

## Channel Nuts With Spring



P1006 - P1010



P10125 - P10245



P4006 - P4010



P5506 - P5510



P1370 - P1382

## Channel Nuts Without Spring



P3014



P3006 - P3012



P1012 - P1024



P4012 - P4022



P1006T - P1010T, P4006T



P4301



P1014

## Hardware



MHCS



HFNS



HRMS



BSMS



HCSS



BSQN



HMCN



HPLW



HLCW



HOCW



HTMR



HRON  
Pg 75



P2406



P2405



P2405K



K1062 - K1064

## MAXIMUM ALLOWABLE PULL-OUT AND SLIP LOADS

Channel	Channel Nut Size-Thread	Gauge	Allowable Pull-Out Strength Lbs (kN)	Resistance to Slip Lbs (kN)	Torque Ft-Lbs (Nm)
P1000 P3000 P4400 P4526 P5000 P5500	3/8" - 9	12	2,500 11.12	1,700 7.56	*125 170
	1/2" - 10	12	2,500 11.12	1,700 7.56	*125 170
	5/8" - 11	12	2,500 11.12	1,500 6.67	*100 135
	1/2" - 13	12	2,000 8.90	1,500 6.67	50 70
	3/8" - 14	12	1,400 6.23	1,000 4.45	35 50
	3/4" - 16	12	1,000 4.45	800 3.56	19 25
	1/2" - 18	12	800 3.56	500 2.22	11 15
	1/4" - 20	12	600 2.67	300 1.33	6 8
P3300	1/2" - 13	12	1,500 6.67	1,500 6.67	50 70
	3/4" - 16	12	1,000 4.45	800 3.56	19 25
	1/2" - 18	12	800 3.56	500 2.22	11 15
	1/4" - 20	12	600 2.67	300 1.33	6 8

Channel	Channel Nut Size-Thread	Gauge	Allowable Pull-Out Strength Lbs (kN)	Resistance to Slip Lbs (kN)	Torque Ft-Lbs (Nm)
P1100 & P4100	1/2" - 13	14	1,400 6.23	1,000 4.45	50 70
	3/8" - 16	14	1,000 4.45	750 3.34	19 25
	1/2" - 18	14	800 3.56	400 1.78	11 15
	1/4" - 20	14	600 2.67	300 1.33	6 8
	P2000 & P4000	1/2" - 13	16	1,000 4.45	1,000 4.54
3/4" - 16		16	1,000 4.45	750 3.34	19 25
1/2" - 18		16	800 3.56	400 1.78	11 15
1/4" - 20		16	600 2.67	300 1.33	6 8

\* May require 1/8" or 1/4" 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 With Spring**

	Part Number	Nut Size Thread	Wt/100 pcs Lbs (kg)	Use With
	P1006-0832	#8 -32	7 (3.2)	P1000, P1100, P2000, P3000
P1006-1024	#10 -24	7 (3.2)		
P1006-1420	1/4" -20	7 (3.2)		
P1007	1/4" -18	6 (2.7)		
P1008	3/8" -16	10 (4.5)		
P1009	1/2" -14	9 (4.1)		
P1010	1/2" -13	12 (5.4)		
	Part Number	Nut Size Thread	Wt/100 pcs Lbs (kg)	Use With
	P1012S	3/8" -11	21 (9.5)	P1000, P1100, P2000, P3000
P1023S	3/8" -10	21 (9.5)		
P1024S	1/2" -9	21 (9.5)		
	Part Number	Nut Size Thread	Wt/100 pcs Lbs (kg)	Use With
	P4006-0832	#8 -32	7 (3.2)	P3300, P4000, P4400, P4520, P4100
P4006-1024	#10 -24	7 (3.2)		
P4006-1420	1/4" -20	7 (3.2)		
P4007	1/4" -18	6 (2.7)		
P4008	3/8" -16	9 (4.1)		
P4009	1/2" -14	9 (4.1)		
P4010	1/2" -13	8 (3.6)		
	Part Number	Nut Size Thread	Wt/100 pcs Lbs (kg)	Use With
	P5506-0832	#8 -32	7 (3.2)	P5000, P5500
P5506-1024	#10 -24	7 (3.2)		
P5506-1420	1/4" -20	7 (3.2)		
P5507	1/4" -18	6 (2.7)		
P5508	3/8" -16	10 (4.5)		
P5509	1/2" -14	10 (4.5)		
P5510	1/2" -13	12 (5.4)		

