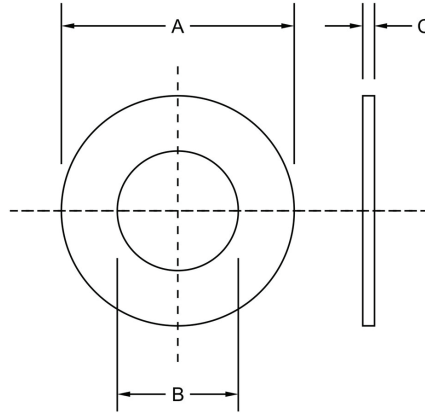


PRODUCT DATA SHEET

F436 STRUCTURAL WASHERS

1.0 DIMENSIONS: AS PER ASTM F436/F436M



NOMINAL WASHER SIZE	INSIDE DIAMETER (B)			OUTSIDE DIAMETER (A)			THICKNESS (C)	
	NOMINAL	MAX	MIN	NOMINAL	MAX	MIN	MAX	MIN
1/4	0.281	0.313	0.281	0.625	0.657	0.593	0.080	0.051
5/16	0.344	0.376	0.344	0.688	0.720	0.656	0.080	0.051
3/8	0.406	0.438	0.406	0.813	0.845	0.781	0.080	0.051
7/16	0.469	0.501	0.469	0.922	0.954	0.890	0.080	0.051
1/2	0.531	0.563	0.531	1.063	1.095	1.031	0.177	0.097
9/16	0.625	0.657	0.625	1.188	1.220	1.156	0.177	0.110
5/8	0.688	0.720	0.688	1.313	1.345	1.281	0.177	0.122
3/4	0.813	0.845	0.813	1.468	1.500	1.436	0.177	0.122
7/8	0.938	0.970	0.938	1.750	1.782	1.718	0.177	0.136
1	1.063	1.126	1.063	2.000	2.063	1.937	0.177	0.136
1-1/8	1.188	1.251	1.188	2.250	2.313	2.187	0.177	0.136
1-1/4	1.375	1.438	1.375	2.500	2.563	2.437	0.177	0.136
1-3/8	1.500	1.563	1.500	2.750	2.813	2.687	0.177	0.136
1-1/2	1.625	1.688	1.625	3.000	3.063	2.937	0.177	0.136
1-3/4	1.875	1.938	1.875	3.375	3.438	3.312	0.280	0.178
2	2.125	2.188	2.125	3.750	3.813	3.687	0.280	0.178
2-1/4	2.375	2.438	2.375	4.000	4.063	3.937	0.340	0.240
2-1/2	2.625	2.688	2.625	4.500	4.563	4.437	0.340	0.240
2-3/4	2.875	2.938	2.875	5.000	5.063	4.937	0.340	0.240
3	3.125	3.188	3.125	5.500	5.563	5.437	0.340	0.240

PRODUCT DATA SHEET

F436 STRUCTURAL WASHERS

2.0 MECHANICAL PROPERTIES

Steel Type 1: As per ASTM F436/F436M. Hardness 38 to 45 HRC, except for hot dip galvanized washers the hardness is 26 to 45 HRC. Washers have to be marked without fail. Marking can be any symbol or any distinguished mark to identify the manufacturer. Marking should be depressed on one side of the washer.

3.0 SURFACE FINISH: PLAIN / ZINC / HDG. ZINC & HDG DETAILS GIVEN IN TABLE BELOW.

PROPERTIES	ZINC YELLOW	HOT DIPPED GALVANIZED
TYPE	HEXAVALENT (Cr+6)	RoHS COMPLAINT
COLOR	YELLOW	
MINIMUM COATING THICKNESS	0.0001" / 3 MICRONS OR 0.0002" / 5 MICRONS	WASHERS UNDER 3/16" IN THICKNESS: 0.0017" (43 MICRONS) AND WASHERS 3/16" & 1/4" THICKNESS 0.0020" (50 MICRONS)
SPECIFICATION	ASTM F1941 / F1941M Fe/Zn 3C OR Fe/Zn 5C ASTM B633 SC1 (0.0002" OR 5 MICRONS) TYPE II	ASTM F2329 / F2329 OR ASTM A153/A153M