

Datasheet

Cat.5e F/UTP 4x2x0,50 PVC-Eca

P/N: 5685894905 (419PM)



PHYSICAL PARAMETERS

- 1) Conductor: copper wire AWG24 ($\varnothing$ 0,50 mm $\pm$ 0,005 mm)
- 2) Insulation: HDPE, $\varnothing$ 1,00 mm $\pm$ 0,05 mm
- 3) Pair: two conductors twisted together
Color identification of pairs:
pair 1: white-blue / blue
pair 2: white-orange / orange
pair 3: white-green / green
pair 4: white-brown / brown
- 4) Sheath: PVC, thickness 0,55 mm $\pm$ 0,05 mm,
nominal cable $\varnothing$ 6,2 mm $\pm$ 0,5 mm
- 5) Ground wire: tinned copper wire $\varnothing$ 0,45 $\pm$ 0,005 mm
- 6) Foil material: Al/Mylar

APPLICATION

- PBX, V.11, X.21, ISDN, Ethernet (10Base-T), ATM-25/52/155 Mbit/s, 100VG-AnyLAN, Token Ring 16/100 Mbit/s
- Fast Ethernet (100BASE-TX), Gigabit Ethernet (1000BASE-T), 2,5 Gbit/s Ethernet (2.5GBASE-T) and 5 Gbit/s (5GBASE-T) with a Channel length of 100 meters confirmed
- PoE (802.3af), PoE+ (802.3at)

RoHS and REACH

RoHS: does not contain any of the substances listed in Annex II of the EU directive no. 2015/863
REACH: does not contain any of the substances from the ECHA list

INSTALLATION AND OPERATION CONDITIONS

For stationary installation inside buildings, stations, structures and equipment, operated on frequencies up to 100 MHz.

COMPLIANCE WITH THE REQUIREMENTS

Cabling: ISO/IEC 11801-1, EN 50173-1, ANSI/TIA-568.2-D
Cable: IEC 61156-5, EN 50288-3-1, ANSI/TIA-568.2-D
CPR: Class E_{ca} (EN 60332-1-2) – AVCP 3

MECHANICAL CHARACTERISTICS

- Temperature range:
- During installation 0 °C ... +50 °C
 - After installation -20 °C ... +60 °C
- Bending radius:
- During installation $\geq$ 4 cable diameters
- Tensile stress: $\leq$ 100 N

ELECTRICAL CHARACTERISTICS AT 20 °C, 100 M

Parameter	Unit	Value
Resistance unbalance	%	2
Signal propagation velocity	s	0,68
Propagation delay	ns/100 m	$\leq$ 535
Delay shift on the frequency 100 MHz	ns/100 m	$\leq$ 45
Test voltage between cores, (DC, 2 s)	kV	2,5

TRANSMISSION CHARACTERISTICS AT 20 °C, 100 M

Frequency, MHz	1	4	8	10	16	20	25	31,25	62,5	100
Attenuation, dB	1,94	3,89	5,52	6,18	7,83	8,77	9,81	11,00	15,67	19,86
NEXT, dB	83,24	71,20	68,88	69,88	66,11	66,90	65,40	57,77	53,31	52,37
PS NEXT, dB	82,43	69,89	66,19	66,88	63,11	63,82	60,58	55,07	51,59	50,12
Prop. Delay, ns	534,95	516,29	510,89	509,48	507,05	506,03	505,18	504,40	502,45	501,44
ACR-F, dB	76,30	64,02	58,02	55,08	52,09	49,66	43,65	45,14	38,30	34,68
RL, dB	32,03	33,38	35,09	36,05	43,10	41,27	40,07	39,08	34,07	33,31

ORDER INFORMATION

P/N	Cable name	Standard packing	Weight, kg/km
5685894905 (419PM)	ARGOS Premium Network Cable - CAT5e FTP PVC	305m/box	39,4