

The R&Mfreenet Cat.6A EL connection modules, part of the Freenet cabling system, are ideal for voice, fast data transmissions and high bandwidth applications. This high-performance Cat.6A module is perfect for use in 10 Gigabit Ethernet (10GBASE-T) and future high-speed applications to 500MHz.

Features of Cat.6A EL Modules

- Meets the Cat.6A ISO component specification (for the entire re-embedded plug range as specified by the standards ISO/IEC 11801, EN 50173, TIA 568-C.2, IEC 60603-7-51 and 60603-7)
- Exceeding the IEEE 802.3 an minimum requements for 10GBASE-T performance
- Achieves best transmission characteristics with R&Mfreenet Cat.6A patch cables
- Gold-plated contact area and tin-plated insulation displacement contact area
- Capacitive and inductive compensation
- Compatible with Cat.6A standard patch cords and cables
- Full mechanical and electrical backward compatibility with Cat 5e/6
- RJ-11/12/14 compatible
- Fits into 3rd party outlets and patchpanel with 4 different adapter
- Tool-free (w/o special tools) connection of installation cables of AWG 22-26 plus stranded cables of AWG 22/7 – 26/7
- Wiring option according to TIA 568 A and B with parallel termination of the pairs without splitting of pair 3,6
- Label with color wiring chart, integrated production date and serialnumber (each module) for quality tracing
- Halogen-free materials
- PoE and PoE+ compatible according to IEC 60512-99-001
- 3P certified

Standards

IEC 60603-7

ISO/IEC 11801, Ed.2.2 June 2011

EN50173-1: May 2011

Technische Daten

Criteria	Date / value
Operating temperature range	-10°C to 60°C
Storage temperature range	-40°C to 70°C
Humidity	95% (non-condensing)
Contact material	CuSn
Contact surface	> 0.76 µm gold over > 1.2 µm nickel
Housing material	Polycarbonate (UL-94-V0) unshielded / die-cast (shielded)
Number of IDC* connections	8 / jack
IDC contact material	CuSn, tin-plated
Admissible wire Ø	0.4 mm (AWG26) – 0.65 mm (AWG22)
Admissible strand Ø	AWG26/7 – AWG22/7
Admissible insulation Ø	0.8 mm – 1.6 mm
Admissible cable Ø	4.5 mm – 9.0 mm
Wire strain relief	Through termination block
Cable strain relief	Through integrated strain relief

