KMM

OUR ALLOYS

Rg5 Pbarm	EN 1982:2008	German DIN
	CuSn5Zn5Pb2-C (CC499K)	DIN 50930-6

For drinking water applications no other single element should be more than 0.02 %. The sum of these single elements should not exceed 0.25%.

Chemical Composition in %		Cu	Sn	Pb	Zn	Ni	Al	Fe	P	S	Si	Sb	As	Cr	Bi	Cd
	min	84.0	4.0	-	4.0	-	-	-	-	-	-	-	-	-	-	-
	max	88.0	6.0	3.0	6.0	0.6	0.01	0.3	0.04	0.04	0.01	0.1	0.03	0.02	0.02	0.02

Mechanical Properties	Rm (Tensile strength min.)	Rp0.2 (Proof Strength min.)	A (Elongation min.)	H_B (Brinell hardness min.)
	250 N/mm ²	110 N/mm2	13 %	65 HBW

engineering material with high elongation, corrosion water proof for air gas and water fittings
application:plain copper sanitary pipes, pipe fittings, bathroom fixtures, tubes for boilers and boiler accessories, designed for potable water, low-pressure valves, gasoline and oil-line fittings, fire extinguishing equipment fittings, etc.

Rg5	EN 1982:2008	German DIN	British BS	US ASTM
	CuSn5Zn5Pb5-C (CC491K)	G-CuSn5ZnPb (DIN 1705, Nr.2.1096.01)	LG2 (BS 1400)	C83600 (ASTM B 505)

Chemical Composition in %		Cu (Including nickel)	Sn	Pb	Zn	Ni	Al	Fe	P	S	Si	Sb
	min	83.0	4.0	4.0	4.0	-	-	-	-	-	-	-
	max	87.0	6.0	6.0	6.0	2.0	0.01	0.3	0.1	0.1	0.01	0.25

Mechanical Properties	Rm (Tensile strength min.)	Rp0.2 (Proof Strength min.)	A (Elongation min.)	H_B (Brinell hardness min.)
	250 N/mm ²	110 N/mm2	13 %	65 HBW

structural material, to some extent can be brazed, resistant to sea water
application:water and steam valve housings up to 226 °C, normally stressed pump bodies and thin-walled complex castings

Rg7	EN 1982:2008	German DIN	US ASTM
	CuSn7Zn4Pb7-C (CC493K)	GC-CuSn7ZnPb (DIN 1705, Nr.2.1090.04)	C93200 (ASTM B 505)

Chemical Composition in %		Cu (Including nickel)	Sn	Pb	Zn	Ni	Al	Fe	P	S	Si	Sb
	min	81.0	5.2	5.0	2.0	-	-	-	-	-	-	-
	max	86.0	8.0	8.0	5.0	2.0	0.01	0.2	0.1	0.1	0.01	0.3

Mechanical Properties	Rm (Tensile strength min.)	Rp0.2 (Proof Strength min.)	A (Elongation min.)	H_B (Brinell hardness min.)
	260 N/mm ²	120 N/mm2	12 %	70 HBW

material for plain bearings in mechanical engineering with medium loads, very good emergency running, high wear and sea water resistance,
application:bearings of cranes and elevators, minor machine tool bearings, bearings for packing machines and electric motor, piston pin bushes for load, guide bushes in hydraulic cylinders, slip and friction rings and discs, valve and gate seat rings, marine shaft covers and cylinders, liner bushes, bottom bushes

Gb12	EN 1982:2008	German DIN	British BS	US ASTM
	CuSn12-C (CC483K)	GC-CuSn12 (DIN 1705, Nr.2.1052.04)	PB2 (BS 1400)	C90800 (ASTM B 427)

Chemical Composition in %		Cu	Sn	Pb	Zn	Ni	Al	Fe	Mn	P	S	Si	Sb
	min	85.0	10.5	-	-	-	-	-	-	-	-	-	-
	max	89.0	13.0	0.7	0.5	2.0	0.01	0.2	0.2	0.6	0.05	0.01	0.15

Mechanical Properties	Rm (Tensile strength min.)	Rp0.2 (Proof Strength min.)	A (Elongation min.)	H_B (Brinell hardness min.)
	300 N/mm ²	150 N/mm2	6 %	90 HBW

material with good antifriction properties, highest wear resistance
application:machine tool spindle bearings, which require the highest precision, precision turning lathes, grinders and gears, piston pin bushes, press bearings, high stress spindle nuts, high speed worm wheels and rims;

Gb10	EN 1982:2008	German DIN	British BS	US ASTM
	CuSn10-C (CC480K)	G-CuSn10 (DIN 1705, Nr. 2.1050.01)	CT1 (BS 1400)	C90500 (ASTM B 505)

Chemical Composition in %		Cu (Including nickel)	Sn	Pb	Zn	Ni	Al	Fe	Mn	P	S	Si	Sb
	min	88.0	9.0	-	-	-	-	-	-	-	-	-	-
	max	90.0	11.0	1.0	0.5	2.0	0.01	0.2	0.1	0.2	0.05	0.02	0.2

