

NUTS & HARDWARE

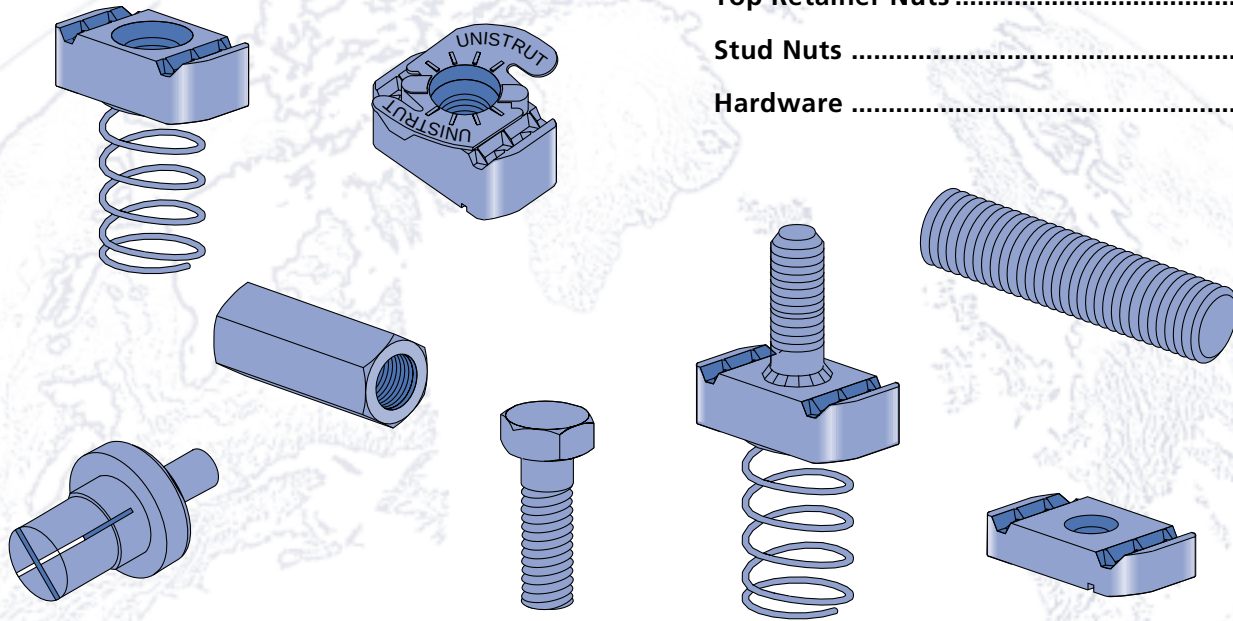
Channel Nuts With Springs 78

Channel Nuts Without Springs 79

Top Retainer Nuts 79

Stud Nuts 80

Hardware 81



MATERIAL

Unistrut channel nuts are manufactured from mild steel bars, and after machining operations are completed, they are case hardened, assuring positive biting action into the inturned edge of the Unistrut channel.

The standard channel nut conforms to ASTM A576 GR 1015 modified and A1011 SS GR 45.

Screws conform to SAE J429 GR 2 (also meets and exceeds ASTM A307).

FINISHES

Nuts, bolts and washers are electro-galvanized (EG), ASTM B633 Type III SC1 finish, unless otherwise noted.

Many hardware items are also available in stainless steel. Consult factory for ordering information.

THREADS

All threads on the nuts and bolts are Unified and American coarse screw threads.

DESIGN BOLT TORQUE

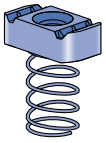
BOLT SIZE	1/4"	5/16"	3/8"	1/2"	5/8"	3/4"
FOOT LBS.	6	11	19	50	100	125
N·m	8	15	25	70	135	170

DIMENSIONS

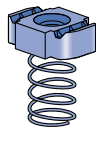
Imperial dimensions are illustrated in inches. Metric dimensions are shown in parenthesis or as noted. Unless noted, all metric dimensions are in millimeters and rounded to one decimal place.

Many Unistrut nuts, bolts and hardware items are also available in standard metric dimensions. Consult factory for ordering information.

