

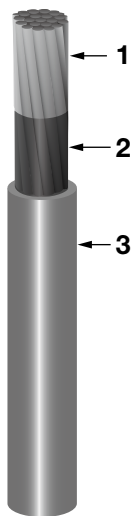
POLYENEX – EN compliant Series – EN50382-2 1800V

single
core

Fire Protection Levels

EN45545-2
Int. HL3 / ext.HL3

Standard
EN50382-2



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

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

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)	Overall diameter (mm)		Max. conductor resistance at 20°C (Ω /km)	Approx. weight (kg/km)
		min	max		
1.5	2.5	6.3	7.3	13.7	65
2.5	2.5	6.7	7.8	8.21	85
4	2.5	7.2	8.4	5.09	105
6	2.5	7.7	9.0	3.39	130
10	2.5	8.5	10.0	1.95	175
16	2.5	9.6	11.2	1.24	240
25	2.5	10.9	12.7	0.795	335
35	2.5	12.1	14.1	0.565	445
50	2.5	13.5	15.8	0.393	580
70	2.5	15.2	17.8	0.277	800
95	2.7	17.0	19.9	0.210	1050
120	2.7	18.6	21.7	0.164	1290
150	2.7	20.1	23.5	0.132	1570
185	2.7	21.7	25.4	0.108	1950
240	2.7	24.1	28.2	0.0817	2450