

KHP®15 (CuSn0,15)

Standard Designation

EN CW117C / UNS C14415

Chemical Composition

| Cu | Sn [%] | | |
|---------|------------|--|--|
| Balance | 0,1 - 0,15 | | |

Description / Applications

KHP®15 is a low alloyed copper. KHP®15 has a high electrical conductivity and is harder than pure copper because of the Sn content. Applications: components for the electrical industry and the photovoltaics, bus bars, tabs, leadframes

Physical Properties¹⁾

| | |
|-------------------------|-------------------------------|
| Density | Thermal expansion coefficient |
| Electrical conductivity | Modulus of elasticity |
| Thermal conductivity | |

¹⁾ Guideline values for soft temper, measured at room temperature³⁾ 1 GPa = 1 kN/mm²²⁾ IACS = International Annealed Copper Standard

Processing information

| | |
|---------------|---------------------------|
| Weldability | Stress corrosion cracking |
| Solderability | |

Mechanical properties

| Temper | Tensile Strength Rm [MPa] | Yield Strength Rp0,2 [MPa] | Elongation A50 [%] | Hardness HV | Bendability ¹⁾ | | | |
|-----------|---------------------------|----------------------------|--------------------|-------------|---------------------------|------------------|------------------------|------------------|
| | | | | | 90° r/t ²⁾ | | 180° r/t ²⁾ | |
| | | | | | GW ³⁾ | BW ⁴⁾ | GW ³⁾ | BW ⁴⁾ |
| R250/H60 | 250 - 320 | max. 200 | min. 9 | 60 - 90 | 0 | 0 | 0 | 0 |
| R300/H85 | 300 - 370 | min. 250 | min. 4 | 85 - 110 | 0 | 0 | 0 | 0 |
| R360/H105 | 360 - 430 | min. 300 | min. 3 | 105 - 130 | 0 | 0 | 0,5 | 1 |
| R420/H120 | 420 - 490 | min. 350 | min. 2 | 120 - 140 | 1 | 1 | 1 | 2,5 |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

¹⁾ The r/t values are valid for a strip thickness up to 0.6 mm (without crack). The data refer to rolled-to-temper material and a width of the bending area of 5 mm.

V-shape bend test according to ISO 7438

²⁾ r = inner radius, t = thickness³⁾ GW = good way⁴⁾ BW = bad way

The details in this datasheet are exclusively meant for general information only. They correspond to the state of knowledge at the time of issue and cannot replace the examination by our customers. Liability cannot be derived from the information.

Rev.: 04/2019

www.kemper-olpe.de