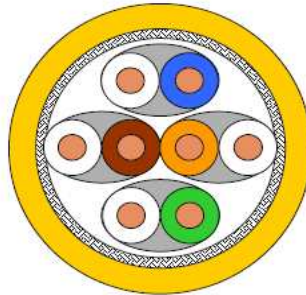


R&M freenet Real10 S/FTP Cat.7 1200MHz

Source Code: M



Application: Primary (Campus), Secondary (Riser), Tertiary (Horizontal)
IEEE 802.3: 10Base-T; 100Base-T; 1000Base-T; 10GBase-T
IEEE 802.5 16 MB; ISDN; TPDDI; ATM

Standards: ISO/IEC 11801 2nd ed.; IEC 61156-7
EN 50173-1; EN 50288-4-1

Fire rating:
LSFRZH: IEC 60332-24; IEC 60754-2; IEC 61034;

Construction

Conductor	bare copper wire Ø 0.63 mm (AWG22)
Insulation	Polyethylene, Ø 1.5 mm
Twisting	2 cores to the pair
Cable lay up	4 pairs to the core
Pair screen	Aluminium/polyester tape
Overall screen	Copper Braid, tinned (approx. 65% coverage)
Sheath	LSFRZH, grey RAL 7035

Technical Data

Product code	Designation	Brand name	Outer diameter mm	Tensile force N
R306257	4x2x0.63	R&M freenet Real10 Cat.7 1200MHz S/FTP 4P LSFRZH	8.5	100

R&M freenet Real10 S/FTP Cat.7 1200MHz

Mechanical Properties

Bending radius		≥ 50mm without load ≥ 70 mm with load
Temperature range	during operation	-20°C...+ 60°C
	during installation	0°C...+ 50°C

Electrical Properties (at 20°C ± 5°C)

DC loop resistance	≤ 12 Ω/100m
Resistance unbalance	≤ 2 %
Insulation resistance (500 V)	≥ 5000 MΩ.km
Capacitance	45 pF/m max.
Capacitance unbalance (pair to ground)	≤ 1600 pF/km max.
Mean characteristic impedance	(100 ± 5) Ω
Nominal velocity of propagation	approx. 78%
Propagation delay	≤ 538 ns/100m
Delay skew	≤ 40 ns/100m
Test voltage (DC, 1 min) Core/Core	1000 V
Transfer impedance	At 1MHz ≤ 5 mΩ/m
	At 10MHz ≤ 5 mΩ/m
	At 30MHz ≤ 10 mΩ/m

Typical transmission characteristics (at 20 °C)

f (MHz)	Attenuation (dB/100m)		NEXT (dB)		PS-NEXT (dB)		ELFEXT (dB/100m)		PS-ELFEXT (dB/100m)		Return loss (dB)	
	Max	Typ	Min	Typ	Min	Typ	Min	Typ	Min	Typ	Min	Typ
4	3.4	3.4	75	90	75	87	78	85	75	82	23	25
10	5.4	5.2	75	90	75	87	74	85	71	82	25	25
20	7.6	7.4	75	90	75	87	68	78	65	75	25	25
62.5	13.7	13.4	75	87	73	84	58	68	55	65	21.5	25
100	17.5	16.8	73	84	70	81	54	65	51	62	20.1	25
250	28.5	27.4	67	78	64	75	46	55	43	52	17.3	22
300	31.5	30	66	77	63	74	44.5	55	41.5	52	16.8	22
600	46.3	43.4	61	72	58	69	38.4	50	38.5	47	14.7	19
1000	62	59.8	58	69	55	66	34	45	31	42	13.1	17
1200	69	67	57	68	54	65	32.4	40	29.4	37	12.5	15

© Reichle & De-Massari AG - Changes without prior

Indoor Cables

R&M freenet Cat.7 S_FTP 1200MHz_V01.doc



Convincing cabling solutions

Reichle & De-Massari AG
 Binzstrasse 31
 CHE – 8622 Wetzikon
 Telephone CO: +41 44 933 81 11
 Telefax CO: +41 44 930 49 41
www.rdm.com