Channel Nuts With Spring



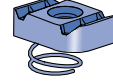
P1006 - P1010
Pg 78



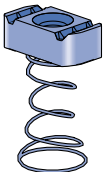
P1012S - P1024S
Pg 78



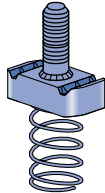
P4006 - P4010
Pg 78



P4012S - P4023S
Pg 78

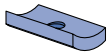


P5506 - P5510
Pg 78

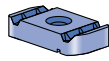


P2378 - P2382
Pg 80

Channel Nuts Without Spring



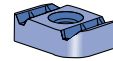
P3016
Pg 79



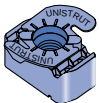
P3006 - P3013
Pg 79



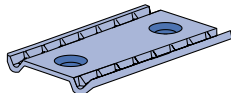
P1012 - P1024
Pg 79



P4012 - P4023
Pg 79

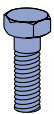


P1006T - P1010T, P4010T
Pg 79

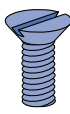


P4908
Pg 79

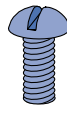
Hardware



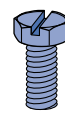
HHCS
Pg 81



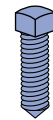
HFMS
Pg 81



HRMS
Pg 81



HSHS
Pg 81



HCSS
Pg 81



HSQN
Pg 82



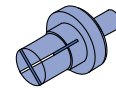
HFLW
Pg 82



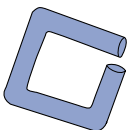
HHXN
Pg 82



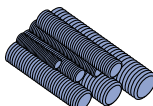
HLKW
Pg 82



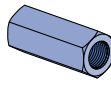
P9010
Pg 82



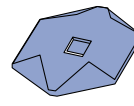
P9209
Pg 82



HTHR
Pg 83



HRCN
Pg 84



P2485
Pg 84

Maximum Allowable Pull-out And Slip Loads

Channel Nut Size-Thread	Gauge	Channel	Allowable Pull-Out Strength Lbs (kg)	Resistance to Slip Lbs (kg)	Torque Ft-Lbs (N•m)
3/4" -10	12	P1000 P3000 P5000 P5500	2,500 1,134	1,700 771	*125 170
5/8" -11	12		2,500 1,134	1,500 680	*100 135
1/2" -13	12		2,000 907	1,500 680	50 70
7/16" -14	12		1,400 635	1,000 454	35 50
3/8" -16	12		1,000 454	800 363	19 25
5/16" -18	12		800 363	500 227	11 15
1/4" -20	12		600 272	300 136	6 8

1/2" -13	12	P3300	1,500 680	1,500 680	50 70
3/8" -16	12		1,000 454	800 363	19 25
5/16" -18	12		800 363	500 227	11 15
1/4" -20	12		600 272	300 136	6 8

1/2" -13	14	P1100 & P4100	1,400 635	1,000 454	50 70
3/8" -16	14		1,000 454	750 340	19 25
5/16" -18	14		800 363	400 181	11 15
1/4" -20	14		600 272	300 136	6 8

1/2" -13	16	P2000 & P4000	1,000 454	1,000 454	50 70
3/8" -16	16		1,000 454	750 340	19 25
5/16" -18	16		800 363	400 181	11 15
1/4" -20	16		600 272	300 136	6 8

* May require 3/8" or 1/2" thick fitting.

Nut design loads include a minimum safety factor of 3.

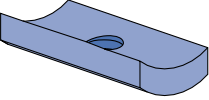
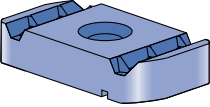
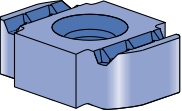
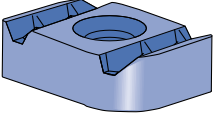
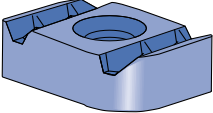
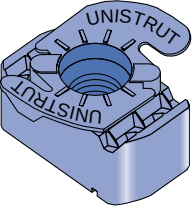
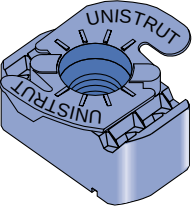
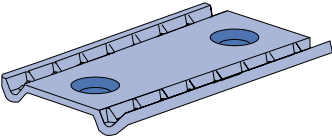
Note: Refer to the Channel Nut Selection Chart on the following two pages for the part number.

