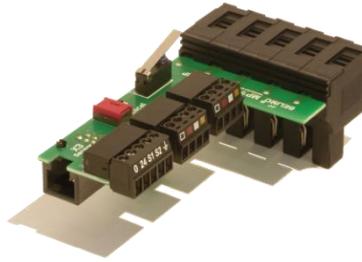**Connecting board suitable for MP-Bus wiring box EXT-WR-FP20-MP (IP20) and EXT-WR-FP65-MP (IP65)**

• Connection of either
  2 MP actuators including 2 sensors
• Service socket for Belimo Tools
• Connection of MP actuators via
  connectors

Technical data

Electrical data	Nominal voltage	AC 24V, 50/60 Hz / DC 24V
	Connection	Screw terminals, max. 1.5 mm2
	Electrical isolation	No
Functional data	Connection options	Connector X1 (4-pin): actuator 1 Connector X2 (4 pin): actuator 2 Connector X3 (5 pin): Sensors / Switches
	Service socket for Belimo Tools (e.g. PC-Tool MFT-P, ZTH-GEN)	Can be switched by means of switch S2: Bus: Connection directly to the MP-Bus Locl: Connection to the MP-devices
	Behaviour of the MP-Bus boxes when the housing cover is closed	Connected MP devices are connected automatically with the MP-Bus, independently of the current position of the S2 switch.
Safety	Protection class	III Safety extra-low voltage
	Degree of protection	IP20 with use of EXT-WR-FP20-MP IP65 with use of EXT-WR-FP65-MP
	Ambient temperature	-30° … +50°C
	Non-operating temperature	–40° ... +80°C
	Ambient humidity	95% r.h., non-condensating (EN 60730-1)
	Maintenance	Maintenance-free

Product features

Mode of operation	The objective of the wiring circuit board in conjunction with the wiring boxes (see Accessories) is a rapid, simple and error-free installation of the MP-Bus and the devices. The ZFP2-MP circuit board connects the MP-Bus in the wiring box either with 2 MP actuators and 2 sensors. Pre-assembled and colour-coded plugs on the MP actuators prevent wiring errors thereby and ensure faster installation. One defined and uniform connection between MP-Bus and the MP devices ensures faultless contacting. The RJ12 diagnostics plug offers the possibility of parameterising or checking MP devices independently of the MP-Bus. In order to prevent a bus collision with two MP Masters, connected devices can be insulated from the MP-Bus by means of the S2 switch ("local" position) without any additional tools required. If the MP communication is to be checked (monitoring via PC-Tool), then a diagnostics option exists starting from each box. The S2 switch must be in "Bus" position in order to accomplish this. If the cover is mounted, then the MP devices are contacted with the MP-Bus under all circumstances (S2 switch position is overridden).

Accessories

|	
EXT-WR-FP20-MP Basic wiring box IP20	Weidmüller 1206530000
EXT-WR-FP65-MP Basic wiring box IP65	Weidmüller 1180300000

Safety notes

⚠

- It may only be installed by suitably trained personnel. Any legal regulations or regulations issued by authorities must be observed during assembly.

- The device contains electrical and electronic components and is not allowed to be disposed of as household refuse. All locally valid regulations and requirements must be observed.

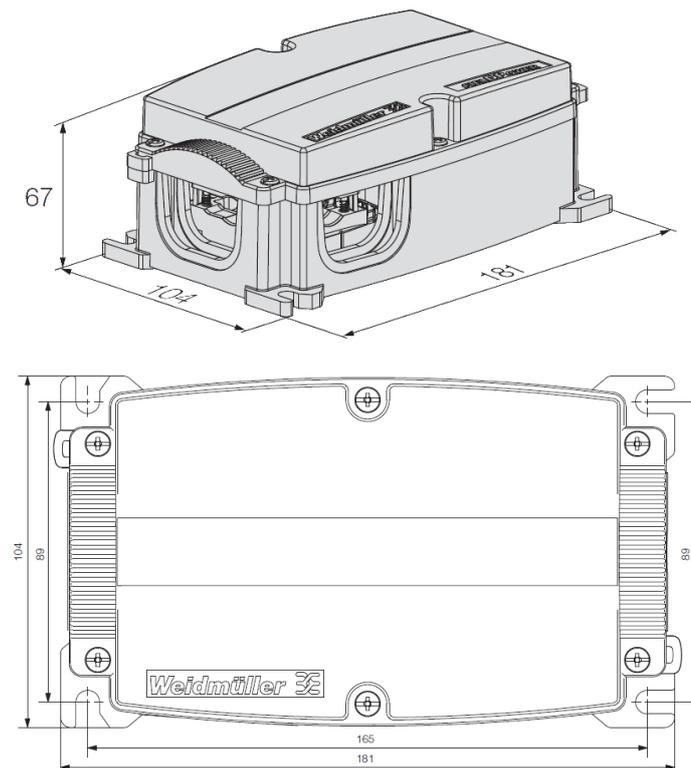## Dimensions IP20   with wiring box EXT-WR-FP20-MP

