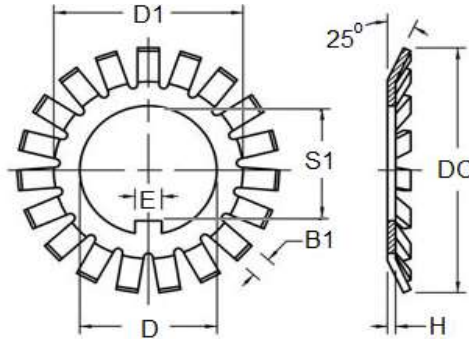


Product Dimensions and Weights

DIN 5406 Specifications

Metric DIN 5406 Shaft Tab Washer
Visit our [online store](#) for product availability



Dimensions of Metric DIN 5406 Shaft Tab Washer

Code	D	DC	D1	B1	E	S1	H	weight kg/1000pcs
MB0	10	21	13.5	3	3	8.5	1	1.3
MB1	12	25	17	3	3	10.5	1	1.9
MB2	15	28	21	4	3	13.5	1	2.5
MB3	17	32	24	4	4	13.5	1	3.1
MB4	20	36	26	4	4	18.5	1	2.5
MB5	25	42	32	5	5	23	1.25	6.4
MB6	30	49	38	5	5	27.5	1.25	7.8
MB7	35	57	44	6	5	32.5	1.25	10.4
MB8	40	62	50	6	6	37.5	1.25	12.3
MB9	45	69	56	6	6	42.5	1.25	15.2
MB10	50	74	61	6	6	47.5	1.25	16
MB11	55	81	67	8	7	52.5	1.5	19.6
MB12	60	86	73	8	7	57.5	1.5	25.3
MB13	65	92	79	8	7	62.5	1.5	29
MB14	70	98	85	8	8	66.5	1.5	33.4
MB15	75	104	90	8	8	71.5	1.75	35.6
MB16	80	112	95	10	8	76.5	1.75	46.4
MB17	85	119	102	10	8	81.5	1.75	52.4
MB18	90	126	108	10	10	86.5	1.75	62.3

All measurements are in mm

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Code	D	DC	D1	B1	E	S1	H	weight kg/1000pcs
MB19	95	133	113	10	10	91.5	1.75	67
MB20	100	142	120	12	10	96.5	1.75	76.5
MB21	105	145	126	12	12	100.5	1.75	82.6
MB22	110	154	133	12	12	105.5	1.75	94
MB23	115	159	137	12	12	110.5	2	108
MB24	120	164	138	14	12	115	2	105
MB25	125	170	148	14	12	120	2	118
MB26	130	175	149	14	14	125	2	113
MB27	135	185	160	14	14	130	2	144
MB28	140	192	160	16	14	135	2	142
MB29	145	202	172	16	14	140	2	168
MB30	150	205	171	16	14	145	2	155
MB31	155	212	182	16	16	147.5	2.5	155
MB32	160	217	182	18	16	154	2.5	222
MB33	165	222	193	18	16	157.5	2.5	241
MB34	170	232	193	18	16	164	2.5	247
MB36	180	242	203	20	18	174	2.5	268
MB38	190	252	214	20	18	184	2.5	278
MB40	200	262	226	20	18	194	2.5	293
MB44	220	292	250	24	20	213	3	307
MB48	240	312	270	24	20	233	3	325
MB52	260	342	300	28	24	253	3	345
MB56	280	362	320	28	24	273	3	362

All measurements are in mm

Metric DIN 5406 External Tooth Shaft Lock Washer with Tab is a simple and reliable way to secure a smaller locknut (eg DIN 981 metric shaft nuts). The inner tab fits into the slot on the adapter sleeve or shaft. One of the outer tabs is bent into the slot of the nut securing the nut in place. Aspen Fasteners offers over 500.000 unique fastener products from stock in inch and metric standard in a variety of materials and finishes. The following sizes metric DIN 5406 External Tooth Shaft Lock Washer with Tab are available for immediate shipping from stock: Diameters range from MB0 (10mm) to MB40 (200mm) in plain steel. View parts by clicking on the following link: [DIN 5406 External Tooth Shaft Lock Washer with Tab](#)

DIN (Deutsches Institut für Normung - German Institute for Standardization) standards are issued for a variety of components including industrial fasteners as metric DIN 5406 External Tooth Shaft Lock Washer with Tab. The DIN standards remain common in Germany. Europe and globally even though the transition to ISO standards is taking place. DIN standards continue to be used for parts which do not have ISO equivalents or for which there is no need for standardization.

