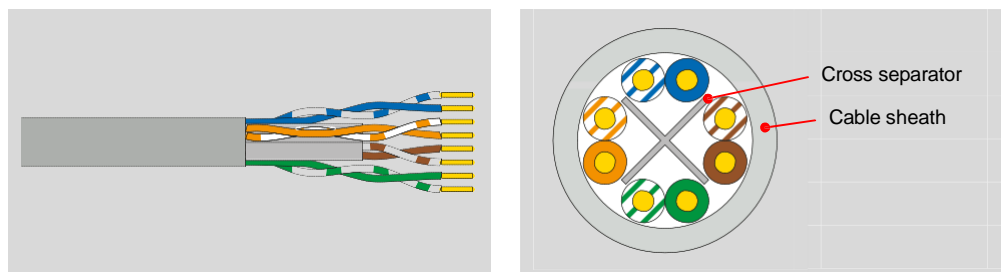


R&M U/UTP Cat.6 250 MHz

R&M U/UTP Cat.6 250MHz 4PxAWG23 PVC NVP=69% ISO/IEC 11801 2nd ed.; EN 50173-1; ANSI/TIA-568-C.2 IEC 61156-5 2nd ed.; EN 50288-6-1

Cable reference	Part number	R195735
	R&M positioning	Cat.6, Level 2

Cable construction	Conductor	Bare solid copper wire AWG23 ($\geq \varnothing 0.55$ mm)
	Insulation	High density polyethylene
	Twisting	2 wires to the pair
	Cable lay up	4 paires to the core with cross separator
	Pair screen	Non
	Overall screen	Non
	Sheath	Flame retardent PVC, gray



Application	Primary (Campus), Secondary (Riser), Tertiary (Horizontal)
	IEEE 802.3an: 10Base-T; 100Base-TX; 1000Base-T
	IEEE 802.5 16 MB; ISDN; TPDDI; ATM
	IEEE 802.3af-2002: POF; IEEE 802.3at: POF+

Standards	ISO/IEC 11801 2 nd ed.; EN 50173-1; ANSI/TIA-568-C.2 IEC 61156-5 2 nd ed.; EN 50288-6-1
------------------	--

Fire rating	PVC
--------------------	-----

Technical Data	Cable designation	U/UTP Cat.6 250MHz 4PxAWG23
	Packaging	Drum 305 m
	Outer diameter	Nominal 6 ± 0.1 mm
	Gross Weight	13.3 kg / box
	Pulling force	11.5 kg

Mechanical Properties	Bending radius	≥ 25 mm during operation (without load)
		≥ 50 mm during installation (with load)
Temperature range	During operation $-20^{\circ}\text{C} \dots + 60^{\circ}\text{C}$	
	During installation $0^{\circ}\text{C} \dots + 50^{\circ}\text{C}$	





Electrical Properties
(at 20°C ± 5°C)

Conductor resistance		≤ 9.38 Ω / 100 m
Resistance unbalance		≤ 5 %
Test voltage	DC, 1 min, core/core	1000 V
Insulation resistance	500 V	≥ 5000 MΩ * km
Mutual capacitance		< 5.6 nF / 100 m
Capacitance unbalance		330 pF / 100 m
Mean characteristic impedance		100 ± 15 Ω
Nominal velocity of propagation		Approx. 69%
Delay skew		≤ 45 ns

Typical transmission characteristics (at 20°C) as per ANSI / TIA 568.C.2 PL

Frequency (MHz)	Insertion Loss Max.(dB)	NEXT (dB) Min.	ACR-N (dB) Min.	RL (dB) Min.	PS NEXT (dB) Min.	PS ACR-N (dB) Min.	ACR-F (dB) Min.	PS ACR-F (dB) Min.
1	1.9	65	62	19.1	62	59	64.2	61.2
4	3.5	64.1	60.6	21	61.8	58.3	52.1	49.1
8	5	59.4	54.4	21	57	52.1	46.1	43.1
10	5.5	57.8	52.3	21	55.5	49.9	44.2	41.2
16	7	54.6	47.6	20	52.2	45.2	40.1	37.1
20	7.9	53.1	45.2	19.5	50.7	42.8	38.2	35.2
25	8.9	51.5	42.7	19	49.1	40.2	36.2	33.2
31.25	10	50	40	18.5	47.5	37.6	34.3	31.3
62.5	14.4	45.1	30.8	16	42.7	28.3	28.3	25.3
100	18.6	41.8	23.3	14	39.3	20.7	24.2	21.2
200	27.4	36.9	9.6	11	34.3	7	18.2	15.2
250	31.1	35.3	4.2	10	32.7	1.6	16.2	13.2

Recommended connection technique

Module	Perm. Link Class D	Perm. Link Class E	Channel Class E _A	Perm. Link Class E _A	Short Link Class E _A
 Cat.5e/u		-	-	-	-
 Cat.6/u			-	-	-
 Cat.6 Real10/u			-	-	-
 Cat.6 _A /u			-	-	-