

# Channel nuts & hardware



## Channel Nuts

Channel nuts are one of the main components of our strut system. It is designed to provide essential gripping power and ease during installation. Channel nuts are press formed, machined and hardened from steel which meets the requirements of ASTM A108 or ASTM A36 for our larger sizes.

## Bolts, Screws, and Nuts

All bolts, screws and nuts meet the physical and chemical requirements of ASTM A307, SAE J429 or ASTM A563, and have unified inch screw threads (coarse, UNC). ISO metric threads are also available on special request.

## Recommended Torque

Bolt Size	1/4"-20	5/16"-18	3/8"-16	1/2"-13
Foot/Lbs.	6	11	19	50
Nm	8	15	26	68

Bolt Size	M6x1	M8 x1.25	M10 x 1.5	M12x1.75
Nm	12	17	36	62
Foot/Lbs.	9	13	27	46

## Materials & Finishes\*

\*Unless otherwise Noted. Refer to the product page for materials and finishes available by catalog number.

**Note:** Channel nuts are not available in HDG, Aluminum, or Stainless Steel Type 304

Finish Code	Finish	Specification
PLN	Plain	ASTM A108/A307 Gr. A, ASTM A563, SAE J429
ZN	Electro-Plated Zinc	ASTM B633 SC1 Type III
CZ	Chromium Zinc	ASTM F1136 Gr. 3
HDG	Hot-Dipped Galvanized	ASTM A153
SS6	Stainless Steel Type 316	MPIF 35/ASTM F593
AL	Aluminum	ASTM F468 S4

## Metric

Metric dimensions are shown in parentheses. Unless Noted, all metric dimensions are in millimeters.

**Note:** Channel nuts and hardware are sold in full box quantities.

## Standard Channel Nuts

Numbering Example:

**N 7 25 - (\*) WO**

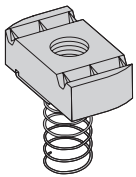
Nut Type	Channel Type	Thread Size	Stud Length	Suffix
N = Standard Nut	7 = Tall Channels	21 = #8-32	* = Specify Length of stud below for Stud Nut or Twirl Stud Nuts	WO = Without Spring
TN = Twirl-Nut™	B11	22 = #10-24	$\frac{3}{4}$ = $\frac{3}{4}$ "	___ = Twirl-Nut or nuts with springs have blank suffix
SN = Stud Nut	B12	27 = #10-32	1 = 1"	
STN = Stud Twirl-Nut	2 = Medium Channels	24 = $\frac{1}{4}$ "-20	$1\frac{1}{4}$ = $1\frac{1}{4}$ "	
NW = Combo Nut Washer	B22	23 = $\frac{5}{16}$ "-18	$1\frac{1}{2}$ = $1\frac{1}{2}$ "	
	B24	28 = $\frac{3}{8}$ "-16		
	B32	26 = $\frac{7}{16}$ "-14		
	5 = Short Channels	25 = $\frac{1}{2}$ "-13		
	B42	55 = $\frac{5}{8}$ "-11		
	B52	75 = $\frac{3}{4}$ "-10		
	B54	78 = $\frac{7}{8}$ "-9		

## Metric Channel Nuts

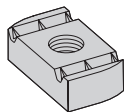
Numbering Example:

**BMS - 6 M**

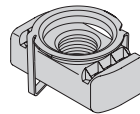
Nut Type	Metric Thread Size	Suffix
BMS = Spring Nut	3 = M3.5	S = Short Spring
BMS-D = Spring Nut ( $\frac{1}{2}$ " thick)	4 = M4	M = Medium Spring
BMT = Twirl-Nut	5 = M5	L = Long Spring
BMT-D = Twirl-Nut ( $\frac{1}{2}$ " thick)	6 = M6	___ = Twirl-Nut and nuts without springs have blank suffix
BMM = Spring Nut (Mini channel)	8 = M8	
	10 = M10	
	12 = M12	



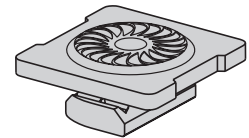
Spring Nut



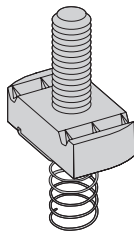
Nut without Spring



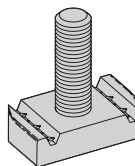
Twirl-Nut



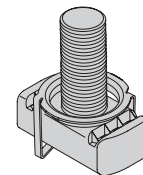
Combo Nut Washer



Stud Nut with Spring



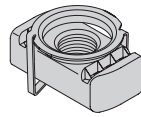
Stud Nut without Spring



Twirl Stud Nut

Reference page 78 for general fitting and standard finish specifications.

