



SPLIT LOCK WASHERS

ZINC, GALVANIZED & STAINLESS STEEL

Split lock washers are designed for increased bolt tensioning resulting in tighter assemblies and protection against loosening resulting from vibration. Lock washers can be used with a standard flat washer to provide uniform bearing surface.



ZINC PLATED

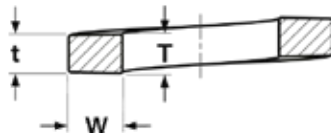


HOT DIP GALVANIZED



STAINLESS STEEL

DIMENSIONAL DATA



Regular & High Alloy Helical Spring Lock Washers					ASME B18.21.1-1999	
Nominal Washer Size		A		B	(T+t) / 2	W
		Inside Diameter		Outside Diameter	Mean Section Thickness	Section Width
		Max	Min	Max	Min	Min
#2	0.086	0.094	0.088	0.172	0.200	0.035
#3	0.099	0.107	0.101	0.195	0.025	0.040
#4	0.112	0.120	0.114	0.209	0.025	0.040
#5	0.125	0.133	0.127	0.236	0.031	0.047
#6	0.138	0.148	0.141	0.250	0.031	0.047
#8	0.164	0.174	0.167	0.293	0.040	0.055
#10	0.190	0.200	0.193	0.334	0.047	0.062
#12	0.216	0.227	0.220	0.377	0.056	0.070
1/4	0.250	0.260	0.252	0.487	0.062	0.109
5/16	0.312	0.322	0.314	0.583	0.078	0.125
3/8	0.375	0.385	0.377	0.680	0.094	0.141
7/16	0.438	0.450	0.440	0.776	0.109	0.156
1/2	0.500	0.512	0.502	0.869	0.125	0.171
9/16	0.562	0.574	0.564	0.965	0.141	0.188
5/8	0.625	0.641	0.628	1.073	0.156	0.203
3/4	0.750	0.766	0.753	1.265	0.188	0.234
7/8	0.875	0.894	0.878	1.459	0.219	0.266
1	1.000	1.024	1.003	1.656	0.250	0.297
1-1/8	1.125	1.153	1.129	1.847	0.281	0.328
1-1/4	1.250	1.280	1.254	2.036	0.312	0.359
1-3/8	1.375	1.408	1.379	2.219	0.344	0.391
1-1/2	1.500	1.534	1.504	2.419	0.375	0.422
1-3/4	1.750	1.789	1.758	2.679	0.389	0.424
2	2.000	2.039	2.008	2.936	0.422	0.427



SPLIT LOCK WASHERS
ZINC, GALVANIZED & STAINLESS STEEL

DIMENSIONAL DATA (CONT'D)

Description	<p>Regular: A coiled, hardened, split circular washer with a slightly trapezoidal wire section. High-Alloy: Dimensionally identical to a regular split lock washer but made from 4037 alloy steel (sizes over 1" are equivalent to heavy split lock washers in size and material). Stainless: A regular split lock washer made from austenitic stainless steel.</p>
Application/Advantages	<p>Regular: (A) Applies greater bolt tension per unit of applied torque; (B) Provides a hardened bearing surface, creating more uniform torque control; (C) Provides more uniform load distribution; (D) Resists loosening caused by vibration and corrosion; (E) Is preferred lock washer for use with hardened bearing surfaces. High-Alloy: Designed for use with Grade-5 & Grade-8 bolts and nuts. Stainless: For use with stainless nuts and screws of a similar stainless alloy in corrosive environments.</p>
Material	<p>Carbon Steel: SAE J403 1055 - 1065 carbon steel High-Alloy: 1/4" through 1": SAE J404 4037 alloy steel; 1/8" through 1-1/2": SAE J1403 1055 - 1065 carbon steel 18-8 Stainless: SAE J405 302 - 305 stainless steel. 316 Stainless: SAE J405 316 stainless steel.</p>
Hardness	<p>Carbon & High-Alloy Steel: Rockwell C38 - 46 Stainless: Through 5/8": Rockwell C35 - 43; Sizes over 5/8": Rockwell C32 - 43</p>
Twist Test	<p>With washer in a vice with the split ends free and straight above the vice jaws, a 90° segment of the free end is gripped with a wrench and bent. Washers are to withstand being twisted through a 90° angle without signs of fracture. When the washer ultimately fractures beyond the prescribed 90° limit, the structure of the breaking point shall show a fine grain.</p>

DIMENSIONAL DATA

ZINC PLATED

PART #	SIZE	QUANTITY / BOX	QUANTITY / CASE
2MSL08	#8	100	7000
2MSL10	#10	100	7000
2MSL14	1/4	100	5000
2MSL56	5/16	100	7000
2MSL38	3/8	100	4000
2MSL12	1/2	100	3000
2MSL58	5/8	100	1500
2MSL34	3/4	50	750



