

Standard Channel Nuts

Numbering Example:

N 7 25 - (*) WO

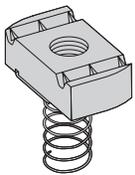
Nut Type	Channel Type	Thread Size	Stud Length	Suffix
N = Standard Nut	7 = Tall Channels	21 = #8-32	* = Specify Length of stud below for Stud Nut or Twirl Stud Nuts	WO = Without Spring
TN = Twirl-Nut™	B11	22 = #10-24	$\frac{3}{4}$ = $\frac{3}{4}$ "	___ = Twirl-Nut or nuts with springs have blank suffix
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

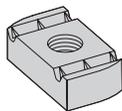
Numbering Example:

BMS - 6 M

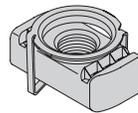
Nut Type	Metric Thread Size	Suffix
BMS = Spring Nut	3 = M3.5	S = Short Spring
BMS-D = Spring Nut ($\frac{1}{2}$ " thick)	4 = M4	M = Medium Spring
BMT = Twirl-Nut	5 = M5	L = Long Spring
BMT-D = Twirl-Nut ($\frac{1}{2}$ " thick)	6 = M6	___ = Twirl-Nut and nuts without springs have blank suffix
BMM = Spring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



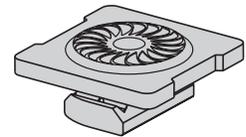
Spring Nut



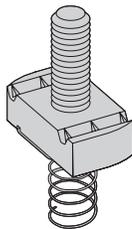
Nut without Spring



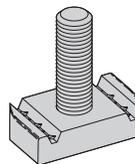
Twirl-Nut



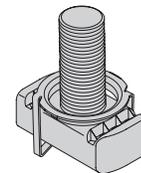
Combo Nut Washer



Stud Nut with Spring



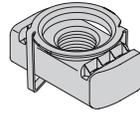
Stud Nut without Spring



Twirl Stud Nut

Reference page 78 for general fitting and standard finish specifications.

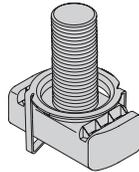
Channel nuts



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	
TN221	#8-32	All sizes except B62 & B72	1/4"	(6.3)	7.0	(3.17)	
TN227	#10-32	All sizes except B62 & B72	1/4"	(6.3)	7.0	(3.17)	
TN222	#10-24	All sizes except B62 & B72	1/4"	(6.3)	7.0	(3.17)	
TN224	1/4-20	All sizes except B62 & B72	1/4"	(6.3)	6.7	(3.04)	
TN223	5/16-18	All sizes except B62 & B72	1/4"	(6.3)	6.7	(3.04)	
TN228	3/8-16	All sizes except B62 & B72	3/8"	(9.5)	9.3	(4.22)	
TN226	7/16-14	All sizes except B62 & B72	3/8"	(9.5)	8.8	(3.99)	
TN225	1/2-13	B11, B12, B22, B24, B32	1/2"	(12.7)	11.6	(5.26)	
TN525	1/2-13	B42, B52, B54	3/8"	(9.5)	8.8	(3.99)	
TN255	5/8-11	B11, B12, B22, B24, B32	1/2"	(12.7)	11.0	(4.99)	
Metric Threads	BMT-6	M6 x 1	All sizes except B62 & B72	1/4"	(6.3)	6.9	(3.13)
	BMT-8	M8 x 1.25	All sizes except B62 & B72	1/4"	(6.3)	6.7	(3.04)
	BMT-10	M10 x 1.5	All sizes except B62 & B72	3/8"	(9.5)	9.6	(4.35)
	BMT-12	M12 x 1.75	All sizes except B62 & B72	3/8"	(9.5)	9.2	(4.17)
	BMT-D-12	M12 x 1.75	B11, B12, B22, B24, B32	1/2"	(12.7)	12.2	(5.53)



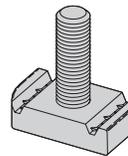
Note: See page 84 for resistance to slip & page 85 for pull-out strength. Channel nuts and hardware are sold in full box quantities.