**Channel Nut Without Spring**

	Part Number	Nut Size Thread	Wt/100 pcs Lbs (kg)	Use With
	P3016-0632	#6 -32	2 (0.9)	Any Channel
P3016-0832	#8 -32	2 (0.9)		
P3016-1024	#10 -24	4 (1.8)		
P3016-1420	1/4" -20	4 (1.8)		
	Part Number	Nut Size Thread	Wt/100 pcs Lbs (kg)	Use With
	P3006-0832	#8 -32	6 (2.7)	Any Channel
P3006-1024	#10 -24	6 (2.7)		
P3006-1420	1/4" -20	6 (2.7)		
P3007	1/4" -18	6 (2.7)		
 <td>P3008</td> <td>3/8" -16</td> <td>9 (4.1)</td> <td rowspan="2">Any Channel Except P3300, P4000, P4400, P4520, P4100</td>	P3008	3/8" -16	9 (4.1)	Any Channel Except P3300, P4000, P4400, P4520, P4100
	P3009	1/2" -14	9 (4.1)	
 <td>P3010</td> <td>1/2" -13</td> <td>11 (5.0)</td> <td rowspan="2">P3300, P4000, P4400, P4520, P4100</td>	P3010	1/2" -13	11 (5.0)	P3300, P4000, P4400, P4520, P4100
	P3013	1/2" -13	8 (3.6)	
	Part Number	Nut Size Thread	Wt/100 pcs Lbs (kg)	Use With
	P1012	3/8" -11	20 (9.1)	Any Channel Except P3300, P4000, P4400, P4520, P4100
P1023	3/8" -10	20 (9.1)		
P1024	1/2" -9	20 (9.1)		
	Part Number	Nut Size Thread	Wt/100 pcs Lbs (kg)	Use With
	P4012	3/8" -11	11 (5.0)	P3300, P4000, P4400, P4520, P4100
P4023	3/8" -10	11 (5.0)		
	Part Number	Nut Size Thread	Wt/100 pcs Lbs (kg)	Use With
	P1006T	1/4" -20	7 (3.2)	Any Channel
P1008T	3/8" -16	10 (4.5)		
 <td>P1010T</td> <td>1/2" -13</td> <td>12 (5.4)</td> <td rowspan="2">Any Channel Except P3300, P4000, P4400, P4520, P4100</td>	P1010T	1/2" -13	12 (5.4)	Any Channel Except P3300, P4000, P4400, P4520, P4100
	P4010T	1/2" -13	8 (3.6)	
 <th>Part Number</th> <th>Nut Size Thread</th> <th>Wt/100 pcs Lbs (kg)</th> <th>Use With</th>	Part Number	Nut Size Thread	Wt/100 pcs Lbs (kg)	Use With
	P4908	1/2" -16	17.5 (7.9)	Any Channel Double Conveyor Adjusting Nut
	Part Number	Nut Size Thread	Wt/100 pcs Lbs (kg)	Use With
	P1016	3/8" -16	17.5 (7.9)	Any "T" Slotted Channel Missing Link Multi-Purpose Strut Fastener

**CHANNEL STUD NUT WITH SPRING**

EG



All Stud Nut grooves are serrated.