	Channel nut Part number	Nut Size Thread	Wt/100 pcs Lbs (kg)	For Use With Channel P1000, P1100, P2000, P3000			
	P1006-0832	#8 -32	7 3.2	■	-	-	-
	P1006-1024	#10 -24	7 3.2	■	-	-	-
	P1006-1420	1/4" -20	7 3.2	■	-	-	-
	P1007	5/16" -18	6 2.7	■	-	-	-
	P1008	3/8" -16	10 4.5	■	-	-	-
	P1009	7/16" -14	9 4.1	■	-	-	-
	P1010	1/2" -13	12 5.4	■	-	-	-
	For Use With Channel P1000, P1100, P2000, P3000						
	Channel nut Part number	Nut Size Thread	Wt/100 pcs Lbs (kg)				
	P1012S	5/8" -11	21 9.5	■	-	-	-
	P1023S	3/4" -10	21 9.5	■	-	-	-
	P1024S	7/8" -9	21 9.5	■	-	-	-
	For Use With Channel P3300, P4000, P4100						
	Channel nut Part number	Nut Size Thread	Wt/100 pcs Lbs (kg)				
	P4006-0832	# 8 -32	7 3.2	-	■	-	-
	P4006-1024	#10 -24	7 3.2	-	■	-	-
	P4006-1420	1/4" -20	7 3.2	-	■	-	-
	P4007	5/16" -18	6 2.7	-	■	-	-
	P4008	3/8" -16	9 4.1	-	■	-	-
	P4009	7/16" -14	9 4.1	-	■	-	-
	P4010	1/2" -13	8 3.6	-	■	-	-
	For Use With Channel P3300, P4000, P4100						
	Channel nut Part number	Nut Size Thread	Wt/100 pcs Lbs (kg)				
	P4012S	5/8" -11	10 4.5	-	■	-	-
	P4023S	3/4" -10	10 4.5	-	■	-	-
	For Use With P5500						
	P5506-0832	#8 -32	7 3.2	-	-	-	■
	P5506-1024	#10 -24	7 3.2	-	-	-	■
	P5506-1420	1/4" -20	7 3.2	-	-	-	■
	P5507	5/16" -18	6 2.7	-	-	-	■
	P5508	3/8" -16	10 4.5	-	-	-	■
	P5509	7/16" -14	10 4.5	-	-	-	■
	P5510	1/2" -13	12 5.4	-	-	-	■

■ Acceptable for use

Channel Nuts Without Spring

UNISTRUT®

	Channel nut Part number	Nut Size Thread	Wt/100 pcs Lbs (kg)	For Use With Channel			
				P1000, P1100, P2000, P3000	P3300, P4000 P4100	P5000	P5500
	P3016-0632	#6 -32	2 0.9	■	■	■	■
	P3016-0832	#8 -32	2 0.9	■	■	■	■
	P3016-1024	#10 -24	4 1.8	■	■	■	■
	P3016-1420	1/4" -20	4 1.8	■	■	■	■
	Channel nut Part number	Nut Size Thread	Wt/100 pcs Lbs (kg)	For Use With Channel			
				P1000, P1100, P2000, P3000	P3300, P4000 P4100	P5000	P5500
	P3006-0832	#8 -32	6 2.7	■	■	■	■
	P3006-1024	#10 -24	6 2.7	■	■	■	■
	P3006-1420	1/4" -20	6 2.7	■	■	■	■
	P3007	5/16" -18	6 2.7	■	■	■	■
	P3008	3/8" -16	9 4.1	■	■	■	■
	P3009	7/16" -14	9 4.1	■	■	■	■
	P3010	1/2" -13	11 5.0	■	-	■	■
	P3013	1/2" -13	8 3.6	-	■	-	-
	Channel nut Part number	Nut Size Thread	Wt/100 pcs Lbs (kg)	For Use With Channel			
				P1000, P1100, P2000, P3000		P5000	P5500
	P1012	5/8" -11	20 9.1	■	-	■	■
	P1023	3/4" -10	20 9.1	■	-	■	■
	P1024	7/8" -9	20 9.1	■	-	■	■
	Channel nut Part number	Nut Size Thread	Wt/100 pcs Lbs (kg)	For Use With Channel			
				P3300, P4000, P4100			
	P4012	5/8" -11	11 5.0	-	■	-	-
	P4023	3/4" -10	11 5.0	-	■	-	-
	Channel nut Part number	Nut Size Thread	Wt/100 pcs Lbs (kg)	For Use With Channel			
				P1000, P1100, P2000, P3000	P3300, P4000 P4100	P5000	P5500
	P1006T1420	1/4" -20	7 3.2	■	■	■	■
	P1008T	3/8" -16	10 4.5	■	■	■	■
	P1010T	1/2" -13	12 5.4	■	-	■	■
	P4010T	1/2" -13	8 3.6	-	■	-	-
	Channel nut Part number	Nut Size Thread	Wt/100 pcs Lbs (kg)	For Use With Channel			
				P1000, P1100, P2000, P3000	P3300, P4000 P4100	P5000	P5500
	P4908	3/8" -16	17.5 7.9	■	■	■	■
Double Conveyor Adjusting Nut							