Twirl Stud Nut

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



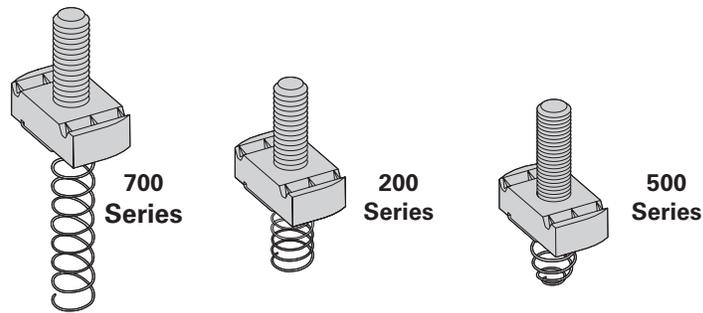
Stud Nut Without Spring

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

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 With Spring

Part No.	Thread Size	Fits Channel Sizes	Nut Thickness		Wt./C	
			In.	mm	Lbs.	kg
SN724-*	1/4-20	B11 & B12	1/4"	(6.3)	8.1	(3.66)
SN224-*	1/4-20	B22, B24, B32	1/4"	(6.3)	8.1	(3.66)
SN524-*	1/4-20	B42, B52, B54	1/4"	(6.3)	8.1	(3.66)
SN728-*	3/8-16	B11 & B12	3/8"	(9.5)	12.9	(5.85)
SN228-*	3/8-16	B22, B24, B32	3/8"	(9.5)	12.9	(5.85)
SN528-*	3/8-16	B42, B52, B54	3/8"	(9.5)	12.9	(5.85)
SN725-*	1/2-13	B11 & B12	1/2"	(12.7)	18.2	(8.23)
SN225-*	1/2-13	B22, B24, B32	1/2"	(12.7)	18.2	(8.23)
SN525-*	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)

- Finish: Electrodeposited zinc ASTM B633 SC1
- Available in 316 stainless steel - add SS6 to part number
- To lock combo nut washer in place a hex nut (sold separately) is required

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



Patent Number
7,604,444

Combo Nut Washer

Part No.	Thread Size	Fits Channel Sizes	Nut Thickness		Wt./C	
			In.	mm	Lbs.	kg
NW524	1/4-20	All Channel Sizes	1/4"	(6.3)	11.9	(5.40)
NW528	3/8-16	All Channel Sizes	3/8"	(9.5)	13.8	(6.26)
NW525	1/2-13	All Channel Sizes	3/8"	(9.5)	13.1	(5.94)
NWM6	M6	All Channel Sizes	1/4"	(6.3)	16.6	(7.50)
NWM8	M8	All Channel Sizes	1/4"	(6.3)	15.4	(7.00)
NWM10	M10	All Channel Sizes	3/8"	(9.5)	18.9	(8.57)
NWM12	M12	All Channel Sizes	3/8"	(9.5)	17.7	(8.00)

Reference page 78 for general fitting and standard finish specifications.

Channel nuts

Resistance To Slip

- With Safety Factor of 3

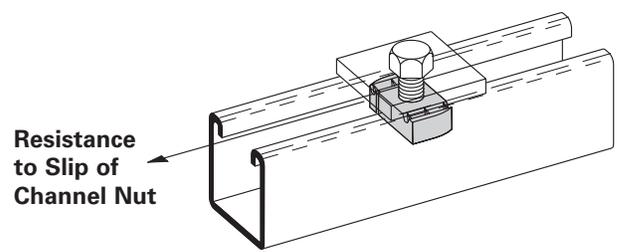
Thread Size	Nut Part Numbers	Resistance to Slip			
		12 ga. Channel		14 ga. Channel	
		Lbs.	N	Lbs.	N
#8-32	N221, N221WO, N521, N721, TN221	50	220	50	220
#10-24	N222, N222WO, N522, N722, TN222	100	440	100	440
#10-32	N227, N227WO, N527, N727, TN227	100	440	100	440
1/4"-20	NW524*, N224, N224WO, N524, N724, TN224, STN224, SN224WO, SN224, SN524, SN724	300	1330	300	1330
5/16"-18	N223, N223WO, N523, N723, TN223	450	2000	450	2000
3/8"-16	NW528*, N228, N228WO, N528, N728, TN228, STN228, SN228WO, SN228, SN528, SN728	800	3560	600	2670
7/16"-14	N226, N226WO, N526, N726, TN226	1000	4450	800	3560
	N225, N225WO, N725, TN225, STN225, SN225WO, SN225, SN725	1500	6670	1000	4450
1/2"-13	NW525*, N525, N525WO, TN525, STN525, SN525WO, SN525	1500	6670	1000	4450
5/8"-11	N255, N255WO, N755, TN255	1500	6670	1000	4450
	N555, N555WO	1500	6670	1000	4450
3/4"-10	N275, N275WO, N775	1500	6670	1000	4450
	N575, N575WO	1500	6670	1000	4450
7/8"-9	N278, N278WO, N778	1500	6670	1000	4450
M6 x 1	BMS-6, BMS-6L, BMS-6M, BMS-6S, BMT-6	300	1330	300	1330
M8 x 1.25	BMS-8, BMS-8L, BMS-8M, BMS-8S, BMT-8	450	2000	450	2000
M10 x 1.50	BMS-10, BMS-10L, BMS-10M, BMS-10S, BMT-10	800	3560	600	2760
M12 x 1.75	BMS-D-12, BMS-D-12L, BMS-D-12M, BMT-D-12	1500	6670	1000	4450
	BMS-12, BMS-12M, BMS-12S, BMT-12	1500	6670	1000	4450

