



BRONMETAL

Brass Zn

Product format:

Bar

Technical characteristics:

Decoletaje and hot stamping

MECHANICAL CHARACTERISTICS

ALLIAGES DE CUIVRE-ZINC-PLOMB

Designations		Nominal Dimension straight section						Tensile strength	Yield strength at 0.2%	Enlogation			Hardness	
Material		Metallurgical state	Diameter			Distance between the faces			R _m	R _{p0.2}	A _{100mm}	A _{11.3}	A	HB ó HV
Symbolic	Numerical		From	Greater than	Up to and including	From	Greater than	Up to and including	N/mm ² mín.	N/mm ² approx.	% mín.	% mín.	% mín.	approx.
CuZn35Pb1 CuZn35Pb2	CW600N CW601N	M	2	-	60	2	-	50	Manufacturing gross					
		R370	2	-	14	2	-	10	370	(250)	16	20	25	(110)
		R370	-	14	40	-	10	35	370	(180)	-	-	30	(90)
		R330	-	40	60	-	35	50	330	(150)	-	-	30	(90)
		R440	2	-	14	2	-	10	440	(340)	10	12	14	(130)
		M	6	-	40	5	-	35	Manufacturing gross					
CuZn36Pb2As	CW602N	R280	6	-	40	5	-	35	280	(120)	-	25	30	(80)
		R350	6	-	40	5	-	35	350	(150)	-	20	25	(90)
		R430	6	-	14	5	-	10	430	(200)	-	12	15	(110)
		M	2	-	80	2	-	60	Manufacturing gross					
CuZn36Pb3	CW603N	R360	6	-	40	5	-	35	360	(180)	-	15	20	(90)
		R340	-	40	80	-	35	60	340	(160)	-	-	20	(90)
		R400	2	-	25	2	-	20	400	(250)	8	10	12	(120)
		R480	2	-	12	2	-	10	480	(380)	(4)	6	8	(140)
		R550	2	-	4	2	-	4	550	(450)	-	-	-	(150)

Designations		Nominal Dimension straight section						Tensile strength	Yield strength at 0.2%	Enlogation			Hardness	
Material		Metallurgical state	Diámetro			Distancia entre caras			R _m	R _{p0.2}	A _{100mm}	A _{11.3}	A	HB ó HV
Symbolic	Numerical		From	Greater than	Up to and including	From	Greater than	Up to and including	N/mm ² mín.	N/mm ² aprox.	% mín.	% mín.	% mín.	
CuZn37Pb2	CW606N	M	2	-	80	2	-	60	Manufacturing gross					
		R340	6	-	40	5	-	35	340	(180)	-	15	20	(90)
		R320	-	40	80	-	35	60	320	(160)	-	-	20	(90)
		R400	2	-	25	2	-	20	400	(250)	8	10	12	(120)
		R480	2	-	14	2	-	10	480	(380)	(4)	6	8	(140)
		R550	2	-	6	2	-	5	550	(450)	-	-	-	(150)
		M	2	-	80	2	-	60	Manufacturing gross					
CuZn38Pb1 CuZn38Pb2 CuZn39Pb0,5 CuZn39Pb1 CuZn39Pb2 CuZn39Pb2Sn ^a	CW607N CW608N CW610N CW611N CW612N CW613N ^a	R380	6	-	40	5	-	35	380	(160)	-	16	20	(90)
		R360	-	40	80	-	35	60	360	(150)	-	-	25	(90)
		R410	2	-	40	2	-	35	410	(250)	10	12	15	(120)
		R490	2	-	6	2	-	5	490	(370)	(4)	6	-	(140)
		R490	-	6	14	-	5	10	490	(370)	-	6	8	(140)
		R550	2	-	6	2	-	5	550	(420)	-	-	-	(150)
		M	2	-	80	2	-	60	Manufacturing gross					
CuZn38Pb4 CuZn39Pb3 CuZn40Pb2 CuZn40Pb2Sn ^a	CW609N CW614N CW617N CW619N ^a	R400	6	-	14	5	-	10	400	(160)	-	12	15	(90)
		R380	-	14	40	-	10	35	380	(160)	-	-	18	(90)
		R360	-	40	80	-	35	60	360	(150)	-	-	20	(90)
		R430	2	-	40	2	-	35	430	(250)	6	8	10	(120)
		R500	2	-	14	2	-	10	500	(390)	(4)	6	8	(150)
		R550	2	-	6	2	-	5	550	(420)	-	-	-	(150)
		M	2	-	80	2	-	60	Manufacturing gross					

^a Products made of these alloys are not available with diameter or with across flats of less than 12 mm.

