

# Catalogue

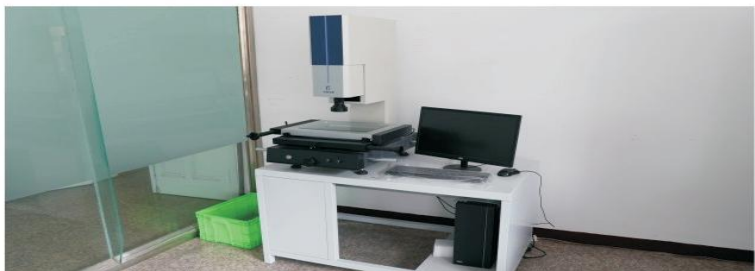
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**Wenzhou Xucky Electric Co.,Ltd**

**[www.xucky.com](http://www.xucky.com)**



**Lightning Arrester&Fuse Cutout&Insulator**



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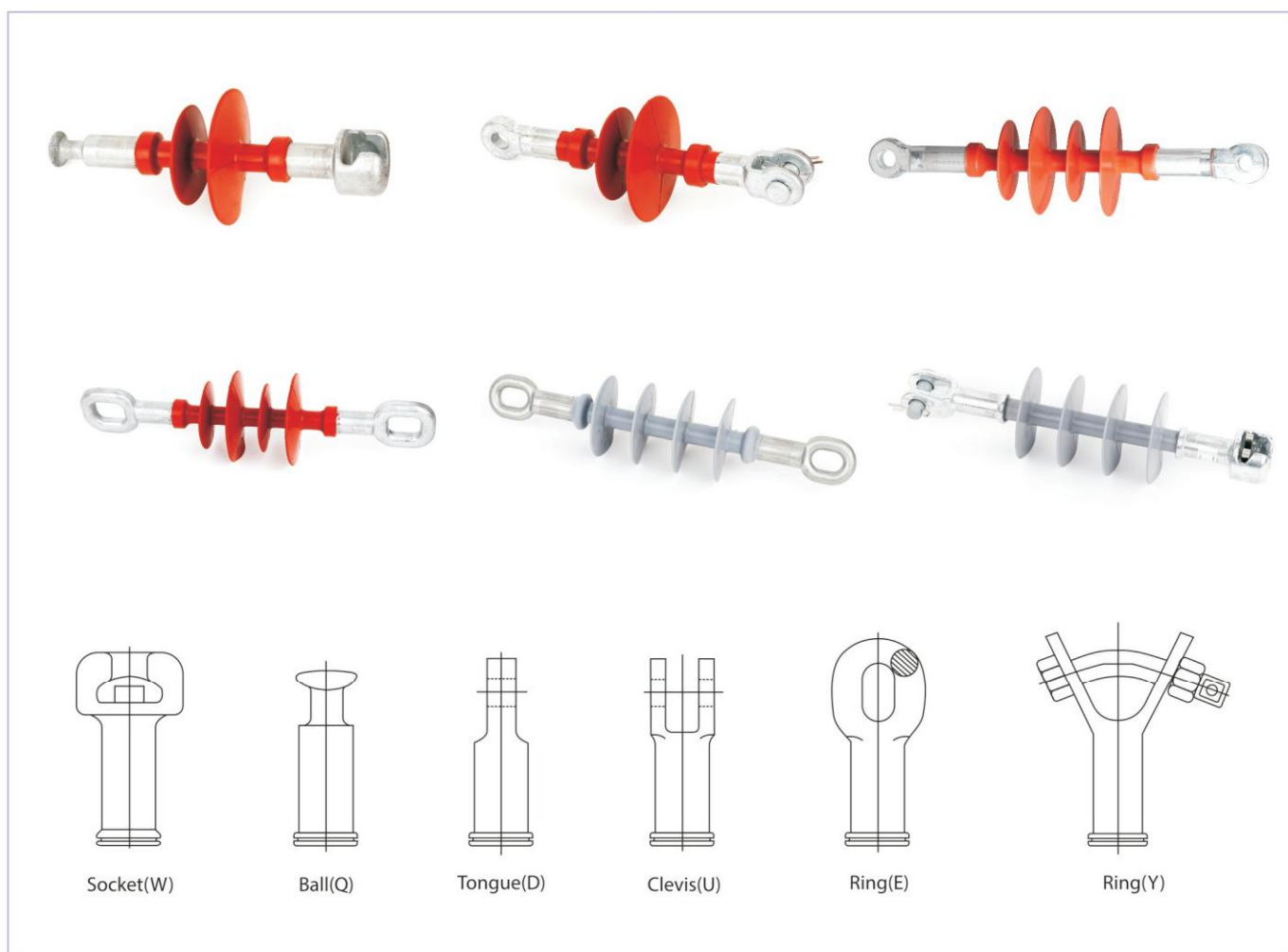
## ***FUSE***

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## Composite Tension & Suspension Insulator

Composite tension & suspension insulator mainly consists of a core rod (ECR type or FRP type), silicone rubber housing and metal end fittings.

- Material of end fittings: #45 forged steel, hot dip galvanized, thickness of the galvanization:  $\geq 86\mu\text{m}$ .
- Material of the core: Epoxy & glass fiber (ECR type or FRP type).
- Material of the weather sheds: HTV silicone.
- Corona ring: Made of high grade aluminum alloy, which is suitable for insulators voltage above 110 kV.
- Housing to core: They are chemically bonded and the interface strength between the housing and core is higher than the tearing strength of housing itself.
- Sealing: Juncture between end fitting and core rod is totally embedded in HTV silicone rubber, eliminating conventional and traditional sealing defects: (The other type is available that use RTV silicone sealant to seal the juncture between end fitting and core rod).
- Standard: IEC61109.



| The connecting hardware in two ends | Socket-Ball | Socket-Tongue | Socket-Clevis | Ball-Ball | Tongue-Clevis | Tongue-Tongue | Clevis-Clevis | Clevis-Ring | Ring-Ring |
|-------------------------------------|-------------|---------------|---------------|-----------|---------------|---------------|---------------|-------------|-----------|
| Abbreviation in China               | WQ          | WD            | WU            | QQ        | DU            | DD            | UU            | UE          | EE        |
| Connection Mark                     | 16-16       | 16-7          | 16-7          | 16-16     | 7-7           | 7-7           | 7-7           | 7-7         | 7-7       |



FXBW-1/70

FXB-11/70

FXBO-11/70

FXB-11/70UD

FXB-12/70WU

FXB-12/70WU



FXB-24/70DU

FXBW-24/70

FXBW-24/70QQ

FXB-33/70DU

FXBW-33/70

FXBW-33/70

FXBW-33/70

FXBW-33/70

FXBW-230/120

FXBW-230/120

| Item No.    | Dimensions  |                              |                            |                          |                 | Mechanical                          |                             | Electrical       |   |  |
|-------------|-------------|------------------------------|----------------------------|--------------------------|-----------------|-------------------------------------|-----------------------------|------------------|---|--|
|             | Height (mm) | Min Dry Arcing Distance (mm) | Min Creepage Distance (mm) | Diameter of the rod (mm) | Number of sheds | Specified Mechanical Load(SML) (kN) | Routine Test Load(RTL) (kN) | Rated Voltage kV | Critical Impulse Flashover Voltage (Pos/Neg) kV | Power Frequency Flashover Voltage (Dry/Wet) kV |
| FXB 11-15kV | 335         | 200                          | 460                        | 17                       | 4               | 70                                  | 35                          | 11-15            | 140/145   | 70/60  |
| FXB 24-27kV | 460         | 235                          | 675                        | 17                       | 6               | 70                                  | 35                          | 24-27            | 170/190   | 75/65  |
| FXB 33-36kV | 545         | 350                          | 900                        | 17                       | 8               | 70                                  | 35                          | 33-36            | 230/250   | 105/95   |
| FXB 33-36kV | 440         | 360                          | 900                        | 18                       | 9               | 40                                  | 20                          | 33-36            | 230/250   | 95/85  |
| FXB 33-36kV | 440         | 360                          | 900                        | 18                       | 9               | 70                                  | 35                          | 33-36            | 230/250   | 95/85  |
| FXBW-69kV   | 970±10      | 780                          | 2130                       | 18                       | 18              | 100                                 | 50                          | 69               | 410   | 200/185  |
| FXBW-132kV  | 1475±15     | 1300                         | 3850                       | 18                       | 30              | 100                                 | 50                          | 132              | 550   | 275/235  |
| FXBW-230kV  | 2380±30     | 1900                         | 6000                       | 24                       | 60              | 160                                 | 80                          | 230              | 1315  | 780/700  |

## Composite Pin Insulator

Composite pin insulator is made of glass fiber epoxy core rod, silicone rubber shed and metal fittings.

- The silicone rubber shed adopt the whole packing pressure technique, and then to solve the key problem – interface electric spark puncture, which would affect the reliability of composite insulator.
- The connection of the glass fiber rod and metal fittings adopts the pressure welding technique of the international advanced level and have the full automatic sound wave detection of defects system, high intension, beautiful outline, small volume, light weight, and the metal fitting of galvanization can corrosion prevention and exchange used with porcelain insulator.
- This product is reliable structure, can't damage the core rod, and take full advantage of the mechanical strength.
- The dimension can be customized as per client's requirement.
- Material of end fittings: #45 forged steel, hot dip galvanized, thickness of the galvanization: 86 μ m.
- Material of the core: Epoxy & glass fiber (ECR type or FRP type).
- Material of the weather sheds: HTV silicone, color grey.
- Standard: IEC61109.



| Item No.    | Dimensions  |                              |                            |                          |                 | Mechanical                             |                                      | Electrical       |                    |                                    |  |
|-------------|-------------|------------------------------|----------------------------|--------------------------|-----------------|--|--------------------------------------|------------------|--------------------|------------------------------------|--|
|             | Height (mm) | Min Dry Arcing Distance (mm) | Min Creepage Distance (mm) | Diameter of the rod (mm) | Number of sheds | Max Design Cantilever Load (MDCL) (kN) | Specified Cantilever Load (SCL) (kN) | Rated Voltage kV | Highest Voltage kV | Lightning Impulse Withstand BIL kV | Power Frequency Flashover Voltage (Dry/Wet) kV |
| FPQ-11/4    | 235         | 200                          | 345                        | 24                       | 2               | 4                                      | 2                                    | 11               | 12                 | 95                                 | 38   |
| FPQ-18/5    | 245         | 210                          | 450                        | 24                       | 3               | 5                                      | 2.5                                  | 18               | 15                 | 95                                 | 45/40  |
| FPQ-27/3    | 340         | 290                          | 660                        | 24                       | 5               | 3                                      | 1.5                                  | 24               | 27                 | 160                                | 60   |
| FPQ-33/12.5 | 430         | 370                          | 1040                       | 38                       | 5               | 12.5                                   | 6.25                                 | 33               | 36                 | 230                                | 95   |

## Composite Post Insulator

Good bending resistance performance, strong anti-fouling ability and impact resistance, vibration and anti-brittle fracture performance, small volume, light weight, convenient installation, free maintenance.



| Item No.          | Rated voltage kV | Rated bending load kN | Structure Height (mm) | Min Arcing Distance (mm) | Min Nominal Creepage Distance (mm) | Lighting full-wave impulse withstand voltage (kV) | Power Frequency Withstand Voltage (wet) | Mounting Dimensions |                     |
|-------------------|------------------|-----------------------|-----------------------|--------------------------|------------------------------------|---|---|---------------------|---------------------|
|                   |                  |                       |                       |                          |                                    |   |   | Mounting Hole       | Lower mounting hole |
| FZN4-12/4         | 12               | 4                     | 230±3                 | 125                      | 330                                | 75  | 75                                      | M10                 | 4×Φ14-Φ76           |
| FZSW-12/4         | 12               | 4                     | 235±3                 | 125                      | 330                                | 75  | 75                                      | 2×M12-Φ76           | 4×M12-Φ76           |
| FZSW-24/8         | 24               | 8                     | 345±3                 | 200                      | 540                                | 150   | 150                                     | 4×M12-Φ76           | 4×M12-Φ76           |
| FZSW-24/8         | 24               | 8                     | 345±3                 | 200                      | 540                                | 150   | 150                                     | 4×Φ14-Φ140          | 4×Φ14-Φ140          |
| FZSW-33/10        | 33               | 10                    | 618±10                | 450                      | 1080                               | 220   | 220                                     | 4×Φ14-Φ140          | 4×Φ14-Φ140          |
| FZSW-35/6-76      | 40.5             | 6                     | 435±3                 | 290                      | 1260                               | 185   | 185                                     | 2×M8-Φ36            | 4×Φ14-Φ76           |
| FZSW-40.5/6L(IEC) | 40.5             | 6                     | 435±3                 | 340                      | 1260                               | 200   | 200                                     | 4×M12-Φ76           | 4×M12-Φ76           |
| FZSW-72.5/8       | 72.5             | 8                     | 780±5                 | 600                      | 1850                               | 350   | 350                                     | 4×Φ14-Φ140          | 4×Φ14-Φ140          |
| FZSW-72.5/10      | 72.5             | 10                    | 780±5                 | 600                      | 1950                               | 350   | 350                                     | 4×Φ14-Φ140          | 4×Φ14-Φ140          |
| FZSW-126/8        | 126              | 8                     | 1240±5                | 1050                     | 3150                               | 550   | 550                                     | 4×M12-Φ140          | 4×Φ18-Φ140          |
| FZSW-126/10       | 126              | 10                    | 1240±5                | 1050                     | 3150                               | 550   | 550                                     | 4×M12-Φ140          | 4×Φ14-Φ140          |
| FZSW-126/12.5     | 126              | 12.5                  | 1440±5                | 1050                     | 3500                               | 550   | 550                                     | 4×M12-Φ140          | 4×Φ14-Φ140          |
| FZSW-252/6K       | 252              | 6                     | 2240±15               | 2070                     | 6300                               | 1050  | 1050                                    | 4×M16-Φ140          | 8×Φ20-Φ225          |
| FZSW-252/8        | 252              | 8                     | 2340±15               | 2000                     | 6700                               | 1050  | 1050                                    | 4×M16-Φ190          | 8×Φ20-Φ225          |

## Polymer Type Lightning Arrester

ZnO lightning arrester is one of the most world advanced over-voltage protector at present due to its core components of resistance applying ZnO and other metal oxide to make of, comparing with traditional carborundum arrester, it improves greatly V-A characteristics of resistance, increases the getting through ability of resistance, therefore it brings fundamental change to features of arrester.

Under normal working voltage, the current passing arrester only A class, when bearing over voltage, the excellent non-linear V-A features of arrester would make effect, the current passing through the arrester increase high to thousands of Ampere instant, the arrester is under getting through state, to release over-voltage energy, therefore it effective limits the damage to power transmission equipment due to over voltage.

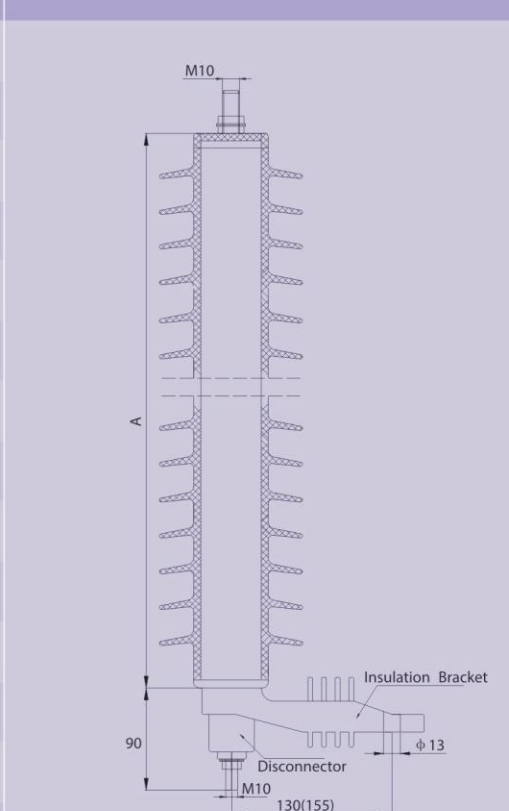


From 3 sheds 22 sheds



## Polymer Type Lightning Arrester Without Gaps: Nominal Discharge Current:5kA

| Item No.    | Rated Voltage (kV) | MCOV (kV) | 1/4 $\mu$ s Lightning Current Impulse | 8/20 $\mu$ s Lightning Current Impulse | 30/60 $\mu$ s Switching Current Impulse | 2000 $\mu$ s Rectangular Current Impulse Withstand | 4/10 $\mu$ s High Current Impulse Withstand |
|-------------|--------------------|-----------|---------------------------------------|--|---|--|---|
| (HY)YH5W-3  | 3                  | 2.55      | 11.3                                  | 9                                      | 8.9                                     | 150  | 65  |
| (HY)YH5W-6  | 6                  | 5.1       | 22.6                                  | 18                                     | 16.8                                    | 150  | 65  |
| (HY)YH5W-9  | 9                  | 7.05      | 33.7                                  | 27                                     | 23.8                                    | 150  | 65  |
| (HY)YH5W-10 | 10                 | 8.4       | 36                                    | 30                                     | 23                                      | 150  | 65  |
| (HY)YH5W-11 | 11                 | 9.4       | 40                                    | 33                                     | 30                                      | 150  | 65  |
| (HY)YH5W-12 | 12                 | 10.2      | 42.2                                  | 36                                     | 27                                      | 150  | 65  |
| (HY)YH5W-15 | 15                 | 12.7      | 51                                    | 45                                     | 38.5                                    | 150  | 65  |
| (HY)YH5W-18 | 18                 | 15.3      | 61.5                                  | 54                                     | 46.2                                    | 150  | 65  |
| (HY)YH5W-21 | 21                 | 17        | 71.8                                  | 63                                     | 54.2                                    | 150  | 65  |
| (HY)YH5W-24 | 24                 | 19.5      | 82                                    | 72                                     | 62                                      | 150  | 65  |
| (HY)YH5W-27 | 27                 | 22        | 92                                    | 81                                     | 69.8                                    | 150  | 65  |
| (HY)YH5W-30 | 30                 | 24.4      | 102                                   | 90                                     | 79                                      | 150  | 65  |
| (HY)YH5W-33 | 33                 | 27.5      | 112                                   | 99                                     | 86.7                                    | 150  | 65  |
| (HY)YH5W-36 | 36                 | 29        | 123                                   | 108                                    | 92.4                                    | 150  | 65  |

| Item No.    | Dimensions A (mm) | Leakage Distance (mm) | Shed No. PCS | Drawing Reference   |
|-------------|-------------------|-----------------------|--------------|---|
| (HY)YH5W-3  | 110               | 215                   | 3            |  <p>Regular model<br/>(The product can be specially made as anti-pollution model)</p> |
| (HY)YH5W-6  | 135               | 300                   | 4            |   |
| (HY)YH5W-9  | 160               | 372                   | 5            |   |
| (HY)YH5W-10 | 160               | 372                   | 5            |   |
| (HY)YH5W-11 | 160               | 372                   | 5            |   |
| (HY)YH5W-12 | 160               | 372                   | 5            |   |
| (HY)YH5W-15 | 210               | 480                   | 7            |   |
| (HY)YH5W-18 | 235               | 575                   | 8            |   |
| (HY)YH5W-21 | 260               | 630                   | 9            |   |
| (HY)YH5W-24 | 285               | 680                   | 10           |   |
| (HY)YH5W-27 | 310               | 750                   | 11           |   |
| (HY)YH5W-30 | 335               | 820                   | 12           |   |
| (HY)YH5W-33 | 385               | 950                   | 14           |   |
| (HY)YH5W-36 | 385               | 950                   | 14           |   |

## Polymer Type Lightning Arrester Without Gaps: Nominal Discharge Current:10kA

| Item No.     | Rated Voltage (kV) | MCOV (kV) | 1/4 $\mu$ s Lightning Current Impulse | 8/20 $\mu$ s Lightning Current Impulse | 30/60 $\mu$ s Switching Current Impulse | 2000 $\mu$ s Rectangular Current Impulse Withstand | 4/10 $\mu$ s High Current Impulse Withstand |
|--------------|--------------------|-----------|---------------------------------------|--|---|--|---|
| (HY)YH10W-3  | 3                  | 2.55      | 11.3                                  | 9                                      | 8.9                                     | 250  | 100   |
| (HY)YH10W-6  | 6                  | 5.1       | 22.6                                  | 18                                     | 16.8                                    | 250  | 100   |
| (HY)YH10W-9  | 9                  | 7.05      | 33.7                                  | 27                                     | 23.8                                    | 250  | 100   |
| (HY)YH10W-10 | 10                 | 8.4       | 36                                    | 30                                     | 23                                      | 250  | 100   |
| (HY)YH10W-11 | 11                 | 9.4       | 40                                    | 33                                     | 30                                      | 250  | 100   |
| (HY)YH10W-12 | 12                 | 10.2      | 42.2                                  | 36                                     | 27                                      | 250  | 100   |
| (HY)YH10W-15 | 15                 | 12.7      | 51                                    | 45                                     | 38.5                                    | 250  | 100   |
| (HY)YH10W-18 | 18                 | 15.3      | 61.5                                  | 54                                     | 46.2                                    | 250  | 100   |
| (HY)YH10W-21 | 21                 | 17        | 71.8                                  | 63                                     | 54.2                                    | 250  | 100   |
| (HY)YH10W-24 | 24                 | 19.5      | 82                                    | 72                                     | 62                                      | 250  | 100   |
| (HY)YH10W-27 | 27                 | 22        | 92                                    | 81                                     | 69.8                                    | 250  | 100   |
| (HY)YH10W-30 | 30                 | 24.4      | 102                                   | 90                                     | 79                                      | 250  | 100   |
| (HY)YH10W-33 | 33                 | 27.5      | 112                                   | 99                                     | 86.7                                    | 250  | 100   |
| (HY)YH10W-36 | 36                 | 29        | 123                                   | 108                                    | 92.4                                    | 250  | 100   |
| (HY)YH10W-48 | 48                 | 39        | 165.6                                 | 144                                    | 122.4                                   | 250  | 100   |

| Item No.     | Dimensions A (mm) | Leakage Distance (mm) | Shed No. PCS | Drawing Reference |
|--------------|-------------------|-----------------------|--------------|-------------------|
| (HY)YH10W-3  | 106               | 180                   | 4            |                   |
| (HY)YH10W-6  | 134               | 300                   | 6            |                   |
| (HY)YH10W-9  | 162               | 372                   | 8            |                   |
| (HY)YH10W-10 | 162               | 372                   | 8            |                   |
| (HY)YH10W-11 | 162               | 372                   | 8            |                   |
| (HY)YH10W-12 | 162               | 372                   | 8            |                   |
| (HY)YH10W-15 | 190               | 480                   | 10           |                   |
| (HY)YH10W-18 | 218               | 575                   | 12           |                   |
| (HY)YH10W-21 | 246               | 630                   | 14           |                   |
| (HY)YH10W-24 | 274               | 750                   | 16           |                   |
| (HY)YH10W-27 | 274               | 750                   | 16           |                   |
| (HY)YH10W-30 | 302               | 925                   | 18           |                   |
| (HY)YH10W-33 | 302               | 925                   | 18           |                   |
| (HY)YH10W-36 | 358               | 1120                  | 22           |                   |
| (HY)YH10W-48 | 522               | 1450                  | 22           |                   |

Anti-pollution model

## Drop Type Fuse Cutout

Drop type fuse cutouts are outdoor high voltage protection facilities. The fuse is installed at high voltage side of transformer or branch line of distribution line to protect transformer or transmission line from short circuit and overload, to break and connect load current.

