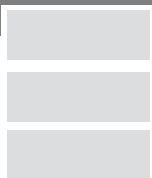
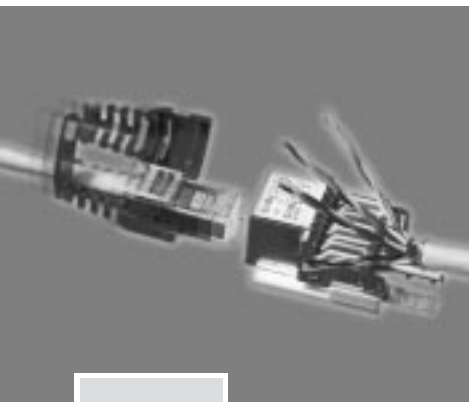


R&M Cabling Guide



R&M *freenet*

- The new E&F Class by R&M
- Worldwide best performance on Ethernet configuration (Pin 12/36)
- Excellent powersum values for Gigabit-Ethernet and -Token Ring

100 MHz Cable Installation

UTP Cable

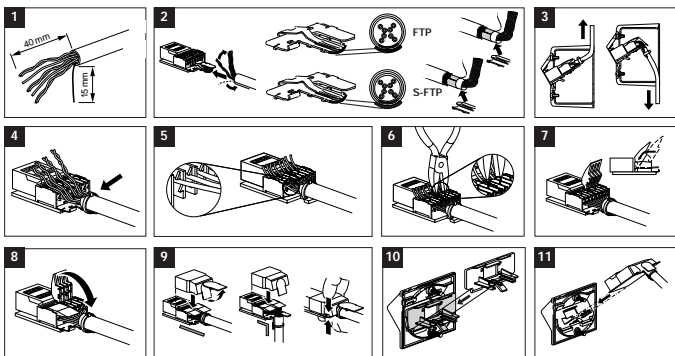
FTP Cable

S-FTP Cable

Unshielded Twisted-Pair

Foiled Twisted-Pair

Screened Foiled Twisted-Pair

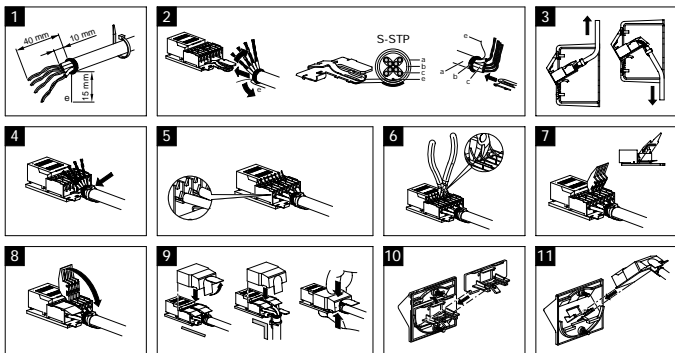


ISO/IEC 11801 link values class D

Frequency MHz	Maximum attenuation dB	Maximum near-end crosstalk loss dB	Minimum-ACR
1	2.5	54	-
4	4.8	45	40
10	7.5	39	35
16	9.4	36	30
20	10.5	35	28
31.25	13.1	32	23
62.5	18.4	27	13
100	23.2	24	4

600 MHz Cable Installation

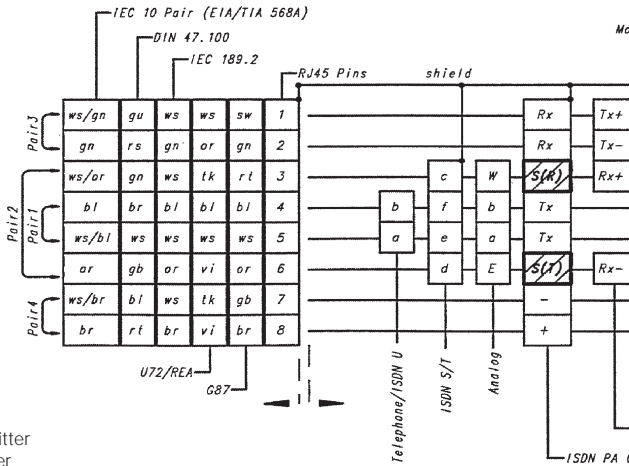
S-STP Cable Screened Shielded Twisted-Pair



