terminal designations for inputs/outputs, these may differ from this connection diagram on older devices. When connecting the supply voltage, please note the changed terminal assignment compared to older device versions and refer to the information on the type label for the correct assignment!

- The reference potential for the digital and analogue inputs and outputs is 0V.
- For device pairs with analogue inputs/outputs, the transmitter and receiver are always matched in pairs to ensure the specified accuracy of +/- 0.2%. When pairing devices that are not matched, this can be up to +/- 2%.
- LED status
 - = Power supply
 - = Error (only at the receiver): no reception or invalid protocol from the transmitter

Safety instructions



- Installation and commissioning may only be carried out by specialist companies or appropriately qualified personnel and in accordance with the guidelines and recognised rules of technology!
- Before making any adjustments to the unit, it must be disconnected from the power supply!
- Ensure suitable ESD protection measures (earthing, aids, etc.)!
- Use suitable tools!

Important notes on the new firmware v3



Due to a hardware-related adjustment to the transmission protocol with firmware v3, the devices in the FOB series are no longer backward compatible. The switch to the new firmware (v3) will take place from serial number **2539xxxx** onwards.

Consequences of irreparable defects in old devices:

New devices with firmware version v3 are not compatible with older devices (up to FW v2) and cannot be used as 1:1 replacements if an older device is still in use on the other side.

This restriction only applies to devices in the following versions:

- **SM:** Single-mode fibre E9/125 µm with 1300 nm
- **13:** Multimode fibre with 1300 nm
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Devices in the following versions are not affected:

- **MM:** Multimode fibre, G50/125 µm or G62.5/125 µm with 820 nm
- Replacement devices with the old firmware version v2 can still be supplied for this purpose.

Due to the lack of backward compatibility, the following options are available depending on the device combination:

1. Defective receiver (FOBxx-E) before serial number 2114xxxx

- In this case, the corresponding transmitter (FOBxx-S) must also be completely replaced.
- Reason: Devices with older hardware have an incompatible controller that cannot be updated with firmware.

2. Defective receiver (FOBxx-E) with serial numbers 2114xxxx to 2538xxxx

- The transmitter (FOBxx-S) can continue to be used as long as the controller is replaced.
- The FOB84-S model requires factory calibration of the analogue inputs. In this case, the controller can only be replaced at the factory.
- The controller in the FOB80-S model can be replaced on site without factory calibration.

3. Defective transmitter (FOBxx-S)

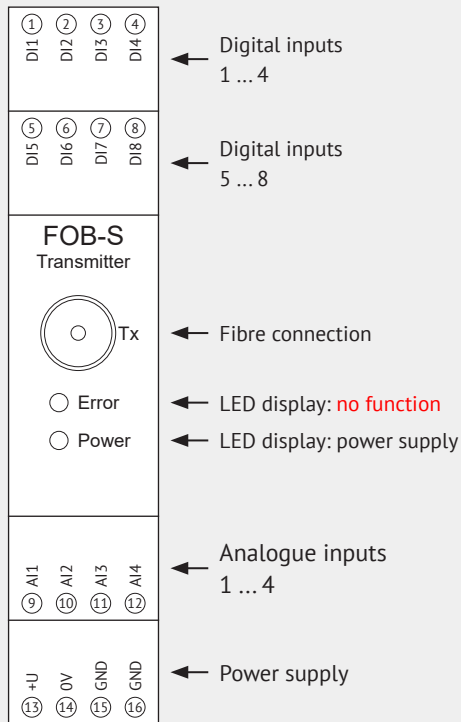
- A defective FOBxx-S transmitter can still be obtained as a spare part with the old firmware v2.