SPLIT LOCK WASHERS

ZINC, GALVANIZED & STAINLESS STEEL

DIMENSIONAL DATA

HOT DIP GALVANIZED

PART #	SIZE	QUANTITY / BOX	QUANTITY / CASE
2MSLG14	1/4	100	7000
2MSLG38	3/8	100	4000
2MSLG12	1/2	100	1500
2MSLG58	5/8	100	1500

DIMENSIONAL DATA

STAINLESS STEEL - 18-8

PART #	SIZE	QUANTITY / BOX	QUANTITY / CASE
2MSLS214	1/4	100	7000
2MSLS256	5/16	100	7000
2MSLS238	3/8	100	4000
2MSLS212	1/2	100	2500
2MSLS258	5/8	100	1500
2MSLS234	3/4	50	750



SPLIT LOCK WASHERS
ZINC, GALVANIZED & STAINLESS STEEL

ORDERING INFORMATION

ZINC PLATED - GRADE 2

PART #	SIZE	QUANTITY / BOX
2HCS14012	1/4-20 x 1/2	100 / BOX
2HCS14058	1/4-20 x 5/8	100 / BOX
2HCS14034	1/4-20 x 3/4	100 / BOX
2HCS14100	1/4-20 x 1	100 / BOX
2HCS14114	1/4-20 x 1-1/4	100 / BOX
2HCS14112	1/4-20 x 1-1/2	100 / BOX
2HCS14200	1/4-20 x 2	100 / BOX
2HCS14300	1/4-20 x 3	100 / BOX
2HCS14400	1/4-20 x 4	100 / BOX
2HCS14500	1/4-20 x 5	100 / BOX
2HCS56012	5/16-18 x 1/2	100 / BOX
2HCS56034	5/16-18 x 3/4	100 / BOX
2HCS56100	5/16-18 x 1	100 / BOX
2HCS56114	5/16-18 x 1-1/4	100 / BOX
2HCS56112	5/16-18 x 1-1/2	100 / BOX
2HCS56200	5/16-18 x 2	100 / BOX
2HCS56212	5/16-18 x 2-1/2	100 / BOX
2HCS56312	5/16-18 x 3-1/2	50 / BOX
2HCS56412	5/16-18 x 4-1/2	50 / BOX
2HCS56500	5/16-18 x 5	50 / BOX
2HCS38012	3/8-16 x 1/2	100 / BOX
2HCS38034	3/8-16 x 3/4	100 / BOX
2HCS38100	3/8-16 x 1	100 / BOX
2HCS38114	3/8-16 x 1-1/4	100 / BOX
2HCS38112	3/8-16 x 1-1/2	100 / BOX
2HCS38134	3/8-16 x 1-3/4	100 / BOX
2HCS38200	3/8-16 x 2	100 / BOX
2HCS38212	3/8-16 x 2-1/2	50 / BOX
2HCS38312	3/8-16 x 3-1/2	50 / BOX
2HCS38400	3/8-16 x 4	50 / BOX
2HCS38412	3/8-16 x 4-1/2	50 / BOX
2HCS38500	3/8-16 x 5	50 / BOX
2HCS38512	3/8-16 x 5-1/2	50 / BOX
2HCS38600	3/8-16 x 6	50 / BOX
2HCS12034	1/2-13 x 3/4	50 / BOX
2HCS12100	1/2-13 x 1	50 / BOX
2HCS12114	1/2-13 x 1-1/4	50 / BOX
2HCS12200	1/2-13 x 2	50 / BOX
2HCS12212	1/2-13 x 2-1/2	50 / BOX
2HCS12300	1/2-13 x 3	50 / BOX

