

Crest Cup Fasteners

Spring washer assembly ideal for use with soft materials

When high clamp load is required, Crest Cup spring washer assembly is the solution.

Its performance-engineered compression washer provides a flat and smooth bearing surface to provide higher tension, resulting in a reliable assembly for the life of the product.

Provides Complete Design Versatility

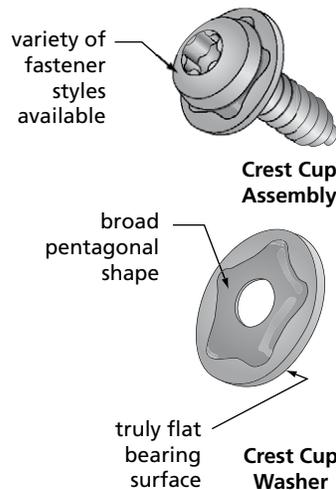
Outstanding engineering and versatility make the Crest Cup spring washer assembly the ideal alternative to costly helical/flat washer assemblies and most other commonly used spring washers.

Features

- Stamped into broad pentagonal shape
- Manufacturing method forms burr upwards, producing a truly flat bearing surface, free of sharp edges
- Preassembled to fasteners

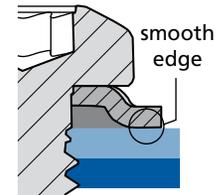
Benefits

- Can eliminate double washer combinations
- Eliminates handling of loose washers and screws
- Adapts easily to automatic assembly equipment
- Maximizes joint integrity
- Helps prevent embedding, notching and marring in application materials



Ideal for Use with Soft Materials

The manufacturing process for Crest Cup washers forms the burr away from the bearing surface. This provides a smooth edge, which prevents the washer from embedding in soft materials or marring low-ductile materials.



The broad surface of the Crest Cup washer spreads clamp force over a large area, helping to retain tension even in soft materials.

Ready to meet your Assembly Needs

Crest Cup spring washer assemblies are available in virtually any head or thread style, in inch or metric sizes to meet your specific needs.

Since Crest Cup washers are preassembled to fasteners, hand-assembly of loose washers and fasteners – and the possibility of dropped, missing or incorrect washers – is eliminated. This also simplifies inventory and ordering. The result is higher productivity and further cost savings.

Many Crest Cup assemblies are in-stock and ready for delivery. Please contact your STANLEY Engineered Fastening representative for more information.

Standard Design Guidelines

Washer Diameters	.210" - .880" (5.3mm - 22.3mm)*
Fastener Sizes	#2 - 5/16" (M2 - M8)*
Fastener Length	3/16" - 5" (4mm - 127mm) threaded length
Fastener Style	Can be used with any head, thread and point style
Washer Material	Carbon steel or stainless steel
Finish	As required

* other washer and fastener sizes available upon request

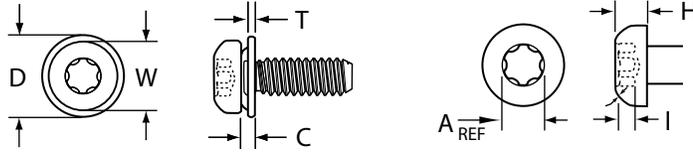
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Crest Cup Fasteners

Dimensional Specifications

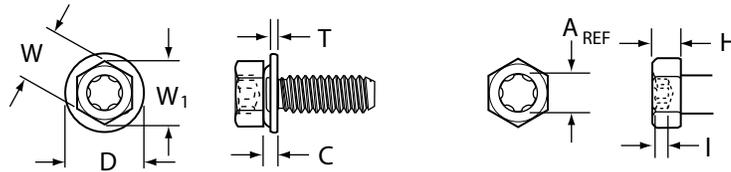
Pan Head



TORX PLUS® Drive System shown; specifications for other drive systems available upon request

