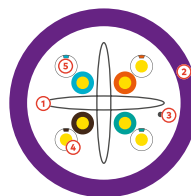
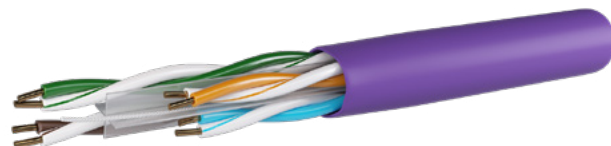


**ENTERPRISE/DATA CENTER COPPER CABLE  
CAT6 U/UTP - LSZH -23 AWG - 0,55mm**

**DESCRIPTION**

- Performance specified up to 250MHz and tested up to 550MHz;
- Decreasing length cable markings - Easy identification of remaining cable reduces installation time and cable scrap;
- Designed to Support all Class E protocols including 1GBASE-T;



- ① Cross Separator;
- ② Outer Jacket;
- ③ Rip-cord;
- ④ Insulation;
- ⑤ Conductor.

**APPLICABLE STANDARDS**

**Electrical Performance:**

- ISO/IEC 11801; • ISO/IEC 61156-5; • EN 50173; • EN 50288-6-1;
- ANSI/ TIA-568-D;

**Reaction to fire:**

- IEC 60332-3-22; • IEC 60754; • IEC 61034; • EN 50267-2-3; • EN 13501-6;
- EN ISO 1716:2010; • EN 50575;

**PoE:**

- IEEE 802.3bt PoE Type 1, 2, 3 and 4.



**CABLE PROPERTIES**

<b>Category</b>	CAT6 U/UTP			
<b>Conductor</b>	<b>Material</b>	Copper		
	<b>Nom O.D.</b>	0,55 ± 0,005 mm 0,022 in		
<b>Insulation</b>	<b>Material</b>	HDPE		
	<b>Diameter</b>	0,98 ± 0,03 mm 0,039 in		
	<b>Thickness</b>	0,55 ± 0,05 mm 0,022 in		
<b>Sheath</b>	<b>External O.D.</b>	6,0 ± 0,4 mm 0,236 ± 0,016 in		
	<b>Material</b>	LSZH (complies RoHS)		
	<b>Color</b>	Purple (RAL4005)		
<b>Rip-cord</b>	Yes			
<b>Core Color</b>	<b>Pair 1</b>	White-Blue/Blue	<b>Pair 2</b>	White-Orange/Orange
	<b>Pair 3</b>	White-Green/Green	<b>Pair 4</b>	White-Brown/Brown



ENTERPRISE/DATA CENTER COPPER CABLE  
CAT6 U/UTP - LSZH -23 AWG - 0,55mm

**SHEATH PHYSICAL PROPERTIES**

Before Aging Tensile Strength (Mpa)	≥ 10,0
Before Aging Elongation (%)	≥ 125
Aging Period (°C x hrs)	100°C x 24h x 7d
After Aging Tensile Strength (Mpa)	≥ 8,0
After Aging Elongation (%)	≥ 100
Cold bend (-20±2°C x 4h)	8 x Cable O.D., No visible cracks

**ELECTRICAL CHARACTERISTICS (20°C)**

	Typical barpa values	Standard values
1-250MHz - Impedance (Ω)	100 ± 15	-
1-250MHz - Delay Skew (ns/100m)	35	≤ 45
DC Resistance (Ω/100m)	7,6	≤ 9,38
DC Conductor Resistance Unbalance (%)	0,5% in pair; 2,4% between pair	≤ 5,0
Unbalanced to Ground Capacitance (pf/100m)	100	≤ 330
1-250MHz - Velocity of Propagation (%) - NVP	69	-