Fuse cutout consist of insulation bracket and fuse tube, fixed contact is installed at both ends of insulation bracket, moving contact is installed at both ends of fuse tube. Fuse tube consist of two parts, arcing extinguish tube in inner side and epoxy glass tube outside. Tension load fuse cutout increase the flexible auxiliary contact and arcing-extinguish shield to break or connect load current.

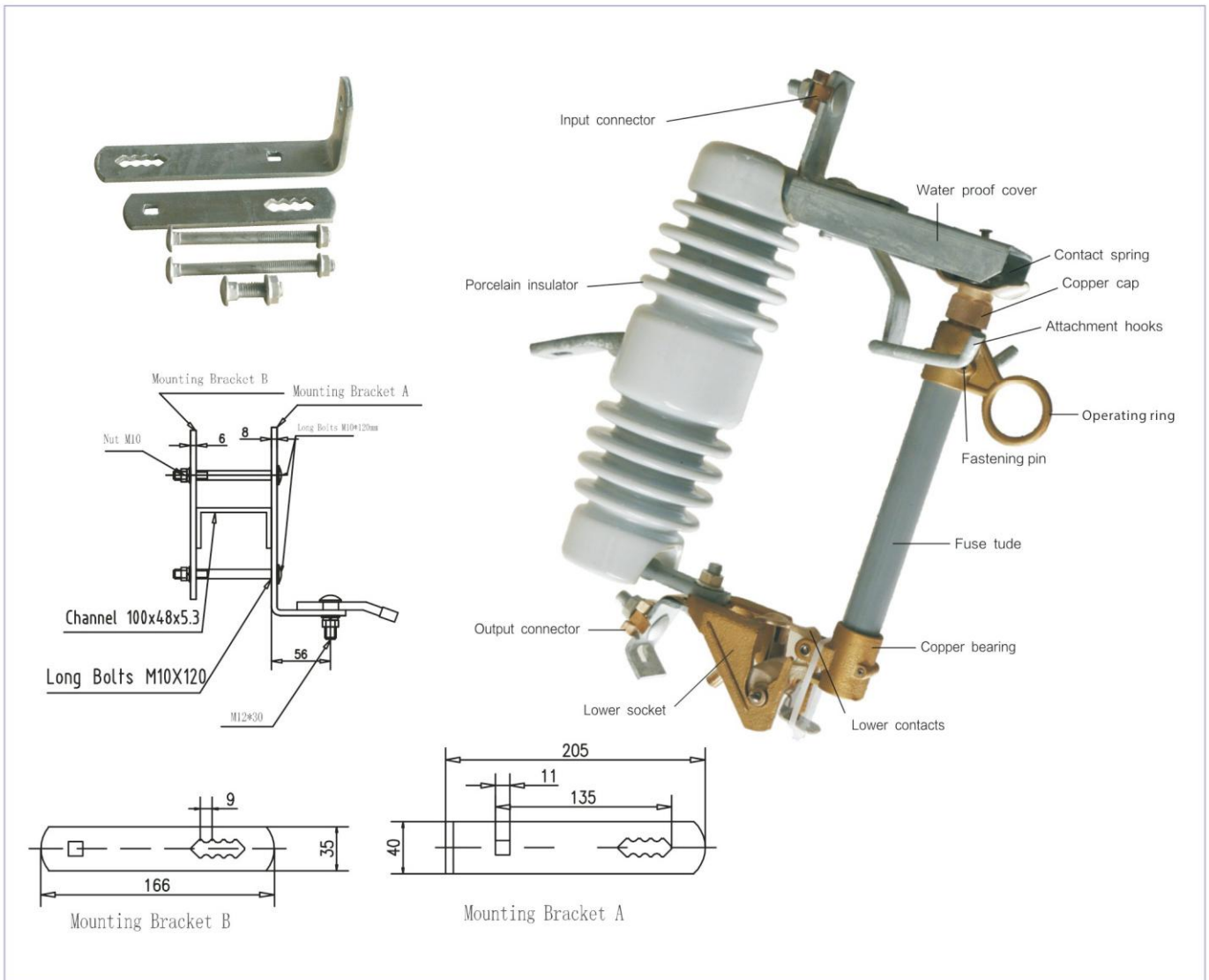
Drop type fuse cutout is a low cost line protection, primarily used on remote overhead electrical transmission lines. The visual display of the status of the fuse cutout quickly and accurately helps field inspectors to locate the faulty segment of the overhead transmission line. Upon clearing of the line fault and replacing the fuse link, each of the phases can then be individually switched back into operation using operating poles, which are available in desired lengths.

Service condition:

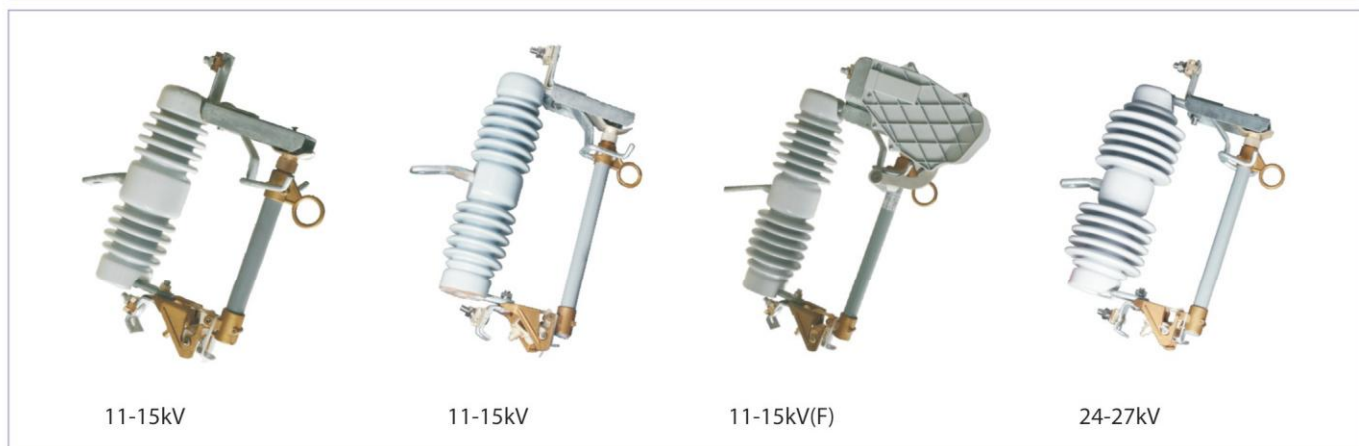
- The ambient air temperatures: -40 to 40°C.
- The altitude above sea level: 1000m.
- Wind speed doesn't exceed 700Pa (not exceed 34m/s).
- The earthquake intensity doesn't exceed 8 degrees.

The product is not applicable to the following locations:

- Combustion or explosion risk areas.
- With severe vibration or shock sites.
- A conductive, chemical gas and serious pollution, salt fog area.



## Fuse Cutout Series



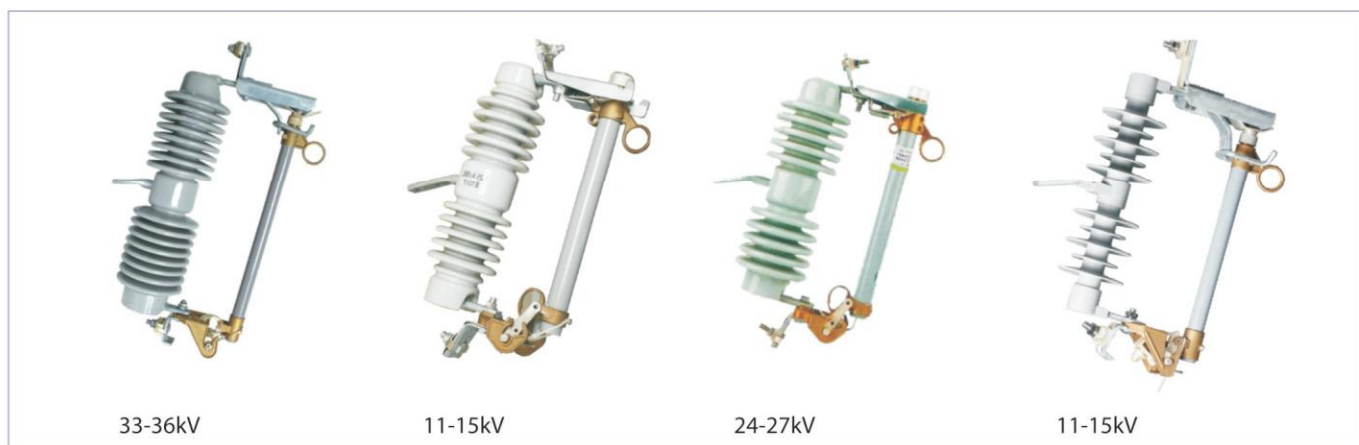
11-15kV

11-15kV

11-15kV(F)

24-27kV

| Item No.  | Rated Voltage (kV) | Rated Current (A) | Breaking Current (A) | Impulse Voltage (BIL) | Power Frequency Withstand Voltage | Leakage Distance (mm) | Weight (KG) | Dimension (cm) |
|-----------|--------------------|-------------------|----------------------|-----------------------|-----------------------------------|-----------------------|-------------|----------------|
| YJF-1     | 12                 | 100               | 6300                 | 110                   | 40                                | 250                   | 6.5         | 40×36×11.5     |
| YJF-1     | 12                 | 200               | 10000                | 110                   | 40                                | 250                   | 6.5         | 40×36×11.5     |
| YJF-2     | 15                 | 100               | 8000                 | 125                   | 45                                | 320                   | 7.5         | 50×36×12.5     |
| YJF-2     | 15                 | 200               | 12500                | 125                   | 45                                | 320                   | 7.5         | 50×36×12.5     |
| YJF2(F)-2 | 15                 | 100               | 8000                 | 125                   | 45                                | 320                   | 8           | 58×40×15       |
| YJF2(F)-2 | 15                 | 200               | 12500                | 125                   | 45                                | 320                   | 8           | 58×40×15       |
| YJF-3     | 24                 | 100               | 8000                 | 150                   | 65                                | 530                   | 12          | 50×38×16       |
| YJF-3     | 24                 | 200               | 12500                | 150                   | 65                                | 530                   | 12          | 50×38×16       |



33-36kV

11-15kV

24-27kV

11-15kV

| Item No. | Rated Voltage (kV) | Rated Current (A) | Breaking Current (A) | Impulse Voltage (BIL) | Power Frequency Withstand Voltage | Leakage Distance (mm) | Weight (KG) | Dimension (cm) |
|----------|--------------------|-------------------|----------------------|-----------------------|-----------------------------------|-----------------------|-------------|----------------|
| YJF-4    | 33                 | 100               | 8000                 | 170                   | 70                                | 720                   | 15          | 64×35×18       |
| YJF-4    | 33                 | 200               | 12500                | 170                   | 70                                | 720                   | 15          | 64×35×18       |
| YJF-5    | 12                 | 100               | 6300                 | 110                   | 40                                | 250                   | 6.5         | 40×36×11.5     |
| YJF-5    | 12                 | 200               | 10000                | 110                   | 40                                | 250                   | 6.5         | 40×36×11.5     |
| YJF-6    | 24                 | 100               | 8000                 | 150                   | 65                                | 540                   | 10          | 60×38×16       |
| YJF-6    | 24                 | 200               | 12500                | 150                   | 65                                | 540                   | 10          | 60×38×16       |
| HYJF-2   | 15                 | 100               | 6300                 | 110                   | 40                                | 250                   | 6           | 40×36×11.5     |
| HYJF-2   | 15                 | 200               | 10000                | 110                   | 40                                | 250                   | 6           | 40×36×11.5     |

## Fuse Cutout Series



11-15kV



24-27kV



33-36kV



24-27kV

| Item No. | Rated Voltage (kV) | Rated Current (A) | Breaking Current (A) | Impulse Voltage (BIL) | Power Frequency Withstand Voltage | Leakage Distance (mm) | Weight (KG) | Dimension (cm) |
|----------|--------------------|-------------------|----------------------|-----------------------|-----------------------------------|-----------------------|-------------|----------------|
| HYJF-2   | 15                 | 100               | 6300                 | 110                   | 40                                | 250                   | 6           | 40×38×16       |
| HYJF-2   | 15                 | 200               | 10000                | 110                   | 40                                | 250                   | 6           | 40×38×16       |
| HYJF-3   | 24                 | 100               | 8000                 | 150                   | 65                                | 530                   | 7           | 50×38×16       |
| HYJF-3   | 24                 | 200               | 12500                | 150                   | 65                                | 530                   | 7           | 50×38×16       |
| HYJF-4   | 33                 | 100               | 8000                 | 125                   | 45                                | 320                   | 7.5         | 50×38×12.5     |
| HYJF-4   | 33                 | 200               | 12500                | 125                   | 45                                | 320                   | 7.5         | 50×38×12.5     |
| HYJF-3   | 24                 | 100               | 8000                 | 150                   | 65                                | 540                   | 7           | 50×38×16       |
| HYJF-3   | 24                 | 200               | 12500                | 150                   | 65                                | 540                   | 7           | 50×38×16       |



33-36kV



24-27kV



33-36kV



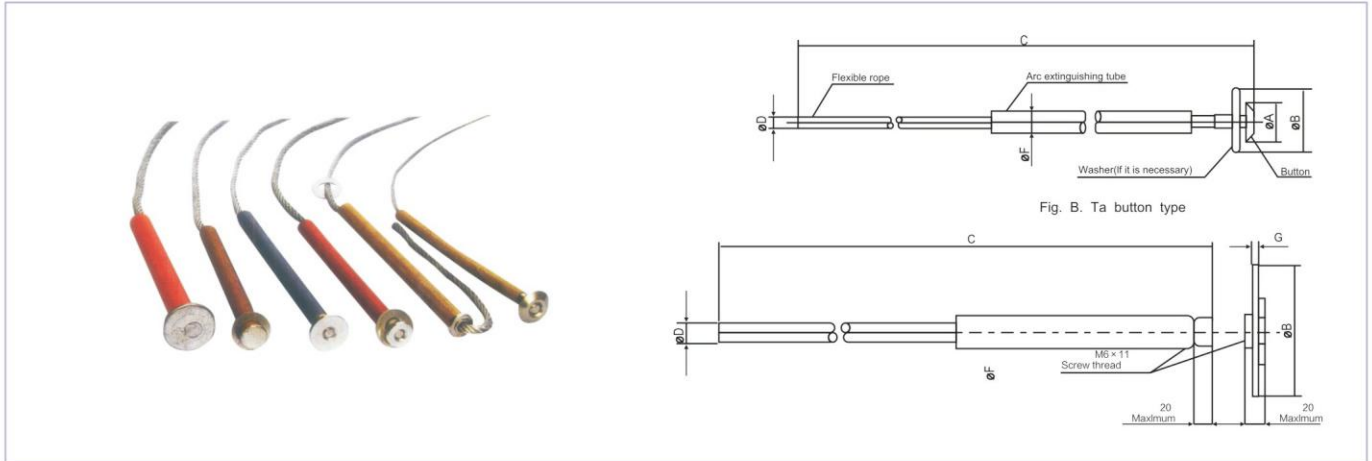
11-15kV

| Item No. | Rated Voltage (kV) | Rated Current (A) | Breaking Current (A) | Impulse Voltage (BIL) | Power Frequency Withstand Voltage | Leakage Distance (mm) | Weight (KG) | Dimension (cm) |
|----------|--------------------|-------------------|----------------------|-----------------------|-----------------------------------|-----------------------|-------------|----------------|
| HYJF-4   | 33                 | 100               | 8000                 | 170                   | 70                                | 720                   | 8           | 64×35×18       |
| HYJF-4   | 33                 | 200               | 12500                | 170                   | 70                                | 720                   | 8           | 64×35×18       |
| HYJF-7   | 24                 | 100               | 8000                 | 150                   | 65                                | 540                   | 10          | 50×36×16       |
| HYJF-7   | 24                 | 200               | 10000                | 150                   | 65                                | 540                   | 10          | 50×36×16       |
| HYJF-8   | 33                 | 100               | 10000                | 170                   | 70                                | 720                   | 15          | 64×35×18       |
| HYJF-8   | 33                 | 200               | 12500                | 170                   | 70                                | 720                   | 15          | 64×35×18       |
| RW11     | 12                 | 100               | 6300                 | 110                   | 42                                | 260                   | 7.5         | 48×32×27       |
| RW11     | 12                 | 200               | 8000                 | 110                   | 42                                | 260                   | 7.5         | 48×32×27       |

## "KB、KU、KS" Type Fuse Links

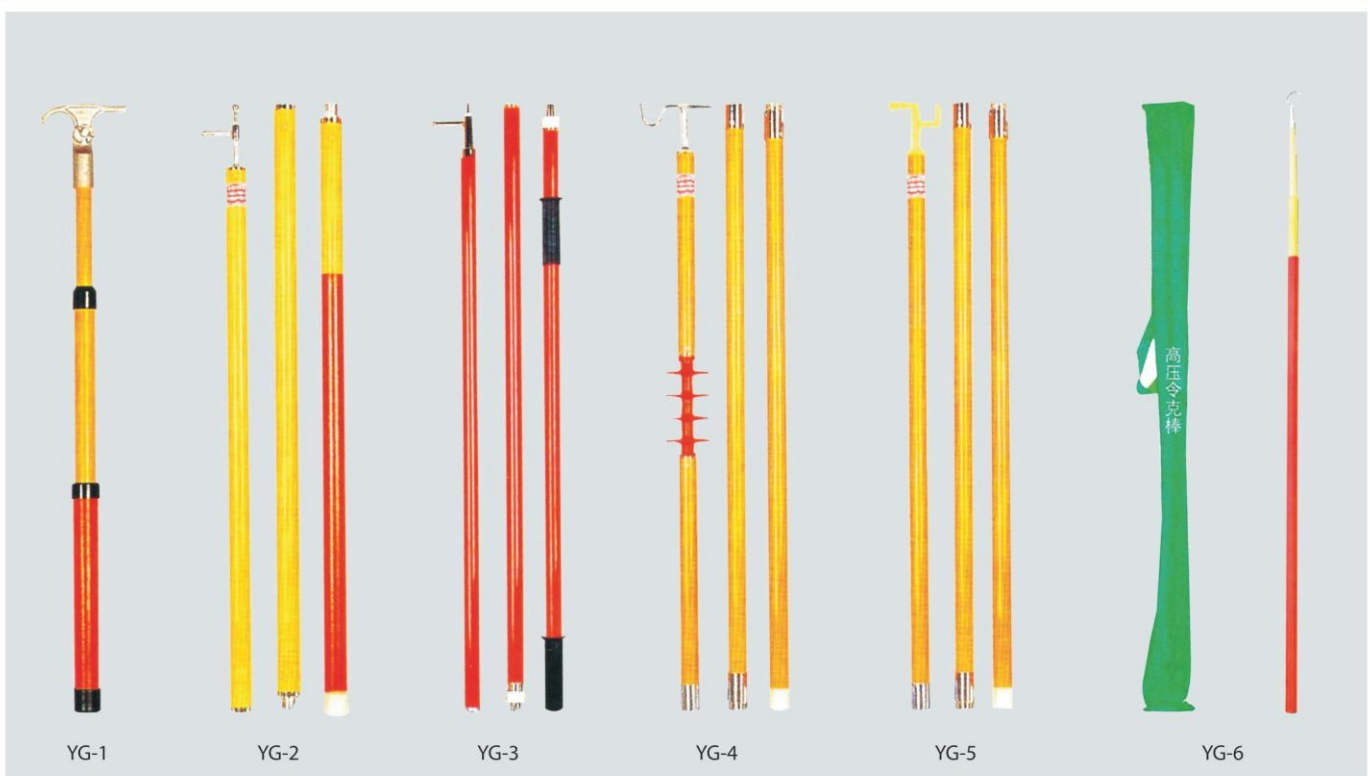
"KB、KU、KS" type fuse links belong to "K" and "T" type fuse,

• It has general type, universal type and screw type available according to IEC-282 standard. 11-36V grade.



| Item No.   | Dimension(mm) |                |        |   |     | Quantity/carton |
|------------|---------------|----------------|--------|---|-----|-----------------|
|            | A             | B              | C      | D | F   |                 |
| 1 to 25    | 12.5±0.2      | 19.0±0.2       | Note 1 | 2 | 6.5 | 500             |
| 30 to 40   | 12.5±0.2      | 19.0±0.2       | Note 1 | 3 | 8   | 500             |
| 50 to 100  | 19.0±0.3      | Not applicable | Note 1 | 5 | 10  | 250             |
| 140 to 200 | 19.0±0.3      | Not applicable | Note 1 | 7 | 12  | 150             |

## Operating Rod



## Head of Operating Rod



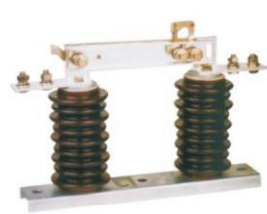
## Disconnecting Switch



HGWR1/GWR1 0.5-1600V

|                    |      |      |      |         |      |         |      |
|--------------------|------|------|------|---------|------|---------|------|
| Fuse Rated Current | 120A | 150A | 220A | 300A    | 360A | 470A    | 600A |
| Fuse Specification | 0.15 | 0.20 | 0.30 | 0.50    | 0.60 | 0.80    | 0.90 |
| Transformer Volume | 80   | 100  | 150  | 180-220 | 250  | 315-320 | 400  |

