

## Technical Data Sheet

# Rosenberger

Cat6A UTP Data Cable

CP11-171-XX

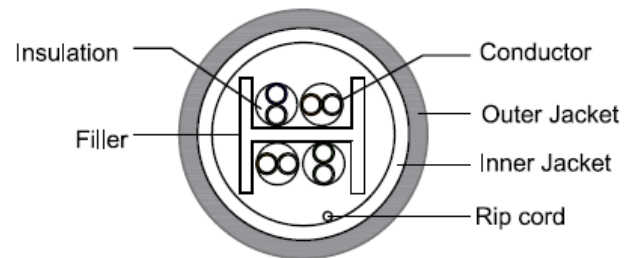
### Application

Rosenberger indoor CAT6A UTP cable are designed for unshielded cabling system. Rosenberger HDCS Category 6A cables exceed ANSI/TIA-568C.2 requirements for Category 6A performance with large margins on all parameters. It is available in different jacket material including CMX, CM, CMR, LSZH for different applications.

- 10baseT Ethernet
- 100baseTX Fast Ethernet
- 1000baseTX Gigabit Ethernet
- 10Gbase-T Gigabit Ethernet
- 155Mbit ATM
- 622Mbit ATM
- 1.2 Gbit ATM
- TR-16 Active
- TR-16 Passive

### Construction

Construction: 4x2xAWG23  
 Conductor: AWG 23 solid copper  
 Insulation: HDPE  
 Core: 4 twist pairs  
 Filling: PE  
 Inner jacket: PE  
 Outer jacket: CMX, CM, CMR, LSZH  
 Standard Colour: Grey (PVC), Purple (LSZH)  
 Normal Diameter: 7.35\* 8.1mm



### Warranty

25 years of total warranty system guarantee the Rosenberger HDCS® for True Class E<sub>A</sub> system.\*

\*Please check the detail warranty documents for more information.

### Installation

Rosenberger HDCS® Category 6A UTP cable is specially designed for easy termination on the field site. With centre PE filling element, Rosenberger HDCS® Category 6A UTP data cables guarantee the stable construction and enhanced performance.

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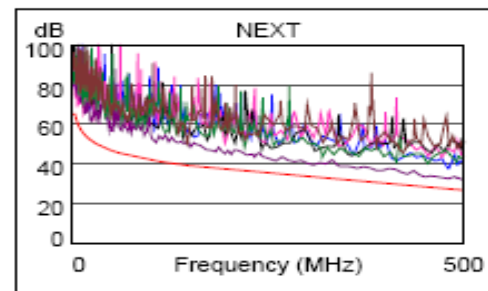
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## Electrical Performance at 20°C

Frequency (MHz)	ATT (dB/100m)	NEXT (dB)	RL (dB)	PSNEXT (dB)	ACRF (dB)	PS-ACRF (dB)	PS-ANEXT (dB)	PS-AACRF (dB)
	Max.	Min.	Min.	Min.	Min.	Min.	Min.	Max.
1.0	2.1	74.3	20.0	72.3	67.8	64.8	67.0	67.0
4.0	3.8	65.3	23.0	63.3	55.8	52.8	67.0	66.2
8.0	5.3	60.8	24.5	58.8	49.7	46.7	67.0	60.1
10.0	5.9	59.3	25.0	57.3	47.8	44.8	67.0	58.2
16.0	7.5	56.2	25.0	54.2	43.7	40.7	67.0	54.1
20.0	8.4	54.8	25.0	52.8	41.8	38.8	67.0	52.2
25.0	9.4	53.3	24.3	51.3	39.8	36.8	67.0	50.2
31.25	10.5	51.9	23.6	49.9	37.9	34.9	67.0	48.3
62.5	15.0	47.4	21.5	45.4	31.9	28.9	65.6	42.3
100.0	19.1	44.3	20.1	42.3	27.8	24.8	62.5	38.2
200	27.6	39.8	18.0	37.8	21.8	18.8	58.0	32.2
250	31.1	38.3	17.3	36.3	19.8	16.8	56.5	30.2
300	34.3	37.1	16.8	35.1	18.3	15.3	55.3	28.7
400	40.1	35.3	15.9	33.3	15.8	12.8	53.5	26.2
500	45.3	33.8	15.2	31.8	13.8	10.8	52.0	24.2

## Other Performance at 20°C

DC resistance	≤9.50 Ω/100m
Unbalanced resistance	≤5%
Unbalance capacitance	≤330pF/100m
Capacitance	≤5.6nF/100m
Dielectric strength	DC 1kv (3s No Fail)
Insulation resistance	≥5000Mohm.Km
Impedance	1~125MHz (100±15) Ω
	125~250MHz (100±22) Ω
	250~500MHz (100±25) Ω
Delay skew	≤45ns
Operating voltage	≤48V



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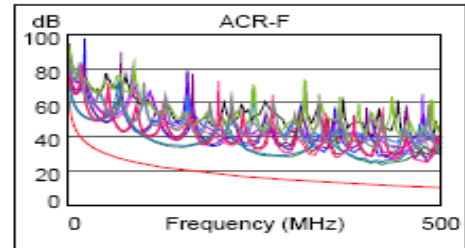
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**Mechanical Performance at 20°C**

Bending radius	
During installation (min.)	8xouter diameter
Installed (min.)	4xouter diameter
Temperature range	
During installation	0°C to +50°C
Installed	-20°C to +60°C

**Ordering Information**

Order Number	Description
CP11-171-12	Cat6A indoor UTP cable, CM, 305m/reel
CP11-171-13	Cat6A indoor UTP cable, LSZH, 305m/reel
CP11-171-14	Cat6A indoor UTP cable, CMR, 305m/reel
CP11-171-22	Cat6A indoor UTP cable, CM, 500m/reel
CP11-171-23	Cat6A indoor UTP cable, LSZH, 500m/reel
CP11-171-24	Cat6A indoor UTP cable, CMR, 500m/reel

While the information has been carefully compiled to the best of our knowledge, nothing is intended as representation or warranty on our part and no statement herein shall be construed as recommendation to infringe existing patents. In the effort to improve our products, we reserve the right to make changes judged to be necessary.

Draft	Date	Check	Approve	Date	Rev.	ECN	Name	Date
<i>[Signature]</i>	2018-08-31	<i>[Signature]</i>	<i>[Signature]</i>	2018-08-31	200	ECN 18-0297	<i>[Signature]</i>	2018-08-31

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