

# POLYENEX – Unified-FS Series – 1.8/3.0kV HF-WP (TYPE-S)

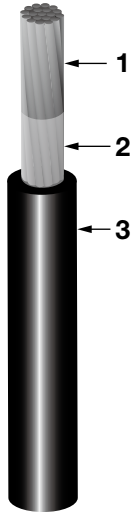
Single  
core

Fire Protection Levels

EN45545-2  
Int. HL3 / ext.HL3

BS6853  
Int. Ia / ext. Ia

DIN5510-2  
1, 2, 3, 4



## Properties

Halogen Free, High flame resistance, Low smoke fume, Low toxicity, Heat/cold resistance

## Application

Single core cable that is applied to fixed internal/external wiring for rolling stock

## Construction

### 1. CONDUCTOR

Stranded with tin-coated annealed copper wire

### 2. SEPARATING TAPE

Add appropriate tape if necessary

### 3. INSULATION

Cross-linked polyolefin (black)

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

## Cable characteristics



Rated voltage  
 $U_0/U$   
AC 1.8/3.0 kV



Operating  
temp. range  
-40~120°C



Flame  
retardant  
IEC60332-1-2



Fire retardant  
IEC60332-3-24  
IEC60332-3-25  
EN50305  
BS6853



Smoke density  
IEC61034-2  
BS6853  
DIN5510-2



Gases toxicity  
EN50305  
BS6853  
DIN5510-2



Halogen free



Oil and fuel  
resistant  
good



Acid and alkaline  
resistant  
good



Ozone resistant  
good



Cold resistant  
good



Minimum bending  
radius when  
installed  
4D



Minimum bending  
radius when  
laying  
4D

Conductor		Max. overall diameter (mm)	Max. conductor resistance at 20°C ( $\Omega$ /km)	Approx. weight (kg/km)
Nominal cross section (mm <sup>2</sup> )	Max. diameter of wires (mm)			
1.5	0.26	3.65	13.7	26
2.5	0.26	3.85	8.21	35
4	0.31	4.60	5.09	55
6	0.31	5.35	3.39	75
10	0.41	6.55	1.95	120
16	0.41	8.60	1.24	185
25	0.41	10.50	0.795	290
35	0.41	12.00	0.565	410
50	0.41	13.80	0.393	550
70	0.51	16.10	0.277	790
95	0.51	17.80	0.210	995
120	0.51	20.10	0.164	1280
150	0.51	22.40	0.132	1560