## Disconnecting Switch



GW9-12W



HGW9-12W



GW9



JDW2

### 12-15kV

| Item No.     | Rated Voltage (kV) | Rated Current (A) | 4s Heat Steady Current (A) | Shock Steady Current(A) | Impulse Withstand Voltage(kV) |                               | Power-Frequency Withstand Voltage (kV) |                               |
|--------------|--------------------|-------------------|----------------------------|-------------------------|-------------------------------|-------------------------------|--|-------------------------------|
|              |                    |                   |                            |                         | To earth                      | Across the isolating distance | To earth                               | Across the isolating distance |
| GW9-12W/400  | 12                 | 400               | 12500                      | 31500                   | 75                            | 85                            | 38                                     | 42                            |
| GW9-12W/630  | 12                 | 630               | 12500                      | 31500                   | 75                            | 85                            | 38                                     | 42                            |
| GW9-12W/1250 | 12                 | 1250              | 20000                      | 50000                   | 75                            | 85                            | 38                                     | 42                            |
| HGW9-12W400  | 12-15              | 400               | 12500                      | 31500                   | 75                            | 85                            | 38                                     | 42                            |
| HGW9-12W630  | 12-15              | 630               | 12500                      | 31500                   | 75                            | 85                            | 38                                     | 42                            |

### 12-15kV

| Item No. | Rated Voltage(kV) | Rated Current(A) | Limit Passing Current(kA) |       | 10 sec Heat Stabilization Current(A) |
|----------|-------------------|------------------|---------------------------|-------|--------------------------------------|
|          |                   |                  | Reak Value                | r.m.s |                                      |
| GW9-10   | 10,12,15          | 200              | 5                         | 9     | 5                                    |
|          | 10,12,15          | 400              | 21                        | 15    | 10                                   |
| GW9-12   | 10,12,15          | 600              | 35                        | 25    | 14                                   |
| GW9-15   | 10,12,15          | 1000             | 50                        | 35    | 20                                   |

### 500V

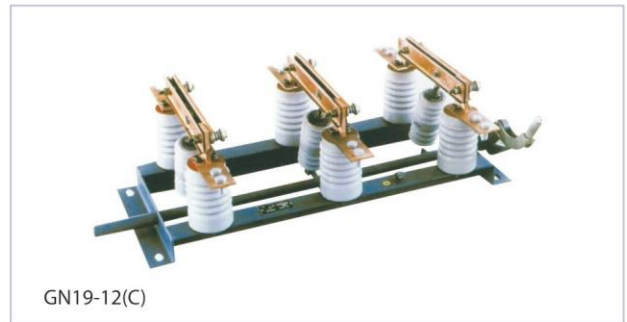
| Item No. | Rated Voltage(kV) | Rated Current(A) | Breaking Current(A) |
|----------|-------------------|------------------|---------------------|
| JDW2-500 | 500               | 500              | 30-500              |
| JDW2-800 | 500               | 800              | 30-500              |



## GN19-12(C) Indoor High Voltage Disconnecting Switch

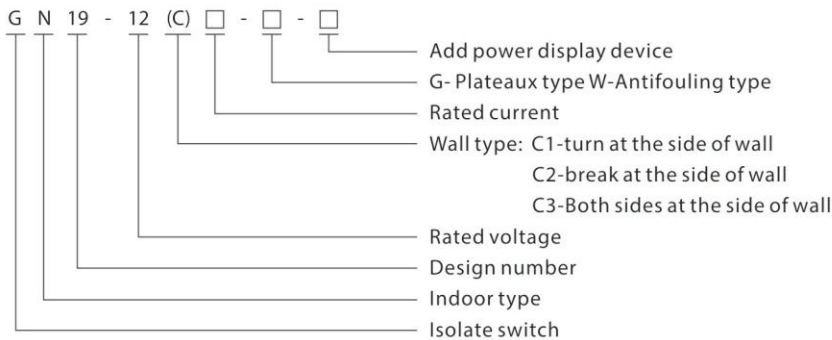
### Summary

GN19-12(C) indoor disconnecting switch is applied in power system with rated voltage 12kV, AC 50Hz and below, it uses with CS6-1 manual operating mechanism, for making and breaking the circuit with voltage and without load, it has pollution proof type, plateau type and adding electrification indication type.



GN19-12(C)

### Definition of model



### Service condition

- The altitude above sea level: 2000m.
- The ambient air temperatures: -40 to 40°C.
- Wind speed doesn't exceed 700Pa (not exceed 34m/s).
- The earthquake intensity doesn't exceed 8 degrees.
- The working situation: without frequent violent vibration.
- The installation site of ordinary type isolator should be kept away from gas, smoke chemical deposition, salt-spray fog, dust and other explosive and corrosive matters that affect seriously insulation and conduction capability of the isolator.
- Pollution proof type isolator applies to sever filthy conduction area. However, it shouldn't be any explosive matters and matters causing fire.

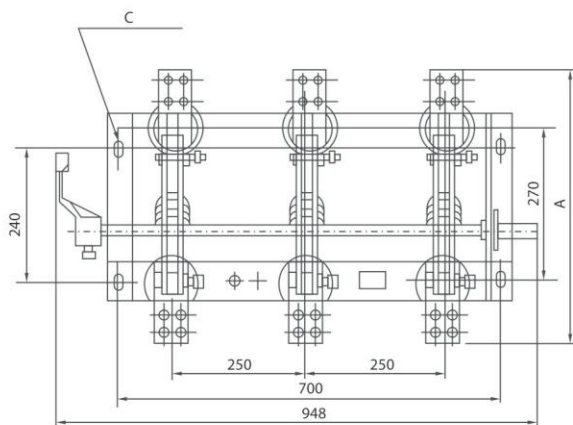
### Key Technical Parameters

| Items                                   |                | Units | Technical parameters  |
|---|----------------|-------|-----------------------|
| Rated voltage                           |                | kV    | 12-15                 |
| 1 min Power frequency withstand voltage | To earth       | kV    | 38                    |
|   | Across open DS | kV    | 42                    |
| Lightning impulse withstand voltage     | To earth       | kV    | 75                    |
|   | Across open DS | kV    | 85                    |
| Rated frequency                         |                | Hz    | 50                    |
| Rated current                           |                | A     | 200/400/630/1000/1250 |
| Short time withstand current(4s)        |                | kA    | 6.3/12.5/20/31.5/40   |
| Rated peak withstand current            |                | kA    | 16/31.5/50/80/100     |
| Rated duration of short/circuit         |                | S     | 4/2                   |
| Creepage Distance                       |                | mm    | 300-380               |
| Mechanical life                         |                | times | 2000                  |

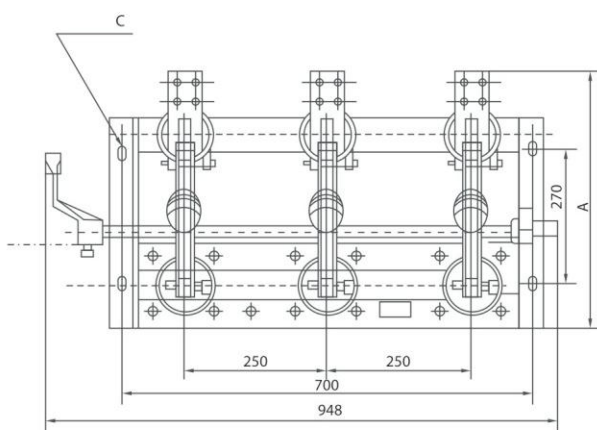
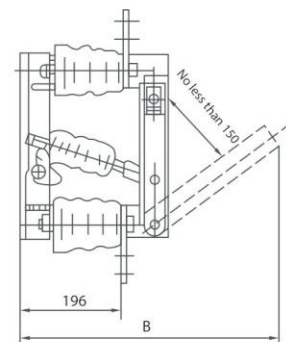
## Key Technical Parameters

| Item No.          | Rated Voltage(kV) | Rated Current(A) | Short time withstand current(4s) kV | Rated peak withstand current kV |
|-------------------|-------------------|------------------|-------------------------------------|---------------------------------|
| GN119-12/400-12.5 | 12                | 400              | 12.5                                | 31.5                            |
| GN19-12/630-20    | 12                | 630              | 20                                  | 50                              |
| GN19-12/1000-31.5 | 12                | 1000             | 31.5                                | 80                              |
| GN19-12/1250-31.5 | 12                | 1250             | 31.5                                | 80                              |
| GN19-12/400-12.5  | 12                | 400              | 12.5                                | 31.5                            |
| GN19-12/630-20    | 12                | 630              | 20                                  | 50                              |
| GN19-12/1000-31.5 | 12                | 1000             | 31.5                                | 80                              |
| GN19-12/1250-31.5 | 12                | 1250             | 31.5                                | 80                              |

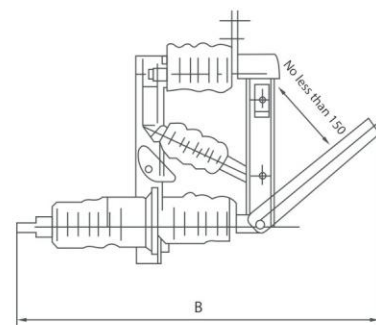
## Overall And Installation Dimension



GN19-12 Series



GN19-12C Series



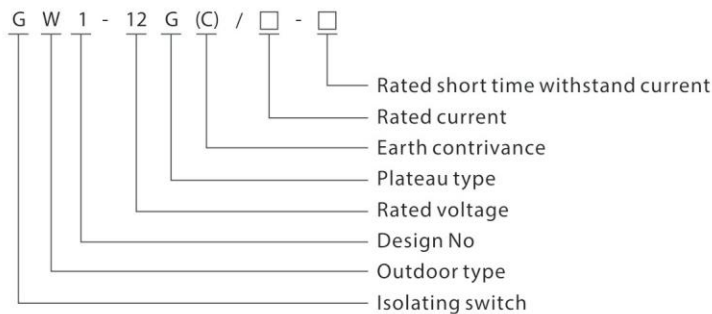
## GW1-12G(D) Series Outdoor High Voltage Disconnecting Switch

### Summary

GW1-12G(D) series outdoor high voltage disconnecting switch is the high voltage switch equipment of composite structure, it is suitable for outdoor 12kV line net with voltage and no load to make opening and close.

With CS □ type manpower operate machinery, can avoid earth line with power and composite flash-locks, wrong operate. The operator is no need to put another earth line. Pollution-proof type isolate switch satisfy customer in filthy conduction area. It can solve the pollution of shed when it is working.

### Definition of model

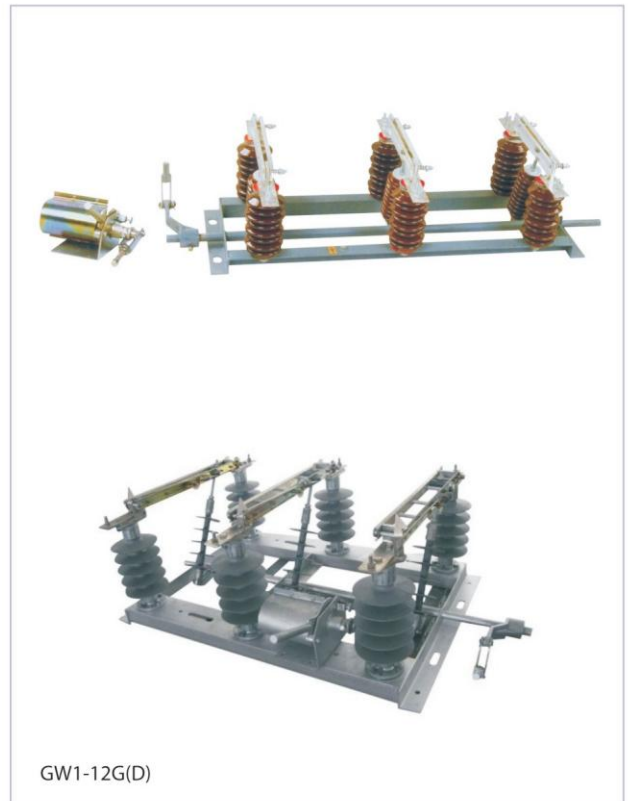


### Service condition

- The altitude above sea level: 2000m.
- The ambient air temperatures: -40 to 40°C.
- Wind speed doesn't exceed 700Pa (not exceed 34m/s).
- The earthquake intensity doesn't exceed 8 degrees.
- The installation site of ordinary type isolator should be kept away from gas, smoke chemical deposition, salt-spray fog, dust and other explosive and corrosive matters that affect seriously insulation and conduction capability of the isolator.
- Pollution proof type isolator applies to sever filthy conduction area. However, it shouldn't be any explosive matters and matters causing fire.

### Key Technical Parameters Of GW1

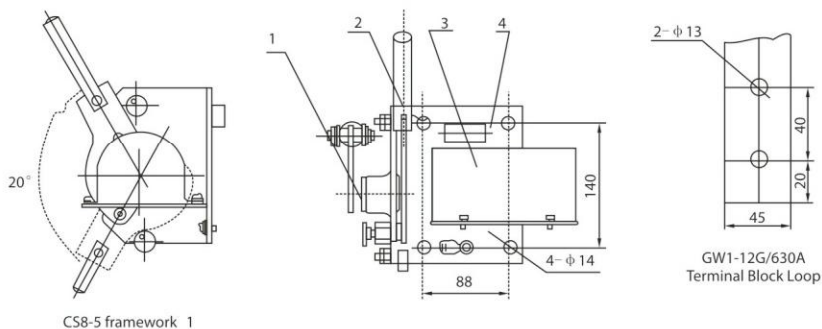
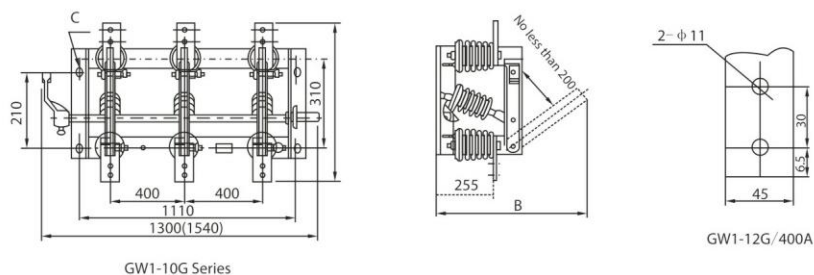
| Items                                   |                | Units   | Technical parameters |      |     |      |
|---|----------------|---|----------------------|------|-----|------|
| Rated voltage                           |                | kV  | 10                   | 15   | 20  |      |
| Max. operating voltage                  |                |   | 12                   | 17.5 | 24  |      |
| 1 min Power frequency withstand voltage | To earth       | kV  | 38                   | 42   | 50  |      |
|   | Across open DS | kV  | 42                   | 48   | 60  |      |
| Lightning impulse withstand voltage     | To earth       | kV  | 75                   | 105  | 125 |      |
|   | Across open DS | kV  | 85                   | 120  | 145 |      |
| Rated frequency                         |                | Hz  | 50                   |      |     |      |
| Rated current                           |                | A   | 200                  | 400  | 630 | 1250 |
| Short time withstand current(4s)        |                | kA  | 6.3                  | 12.5 | 20  | 31.5 |
| Rated peak withstand current            |                | kA  | 10                   | 31.5 | 50  | 80   |
| Mechanism supplied for disconnecter     |                | CS8-1、CS8-D、CD8-8 Rain type manual mechanism or CX6 motor drive mechanism |                      |      |     |      |



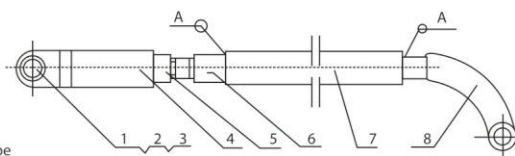
## Key Technical Parameters HGW1

| Items                                   |                | Units   | Technical parameters |      |     |      |
|---|----------------|---|----------------------|------|-----|------|
| Rated voltage                           |                | kV  | 12                   | 24   | 33  |      |
| Max. operating voltage                  |                |   | 15                   | 27   | 35  |      |
| 1 min Power frequency withstand voltage | To earth       | kV  | 40                   | 50   | 80  |      |
|   | Across open DS | kV  | 47                   | 60   | 90  |      |
| Lightning impulse withstand voltage     | To earth       | kV  | 105                  | 125  | 180 |      |
|   | Across open DS | kV  | 120                  | 145  | 210 |      |
| Rated frequency                         |                | Hz  | 50                   |      |     |      |
| Rated current                           |                | A   | 200                  | 400  | 630 | 1250 |
| Short time withstand current(4s)        |                | kA  | 6.3                  | 12.5 | 20  | 31.5 |
| Rated peak withstand current            |                | kA  | 10                   | 31.5 | 50  | 80   |
| Mechanism supplied for disconnect       |                | CS8-1、CS8-D、CD8-8 Rain type manual mechanism or CX8-5 motor drive mechanism |                      |      |     |      |

## Overall And Installation Dimension



- Connect pole
1. φ12Spindle
  2. Washer12
  3. Open bolt4 25
  4. Bend coupling
  5. M16Nut
  6. Pole
  7. 3/4"Water gas pipe
  8. Connect pole head



| Item No.     | A   | B   | C       |
|--------------|-----|-----|---------|
| GW1-12G/400A | 510 | 555 | 18×24=4 |
| GW1-12G/630A | 530 | 555 | 18×24=4 |
| GW1-24G/400A | 510 | 555 | 18×24=4 |
| GW1-24G/630A | 530 | 555 | 18×24=4 |

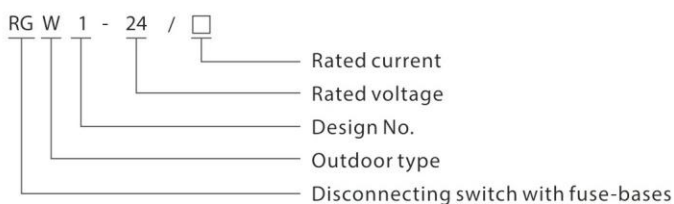
## RGW1-24 Type Three Pole Outdoor Disconnecting Switch With Fuse-bases

### Summary

RGW1-24 series three pole outdoor disconnecting switch with fuse-bases is the high voltage switch equipment, in the suitable for outdoor 24kV line internet with voltage and no load, to make separate and fabricate. With CS8 type manpower operate machinery to avoid earth line with power and composite flash-locks and wrong operate. The operator no need put another earth line. Pollution-proof type isolate switch of customer in filthy conduction area. It can solve the pollution of shed when it is work.



### Definition of model



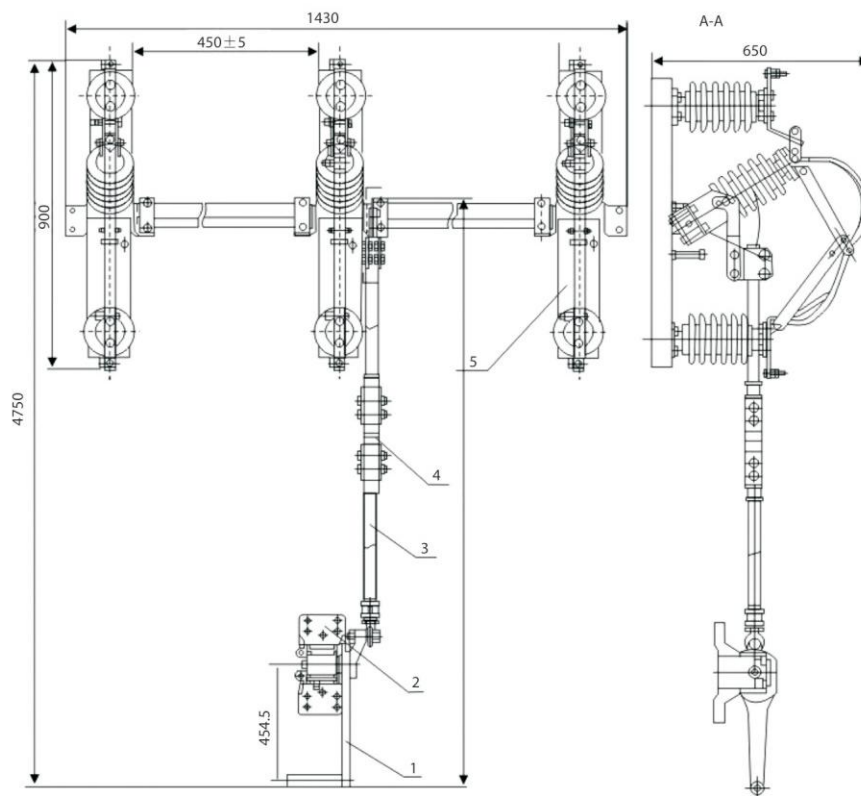
### Service condition

- The altitude above sea level: 2000m.
- The ambient air temperatures: -40 to 40°C
- Wind speed doesn't exceed 700Pa (not exceed 34m/s)
- The earthquake intensity doesn't exceed 8 degrees.
- The working situation: without frequent violent vibration.
- The installation site of ordinary type isolator should be kept away from gas, smoke chemical deposition, salt-spray fog, dust and other explosive and corrosive matters that affect seriously insulation and conduction capability of the isolator.
- Pollution proof type isolator applies to sever filthy conduction area. However, it shouldn't be any explosive matters and matters causing fire.

### Key Technical Parameters

| Items                                   | Units               | Technical parameters |     |
|---|---------------------|----------------------|-----|
| Rated voltage                           | kV                  | 24                   |     |
| Rated frequency                         | Hz                  | 50                   |     |
| Rated current                           | A                   | 630                  |     |
| Rated short time current                | kA                  | 25                   |     |
| Rated duration of short circuit         | S                   | 3                    |     |
| Rated impulse withstand voltage         | To earth            | kV                   | 125 |
|   | Across the open gap | kV                   | 145 |
| Rated power frequency withstand voltage | To earth            | kV                   | 50  |
|   | Across the open gap | kV                   | 60  |

## Overall And Installation Dimension



### RGW-B 11-33kV

| Item No. | Rated Voltage (kV) | Rated Current (A) | 4s Heat Steady Current(A) | Shock Steady Current(A) | Impulse Withstand Voltage(kV) | Power-Frequency Withstand Voltage (kV) |
|----------|--------------------|-------------------|---------------------------|-------------------------|-------------------------------|--|
| RGW-B    | 11                 | 400               | 12500                     | 31500                   | 95                            | 42                                     |
| RGW-B    | 33                 | 600               | 12500                     | 31500                   | 195                           | 80                                     |

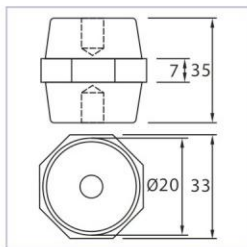
## Busbar Insulator

It is the special part to fix, install and insulate on communication, electric power, lightning protection, machinery, medical, wind energy, frequency conversion equipment, new energy vehicles (integrated chassis cabinets, locker, etc.) to provide meet the fixed support, installation and insulation isolation effect of special parts.

