

Cables for nuclear power station

# 核电站用电缆

## 核电站用 1A 级 K3 类仪表电缆

### Instrument cables of class 1A category K3 for nuclear power station

#### 1 适用范围 服务热线 : 0550-7092499

- 本产品适用于额定电压 300/500V 核电站传感器和电气机柜测量连接。
- 在导体长期允许工作温度不大于 90℃ 时，电缆的鉴定寿命不少于 40 年。
- 成品电缆应符合 GB/T18380.3 标准中规定的 A 类成束燃烧试验要求。
- 成品电缆烟密度：透光率不小于 70%。
- 耐辐射性能： $25 \times 10^4 \text{ Gy}$ 。
- 无卤性：非金属材料在燃烧时，逸出气体的酸度(以 PH 值表示)应大于 4.3；电导率不大于  $10\mu\text{S}/\text{mm}$ 。

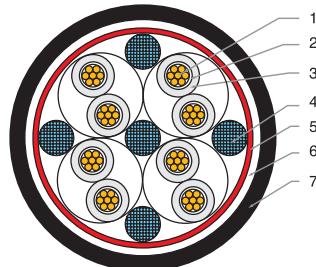
#### 1 Application

- This product is suitable for connecting the sensor with electric cabinet in the nuclear station of rated voltage up to 300/500V.
- When the allowable long-term working temperature of cable conductor is  $\leq 90^\circ\text{C}$ , evaluated life of the cable should be  $\geq 40$  years.
- Finished cable should be in accordance with the flame test method of GB/T18380.3, Category A for bunched cables.
- Smoke density of finished cable: Transmittance  $\geq 70\%$ .
- Radiation resistance:  $25 \times 10^4 \text{ Gy}$ .
- Halogen free: During burning of non-metallic material, acidity of the emergent gas (PH value) should be larger than 4.3; conductivity should be smaller than  $10\mu\text{S}/\text{mm}$ .

#### 2 电缆型号及规格 Size of cable

型号 Model	标称截面 Cross sectional area of conductor ( $\text{mm}^2$ )	额定电压 specified voltage (kv)	芯数 No. of cores
WDZA-HDPYJY			
WDZA-HDPYJYJ			
WDZA-HDPYJYP			
WDZA-HDPYJYJP	0.5		$(1-37) \times 2$
WDZA-HDPYJYP2	0.75		
WDZA-HDPYJYJP2	1.0	300/500	或 3
WDZA-HDPYJYP3	1.5		或 4
WDZA-HDPYJYJP3	2.5		
WDZA-HDPYJPYP			
WDZA-HDPYJPYJP			

#### 3 结构示意图 Drawing



- |               |   |
|---------------|---|
| 1. 铜导体        | 1. Copper conductor                                       |
| 2. 辐照交联聚乙烯内绝缘 | 2. Irradiation XLPE internal insulation                   |
| 3. 辐照交联聚烯烃外绝缘 | 3. Irradiation crosslinked polyolefin external insulation |
| 4. 无卤低烟填充条    | 4. LSOH packed band                                       |
| 5. 无卤阻燃隔氧层    | 5. Non-halogen flame-retardant oxygen barrier             |
| 6. 无卤阻燃包带     | 6. Non-halogen flame-retardant binding band               |
| 7. 无卤低烟外护套    | 7. LSOH outer sheath                                      |