■ Acceptable for use

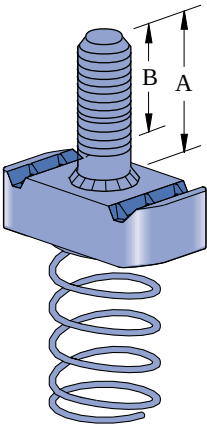
15/8" Channel
Teleslur
System

Nuts & Hardware

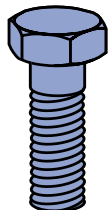
General
FittingsPipe/Conduit
SupportsElectrical
FittingsConcrete
Inserts1 1/2" Framing
System1 3/8" Framing
SystemFiberglass
SystemSpecial
MetalsPrimeAngle
SystemProduct
Index



Channel Stud Nut With Spring

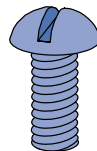
	Channel nut Part number	Nut Size Thread	"A" Stud In (mm)	"B" Thread In (mm)	Wt/100 pcs Lbs (kg)	For Use With Channel P1000, P1100, P2000, P3000
 All Stud Nut grooves are serrated. Special stud lengths and thread lengths can be supplied upon request. ■ Acceptable for use	P2378-1	1/4" -20	7/8 22.2	5/8 15.9	8 3.6	■
	P2378-2		1 1/8 28.6	7/8 22.2	9 4.1	■
	P2378-3		1 3/8 34.9	1 1/8 28.6	9 4.1	■
	P2379-1	5/16" -18	7/8 22.2	5/8 15.9	12 5.4	■
	P2379-2		1 1/8 28.6	7/8 22.2	12 5.4	■
	P2379-3		1 3/8 34.9	1 1/8 28.6	13 5.9	■
	P2380-1	3/8" -16	7/8 22.2	5/8 15.9	13 5.9	■
	P2380-2		1 1/8 28.6	7/8 22.2	13 5.9	■
	P2380-3		1 3/8 34.9	1 1/8 28.6	13 5.9	■
	P2380-4	1 5/8" -13	1 5/8 41.3	1 3/8 34.9	15 6.8	■
	P2380-5		1 7/8 47.6	1 5/8 41.3	16 7.3	■
	P2380-6		2 1/8 54.0	1 7/8 47.6	16 7.3	■
	P2381-2	1/2" -13	7/8 22.2	1/2 12.7	14 6.4	■
	P2381-3		1 1/8 28.6	3/4 19.1	15 6.8	■
	P2381-4		1 3/8 34.9	1 25.4	17 7.7	■
	P2381-5	1 1/4" -11	1 5/8 41.3	1 1/4 31.8	18 8.2	■
	P2381-6		1 7/8 47.6	1 1/2 38.1	19 8.6	■
	P2381-7		2 1/8 54.0	1 3/4 44.5	20 9.1	■
	P2382-2	5/8" -11	1 1/8 28.6	5/8 15.9	18 8.2	■
	P2382-3		1 3/8 34.9	7/8 22.2	20 9.1	■

Hex Head Cap Screws



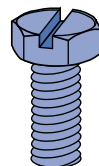
Part No.	Size	Wt/100 pcs Lbs (kg)
HHCS025044EG	1/4" x 7/16"	1.0 0.5
HHCS025075EG	1/4" x 3/4"	1.3 0.6
HHCS025150EG	1/4" x 1 1/2"	2.6 1.2
HHCS031125EG	5/16" x 1 1/4"	3.6 1.6
HHCS037075EG	3/8" x 3/4"	4.0 1.8
HHCS037087EG	3/8" x 7/8"	4.4 2.0
HHCS037100EG	3/8" x 1"	4.5 2.0
HHCS037125EG	3/8" x 1 1/4"	5.3 2.4
HHCS037150EG	3/8" x 1 1/2"	6.0 2.7
HHCS037200EG	3/8" x 2"	7.6 3.4
HHCS037225EG	3/8" x 2 1/4"	8.4 3.8
HHCS037250EG	3/8" x 2 1/2"	9.2 4.2
HHCS050094EG	1/2" x 1 5/16"	9.1 4.1
HHCS050119EG	1/2" x 1 3/16"	10.2 4.6
HHCS050150EG	1/2" x 1 1/2"	11.6 5.3
HHCS050175EG	1/2" x 1 3/4"	13.1 5.9
HHCS050200EG	1/2" x 2"	14.6 6.6
HHCS050225EG	1/2" x 2 1/4"	16 7.3
HHCS050250EG	1/2" x 2 1/2"	17.5 7.9