NOTE 1 - The numbers in brackets are not requirements for this regulation, they are given for informative purposes.

NOTE 2 - 1 N/mm² equivalent a 1 Mpa.

ALLOYS COPPER-ZINC COMPLEX

Designations		Nominal Dimension straight section						Tensile strength	Yield strength at 0.2%	Enlogation			Hardness	
Material		Metallurgical state	Diámetro			Distancia entre caras			R _m	R _{p0.2}	A _{100mm}	A _{11.3}	A	HB ó HV
Symbolic	Numerical		From	Greater than	Up to and including	From	Greater than	Up to and including	N/mm ² mín.	N/mm ² aprox.	% mín.	% mín.	% mín.	approx.
CuZn36Pb2Sn1 CuZn37Pb1Sn1	CW711R CW714R	M	2	-	80	2	-	60	Manufacturing gross					
		R390	12	-	25	10	-	20	390	(240)	-	-	18	(120)
		R370	-	25	50	-	20	40	370	(220)	-	-	22	(110)
		R360	-	50	80	-	40	60	360	(200)	-	-	25	(110)
		R410	2	-	50	2	-	40	410	(250)	12	15	18	(125)
		R460	2	-	25	2	-	20	460	(350)	6	8	10	(140)
		R500	2	-	12	2	-	10	500	(400)	(2)	(3)	5	(160)
		M	6	-	80	-	-	-	Manufacturing gross					
CuZn37Mn3Al2PbSi	CW713R	R540	6	-	80	-	-	540	(280)	-	12	15	(150)	
		R590	6	-	50	-	-	590	(320)	-	10	12	(160)	
		R570	-	50	80	-	-	-	570	(300)	-	-	12	(150)
		R640	6	-	15	-	-	640	(400)	-	(3)	5	(180)	
		R620	-	15	50	-	-	620	(350)	-	-	8	(170)	
		M	2	-	80	4	-	60	Manufacturing gross					
CuZn40Mn1Pb1	CW720R	R390	10	-	80	10	-	60	390	(200)	-	-	20	(110)
		R440	6	-	50	5	-	40	440	(250)	-	15	18	(120)
		R490	2	-	20	4	-	16	490	(350)	6	8	10	(140)
		R560	2	-	4	-	-	560	(500)	-	-	-	(160)	
		M	2	-	80	4	-	60	Manufacturing gross					

Designations		Nominal Dimension straight section						Tensile strength	Yield strength at 0.2%	Enlogation			Hardness	
Material		Metallurgical state	Diámetro			Distancia entre caras			R _m	R _{p0.2}	A _{100mm}	A _{11.3}	A	HB ó HV
Symbolic	Numerical		From	Greater than	Up to and including	From	Greater than	Up to and including	N/mm ² mín.	N/mm ² aprox.	% mín.	% mín.	% mín.	approx.
		M	2	-	80	2	-	60	Manufacturing gross					
CuZn40Mn1Pb1AlFeSn CuZn40Mn1Pb1FeSn	CW721R CW722R	R460	2	-	18	2	-	15	460	(250)	10	12	14	(130)
		R450	-	18	40	-	15	35	450	(220)	-	-	16	(130)
		R440	-	40	80	-	35	60	440	(200)	-	-	18	(120)
		R520	2	-	30	2	-	25	520	(290)	8	10	12	(150)
		R500	-	30	60	-	25	50	500	(250)	-	-	14	(140)

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NOTE 2 - 1 N/mm² equivalent a 1 Mpa.