

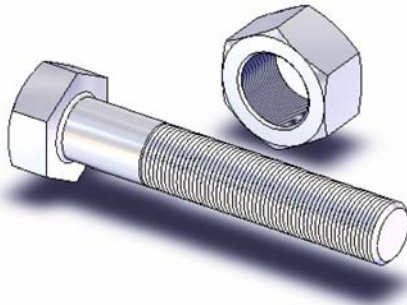


# Heavy Hex Bolts and Nuts

## for Flanges to B16.1-125#, B16.5-150#

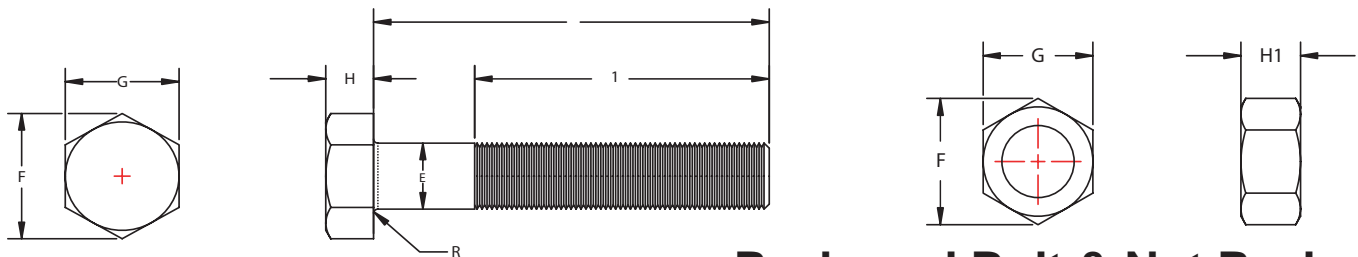
Material: Bolts - ASTM A307 Grade B, Nuts -ASTM A563, Grade A

# UNITED BRAND



Note: All dimensions in inches

Nominal Size	Part No.	E	G	F	H	HI	R	L <sub>1</sub>	L
		Body Diameter	Width Across Flats	Max. Width Across Corners	Bolt Head Height	Nut Height	Radius of Fillet	Thread Length	Shaft Length
1/2 x 2	BN7025-050-200	0.515	7/8	1.010	11.32	31/64	0.01-0.03	1.25	2.00
5/8 x 2-1/2	BN7025-062-250	0.642	1-1/16	1.227	27/64	39/64	0.02-0.06	1.50	2.50
5/8 x 3	BN7025-062-300	0.642	1-1/16	1.227	27/64	39/64	0.02-0.06	1.50	3.00
3/4 x 3-1/2	BN7025-075-350	0.768	1-1/4	1.443	1/2	47/64	0.02-0.06	1.75	3.50
3/4 x 4-1/2	BN7025-075-450	0.768	1-1/4	1.443	1/2	47/64	0.02-0.06	1.75	4.50
7/8 x 4	BN7025-082-400	0.895	1-7/16	1.660	37/64	55/64	0.02-0.06	2.00	4.00
7/8 x 4-1/2	BN7025-082-450	0.895	1-7/16	1.660	37/64	55/64	0.02-0.06	2.00	4.50
1 x 4-1/2	BN7025-100-450	1.022	1-5/8	1.876	43/64	63/64	0.03-0.09	2.25	4.50
1-1/8 x 5	BN7025-112-500	1.149	1-13/16	2.093	3/4	1-7/32	0.03-0.09	2.50	5.00
1-1/8 x 5-1/2	BN7025-112-550	1.149	1-13/16	2.093	3/4	1-7/32	0.03-0.09	2.50	5.50
1-1/4 x 6-1/2	BN7025-125-650	1.277	2	2.309	27/32	1-7/32	0.03-0.09	2.75	6.50
1-1/2 x 7	BN7025-150-700	1.531	2-3/8	2.742	1	1-15/32	0.03-0.09	3.25	7.00
1-1/2 x 7-1/2	BN7025-150-750	1.531	2-3/8	2.742	1	1-15/32	0.03-0.09	3.25	7.50
1-1/2 x 8	BN7025-150-800	1.531	2-3/8	2.742	1	1-15/32	0.03-0.09	3.25	8.00



