

UNSHIELDED SILICONE HIGH VOLTAGE / HIGH TEMPERATURE APPLIANCE WIRE 10kV_{DC} - 30kV_{DC} - ~~UL~~ AWM STYLE 3239 - INTERNAL USE

Limited availability - see HSW or HSX series for suitable alternates

FEATURES

- 22 AWG - 10 AWG Conductors
- Conductor Construction: Tinned Copper
- Operating Temperature -50°C - +150°C
- High Flexibility
- Ozone and Corona Resistant
- Meets VW-1 Flame Test
- Made in Germany
- RoHS Compliant



TYPICAL APPLICATIONS

- Internal High Voltage Wiring
- Laser Power Supplies
- CRT / Video Displays

SPECIFICATIONS

Operating Temperature: -50°C - +150°C
Min. Bend Radius (fixed): 7.5 * Outer Diameter

TYPE OVERVIEW

| CONDUCTOR | | | | RATED VOLTAGE [kV _{DC}] | | | | | |
|---|-----------------|-------------------------|----------------|-----------------------------------|----------------------|---------------------|----------------------|---------------------|----------------------|
| | | | | 10 | | 20 | | 30 | |
| SIZE [AWG] | STRANDS [n/AWG] | AREA [mm ²] | WEIGHT [kg/km] | OUTER DIAMETER [mm] | TOTAL WEIGHT [kg/km] | OUTER DIAMETER [mm] | TOTAL WEIGHT [kg/km] | OUTER DIAMETER [mm] | TOTAL WEIGHT [kg/km] |
| 22 | 7/30 | 0.36 | 3.4 | 2.78-3.19 | 11.3 | 3.5-3.8 | 15.8 | 4.04-4.56 | 20.5 |
| 20 | 19/32 | 0.62 | 5.7 | 3.01-3.43 | 14.8 | 3.9-4.3 | 20.9 | 4.27-4.8 | 24.5 |
| 18 | 19/30 | 0.96 | 9.3 | 3.27-3.71 | 19.1 | 3.93-4.34 | 24.0 | 4.53-5.07 | 29.5 |
| 16 | 19/29 | 1.35 | 13.0 | - | - | - | - | 4.76-5.31 | 34.7 |
| | 30/30 | 1.52 | 14.4 | 3.57-4.02 | 25.7 | - | - | - | - |
| 14 | 41/30 | 2.08 | 19.9 | 4.01-4.27 | 34.0 | - | - | 5.27-5.85 | 44.9 |
| 12 | 61/29 | 3.92 | 35.0 | 4.39-4.88 | 45.8 | 5.05-5.51 | 53.0 | 5.65-6.25 | 59.0 |
| 10 | 37/25 | 5.88 | 57.6 | - | - | - | - | 6.19-6.81 | 88.0 |
| | 84/29 | 5.94 | 57.0 | 5.6-6.09 | 77.5 | 5.6-6.41 | 82.0 | - | - |
| | 105/30 | 5.35 | 51.0 | 5.6-6.0 | 73.0 | - | - | - | - |
| Test Voltage (Spark Test) [kV _{AC}] | | | | 10 | | 15 | | 20 | |

HSU type wires above 30kV_{DC} are no longer available. Please refer to the HSW or HSX series.

AWG12-65 stranding will gradually be changed to AWG12-61 stranding.

Different conductor constructions and plating for use up to 200°C available on request.

ORDERING INFORMATION (Ordering example for part number: **HSU-1012-61-2**)

| | | | | | | | | |
|-----------------------|---|------------------------------------|---|----------------------|---|----------------|---|------------|
| HSU | - | 10 | - | 12 | - | 61 | - | 2 |
| Base Part Designation | | Voltage Rating [kV _{DC}] | | Conductor Size [AWG] | | No. of Strands | | Color Code |

■ COLOR CODE

| | | | | | |
|----------------|----------|--------------|----------------|------------|---------|
| 0 black | 1 brown | 2 red | 3 orange | 4 yellow | 5 green |
| 6 blue | 7 violet | 8 grey | 9 white | 10 natural | |

Preferred colors shown in **bold**. Minimum order quantities may apply.

These cables have been spark tested according to UL758 during production. It is recommended to derate the operating voltage for continuous operation. The user has to ensure by adequate tests that the cable is suitable for his application.

■ HSU SERIES CROSS SECTION VIEWS



HSU-1010-84-X



HSU-1012-61-X



HSU-1014-41-X



HSU-1016-30-X



HSU-1018-19-X



HSU-1020-19-X



HSU-1022-7-X



HSU-2010-84-X



HSU-2012-61-X



HSU-2018-19-X



HSU-2022-7-X



HSU-3010-37-X



HSU-3012-61-X



HSU-3014-41-X



HSU-3016-19-X



HSU-3018-19-X



HSU-3020-19-X



HSU-3022-7-X