- Its appearance is usually the cylinder, hexagonal.
- Operating Temperature: -40°C to +140°C.
- Insert: Brass Steel with Zn coating.
- Material: BMC (Bough Moulding Compound).
- OEM can be provide.

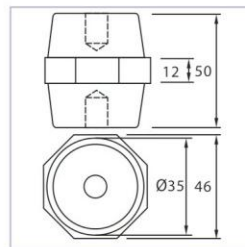


SM-7100×35(mm)



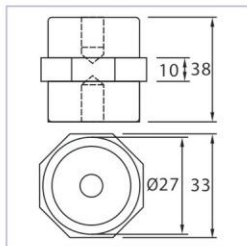
|                        |     |
|------------------------|-----|
| Tensile Strength(LBS)  | 500 |
| Voltage Withstand(kV)  | 6   |
| Torgue Strength(FTLBS) | 6   |
| Screw(mm)              | 6   |
| Screw Depth(mm)        | 9   |

SM-7120A×50(mm)



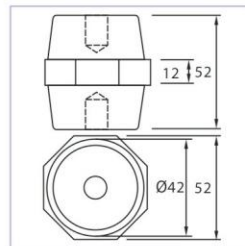
|                        |       |
|------------------------|-------|
| Tensile Strength(LBS)  | 1200  |
| Voltage Withstand(kV)  | 15    |
| Torgue Strength(FTLBS) | 12 35 |
| Screw(mm)              | 8 10  |
| Screw Depth(mm)        | 15 15 |

SM-7105×38(mm)



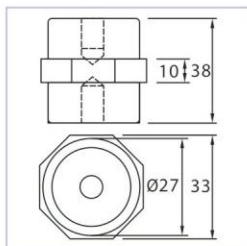
|                        |     |
|------------------------|-----|
| Tensile Strength(LBS)  | 650 |
| Voltage Withstand(kV)  | 8   |
| Torgue Strength(FTLBS) | 8   |
| Screw(mm)              | 6   |
| Screw Depth(mm)        | 10  |

SM-7120A×52(mm)



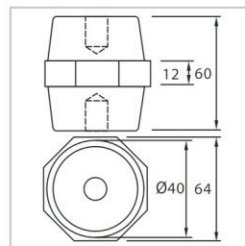
|                        |       |
|------------------------|-------|
| Tensile Strength(LBS)  | 1200  |
| Voltage Withstand(kV)  | 15    |
| Torgue Strength(FTLBS) | 12 35 |
| Screw(mm)              | 10 10 |
| Screw Depth(mm)        | 15 15 |

SM-7105×38(mm)



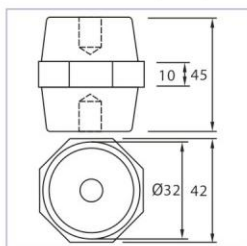
|                        |     |
|------------------------|-----|
| Tensile Strength(LBS)  | 650 |
| Voltage Withstand(kV)  | 8   |
| Torgue Strength(FTLBS) | 8   |
| Screw(mm)              | 8   |
| Screw Depth(mm)        | 10  |

SM-7120A×60(mm)



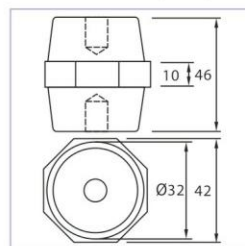
|                        |       |
|------------------------|-------|
| Tensile Strength(LBS)  | 1200  |
| Voltage Withstand(kV)  | 15    |
| Torgue Strength(FTLBS) | 12 35 |
| Screw(mm)              | 10 12 |
| Screw Depth(mm)        | 15 15 |

SM-7110×45(mm)



|                        |     |
|------------------------|-----|
| Tensile Strength(LBS)  | 800 |
| Voltage Withstand(kV)  | 10  |
| Torgue Strength(FTLBS) | 10  |
| Screw(mm)              | 8   |
| Screw Depth(mm)        | 12  |

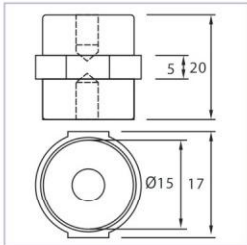
SM-7110×45(mm)



|                        |     |
|------------------------|-----|
| Tensile Strength(LBS)  | 800 |
| Voltage Withstand(kV)  | 10  |
| Torgue Strength(FTLBS) | 10  |
| Screw(mm)              | 10  |
| Screw Depth(mm)        | 12  |

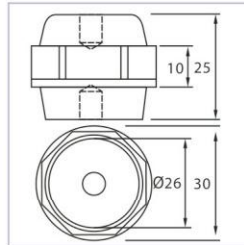
## Busbar Insulator

SM-20(mm)



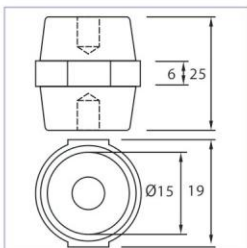
|                        |     |
|------------------------|-----|
| Tensile Strength(LBS)  | 300 |
| Voltage Withstand(kV)  | 5   |
| Torgue Strength(FTLBS) | 4   |
| Screw(mm)              | 6   |
| Screw Depth(mm)        | 7   |

SM-25(mm)



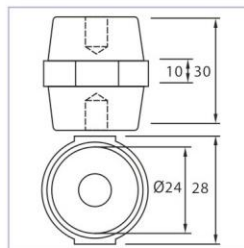
|                        |      |
|------------------------|------|
| Tensile Strength(LBS)  | 600  |
| Voltage Withstand(kV)  | 6    |
| Torgue Strength(FTLBS) | 6    |
| Screw(mm)              | 6(8) |
| Screw Depth(mm)        | 9    |

SM-25S(mm)



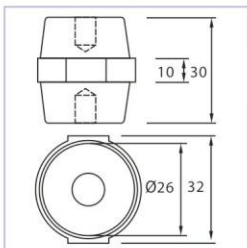
|                        |     |
|------------------------|-----|
| Tensile Strength(LBS)  | 400 |
| Voltage Withstand(kV)  | 6   |
| Torgue Strength(FTLBS) | 5   |
| Screw(mm)              | 6   |
| Screw Depth(mm)        | 8   |

SM-30(mm)



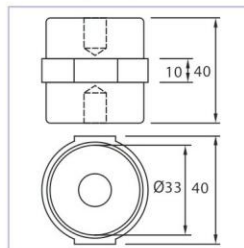
|                        |      |
|------------------------|------|
| Tensile Strength(LBS)  | 600  |
| Voltage Withstand(kV)  | 6    |
| Torgue Strength(FTLBS) | 6    |
| Screw(mm)              | 6(8) |
| Screw Depth(mm)        | 9    |

SM-35(mm)



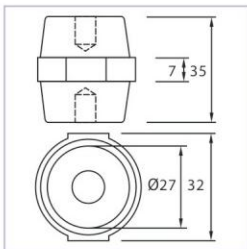
|                        |     |
|------------------------|-----|
| Tensile Strength(LBS)  | 600 |
| Voltage Withstand(kV)  | 10  |
| Torgue Strength(FTLBS) | 10  |
| Screw(mm)              | 8   |
| Screw Depth(mm)        | 11  |

SM-40(mm)



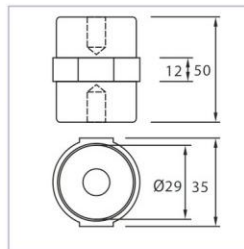
|                        |          |
|------------------------|----------|
| Tensile Strength(LBS)  | 660      |
| Voltage Withstand(kV)  | 12       |
| Torgue Strength(FTLBS) | 12       |
| Screw(mm)              | 6(8)(10) |
| Screw Depth(mm)        | 11       |

SM-32×30(mm)



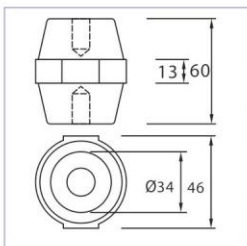
|                        |      |
|------------------------|------|
| Tensile Strength(LBS)  | 550  |
| Voltage Withstand(kV)  | 8    |
| Torgue Strength(FTLBS) | 8    |
| Screw(mm)              | 6(8) |
| Screw Depth(mm)        | 11   |

SM-51(mm)



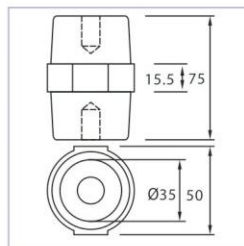
|                        |          |
|------------------------|----------|
| Tensile Strength(LBS)  | 1000     |
| Voltage Withstand(kV)  | 15       |
| Torgue Strength(FTLBS) | 20       |
| Screw(mm)              | 6(8)(10) |
| Screw Depth(mm)        | 11       |

SM-60(mm)



|                        |         |
|------------------------|---------|
| Tensile Strength(LBS)  | 1200    |
| Voltage Withstand(kV)  | 20      |
| Torgue Strength(FTLBS) | 35      |
| Screw(mm)              | (8)(10) |
| Screw Depth(mm)        | 15      |

SM-76(mm)

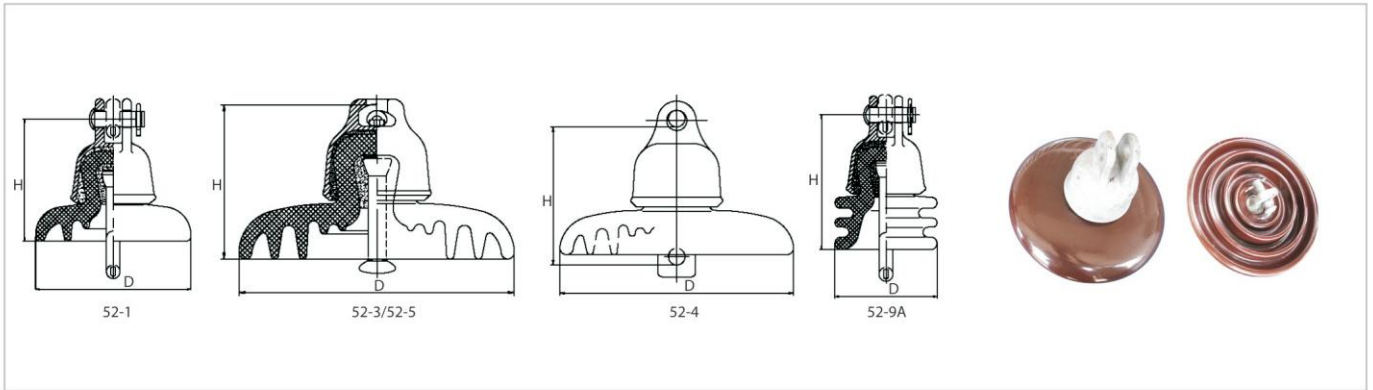


|                        |      |
|------------------------|------|
| Tensile Strength(LBS)  | 1600 |
| Voltage Withstand(kV)  | 25   |
| Torgue Strength(FTLBS) | 40   |
| Screw(mm)              | 10   |
| Screw Depth(mm)        | 15   |



## Suspension Insulator

- 52 Series Ball-Socket and Clevis-Tongue Type.
- Standard: ANSI C29.1 ANSI C29.2.
- Voltage:6-33kV.

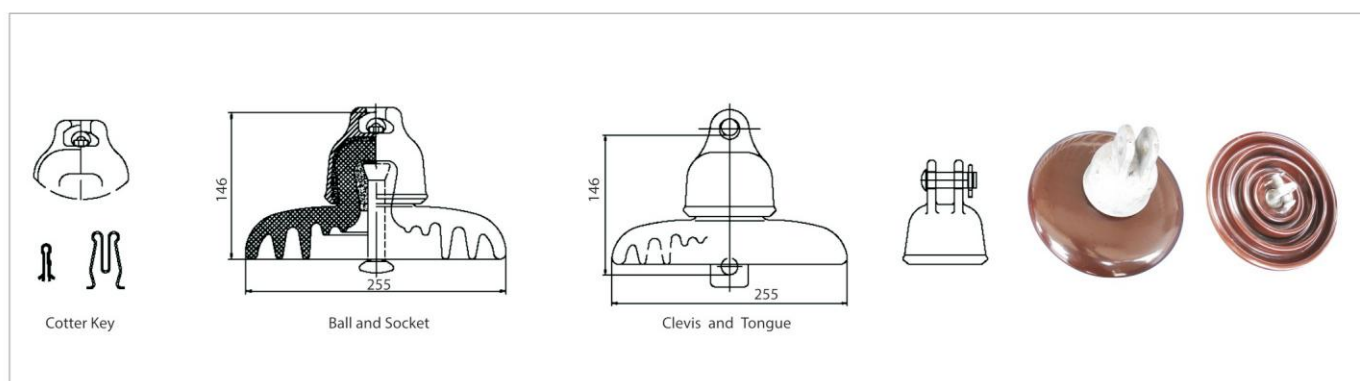


| ANSI CLASS                            |                            | 52-1 | 52-2 | 52-3 | 52-4 | 52-5 | 52-9A/B |
|---------------------------------------|----------------------------|------|------|------|------|------|---------|
| Porcelain Shell Diameter, D, mm       |                            | 165  | 190  | 254  | 254  | 254  | 108     |
| Unit Spacing, H, mm                   |                            | 140  | 146  | 146  | 146  | 146  | 159     |
| Leakage Distance, mm                  |                            | 178  | 210  | 292  | 292  | 292  | 171     |
| Combined M & E Strength, kN           |                            | 44   | 70   | 70   | 70   | 111  | 44      |
| Impact Strength, N-m                  |                            | 5    | 5    | 6    | 6    | 7    | 5       |
| Tension Proof Load, kN                |                            | 22   | 33.5 | 33.5 | 33.5 | 55.5 | 22      |
| Low-Frequency Flashover Voltage       | Dry, kV                    | 60   | 65   | 80   | 80   | 80   | 60      |
| Low-Frequency Flashover Voltage       | Wet, kV                    | 30   | 35   | 50   | 50   | 50   | 30      |
| Critical Impulse Flashover Voltage    | Pos., kV                   | 100  | 115  | 125  | 125  | 125  | 100     |
| Critical Impulse Flashover Voltage    | Neg., kV                   | 100  | 115  | 130  | 130  | 130  | 90      |
| Lower- Frequency Puncture Voltage, kV |                            | 80   | 90   | 110  | 110  | 110  | 80      |
| Radio Influence Voltage Data          | Test Voltage to Ground, kV | 7.5  | 7.5  | 10   | 10   | 10   | 7.5     |
| Radio Influence Voltage Data          | Max. RIV at 1000 KHz, uV   | 50   | 50   | 50   | 50   | 50   | 50      |
| Net Weight,Each, Approx., kg          |                            | 2.5  | 3.8  | 4.6  | 4.9  | 5.6  | 2.6     |

Each suspension shell undergoes rigorous electrical testing before and after assembly before being shipped.

## Suspension Insulator

- Ac Disc Porcelain Insulators (Normal Type).
- Standard: IEC60383.
- Voltage:6-33kV.
- Suspension insulators are available for ball & socket or clevis-tongue coupling.
- Standard caps are constructed of hot-dip galvanized malleable iron.
- Cotter keys for locking ball & socket and clevis pin connections are stainless steel.
- The normal type disc suspension insulators include standard type and large creepage distance type, which are widely used in clean area and light pollution area.



| IEC CLASS                                   |                            | U70BL   | U70C   | U80BL | /     | U100BL  | U120B   |
|---|----------------------------|---------|--------|-------|-------|---------|---------|
| Item No.                                    |                            | XP-70   | XP-70C | XP-80 | XP-90 | XP-100  | XP-120  |
| Porcelain Nominal Diameter,D.mm             |                            | 255     | 255    | 255   | 255   | 255     | 255     |
| Unit Spacing,H.mm                           |                            | 146     | 146    | 146   | 146   | 146     | 146     |
| Standard Coupling Size                      |                            | 16      | 16C    | 16    | 16    | 16      | 16      |
| Nominal Creepage Distance,mm                |                            | 295/320 | 295    | 295   | 295   | 295/320 | 295/320 |
|   |                            | 70      | 70     | 80    | 90    | 100     | 120     |
| Routine Tension Load,kN                     |                            | 35      | 35     | 40    | 45    | 50      | 60      |
| Impact failing load,N-m                     |                            | 6       | 6      | 6     | 6     | 7       | 7       |
| Power Frequency Withstand Voltage           | Dry, kV                    | 70      | 70     | 70    | 70    | 70      | 70      |
| Power Frequency Withstand Voltage           | Wet, kV                    | 40      | 40     | 40    | 40    | 40      | 40      |
| Dry Lightning Impulse Withstand Voltage, kV |                            | 100     | 100    | 100   | 100   | 100     | 100     |
| Power Frequency Puncture Voltage,kV         |                            | 110     | 110    | 110   | 110   | 110     | 110     |
| Radio Influence Voltage Data                | Test Voltage to Ground, kV | 10      | 10     | 10    | 10    | 10      | 10      |
| Radio Influence Voltage Data                | Max. RIV at 1000 KHz, uV   | 50      | 50     | 50    | 50    | 50      | 50      |
| Net Weight,Each, Approx., kg                |                            | 4.6     | 4.8    | 4.9   | 5.3   | 5.7     | 6       |

Each suspension shell undergoes rigorous electrical testing before and after assembly before being shipped.

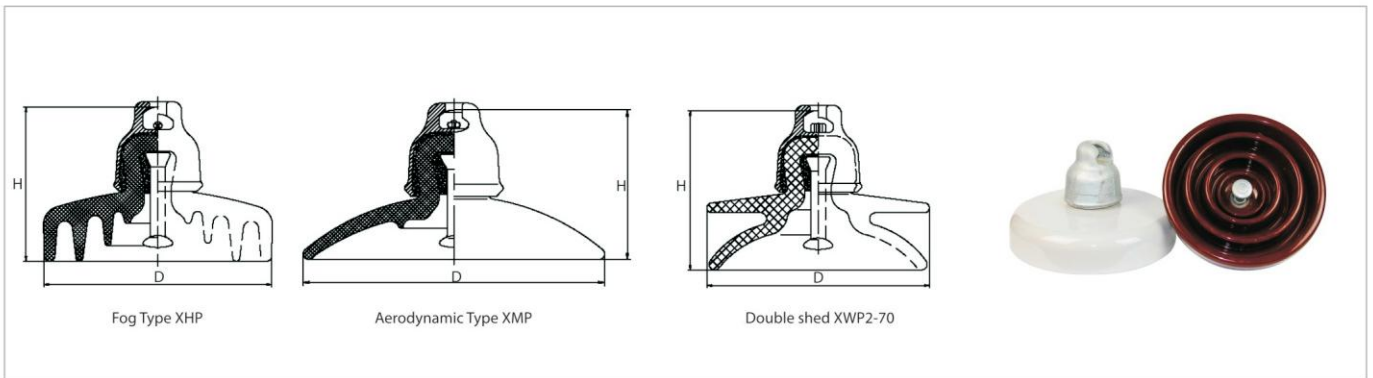
## Suspension Insulator Fog Type, Double-shed and Aerodynamic Type

- The fog type insulators usually serve in coastlands and rainy areas with large creepage distance structure and well flashover performance in wet condition.
- The aerodynamic type insulators, with streamline structure, low deposit rate of insoluble material and great self-clean function take the special protection effect in insulator strings.
- The double-shed and tri-shed type insulator with big diameter, large creepage distance, great self-clean function and strong resistance to pollution, especially serving in droughty, rainless and windy areas.

PORCELAIN INSULATOR

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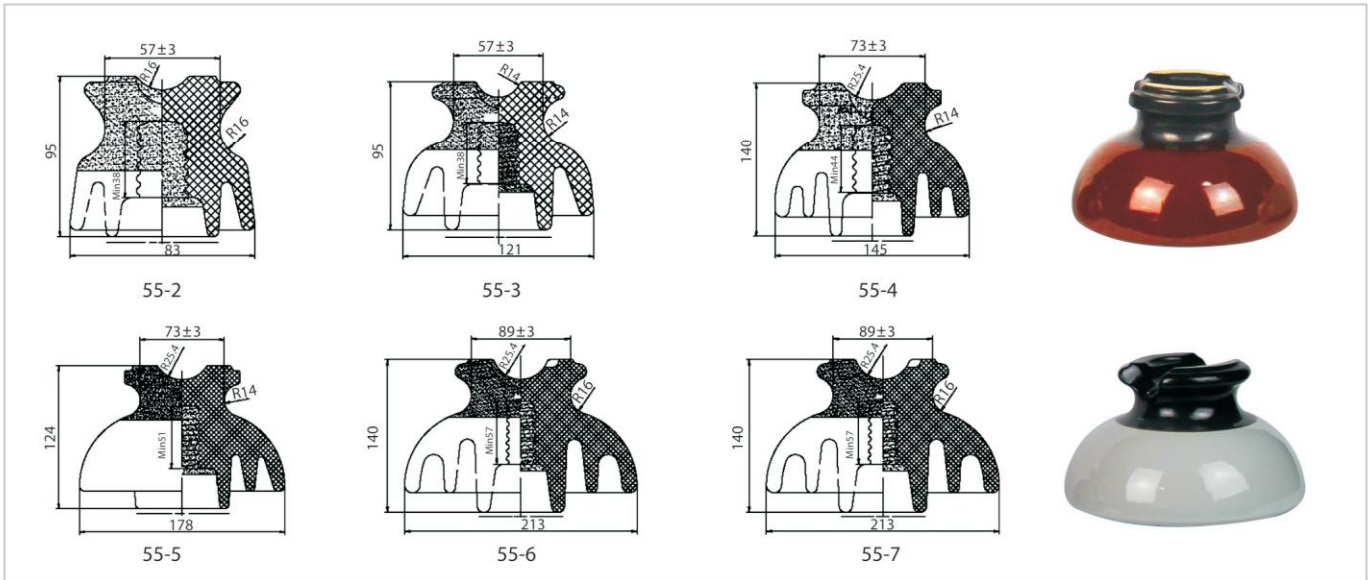


| IEC CLASS                                   |                            | U70BLP  | U80BLP | U100BLP  | U120BP   | U70BL  | U70BLP  |
|---|----------------------------|---------|--------|----------|----------|--------|---------|
| Item No.                                    |                            | XHP-70  | XHP-80 | XHP2-100 | XHP1-120 | XMP-70 | XWP2-70 |
| Porcelain Nominal Diameter,D.mm             |                            | 255     | 255    | 255      | 255/280  | 350    | 255     |
| Unit Spacing,H.mm                           |                            | 146     | 146    | 146      | 146      | 146    | 146     |
| Standard Coupling Size                      |                            | 16      | 16     | 16       | 16B      | 16     | 16      |
| Nominal Creepage Distance,mm                |                            | 432/450 | 432    | 432/450  | 432/450  | 300    | 400/450 |
| Rated E&M Failing load,kN                   |                            | 70      | 80     | 100      | 120      | 70     | 70      |
| Routine Tension Load,kN                     |                            | 35      | 40     | 50       | 60       | 35     | 35      |
| Impact failing load,N-m                     |                            | 6       | 6      | 7        | 7        | /      | /       |
| Power Frequency Withstand Voltage           | Dry, kV                    | 80      | 80     | 80       | 80       | 70     | 80      |
| Power Frequency Withstand Voltage           | Wet, kV                    | 42      | 42     | 42       | 42       | 40     | 42      |
| Dry Lightning Impulse Withstand Voltage, kV |                            | 120     | 120    | 120      | 120      | 105    | 120     |
| Power Frequency Puncture Voltage, kV        |                            | 120     | 120    | 120      | 120      | 120    | 120     |
| Radio Influence Voltage Data                | Test Voltage to Ground, kV | 10      | 10     | 10       | 10       | 10     | 10      |
| Radio Influence Voltage Data                | Max. RIV at 1000 KHz, uV   | 50      | 50     | 50       | 50       | 50     | 50      |
| Net Weight, Each, Approx., kg               |                            | 6.1/6.3 | 6.5    | 7.7/7.9  | 8/8.2    | 5.7    | 5.9/6.4 |

Each suspension shell undergoes rigorous electrical testing before and after assembly before being shipped.

