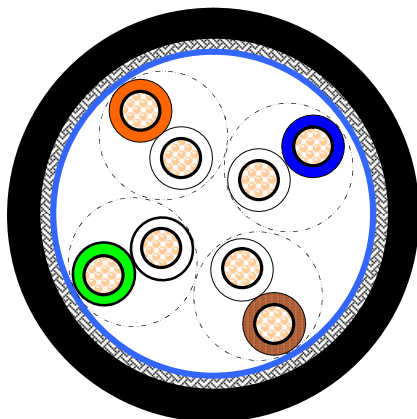


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APPLICATION:

For use in railway applications such as rolling stock, buses or other vehicles, cable meets the requirements of the relevant parts of international railway standards like DIN 5510-2, EN50153 EN50155, EN50305 and CEN/TS 45545

CABLE CONSTRUCTION



Conductor:

Material Stranded PACW
Construction 19X0.1 mm (26 AWG)

Insulation:

Material Polyolefin (solid)
Diameter 1.0 mm +/- 0.05

Pair

Pair 2 twisted insulated conductors
Number of pairs 4, all twisted together Left hand lay.
Colour code pair 1 White / Blue & Blue
Colour code pair 2 White / Orange & Orange
Colour code pair 3 White / Green & Green
Colour code pair 4 White / Brown & Brown

Tape

Material Polyester tape

Foil-Screen

Material Aluminium/polyester

Braided Screen:

Material tinned copper wires
Coverage >85%

Sheath:

Material X-FRNC
Diameter 6.7 +/- 0.2 mm
wallthickness 0.9 mm
Colour Black

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ELECTRICAL CHARACTERISTICS (ACC. ISO/IEC 11801 CAT D)

Low frequency and D.C. (at 20°C)	Specification	Unit
D.C. resistance conductor	< 14.5	Ω/100m
Resistance unbalance: within a pair / between pairs	< 2 / < 4	%
D.C. insulation resistance: cond. – cond.	≥ 5000	MΩ.km
Dielectric strength conductor-conductor and conductor-screen (2 sec.)	2.5	kV DC
Mutual capacitance	< 56	nF/km
Capacitance unbalance pair to ground	< 1600	pF/km
Nominal velocity of propagation (for information only)	> 0.6	c
Delay skew (differential delay)	≤ 40	ns/100m
Transfer impedance according IEC 61156-5	Grade 1	
Coupling attenuation according IEC 61156-5	Type I	

High frequency (at 20°), reference standard: ISO/IEC61156-5									
TYPE	1*	4	10	16	20	31.25	62.5	100	MHz
Attenuation	3.2	6.0	9.5	12.1	13.5	17.1	24.8	33.0	dB/100m
NEXT	65.3	56.3	50.3	47.2	45.8	42.9	38.4	35.3	dB/100m
PS NEXT	62.3	53.3	47.3	44.2	42.8	39.9	35.4	32.3	dB/100m
ACR	62.1	50.3	40.8	35.2	32.2	25.8	13.6	3.3	dB/100m
PS ACR	59.1	47.3	37.8	32.2	29.2	22.8	10.6	0.3	dB/100m
ACR-F	64.0	52.0	44.0	39.9	38.0	34.1	28.1	24.0	dB/100m
PS ACR-F	61.0	49.0	41.0	36.9	35.0	31.5	25.1	21.0	dB/100m
Return Loss	20.0	23.0	25.0	25.0	25.0	23.3	20.7	19.0	dB/100m
TCI level 1	40.0	34.0	30.0	28.0	27.0	25.1	22.0	20.0	dB/100m
EL TCTL	35.0	23.0	15.0	10.9	9.0	5.5			dB/100m
Impedance upper limit	122.2	115.2	111.9	111.9	111.9	114.6	120.2	125.3	Ω
Impedance lower limit	81.8	86.8	89.4	89.4	89.4	87.2	83.2	79.8	Ω
Propagation delay	570	552	545	543	540	539	538	537	ns/100m

NOTE: Limits below 4MHz are for information only