Round Head Machine Screws



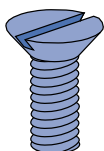
Part No.	Size	Wt/100 pcs Lbs (kg)
HRMS025050EG	1/4" x 1/2"	1 0.5
HRMS025075EG	1/4" x 3/4"	1.2 0.5
HRMS025100EG	1/4" x 1"	1.5 0.7
HRMS031100EG	5/16" x 1"	2.6 1.2
HRMS031125EG	5/16" x 1 1/4"	3 1.4
HRMS037100EG	3/8" x 1"	4.1 1.9
HRMS037125EG	3/8" x 1 1/4"	4.7 2.1
HRMS037150EG	3/8" x 1 1/2"	5.3 2.4

Hex Slotted Machine Screws



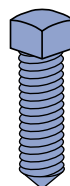
Part No.	Size	Wt/100 pcs Lbs (kg)
HSHS025050EG	1/4" x 1/2"	1.4 0.6
HSHS025062EG	1/4" x 5/8"	1.5 0.7
HSHS025075EG	1/4" x 3/4"	1.7 0.8
HSHS031100EG	5/16" x 1"	2.6 1.2
HSHS031125EG	5/16" x 1 1/4"	3 1.4
HSHS031150EG	5/16" x 1 1/2"	3.4 1.5
HSHS037125EG	3/8" x 1 1/4"	5.3 2.4

Flat Head Machine Screws



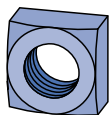
Part No.	Size	Wt/100 pcs Lbs (kg)
HFMS025062EG	1/4" x 5/8"	1.2 0.5
HFMS031100EG	5/16" x 1"	2.6 1.2
HFMS050100EG	1/2" x 1"	9.3 4.2

Cone Point Set Screws



Part No.	Size	Wt/100 pcs Lbs (kg)
HCSS025100EG	1/4" x 1"	2.8 1.3
HCSS031150EG	5/16" x 1 1/2"	3.9 1.8
HCSS037150EG	3/8" x 1 1/2"	4.5 2.0
HCSS037200EG	3/8" x 2"	6.1 2.8
HCSS050150EG	1/2" x 1 1/2"	8.5 3.9
HCSS050200EG	1/2" x 2"	11.4 5.2
HCSS062150EG	5/8" x 1 1/2"	14.5 6.6
HCSS062200EG	5/8" x 2"	23.0 10.4

Square Nuts



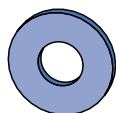
Part No.	Size	Wt/100 pcs Lbs (kg)
HSQN025EG	1/4"	0.9 0.4
HSQN031EG	5/16"	1.6 0.7
HSQN037EG	3/8"	2.7 1.2
HSQN050EG	1/2"	5.8 2.6
HSQN062EG	5/8"	10.7 4.9
HSQN075EG	3/4"	15.4 6.9
HSQN087EG	7/8"	24.9 11.3
HSQN100EG	1"	36.3 16.5

Hexagon Nuts



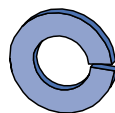
Part No.	Size	Wt/100 pcs Lbs (kg)
HHXN025EG	1/4"	0.6 0.3
HHXN031EG	5/16"	1.2 0.5
HHXN037EG	3/8"	1.6 0.7
HHXN050EG	1/2"	4.8 2.2
HHXN062EG	5/8"	7.3 3.3
HHXN075EG	3/4"	11.9 5.4
HHXN087EG	7/8"	19 8.6
HHXN100EG	1"	28.3 12.8

