


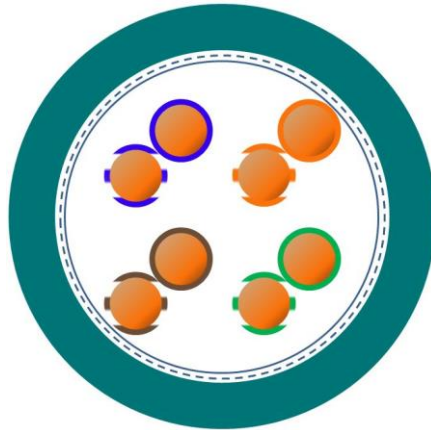
2170297	DATA SHEET	
valid from: 01.01.2019	ETHERLINE® P Cat. 5e 4x2x24/1 AWG	

Application

ETHERLINE® P Cat. 5e 4x2x24/1 AWG is a CATEGORY 5e high speed data transmission cable for industrial environments. This data cable meets the requirements of Standards EIA/TIA-568, TSB-36 and ISO/IEC 11801 „Generic Cabling for Customer Premises“ for CLASS D

Links. The high quality screen ensures high transmission reliability of data transfer in electro-magnetically polluted areas. The PUR sheath is widely resistant against mineral oils and abrasion. The cable is intended for fixed installation in dry and damp interiors and outdoors.

Design



Certification	UL AWM styles 11117 and 21576 (1000 V, 80 °C) acc. to UL 758 cRU AWM I/II A/B (FT2) acc. to CSA C22.2 No.210-05
Conductor	bare copper wire, ∅ ca. 0.51 mm (24 AWG)
Insulation	foam-skin polyolefin, core ∅ max. 1.04 mm
Core identification code	acc. to IEC 60708-1 pair 1: white(-blue)/blue; pair 2: white(-orange)/orange; pair 3: white(-green)/green; pair 4: white(-brown)/brown
Stranding	cores twisted to pairs, pairs stranded together 1 layer plastic-foil
Screen	plastic laminated aluminum foil on top: braid of tinned copper wire, coverage ca. 85 %
Outer sheath	PUR halogen free compound, blue (similar to RAL 5021), outer ∅: ca. 6.1 mm

Electrical properties at 20°C

Loop resistance	max. 192 Ω/km
Insulation resistance	min. 5 GΩxkm
Mutual capacitance	nom. 48 nF/km
Characteristic impedance	100 Ω ±15 Ω (1MHz up to 100 MHz)
Velocity of propagation	ca. 0.77 c
Signal transit time	nom. 433 ns/100 m
Peak operating voltage	125 V (not for power purposes)
Test voltage	conductor/conductor 1000 V conductor/screen 1000 V

Creator: TOST / PDC	Document: DB2170297EN	Page 1 of 2
Released: ALTE / PDC	Version: 07	

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Electrical transmission properties at 20°C

f [MHz]	Attenuation [dB/100m] standard	NEXT [dB] standard	EL FEXT [dB] standard	Return Loss [dB] standard
4	4,1	56,3	52	23
10	6,7	50	43,3	25
16	8,3	47,2	40	25
31,25	11,7	42,8	34	23,6
62,5	17	38,4	28,1	21,6
100	22	35,3	24	20,1

Mechanical and thermal properties

Minimum bending radius	7,5 x cable Ø
Temperature range	moved (VDE): -5° C up to +50° C fixed installation (VDE): -30° C up to +80° C moved (UL): -5° C up to +80° C fixed installation (UL): -30° C up to +80° C
Flammability	acc. to IEC 60332-1-2
Halogen free	acc. to VDE 0472-815
General requirements	This cable is conform to the EU-Directive 2011/65/EU (RoHS, Restriction of the use of certain hazardous substances).

Creator: TOST / PDC	Document: DB2170297EN	Page 2 of 2
Released: ALTE / PDC	Version: 07	