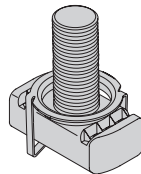
# Channel nuts



**Note:** See page 84 for resistance to slip & page 85 for pull-out strength. Channel nuts and hardware are sold in full box quantities.

## Twirl-Nut

Part No.	Thread Size	Fits Channel Sizes	Nut Thickness		Wt./C		
			In.	mm	Lbs.	kg	
<b>TN221</b>	#8-32	All sizes except B62 & B72	1/4"	(6.3)	7.0	(3.17)	
<b>TN227</b>	#10-32	All sizes except B62 & B72	1/4"	(6.3)	7.0	(3.17)	
<b>TN222</b>	#10-24	All sizes except B62 & B72	1/4"	(6.3)	7.0	(3.17)	
<b>TN224</b>	1/4-20	All sizes except B62 & B72	1/4"	(6.3)	6.7	(3.04)	
<b>TN223</b>	5/16-18	All sizes except B62 & B72	1/4"	(6.3)	6.7	(3.04)	
<b>TN228</b>	3/8-16	All sizes except B62 & B72	3/8"	(9.5)	9.3	(4.22)	
<b>TN226</b>	7/16-14	All sizes except B62 & B72	3/8"	(9.5)	8.8	(3.99)	
<b>TN225</b>	1/2-13	B11, B12, B22, B24, B32	1/2"	(12.7)	11.6	(5.26)	
<b>TN525</b>	1/2-13	B42, B52, B54	3/8"	(9.5)	8.8	(3.99)	
<b>TN255</b>	5/8-11	B11, B12, B22, B24, B32	1/2"	(12.7)	11.0	(4.99)	
<b>Metric Threads</b>	<b>BMT-6</b>	M6 x 1	All sizes except B62 & B72	1/4"	(6.3)	6.9	(3.13)
	<b>BMT-8</b>	M8 x 1.25	All sizes except B62 & B72	1/4"	(6.3)	6.7	(3.04)
	<b>BMT-10</b>	M10 x 1.5	All sizes except B62 & B72	3/8"	(9.5)	9.6	(4.35)
	<b>BMT-12</b>	M12 x 1.75	All sizes except B62 & B72	3/8"	(9.5)	9.2	(4.17)
	<b>BMT-D-12</b>	M12 x 1.75	B11, B12, B22, B24, B32	1/2"	(12.7)	12.2	(5.53)



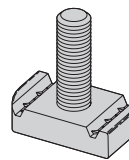
**Note:** See page 84 for resistance to slip & page 85 for pull-out strength. Channel nuts and hardware are sold in full box quantities.

## Twirl Stud Nut

Part No.	Thread Size	Fits Channel Sizes	Nut Thickness		Wt./C	
			In.	mm	Lbs.	kg
<b>STN224-*</b>	1/4-20	All sizes except B62 & B72	1/4"	(6.3)	8.1	(3.66)
<b>STN228-*</b>	3/8-16	All sizes except B62 & B72	3/8"	(9.5)	12.9	(5.85)
<b>STN225-*</b>	1/2-13	B11, B12, B22, B24, B32	1/2"	(12.7)	18.2	(8.23)
<b>STN525-*</b>	1/2-13	B42, B52, B54	3/8"	(9.5)	15.4	(6.96)

\*Note: Add stud length in inches (3/4, 1, 1 1/4, 1 1/2)

**Note:** See page 84 for resistance to slip & page 85 for pull-out strength. Channel nuts and hardware are sold in full box quantities.



## Stud Nut Without Spring

Part No.	Thread Size	Fits Channel Sizes	Nut Thickness		Wt./C	
			In.	mm	Lbs.	kg
<b>SN224-*WO</b>	1/4-20	All sizes except B62 & B72	1/4"	(6.3)	8.1	(3.66)
<b>SN228-*WO</b>	3/8-16	All sizes except B62 & B72	3/8"	(9.5)	12.9	(5.85)
<b>SN225-*WO</b>	1/2-13	B11, B12, B22, B24, B32	1/2"	(12.7)	18.2	(8.23)
<b>SN525-*WO</b>	1/2-13	B42, B52, B54	3/8"	(9.5)	15.4	(6.96)

\*Note: Add stud length in inches (3/4, 1, 1 1/4, 1 1/2)

Reference page 78 for general fitting and standard finish specifications.