System variants

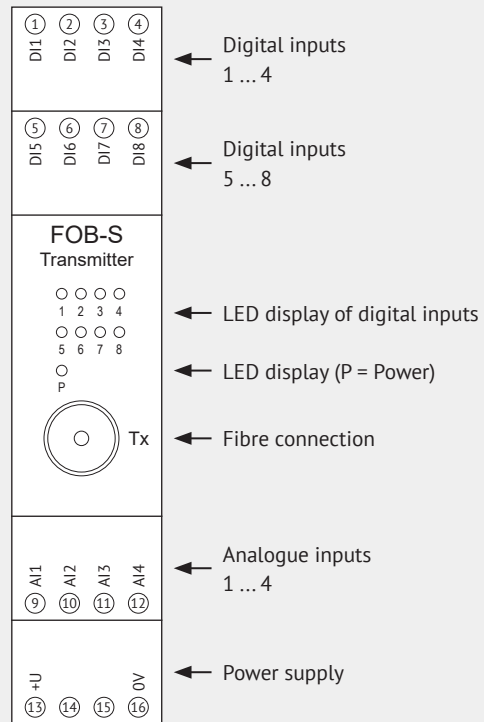
Signals	0x analogue	2x analogue	4x analogue
0x digital		FOB02	FOB04
4x digital	FOB40	FOB42	
8x digital	FOB80		FOB84

