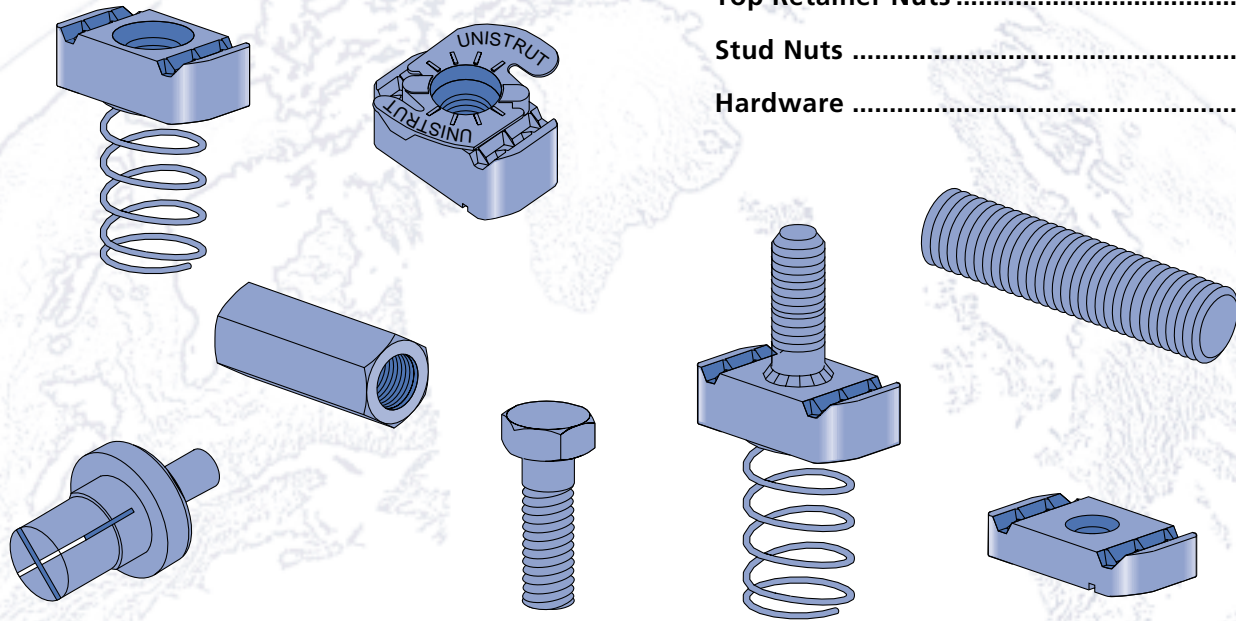




UNISTRUT®

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

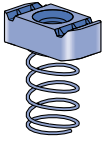
DIMENSIONS

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.

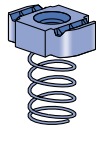
Many Unistrut nuts, bolts and hardware items are also available in standard metric dimensions. Consult factory for ordering information.