# Pin Type Insulator

- 55 Series Low and Medium Voltage Pin Type.
- Standard: ANSI C29.1, ANSI C29.5.
- Voltage:4-12kV.

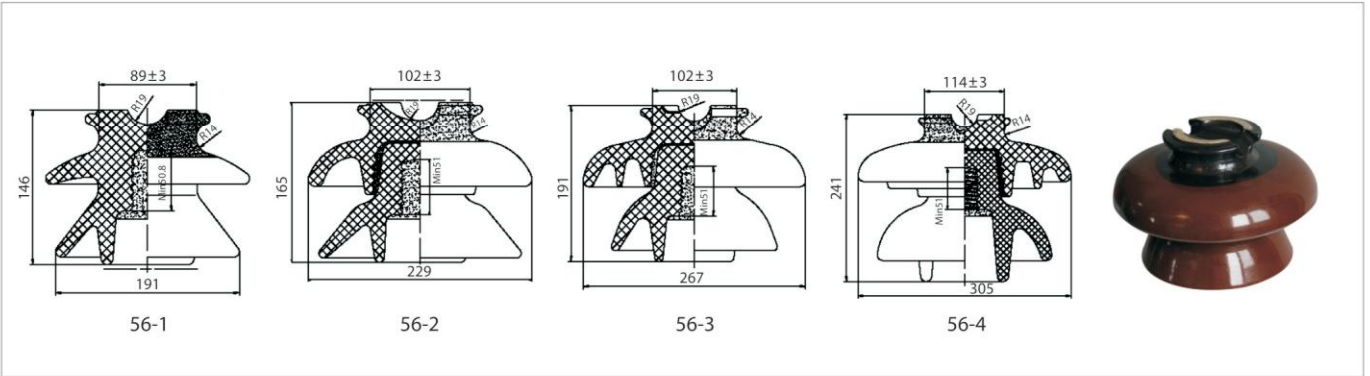


| ANSI CLASS                            |                            | 55-2 | 55-3 | 55-4 | 55-5 | 55-6 | 55-7 |
|---------------------------------------|----------------------------|------|------|------|------|------|------|
| Neck Type                             |                            | C    | C    | F    | F    | J    | J    |
| Leakage Distance, mm                  |                            | 127  | 178  | 229  | 305  | 381  | 381  |
| Dry Arcing Distance, mm               |                            | 86   | 114  | 127  | 159  | 203  | 203  |
| Minimum Pin Length, mm                |                            | 102  | 127  | 127  | 152  | 190  | 190  |
| Cantilever Strength, kN               |                            | 11   | 11   | 13   | 13   | 13   | 13   |
| Low-Frequency Flashover Voltage       | Dry, kV                    | 45   | 55   | 65   | 80   | 100  | 100  |
| Low-Frequency Flashover Voltage       | Wet, kV                    | 25   | 30   | 35   | 45   | 50   | 50   |
| Critical Impulse Flashover Voltage    | Pos., kV                   | 70   | 90   | 105  | 130  | 150  | 150  |
| Critical Impulse Flashover Voltage    | Neg., kV                   | 85   | 110  | 130  | 150  | 170  | 170  |
| Lower- Frequency Puncture Voltage, kV |                            | 70   | 90   | 95   | 115  | 135  | 135  |
| Radio Influence Voltage Data          | Test Voltage to Ground, kV | 5    | 10   | 10   | 15   | 22   | 22   |
| Radio Influence Voltage Data          | Max. RIV at 1000 KHz, uV   | 50   | 50   | 50   | 100  | 100  | 100  |
| Net Weight, Each, Approx., kg         |                            | 0.75 | 1.1  | 1.7  | 2.9  | 4.4  | 4.4  |

Above data for radio -freed type. Plain type are available if required.

## Pin Type Insulator

- 56 Series High -Voltage Pin Type.
- Standard: ANSI C29.1, ANSI C29.6.
- Voltage:11-36kV.

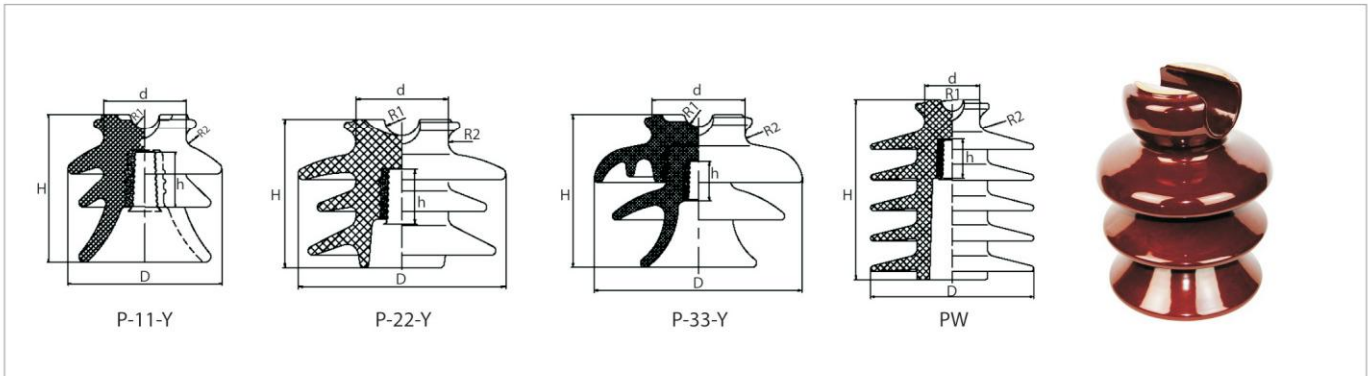


| ANSI CLASS                           |                            |          | 56-1      | 55-2        | 56-3        | 56-4        | 56-5        |
|--------------------------------------|----------------------------|----------|-----------|-------------|-------------|-------------|-------------|
| Neck Type                            |                            |          | J         | K           | K           | /           | /           |
| Leakage Distance, mm                 |                            |          | 330       | 432         | 533         | 685         | 864         |
| Dry Arcing Distance, mm              |                            |          | 178       | 210         | 241         | 285.8       | 355.6       |
| Min. Pin Length, mm                  |                            |          | 152       | 178         | 203         | 254         | 305         |
| Main Dimensions, mm                  | D-Diameter                 |          | 191       | 229         | 267         | 305         | 343         |
| Main Dimensions, mm                  | H-Height                   |          | 146       | 165         | 191         | 241         | 318         |
| Main Dimensions, mm                  | N-Neck Diameter            |          | 89        | 102         | 102         | 114         | 140         |
| Main Dimensions, mm                  | E-Pin Diameter             |          | 35        | 35          | 35          | 35          | 35          |
| Main Dimensions, mm                  | S-Saddle Groove Radius     |          | 19        | 19          | 19          | 19          | 19          |
| Main Dimensions, mm                  | Wire Grooves Radius        |          | 14        | 14          | 14          | 14          | 14          |
| Cantilever Strength, kN              |                            |          | 2500 (11) | 3000 (13.2) | 3000 (13.2) | 3000 (13.2) | 3000 (13.2) |
| Min Flashover Voltage                | Power Frequency            | Dry, kV  | 95        | 110         | 125         | 140         | 175         |
| Min Flashover Voltage                | Power Frequency            | Wet, kV  | 60        | 70          | 80          | 95          | 125         |
| Min Flashover Voltage                | Critical Impulse           | Pos., kV | 150       | 175         | 200         | 225         | 270         |
| Min Flashover Voltage                | Critical Impulse           | Neg., kV | 190       | 225         | 265         | 310         | 340         |
| Radio Influence Voltage Data         | Test Voltage to Ground, kV |          | 15        | 22          | 30          | 30          | 44          |
| Radio Influence Voltage Data         | Max.RIV at 1000 KHz, uV    |          | 100       | 100         | 200         | 200         | 200         |
| Power Frequency Puncture Voltage, kV |                            |          | 130       | 145         | 165         | 185         | 225         |

Each suspension shell undergoes rigorous electrical testing before and after assembly before being shipped.

# Pin Type Insulator

- BS 11kV 22kV 33kV Pin Type.
- Standard: BS 137, IEC60383.
- Voltage:11-36kV.



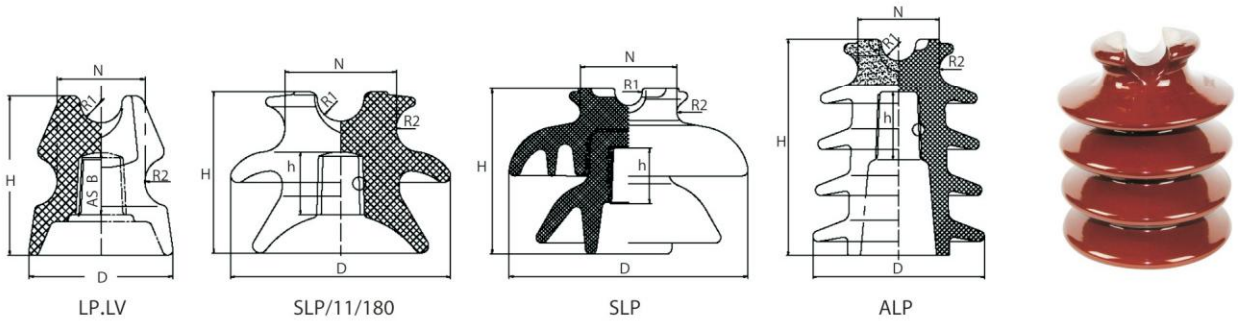
| BS CLASS                             |                            |          | P-11-Y | P-15-Y | P-22-Y | P-33-Y | PW-15-Y | PW-22-Y |
|--------------------------------------|----------------------------|----------|--------|--------|--------|--------|---------|---------|
| Creepage Distance, mm                |                            |          | 254    | 298    | 432    | 630    | 432     | 673     |
| Dry Arcing Distance, mm              |                            |          | 102    | 133    | 200    | 360    | 197     | 267     |
| Dimensions, mm                       | H - Height                 |          | 130    | 137    | 165    | 244    | 185     | 255     |
| Dimensions, mm                       | h- Depth of Thread         |          | 140    | 152    | 229    | 280    | 170     | 205     |
| Dimensions, mm                       | D-Diameter                 |          | 48     | 48     | 52.6   | 52.6   | 52.6    | 52.6    |
| Dimensions, mm                       | d- Pin Diameter            |          | 18.3   | 18.3   | 27.8   | 27.8   | 27.8    | 27.8    |
| Dimensions, mm                       | R1-Saddle Groove Radius    |          | 13     | 13     | 19     | 11     | 16      | 16      |
| Dimensions, mm                       | R2-Wire Grooves Radius     |          | 9.5    | 11     | 14.3   | 13     | 16      | 16      |
| Cantilever Strength, kN              |                            |          | 11     | 11     | 11     | 13     | 11      | 11      |
| Min Flashover Voltage                | Power Frequency            | Dry, kV  | 75     | 80     | 100    | 135    | 100     | 125     |
| Min Flashover Voltage                | Power Frequency            | Wet, kV  | 50     | 55     | 60     | 95     | 65      | 95      |
| Min Flashover Voltage                | Critical Impulse           | Pos., kV | 115    | 130    | 160    | 180    | 150     | 190     |
| Min Flashover Voltage                | Critical Impulse           | Neg., kV | 150    | 175    | 205    | 290    | 190     | 235     |
| Withstand Voltage                    | One Minute Power Frequency | Dry, kV  | 65     | 70     | 90     | 110    | 90      | 110     |
| Withstand Voltage                    | One Minute Power Frequency | Wet, kV  | 40     | 50     | 55     | 75     | 60      | 90      |
| Impulse Withstand Voltage, kV        |                            |          | 90     | 110    | 150    | 170    | 140     | 180     |
| Radio Influence Voltage Data         | Test Voltage to Ground, kV |          | 15     | 15     | 22     | 30     | 22      | 30      |
| Radio Influence Voltage Data         | Max.RIV at 1000 KHz, uV    |          | 8000   | 8000   | 12000  | 16000  | 12000   | 16000   |
| Power Frequency Puncture Voltage, kV |                            |          | 150    | 150    | 145    | 210    | 150     | 199     |

Above data for radio -freed type. Plain type are available if required.

## Pin Type Insulator

- AS Pin Type Insulators.
- Standard: AS 4899-2007, IEC60383.
- Voltage:0.4-36kV.

PORCELAIN INSULATOR



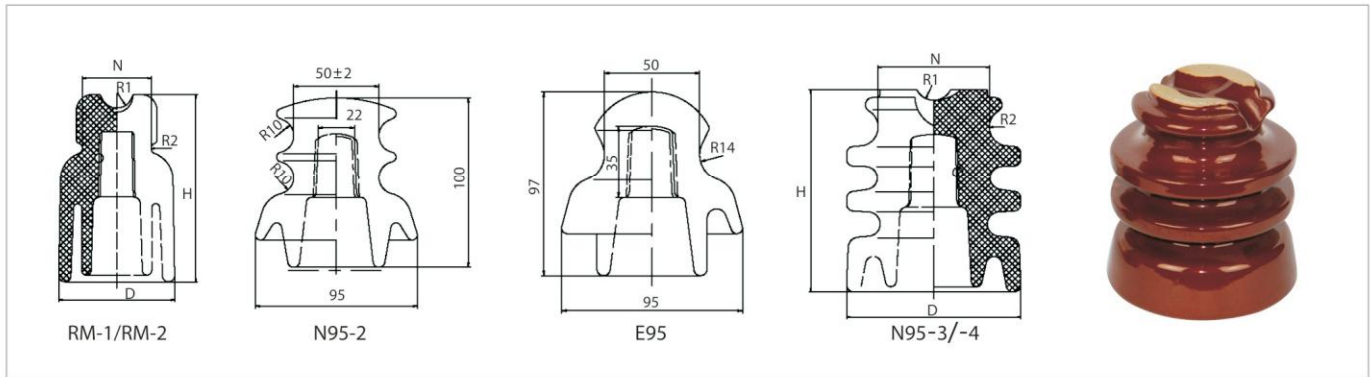
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| ANSI CLASS                                |                        | LP.LV | SLP/11/180 | SLP/22/420 | SLP/33/534 | ALP/11/275 | ALP/22/450 |
|---|------------------------|-------|------------|------------|------------|------------|------------|
| Nominal Voltage, kV                       |                        | -     | 11         | 22         | 33         | 11         | 22         |
| Creepage Distance, mm                     |                        | -     | 180        | 420        | 534        | 275        | 450        |
| Dimensions, mm                            | H - Height             | 91    | 110        | 170        | 200        | 160        | 203        |
| Dimensions, mm                            | D-Diameter             | 82    | 150        | 229        | 250        | 150        | 160        |
| Dimensions, mm                            | N-Neck Diameter        | 50    | 76         | 113        | 113        | 76         | 76         |
| Dimensions, mm                            | R1-Top Groove Radius   | 12    | 16         | 16         | 16         | 16         | 16         |
| Dimensions, mm                            | R2-Side Grooves Radius | 14    | 16         | 13         | 13         | 16         | 16         |
| Dimensions, mm                            | Thread Form, Pattern   | B     | A          | C          | C          | C          | C          |
| Cantilever Strength, kN                   |                        | 7     | 7          | 11         | 11         | 7          | 11         |
| Power Frequency Withstand Voltage Wet, kV |                        | -     | 28         | 50         | 70         | 28         | 50         |
| Lighting Impulse Withstand, kV            |                        | -     | 95         | 145        | 200        | 95         | 145        |
| Recommended Spindle                       |                        | 1     | A/130/7    | C/200/11   | C/200/7    | C/150/7    | C/200/11   |

## Pin Type Insulator

- RM and Other Type Insulators.
- Voltage:0.4-36kV.



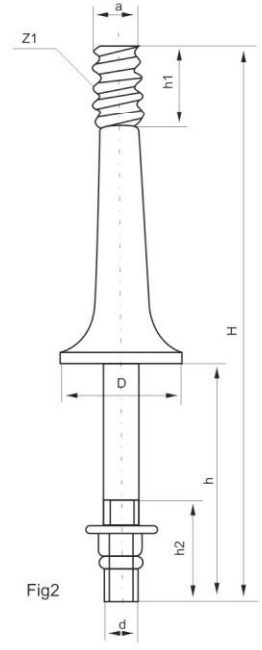
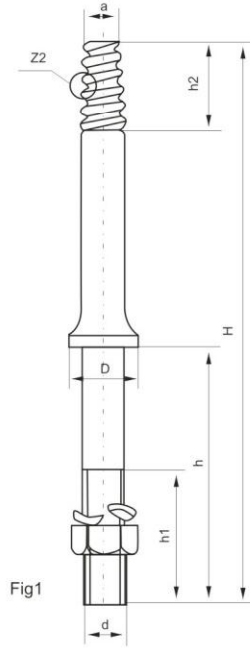
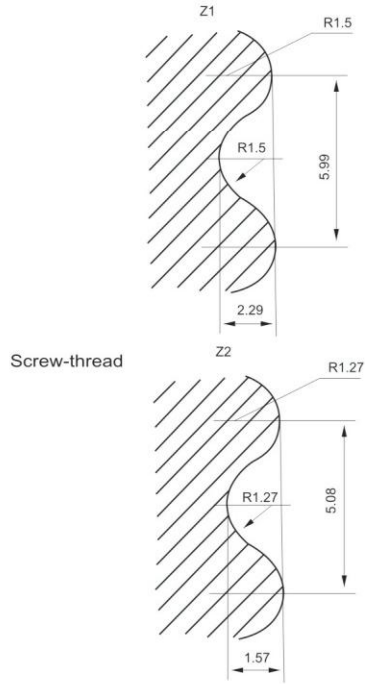
| NBR                                       |                        | N95-3 | N95-4 |
|---|------------------------|-------|-------|
| Dimensions, mm                            | D-Diameter             | 100   | 130   |
|   | H-Height               | 120   | 152   |
|   | N-Neck Diameter        | 60    | 80    |
|   | T-Top Diameter         | 80    | 100   |
|   | R1-Top Groove Radius   | 14    | 14    |
|   | R2-Wire Grooves Radius | 14    | 14    |
| Minimum leakage Distance, mm              |                        | 230   | 318   |
| Dry arcing distance, mm                   |                        | 152   | 180   |
| Cantilever Strength , kN                  |                        | 9.8   | 13.5  |
| Low frequency Puncture voltage, kv        |                        | 95    | 115   |
| Critical Impulse flashover (1.2*50μs), kV | Positive               | 115   | 140   |
| Critical Impulse flashover (1.2*50μs), kV | Negative               | 140   | 170   |
| Low frequency Flashover, kV               | Dry                    | 70    | 85    |
| Low frequency Flashover, kV               | Wet                    | 45    | 55    |
| Net Weight, Each, Approx. kg              |                        | 1.34  | 2.6   |

| INSULATOR                    |                        | RM-1  | RM-2  |
|------------------------------|------------------------|-------|-------|
| Dimensions, mm               | D-Diameter             | 86    | 70    |
|                              | H-Height               | 140   | 100   |
|                              | N-Neck Diameter        | 51    | 47    |
|                              | T-Top Diameter         | /     | /     |
|                              | R1-Top Groove Radius   | 12    | 8.5   |
|                              | R2-Wire Grooves Radius | 4     | 4     |
| Insulation Resistance M Ω    |                        | 50000 | 40000 |
| Net Weight, Each, Approx. kg |                        | 1.1   | 0.5   |

| Item No.                           | E95  | N95-2 |
|------------------------------------|------|-------|
| Leakage distance, mm               | 140  | 130   |
| Minimum Breaking Load, kg          | 1250 | 1250  |
| 1 minute withstand voltage wet, kV | 10   | 10    |
| Weight, kg                         | 0.55 | 0.63  |



