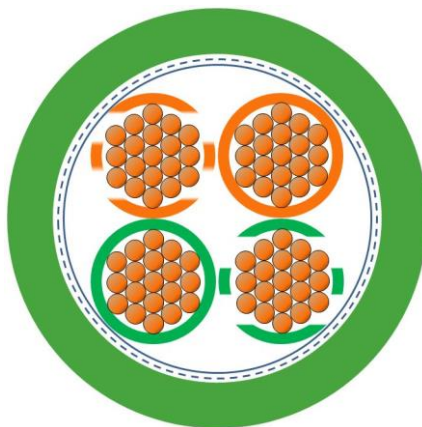


2170433	DATA SHEET	
valid from: 01.01.2019	ETHERLINE® P EC FD Cat. 5e	

Application

ETHERLINE® P EC FD Cat. 5e is a high flexible CATEGORY 5e high speed data transmission cable for industrial environments. The high quality screen ensures high transmission reliability of data transfer in electromagnetically polluted areas.

Design



Conductor	tinned stranded copper, 26/19 AWG
Insulation	polyolefin, core Ø ca. 1.03 mm
Core identification code	orange-orange/white; green-green/white
Stranding	star quad non-woven tape
Screen	plastic laminated aluminum foil on top: braid of copper wire, coverage ca. 85 %
Outer sheath	PUR compound, green (similar to RAL 6018), outer Ø ca. 4,8 mm

Electrical properties at 20°C

Conductor resistance	max. 142 Ω/km
Specific volume resistivity	min. 5 GΩxkm
Velocity of propagation	ca. 0,67 c
Signal transit time	nom. 498 ns/100 m
Peak operating voltage	125 V (not for power purposes)
Test voltage	conductor/conductor 1500 V conductor/screen 1500 V

Creator: TOST / PDC	Document: DB2170433EN	Page 1 of 2
Released: ALTE / PDC	Version: 02	

2170433	DATA SHEET	
valid from: 01.01.2019	ETHERLINE® P EC FD Cat. 5e	

Electrical transmission properties at 20°C

f [MHz]	Attenuation [dB/100m] standard	NEXT [dB] standard	EL FEXT [dB] standard	Return Loss [dB] standard
4	6	56,3	52	23
10	9,5	50,6	43,6	25
16	12,1	47,2	39,8	25
31,25	17,1	42,9	34,1	23,3
62,5	24,8	38,4	28,1	20,8
100	32	35,3	24,0	19

Mechanical and thermal properties

Minimum bending radius	moved: 16 x cable Ø (to be tested, mechanical and continuity test) fixed installation: 4 x cable Ø
Temperature range	moved: -30° C up to +50° C fixed installation: -40° C up to +80° C
Flammability	VW-1 flame test, acc. to UL 1581 / UL 2556
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: DB2170433EN	Page 2 of 2
Released: ALTE / PDC	Version: 02	