

Technical characteristics

MECHANICAL PROPERTIES WEAKLY COPPER ALLOYS

Designations		Nominal Diameter or distance between faces				Tensile Strength R_m	Yield Limit to 0.2% $R_{p0.2}$ N/mm ²	Elongation			Hardness			
								A_{100mm}	$A_{11.3}$	A	HB		HV	
Material		Metallurgical State	From	greater than	up to and including	N/mm ²	approx.	%	%	%	min.	max.	min.	max.
Symbolic	Numerical					min.		approx.	min.	min.				
CuCo1Ni1Be CuCo2Be CuNiP CuNi2Be	CW103C CW104C CW108C CW110C	M	2	–	80	Rough Manufacture								
		R250	2	–	80	250	(140)	20	22	25	–	–	–	–
		H065	2	–	80	–	–	–	–	–	65	95	70	100
		R500	2	–	25	500	(430)	5	6	8	–	–	–	–
		H135	2	–	25	–	–	–	–	–	135	175	140	180
		R450	–	25	40	450	(380)	–	–	10	–	–	–	–
		H125	–	25	40	–	–	–	–	–	125	175	130	180
		R400	–	40	80	400	(330)	–	–	10	–	–	–	–
		H110	–	40	80	–	–	–	–	–	110	160	115	165
		R650	2	–	80	650	(500)	8	10	12	–	–	–	–
		H190	2	–	80	–	–	–	–	–	190	–	200	–
		R800	2	–	25	800	(730)	(3)	(4)	5	–	–	–	–
		H220	2	–	25	–	–	–	–	–	220	–	230	–
		R750	–	25	40	750	(680)	–	–	5	–	–	–	–
		H210	–	25	40	–	–	–	–	–	210	–	220	–
		R700	–	40	80	700	(630)	–	–	5	–	–	–	–
		H200	–	40	80	–	–	–	–	–	200	–	210	–

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Symbolic	Numerical					min.		approx.	min.	min.	min.	min.	max.	min.
CuCr1 CuCr1Zr	CW105C CW106C	M	4	–	80	Rough Manufacture								
		R200	8	–	80	200	(60)	–	–	30	–	–	–	–
		H065	8	–	80	–	–	–	–	–	65	90	70	95
		R440	4	–	25	440	(350)	–	9	10	–	–	–	–
		H420	–	25	50	420	(330)	–	–	12	–	–	–	–
		R400	–	50	80	400	(310)	–	–	12	–	–	–	–
		H135	4	–	80	–	–	–	–	–	135	180	140	185
		R470	4	–	25	470	(380)	–	7	8	–	–	–	–
		H450	–	25	50	450	(360)	–	–	10	–	–	–	–
		R150	4	–	50	–	–	–	–	–	150	–	155	–

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Symbolic	Numerical					min.		approx.	min.	min.				
CuNi1Si	CW109C	M	2	–	80	Rough Manufacture								
		R240	2	–	80	240	(90)	25	30	35	–	–	–	–
		H050	2	–	80	–	–	–	–	–	50	75	55	80
		R410	2	–	30	410	(320)	5	7	9	–	–	–	–
		H105	2	–	30	–	–	–	–	–	105	150	110	155
		R350	–	30	50	350	(280)	–	–	12	–	–	–	–
		H095	–	30	50	–	–	–	–	–	95	140	100	145
		R300	–	50	80	300	(210)	–	–	16	–	–	–	–
		H085	–	50	80	–	–	–	–	–	85	130	90	135
		R440	2	–	80	440	(320)	12	15	17	–	–	–	–
		H120	2	–	80	–	–	–	–	–	120	170	125	175
		R590	2	–	30	590	(570)	8	10	12	–	–	–	–
		H160	2	–	30	–	–	–	–	–	160	–	170	–
		R540	–	30	50	540	(450)	–	–	10	–	–	–	–
		H140	–	30	50	–	–	–	–	–	140	–	145	–
		R500	–	50	80	500	(420)	–	–	10	–	–	–	–
		H125	–	50	80	–	–	–	–	–	125	–	130	–

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Symbolic	Numerical					min.		approx.	min.	min.					min.	
CuNi2Si	CW111C	M	2	–	80	Rough Manufacture										
		R260	2	–	80	260	(90)	25	30	35	–	–	–	–		
		H060	2	–	80	–	–	–	–	–	60	90	65	95		
		R410	2	–	30	410	(370)	5	6	8	–	–	–	–		
		H115	2	–	30	–	–	–	–	–	115	165	120	170		
		R380	–	30	50	380	(330)	–	–	10	–	–	–	–		
		H100	–	30	50	–	–	–	–	–	100	150	105	155		
		R320	–	50	80	320	(230)	–	–	15	–	–	–	–		
		H090	–	50	80	–	–	–	–	–	90	140	95	145		
		R490	2	–	80	490	(370)	10	12	15	–	–	–	–		
		H150	2	–	80	–	–	–	–	–	150	200	155	205		
		R640	2	–	30	640	(620)	6	8	10	–	–	–	–		
		H180	2	–	30	–	–	–	–	–	180	–	190	–		
		R600	–	30	50	600	(510)	–	–	10	–	–	–	–		
		H165	–	30	50	–	–	–	–	–	165	–	175	–		
		R550	–	50	80	550	(430)	–	–	10	–	–	–	–		
		H155	–	50	80	–	–	–	–	–	155	–	165	–		

