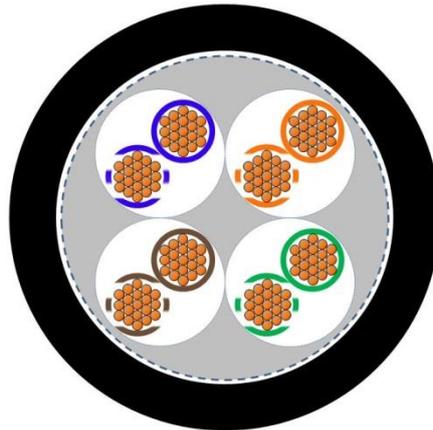


CE217489	DATA SHEET	
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Application

ETHERLINE® FD P BK CAT. 5 4 x 2 x AWG26/19 is a CATEGORY 5 high speed data transmission cable suitable for application in the industrial environments. It is made of halogen free materials. This data cable meets the requirements of standards EIA/TIA-568, TSB-36 and ISO/IEC IS 11801 „Generic Cabling for Customer Premises“ for CLASS D Links. The high quality screen ensures high transmission reliability of data transfer in electromagnetically polluted areas. The PUR outer sheath is very resistant against mineral oils and fats, against abrasion and atmospheric UV radiation. The cable is intended for highly flexible applications in power chains or permanently moving machines and linear robots in dry and damp interiors and in harsh industrial environment.

Design



Certification	UL AWM styles 11117 and 21576 (1000 V, 80 °C) acc. to UL 758 cRU AWM I/II A/B (FT1) acc. to CSA C22.2 No.210-15
Conductor	bare copper fine-wire stranded 19 x 0.10 mm \varnothing 0.15 mm ² (26 AWG)
Insulation	foam-skin polyethylen ca. 1.0 mm outer \varnothing
Core identification code	pair 1: white/blue-blue, pair 2: white/orange-orange, pair 3: white/green-green, pair 4: white/brown-brown
Stranding	2 cores stranded to pair, 4 pairs stranded to bundle with filler
Inner sheath	Halogen free TPE, nom. \varnothing 5.0 mm
Screen	braid of copper wire tinned wire coverage ca. 85 %
Outer sheath	PUR black similar to RAL 9005 outer \varnothing : ca. 6.3 mm

Electrical properties at 20°C

Loop resistance	max. 290 Ω /km
Insulation resistance	min. 5 G Ω km
Mutual capacitance	nom. 50 nF/km
Characteristic impedance	nom. 100 Ω acc. to IEC 61156-6 100 \pm 15 Ω (@ 100 MHz)
Peak operating voltage	125 V (not for power purposes)
Test voltage	conductor/conductor 1000 V conductor/screen 500 V

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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	moved: 15 x cable Ø fixed installation: 10 x cable Ø
Temperature range	moved: -30° C up to +70° C fixed installation: -40° C up to +80° C
Flammability	Compliant to UL 1581 § 1090 and 1100 std.
Halogen free	halogen free acc. to IEC 60754-1 Std. and EN 50267-2-1
Oil resistance	oil resistant acc. to IEC 60811-2-1, ICEA S-82-552 and ASTM-oil 1 Std.
General requirements	This cable is conform to the EU-Directive 2011/65/EU (RoHS, Restriction of the use of certain hazardous substances).

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