Mechanical Properties	Rm (Tensile strength min.)	Rp0.2 (Proof Strength min.)	A (Elongation min.)	H_B (Brinell hardness min.)
	280 N/mm ²	170 N/mm2	10 %	80 HBW

material with high elongation, corrosion and sea water resistant
application:plain bearings and landing gear components on aircraft, engine components (especially for seagoing ships), underwater fastenings in naval architecture, and ship propellers, o and petrochemical industries (i.e. tools for use in non-sparking environments)

Gb12Ni	EN 1982:2008	German DIN	British BS	US ASTM
	CuSn12Ni2-C (CC484K)	GC-CuSn12Ni (DIN 1705, Nr.2.1060.04)	CT2 (BS 1400)	C91700 (ASTM B 427)

Chemical Composition in %		Cu	Sn	Pb	Zn	Ni	Al	Fe	Mn	P	S	Si	Sb
	min	84.5	11.0	-	-	1.5	-	-	-	-	-	-	-
	max	87.5	13.0	0.3	0.4	2.5	0.01	0.2	0.2	0.4	0.05	0.01	0.1

Mechanical Properties	Rm (Tensile strength min.)	Rp0.2 (Proof Strength min.)	A (Elongation min.)	H_B (Brinell hardness min.)
	300 N/mm ²	180 N/mm2	10 %	95 HBW

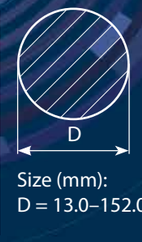
application:housing and pump cases, guide and running wheels and impellers for pumps and water turbines, etc.

The equivalence between the standards is not absolute and some variations in composition can exist.

KMM

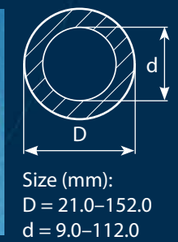
COMPANY PRODUCTS

ROUND BAR



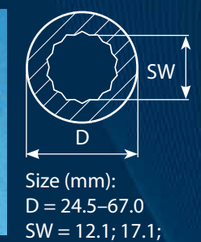
Size (mm):
D = 13.0–152.0

ROUND TUBE



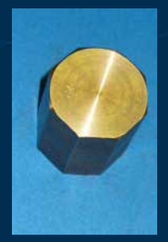
Size (mm):
D = 21.0–152.0
d = 9.0–112.0

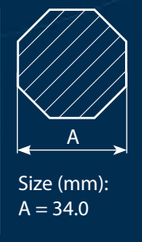
HOLLOW WIT H POLYGON INS IDE



Size (mm):
D = 24.5–67.0
SW = 12.1; 17.1;
22.1; 27.1; 32.1; 42.1

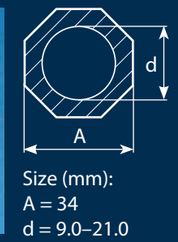
OCTAGON





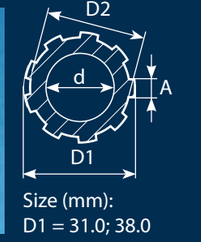
Size (mm):
A = 34.0

OCTAGONAL TUBE



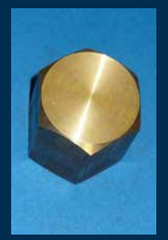
Size (mm):
A = 34
d = 9.0–21.0

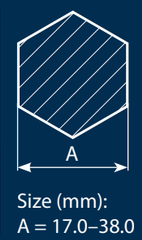
HOLLOW WIT H OUTER RI BS



Size (mm):
D1 = 31.0; 38.0
D2 = 28.0; 35.0; A = 5
d = 14.5; 17.5; 20.0; 23.3

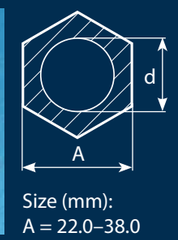
HEXA GON





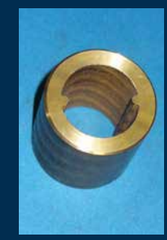
Size (mm):
A = 17.0–38.0

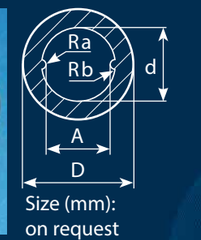
HEXA GONAL TUBE



Size (mm):
A = 22.0–38.0
d = 9.0–25.0

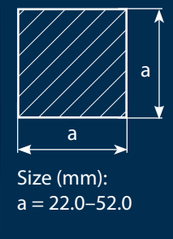
PRO FILED HOLLOW





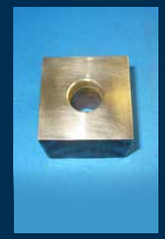
Size (mm):
on request

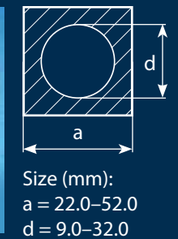
SQUARE



Size (mm):
a = 22.0–52.0

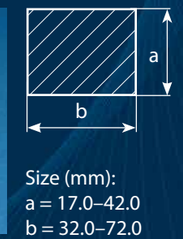
HOLLOW SQUARE





Size (mm):
a = 22.0–52.0
d = 9.0–32.0

FLAT BAR



Size (mm):
a = 17.0–42.0
b = 32.0–72.0

Optimal delivery lenght is 3000 - 3400 mm