Flat Washers



Part No.	Size	Wt/100 pcs Lbs (kg)
HFLW025EG	1/4"	0.8 0.4
HFLW031EG	5/16"	1 0.5
HFLW037EG	3/8"	1.5 0.7
HFLW050EG	1/2"	3.5 1.6
HFLW062EG	5/8"	7.7 3.5
HFLW075EG	3/4"	11 5.0
HFLW087EG	7/8"	15.3 6.9
HFLW100EG	1"	18.8 8.5

Lock Washers

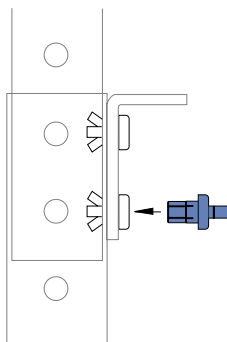
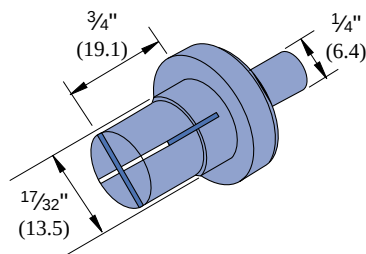


Part No.	Size	Wt/100 pcs Lbs (kg)
HLKW025EG	1/4"	0.25 0.1
HLKW031EG	5/16"	0.41 0.2
HLKW037EG	3/8"	0.63 0.3
HLKW050EG	1/2"	1.32 0.60
HLKW062EG	5/8"	2.20 1.0
HLKW075EG	3/4"	3.80 1.7
HLKW087EG	7/8"	6.00 2.7
HLKW100EG	1"	8.80 4.0

P9010

Rivet

Wt/100 pcs: 10.0 Lbs (4.5 kg)

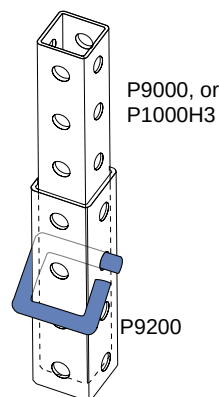
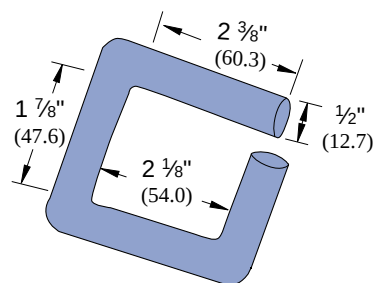


For use with
P9000, P9200 & P1000 H3

P9209

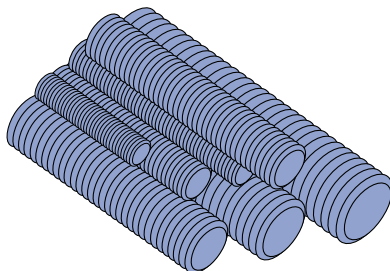
Gravity Pin

Wt/100 pcs: 10.0 Lbs (4.5 kg)



For use with
P9000, P9200 & P1000 H3.

Steel Threaded Rod



Part No.	Size	Wt/100 Ft. Lbs (kg)
HTHR025	1/4" x 20	13 5.9
HTHR031	5/16" x 18	20 9.1
HTHR037	3/8" x 16	30 13.6
HTHR044	7/16" x 14	30 13.6
HTHR050	1/2" x 13	53 24.0
HTHR062	5/8" x 11	84 38.1
HTHR075	3/4" x 10	124 56.2
HTHR087	7/8" x 9	170 77.1
HTHR100	1" x 8	223 101.2

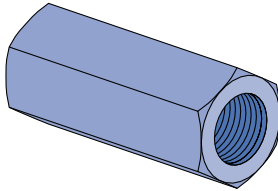
Load Carrying Capacity Of Threaded Hot Rolled Steel
Conforming To Astm A575 And A576

Nominal Diameter	Root Area In ² (mm ²)	Maximum Safe Load at 650°F (343°C) Lbs (kg)
3/8	0.068 43.9	610 277
1/2	0.126 81.3	1,130 513
5/8	0.202 130.3	1,810 821
3/4	0.302 194.8	2,710 1,229
7/8	0.419 270.3	3,770 1,710
1	0.552 356.1	4,960 2,250
1 1/8	0.693 447.1	6,230 2,826

Nominal Diameter	Root Area In ² (mm ²)	Maximum Safe Load at 650°F (343°C) Lbs (kg)
1 1/4	0.889 573.5	8,000 3,629
1 3/8	1.053 679.4	9,470 4,296
1 1/2	1.293 834.2	11,630 5,275
1 5/8	1.515 977.4	13,630 6,182
1 3/4	1.714 1,105.8	15,690 7,117
1 7/8	2.048 1,321.3	18,430 8,360
2	2.292 1,478.7	20,690 9,385

"Extracted from American Standard Code for pressure piping (ASA B31.1-1973, with permission of the publisher, the American Society of Mechanical Engineers, United Engineering Center, 345 E. 47th Street, New York, New York)."