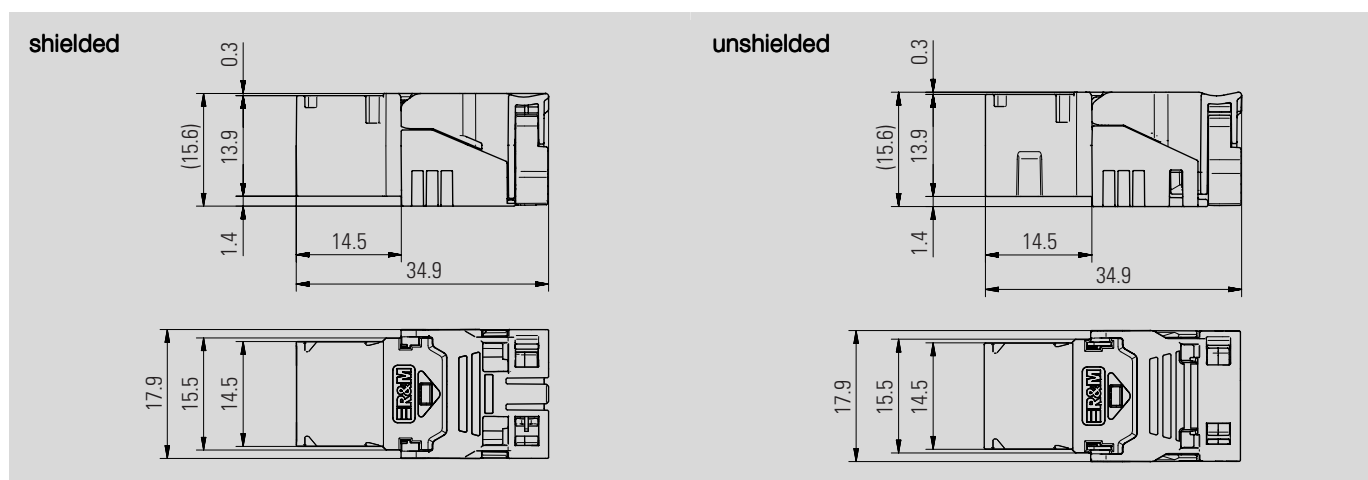
IDC Insulation Displacement Contact

Description	Standard value	Relevant Standard	Typical value (at 20°C)
Mating cycles min.	> 750	ISO/IEC 11801 2 nd Ed.	> 1000
Re-terminations	≥ 4	IEC 60352-3	≥ 4

Electrical Data

Description	Standard value	Relevant standard	Typical value (at 20°)
Electric strength			
Contacts	1000 V DC or AC peak	IEC 60603-7	1200 V DC
Contact to shield	1500 V DC	IEC 60603-7	1700 V DC
Insulation resistance	> 500 MΩ (100 V DC)	IEC 60603-7	5GΩ (100 V DC)
Contact resistance	< 20 mΩ	IEC 60603-7	< 5 mΩ
I/O resistance	< 200 mΩ	IEC 60603-7	30 mΩ
I/O resistance unbalance	< 50 mΩ	IEC 60603-7	20 mΩ
Current carrying capacity	1 Amp@60°C	IEC 60603-7	Pass

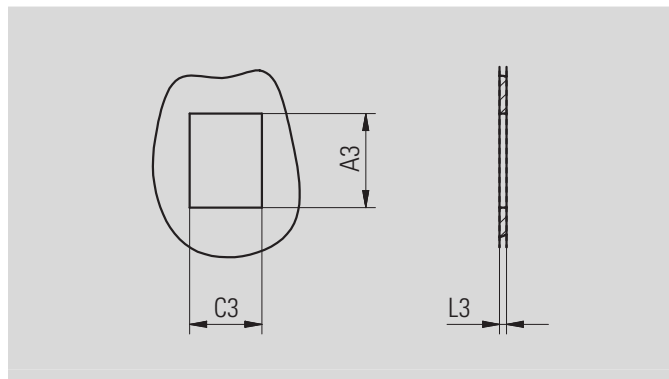
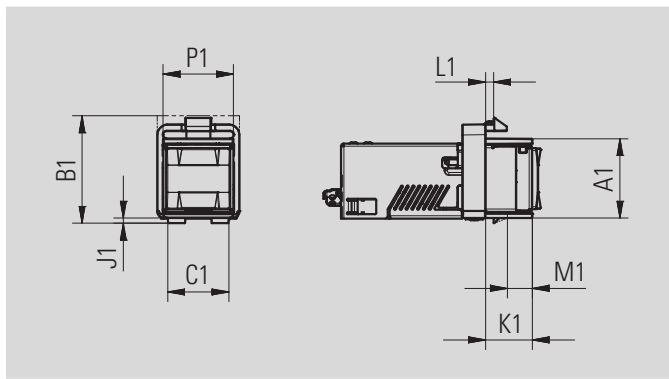
Dimensions



Keystone Cut-out

The keystone adapter ensures that the module will fit in keystone cut-outs as defined in IEC60603-7 ed. 3 Annex D.

Connector Dimensions



Letter	Maximum (mm)	Minimum (mm)
A1	16.51	16.00
B1	22.43	22.07
C1	12.65	12.34
J1	1.65	1.17
K1	9.78	9.53
L1	1.75	1.55
M1	5.46	5.16
P1	14.61	14.35

Letter	Maximum (mm)	Minimum (mm)
A3	19.61	19.30
C3	15.04	14.78
L3	1.54	1.22

Available Adapters

