

CATALOG NO. LPSC-46SK-HP-M20

| REVISIONS | | | | | |
|-----------|----------|--|-----------|-----------|------------|
| REV | LOCATION | NOTICE | DSN BY | APP BY | DATE |
| I/R | | INITIAL RELEASE | J.H. PARK | C.H. PARK | 06/17/2016 |
| A | | 1. MOVED BOLT POSITION 2. CHANGED FIXED PIN SIZE (Ø5 to -) 3. ADDED MATERIAL DETAILS | B.J. KIM | D.H. YOO | 07/25/2024 |

| DIMENSIONS | |
|---------------------------|----------|
| LEAKAGE DISTANCE | 1,703 mm |
| DRY ARCING DISTANCE | 433 mm |
| SHEDS Q'TY | 11 PCS |
| MECHANICAL VALUES | |
| SPECIFIED CANTILEVER LOAD | 12.5 kN |
| ELECTRICAL VALUES | |
| Low-Freq. WITHSTAND-WET | 152 kV |
| IMPULSE WITHSTAND-POS | 290 kV |
| IMPULSE WITHSTAND-NEG | 380 kV |
| PACKING INFORMATION | |
| NET WEIGHT EACH | 7.59 kg |
| NO. IN STANDARD PACKAGE | 1 PCS |

Material : Special Clamp
 1. Chemical Analysis (KS D 6008 : 2002) (Unit:wt%)

| Element | Cu | Si | Mg | Zn | Fe | Mn |
|---------|--------|---------|-----------|--------|--------|--------|
| Spec | 0.20 ↓ | 6.5~7.5 | 0.25~0.45 | 0.10 ↓ | 0.20 ↓ | 0.10 ↓ |
| AC4CH | Ni | Ti | Pb | Sn | Cr | Al |
| | 0.05 ↓ | 0.20 ↓ | 0.05 ↓ | 0.05 ↓ | 0.05 ↓ | Rest |

2. Mechanical Properties (KS D 6008 : 2002)

| AC4CH-T6 | Tensile Strength (kgf/cm ²) | Elongation (%) | Brinell Hardness [HB(10/500)] |
|----------|---|----------------|-------------------------------|
| | 240 ↑ | 5 ↑ | about 85 |

3. Heat Treatment (KS D 6008 : 2002)

| AC4CH-T6 | Method | Solution Treatment | | Age Hardening Treatment | |
|----------|--------------------------|--------------------|----------|-------------------------|----------|
| | | Temperature (°C) | Time (h) | Temperature (°C) | Time (h) |
| | after Solution Treatment | about 535 | about 8 | about 155 | about 6 |

