



Self-Clinching Studs



Series HCW (Wide-Head)

HCW Wide-Head studs offer advantages over weld studs and other fasteners. The wide head configuration provides strong load bearing threads in materials as thin as .040 in. (1mm).

Series	Material	Finish
HCW	Heat-treated Medium Carbon Steel	Zinc* Clear

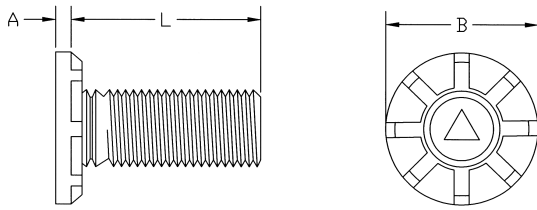
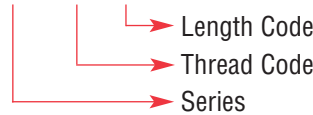
*See Finish Spec. on Page 6.

Thread: External 2A, ANSI B1.1 (6g ANSI/ASME B1.13M).**

Use in: Cold-rolled Steel or 5052-H34 Aluminum with Rockwell Hardness of HRB-85 or less:

Part Number Structure:

HCW 1032-12



**See Note 3 on Page 6 for Gauging Spec.

Dimensions & Specifications

	Thread Size	Thread Code	L Length $\pm .015$ in.							Min. Sheet Thickness	Min. Sheet Thickness	A Max.	B $\pm .01$	Max Hole in Attached Parts	Min.
			.500	.750	1.00	1.25	1.50	1.75	2.00						
INCH (in.)	#10-32	1032	-8 [†]	-12	-16	-20	-24 [†]	-28 [†]	-32 [†]	.040	.190	.048	.357	.280	.360
	1/4-20	420	-8 [†]	-12	-16	-20	-24 [†]	-28 [†]	-32 [†]	.040	.250	.060	.462	.340	.470
	5/16-18	518	-8 [†]	-12	-16	-20	-24	-28 [†]	-32 [†]	.060	.312	.083	.586	.402	.560

Thread Strength= 120 ksi.

Dimensions & Specifications

	Thread Size	Thread Code	L Length $\pm .4$ mm							Min. Sheet Thickness	Min. Sheet Thickness	A Max.	B $\pm .25$	Max Hole in Attached Parts	Min.
			15	20	25	30	35	40	50						
METRIC (mm)	M5 x 08	M5	-15 [†]	-20	-25 [†]	-30	-35 [†]	-40 [†]	-50 [†]	1	5	1.35	9.6	7.3	10
	M6 x 1.0	M6	-15 [†]	-20	-25 [†]	-30	-35 [†]	-40 [†]	-50 [†]	1	6	1.52	11.35	8.3	11.5
	M8 x 1.25	M8	-15 [†]	-20	-25 [†]	-30	-35 [†]	-40 [†]	-50 [†]	1.5	8	2.13	15.3	10.3	14.5

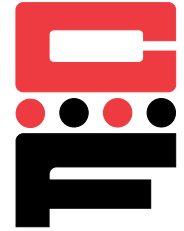
Thread Strength= 900 MPa.

[†] Not stocked, available on special order.

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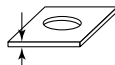

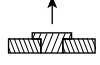
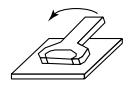

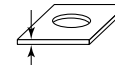

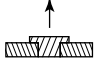
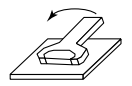
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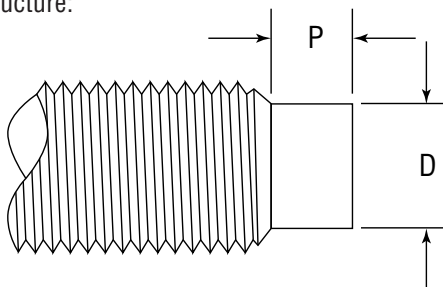
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Installation & Performance Data

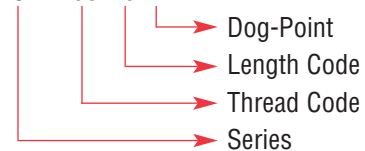
INCH (in.)						
	Thread Code	Sheet Thickness & Material	Sheet Hardness HRB	Installation Force (lbs.)	Pushout (lbs.)	Torque-out (in.-lbs.)
	1032	.040 Aluminum	27	7500	170	60
		.040 Cold Rolled Steel	67	9500	300	60
	420	.040 Aluminum	27	8000	180	120
		.040 Cold Rolled Steel	67	13500	340	130
	518	.060 Aluminum	22	9000	275	240
		.060 Cold Rolled Steel	65	15500	575	290
METRIC (mm)						
	Thread Code	Sheet Thickness & Material	Sheet Hardness HRB	Installation Force (kN)	Pushout (N)	Torque-out (N•m)
	M5	1 mm Aluminum	27	37.7	690	8.1
		1 mm Cold Rolled Steel	67	51.1	1350	8.1
	M6	1 mm Aluminum	27	39	750	11.8
		1 mm Cold Rolled Steel	67	60	1400	14.4
M8	1.5 mm Aluminum	22	42	1230	23.5	
	1.5 mm Cold Rolled Steel	65	71.1	2400	33.9	

CAPTIVE® Dog-Point Studs

CAPTIVE studs are available with a dog-point end to assist the attachment of mating nuts, which is especially useful in high-speed production assembly, using motorized nut drivers. Dog-points may be specified on most CH, TCH, HCH, CHTS, and HCW style studs as a special order, using the following Part Number Structure:



Example: HCW 1032-8 DP



INCH (in.)	D ±.005	P ±.010	METRIC (mm)	D ±.13	P ±.25
6-32	.086	.050	M3.5 x 0.6	2.4	1.27
8-32	.111	.055	M4 x 0.7	2.79	1.4
10-24	.124	.065	M5 x 0.8	3.66	1.78
10-32	.138	.065	M6 x 1	4.37	2.03
1/4 x 20	.173	.085	M8 x 1.25	6.05	2.67
1/4 x 28	.192	.085			
5/16 x 18	.228	.105			

Note: Maximum dog-point diameter is .003 in. (.08 mm) less than the minimum minor diameter of 2B or 6g mating nut threads.