DIN Draft 44312-5 link values class F

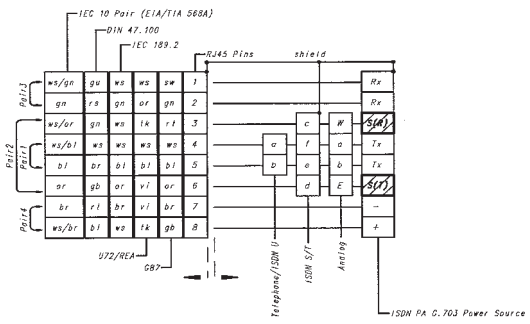
Frequency MHz	Maximum attenuation dB	Maximum near-end crosstalk loss dB	Minimum-ACR
175	25.3	62.3	37
300	33.1	58.7	25.6
600	50	54	4

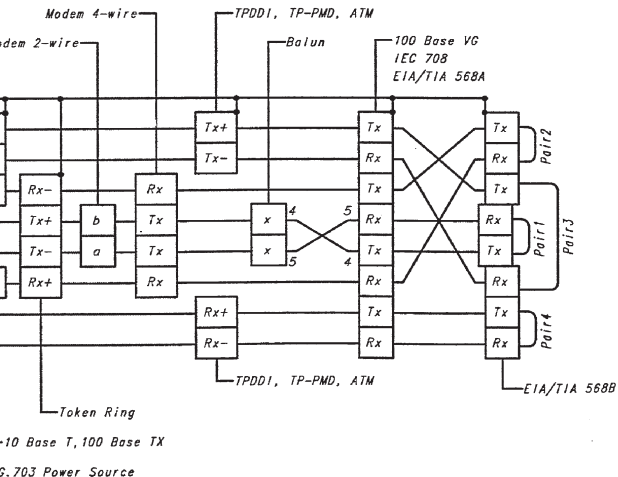
Wiring diagrams of RJ45 connector, EIA/TIA 568A



Tx = Transmitter
 Rx = Receiver

Connection scheme for ISDN RJ45-module (I.430, EURO-ISDN)

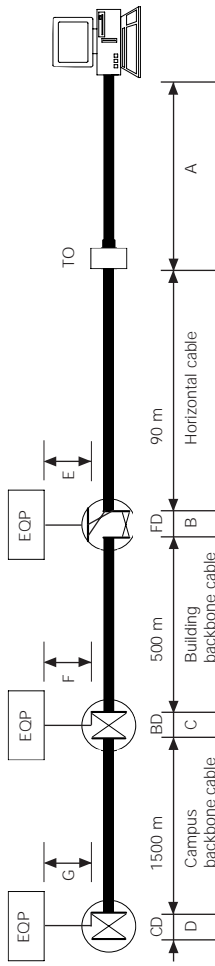




ws = white
bl = blue
rt = red
br = brown
gb = yellow
gu = grey
gn = green
vi = violet
or = orange
rs = pink
tk = turquoise
sw = black

Hotline: Telephone +41 1 933 83 33
Internet: <http://www.rdm.ch>

Maximum cable lengths ISO/IEC 11801



A + B + E ≤ 10 m (combined length of work area cable, equipment cable and patch cord (or jumper) in the horizontal subsystem)

C + D ≤ 20 m (patch cord (or jumper) in the BD or CD)

F + G ≤ 30 m (equipment cables in the BD or CD)

EQP = Application Specific Equipment BD = Building distributor

CD = Campus distributor

FD = Floor distributor

TO = Telecommunication Outlet

AWG-table

AWG-No.	Wire diameter mm	cross-section mm	ohms per Km 20° C
20	0.813	0.5190	33.2
21	0.724	0.4110	41.9
22	0.643	0.3240	53.2
23	0.574	0.2590	66.6
24	0.511	0.2050	84.2
25	0.455	0.1620	106
26	0.404	0.1280	135
27	0.361	0.1020	169