

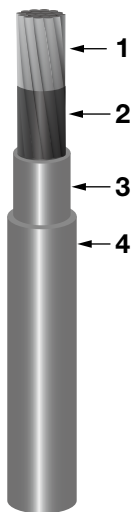
POLYENEX – EN compliant Series – EN50382-2 1800V Sheathed

single
core

Fire Protection Levels

EN45545-2
Int. HL3 / ext.HL3

Standard
EN50382-2



- Rated voltage U_0/U
AC 1.8/3.0kV
- Operating temp. range
-40~120°C
-40~150°C

Properties

Halogen free, Flame resistance, Low smoke fume, Low toxicity, High chemical resistance, High mechanical properties, Heat/cold resistance, Ozone resistance

Application

Single core cable that is applied to fixed internal/external wiring for rolling stock (Reference: EN50355:2003 EN50343:2003)

Construction

1. CONDUCTOR

Stranded with tin-coated (120°C) or plain (150°C) annealed copper wire

2. SEPARATING TAPE

Add appropriate tape if necessary

3. INSULATION

Cross-linked silicone rubber (white or black)

Type EI111 according to EN50382-1

4. SHEATH

Cross-linked silicone rubber (black)

Type EM106 or EM107 according to EN50382-1

Cable characteristics



Rated voltage
 U_0/U
AC 1.8/3.0 kV



Operating temp. range
-40~120°C
-40~150°C



Flame retardant
IEC60332-1-2



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



Smoke density
IEC61034-2



Gases toxicity
EN50305



Gases corrosivity
EN50267-2-2



Halogen free
EN50267-2-1
EN60684-2



Oil and fuel resistant
IEC60811-2-1



Acid and alkaline resistant
IEC60811-2-1



Ozone resistant
EN50305



Cold resistant
IEC60811-1-4
EN50305



Minimum bending radius when installed
($D \leq 12$) 3D
($D > 12$) 4D



Minimum bending radius when laying
($D \leq 12$) 4D
($D > 12$) 5D

Nominal cross section (mm ²)	Ave. insulation thickness (mm)	Ave. sheath thickness (mm)	Overall diameter (mm)		Max. conductor resistance at 20°C (Ω/km)	Approx. weight (kg/km)
			min	max		
1.5	1.3	1.4	6.8	7.9	13.7	75
2.5	1.3	1.4	7.2	8.4	8.21	90
4	1.3	1.4	7.7	9.0	5.09	110
6	1.3	1.4	8.2	9.6	3.39	140
10	1.5	1.4	9.4	11.0	1.95	195
16	1.5	1.4	10.5	12.2	1.24	260
25	1.8	1.4	12.3	14.4	0.795	375
35	1.8	1.4	13.6	15.9	0.565	490
50	1.8	1.4	15.0	17.5	0.393	635
70	1.8	1.5	16.8	19.7	0.277	870
95	2.2	1.5	19.0	22.2	0.210	1150
120	2.2	1.6	20.8	24.3	0.164	1410
150	2.2	1.6	22.3	26.1	0.132	1700
185	2.4	1.7	24.5	28.6	0.108	2060
240	2.4	1.8	27.1	31.7	0.0817	2660