

## METAL :- BRASS

### Free Machining Brass

ISO SYMBOLS	UNS	EN	BS	JIS	IS
CuZn39Pb3	C38500	CW614N	CZ121Pb3	C3603 C3604	IS 319 Type-1
CuZn38Pb4	-	CW609N	CZ121Pb4	-	-
CuZn36Pb3	C36000	CW603N	CZ124	C3601 C3602	IS 319 Type-1
	C35600				
	C36010				

### Forging Brass

ISO SYMBOLS	UNS	EN	BS	JIS	IS
CuZn39Pb1	C37000	-	CZ129	C3712	-
	C36500				
CuZn39Pb2	C37700	CW612N	-	-	-
CuZn40Pb2	C37710	CW617N	CZ122	C3771	6912 FLB
	C38000				
CuZn38Pb2	-	CW608N	CZ128	-	-
CuZn39Pb2Sn	-	CW613N	-	-	-
CuZn40Pb1Al	-	CW616N	-	-	-
CuZn40Pb2Sn	-	CW619N	-	-	-
CuZn39Pb2Mn	-	-	-	-	8737 MOD

### Leaded Brass

ISO SYMBOLS	UNS	EN	BS	JIS	IS
CuZn35Pb1	C34000	CW604N	CZ119	C2700	2704
	C33500				
CuZn36Pb2As	C35330	CW602N	CZ132	-	-
CuZn35Pb3NiP	C35350	-	-	-	-
CuZn39Pb1	C36500	CW610N	-	C3712	-
		CW611N			
CuZn38Pb1	C37000	CW607N	-	-	-
	C37100				
CuZn35Pb2	C34200	CW601N	-	-	-
	C34500				
	C35000				
CuZn37Pb1	-	CW605N	-	-	319 II
CuZn37Pb2	C35300	CW606N	CZ131	-	-
CuZn40Pb3Al	-	CW623N	CZ130	-	-
CuZn40Pb	-	-	CZ137	-	-
CuZn42PbAl	-	CW621N	-	-	-
CuZn43Pb1Al	-	CW622N	-	-	-
CuZn43Pb2Al	-	CW624N	-	-	-
CuZn39Pb0.5	C36300	-	-	-	-

## Naval Brass

ISO SYMBOLS	UNS	EN	BS	JIS	IS
CuZn39Sn1	C46400 C47000	CW719R	-	C4641	-
CuZn38Sn1As	C46500	CW717R			-
CuZn35NiFe1Sn1Pb2	C47940	-	-	-	-
CuZn38Sn1	C48200	-	-	-	-
CuZn37Sn1Pb	C48500	CW712R	CZ133	-	291 Gr I
	C46200	CW714R		-	
CuZn37Sn1Pb1As	C48600	-	-	-	-
CuZn36Sn1Pb2	-	CW711R	-	-	-
CuZn38Sn1	-	-	CZ112	-	-
CuZn37Sn1Pb2	-	-	CZ134	C4622	291 GR II
CuZn37Sn1	-	-	-	-	IS6912 FNB

## Lead Free Brass

ISO SYMBOLS	UNS	EN	BS	JIS	IS
CuZn35	C27000	-	-	-	-
CuZn36	-	CW507L	-	-	-
CuZn37	C27400	CW508L	CZ108	-	4413
	C27450				
	C27451				
CuZn37p	C27451	-	-	-	-
CuZn38As	-	CW511L	-	-	-
CuZn40	C28000	CW509L	CZ109	C2800	4170
CuZn42	C28500	CW510L		-	-
CuZn30	C26000	CW505L	CZ106	-	-
CuZn33	C26800	CW506L	CZ107	-	-
	C26200			-	-
CuZn30As	-	CW707R	CZ126	-	-
CuZn28Sn1As	-	CW706R	-	-	-
CuZn15	C23000	-	-	-	-
CuZn18	C23400	-	-	-	-

## Silicon Red Brass

ISO SYMBOLS	UNS	EN	BS	JIS	IS
CuZn14Si4	C69430	-	-	-	-
CuZn18Si3Pb1	C69700	-	-	-	-
CuZn19Si3	C69710	-	-	-	-
CuZn20Si3P	C69300	-	-	-	-
CuZn21Si3P	-	CW724R	-	-	-

## METAL :- Bronze

### Manganese Bronze

ISO SYMBOLS	UNS	EN	BS	JIS	IS
CuZn39AlFeMn	-	-	-	C6782	-
CuZn39AlFeMn	-	-	-	C6783	-
CuZn35Mn3Pb2Si1	C67300	-	-	-	-
CuZn37Mn3Al1Si1	C67400	-	-	-	-
CuZn38Mn2Al1PbFeSi	C67420	-	-	-	-
CuZn39Fe1Pb,5Sn1Mn	C67500	-	-	-	-
CuZn39Fe1Sn1PbMn	C67600	-	-	-	-
CuZn39Fe1Sn1NiMnSi	C68000	-	-	-	-
CuZn39Fe1Sn1MnSi	C68100	-	-	-	-
CuZn38Pb1Al1Fe1Mn1Sn	C68600	-	-	-	-
CuZn35Ni3Mn2AlPb	-	CW710R	-	-	-
CuZn37Mn3Al2PbSi	-	CW713R	-	-	-
CuZn38Mn1Al	-	CW716R	-	-	-
CuZn39Mn1AlPbSi	-	CW718R	-	-	-
CuZn40Mn1Pb1	-	CW720R	-	-	-
CuZn40Mn1Pb1AlFeSn	-	CW721R	-	-	-
CuZn40Mn1Pb1FeSn	-	CW722R	-	-	-
CuZn39AlFeMn	-	-	CZ114	-	320 HT 2
CuZn39FeMn	-	-	CZ115	-	320 HT 1
CuZn27Fe1Al5Mn2	-	-	CZ116	-	-
CuZn37Mn3Al2Si	-	-	CZ135	-	-
CuZn38Pb3Mn1	-	-	CZ136	-	-
CuZn40Mn2	-	CW723R	-	-	-
CuZn37FeSnMn2	-	-	-	-	6912 FHTB1
CuZn37FeSnAlMn	-	-	-	-	6912 FHTB2
	-	-	-	-	-

### Leaded Bronze

ISO SYMBOLS	UNS	EN	BS	JIS	IS
CuZn10Pb1	C31400	-	-	-	-
CuZn10Pb1Ni	C31600	-	-	-	-

### Low leaded Bronze

ISO SYMBOLS	UNS	EN	BS	JIS	IS
CuZn10Pb1	C31200	-	-	-	-

### Non leaded Bronze

ISO SYMBOLS	UNS	EN	BS	JIS	IS
CuZn10	C22000	-	-	-	-
CuZn12	C22600	-	-	-	-

## Bismuth Bronze

ISO SYMBOLS	UNS	EN	BS	JIS	IS
CuZn34Bi3Sn2	-	-	-	C6801	-
				C6802	
				C6803	
				C6804	

## METAL :- MS/Steel

En1A Leaded
SS316
SS304
SS202

## METAL :- Plastic

Nylone 6.6
HDPE
PP
DELRINE

## METAL :- Rubber

NATURAL RUBBER (POLYISOPRENE)
NEOPRENE (POLYCHLOROPRENE-CR)
NITRILE - BUNA-N – NBR (ACRYLONITRILE-BUTADIENE)
EPDM (ETHYLENE-PROPYLENE-DIENE-MONOMER)
BUTYL
SILICONE (POLYSILOXANE)
VITON (FLUOROELASTOMER-FKM)
HYPALON (CSM)