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
- 230 V 10 A 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	TT2x1.5 mm² (preferred) Maximum cable length = 1'000 m
Stub line	U72 1x4x0.8 mm² (preferred) Maximum cable length = 50 m

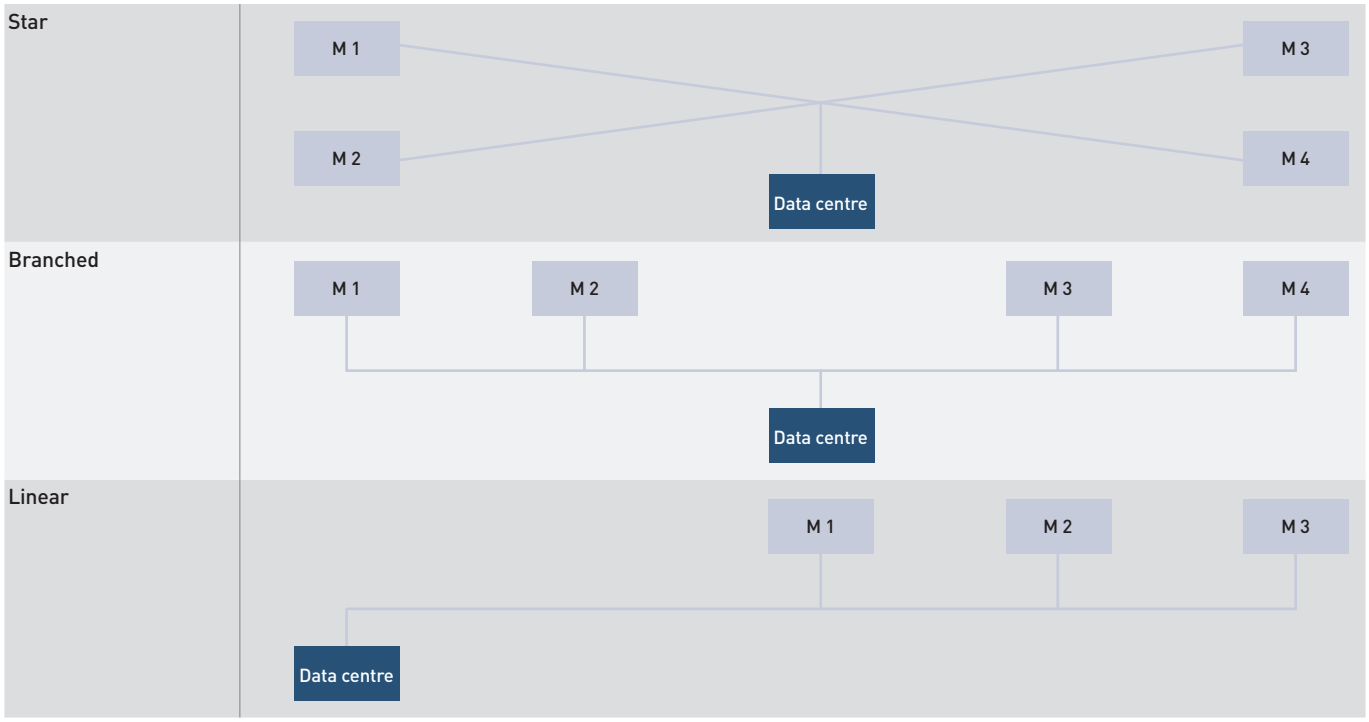
For greater cable lengths please consult GWF

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 78x78 mm
Flush-mounted boxes	Standard junction boxes

Line connections (proposed material)
Insulation displacement connectors «Scotchlok IDC» 0,5 ... 1,5 mm²
Usual terminals for low-voltage lines

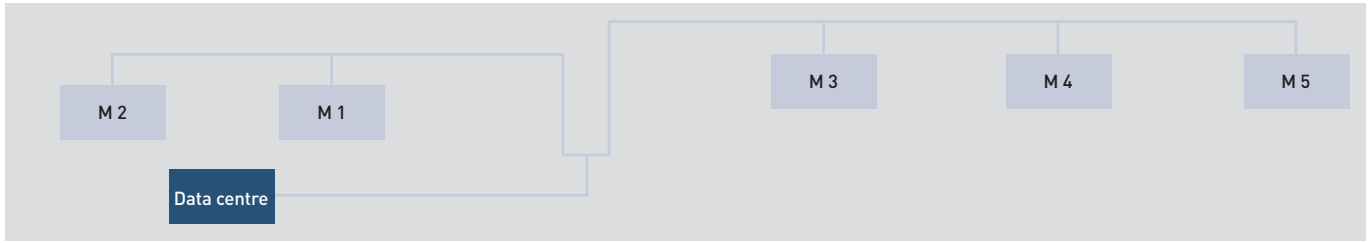
3. Bus topology

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

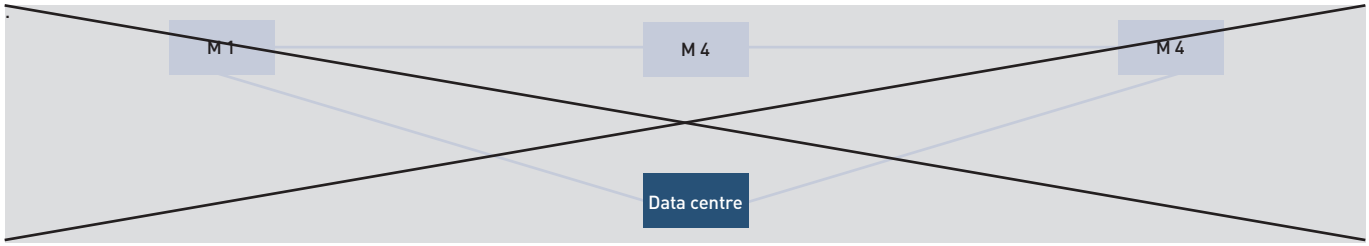


4. Combinations of these cable routings

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.



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