

Technical characteristics

Designations		Nominal dimension of cross section				Tensile Strength	Yield Limit at 0.2%	Elongation	Hardness	
Material		Metallurgical State	profile ^a	rectangular sheet bar thickness mm		R _m N/mm ²	R _{p0.2} N/mm ²	A %	HB	HV
Symbol	Number			from	up to and including	min.	approx.	approx.	min.	min.
CuCr1 CuCr1Zr	CW105C CW106C	M	All	All		Rough Manufacture				
		R200 ^e	—	3	60	200	(60)	(30)	—	—
		H065 ^e	—	3	60	—	—	—	65	70
		R360 ^c	—	3	30	360	(250)	(15)	—	—
		H105 ^c	—	3	30	—		—	105	110
		R420 ^d	—	3	30	420	(350)	(8)	—	—
		H120 ^d	—	3	30	—		—	120	125

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Symbol	Number			from	up to and including	min.	approx.	approx.	min.	min.
CuNi1Si	CW109C	M	All	All		Rough Manufacture				
		R250 ^e	–	3	60	250	(100)	(35)	–	–
		H060 ^e	–	3	60	–	–	–	60	65
		R380 ^b	–	3	60	380	(250)	(8)	–	–
		H110 ^b	–	3	60	–	–	–	110	115
		R420 ^c	–	3	30	420	(260)	(15)	–	–
		H120 ^c	–	3	30	–	–	–	120	125
		R560 ^d	–	3	30	560	(520)	(10)	–	–
		H170 ^d	–	3	30	–	–	–	170	180

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Symbol	Number			from	up to and including	min.	approx.	approx.	min.	min.
CuNi2Si	CW111C	M	All	All		Rough Manufacture				
		R280 ^e	–	3	60	280	(100)	(30)	–	–
		H070 ^e	–	3	60	–	–	–	70	75
		R380 ^b	–	3	60	380	(260)	(6)	–	–
		H120 ^b	–	3	60	–	–	–	120	125
		R460 ^c	–	3	30	460	(300)	(12)	–	–
		H140 ^c	–	3	30	–	–	–	140	145
		R600 ^d	–	3	30	600	(480)	(8)	–	–
		H180 ^d	–	3	30	–	–	–	180	190

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Symbol	Number			from	up to and including	min.	approx.	approx.	min.	min.
CuZr	CW120C	M	All	All		Rough Manufacture				
		R200 ^e	–	3	60	200	(80)	(30)	–	–
		H050 ^e	–	3	60	–	–	–	50	50
		R300 ^d	–	3	30	300	(250)	(20)	–	–
		H110 ^d	–	3	30	–	–	–	110	115
		R350 ^d	–	3	10	350	(300)	(18)	–	–
		H130 ^d	–	3	10	–	–	–	130	135

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Symbol	Number			from	up to and including	min.	approx.	approx.	min.	min.
CuBe2	CW101C	M	All	All		Rough Manufacture				
		R410	–	3	60	410	(190)	(40)	–	–
		H085	–	3	60	–	–	–	85	90
		R580 ^b	–	3	60	580	(520)	(14)	–	–
		H160 ^b	–	3	60	–	–	–	160	170
		R1130 ^c	–	3	30	1130	(950)	(6)	–	–
		H330c	–	3	30	–	–	–	330	350
		R1200 ^d	–	3	30	1200	(1050)	(6)	–	–
		H340 ^d	–	3	30	–	–	–	340	360

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Symbol	Number			from	up to and including	min.	approx.	approx.	min.	min.
CuCo1Ni1Be CuCo2Be CuNi2Be	CW103C CW104C CW110C	M	All	All		Rough Manufacture				
		R240	–	3	60	240	(130)	(25)	–	–
		H055	–	3	60	–	–	–	55	60
		R440 ^b	–	3	60	440	(340)	(12)	–	–
		H100 ^b	–	3	60	–	–	–	100	105
		R680 ^c	–	3	30	680	(600)	(15)	–	–
		H220 ^c	–	3	30	–	–	–	220	230
		R750 ^d	–	3	30	750	(700)	(15)	–	–
		H240 ^d	–	3	30	–	–	–	240	250
^a For these profiles, mechanical characteristics will depend on the shape and dimensions of the profile and will be subject to agreement between client and supplier.										
^b Solution heat treatment cold rolling.										
^c Solution heat treatment cold rolling and hardening										
^d Solution heat treatment cold rolling and precipitation hardening in the factory.										
^e Solucion heat treated										
NOTE 1 – The values in brackets are not requisites for this norm, they are given only for informative purposes.										

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NOTE 2 – 1N/mm ² is equivalent to 1 MPa										