**TECHNICAL PERFORMANCE (100m || 328ft.)**

Frequency (MHz)	Attenuation ≤ dB		Return Loss ≥ dB		NEXT ≥ dB		PHASE DELAY ≤ ns		PSNEXT ≥ dB		ELFEXT ≥ dB		PSELFEXT ≥ dB	
	GWC	BT	GWC	BT	GWC	BT	GWC	BT	GWC	BT	GWC	BT	GWC	BT
1	2,03	1,75	20	27,75	74,3	87,2	570	546,02	72,3	83,63	67,8	87,93	64,8	83,01
4	3,78	3,51	23	34,81	65,3	76,9	552	528,37	63,3	77,8	55,8	71,52	52,8	70,01
8	5,32	5	24,5	36,76	60,8	71,57	546,73	523,19	58,8	68,79	49,7	63,49	46,7	62,18
10	5,95	5,6	25	37,94	59,3	70,42	545,38	521,88	57,3	68,36	47,8	61,32	44,8	60,05
16	7,55	7,12	25	37,03	56,2	67,36	543	519,54	54,2	65,25	43,7	63,64	40,7	61,87
20	8,47	8	25	38,16	54,8	65,44	542,05	518,61	52,8	61,39	41,8	57,13	38,8	56,48
25	9,51	8,96	24,3	35,84	53,3	61,46	541,2	517,77	51,3	60,4	39,8	53,56	36,8	52,99
31,25	10,67	10,05	23,6	35,69	51,9	59,02	540,44	517,03	49,9	58,49	37,9	56,37	34,9	52,51
62,5	15,38	14,41	21,5	31,6	47,7	57,38	538,55	515,18	45,4	56,03	31,9	48,64	28,9	45,33
100	19,8	18,28	20,1	32,86	44,3	59,26	537,6	514,24	42,3	57,21	27,8	43,97	24,8	42,13
200	28,98	26,24	18	23,74	39,8	52,37	536,54	513,21	37,8	49,45	21,8	36,61	18,8	35,86
250	32,85	29,5	17,3	22,54	38,3	57,47	536,27	512,94	36,3	53,41	19,8	39,59	16,8	35,94
500*	-	46,12	-	23,32	-	51,32	-	512,44	-	47,52	-	32,61	-	29,44
550*	-	48,72	-	22,15	-	50,08	-	512,03	-	47,33	-	31,55	-	28,95

GWC = Guaranteed Worst Case // BT = barpa Typical

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## ENTERPRISE/DATA CENTER COPPER CABLE CAT6 U/UTP - LSZH -23 AWG - 0,55mm

### INSTALLATION

Temperature Range (Operation)	-20°C to +75°C	Temperature Range (Installation)	0°C to +50°C
Min. Bending Radius (Operation)	4D, D is the finished diameter	Max. Tensile Load (Installation)	100N

### CABLE MARK

barpa (product code) category 6 U-UTP LSZH CU cable 4 pair 23 AWG Verified to ISO/IEC11801, EN 50173, EN 50174 CLASS CPR NVP-69 \_\_\_m (produce date)

### ORDER INFORMATION

Code	Type of package	Size package (mm)	Gross Weight (kg/item)	Net Weight (kg/item)	Quantity (m)	EAN CODE	CPR Class
82222122030D1	Reel in box	330x265x350	15,0	13,0	305	5608445014184	Dca-s2,d2,a1
82222122050D1	Drum	370x160x300	22,5	20,5	500	5608445014320	Dca-s2,d2,a1
82222122100D1	Drum	560x200x240	45,5	41,0	1000	5608445014337	Dca-s2,d2,a1
82222122030C1	Reel in box	330x265x350	15,0	13,0	305	5608445032294	Cca-s1a,d1,a1

### PACKAGING

This images are merely illustratives. We want you to see the importance we attach to the packaging. We always work with products and materials that are easy to use. The drum material is Plywood.



Available in different CPR class. Please specify in your request.



As part of our goal to achieve quality excellence, our barpa System Warranty can give you 25 years products and solution assurance of compliance with the industry performance standard comparing with the class installed. This warranty applies to network infrastructure installations that was made by an approved barpa Partner using an barpa solution (end-to-end). For more informations go to our website.

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datasheet n° b7\_4