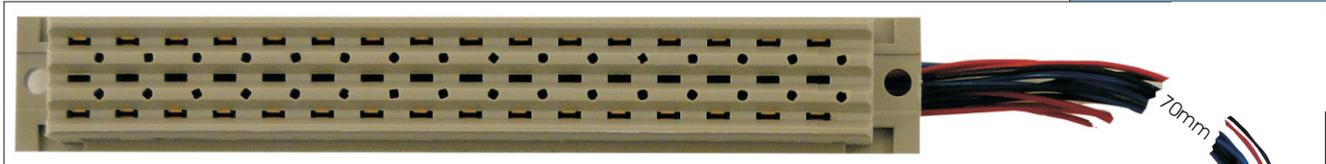


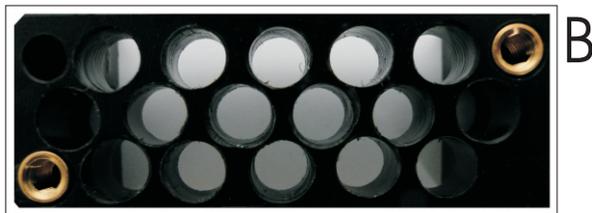
# LWL 1000 coupler R-T-8 (MPF)

## Redesign

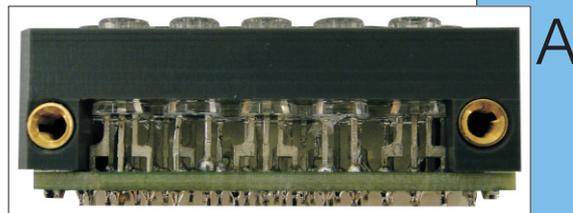
For electrically decoupled and interference-free transmission of control signals between drive control units and power units of light rail vehicles, optical fibres and couplers from 8 transmitters and 8 IR-receivers are being used. The original modules by manufacturer Siemens had been joined by a susceptible flex printed circuit. The redesign of the couplers is made of a low profile DIN 41612 female multi point connector with special mounting on row z and d as well as the construction form F, 2 multilayer circuit boards, which are robustly connected with each other by 70mm AWG26 single wires. Other connection lengths can be manufactured optionally.



Both multilayers carry the DIN 41612 female multipoint connector and also the optic coupler, with the arrangement of 8 receivers and 8 transmitters for standard 1000 micron plastic fibre (MPF). The optical modules are combined in a grey plastic carrier as an "optical coupler", on which an adapter for the connection with 16 optical fibres can be screwed on.



Adapter for 16 optical fibres, unpopulated



LWL-coupler R-T-8 side view



Optical fibres 1000 MPF with snap-in-connector

The optical fibres lock in adapter B by a snap-in-connection and this way can be separated in the given arrangement from coupler A "in one piece". Alternatively, customer-specific assembled adapters with each 8 firmly moulded MPF by different colours for "receiver-" and "transmitter-" lines can be delivered. Length of MPF according to specifications. Individual wire designation. The couplers can be mounted into an Intermas connector housing for the construction type DIN 41612 F upon request so the female multi point connector can provide electric contacting on the one hand and the adapter with the 16 optical fibres on the coupler can maintain and secure the coupling of the IR-signals on the other hand.

The 16 optical fibres are led out the connector housing strain-relieved with an according cable support sleeve.

### Technical data:

Electronic-optical coupler, DIN 41612 F32 low-profile to 8 IR-transmitter and 8 IR-receiver. Standard: without cover, adapter, 1000 MPF

8 Transmitter	: micro lens for 2,2mm Apertur to standard 1000MPF
Transferrate	: 10MBd at 650nm
8 Receiver	: Open collector, 2,2mm Apertur to standard 1000MPF
Transferrate	: 5Mbit/s at 650nm
Wiring	: Standard 17x AWG26-70mm, optional other length



### DIE ENTWICKLER

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