

POLYENEX – Communication Series – CAT5e CO-IREE-SB CX100 (X)

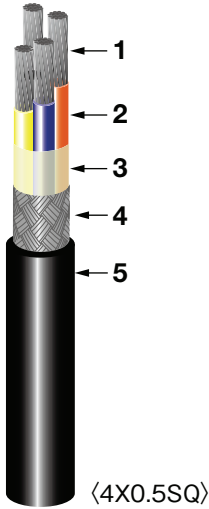
100Ω

Fire Protection Levels

EN45545-2
Int. HL3 / ext.HL3

DIN5510-2
1, 2, 3, 4

Standard
IEC61156-6



<4X0.5SQ>

- Rated voltage
AC 30V
- Operating temp. range
-40~80°C

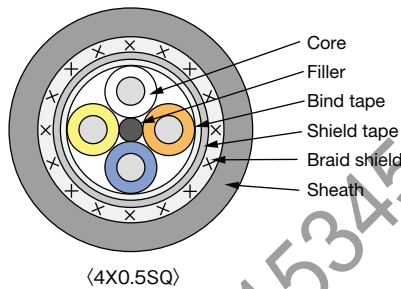
Properties

Flame resistance, Low smoke fume, Low toxicity

Application

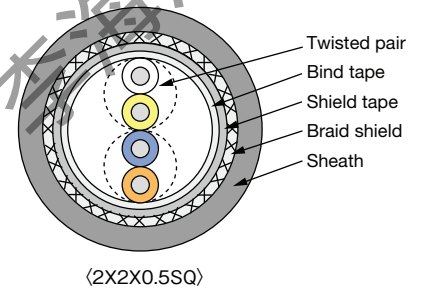
On-board railway Ethernet cables up to 100MHz

Construction



<4X0.5SQ>

- 1. CONDUCTOR**
Stranded with tin-coated annealed copper wire
- 2. INSULATION**
Cross-linked polyethylene (white, yellow, blue, orange)
- 3. BIND TAPE**
Add appropriate tape if necessary
- 4. SCREEN**
Metal tape shield and tin-coated annealed copper braid shield
- 5. SHEATH**
Cross-linked polyolefin (black)



<2X2X0.5SQ>

- 1. CONDUCTOR**
Stranded with tin-coated annealed copper wire
- 2. INSULATION**
Cross-linked polyethylene
(Pair No.1:white/yellow)
(Pair No.2:blue/orange)
- 3. BIND TAPE**
Add appropriate tape if necessary
- 4. SCREEN**
Metal tape shield and tin-coated annealed copper braid shield
- 5. SHEATH**
Cross-linked polyolefin (black)

Cable characteristics



Rated voltage
AC 30V



Operating temp. range
-40~80°C



Flame retardant
IEC60332-1-2



Fire retardant
IEC60332-3-24
IEC60332-3-25
EN50305



Smoke density
IEC61034-2
DIN5510-2



Gases toxicity
EN50305
DIN5510-2



Halogen free



Oil and fuel
resistant
good



Acid and alkaline
resistant
good



Ozone resistant
good



Cold resistant
-40°C
good



Minimum bending
radius when
installed
10D



Minimum bending
radius when
laying
10D

No. of cond. x Cross section (mm ²)	Inner conductor diameter (Nom.) (mm)	Insulation diameter (Nom.) (mm)	Overall diameter (mm)	Max. conductor resistance at 20°C (Ω/km)	Capacitance 1kHz (pF/m)	Characteristic impedance 1-100MHz (Ω)	Near end crosstalk			Attenuation			Approx. weight (kg/km)
							1.0MHz (dB/100m)	31.25MHz (dB/100m)	100MHz (dB/100m)	1.0MHz (dB/100m)	31.25MHz (dB/100m)	100MHz (dB/100m)	
4X0.5	0.94	2.2	7.7± 0.4	40.1	≤55	100±15	≥59	≥37	≥29	≤2.1	≤11.8	≤22	85
2X2X0.5*	0.94	1.86	9.5 ± 0.4	40.1	≤55	100±15	≥68	≥44	≥47	≤2.1	≤11.8	≤22	100

* Conductor sizes in the range from 0.25mm² to 0.75mm² are available upon request