Metric Threads

* Combo Nut Washer (see page 83)

Note:

Using stainless steel channel nuts in stainless steel channel, reduce slip loads by 50% due to hardness of material. Using stainless steel channel nuts in aluminum channel, reduce slip loads by 70% due to hardness of material.



Note: For mini channel nut information see page 245.

Reference page 78 for general fitting and standard finish specifications.

Pull-Out Strength

- With Safety Factor of 3
- Maximum pullout strength for B11 & B12 channels is limited to 1500 lbs. (6670 N).

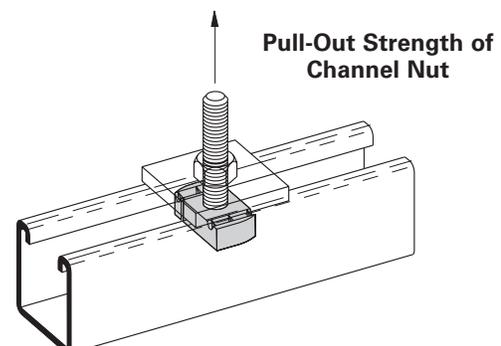
Thread Size	Nut Part Numbers	Pull-Out Strength			
		12 ga. Channel		14 ga. Channel	
		Lbs.	N	Lbs.	N
#8-32	N221, N221WO, N521, N721, TN221	200	890	200	890
#10-24	N222, N222WO, N522, N722, TN222	250	1110	250	1110
#10-32	N227, N227WO, N527, N727, TN227	250	1110	250	1110
1/4"-20	NW524*, N224, N224WO, N524, N724, TN224, STN224, SN224WO, SN224, SN524, SN724	450	2000	450	2000
5/16"-18	N223, N223WO, N523, N723, TN223	750	3330	750	3330
3/8"-16	NW528*, N228, N228WO, N528, N728, TN228, STN228, SN228WO, SN228, SN528, SN728	1100	4890	1000	4450
7/16"-14	N226, N226WO, N526, N726, TN226	1500	6670	1200	5340
1/2"-13	N225, N225WO, N725, TN225, STN225, SN225WO, SN225, SN725	2000	8900	1400	6230
	NW525*, N525, N525WO, TN525, STN525, SN525WO, SN525	1500	6670	1400	6230
5/8"-11	N255, N255WO, N755, TN255	2000	8900	1400	6230
	N555, N555WO	1500	6670	1400	6230
3/4"-10	N275, N275WO, N775	2000	8900	1400	6230
	N575, N575WO	1500	6670	1400	6230
7/8"-9	N278, N278WO, N778	1500	6670	1400	6230
M6 x 1	BMS-6, BMS-6L, BMS-6M, BMS-6S, BMT-6	450	2000	450	2000
M8 x 1.25	BMS-8, BMS-8L, BMS-8M, BMS-8S, BMT-8	750	3330	750	3330
M10 x 1.50	BMS-10, BMS-10L, BMS-10M, BMS-10S, BMT-10	1100	4890	1000	4450
M12 x 1.75	BMS-D-12, BMS-D-12L, BMS-D-12M, BMT-D-12	2000	8900	1400	6230
	BMS-12, BMS-12M, BMS-12S, BMT-12	1500	6670	1400	6230

Metric Threads

* Combo Nut Washer (see page 83)

Note:

Using stainless steel channel nuts in stainless steel channel, use pull-out loads as shown above.
Using stainless steel channel nuts in aluminum channel, reduce pull-out loads by 70% due to hardness of material.



Note: For mini channel nut information see page 245.

Reference page 78 for general fitting and standard finish specifications.