

**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.	
CW721R	CuZn40Mn1Pb1AlFeSn	M	All			All			As manufactured								
		R440	-	40	80	-	40	60	440	180	-	-	-	-	20	-	-
		H100	-	40	80	-	40	60	-	-	-	-	-	-	-	100	140
		R500	5	-	40	5	-	40	500	270	-	-	-	10	12	-	-
		H130	5	-	40	5	-	40	-	-	-	-	-	-	-	130	-

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

Designations		Diameter		Hardness		
Material		mm		HB		
Number	Symbol	Material Condition	from	up to and including	min.	max.
CW721R	CuZn40Mn1Pb1AlFeSn	M	All		As manufactured	
		H120	8	80	120	180