## Packaged Bolt & Nut Packs (water resistant)

1. Heavy hex head steel bolts to ANSI B18.2.1 with heavy hex steel nuts to ANSI B18.2.2. Bolts to be threads to ANSI B1.1 unified inch screw threads, Class 2A external & Class 2B internal. The steel material to conform to ASTM A307 specification for carbon steel externally threaded standard fasteners, Grade B.
2. Zinc Plated per ASTM B633

Part No.	Class 125/150 Flange Size	Bolt Diameter and Length	No. of Bolts per Poly Bag	Master Box (Qty. of Sets)
FBZ03	2-1/2	5/8 x 2-1/2	4	20
FBZ04	3	5/8 x 3	8	16
FBZ08	5	3/4 x 3-1/2	8	8
FBZ12	6	7/8 x 4	12	4
FBZ14	10	1 x 4-1/2	12	1
FBZ16	12	1 x 4-1/2	16	1
FBZ18		1-1/8 x 5	16	1
FBZ20		1-1/8 x 5	20	1
FBZ24		1-1/4 x 5-1/2	20	1
FBZ30		1-1/4 x 6-1/2	14	2
FBZ36		1-1/2 x 7	8	4
FBZ42		1-1/2 x 7-1/2	9	4
FBZ48		1-1/2 x 8	11	4



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### NAPAC, Inc.

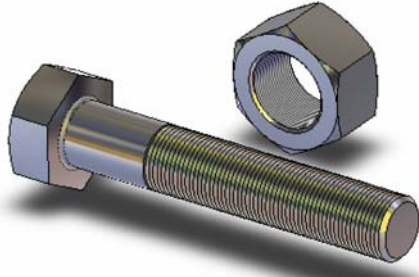
229 Southbridge Street, Worcester, MA 01608  
Tel.: (800) 807-2215 • Fax: (800) 807-2214