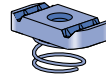
Channel Nuts With Spring



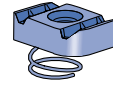
P1006 - P1010
Pg 78



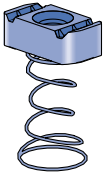
P1012S - P1024S
Pg 78



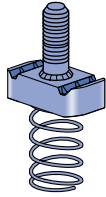
P4006 - P4010
Pg 78



P4012S - P4023S
Pg 78

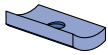


P5506 - P5510
Pg 78

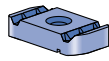


P2378 - P2382
Pg 80

Channel Nuts Without Spring



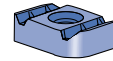
P3016
Pg 79



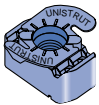
P3006 - P3013
Pg 79



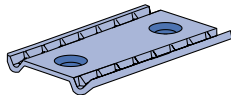
P1012 - P1024
Pg 79



P4012 - P4023
Pg 79

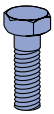


P1006T - P1010T, P4010T
Pg 79

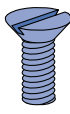


P4908
Pg 79

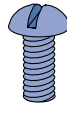
Hardware



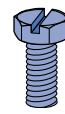
HHCS
Pg 81



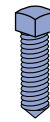
HFMS
Pg 81



HRMS
Pg 81



HSHS
Pg 81



HCSS
Pg 81



HSQN
Pg 82



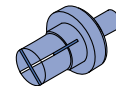
HFLW
Pg 82



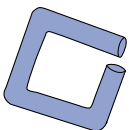
HHXN
Pg 82



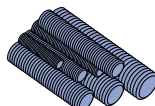
HLKW
Pg 82



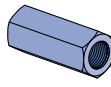
P9010
Pg 82



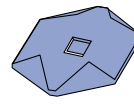
P9209
Pg 82



HTHR
Pg 83



HRCN
Pg 84



P2485
Pg 84

15/16" Channel
Telestrut System
Nuts & Hardware
General Fittings
Pipe/Conduit Supports
Electrical Fittings
Concrete Inserts
1 1/4" Framing System
1 3/16" Framing System
Fiberglass System
Special Metals
PrimeAngle System
Product Index

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 (Nm)
3/4" -10	12	P1000 P3000 P5000 P5500	2,500	1,700	*125
			1,134	771	170
5/8" -11	12		2,500	1,500	*100
			1,134	680	135
1/2" -13	12		2,000	1,500	50
			907	680	70
7/16" -14	12		1,400	1,000	35
			635	454	50
3/8" -16	12		1,000	800	19
			454	363	25
5/16" -18	12	800	500	11	
		363	227	15	
1/4" -20	12	600	300	6	
		272	136	8	

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

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

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

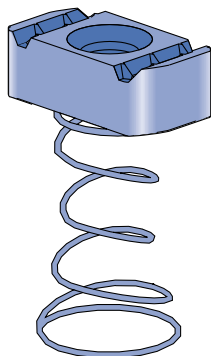
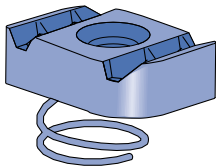
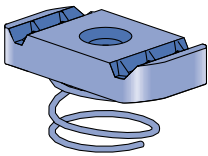
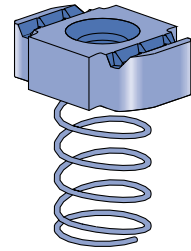
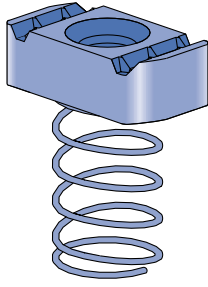
* May require 3/8" or 1/2" thick fitting.

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.

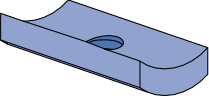
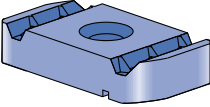


15/16" Channel
 Telesrnut System
 Nuts & Hardware
 General Fittings
 Pipe/Conduit Supports
 Electrical Fittings
 Concrete Inserts
 1 1/4" Framing System
 1 3/16" Framing System
 Fiberglass System
 Special Metals
 PrimeAngle System
 Product Index



■ Acceptable for use

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	■	-	-	-
Channel nut Part number	Nut Size Thread	Wt/100 pcs Lbs (kg)	For Use With Channel P1000, P1100, P2000, P3000			
P1012S	5/8" -11	21 9.5	■	-	-	-
P1023S	3/4" -10	21 9.5	■	-	-	-
P1024S	7/8" -9	21 9.5	■	-	-	-
Channel nut Part number	Nut Size Thread	Wt/100 pcs Lbs (kg)	For Use With Channel P3300, P4000, P4100			
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	-	■	-	-
Channel nut Part number	Nut Size Thread	Wt/100 pcs Lbs (kg)	For Use With Channel P3300, P4000, P4100			
P4012S	5/8" -11	10 4.5	-	■	-	-
P4023S	3/4" -10	10 4.5	-	■	-	-
Channel nut Part number	Nut Size Thread	Wt/100 pcs Lbs (kg)	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	-	-	-	■

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			
	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			
	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			
	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			
	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			
	P4908 3/8" -16	17.5 7.9	■	■	■	■
Double Conveyor Adjusting Nut						

