

Specification Nordic Brown and Nordic Brown Light

Phosphorous deoxidised copper (DHP-Copper)



CW024A

Typical use

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

Nordic Brown & Nordic Brown Light

Dimension:

Width range	max. 1000 mm			
Thickness range	0,51,5 mm			
Coils	max. 4000 kg			
Sheet length	max. 6000 mm			

Physical properties:

Density	8,94 kg/dm ³			
Thermal expansion	17*10 ⁻⁶ 1/K (ΔT 100°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 standrad 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/mm² min.	N/mm² max.	N/mm² min.	N/mm² 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	-
CuSnO,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