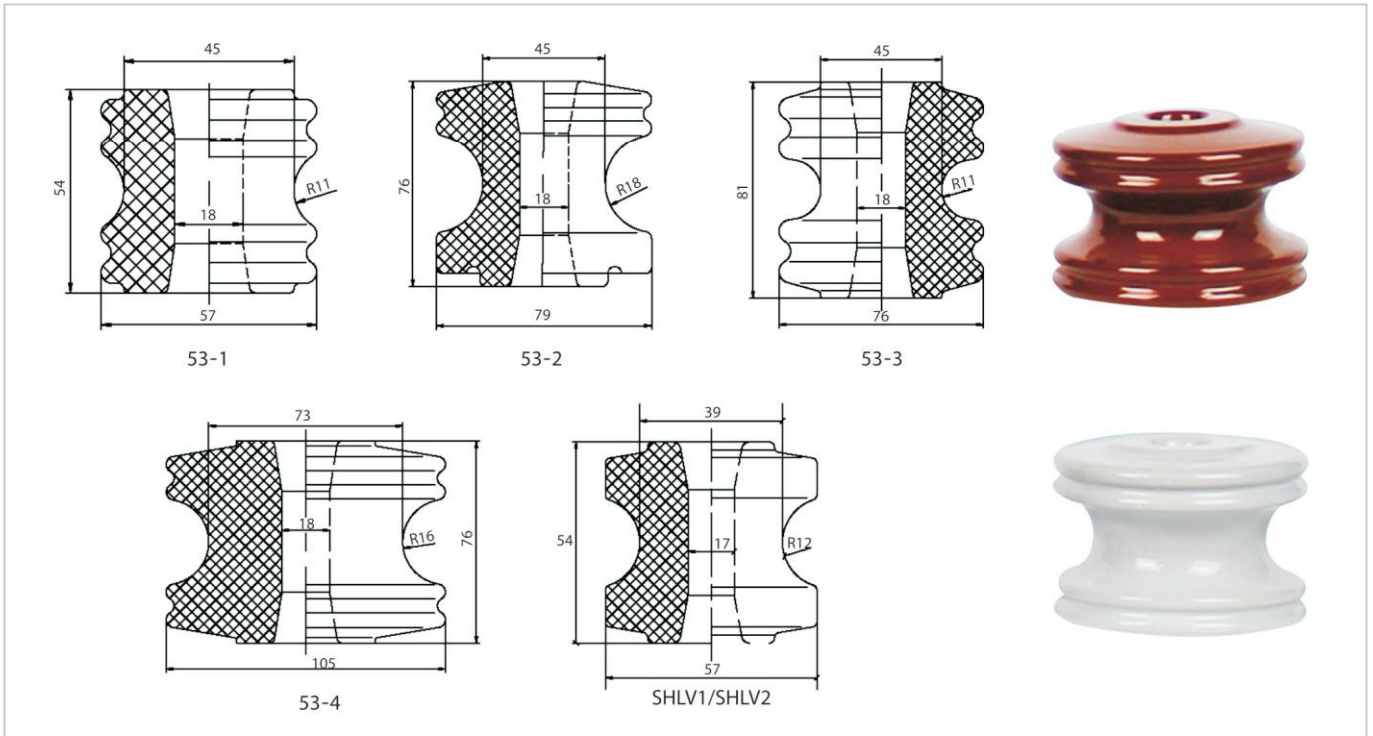
## Spindles (For Use With Pin Type Insulators)



| Item No.                | A1022          | A1023 | A1024 | A1025          | A1026 |       |
|-------------------------|----------------|-------|-------|----------------|-------|-------|
| Old Cat.No.             | B2201          | B2041 | B2202 | BS.16          | BS.29 |       |
| Fig                     | 1              | 1     | 1     | 2              | 2     |       |
| Class GB                | BS Small steel |       |       | BS Large Steel |       |       |
| Main Dimensions mm      | H              | 305   | 352   | 215            | 261   | 369   |
|                         | D              | 38    | 41    | 38             | 60    | 51    |
|                         | h              | 140   | 127   | 50             | 46    | 140   |
|                         | h1             | 74    | 80    | 44             | 41    | 78    |
|                         | h2             | 44.45 | 44.45 | 44.45          | 47    | 47    |
|                         | a              | 18.29 | 18.29 | 18.29          | 27.78 | 27.78 |
|                         | d              | 20    | 22    | 20             | 22    | 22    |
| Mechanical strength(KN) | 5              | 5     | 5     | 10             | 10    |       |
| Weight(kg)              | 1              | 1.2   | 0.75  | 1.5            | 2     |       |

# Spool Insulator

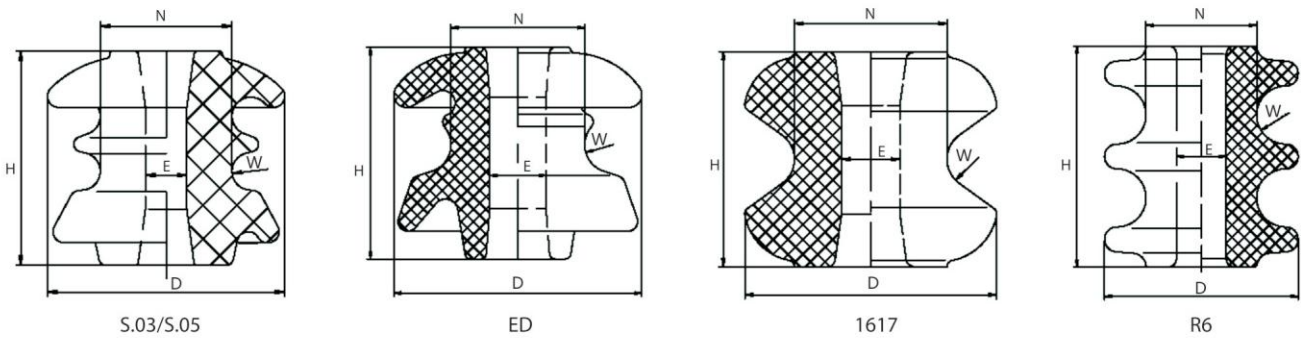
- 53 Series and AS Type.
- Standard: ANSI C29.3, ANSI C29.1, AS 3608.
- Voltage: Low voltage.



| SPOOL INSULATORS                        |                       | ANSI |      |      |      |      | AS    |
|---|-----------------------|------|------|------|------|------|-------|
| Item No.                                |                       | 53-1 | 53-2 | 53-3 | 53-4 | 53-5 | SHLV1 |
| Mechanical Failing Load, kN             |                       | 8.9  | 13.3 | 17.8 | 20   | 26.7 | 9     |
| Low Frequency Dry Flashover Voltage, kV |                       | 20   | 25   | 25   | 25   | 35   | /     |
| Low Frequency Wet Flashover Voltage, kV | Vertical, kV          | 8    | 12   | 12   | 12   | 18   | /     |
|   | Horizontal, kV        | 10   | 15   | 15   | 15   | 25   | /     |
| Dimensions, mm                          | H - Height            | 54   | 76   | 81   | 76   | 105  | 54    |
|   | D - Diameter          | 57   | 79   | 76   | 105  | 102  | 57    |
|   | N - Neck Diameter     | 45   | 45   | 45   | 73   | 73   | 39    |
|   | E - Hole Diameter     | 18   | 18   | 18   | 18   | 18   | 17    |
|   | W-Wire Grooves Radius | 11   | 18   | 11   | 16   | 11   | 12    |
| Net Weight, Each, Approx, kg            |                       | 0.2  | 0.55 | 0.6  | 1.1  | 1.16 | 2.4   |

## Shackle (Spool) Insulator

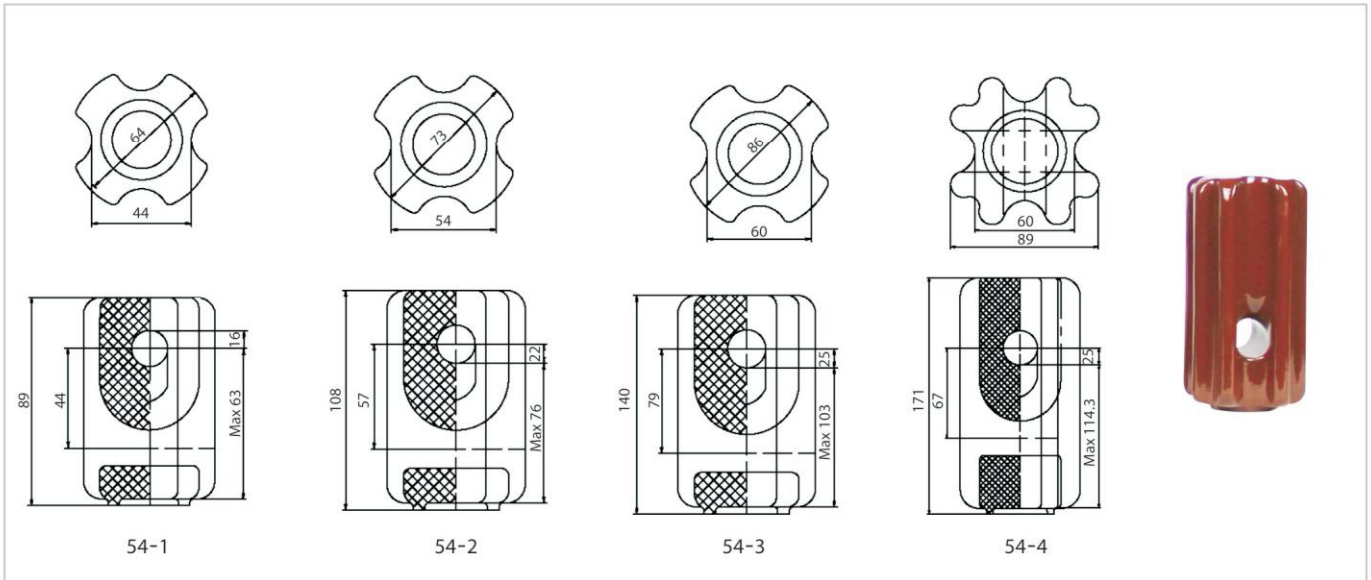
- Standard: IEC60383.
- Voltage: Low voltage.



| BS CLASS                          |                       | Shackle |      |      |       |      | Spool |      |
|-----------------------------------|-----------------------|---------|------|------|-------|------|-------|------|
| Item No.                          |                       | S.03    | S.05 | ED-2 | ED-2B | ED-3 | 1617  | R6   |
| Dimensions, mm                    | H - Height            | 57      | 75   | 75   | 76    | 65   | 65    | 80   |
|                                   | D - Diameter          | 63      | 88   | 80   | 89    | 70   | 76    | 70   |
|                                   | N - Neck Diameter     | 35      | 41   | 42   | 48    | 36   | 46    | 40   |
|                                   | E - Hole Diameter     | 11      | 17   | 20   | 21    | 16   | 17.5  | 18   |
|                                   | W-Wire Grooves Radius | 5       | 8    | 10   | 10    | 8    | 9     | 10   |
| Mechanical Failing Load, kN       |                       | 6.25    | 15   | 10   | 12.5  | 8    | 9     | 240N |
| Power Frequency Flashover Voltage | Dry, kV               | 17      | 22   | 18   | 23    | 16   | 20    | 12   |
| Power Frequency Flashover Voltage | Wet, kV               | 8       | 11   | 9    | 12    | 7    | 9     | 15   |
| Net Weight, Each, Approx., kg     |                       | 0.3     | 0.48 | 0.4  | 0.48  | 0.25 | 0.4   | 0.4  |

## Guy Strain Insulator 54 Series

- Strain insulators are mainly used on the guy wire structure to balance the tension strength and also provide the insulating.
- Standard: ANSI C29.4.
- Voltage:0.4-33kV.



| Item No.                        |                          | 54-1  | 54-2  | 54-3   | 54-4     |
|---------------------------------|--------------------------|-------|-------|--------|----------|
|                                 |                          | 41    | 48    | 57     | 76       |
| Dimensions, mm                  | A - Height               | 89    | 108   | 140    | 171      |
|                                 | B - Hole Centers Spacing | 44    | 57    | 79     | 67       |
|                                 | C - Inner Diameter       | 44    | 54    | 60     | 60       |
|                                 | D - Outer Diameter       | 64    | 73    | 86     | 89       |
|                                 | E - Cable Hole Diameter  | 16    | 22    | 25     | 25       |
|                                 | F - Height To Hole       | Max63 | Max76 | Max103 | Max114.3 |
| Mechanical Failing Load, kN     |                          | 44    | 53    | 89     | 89       |
| Low Frequency Flashover Voltage | Dry, kV                  | 25    | 30    | 35     | 40       |
| Low Frequency Flashover Voltage | Wet, kV                  | 12    | 15    | 18     | 23       |
| Net Weight, Each, Approx. kg    |                          | 0.5   | 0.65  | 1.2    | 2.2      |

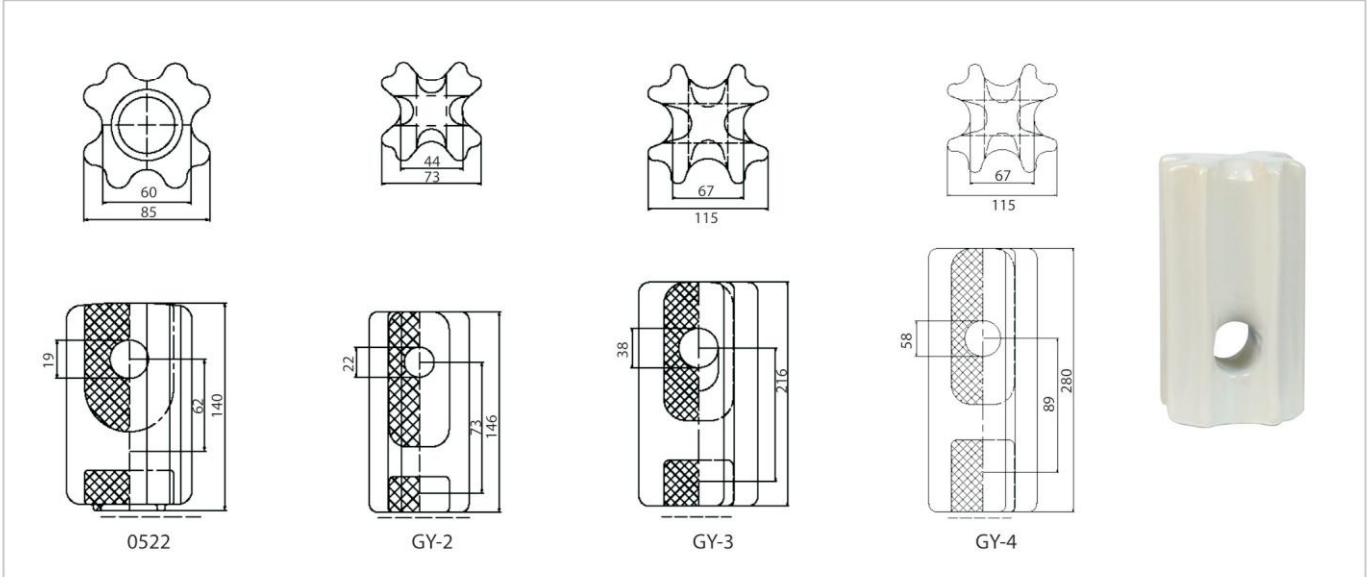
## Guy Strain Insulator GY and BS Series

- Strain insulators are mainly used on the guy wire structure to balance the tension strength and also provide the insulating.
- Standard: BS 137, AS 3609.
- Voltage: 0.4-33kV.

PORCELAIN INSULATOR

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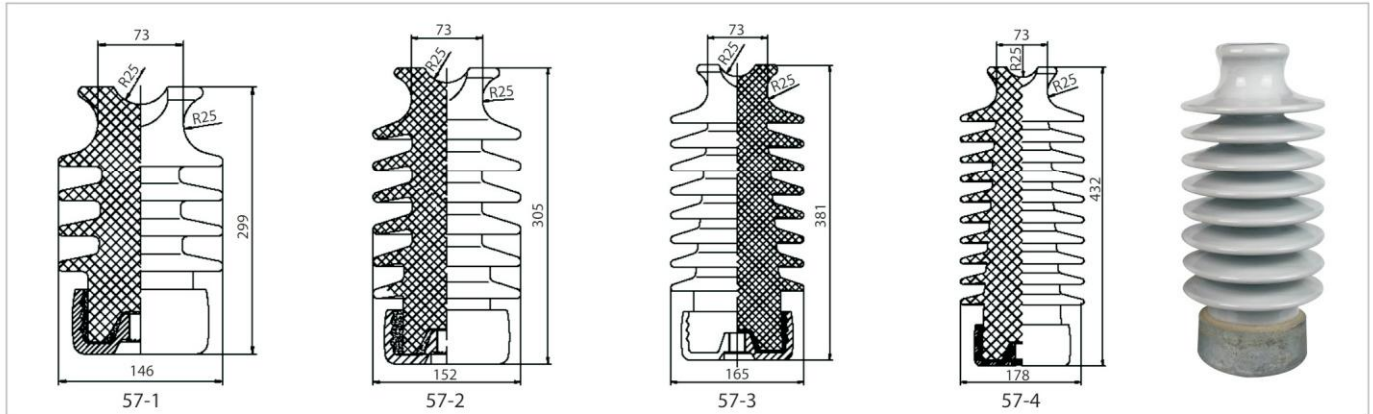
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| ANSI CLASS                      |                          | BS-137  |         |          | AS-3609 |      |      |      |
|---------------------------------|--------------------------|---------|---------|----------|---------|------|------|------|
| Item No.                        |                          | 11.1075 | 11.0522 | 11-3257G | GY-1    | GY-2 | GY-3 | GY-4 |
| Dimensions, mm                  | A - Height               | 78      | 140     | 220      | 90      | 146  | 216  | 280  |
|                                 | B - Hole Centers Spacing | 50      | 62      | 80       | 48      | 73   | 89   | 89   |
|                                 | C - Inner Diameter       | 37      | 60      | 120      | 40      | 44   | 67   | 67   |
|                                 | D - Outer Diameter       | 57      | 85      | 135      | 68      | 73   | 115  | 115  |
|                                 | E - Cable Hole Diameter  | 19      | 19      | 22       | 16      | 22   | 38   | 38   |
|                                 | F - Height To Hole       |         |         |          | 60      | 99   | 133  | 165  |
| Mechanical Failing Load, kN     |                          | 45      | 110     | 110      | 27      | 71   | 222  | 222  |
| Low Frequency Flashover Voltage | Dry, kV                  | 30      | 35      | 23       | /       | /    | /    | /    |
| Low Frequency Flashover Voltage | Wet, kV                  | 15      | 18      | 48       | 10      | 15   | 20   | 30   |
| Net Weight, Each, Approx. kg    |                          | 1       | 1.4     | 4.8      | 0.7     | 1.25 | 3.8  | 5    |

## Line Post Insulator 57 Series Tie-Top Type

- Standard: ANSI C29.7-2015.
- Voltage: 11-66kV.



| ANSI CLASS                                   | 57-1 | 57-2 | 57-3 | 57-4 |
|--|------|------|------|------|
| Creepage Distance (mm)                       | 356  | 559  | 737  | 1015 |
| Dry Arcing Distance (mm)                     | 165  | 241  | 311  | 368  |
| Cantilever Strength (kN)                     | 12.5 | 12.5 | 12.5 | 12.5 |
| Low Frequency Flashover Voltage-Dry (kV)     | 70   | 100  | 125  | 140  |
| Low Frequency Flashover Voltage-Wet (kV)     | 50   | 70   | 95   | 110  |
| Critical Impulse Flashover Voltage-Pos. (kV) | 120  | 160  | 200  | 230  |
| Test Voltage to Ground (kV)                  | 15   | 22   | 30   | 44   |
| Maximum RIV at 1000KHZ ( $\mu$ v)            | 100  | 100  | 200  | 200  |
| Net Weight (kg)                              | 4.8  | 7.8  | 11.0 | 18.0 |

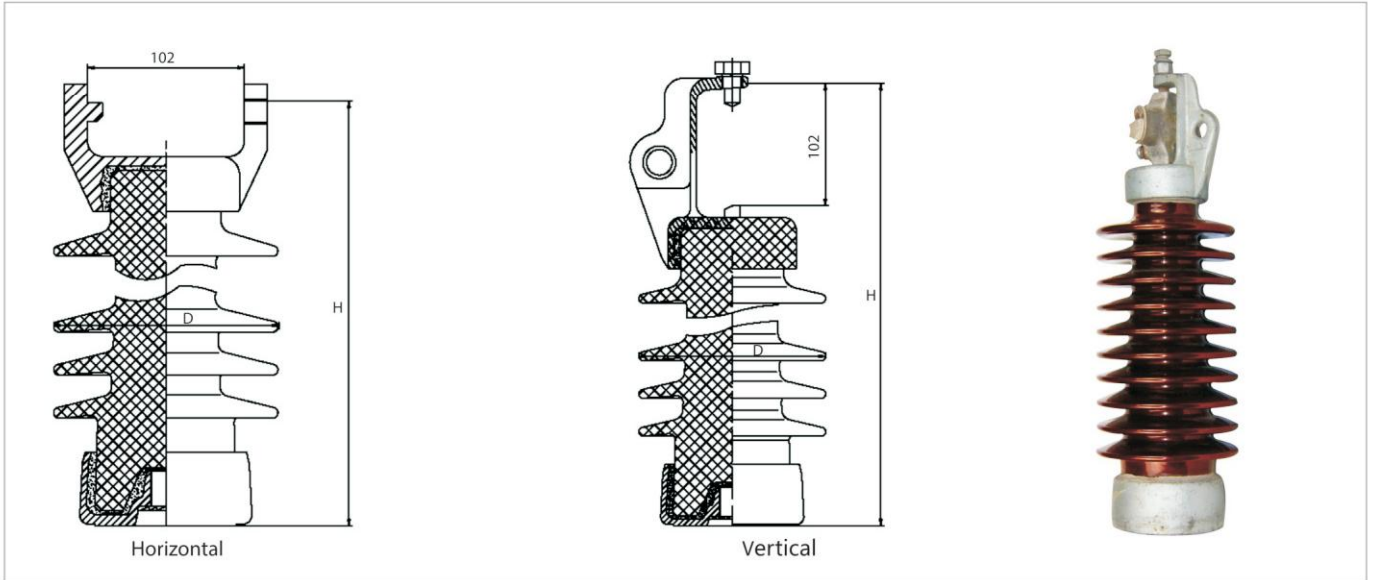
## Line Post Insulator 57 Series Vertical Clamp Type and Horizontal Clamp Type

- Standard: IEC60383, ANSI C29.1, ANSI C29.7.
- Voltage:15-45kV.
- Vertical clamp type line post mounted upright on crossarms and structures.
- Horizontal clamp type line post assemblies for ratings 15 kV through 45 kV.