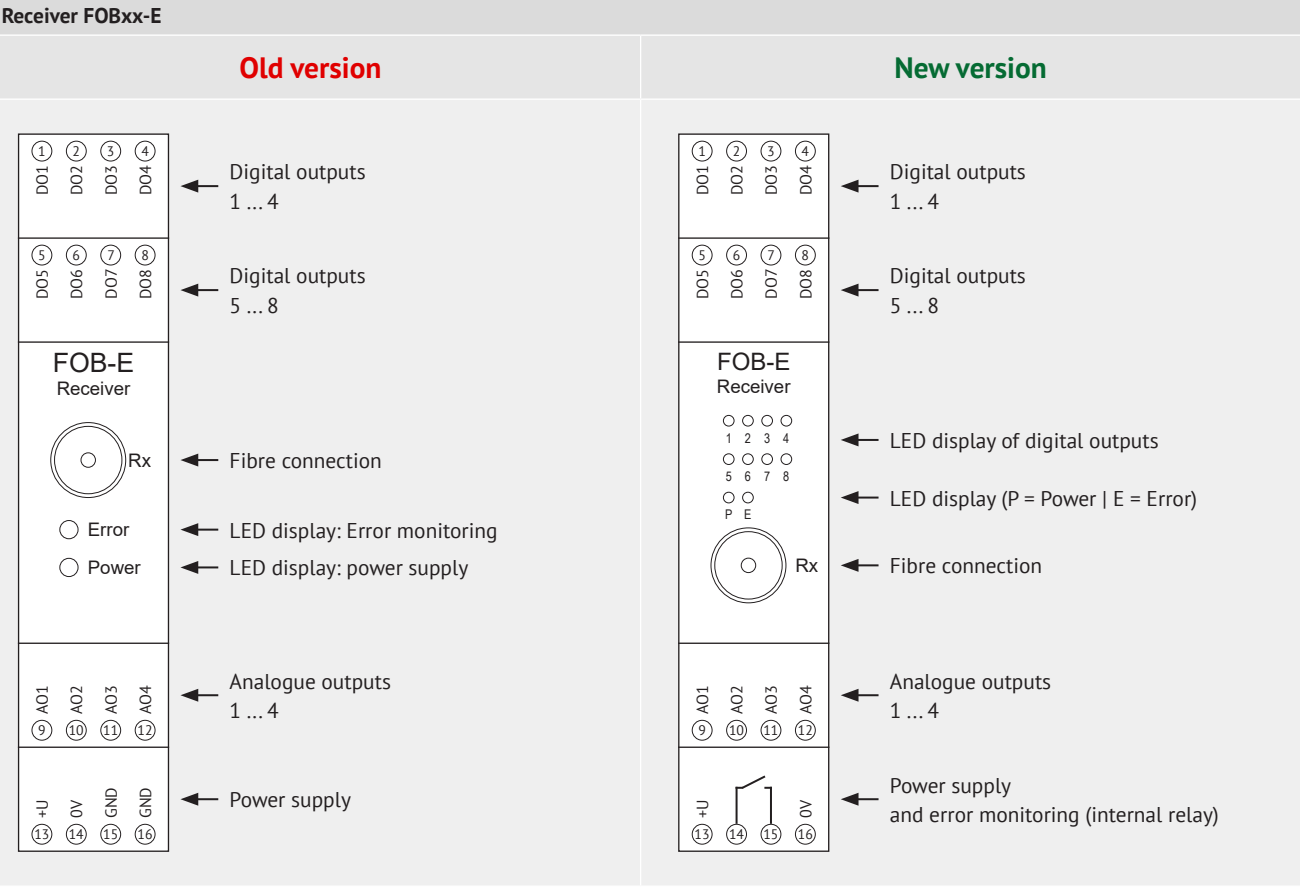
Transmitter FOBxx-S

Old version



New version





Setting the relay switching behaviour

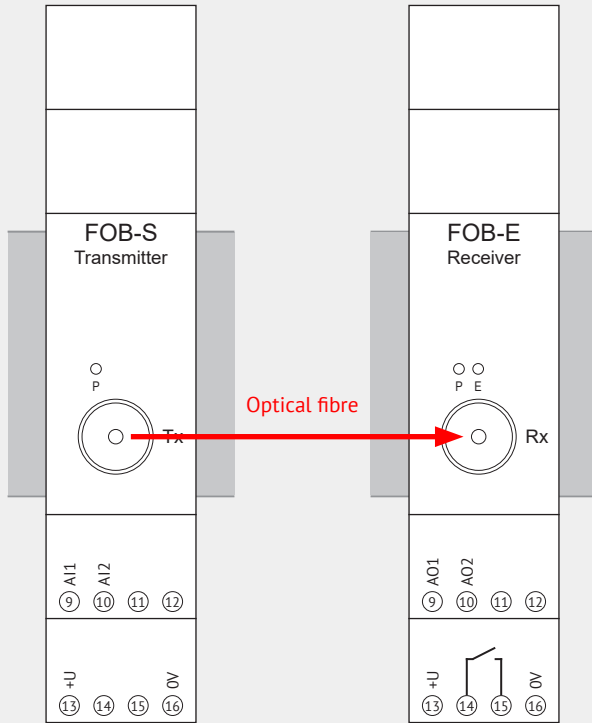
Jumper position	N	Er
	 Intrinsically safe (Factory setting)	
No error	Closed	Open
Error	Open	Closed

Connection Plan

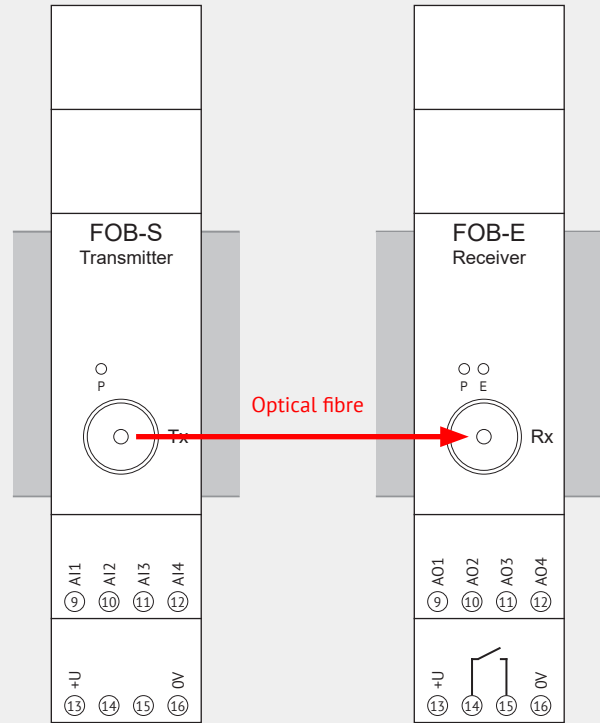
FOB

Unidirectional transmission of analogue signals

FOB02 (up to 2 analogue signals)