# Stainless Steel Hex Bolts and Nuts

## SS 304 and SS 316

For Flanges to B16.1-125#, B16.5-150#

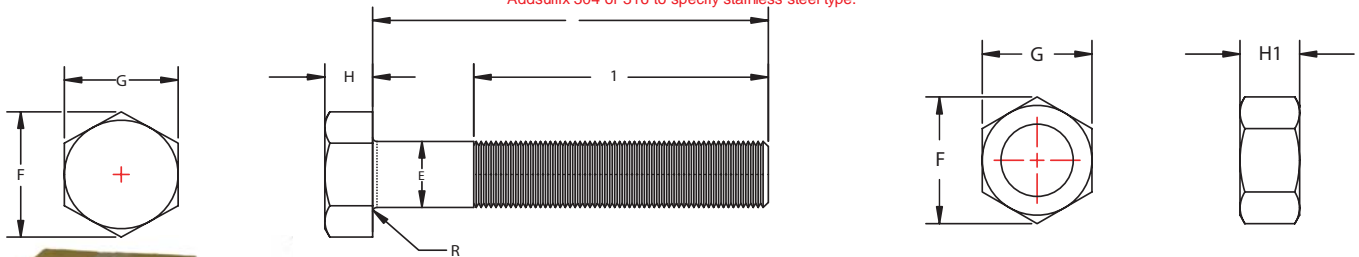
# UNITED BRAND



Nominal Size	Part No.	E	G	F	H	HI	R	L <sub>1</sub>	L
		Body Diameter	Width Across Flats	Max. Width Across Corners	Bolt Head Height	Nut Height	Radius of Fillet	Thread Length	Shaft Length
1/2 x 2	BN6025-050-200*	0.515	3/4	0.866	11/32	7/16	0.01-0.03	1.25	2.00
5/8 x 2-1/2	BN6025-062-250*	0.642	15/16	1.083	27/64	35/64	0.02-0.06	1.50	2.50
5/8 x 3	BN6025-062-300*	0.642	15/16	1.083	27/64	35/64	0.02-0.06	1.50	3.00
3/4 x 3-1/2	BN6025-075-350*	0.768	1-1/8	1.299	1/2	41/64	0.02-0.06	1.75	3.50
3/4 x 4-1/2	BN6025-075-450*	0.768	1-1/8	1.299	1/2	41/64	0.02-0.06	1.75	4.50
7/8 x 4	BN6025-082-400*	0.895	1-5/16	1.516	37/64	3/4	0.02-0.06	2.00	4.00
7/8 x 4-1/2	BN6025-082-450*	0.895	1-5/16	1.516	37/64	3/4	0.02-0.06	2.00	4.50
1 x 4-1/2	BN6025-100-450*	1.022	1-1/2	1.732	43/64	55/64	0.03-0.09	2.25	4.50
1-1/8 x 5	BN6025-112-500*	1.149	1-11/16	1.949	3/4	31/32	0.03-0.09	2.50	5.00
1-1/8 x 5-1/2	BN6025-112-550*	1.149	1-11/16	1.949	3/4	1-1/16	0.03-0.09	2.50	5.50
1-1/4 x 6-1/2	BN6025-125-650*	1.277	1-7/8	2.165	27/32	1-9/32	0.03-0.09	2.75	6.50
1-1/2 x 7	BN6025-150-700*	1.531	2-1/4	2.598	1	1-9/32	0.03-0.09	3.25	7.00
1-1/2 x 7-1/2	BN6025-150-750*	1.531	2-1/4	2.598	1	1-9/32	0.03-0.09	3.25	7.50
1-1/2 x 8	BN6025-150-800*	1.531	2-1/4	2.598	1	1-9/32	0.03-0.09	3.25	8.00

Note: All dimensions in inches

\*Add suffix 304 or 316 to specify stainless steel type.



1. Hex head stainless steel bolts to ANSI B18.2.1 with hex stainless steel nuts to ANSI B18.2.2. Bolts to be threaded to ANSI B1.1 unified inch screw threads, Class 2A external & Class 2B internal. The stainless steel material is available in either Type 304 or Type 316.

## Packaged Bolt & Nut Packs

(water resistant)

### Stainless Steel 304

Part No.	Class 125/150 Flange Size	Bolt Diameter and Length	No. of Bolts per Flange	No. of Bolts per Poly Bag	Master Box (Qty. of Sets)
FBS03-304	2-1/2	5/8" x 2-1/2"	4	4	20
FBS04-304	3	5/8" x 3"	8	8	16
FBS08-304	5	3/4" x 3-1/2"	8	8	8
FBS12-304	6	7/8" x 4"	12	12	4
FBS14-304	8	1" x 4-1/2"	12	12	1
FBS16-304	10	1" x 4-1/2"	16	16	1
FBS18-304	12	1-1/8" x 5"	16	16	1
FBS20-304	14	1-1/8" x 5"	20	20	1
FBS24-304	16	1-1/4" x 5-1/2"	20	20	1
FBS30-304	18	1-1/4" x 6-1/2"	28	14	2 boxes
FBS36-304	20	1-1/2" x 7"	32	8	4 boxes

### Stainless Steel 316

Part No.	Class 125/150 Flange Size	Bolt Diameter and Length	No. of Bolts per Flange	No. of Bolts per Poly Bag	Master Box (Qty. of Sets)
FBS03-316	2-1/2	5/8" x 2-1/2"	4	4	20
FBS04-316	3	5/8" x 3"	8	8	16
FBS08-316	5	3/4" x 3-1/2"	8	8	8
FBS12-316	6	7/8" x 4"	12	12	4
FBS14-316	8	1" x 4-1/2"	12	12	1
FBS16-316	10	1" x 4-1/2"	16	16	1
FBS18-316	12	1-1/8" x 5"	16	16	1
FBS20-316	14	1-1/8" x 5"	20	20	1
FBS24-316	16	1-1/4" x 5-1/2"	20	20	1
FBS30-316	18	1-1/4" x 6-1/2"	28	14	2 boxes
FBS36-316	20	1-1/2" x 7"	32	8	4 boxes

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## NAPAC, Inc.