■ Acceptable for use

15/8" Channel
Telestrut System

Nuts & Hardware

General Fittings

Pipe/Conduit Supports

Electrical Fittings

Concrete Inserts

1 1/2" Framing System

1 3/4" Framing System

1 3/8" Framing System

Fiberglass System

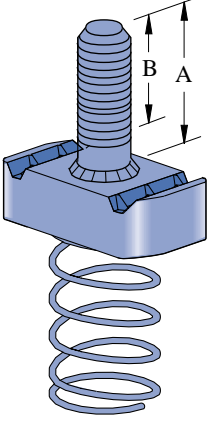
Special Metals

PrimeAngle System

Product Index



Channel Stud Nut With Spring

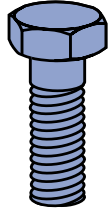


All Stud Nut grooves are serrated.
Special stud lengths and thread lengths can be supplied upon request.

■ Acceptable for use

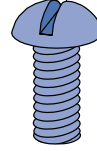
Channel nut Part number	Nut Size Thread	"A" Stud In (mm)	"B" Thread In (mm)	Wt/100 pcs Lbs (kg)	For Use With Channel P1000, P1100, P2000, P3000
P2378-1	1/4" -20	7/8	5/8	8	■
		22.2	15.9	3.6	
P2378-2		1 1/8	7/8	9	■
		28.6	22.2	4.1	
P2378-3		1 3/8	1 1/8	9	■
		34.9	28.6	4.1	
P2379-1	5/16" -18	7/8	5/8	12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

Hex Head Cap Screws



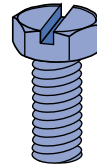
Part No.	Size	Wt/100 pcs Lbs (kg)
HHCS025044EG	1/4" x 7/16"	1.0 0.5
HHCS025075EG	1/4" x 3/4"	1.3 0.6
HHCS025150EG	1/4" x 1 1/2"	2.6 1.2
HHCS031125EG	5/16" x 1 1/4"	3.6 1.6
HHCS037075EG	3/8" x 3/4"	4.0 1.8
HHCS037087EG	3/8" x 7/8"	4.4 2.0
HHCS037100EG	3/8" x 1"	4.5 2.0
HHCS037125EG	3/8" x 1 1/4"	5.3 2.4
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 15/16"	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



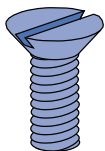
Part No.	Size	Wt/100 pcs Lbs (kg)
HRMS025050EG	1/4" x 1/2"	1 0.5
HRMS025075EG	1/4" x 3/4"	1.2 0.5
HRMS025100EG	1/4" x 1"	1.5 0.7
HRMS031100EG	5/16" x 1"	2.6 1.2
HRMS031125EG	5/16" x 1 1/4"	3 1.4
HRMS037100EG	3/8" x 1"	4.1 1.9
HRMS037125EG	3/8" x 1 1/4"	4.7 2.1
HRMS037150EG	3/8" x 1 1/2"	5.3 2.4

Hex Slotted Machine Screws



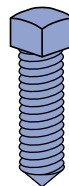
Part No.	Size	Wt/100 pcs Lbs (kg)
HSHS025050EG	1/4" x 1/2"	1.4 0.6
HSHS025062EG	1/4" x 5/8"	1.5 0.7
HSHS025075EG	1/4" x 3/4"	1.7 0.8
HSHS031100EG	5/16" x 1"	2.6 1.2
HSHS031125EG	5/16" x 1 1/4"	3 1.4
HSHS031150EG	5/16" x 1 1/2"	3.4 1.5
HSHS037125EG	3/8" x 1 1/4"	5.3 2.4

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

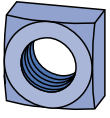
Cone Point Set Screws



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

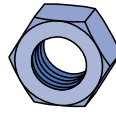


Square Nuts



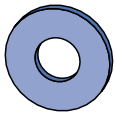
Part No.	Size	Wt/100 pcs Lbs (kg)	
HSQN025EG	1/4"	0.9 0.4	
HSQN031EG	5/16"	1.6 0.7	
HSQN037EG	3/8"	2.7 1.2	
HSQN050EG	1/2"	5.8 2.6	
HSQN062EG	5/8"	10.7 4.9	
HSQN075EG	3/4"	15.4 6.9	
HSQN087EG	7/8"	24.9 11.3	
HSQN100EG	1"	36.3 16.5	