Part No.	Thread	"A" Stud In (mm)	Wt/100 pcs Lbs (kg)
P2378-1	1/4" - 20	1 (25.4)	8 (3.6)
P2378-2		1 1/4 (31.8)	9 (4.1)
P2378-3		1 1/2 (38.1)	9 (4.1)
P2379-1	3/8" - 18	1 (25.4)	12 (5.4)
P2379-2		1 1/4 (31.8)	12 (5.4)
P2379-3		1 1/2 (38.1)	13 (5.9)
P2380-1	1/2" - 16	1 (25.4)	13 (5.9)
P2380-2		1 1/4 (31.8)	13 (5.9)
P2380-3		1 1/2 (38.1)	13 (5.9)
P2380-4		1 3/4 (44.5)	15 (6.8)

**Use With P1000, P1100, P2000, P3000**

Part No.	Thread	"A" Stud In (mm)	Wt/100 pcs Lbs (kg)
P2380-5	3/8" - 16	2 (50.8)	16 (7.3)
P2380-6		2 1/4 (57.2)	16 (7.3)
P2381-2	1/2" - 13	1 (25.4)	14 (6.4)
P2381-3		1 1/4 (31.8)	15 (6.8)
P2381-4		1 1/2 (38.1)	17 (7.7)
P2381-5		1 3/4 (44.5)	18 (8.2)
P2381-6		2 (50.8)	19 (8.6)
P2381-7	1/2" - 11	2 1/4 (57.2)	20 (9.1)
P2382-2		1 1/4 (31.8)	18 (8.2)
P2382-3		1 1/2 (38.1)	20 (9.1)

**Use With P1000, P1100, P2000, P3000**

**HEX HEAD CAP SCREWS**

DF EG



Part No.	Size	Wt/100 pcs Lbs (kg)
HHCS025044EG	1/4" x 1/4"	1.0 (0.5)
HHCS025075EG	1/4" x 3/8"	1.3 (0.6)
HHCS025150EG	1/4" x 1/2"	2.6 (1.2)
HHCS031125EG	3/8" x 1/2"	3.6 (1.6)
HHCS037075EG	3/8" x 3/8"	4.0 (1.8)
HHCS037087EG	3/8" x 3/8"	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 3/4"	9.1 (4.1)
HHCS050119EG	1/2" x 1 1/4"	10.2 (4.6)
HHCS050125EG	1/2" x 1 1/2"	11.0 (5.0)
HHCS050150EG	1/2" x 1 3/4"	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)

**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 3/8"	1.5 (0.7)
HSHS025075EG	1/4" x 3/8"	1.7 (0.8)
HSHS031100EG	3/8" x 1"	2.6 (1.2)
HSHS031125EG	3/8" x 1 1/4"	3.0 (1.4)
HSHS031150EG	3/8" x 1 1/2"	3.4 (1.5)
HSHS037125EG	3/8" x 1 1/4"	5.3 (2.4)



Part No.	Size	Wt/100 pcs Lbs (kg)
HCSS025100EG	1/4" x 1"	2.8 (1.3)
HCSS031150EG	3/8" 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"	6.5 (3.0)
HCSS050200EG	1/2" x 2"	11.4 (5.2)
HCSS062150EG	3/8" x 1 1/2"	14.5 (6.6)
HCSS062200EG	3/8" x 2"	23.0 (10.4)

**FLAT HEAD MACHINE SCREWS**



Part No.	Size	Wt/100 pcs Lbs (kg)
HFMS025062EG	1/4" x 3/8"	1.2 (0.5)
HFMS031100EG	3/8" x 1"	2.6 (1.2)
HFMS050100EG	1/2" x 1"	9.3 (4.2)



Part No.	Size	Wt/100 pcs Lbs (kg)
HRMS025050EG	1/4" x 1/2"	1 (0.5)
HRMS025075EG	1/4" x 3/8"	1.2 (0.5)
HRMS025100EG	1/4" x 1"	1.5 (0.7)
HRMS031100EG	3/8" x 1"	2.6 (1.2)
HRMS031125EG	3/8" x 1 1/4"	3.0 (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)