PART #	SIZE	QUANTITY / BOX
2HCS12312	1/2-13 x 3-1/2	25 / BOX
2HCS12400	1/2-13 x 4	25 / BOX
2HCS12412	1/2-13 x 4-1/2	25 / BOX
2HCS12500	1/2-13 x 5	25 / BOX
2HCS12512	1/2-13 x 5-1/2	25 / BOX
2HCS12600	1/2-13 x 6	25 / BOX
2HCS12700	1/2-13 x 7	25 / BOX
2HCS12800	1/2-13 x 8	25 / BOX
2HCS12900	1/2-13 x 9	25 / BOX
2HCS12010	1/2-13 x 10	25 / BOX
2HCS12120	1/2-13 x 12	25 / BOX
2HCS58100	5/8-11 x 1	25 / BOX
2HCS58114	5/8-11 x 1-1/4	25 / BOX
2HCS58112	5/8-11 x 1-1/2	25 / BOX
2HCS58134	5/8-11 x 1-3/4	25 / BOX
2HCS58200	5/8-11 x 2	25 / BOX
2HCS58212	5/8-11 x 2-1/2	25 / BOX
2HCS58234	5/8-11 x 2-3/4	25 / BOX
2HCS58300	5/8-11 x 3	25 / BOX
2HCS58400	5/8-11 x 4	25 / BOX
2HCS58412	5/8-11 x 4-1/2	25 / BOX
2HCS58512	5/8-11 x 5-1/2	25 / BOX
2HCS58600	5/8-11 x 6	25 / BOX
2HCS34114	3/4-10 x 1-1/4	20 / BOX
2HCS34112	3/4-10 x 1-1/2	20 / BOX
2HCS34134	3/4-10 x 1-3/4	20 / BOX
2HCS34212	3/4-10 x 2-1/2	20 / BOX
2HCS34334	3/4-10 x 3-3/4	15 / BOX
2HCS34400	3/4-10 x 4	15 / BOX
2HCS34412	3/4-10 x 4-1/2	15 / BOX
2HCS34500	3/4-10 x 5	15 / BOX
2HCS34512	3/4-10 x 5-1/2	15 / BOX
2HCS34600	3/4-10 x 6	15 / BOX
2HCS78112	7/8-9 x 1-1/2	15 / BOX
2HCS78200	7/8-9 x 2	15 / BOX
2HCS78214	7/8-9 x 2-1/4	15 / BOX
2HCS78212	7/8-9 x 2-1/2	15 / BOX
2HCS78234	7/8-9 x 2-3/4	15 / BOX
2HCS78300	7/8-9 x 3	15 / BOX
2HCS78312	7/8-9 x 3-1/2	15 / BOX
2HCS78334	7/8-9 x 3-3/4	15 / BOX
2HCS78400	7/8-9 x 4	15 / BOX



SPLIT LOCK WASHERS
ZINC, GALVANIZED & STAINLESS STEEL

ORDERING INFORMATION

ZINC PLATED - GRADE 5

PART #	SIZE	QUANTITY / BOX
2HCS14114G5	1/4-20 x 1-1/4	100 / BOX
2HCS14112G5	1/4-20 x 1-1/2	100 / BOX
2HCS56100G5	5/16-18 x 1	100 / BOX
2HCS56212G5	5/16-18 x 2-1/2	100 / BOX
2HCS38100G5	3/8-16 x 1	100 / BOX
2HCS38114G5	3/8-16 x 1-1/4	100 / BOX
2HCS38112G5	3/8-16 x 1-1/2	100 / BOX
2HCS38312G5	3/8-16 x 3-1/2	50 / BOX
2HCS12100G5	1/2-13 x 1	50 / BOX
2HCS12114G5	1/2-13 x 1-1/4	50 / BOX
2HCS12200G5	1/2-13 x 2	50 / BOX
2HCS12414G5	1/2-13 x 4-1/4	25 / BOX
2HCS12500G5	1/2-13 x 5	25 / BOX
2HCS58100G5	5/8-11 x 1	25 / BOX
2HCS58114G5	5/8-11 x 1-1/4	25 / BOX
2HCS58200G5	5/8-11 x 2	25 / BOX
2HCS14114G5	1/4-20 x 1-1/4	100 / BOX
2HCS14112G5	1/4-20 x 1-1/2	100 / BOX
2HCS56100G5	5/16-18 x 1	100 / BOX
2HCS56212G5	5/16-18 x 2-1/2	100 / BOX
2HCS38100G5	3/8-16 x 1	100 / BOX
2HCS38114G5	3/8-16 x 1-1/4	100 / BOX
2HCS38112G5	3/8-16 x 1-1/2	100 / BOX
2HCS38312G5	3/8-16 x 3-1/2	50 / BOX
2HCS12100G5	1/2-13 x 1	50 / BOX
2HCS12114G5	1/2-13 x 1-1/4	50 / BOX
2HCS12200G5	1/2-13 x 2	50 / BOX
2HCS12414G5	1/2-13 x 4-1/4	25 / BOX
2HCS12500G5	1/2-13 x 5	25 / BOX
2HCS58100G5	5/8-11 x 1	25 / BOX
2HCS58114G5	5/8-11 x 1-1/4	25 / BOX
2HCS58200G5	5/8-11 x 2	25 / BOX
2HCS58214G5	5/8-11 x 2-1/4	25 / BOX