	Screw Size	Pan Head			Drive		Washer		
		W max. - min.	H max. - min.	I max. - min.	A _{REF}	Size	Diameter D	Thickness T	Height C
Inch Sizes	#2	.167 - .155	.062 - .053	.037 - .032	.081	7IP	.210 - .200	.020 - .010	.040 - .020
	#4	.219 - .205	.080 - .070	.051 - .043	.111	10IP	.250 - .244	.025 - .015	.050 - .030
	#6	.270 - .256	.097 - .087	.061 - .051	.132	15IP	.320 - .307	.035 - .025	.070 - .050
	#8	.322 - .306	.115 - .105	.071 - .060	.155	20IP	.380 - .370	.040 - .030	.080 - .060
	#10	.373 - .357	.133 - .122	.082 - .069	.178	25IP	.446 - .433	.040 - .030	.080 - .060
	#12	.425 - .407	.151 - .139	.092 - .078	.200	27IP	.446 - .433	.040 - .030	.080 - .060
	1/4"	.492 - .473	.175 - .162	.102 - .086	.221	30IP	.505 - .495	.050 - .040	.100 - .080
	5/16"	.615 - .594	.218 - .203	.122 - .104	.266	40IP	.880 - .870	.075 - .065	.150 - .130
Metric Sizes	M2.0	4.00 - 3.70	1.60 - 1.40	0.81 - 0.68	1.75	6IP	5.33 - 5.08	0.50 - 0.25	1.00 - 0.50
	M2.5	5.00 - 4.70	2.10 - 1.90	1.10 - 0.93	2.39	8IP	6.35 - 6.20	0.63 - 0.38	1.26 - 0.76
	M3.0	5.60 - 5.30	2.40 - 2.20	1.30 - 1.10	2.82	10IP	6.35 - 6.20	0.63 - 0.38	1.26 - 0.76
	M3.5	7.00 - 6.60	2.60 - 2.30	1.54 - 1.31	3.35	15IP	8.12 - 7.79	0.88 - 0.63	1.76 - 1.26
	M4.0	8.00 - 7.60	3.10 - 2.80	1.81 - 1.54	3.94	20IP	9.65 - 9.40	1.00 - 0.76	2.00 - 1.53
	M5.0	9.50 - 9.10	3.70 - 3.40	2.08 - 1.75	4.52	25IP	11.33 - 11.00	1.00 - 0.76	2.00 - 1.53
	M6.0	12.00 - 11.50	4.60 - 4.30	2.58 - 2.19	5.61	30IP	12.90 - 12.57	1.27 - 1.00	2.54 - 2.00
	M8.0	16.00 - 15.50	6.00 - 5.60	3.11 - 2.64	6.76	40IP	22.35 - 22.09	1.90 - 1.65	3.81 - 3.30

Hex Head



TORX PLUS® Drive System shown; specifications for other drive systems available upon request

	Screw Size	Hex Head			Drive		Washer			
		W max. - min.	W ₁ min.	H max. - min.	I max. - min.	A _{REF}	Size	Diameter D	Thickness T	Height C
Inch Sizes	#4	.188 - .181	.202	.090 - .080	.046 - .038	.111	10IP	.250 - .244	.025 - .015	.050 - .030
	#6	.205 - .244	.272	.100 - .090	.054 - .045	.132	15IP	.320 - .307	.035 - .025	.070 - .050
	#8	.250 - .244	.272	.121 - .111	.064 - .053	.155	20IP	.380 - .370	.040 - .030	.080 - .060
	#10	.312 - .305	.340	.133 - .122	.073 - .061	.178	25IP	.446 - .433	.040 - .030	.080 - .060
	#12	.312 - .305	.340	.155 - .139	.082 - .068	.200	27IP	.446 - .433	.040 - .030	.080 - .060
	1/4"	.375 - .367	.409	.190 - .172	.102 - .075	.221	30IP	.630 - .610	.050 - .040	.100 - .080
	5/16"	.500 - .489	.545	.230 - .208	.109 - .090	.266	40IP	.880 - .870	.075 - .065	.150 - .130
Metric Sizes	M2.0	3.20 - 3.02	3.38	1.60 - 1.30	0.72 - 0.60	1.75	6IP	5.33 - 5.08	0.50 - 0.25	1.00 - 0.50
	M2.5	4.00 - 3.82	4.28	2.10 - 1.80	0.98 - 0.81	2.39	8IP	6.35 - 6.20	0.63 - 0.38	1.26 - 0.76
	M3.0	5.00 - 4.82	5.40	2.40 - 2.10	1.16 - 0.96	2.82	10IP	6.35 - 6.20	0.63 - 0.38	1.26 - 0.76
	M3.5	5.50 - 5.32	5.96	2.70 - 2.40	1.37 - 1.14	3.35	15IP	8.12 - 7.79	0.88 - 0.63	1.76 - 1.26
	M4.0	7.00 - 6.78	7.59	3.30 - 2.90	1.62 - 1.34	3.94	20IP	9.65 - 9.40	1.00 - 0.76	2.00 - 1.53
	M5.0	8.00 - 7.78	8.71	3.80 - 3.30	1.85 - 1.54	4.52	25IP	11.33 - 11.00	1.00 - 0.76	2.00 - 1.53
	M6.0	10.00 - 9.78	10.95	4.70 - 4.10	2.30 - 1.91	5.61	30IP	12.90 - 12.57	1.27 - 1.00	2.54 - 2.00
	M8.0	13.00 - 12.73	14.26	6.00 - 5.20	2.77 - 2.30	6.76	40IP	22.35 - 22.09	1.90 - 1.65	3.81 - 3.30

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