Hexagon Nuts



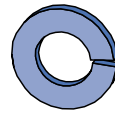
Part No.	Size	Wt/100 pcs Lbs (kg)	
HHXN025EG	1/4"	0.6 0.3	
HHXN031EG	5/16"	1.2 0.5	
HHXN037EG	3/8"	1.6 0.7	
HHXN050EG	1/2"	4.8 2.2	
HHXN062EG	5/8"	7.3 3.3	
HHXN075EG	3/4"	11.9 5.4	
HHXN087EG	7/8"	19 8.6	
HHXN100EG	1"	28.3 12.8	

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

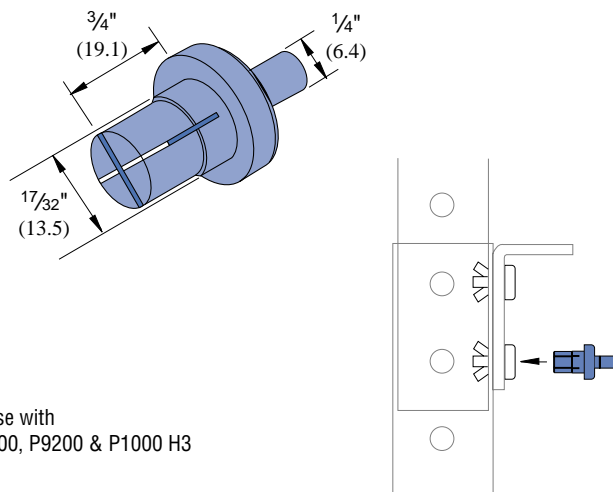


Part No.	Size	Wt/100 pcs Lbs (kg)	
HLKW025EG	1/4"	0.25 0.1	
HLKW031EG	5/16"	0.41 0.2	
HLKW037EG	3/8"	0.63 0.3	
HLKW050EG	1/2"	1.32 0.60	
HLKW062EG	5/8"	2.20 1.0	
HLKW075EG	3/4"	3.80 1.7	
HLKW087EG	7/8"	6.00 2.7	
HLKW100EG	1"	8.80 4.0	

P9010

Rivet

Wt/100 pcs: 10.0 Lbs (4.5 kg)

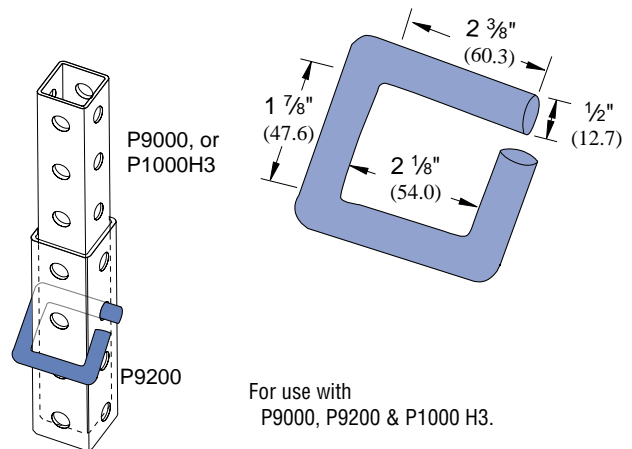


For use with
P9000, P9200 & P1000 H3

P9209

Gravity Pin

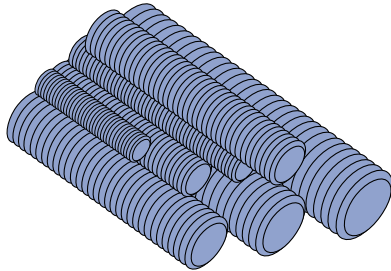
Wt/100 pcs: 10.0 Lbs (4.5 kg)



For use with
P9000, P9200 & P1000 H3.