Steel Coupler Nuts

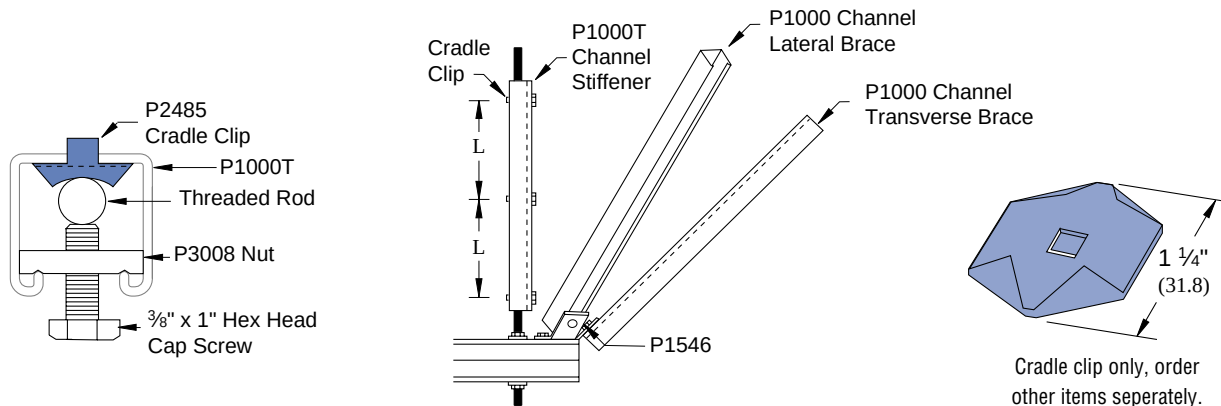


Part No.	Size	Length In (mm)	Wt/100 pcs Lbs (kg)
HRCN025	1/4" - 20	7/8" 22.2	1.9 0.9
HRCN031	5/16" - 18	1 3/4" 44.5	7.5 3.4
HRCN037	3/8" - 16	1 3/4" 44.5	9.0 4.1
HRCN044	7/16" - 14	1 3/4" 44.5	10.4 4.7
HRCN050	1/2" - 13	1 3/4" 44.5	10.0 4.5
HRCN062	5/8" - 11	2 1/8" 54.0	18.0 8.2
HRCN075	3/4" - 10	2 1/4" 57.2	28.0 12.7
HRCN087	7/8" - 9	2 1/2" 63.5	55.0 24.9
HRCN100	1" - 8	2 3/4" 69.9	73.0 33.1

P2485

Cradle Clip

Wt/100 pcs: 3.0 Lbs (1.4 kg)



Refer to seismic bracing systems catalog for more detailed information.

Rod Size In	Root Area In ² (mm ²)	Root Diameter In (mm)	Radius of Gyration In (mm)	Max. Allowable Rod Compression @100% Lbs (kg)	Clip Spacing (L)		
					Rod Stress @50% 4,500 PSI 31,026 kPa	Rod Stress @75% 6,750 PSI 46,539 kPa	Rod Stress @100% 9,000 PSI 62,053 kPa
					In (mm)	In (mm)	In (mm)
3/8"	0.068 43.87	0.314 7.98	0.0785 1.99	610 277	14 356	12 305	10 254
1/2"	0.126 81.29	0.425 10.8	0.1063 2.7	1130 513	20 508	16 406	14 356
5/8"	0.202 130.3	0.536 13.61	0.1341 3.41	1810 821	24 610	20 508	16 406
3/4"	0.302 194.8	0.652 16.56	0.163 4.14	2710 1,229	30 762	24 610	20 508
7/8"	0.419 270.3	0.73 18.54	0.183 4.65	3770 1,710	35 889	28 711	25 635
1"	0.552 356.1	0.838 21.29	0.21 5.33	4960 2,250	40 1,016	33 838	28 711