



METAL & STAINLESS STEEL MERCHANTS' ASSOCIATION

TECHNICAL INFORMATION

SPECIFICATION TABLE OF BRASS

MATERIAL DESCRIPTION	STANDARD SPECIFICATION	COPPER Cu%	LEAD pb%	TIN Sn%	IRON Fe%	ALLUMINUM Al%	MANGANESE Mn%	OTHER ELEMENTS	ZINC Zn%	NICKLE Ni%
FREE CUTTING BRASS TYPE I	IS: 319/89 BSS:249 EQUV.: BS 2874/86 CZ 121pb3	56 TO 59	2.0 to 3.5	-	0.35 Max	-	-	0.7 Max	Remn.	-
FREE CUTTING BRASS TYPE II	IS: 319/89 BSS:249 EQUV.: BS 2874/86 CZ 124	60 TO 63	2.5 to 3.7	-	0.35 Max	-	-	0.5 Max	Remn.	-
FREE CUTTING BRASS TYPE III	IS: 319/89 BSS:249 EQUV.: BS 2874/86 CZ 124	60 TO 63	0.5 to 1.5	-	0.20 Max	-	-	0.5 Max	Remn.	-
FORGING BRASS	IS: 3488/80 BSS:218 EQUV.: BS 2874/86 CZ 124	56.5 TO 60	0.5 to 2.0	-	0.30 Max	-	-	0.2 Max	Remn.	-
	CuZn40pb2	57 TO 59	1.5 to 2.5	-	0.40 Max	-	-	0.7 Max	Remn.	-
SPECIAL HIGH TENSILE BRASS FOR VALVES	GRADE I GENERAL	56.5 TO 60.0	0.75 to 1.75	-	0.30 Max	-	0.4 to 1.1	0.75 Max incl. Fe	Remn.	-
	GRADE II GENERAL I.O.C	56.5 TO 60.0	1.0 to 1.5	-	0.30 Max	-	0.2 to 0.5	0.75 Max incl. Fe	Remn.	-
REVETING BRASS RODS LEAD FREE	BS:2874/86 CZ109 EQUV.: IS 4170/87CuZn40	59 TO 62.	-	-	-	-	-	0.30 Max	Remn.	-
	IS:4413/81CuZn 37 EQUV.: BS/2873/86 CZ108	62 TO 65	0.30 Max	-	0.10 Max	-	-	0.60 Max	Remn.	-
HIGH TENSILE BRASS RODS	BS:2874/86CZ 114 EQUV.: BS/250	56.5 TO 58.5	0.5 to 1.5	0.2 to 0.8	0.3 to 1.0	1.5 Max	0.5 to 2.0	0.5 Max	Remn.	-
	BS:2874/86CZ 115 EQUV.: BS/1001	56.5 TO 58.5	0.5 to 1.5	0.8 to 1.1	0.25 to 1.2	0.2 Max	0.3 to 2.0	0.5 Max	Remn.	-
HIGH TENSILE BRASS RODS I	IS:320/80	56 TO 60	0.2 to 1.5	0.2 to 1.0	0.2 to 1.25	0.2 Max	0.25 to 2.0	0.5 Max	Remn.	-
HIGH TENSILE BRASS RODS II	IS:320/80	56 TO 61	0.5 to 1.5	1.0 Max	0.2 to 1.25	0.3 to 2.0	0.5 to 2.0	0.5 Max	Remn.	-
RIVETING BRASS RODS LEADED	IS:2704/83 CuZn35pb1	62.0 TO 65.0	0.75 to 1.5	-	0.1 Max	-	-	0.5 Max	Remn.	-
	IS:2704/83 CuZn35	63.0 TO 68.0	0.02 Max	-	0.1 Max	-	-	0.5 Max	Remn.	-
NAVAL BRASS ROD GRADE I	IS:291/77 Gr.I EQUV.: BS2874 CZ 112	61.0 TO 64.0	0.02 Max	1.0 to 1.5	0.1 Max	-	-	0.2 Max	Remn.	-
NAVAL BRASS ROD GRADE II	IS:291/77 Gr.II	59 TO 62	0.5 to 1.0	0.5 to 1.0	-	-	-	0.2 Max	Remn.	-
NICKEL SILVER ALLOY RODS	BS:2874/86 NS 101	42.0 TO 47.0	1.0 to 2.5	-	0.4 Max	-	0.2 to 0.5	0.3 Max	Remn.	9.0 to 11.0
COPPER ROD FOR GENERAL ENGG PURPOSE	BS:2874/86 CC 101	REMINDER	-	-	-	-	-	0.36 to 1.4 (chromium)	-	-

Round Rods \bigcirc Weight per meter = $(A \times A \times 0.006676)$ kg.
 Square Rods \square Weight per meter = $(A \times A \times 0.006500)$ kg.
 Rectangle Rods/Strip $\text{---} \text{---} \text{---} \text{---}$ Weight per meter = $(A \times B \times 0.008500)$ kg.
 Hex Rods $\text{---} \text{---} \text{---}$ Weight per meter = $(A \times A \times 0.007361)$ kg.
 Note: Weight of Copper Rods = 1.0517 x The Corresponding Weight of Brass Rod
 1 Meter = 100 Cms = 1000mm = 39.37 Inches = 3.28 Feet