



M-Bus design notes

1. Work to be carried out by the electrician

- Installation of empty conduits or line channels from data centre to branch boxes or measuring equipment etc.
- Drawing-in of cables to all measuring devices and components
- Delivery, installation and connection of sealable branch/connector boxes at all terminal blocks and connection components
- Installation of data centre, incl. connection
- 230V 10A from sealable fuse groups
Caution: Do not apply voltage to the centre or the supply unit!

2. Electrical installation instructions/installation cable

In general, the SEV regulations apply. The bus lines should be designed to the shortest length possible. GWF recommends the following cable types:

Riser	TT2x1.5mm ² (preferred) Maximum cable length = 1'000m
Stub line	U72 1x4x0.8mm ² (preferred) Maximum cable length = 50m

For greater cable lengths please consult GWF

Terminals / Connections

All branch-off and connecting points have to be sealable. Sealing is done by GWF. Proposed material:

Surface-mounted boxes	e.g. Woertz 78x78mm
Flush-mounted boxes	Standard junction boxes

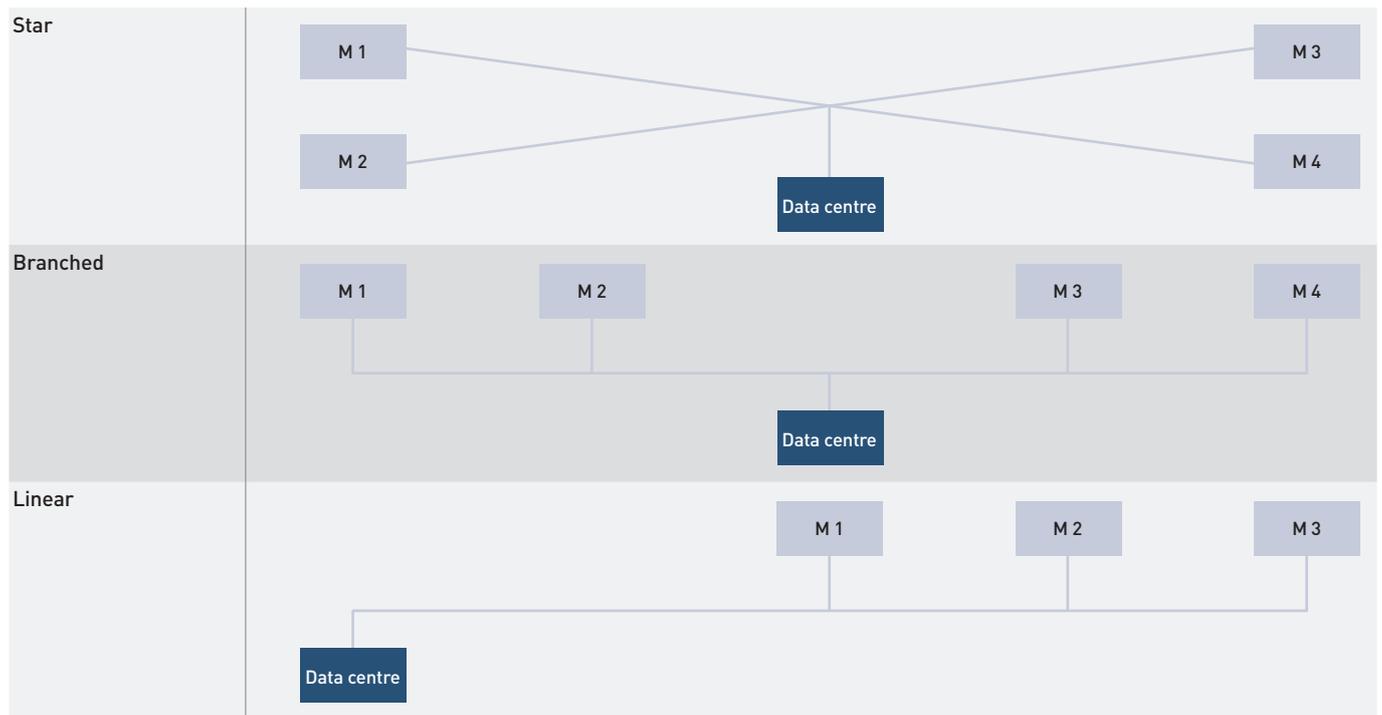
Line connections (proposed material)

Insulation displacement connectors «Scotchlok IDC» 0,5 ... 1,5mm²

Usual terminals for low-voltage lines

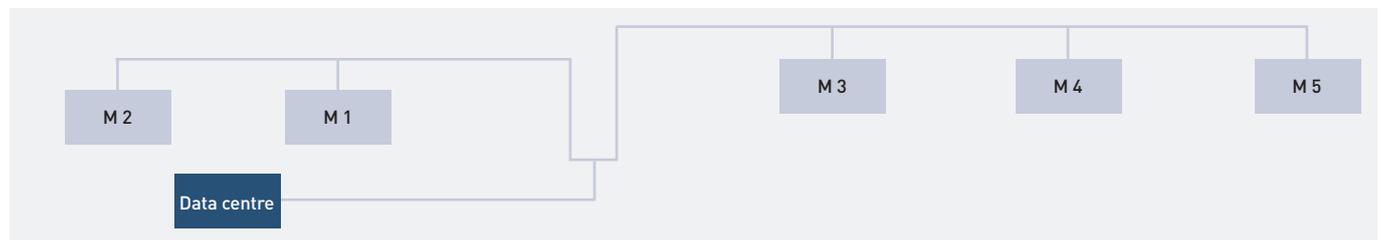
3. Bus topology

The 2-core bus cabling or cable routing can be designed freely according to the following list:



4. Combinations of these cable routings

We recommend to split the laying of bus cables into risers and stub lines.



Caution: Ring cable routing of the M-Bus is not allowed.