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# Stud Bolt Packs

# UNITED BRAND

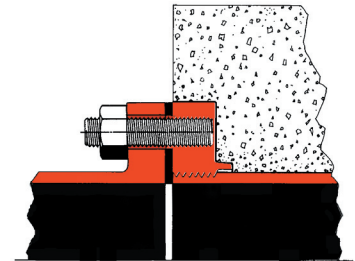
## Packaged Flange Stud Bolt Packs for use with Class 125/150 Flange Pipe

### Material:

**Bolts:** Zinc Plated Steel, Grade B7  
Stainless Steel 304  
Stainless Steel 316

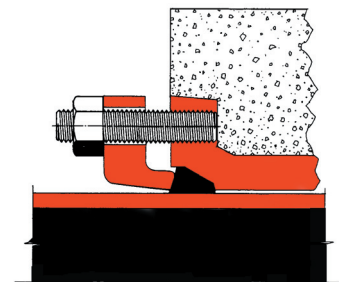
**Nuts:** Zinc Plated Steel, Grade 2H  
Stainless Steel 304  
Stainless Steel 316

Part No. B7, 2H	Part No. SS304	Part No. SS316	Flange Size	Bolt Size	No. of Bolts/Nuts per Flange	No. of Bolts/Nuts per Polybag	Master Box (No. of Packs)
FSB03	FSB03-304	FSB03-316	2"	5/8" x 3"	4	4	20
			2-1/2"				
			3"				
FSB04	FSB04-304	FSB04-316	4"	5/8" x 3"	8	8	16
FSB08	FSB08-304	FSB08-316	5"	3/4" x 3-1/2"	8	8	8
			6"				
			8"				
FSB12	FSB12-304	FSB12-316	10"	7/8" x 3-1/2"	12	12	4
			12"				
FSB14	FSB14-304	FSB14-316	14"	1" x 4"	12	12	1
FSB16	FSB16-304	FSB16-316	16"	1" x 4"	16	16	1
FSB18	FSB18-304	FSB18-316	18"	1-1/8" x 4-1/2"	16	16	1
FSB20	FSB20-304	FSB20-316	20"	1-1/8" x 4-1/2"	20	20	1
FSB24	FSB24-304	FSB24-316	24"	1-1/4" x 5"	20	20	1
FSB30	FSB30-304	FSB30-316	30"	1-1/4" x 5"	28	14	2 boxes (1pack each box)
FSB36	FSB36-304	FSB36-316	36"	1-1/2" x 6"	32	8	4 boxes (1pack each box)
FSB42	FSB42-304	FSB42-316	42"	1-1/2" x 6"	36	9	4 boxes (1pack each box)
FSB48	FSB48-304	FSB48-316	48"	1-1/2" x 7"	44	11	4 boxes (1pack each box)



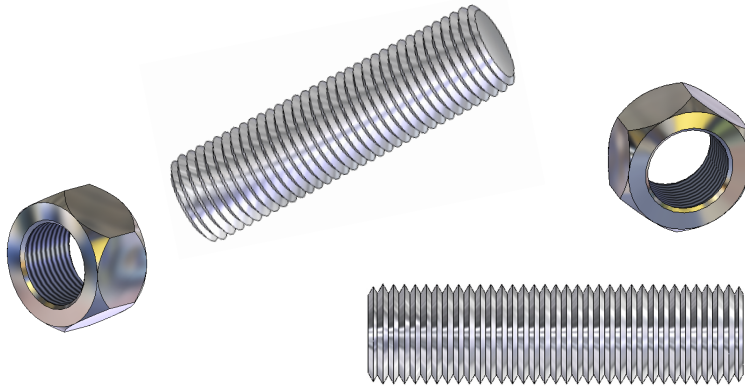
## Packaged Stud Bolt Packs for use with Mechanical Joints