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1) Mechanical properties of stainless steel for metric DIN 5406 External Tooth Shaft Lock Washer with Tab

Stainless steels can be divided into three groups of steel - austenitic, ferritic and martensitic. Austenitic steel is by far the most common type (>90% of commercial fasteners). The steel groups and strength classes are designated by a four-digit sequence of letters and numbers (eg A2-70) as shown in the following table. DIN EN ISO 3506 governs screws and nuts made from stainless steel.

Steel group	Steel grade	Strength class	Screws, Nuts and Bolts			
			Tensile strength N/mm ²	Tensile strength PSI	Dia range	Nut Load N/mm ²
Austenitic	A2 and A4	50	500	70.000	<=M39	500
		70	700	100.000	<=M20	700
		80	800	118.000	<=M20	800

The tensile stress is calculated with reference to the tensile stress area (see DIN EN ISO 3506-1979). Nuts to be paired with same grade of stainless steel screws

Steel group	Property Strength class	Made From	Characteristics
Austenitic	50	A1, A2	Soft; cold worked, turned and soft pressed fasteners
	70	A2, A4	Cold worked, normal strength formed fasteners
	80	A2, A4	Extreme cold worked, high strength, special applications

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2) Chemical composition of stainless steel metric DIN 5406 External Tooth Shaft Lock Washer with Tab

Grade	USA Grade	Material designation	Material no.	C %	Si ≤ %	Mn ≤ %	Cr %	Mo %	Ni %
A 2	304	X 5Cr Ni 1810	1.4301	≤ 0.07	1.0	2.0	17.5 to 19.5	-	8.0 to 10.5
		X 2 Cr Ni 1811	1.4306	≤ 0.03	1.0	2.0	18.0 to 20.0	-	10 to 12.0
		X 8 Cr Ni 19/10	1.4303	≤ 0.07	1.0	2.0	17.0 to 19.0	-	11.0 to 13.0
A 4	316	X 5 Cr Ni Mo 1712	1.4401	≤ 0.07	1.0	2.0	16.5 to 18.5	2.0 to 2.5	10.0 to 13.0
		X 2 Cr Ni Mo 1712	1.4404	≤ 0.03	1.0	2.0	16.5 to 18.5	2.0 to 2.5	10 to 13

3) Chemical composition of steel metric DIN 5406 External Tooth Shaft Lock Washer with Tab

PROPERTY CLASS	MATERIAL AND TREATMENT	CHEMICAL COMPOSITION LIMITS %				TEMPERING TEMP °C MIN.
		C		P	S	
		min.	max.	max.	max.	
4.6. 4.8. 5.8. 6.8	Low or medium carbon steel	-	0.55	0.05	0.06	-
8.8	Medium carbon steel quenched. tempered	0.25	0.55	0.04	0.05	425
9.8	Medium carbon steel quenched. tempered	0.25	0.55	0.04	0.05	425
10.9	Medium carbon steel additives e.g. boron. Mn. Cr or Alloy steel - quenched. tempered	0.20	0.55	0.04	0.05	425
12.9	Alloy steel - quenched. tempered	0.20	0.50	0.035	0.035	380

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4) Mechanical properties of steel for metric DIN 5406 External Tooth Shaft Lock Washer with Tab

MECHANICAL PROPERTY		PROPERTY CLASS								
		4.8	5.6	5.8	6.8	8.8		9.8	10.9	12.9
						Up to M 16	Over M 16			
Tensile Strength (Rm. N/mm²)	nom.	400	500		600	800		900	1000	1200
	min.	420	500	520	600	800	830	900	1040	1220
Vickers Hardness	min.	130	155	160	190	250	255	290	320	385
	max	250				320	336	360	380	435
Brinell Hardness	min.	124	147	152	181	319	242	266	295	353
	max.	238				385	319	342	363	412
Rockwell Hardness	min. HR	71	79	82	89	-				
	HRC	-	-	-	-	20	23	28	32	39
	HR	95			99	-				
	max. HRC	-	-	-	-	32	34	37	39	44
Yield Stress ReL. N/mm²	nom.	320	300	400	480	-				
	min.	340	300	420	480	-				
Stress at permanent set limit N/mm²	nom.	-				640		720	900	1080
	min.	-				640	660	720	940	1100

Disclaimer

Dimensional data and technical information for metric DIN 5406 External Tooth Shaft Lock Washer with Tab was obtained from publicly available sources and not DIN 980 All Metal Prevailing Torque Type Hex Lock Nut acquired through standards agencies. It has been completed and compiled for reference purposes only; where discrepancies are found they are subject to change without notice. Aspen Fasteners makes no warranties or representations regarding the accuracy and validity of the compiled information and data. Contact the relevant standards authorities for accurate and detailed information.

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