EN 12163, Copper and copper alloys — Rod for general purposes

Designations			Diameter			Width across - flats			Tensile Strength	0,2% proof strength		Elongation			Hardness	
Material		Material Condition	mm			mm			Rm (Mpa)	Rp 0,2 (Mpa)		A 100 (%)	A 11,3 (%)	A (%)	HBW	
Number	Symbol		from	over	up to and including	from	over	up to and including	min.	min.	max.	min.	min.	min.	min.	max.
CW510L	CuZn42	M	All			All			As manufactured							
		R360	6	-	80	5	-	60	360	320	-	-	15	20	-	-
		H090	6	-	80	5	-	60	-	-	-	-	-	-	90	125
		R430	2	-	40	2	-	35	430	220	-	6	8	10	-	-
		H110	2	-	40	2	-	35	-	-	-	-	-	-	110	160
		R500	2	-	14	2	-	10	500	350	-	-	3	5	-	-
		H135	2	-	14	2	-	10	-	-	-	-	-	-	135	-

EN 12164, Copper and copper alloys — Rod for free machining purposes

Designations			Diameter			Width across - flats			Tensile Strength	0,2% proof strength		Elongation			Hardness	
Material		Material Condition	mm			mm			Rm (Mpa)	Rp 0,2 (Mpa)		A 100 (%)	A 11,3 (%)	A (%)	HBW	
Number	Symbol		from	over	up to and including	from	over	up to and including	min.	min.	max.	min.	min.	min.	min.	max.
CW510L	CuZn42	M	All			All			As manufactured							
		R360	6	-	80	5	-	60	360	-	320	-	15	20	-	-
		H090	6	-	80	5	-	60	-	-	-	-	-	-	90	125
		R430	2	-	40	2	-	35	430	220	-	6	8	10	-	-
		H110	2	-	40	2	-	35	-	-	-	-	-	-	110	160
		R500	2	-	14	2	-	10	500	350	-	-	8	5	-	-
		H135	2	-	14	2	-	10	-	-	-	-	-	-	135	-

EN 12165, Copper and copper alloys — Wrought and unwrought forging stock

Designations			Diameter		Hardness	
Material		Material Condition	mm		HB	
Number	Symbol		from	up to and including	min.	max.
CW510L	CuZn42	M	All		As manufactured	
		H090	8	120	90	190

EN 12166, Copper and copper alloys — Wire for general purposes

Designations			Diameter		Tensile Strength	0,2% proof strength		Elongation			Hardness	
Material		Material Condition	mm		Rm (Mpa)	Rp 0,2 (Mpa)		A 100 (%)	A 11,3 (%)	A (%)	HV	
Number	Symbol		from	up to and including	min.	min.	max.	min.	min.	min.	min.	max.
CW510L	CuZn42	M	All		As manufactured							
		R360	6	20	360	-	320	-	15	20	-	-
		H095	6	20	-	-	-	-	-	-	95	130
		R430	0,5	14	430	220	-	6	8	10	-	-
		H115	1,5	14	-	-	-	-	-	-	115	170
		R500	0,5	8	500	350	-	2	5	-	-	-
		H145	1,5	8	-	-	-	-	-	-	145	-