Material : Stud Base

1. Chemical Analysis (KS D 3752 : 2019) (Unit:wt%)

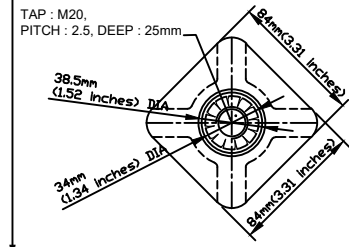
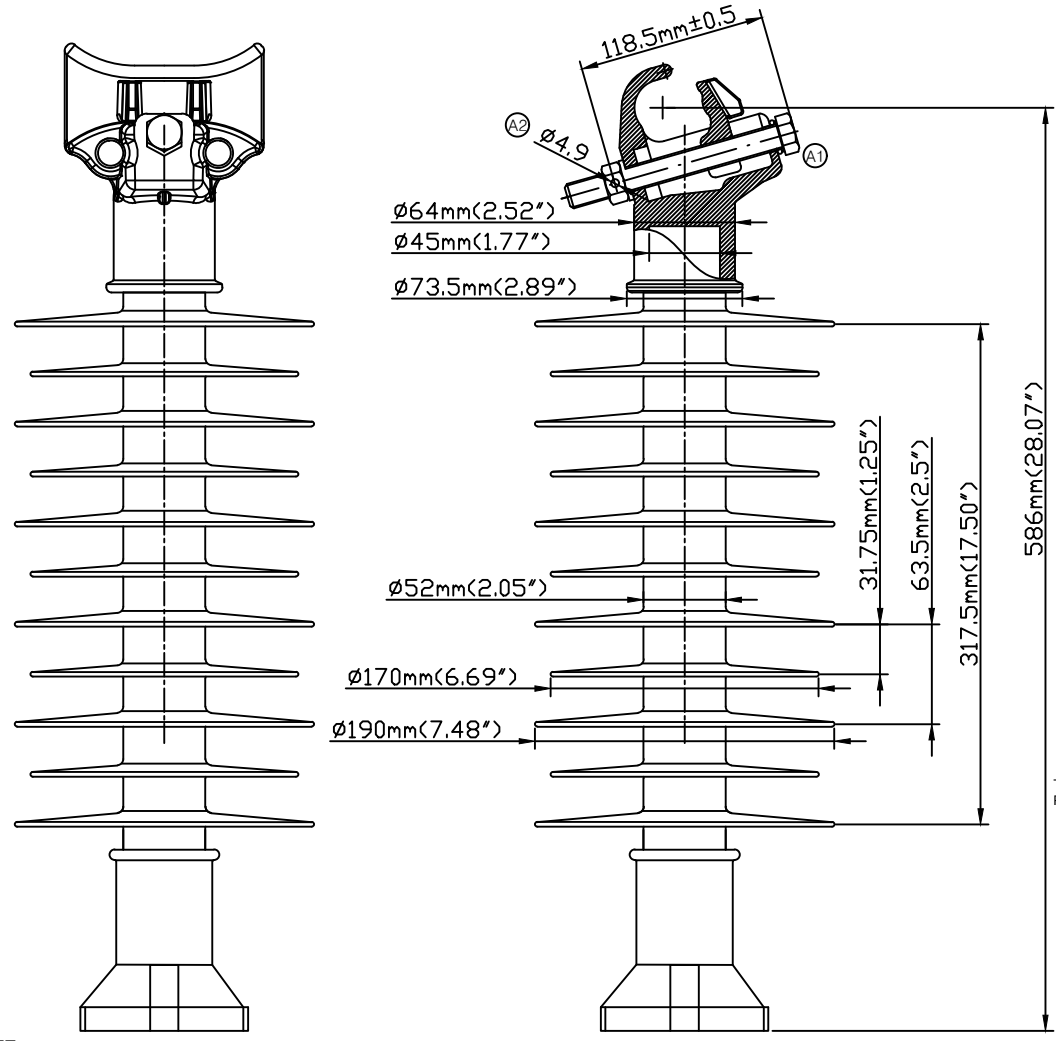
| Element | C | Si | Mn | P | S |
|---------|-----------|-----------|-----------|---------|---------|
| Spec | 0.18~0.23 | 0.15~0.35 | 0.30~0.60 | 0.030 ↓ | 0.035 ↓ |
| S20C | | | | | |

2. Mechanical Properties (KS D 3752 : 2019)


| S20C | Yield Point (kgf/cm ²) | Tensile Strength (kgf/cm ²) | Elongation (%) | Tightening (%) | Hardness (HB) |
|------|------------------------------------|---|----------------|----------------|---------------|
| | 25 ↑ | 41 ↑ | 28 ↑ | - | 116 ~ 174 |

3. Heat Treatment (KS D 3752 : 2019)

| S20C | Method | Temperature (°C) |
|------|--------|-------------------------------------|
| | | Normalizing 870 ~ 920 (Air Cooling) |



- NOTE:**
- TOP END FITTING IS MADE FROM ALUMINUM ALLOY & ANODIZED.
 - BASE END FITTING IS MADE FROM STEEL FORGED & GALVANIZED.
 - FIBERGLASS ROD IS MADE FROM EPOXY RESIN (ECR).
 - CLAMP AND STUD BASE DIMENSIONS ARE IN ACCORDANCE WITH ANSI C29.18.
 - THE DIA. OF FRP ROD IS 45mm(1.77 inches) SOLID.
 - BASE AND INSULATOR ASSEMBLED WITH M20 BOLT AND WASHER.
 - THE THICKNESS OF HOT DIP GALVANIZING SHALL BE MINIMUM 79um ACCORDING TO ASTM A 153.
 - THE TOLERANCE ON ALL DIMENSIONS SHALL BE AS FOLLOWS:
 ±(0.04d+1.5)mm when d<300mm
 ±(0.025d+6)mm when d>300mm with a maximum of 50mm

| REPLACEABLE MATERIAL | NO | PART NAME | EA | MATERIAL | DWG NO |
|----------------------|------------------------|----------------------|-----------------------|---|----------|
| PART LISTS | | | | | |
| ORIGINAL DWG | COMMON TOLERANCE | DATE | 07/25/2024 |  TITLE Polymer Line Post Insulator for Distribution (46kV HP Special Clamp) | |
| | DECIMAL ANGLE FRACTION | APP DIVISION | R&D Team | | |
| | MATERIAL | CHK BY | KC.PARK APP BY DH.YOO | | |
| | HEAT TREATMENT | DSN BY | CHK BY | | |
| RELEVANT DWG | APPLICABLE ITEM | HEAT TREATMENT | CHK BY | DWG DIVISION | R&D Team |
| PART NO | | CORROSION PROTECTION | SCALE | UNIT | WEIGHT |
| | | | 1:1 | mm | |
| | | | SIZE | DWG NO | |
| | | | A3 | LPSC-46SK-HP-M20 | |
| | | | SHEET | 1 | OF 1 |