

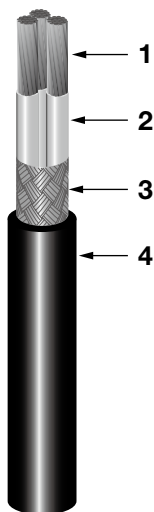
# POLYENEX – EN compliant Series – EN50306-3 300V

multi core  
screened

Fire Protection Levels

EN45545-2  
Int. HL3 / ext.HL3

Standard  
EN50306-3



- Rated voltage  $U_0/U$   
AC 300/500V
- Operating temp. range  
-40~125°C

## Properties

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

## Application

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

## Construction

### 1. CONDUCTOR

Stranded with tin-coated annealed copper wire

### 2. INSULATION

Engineering plastic (white)  
Category M according to EN50306-1

### 3. SCREEN

Tin-coated annealed copper braid shield

### 4. SHEATH

Crosslinked polyolefin (black)  
Category M according to EN50306-1

## Cable characteristics



Rated voltage  
 $U_0/U$   
AC 300/500 kV



Operating  
temp. range  
-40~125°C



Flame  
retardant  
IEC60332-1-2



Fire retardant  
IEC60332-3-24  
EN50305



Smoke density  
IEC61034-2



Gases toxicity  
EN50305



Gases  
corrosivity  
EN50267-2-2



Halogen free  
EN50267-2-1  
EN60684-2



Oil and fuel  
resistant  
EN50305



Acid and alkaline  
resistant  
EN50305



Ozone resistant  
EN50305



Cold resistant  
EN50305



Minimum bending  
radius when  
installed  
10D



Minimum bending  
radius when  
laying  
10D

No. of cond. x Cross section (mm <sup>2</sup> )	Min. insulation thickness (mm)	Approx. screen thickness (mm)	Min. sheath thickness (mm)	Overall diameter (mm)		Max. conductor resistance at 20°C (Ω/km)	Approx. weight (kg/km)
				min	max		
1x0.5	0.18	0.3	0.20	2.3	2.8	40.1	15
2x0.5	0.18	0.3	0.20	3.5	4.3	40.1	29
3x0.5	0.18	0.3	0.20	3.7	4.5	40.1	37
4x0.5	0.18	0.3	0.20	4.0	5.0	40.1	43
1x0.75	0.18	0.3	0.20	2.5	3.0	26.7	20
2x0.75	0.18	0.3	0.20	3.9	4.7	26.7	37
3x0.75	0.18	0.3	0.20	4.0	5.0	26.7	47
4x0.75	0.18	0.3	0.20	4.5	5.5	26.7	55
1x1.0	0.18	0.3	0.20	2.7	3.2	20.0	22
2x1.0	0.18	0.3	0.20	4.2	5.2	20.0	43
3x1.0	0.18	0.3	0.20	4.5	5.5	20.0	55
4x1.0	0.18	0.3	0.20	5.0	6.0	20.0	65
1x1.5	0.22	0.3	0.20	3.1	3.6	13.7	31
2x1.5	0.22	0.3	0.20	5.1	6.1	13.7	65
3x1.5	0.22	0.3	0.20	5.4	6.4	13.7	80
4x1.5	0.22	0.3	0.20	6.0	7.0	13.7	105
1x2.5	0.28	0.3	0.20	3.6	4.4	8.21	44
2x2.5	0.28	0.3	0.20	6.4	7.4	8.21	90
3x2.5	0.28	0.3	0.20	6.8	7.8	8.21	120
4x2.5	0.28	0.3	0.20	7.5	8.5	8.21	145