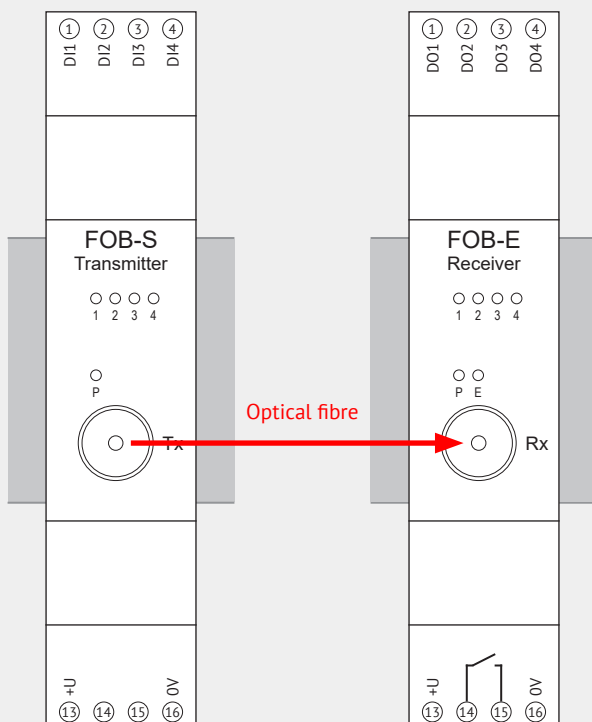


FOB04 (up to 4 analogue signals)

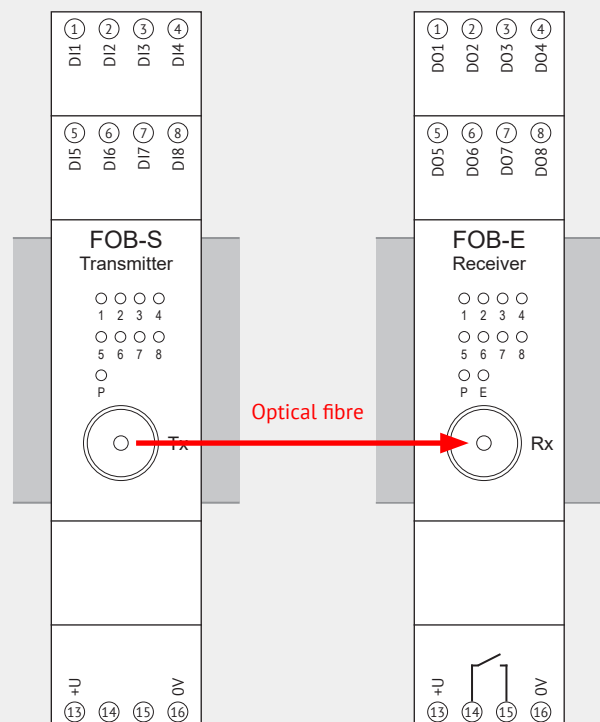


Unidirectional transmission of digital signals

FOB40 (up to 4 digital signals)

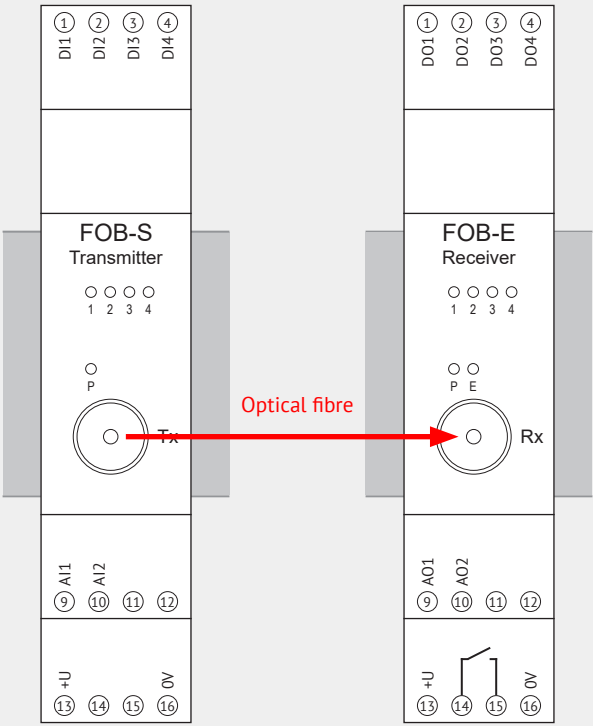


FOB80 (up to 8 digital signals)



Unidirectional transmission of analogue and digital signals

FOB42 (up to 4 digital and 2 analogue signals)



FOB84 (up to 8 digital and 4 analogue signals)