PORCELAIN INSULATOR

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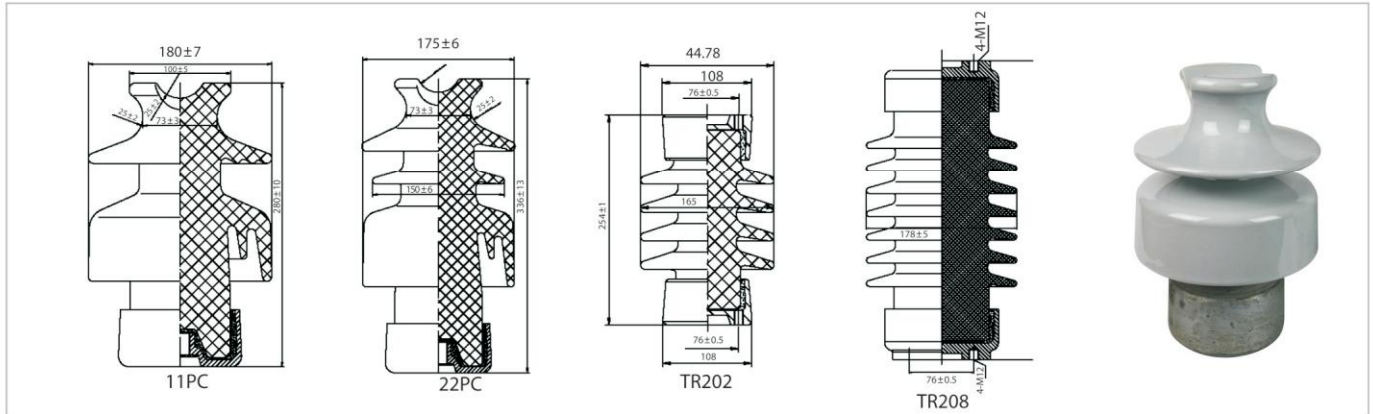
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| ANSI CLASS                                   | 57-11 | 57-21 | 57-12 | 57-22 | 57-13 | 57-23 |
|--|-------|-------|-------|-------|-------|-------|
| Creepage Distance (mm)                       | 356   | 356   | 559   | 559   | 737   | 737   |
| H - Height To Middle of Clamp Assembly       | 257   | 276   | 333   | 352   | 400   | 419   |
| D - Diameter                                 | 146   | 146   | 160   | 160   | 160   | 160   |
| C - Clamp Throat Width                       | 102   | 102   | 102   | 102   | 102   | 102   |
| Dry Arcing Distance(mm)                      | 165   | 165   | 241   | 241   | 311   | 311   |
| Cantilever Strength(kN)                      | 12.5  | 12.5  | 12.5  | 12.5  | 12.5  | 12.5  |
| Low Frequency Flashover Voltage-Dry(kV)      | 70    | 70    | 100   | 100   | 125   | 125   |
| Low Frequency Flashover Voltage-Wet(kV)      | 50    | 50    | 70    | 70    | 95    | 95    |
| Critical Impulse Flashover Voltage-Pos.,(kV) | 120   | 120   | 160   | 160   | 200   | 200   |
| Test Voltage to Ground(kV)                   | 15    | 15    | 22    | 22    | 30    | 30    |
| Maximum RIV at 1000KHZ( $\mu$ v)             | 100   | 100   | 100   | 100   | 200   | 200   |

## Pin Post And Tr Station

- Standard: IEC60383, ANSI C29.1, ANSI C29.9.
- Voltage: 11-330kV.



PORCELAIN INSULATOR

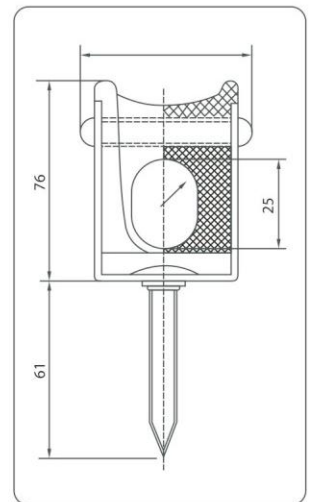
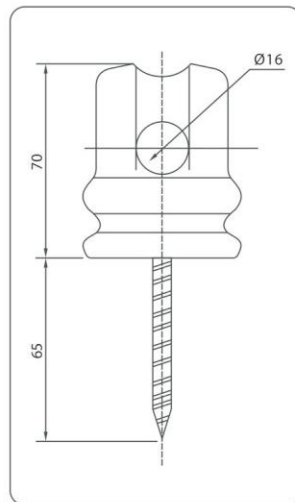
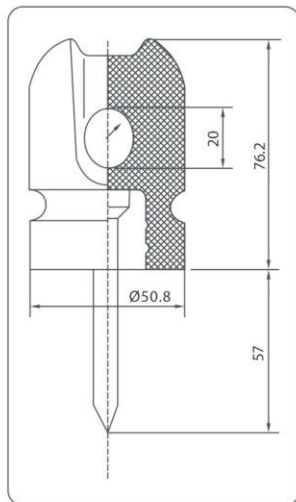
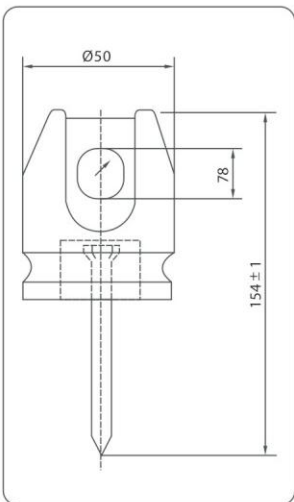
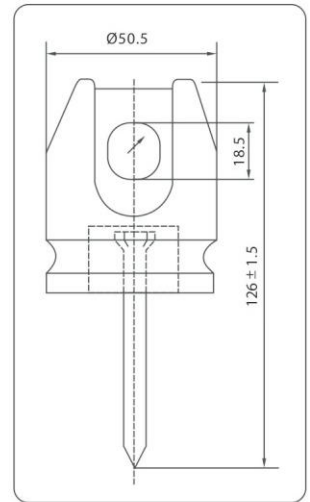
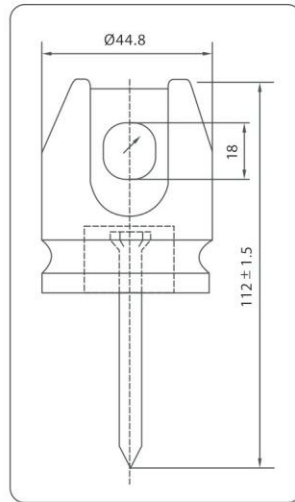
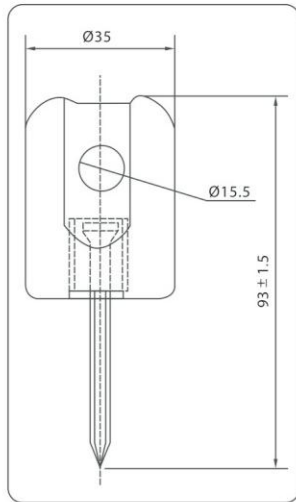
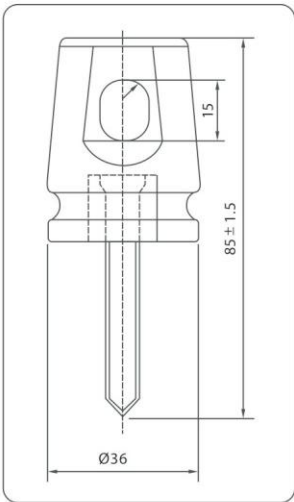
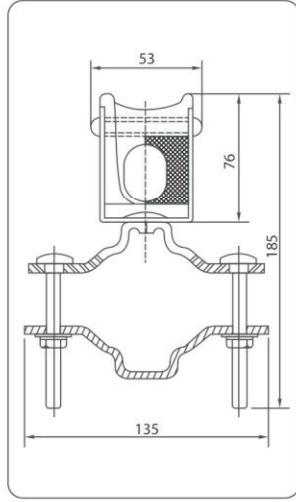
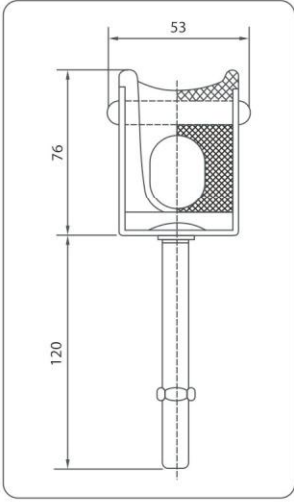
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| CLASS   | TR 202 | TR 205  | TR 208  |
|---|--------|---------|---------|
| Creepage Distance(mm)                         | 267    | 394     | 610     |
| H - Height                                    | 190.5  | 254     | 356     |
| D - Diameter                                  | 178    | 178/160 | 178/160 |
| Cantilever Strength(kN)                       | 8.9    | 8.9     | 8.9     |
| Tension Strength                              | 31.2   | 38      | 44.5    |
| Torision Strength, N-m                        | 678    | 791     | 904     |
| Compression Strength, kN                      | 44.5   | 44.5    | 44.5    |
| Low Frequency Flashover Voltage-Dry(kV)       | 60     | 85      | 110     |
| Low Frequency Flashover Voltage-Wet(kV)       | 40     | 55      | 75      |
| Critical Impulse Flashover Voltage-Pos., (kV) | 105    | 125     | 170     |
| Critical Impulse Flashover Voltage-Neg., (kV) | 120    | 200     | 250     |
| Power frequency withstand voltage kV          | 30     | 50      | 70      |
| Impulse withstand voltage kV                  | 95     | 110     | 150     |

| CLASS                  | 11PC | 22PC  | 33PC |
|------------------------|------|-------|------|
| Rated Voltage          | 11kV | 22 kV | 33kV |
| H - Height             | 280  | 336   | 390  |
| D - Diameter           | 180  | 175   | 180  |
| Creepage Distance mm   | 465  | 565   | 720  |
| Cantilever Strength kN | 12.5 | 12.5  | 12.5 |
| Low frequency          | 70   | 95    | 110  |
| Flashover Voltage (kV) | 40   | 65    | 85   |



## Wiring And Other Insulator



## Glass Insulator

- Standard: IEC60383, ANSI C29.1, ANSI C29.9.
- Voltage: 11-330kV.

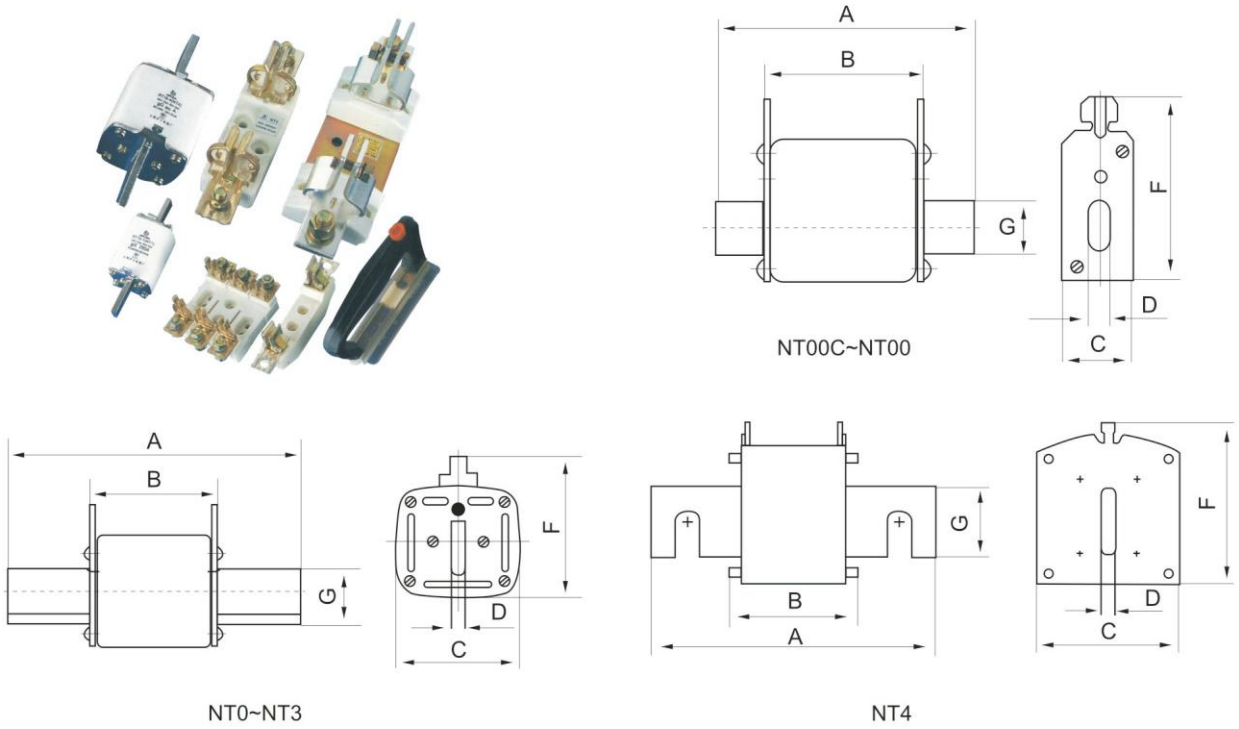


| TYPE       | IEC     | Min Mechanical Failing Load (kN) | H (mm) | D (mm) | Nominal Creepage Distance (mm) | Dry Lightning Impulse Withstand Voltage (kV) | Power Frequency |            | Standard Coupling | Puncture Withstand Voltage (kV) | Weight (Kg) |
|------------|---------|----------------------------------|--------|--------|--------------------------------|--|-----------------|------------|-------------------|---------------------------------|-------------|
|            |         |                                  |        |        |                                |  | Dry, 1 min      | Wet, 1 min |                   |                                 |             |
| LXY-40     | U40B    | 70                               | 110    | 175    | 190                            | 75   | 55              | 30         | 11                | 90                              | 2           |
| LXY2-70    | U70BL   | 70                               | 127    | 255    | 320                            | 100  | 70              | 40         | 16                | 130                             | 3.5         |
| LXY1-70    | U70BL   | 70                               | 146    | 255    | 320                            | 100  | 70              | 40         | 16                | 130                             | 3.9         |
| LXY2-100   | U100BS  | 100                              | 127    | 255    | 320                            | 100  | 70              | 40         | 16                | 130                             | 3.9         |
| LXY-100    | U100BL  | 100                              | 146    | 255    | 320                            | 100  | 70              | 40         | 16                | 130                             | 4           |
| LXY2-120   | U120BS  | 120                              | 127    | 255    | 320                            | 100  | 70              | 40         | 16                | 130                             | 3.9         |
| LXY-120    | U120BL  | 120                              | 146    | 255    | 320                            | 100  | 70              | 40         | 16                | 130                             | 4           |
| LXY4-160   | U160BS  | 160                              | 146    | 280    | 380                            | 110  | 75              | 45         | 20                | 130                             | 6.1         |
| LXY3-160   | U 1 60S | 160                              | 155    | 280    | 380                            | 110  | 75              | 45         | 20                | 130                             | 6.3         |
| LXY-160    | U160BL  | 160                              | 170    | 280    | 380                            | 110  | 75              | 45         | 20                | 130                             | 6.5         |
| LXY3-210   | U210B   | 210                              | 170    | 280    | 400                            | 110  | 75              | 45         | 20                | 130                             | 6.9         |
| LXY-240    | U240B   | 240                              | 170    | 280    | 400                            | 110  | 75              | 45         | 24                | 130                             | 7.6         |
| LXY3-300   | U300B   | 300                              | 195    | 320    | 485                            | 130  | 85              | 50         | 24                | 130                             | 10.6        |
| LXHY5-70   | -       | 70                               | 146    | 255    | 400                            | 120  | 85              | 45         | 16                | 130                             | 4.7         |
| LXHY5-70   | U70BLP  | 70                               | 146    | 280    | 450                            | 125  | 85              | 50         | 16                | 130                             | 5.9         |
| LXHY4-100  | U100BLP | 100                              | 146    | 280    | 450                            | 125  | 85              | 50         | 16                | 130                             | 5.9         |
| LXHY4-120  | U120BLP | 120                              | 146    | 280    | 450                            | 125  | 85              | 50         | 16                | 130                             | 5.9         |
| LXHY3 -160 | -       | 160                              | 155    | 280    | 450                            | 125  | 85              | 50         | 20                | 130                             | 7           |
| LXHY4-160  | -       | 160                              | 170    | 280    | 450                            | 125  | 85              | 50         | 20                | 130                             | 7.3         |
| LXHY7-160  | U160BSP | 160                              | 146    | 320    | 540                            | 140  | 90              | 55         | 20                | 130                             | 8.5         |
| LXHY6-160  | U160BP  | 160                              | 155    | 320    | 540                            | 140  | 90              | 55         | 20                | 130                             | 8.7         |
| LXHY5-160  | U160BLP | 160                              | 170    | 320    | 540                            | 140  | 90              | 55         | 20                | 130                             | 9           |
| LXHY3-210  | U210BP  | 210                              | 170    | 320    | 540                            | 140  | 90              | 55         | 20                | 130                             | 9.2         |
| LXHY3-240  | U240BP  | 240                              | 170    | 320    | 540                            | 140  | 90              | 55         | 24                | 130                             | 9.9         |

## Blade Knife Fuse Link NT Series

NT series blade knife fuse links are used for overload and short circuit protection of distributing line.

- Rated Voltage: 500/590V.
- Breaking Capability: 500V-120KA,660v-50KA.
- Function Grade: gG/gL/aM/gM.
- Rated current up to 1250A (AC 50Hz).
- Standard: GB13539, IEC60269 and VDE0636.

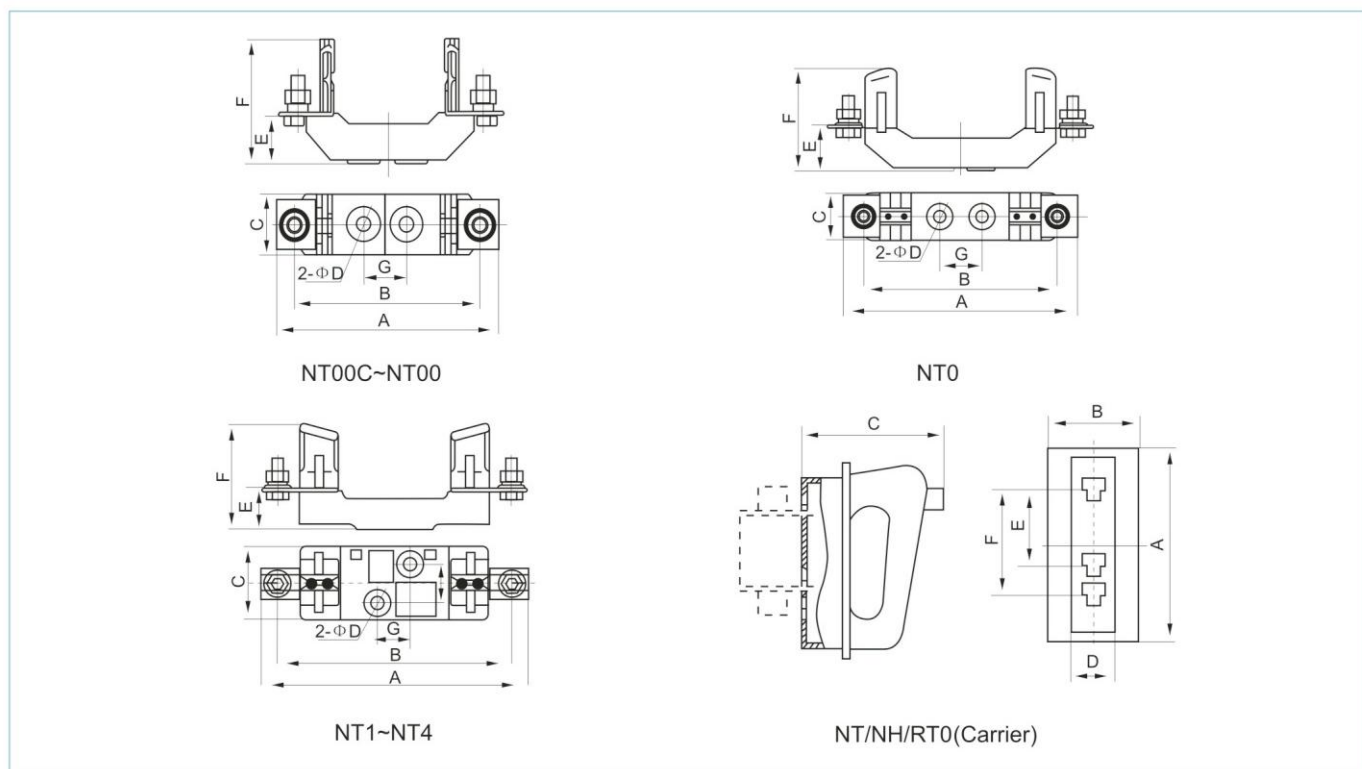


| Item No. | Competitor part number       | Class rating(A) | Dimension(mm) |    |    |   |      |    |
|----------|------------------------------|-----------------|---------------|----|----|---|------|----|
|          |                              |                 | A             | B  | C  | D | F    | G  |
| NT00C    | RO30A、3NA3、RT16-000、RT20-000 | 4-100           | 78            | 49 | 21 | 6 | 52.5 | 15 |
| NT00     | RO31、3NA3、RT16-00、RT20-000   | 4-160           | 78            | 49 | 30 | 6 | 55.5 | 15 |
| NT0      | RO31B、3NA3、RT16-0、RT20-0     | 4-160           | 125           | 65 | 30 | 6 | 55.5 | 15 |
| NT1      | RO32、3NA3、RT16-1、RT20-1      | 80-250          | 135           | 68 | 48 | 6 | 60   | 20 |
| NT2      | RO33、3NA3、RT16-2、RT20-2      | 125-400         | 150           | 68 | 58 | 6 | 70   | 25 |
| NT3      | RO34、3NA3、RT16-3、RT20-3      | 315-630         | 150           | 68 | 67 | 6 | 82   | 32 |
| NT4      | RO39、3NA3、RT16-4、RT20-4      | 800-1250        | 200           | 90 | 97 | 6 | 113  | 50 |

## Fuse Carrier NT/NH/RTO Series

NT/NH/RTO series fuse carriers are used as a mounting and replacing tool for NT/NH/RTO body.

- Rated Voltage: 500/590V.
- Breaking Capability: 500V-120KA,660v-50KA.
- Function Grade: gG/gL.
- Rated current up to 1250A (AC 50Hz).
- Standard: GB13539, IEC60269 and VDE0636.



