

# Technical data on alloys

Table of standard alloys for Flat based Profiles (\*1)

Standard EN 12167		ASTM	Description KME	Main characteristics and uses	Average density g/cm <sup>3</sup>	Manufacturing capability				Thermal conductivity 20° C W/m.K	Specific heat capacity J/kgK to 20C	Linear expansion coefficient mm/m x1°C	Modulus of elasticity MPa	Tensile strength status (*2) MPa
Composition symbols	Number					Drawn flat bars	Profiles as extruded	Drawn profiles	Tubes					
<b>Brass and Architectural bronze</b>														
CuZn40Pb2Al	CW618N	(C38000)	N18	brass for profiles machining/polishing	8,3	X*	X St	X*	O	80	380	0,019	85 000	390
CuZn41Pb1Al	CW620N	C38000	N20	brass for profiles Thin and complex parts polishing/bending	8,3	X*	X St	X*	O	80	380	0,019	85 000	390
CuZn40Mn1Pb1	(CW720R)	-	R20	architectural bronze good surface appearance self-protective surface	8,3	X*	X St	X*	O	80	380	0,019	85 000	390
CuZn40Mn2Fe1	(CW723R)	-	R 23	architectural bronze good surface appearance self-protective surface	8,3	X*	X St	X*	O	80	380	0,019	85 000	390
<b>Leaded brass</b>														
CuZn40Pb2	CW617N	C37700	N17	machining hot stamping	8,4	X St	X*	X St	O	120	380	0,0207	97 500	360
CuZn39Pb3	CW614N	C38500	N14	machining	8,4	X	X*	X	O	120	380	0,0208	98 000	380
CuZn36Pb3	CW603N	C36001	N03	machining forming, cold crimping, rolling	8,4	X	X*	X	O	115	380	0,0205	101 000	340
CuZn38Pb2	CW608N	C35001	N08	machining forming, cold crimping	8,4	X	X*	X	O	120	380	0,0207	105 000	360
<b>Binary brass</b>														
CuZn36	CW507L	C27000	CuZn36	crimping heavy cold forming	8,4	X*	O	X*	X St	116	380	0,0203	105 000	360
CuZn40	CW509L	C28000	CuZn40	crimping	8,4	X*	O	X*	X St	123	375	0,0208	105 000	340

x: manufacturing possible  
 X St: standard product  
 X\*: only for certain sizes  
 O: no manufacturing capability

(\*1): other alloys possible  
 (\*2): status M = As extruded, not drawn