PART #	SIZE	QUANTITY / BOX
2HCS58212G5	5/8-11 x 2-1/2	25 / BOX
2HCS58234G5	5/8-11 x 2-3/4	25 / BOX
2HCS58300G5	5/8-11 x 3	25 / BOX
2HCS58400G5	5/8-11 x 4	25 / BOX
2HCS58414G5	5/8-11 x 4-1/4	25 / BOX
2HCS58412G5	5/8-11 x 4-1/2	25 / BOX
2HCS58500G5	5/8-11 x 5	25 / BOX
2HCS58700G5	5/8-11 x 7	25 / BOX
2HCS34112G5	3/4-10 x 1-1/2	20 / BOX
2HCS34200G5	3/4-10 x 2	20 / BOX
2HCS34212G5	3/4-10 x 2-1/2	20 / BOX
2HCS34300G5	3/4-10 x 3	20 / BOX
2HCS34314G5	3/4-10 x 3-1/4	20 / BOX
2HCS34312G5	3/4-10 x 3-1/2	15 / BOX
2HCS34334G5	3/4-10 x 3-3/4	15 / BOX
2HCS34400G5	3/4-10 x 4	15 / BOX
2HCS34414G5	3/4-10 x 4-1/4	15 / BOX
2HCS34412G5	3/4-10 x 4-1/2	15 / BOX
2HCS34512G5	3/4-10 x 5-1/2	15 / BOX
2HCS34600G5	3/4-10 x 6	15 / BOX
2HCS34700G5	3/4-10 x 7	15 / BOX
2HCS78200G5	7/8-9 x 2	15 / BOX
2HCS78234G5	7/8-9 x 2-3/4	15 / BOX
2HCS78300G5	7/8-9 x 3	15 / BOX
2HCS78400G5	7/8-9 x 4	15 / BOX
2HCS78412G5	7/8-9 x 4-1/2	15 / BOX
2HCS78500G5	7/8-9 x 5	15 / BOX
2HCS01300G5	1-8 x 3	10 / BOX
2HCS01400G5	1-8 x 4	10 / BOX
2HCS01412G5	1-8 x 4-1/2	10 / BOX
2HCS01612G5	1-8 x 6-1/2	10 / BOX
2HCS01800G5	1-8 x 8	10 / BOX



SPLIT LOCK WASHERS

ZINC, GALVANIZED & STAINLESS STEEL

ORDERING INFORMATION

STAINLESS STEEL - GRADE 304

PART #	SIZE	QUANTITY / BOX
2HCSS212100	1/2-13 x 1	50 / BOX
2HCSS212114	1/2-13 x 1-1/4	50 / BOX
2HCSS212112	1/2-13 x 1-1/2	50 / BOX
2HCSS212200	1/2-13 x 2	50 / BOX
2HCSS212214	1/2-13 x 2-1/4	50 / BOX
2HCSS212212	1/2-13 x 2-1/2	50 / BOX
2HCSS212300	1/2-13 x 3	50 / BOX
2HCSS212400	1/2-13 x 4	25 / BOX
2HCSS258112	5/8-11 x 1-1/2	25 / BOX
2HCSS258200	5/8-11 x 2	25 / BOX
2HCSS258212	5/8-11 x 2-1/2	25 / BOX
2HCSS258234	5/8-11 x 2-3/4	25 / BOX
2HCSS258300	5/8-11 x 3	25 / BOX
2HCSS258312	5/8-11 x 3-1/2	25 / BOX
2HCSS234212	3/4-10 x 2-1/2	20 / BOX
2HCSS234300	3/4-10 x 3	20 / BOX
2HCSS234312	3/4-10 x 3-1/2	15 / BOX
2HCSS212100	1/2-13 x 1	50 / BOX

PART #	SIZE	QUANTITY / BOX
2HCSS212100	1/2-13 x 1	50 / BOX
2HCSS212114	1/2-13 x 1-1/4	50 / BOX
2HCSS212112	1/2-13 x 1-1/2	50 / BOX
2HCSS212200	1/2-13 x 2	50 / BOX
2HCSS212214	1/2-13 x 2-1/4	50 / BOX
2HCSS212212	1/2-13 x 2-1/2	50 / BOX
2HCSS212300	1/2-13 x 3	50 / BOX
2HCSS212400	1/2-13 x 4	25 / BOX
2HCSS258112	5/8-11 x 1-1/2	25 / BOX
2HCSS258200	5/8-11 x 2	25 / BOX
2HCSS258212	5/8-11 x 2-1/2	25 / BOX
2HCSS258234	5/8-11 x 2-3/4	25 / BOX
2HCSS258300	5/8-11 x 3	25 / BOX
2HCSS258312	5/8-11 x 3-1/2	25 / BOX
2HCSS234212	3/4-10 x 2-1/2	20 / BOX
2HCSS234300	3/4-10 x 3	20 / BOX
2HCSS234312	3/4-10 x 3-1/2	15 / BOX