

JE-H(St)H...Bd FE180 E90

Ref. Std. VDE 0815

Fire Resistant, Internal Installation Communication and Fire Alarm Cables (Silicon Insulated)



APPLICATION

These cables can function in case of fire Halogen Free, flame retardant, low smoke density, Acidic (Corrosive) Gas Test, air ports, hospitals, metro, subway stations, shopping centers, high rise buildings, hotels, industrial plants and so on. signal and communication cables are used as emergency circuits.

CONSTRUCTION



- 1-Inner conductor
 - Electrolytic mono annealed copper (EN 60228, Class 1)
- 2-Insulation
 - This cable is produced with fire resistant special silicon insulation. Core colors will be suitable according to VDE 0815 (Table 1) Up to 4 pairs can produce different core color combination. (Diameter $1,7 \pm 0,05$ mmØ)
- 3-Lay-Up
 - Dual twisted cores are twisted together in 4-units, 4 units twisted in layers.
- 4-Flame Barrier
 - To increase the flame resistance of twisted cores, wrapped with special flame retardant glass fiber tape.
- 5-Screen
 - Screening is performed with AL-PES tape and 0,8mm tinned-copper or mono annealed copper drain wire
- 6-Outer sheath
 - HFFR (EN 50290-2-27, VDE0207 HM2), RAL 2003 Orange

GENERAL FEATURES

-  Flame Retardant (For a single cable) > IEC 60332-1-2, EN 60332-1-2, VDE 0482-332-1-2
-  Acidic (Corrosive) Gas Test > IEC 60754-2, EN 50267-2-2, VDE 0482-267-2-2
-  Flame Retardant (Cable for bundle) > IEC 60332-3-24, EN 60332-3-24, VDE 0482-332-3-24
-  Smoke Density Test > IEC 61034-2, EN 61034-2, VDE 0482-1034-2
-  Determination of Flame Particles Test (Test of flaming droplets) > IEC 60332-1-3, EN 60332-1-3, VDE 0482-332-1-3
-  Insulation Continuity Test (FE180) > IEC 60331-23, VDE 472 part 814
-  Halogen Acid Gas Test > IEC 60754-1, EN 50267-2-1, VDE 0482-267-2-1
-  Circuit Integrity (E90) > DIN 4102-12

TECHNICAL PROPERTIES	0,8 mm	1,0 mm	1,5 mm ²	2,5 mm ²
Temperature Range	-30 °C +90 °C			
Operating Voltage	Max. 300 V			
Test Voltage	Core/core, 1500 V			
Min. Bending Radius	10xD			

ELECTRICAL CHARACTERISTICS	0,8 mm	1,0 mm	1,5 mm ²	2,5 mm ²
Conductor loop resistance (Ω/km)	73,2	43,8	24,2	14,8
Effective Capacity, 800 Hz	120 nF/km			
Capacity Unbalance, 800 Hz	200 pF/100 m			
Insulation Resistance	>100 M.Ω.km			

Table 1

...Bd Standed Layout and Colors 4 pair A Unit (Bd) is defined as.				
A - Teli		B - Teli		
1. Pair	Blue	Red		
2. Pair	Grey	Yellow		
3. Pair	Green	Brown		
4. Pair	White	Black		
5 Pair	Blue	Red	with line ring	

Table 2

Pair Number nx2xØ	Avg. Diameter (mmØ)	Cu Factor (kg/km)	Avg. Weight (kg/km)
1x2x0,8	6,1±0,20	13,8	50
2x2x0,8	6,8±0,20	24	67
4x2x0,8	9,6±0,20	41	117
5x2x0,8	9,8±0,20	50	125
2x2x1,50		56	115