1 1/2" Channel
 Telesruct System
 Nuts & Hardware
 General Fittings
 Pipe/Conduit Supports
 Electrical Fittings
 Concrete Inserts
 1 1/4" Framing System
 1 3/16" Framing System
 Fiberglass System
 Special Metals
 PrimeAngle System
 Product Index

Steel Threaded Rod



Part No.	Size	Wt/100 Ft. Lbs (kg)
HTHR025	¼" x 20	13 5.9
HTHR031	⅝" x 18	20 9.1
HTHR037	⅜" x 16	30 13.6
HTHR044	⅞" x 14	30 13.6
HTHR050	½" x 13	53 24.0
HTHR062	⅝" x 11	84 38.1
HTHR075	¾" x 10	124 56.2
HTHR087	⅞" 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

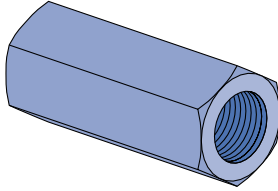
Nominal Diameter	Root Area In ² (mm ²)	Maximum Safe Load at 650°F (343°C) Lbs (kg)
⅜	0.068 43.9	610 277
½	0.126 81.3	1,130 513
⅝	0.202 130.3	1,810 821
¾	0.302 194.8	2,710 1,229
⅞	0.419 270.3	3,770 1,710
1	0.552 356.1	4,960 2,250
1⅝	0.693 447.1	6,230 2,826

Nominal Diameter	Root Area In ² (mm ²)	Maximum Safe Load at 650°F (343°C) Lbs (kg)
1¼	0.889 573.5	8,000 3,629
1⅜	1.053 679.4	9,470 4,296
1½	1.293 834.2	11,630 5,275
1⅝	1.515 977.4	13,630 6,182
1¾	1.714 1,105.8	15,690 7,117
1⅞	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

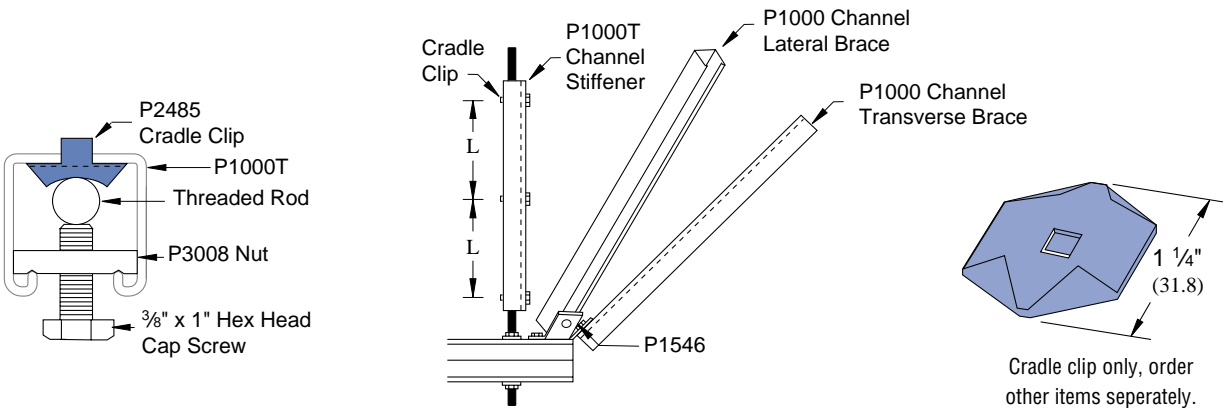


Part No.	Size	Length In (mm)	Wt/100 pcs Lbs (kg)
HRCN025	1/4" - 20	7/8" 22.2	1.9 0.9
HRCN031	5/16" - 18	1 3/4" 44.5	7.5 3.4
HRCN037	3/8" - 16	1 3/4" 44.5	9.0 4.1
HRCN044	7/16" - 14	1 3/4" 44.5	10.4 4.7
HRCN050	1/2" - 13	1 3/4" 44.5	10.0 4.5
HRCN062	5/8" - 11	2 1/8" 54.0	18.0 8.2
HRCN075	3/4" - 10	2 1/4" 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 In (mm)	Rod Stress @75% 6,750 PSI 46,539 kPa In (mm)	Rod Stress @100% 9,000 PSI 62,053 kPa 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

1 5/8" Channel
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