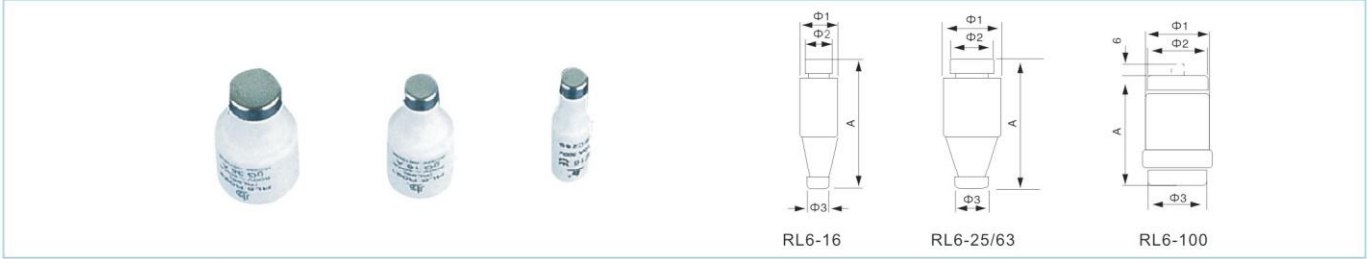
| Item No. | Competitor part number | Class rating(A) | Dimension(mm) |     |    |     |      |     |    |    |
|----------|------------------------|-----------------|---------------|-----|----|-----|------|-----|----|----|
|          |                        |                 | A             | B   | C  | ØD  | E    | F   | G  | H  |
| NT00     | sist101                | 160             | 120           | 100 | 30 | 7   | 23   | 60  | 25 | -  |
| NT0      | sist160                | 160             | 170           | 150 | 30 | 7   | 35   | 73  | 25 | -  |
| NT1      | sist201                | 250             | 200           | 175 | 58 | 9.5 | 38   | 82  | 25 | 30 |
| NT2      | sist401                | 400             | 225           | 200 | 64 | 9.5 | 40   | 100 | 25 | 30 |
| NT3      | sist601                | 630             | 240           | 216 | 64 | 9.5 | 40.5 | 105 | 25 | 30 |
| NT4      | sist1001               | 1250            | 304           | 260 | 96 | 13  | 44   | 145 | 30 | 45 |

NT/NH/RTO fuse carrier technical data.

| Item No.  | Competitor part number | Class rating(A) | Dimension(mm) |    |    |    |    |    |
|-----------|------------------------|-----------------|---------------|----|----|----|----|----|
|           |                        |                 | A             | B  | C  | D  | F  | G  |
| NT/NH/RTO |                        | 4-1250          | 145           | 65 | 93 | 26 | 46 | 65 |

## Fuse RL6 Series

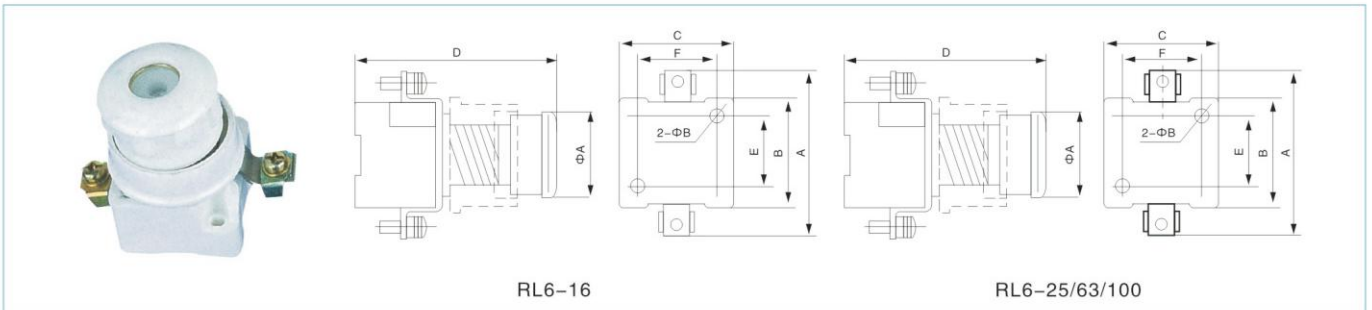
- Rated Voltage: 500V.
- Breaking Capability: 50KA. Function Grade: Gg/Gl/Gtr/Am/Gm.



| Item No. | Competitor part number | Class rating(A) | Dimension(mm) |      |      |    |
|----------|------------------------|-----------------|---------------|------|------|----|
|          |                        |                 | A             | Ø1   | Ø2   | Ø3 |
| RL6-16   | R024、E16、DI、5SA        | 2-6.            | 50            | 12.5 | 11.3 | 6  |
| RL6-16   | R024、E16、DI、5SA        | 10              | 50            | 12.5 | 11.3 | 8  |
| RL6-16   | R024、E16、DI、5SA        | 16              | 50            | 12.5 | 11.3 | 10 |
| RL6-16   | R024、E16、DI、5SA        | 20              | 50            | 12.5 | 11.3 | 12 |
| RL6-16   | R024、E16、DI、5SA        | 25              | 50            | 12.5 | 11.3 | 12 |
| RL6-25   | R021、E24、DII、5SB       | 2-6.            | 50            | 21   | 13   | 6  |
| RL6-25   | R021、E24、DII、5SB       | 10              | 50            | 21   | 13   | 8  |
| RL6-25   | R021、E24、DII、5SB       | 16              | 50            | 21   | 13   | 10 |
| RL6-25   | R021、E24、DII、5SB       | 20              | 50            | 21   | 13   | 12 |
| RL6-25   | R021、E24、DII、5SB       | 25              | 50            | 27   | 13   | 14 |
| RL6-63   | R022、E33、DIII、5SB      | 35              | 50            | 27   | 20   | 16 |
| RL6-63   | R022、E33、DIII、5SB      | 50              | 50            | 27   | 20   | 18 |
| RL6-63   | R022、E33、DIII、5SB      | 63              | 50            | 27   | 20   | 20 |
| RL6-100  | R0201、DIV              | 30-100          | 56            | 34   | 32   | 32 |

## Fuse Carrier RL Series

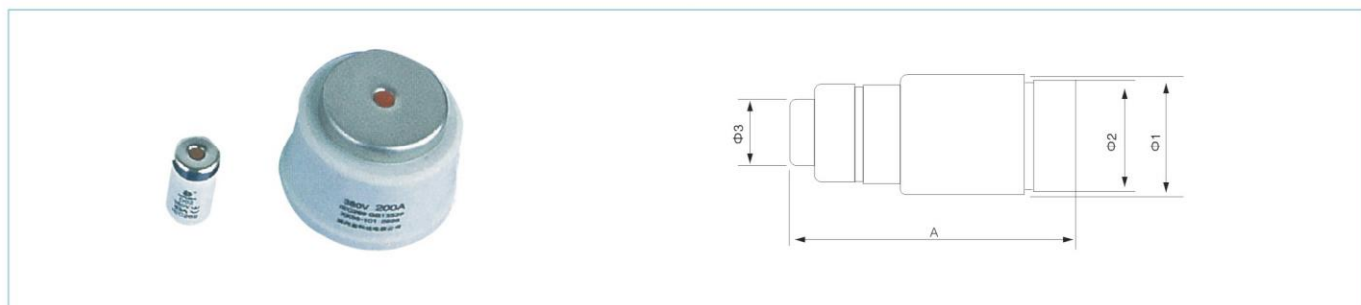
- Rated Voltage: 500V.
- Breaking Capability: 50KA.
- Function Grade: gG/gL.



| Item No. | Competitor part number | Class rating(A) | Dimension(mm) |    |    |     |    |    |    |     |
|----------|------------------------|-----------------|---------------|----|----|-----|----|----|----|-----|
|          |                        |                 | A             | B  | C  | D   | E  | F  | ØA | ØB  |
| RL3-16   | R024、E16、DI、5SA        | 25              | 55            | 32 | 30 | 80  | 26 | 22 | 26 | 5   |
| RL6-25   | R021、E27、DII、5SB       | 25              | 65            | 39 | 35 | 80  | 30 | 27 | 38 | 5   |
| RL6-63   | R022、E33、DIII、5SB      | 63              | 80            | 48 | 44 | 82  | 37 | 34 | 48 | 5   |
| RL3-100  | R0201、DIV              | 100             | 120           | 76 | 66 | 104 | 55 | 45 | 70 | 8.5 |

## Fuse RL8 Series

- Rated Voltage: 380V.
- Breaking Capability: 50KA.
- Function Grade: gG/gL/gtr/aM/gM.

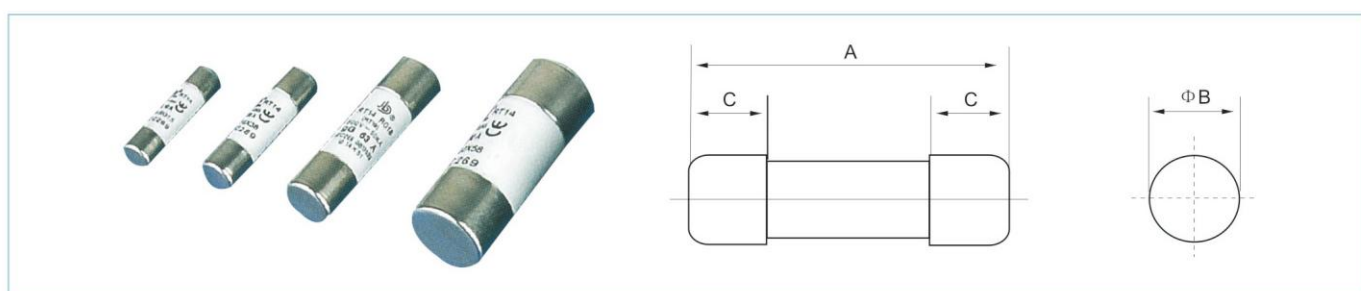


| Item No. | Competitor part number | Class rating(A) | Dimension(mm) |      |      |     |
|----------|------------------------|-----------------|---------------|------|------|-----|
|          |                        |                 | A             | Ø1   | Ø2   | Ø3  |
| RL8-16   | R026-16、E14、D01        | 2-16.           | 36            | 10.5 | 10.3 | 5.9 |
| RL8-63   | R026-63、E18、D02        | 20-63.          | 36            | 15   | 14.3 | 9.8 |
| RL8-100  | R026-100、D03           | 80-100.         | 43            | 22   | 21   | 16  |

## Cylindrical Fuse Link RT14/RT19 Series

RT14/RT19 series cylindrical fuse series are used for overload and short circuit protection of distributing line.

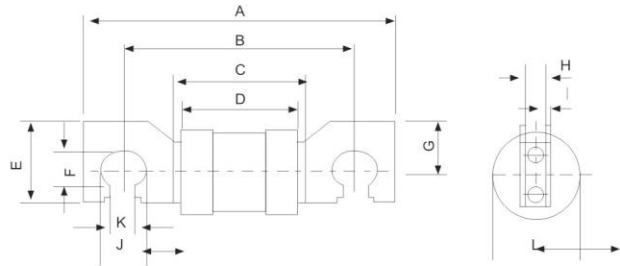
- Rated Voltage: 380/500V.
- Breaking Capability: 80KA.
- Function Grade: gG/gL/gtr/aM/gM.
- Rated current up to 125A (AC 50Hz).
- Standard: GB13539 and VDE0636.



| Item No. | Competitor part number | Class rating(A) | Dimension(mm) |      |     |
|----------|------------------------|-----------------|---------------|------|-----|
|          |                        |                 | A             | ØB   | C   |
| RT14-20  |                        | 2-20.           | 38            | 10.3 | 10  |
| RT14-32  |                        | 2-32            | 51            | 14.3 | 12  |
| RT14-63  |                        | 10-63           | 58            | 22.2 | 14  |
| RT19-16  | aM1                    | 2-16.           | 31.5          | 8.5  | 6.3 |
| RT19-25  | aM2                    | 2-25.           | 38            | 10.3 | 10  |
| RT19-40  | aM3                    | 10-40           | 51            | 14.3 | 12  |
| RT19-125 | aM4                    | 25-125          | 58            | 22.2 | 14  |

## J Type Fuse RGJ Series

- Rated Voltage: 415V.
- Breaking Capability: 80KA.
- Function Grade: Gg/Gl/Am/Gm.

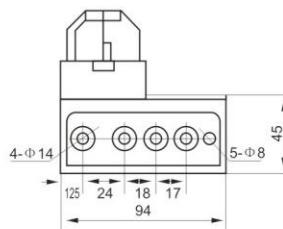
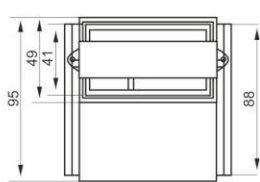
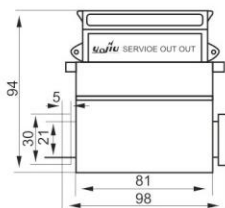


| Item No. | Competitor part number | Rated voltage | Class rating (A) | Dimension(mm) |    |      |      |    |      |    |     |     |      |     |      |
|----------|------------------------|---------------|------------------|---------------|----|------|------|----|------|----|-----|-----|------|-----|------|
|          |                        |               |                  | A             | B  | C    | D    | E  | F    | G  | H   | I   | J    | K   | L    |
| RGJ30G82 | MJ30-8                 | 415           | 32-315           | 110           | 82 | 45.2 | 40.5 | 30 | 14.8 | 18 | 6.5 | 2.4 | 17.5 | 9.8 | 30.8 |
| RGJ38G82 | MJ30-7                 | 415           | 355-400          | 110           | 82 | 45.2 | 40.5 | 30 | 14.4 | 18 | 6.5 | 2.4 | 17.5 | 9.8 | 30.8 |

## Service Cut Out Fuse JG Series

JG series service cut out fuses are used for overload and short circuit protection of distributing line.

- Rated Voltage: 415V.
- Breaking Capability: 80KA.
- Function Grade: Gg/Gl.
- Rated current up to 125A (AC 50Hz).
- Standard: GB13539 and IEC60269 and BS88.

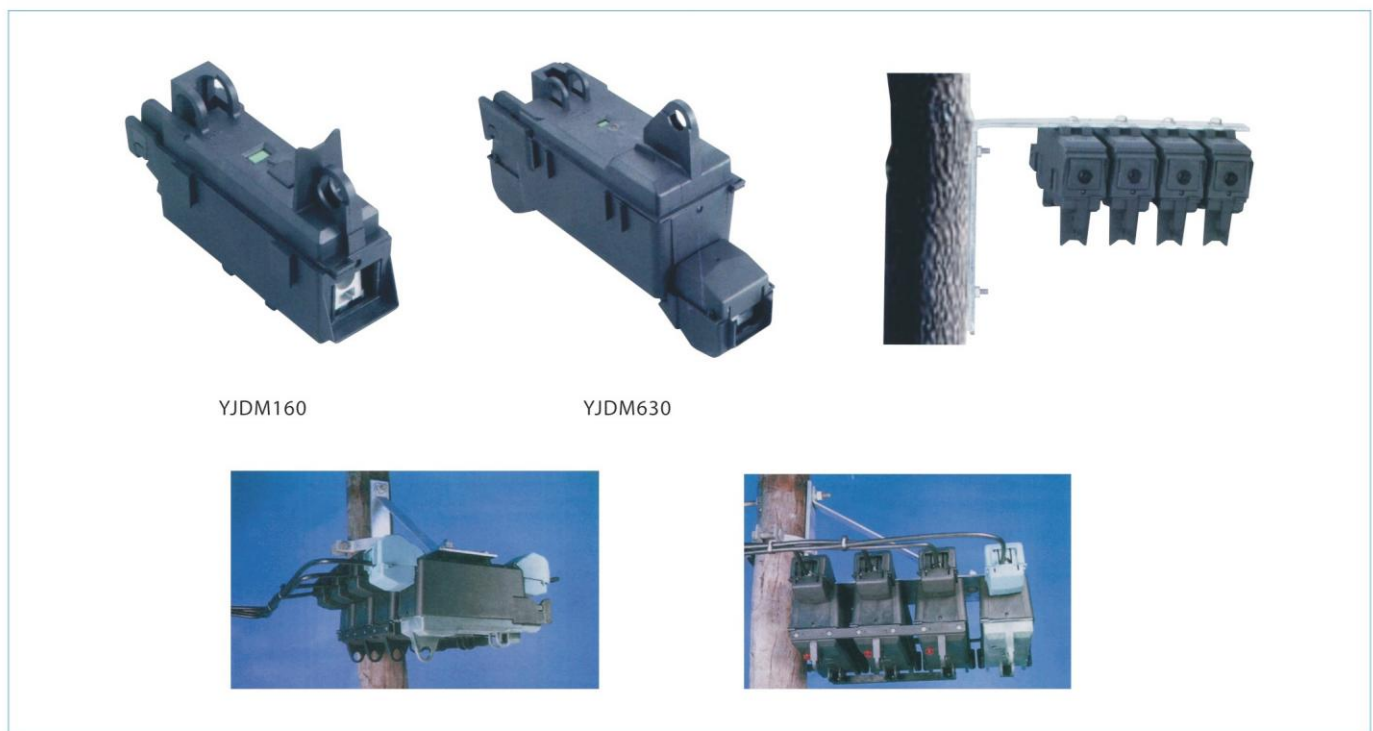


| Item No. | Competitor part number | Rated voltage(V) | Class rating (A) | Dimension(mm)    |
|----------|------------------------|------------------|------------------|------------------|
| JG14-63  | RT94(Ø22×57)           | 415              | 30-63            | Attached drawing |
| JG14-125 | RT94(Ø30×57)           | 415              | 80-125           | Attached drawing |

## Phase Switch YJDM630-3 For NH Fuses Up To 630A, With Three Phase Operation

YJDM630-3 phase switch is suitable for switching and protecting LV overhead lines.

- It provides a protection when doing a connection to low voltage underground systems.
- The design of this equipment allows the opening and closing of the three phases simultaneously and independently from the neutral, which is clearly identified to prevent its disconnection in rigidly landed systems.
- If required, it can be easily transformed in a single phase operation switch as the standard model YJDM630. It can be connected with terminals lugs or directly with its connectors.
- Each phase and the neutral have an indicator which show if the fuse or the blade are installed. The closure of the cap allows the switch to be closed with or without the fuse preventing the risk of leaving live parts exposed.
- It can also be provided with a led to show the fusion of the fuses.



YJDM160

YJDM630

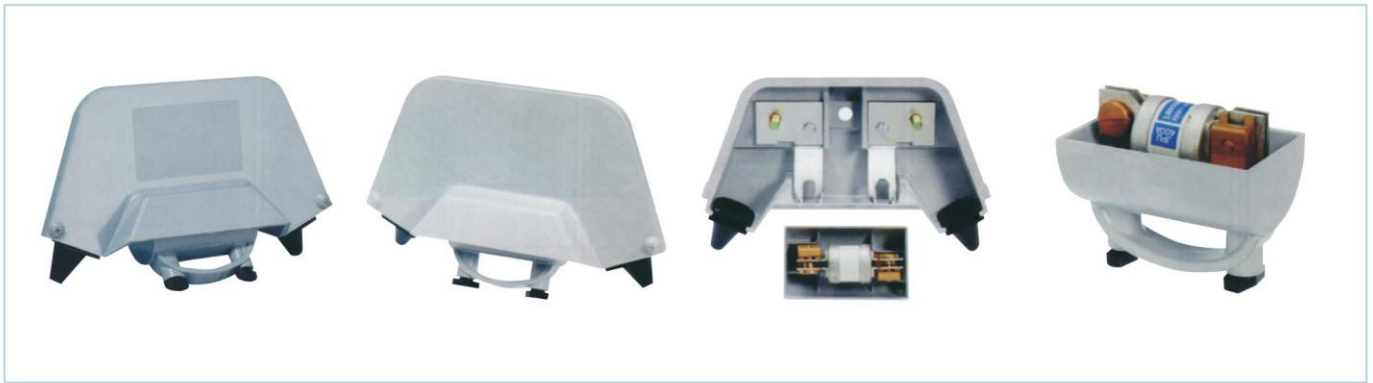
|  |         |
|--|---------|
| Voltage  | 500V    |
| Insulation level                                 | 1000V   |
| Frequency  | 50/60Hz |
| Operational current with fuses                   | 630A    |
| Operational current with blades                  | 800A    |
| Installation category                            | AC22    |
| Short lasting current(1s)                        | 12kA    |
| Dynamic current(crest)                           | 50kA    |
| Interruption capacity                            | 100kA   |
| Operations behavior without load (oper)          | 800     |
| Operations behavior(operation)(400A Cos fi 0,65) | 200     |
| Weight   | 1.8kg   |
| Protection range                                 | IP23    |



## 400A Overhead Service Fuse Cutout Carrier

400A overhead service fuse cutout carrier is designed with ease of use and simplicity in mind, this pole mountable fuse cutout is the ideal method of providing rural dwellings with a safe, protected and reliable low voltage power supply.

- The body is made of glass reinforced polyester, this fuse cutout is unobtrusive in appearance and vandal resistant, when compared to many of the more traditional materials such as porcelain.
- The fuse carrier accepts "J" type fuses to BS88 rated up to 400A. The terminals will accept solid or stranded aluminium and solid copper conductors in the range 70 to 300mm<sup>2</sup>. An adaptor is available for 25/35mm<sup>2</sup> copper or aluminium conductors. With the PVC cable sealing grommets in place the cut-out is IP43 rated and has been designed to fully comply with the performance requirements specified in BS7656:1993 for LV pole mounting fuses.
- It has fuse contacts and cable terminal plates which are made of tin-plated copper. These plates incorporate M12 captive studs with nuts and washers for the reception of cable sockets (lugs) up to 300mm<sup>2</sup> (compression type only at 300mm<sup>2</sup>) with copper or aluminium conductors.
- For ease of mounting to either a wall or a wooden pole, the M12 coach screw is supplied.
- For cross-arm type mounting, the M12 nut, bolt and washer are supplied.



| Model    | Fixing Arrangement   |
|----------|--|
| 54611-18 | 400A fused cut-out for pole or wall mounting c/w M12 coach screw       |
| 54611-06 | 400A fused cut-out for cross-arm mounting c/w M12 bolt, nut and washer |
| 58424-03 | Spare fuse carrier   |

Note:

- Stepped washer is recommended if the hole on the palm of lug is 16mm or greater.

Fuse links

- This fuse cutout is designed to accommodate standard wedge type fuse link to BS88 part 5:1988.
- Tested and approved for category of duty 415 AC 80.
- Fixing center requirement is 82mm.
- Standard fuse link ratings range from 20 to 400A.