## SQUARE NUTS



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

## HEXAGON NUTS

DF EG



Part No.	Size	Wt/100 pcs Lbs(kg)
HHXN025EG	1/4"	0.6 (0.3)
HHXN031EG	3/8"	1.2 (0.5)
HHXN037EG	1/2"	1.6 (0.7)
HHXN050EG	3/4"	4.8 (2.2)
HHXN062EG	1"	7.3 (3.3)
HHXN075EG	1 1/8"	11.9 (5.4)
HHXN087EG	1 1/4"	19.0 (8.6)
HHXN100EG	1 1/2"	28.3 (12.8)

## FLAT WASHERS

DF EG



Part No.	Size	Wt/100 pcs Lbs(kg)
HFLW025EG	1/4"	0.8 (0.4)
HFLW031EG	3/8"	1.0 (0.5)
HFLW037EG	1/2"	1.5 (0.7)
HFLW050EG	3/4"	3.5 (1.6)
HFLW062EG	1"	7.7 (3.5)
HFLW075EG	1 1/8"	11.0 (5.0)
HFLW087EG	1 1/4"	15.3 (6.9)
HFLW100EG	1 1/2"	18.8 (8.5)

## STEEL THREADED ROD

DF EG



Standard Length 12' (3.7m)

Low Carbon Steel Grade 1006 - 1010  
 $F_u = 36,000$  psi minimum  
 $F_y = 58,000$  psi minimum

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

## LOCK WASHERS

DF EG



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

## LOAD CARRYING CAPACITY OF THREADED HOT ROLLED STEEL CONFORMING TO ASTM A575 AND A576

Threaded Rod Loads for Piping Applications (based on MSS SP-58)		
Nominal Dia.	Root Area In <sup>2</sup> (mm <sup>2</sup> )	Max. Safe Load at 650°F (343°C) Lbs (kN)
1/4"	0.068 (43.9)	730 (3.23)
3/8"	0.126 (81.3)	1,350 (6.01)
1/2"	0.202 (130.3)	2,160 (9.61)
3/4"	0.302 (194.8)	3,230 (14.37)
1"	0.419 (270.3)	4,480 (19.93)
1 1/4"	0.552 (356.1)	5,900 (26.24)

Threaded Rod Loads for Structural Applications <small>(Based on AISC, Steel Construction Manual, ASD, 14th Edition. Per AISC, Allowed Tensile Stress = 0.33 * F<sub>u</sub>)</small>		
Nominal Dia.	Nominal Area In <sup>2</sup> (mm <sup>2</sup> )	Allowed Tension Load Lbs (kN)
1/4"	0.049 (31.6)	930 (4.14)
3/8"	0.110 (71.0)	2,110 (9.39)
1/2"	0.150 (96.8)	2,870 (12.77)
3/4"	0.196 (126.5)	3,750 (16.68)
1"	0.307 (198.2)	5,870 (26.11)
1 1/4"	0.442 (285.4)	8,450 (37.39)
1 1/2"	0.601 (388.0)	11,500 (51.15)
1 3/4"	0.785 (506.8)	15,030 (66.86)

## STEEL COUPLER NUTS

DF EG



Part Number	Size	Length In (mm)	Wt/100 pcs Lbs (kg)
HRCN025	1/4" - 20	1/2" (22.2)	1.9 (0.9)
HRCN031	3/8" - 18	1 1/4" (44.5)	7.5 (3.4)
HRCN037	1/2" - 16	1 1/2" (44.5)	9.0 (4.1)
HRCN044	5/8" - 14	1 3/4" (44.5)	10.4 (4.7)
HRCN050	3/4" - 13	1 3/4" (44.5)	10.0 (4.5)
HRCN062	1" - 11	2 1/4" (54.0)	18.0 (8.2)
HRCN075	1 1/8" - 10	2 1/2" (57.2)	28.0 (12.7)
HRCN087	1 1/4" - 9	2 3/4" (68.5)	55.0 (24.9)
HRCN100	1 1/2" - 8	2 3/4" (68.9)	73.0 (33.1)