Outside dimensions IP20
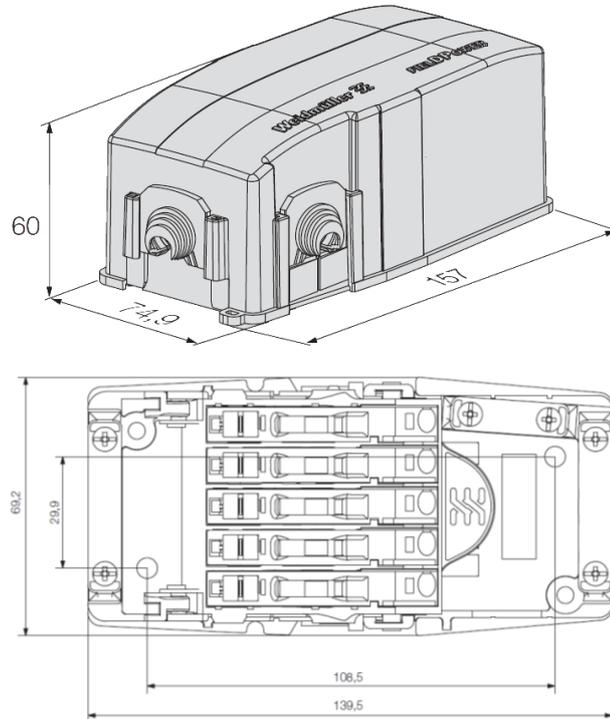
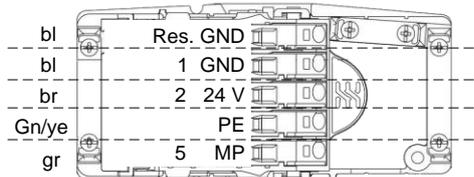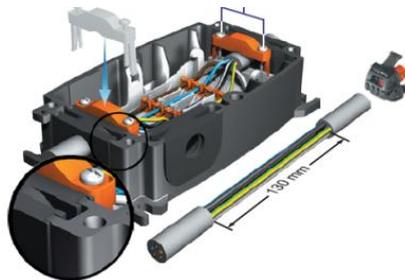## Dimensions IP65   with wiring box EXT-WR-FP65-MP

Outside dimensions IP65

Electrical installation

Basic installation:

EXT-WR-FP20-MP and EXT-WR-FP65-MP

bl	Res.	GND
bl	1	GND
br	2	24 V
Gn/ye		PE
gr	5	MP

Connections:

ZFP2-MP for 2 MP Actuators and 2 Sensors (passiv or activ)
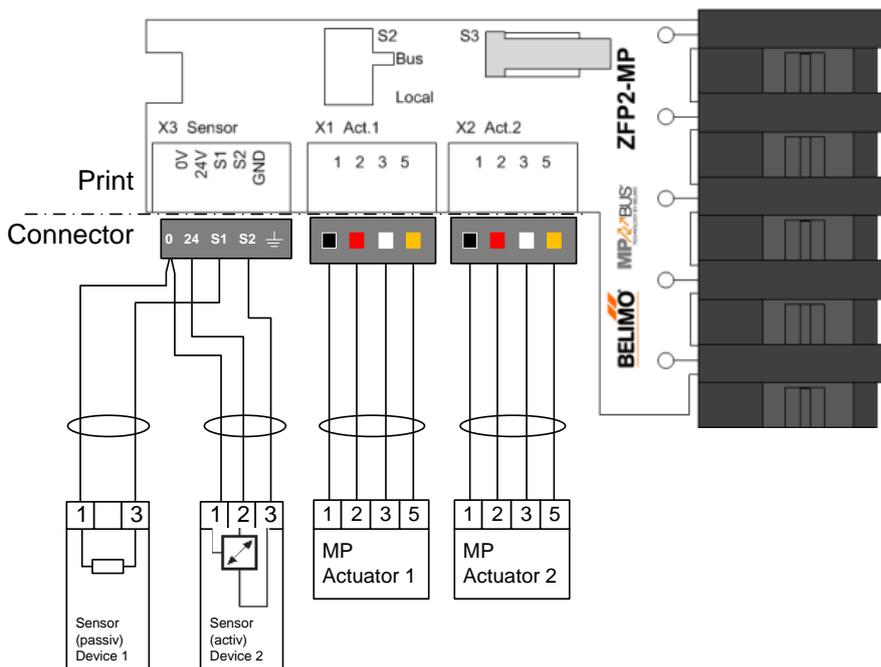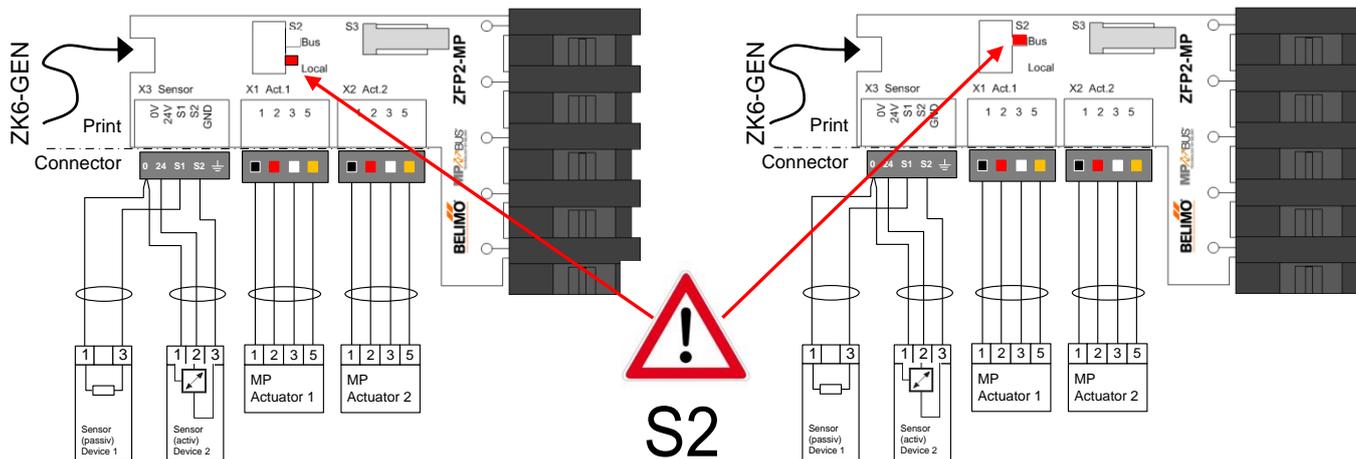
OPTION:

Belimo MP-Actuators can assamblet with **3m cable and connector for ZFP** be ordered.

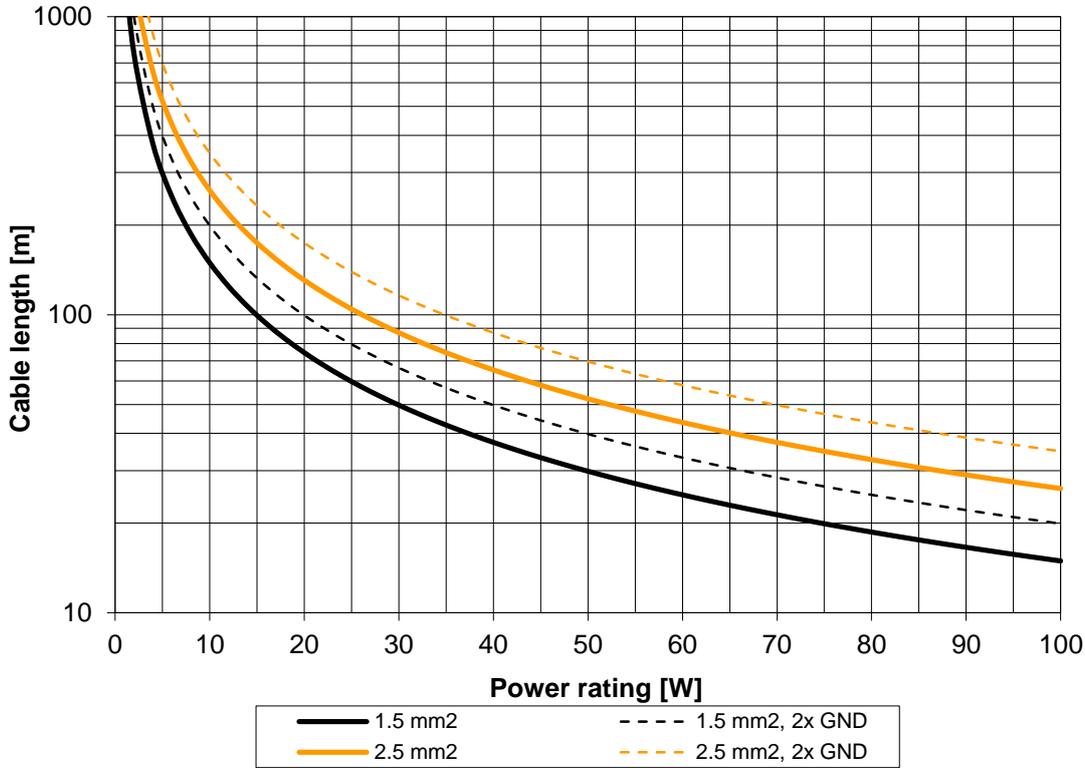### Commissioning / Service:

ZFP2-MP with Belimo Tools

Local Communication

Bus Communication

S2

Maximum cable lengths

Cable length vs. power rating applies do DC supply
(Transformer voltage 24 VDC)

Legend:
- 1.5 mm2 (solid black)
- 1.5 mm2, 2x GND (dashed black)
- 2.5 mm2 (solid orange)
- 2.5 mm2, 2x GND (dashed orange)

X-axis: Power rating [W]
Y-axis: Cable length [m]

Cable length vs. power rating applies do AC supply
(Minimum transformer voltage 21.6 VAC)

Legend:
- 1.5 mm2 (solid black)
- 1.5 mm2, 2x GND (dashed black)
- 2.5 mm2 (solid orange)
- 2.5 mm2, 2x GND (dashed orange)

X-axis: Power rating [VA]
Y-axis: Cable length [m]