High Conductivity Copper Alloys / Delivery Program

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The Alloy number gives an indication to the thermal conductivity.

Alloy	Nominal Value % Chemical Composition Cu - balance	Specification	Availability		Typical mechanical and physical Properties											Properties	Application
			Forgings	Extruded	Hardness Brinell HB 30	Tensile Strength Rm N/mm²	Yield Strength Rp 0,2 N/mm²	Elongation at break A5 %	Density g/cm³	Liquidus temperature °C	Softening temperature °C	Modulus of Elasticity E KN/mm²	Coefficient of expansion 10^{-6}/K	Thermal conductivity at 20°C $\frac{W}{m \cdot K}$	Electrical Conductivity $\frac{m}{\Omega \cdot mm^2}$		
ALBROMET W 130	Be 2,0 Others. 0,5 max.	EN CW 101 C Typ A4/2 DIN 2.1247 CuBe2	●	●	350 - 390	1250	1000	3	8,4	950	~300	135	17	~130	18	Heat treated Copper-Beryllium alloy with extremely high hardness and yields, relatively good thermal and electrical conductivity	Electrodes for resistance welding, non-sparking and non-magnetic. Mold applications for Blow molds and injection molds, nozzles
ALBROMET W 164	Ni Si Cr Others not published	Similar 2.0857 Cu Ni Cr Si CW 112 C	●	●	260 - 285	860	720	5	8,8	1150	~450	144,8	15,7	~164	20	Heat treated Copper Alloy with unprecedented combinations of Thermal Conductivity, Hardness and Tensile strength. Beryllium free!	Highly effective for injection molding, blow molding, thermoforming and other plastic processing applications
ALBROMET W 200	Ni 2,5 Si 0,7 Cr 0,4 Others. 0,3 max	EN CW 112 C DIN 2.0857 Cu Ni Cr Si Similar 2.0855 / CW 111 C	●	●	190 - 220	> 600	500	> 10	8,7	1150	~480	140	16	~200	22	Heat treated Copper Alloy with high yields and thermal and electrical conductivity. Beryllium free!	Electrodes for resistance welding, plunger tips. Mold application for Blow molds and injection molds. Cores, Cavities, Core and ejector pins, Sprue bushings, hot runner systems
ALBROMET W 240	Co 1,0 Ni 1,0 Be 0,5	En CW 103 C Typ A3/1 Similar 2.1285 Cu Co 1 Ni 1 Be	●	●	230 - 260	650	500	> 8	8,8	1050	~480	135	17,2	~240	25	Heat treated Copper-Beryllium-Alloy with higher yields and thermal conductivity than W200	Same as W200

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ALBROMET W-130
Round

Size Ø mm	Weight kg/m
12,7	1,0
15,9	1,6
19,1	2,4
25,4	4,2
31,8	6,6
38,1	9,4
44,4	12,8
50,8	16,7
57,1	21,1
63,5	26,1
76,2	37,6

Bigger sizes on request !

ALBROMET W-200
Round

Size Ø mm	Weight kg/m
10	0,7
12	1,0
13	1,2
15	1,6
16	1,8
18	2,3
20	2,8
22	3,4
25	4,4
28	5,4
30	6,1
32	7,0
35	8,4
40	11,0
45	13,8
50	17,1
56	21,4
61	25,4
71	34,4
81	44,8
91	56,6
102	71,1
112	85,7
122	101,7

Bigger sizes on request !

ALBROMET W-240
Round

Size Ø mm	Weight kg/m
10	0,7
12	1,0
14	1,4
15	1,6
16	1,8
18	2,2
20	2,8
22	3,3
25	4,3
30	6,2
35	8,5
40	11,1
45	14,0
50	17,3
60	25,0
70	34
80	44,2
91	57,2
105	76,2
112	86,7

Bigger sizes on request !

ALBROMET W-240
Flat bars

Size Ø mm	Weight kg/m
10 x 50	4,4
15 x 15	2,0
15 x 60	7,9
20 x 20	3,5
20 x 40	7,0
20 x 50	8,8
20 x 60	10,6
20 x 70	12,3
20 x 80	14,1
20 x 100	17,6
25 x 25	5,5
25 x 40	8,8
25 x 50	11,0
30 x 30	7,9
30 x 50	13,2
30 x 70	18,5
40 x 40	14,1
40 x 50	17,6
50 x 50	22,0
60 x 60	31,7
80 x 80	56,3

Cutted plates available on your demand, from forged plates.

ALBROMET W-164
Round

Size Ø mm	Weight kg/m
19,1	2,5
25,4	4,4
31,8	6,9
38,1	9,9
44,4	13,5
50,8	17,6
63,5	27,6
76,2	39,7
82,0	45,9

Also available:
[in thickness about ca. 200 mm]

Special cuttings from forged plates

W130, W200, W240, W164

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