

ROUND WASHER

- Figure 103** (Carbon Steel – Plain)
- Figure 103E** (Carbon Steel – Electro-Galvanized)
- Figure 103G** (Carbon Steel – Hot-Dip Galvanized)
- Figure 103S** (Stainless Steel)

Compliance: United States Standard.

Material: Carbon Steel or Stainless Steel (ASTM 240 Type 304 or Type 316).

Finish: Plain, Electro-Plated, Hot-Dip Galvanized.

Ordering: Specify rod size, figure number, finish or grade of material. For Metric applications Specify Figure M103. Please see Figure 176 for Lock Washers, Fender Washers and Tooth Lock Washers are available upon request.

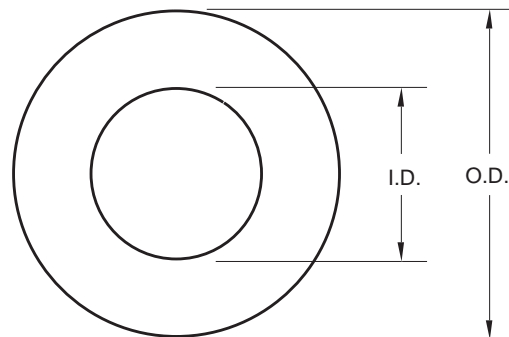


FIGURE 103 – ROUND WASHER

BOLT SIZE	$\frac{1}{4}$ M6	$\frac{3}{16}$ M8	$\frac{3}{8}$ M10	$\frac{7}{16}$ M12	$\frac{1}{2}$ M12	$\frac{9}{16}$ M14	$\frac{5}{8}$ M16
I.D.	$\frac{5}{16}$ 8	$\frac{3}{8}$ 10	$\frac{7}{16}$ 11	$\frac{1}{2}$ 13	$\frac{9}{16}$ 14	$\frac{5}{8}$ 16	$\frac{11}{16}$ 17
O.D.	1 19	1 25	1 25	$1\frac{1}{4}$ 32	$1\frac{3}{8}$ 35	$1\frac{1}{2}$ 38	$1\frac{3}{4}$ 44
WGT. EACH	0.01 0.04	0.02 0.09	0.02 0.09	0.03 0.13	0.04 0.18	0.06 0.27	0.08 0.36
BOLT SIZE	$\frac{3}{4}$ M20	$\frac{7}{8}$ M22	1 M24	$1\frac{1}{4}$ M30	$1\frac{1}{2}$ M30	$1\frac{3}{4}$ M36	$1\frac{1}{2}$ M36
I.D.	$\frac{13}{16}$ 21	$\frac{15}{16}$ 24	$1\frac{1}{16}$ 27	$1\frac{1}{4}$ 32	$1\frac{3}{8}$ 35	$1\frac{1}{2}$ 38	$1\frac{3}{8}$ 41
O.D.	2 51	$2\frac{1}{4}$ 57	$2\frac{1}{2}$ 64	$2\frac{3}{4}$ 70	3 76	$3\frac{1}{4}$ 83	$3\frac{1}{2}$ 89
WGT. EACH	0.11 0.49	0.15 0.67	0.19 0.85	0.22 0.98	0.26 1.16	0.32 1.42	0.38 1.69

STEEL COACH SCREWS

Figure 107

Figure 107 Coach Screws are normally used on our Figures 303, 337, and 340 brackets.

Material: Steel.

Finish: Plain, Electro-Galvanized.

Ordering: Specify diameter, length, figure number, and finish.

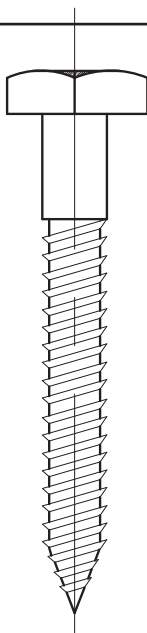


FIGURE 107 – STEEL COACH SCREW

LENGTH	WEIGHT EACH BY DIAMETER			
	$\frac{1}{4}$ 6	$\frac{3}{8}$ 10	$\frac{1}{2}$ 13	$\frac{5}{8}$ 16
$1\frac{1}{2}$	0.023	0.060		
38	0.010	0.027		
2	0.028	0.070	0.144	0.232
51	0.013	0.032	0.065	0.105
$2\frac{1}{2}$	0.033	0.083	0.162	0.270
64	0.015	0.038	0.073	0.122
3	0.039	0.098	0.186	0.310
76	0.018	0.044	0.084	0.141
$3\frac{1}{2}$	0.044	0.114	0.212	0.348
89	0.020	0.052	0.096	0.158
4	0.050	0.125	0.233	0.376
102	0.023	0.057	0.106	0.171
5	0.063	0.154	0.290	0.455
127	0.029	0.070	0.132	0.206
6	0.074	0.183	0.340	0.530
152	0.034	0.083	0.154	0.240

DIMENSIONS		TEMPERATURE	LOADS	WEIGHT
INCHES		FAHRENHEIT	POUNDS	POUNDS
MILLIMETERS		CELSIUS	NEWTONS	KILOGRAMS