PRD520

DuraFlex™ Ethercon CAT5E SF/UTP cable

PRO AB
PRIME SERIES
★★★★★

The PRD520 is a *DuraFlex*™ Ethercon CAT5E SF/UTP cable (PCT50SF) which is specifically designed for the growing number of digital applications in the professional AV industry.

Both ends are terminated using male Ethercon connectors, allowing ridgid and direct connections between equipment provided with female Ethercon chassis connections. It features a Duraflex™ outer jacket constructed using a double-extrusion technique with an polyurethane outer and PVC inner jacket. The polyurethane outer jacket offers an excellent resistance against mechanical wear due to pulling, bending, cracking and UV exposure, while the PVC inner jacket keeps it easy to handle.

The conductor section consists of 4 pairs with stranded 24 AWG conductors which guarantees an optimal signal transmission while the double shielding consisting of an overall aluminum foil surrounded by a braiding offers a high immunity to noise and interference caused by external devices.

Supports 10Base-T, 100Base-TX and 1000Base-T gigabit networks.
Supports Dante, Cobranet, Ethersound, HdbaseT and other AV network protocols

RENTAL+

CONNECTORS BY NEUTRIK® innovative solutions superior quality

PUR Polyurethane | CAT5E 100 MHz | Bi-Jacketed | Shielded | Shrinksleeve | Gold plated

Physical Characteristics	
Type of cable	CAT5E SF/UTP Networking cable
Inner conductor	BC 7 x 0.20 mm (OFC)
Inner conductor section	0.22 mm²
Number of conductors	8 (4 pairs)
Insulation	HDPE Ø 1.14 mm
Insulation colour	Blue & Blue / White Orange & Orange / White Green & Green / White Brown & Brown / White
Twisting lay length	≤ 30mm
Shielding 1	Individual Al-foil 100% coverage - 25% Overlap
Shielding 2	Braiding TC 16 x 4 x 0.1 mm > 66% coverage
Inner jacket	Soft PVC
Inner jacket dimensions	Ø 6.6 mm
Separator	Polyester tape
Outer jacket	Polyurethane (PUR)
Outer jacket colour	Black
Outer jacket dimensions	Ø 8.2 mm
American Wire Gauge	24 AWG
Connection type	Ethercon male to Ethercon male
Fitted connectors	2 x NE8MC-B-1

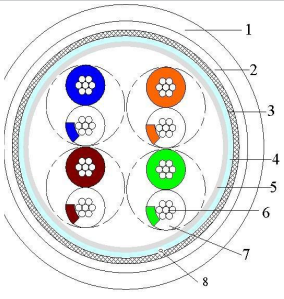
Standards & regulations	
RoHS2 compliant	According EU Directive 2011/65/EU
Reach compliant	According EC 1907/2006
Flammability test	According IEC 60332-1
Indoor / outdoor	Indoor & outdoor
Cabling standard	ISO/IEC11801; IEC61156; UL444; ANSI/TIA-568-C.2

Mechanical Characteristics		
Temperature range	fixed installation	-20° C till +75° C
	flexible installation	-15° C till +60° C
Bending radius	fixed installation	8 x cable Ø OD
	flexible installation	10 x cable Ø OD

Ordering & packaging	
PRD520/5	5 meter version
PRD520/10	10 meter version
PRD520/15	15 meter version
PRD520/20	20 meter version

Electrical Characteristics	
Dielectricum Σr	HDPE
Max. conductor DC resistance	145 (Ω/Km)
Max. conductor DC resistance unbal.	2%
Nom. mutual capacitance	5.6 (nF/100m)
Pair to ground capacitance unbalance	160 (pF/100m)
Nom. Velocity of propagation	65 %
Max. Delay / Skew	45 (ns/100m)
Dielectric strength	1.5 (KV/1min. DC)
Nom. shield DC resistance	(Ω/Km)
Characteristic impedance	100Ω +/-15Ω
Voltage rating	72V

Cross section



1	Outer jacket
2	Inner jacket
3	Braiding
4	Al-foil
5	Polyester tape
6	Insulation
7	Conductor
8	Drain wire

Additional specifications

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Frequency	Characteristic Impedance Upper limit	Characteristic Impedance Lower limit	ATT	RL	NEXT	PS NEXT	ELFEXT (ACR-F)	PS ELFEXT (PS ACR-F)	PD
(MHz)	Zu (Ω)	Zl (Ω)	(dB/100m)	(dB Min)	(dB Min)	(dB Min)	(dB Min)	(dB Min)	(ns/100m Max)
4	115.2	86.8	6.0	23.0	56.3	53.5	52.0	49.0	552.0
8	112.6	88.8	8.5	24.5	51.8	48.8	45.9	42.9	546.7
10	111.9	89.4	9.5	25.0	50.3	47.3	44.0	41.0	545.4
16	111.9	89.4	12.1	25.0	47.2	44.2	39.9	36.9	543.0
20	111.9	89.4	13.5	25.0	45.8	42.8	38.0	35.0	542.0
25	113.2	88.3	15.2	24.2	44.3	41.3	36.0	33.0	541.2
31.25	114.6	87.2	17.1	23.3	42.9	39.9	34.1	31.1	540.4
62.5	120.2	83.2	24.8	20.7	38.4	35.4	28.1	25.1	538.6
100	125.3	79.8	32.0	19.0	35.3	32.3	24.0	21.0	537.6

Above indicated values are measured by PCT50SF cable according to the ANSI/TIA-568-C.2 (100 meter) specification

For measurement reports on other specific lengths refer to the LinkWare test reports available on www.procab.be