

Specification Nordic Standard

Phosphorous deoxidised copper (DHP-Copper)



Nordic Standard

CW024A

Typical use

Architecture, eg. roofing, facades,
window and door frames, decoration.

Dimension:

Width range	max. 1100 mm
Thickness range	0,4...1,5 mm
Coils max.	4000 kg
Sheet length	max. 6000 mm

Physical properties:

Density	8,94 kg/dm ³
Thermal expansion	$17 \cdot 10^{-6} \text{ 1/K}$ ($\Delta T \text{ 100}^\circ\text{C}$ = 1,7mm/m)
Specific heat	385 J/kg K
Thermal conductivity	335 %W/Cm

Chemical Composition %:

Copper (Cu)	99.90 (min.)
Phosphorus (P)	0,015-0,040.

Fabrication properties:

Formability	Excellent
Soldering	Excellent
Brazing	Excellent
TIG	Good
MIG	Good
EBW	Poor

Oxide layer must be removed before
the welding, soldering and brazing.

Mechanical properties:

The material fulfils the requirements of standard EN 1172.

Designation			Tensile strength R_m		0,2 % proof strength $R_{p0,2}$		Elongation A_{50mm}	Hardness HV	
Material symbol	Material number	Material condition	N/mm ² min.	N/mm ² max.	N/mm ² min.	N/mm ² max.	% min.	min.	max.
Cu-DHP CuZn0,5	CW024A CW119C	R220	220	260	-	140	33	-	-
		H040	-	-	-	-	-	40	65
		R240	240	300	140	-	8	-	-
		H065	-	-	-	-	-	65	95
		R290	290	-	250	-	-	-	-
		H090	-	-	-	-	-	90	-
CuSn0,15	CW117C	R250	250	320	200	-	9	-	-
		H060	-	-	-	-	-	60	90
		R300	300	370	250	-	4	-	-
		H085	-	-	-	-	-	85	110
CuAl5Zn5Sn1	CW309G	R400	400	-	170	-	45	-	-
		H080	-	-	-	-	-	80	-
CuSn4	CW450K	R290	290	390	-	190	40	-	-
		H070	-	-	-	-	-	70	100
CuZn15	CW502L	R310	310	370	200	290	10	-	-
		H090	-	-	-	-	-	90	115