

PRD500

DuraFlex™ RJ45 CAT5E SF/UTP cable



The PRD500 is a DuraFlex™ 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 by male RJ45 connectors with removable connector boots, allowing the assembly of Neutrik Ethercon connector shells. The 50 micron thick gold plating on the contacts guarantee an optimal and reliable connection, even after numerous times of usage. It features a DuraFlex™ outer jacket constructed using a double-extrusion technique with a 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



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Physical Characteristics

Type of cable	CAT5E SF/UTP Networking cable
Inner conductor	BC 7 x 0.20 mm (OFC)
Inner conductor section	0.22 mm ²
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	RJ45 male to RJ45 male
Fitted connectors	RJ45 with 50 micron gold plated contacts

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

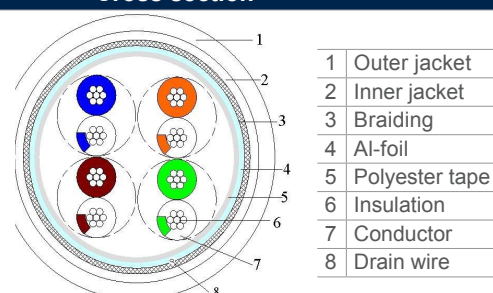
Ordering & packaging

PRD500/0.5	0.5 meter version
PRD500/1	1 meter version
PRD500/1.5	1.5 meter version
PRD500/3	3 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	100 Ω +/-15 Ω
Voltage rating	72V

Cross section



Additional specifications

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