Part No. B7, 2H	Part No. SS304	Part No. SS316	Joint Size	Bolt Size	No. of Bolts/Nuts per Joint	No. of Bolts/Nuts per Polybag	Master Box (No. of Packs)
MSB03	MSB03-304	MSB03-316	2"	5/8" x 3"	4	4	20
			2-1/2"				
			3"				
MSB04	MSB04-304	MSB04-316	4"	3/4" x 4"	4	4	16
MSB08	MSB08-304	MSB08-316	5"	3/4" x 4"	6	6	8
			6"				
			8"				
MSB12	MSB12-304	MSB12-316	10"	3/4" x 4"	8	8	4
			12"				
MSB14	MSB14-304	MSB14-316	14"	3/4" x 4-1/2"	10	10	1
MSB16	MSB16-304	MSB16-316	16"	3/4" x 4-1/2"	12	12	1
MSB18	MSB18-304	MSB18-316	18"	3/4" x 4-1/2"	12	12	1
MSB20	MSB20-304	MSB20-316	20"	3/4" x 5-1/2"	14	14	1
MSB24	MSB24-304	MSB24-316	24"	3/4" x 5-1/2"	16	16	1
MSB30	MSB30-304	MSB30-316	30"	1" x 6"	20	20	1
MSB36	MSB36-304	MSB36-316	36"	1" x 6"	24	12	2 boxes (1pack each box)
MSB42	MSB42-304	MSB42-316	42"	1-1/4" x 7"	28	14	2 boxes (1pack each box)
MSB48	MSB48-304	MSB48-316	48"	1-1/4" x 7"	32	8	4 boxes (1pack each box)



# Stud Bolts/Nuts

**UNITED  
BRAND**



**Material:**

- Bolts:** Zinc Plated Steel, Grade B7  
Stainless Steel 304  
Stainless Steel 316
- Nuts:** Zinc Plated Steel, Grade 2H  
Stainless Steel 304  
Stainless Steel 316

STUD BOLTS				NUTS			
Bolt Size	Part No. Zinc Plated (B7)	Part No. SS304	Part No. SS316	Nut Size	Part No. Zinc Plated (2H)	Part No. SS304	Part No. SS316
1/2" x 2"	8025-050-200	8025-050-200-304	8025-050-200-316	1/2"	8035-050	8035-050-304	8035-050-316
5/8" x 2-1/2"	8025-062-250	8025-062-250-304	8025-062-250-316	5/8"	8035-062	8035-062-304	8035-062-316
5/8" x 3"	8025-062-300	8025-062-300-304	8025-062-300-316				
5/8" x 3-1/2"	8025-062-350	8025-062-350-304	8025-062-350-316				
5/8" x 6"	8025-062-600	8025-062-600-304	8025-062-600-316				
3/4" x 3"	8025-075-300	8025-075-300-304	8025-075-300-316	3/4"	8035-075	8035-075-304	8035-075-316
3/4" x 3-1/2"	8025-075-350	8025-075-350-304	8025-075-350-316				
3/4" x 4"	8025-075-400	8025-075-400-304	8025-075-400-316				
3/4" x 4-1/2"	8025-075-450	8025-075-450-304	8025-075-450-316				
3/4" x 5"	8025-075-500	8025-075-500-304	8025-075-500-316				
3/4" x 5-1/2"	8025-075-550	8025-075-550-304	8025-075-550-316				
3/4" x 6"	8025-075-600	8025-075-600-304	8025-075-600-316				
3/4" x 7"	8025-075-700	8025-075-700-304	8025-075-700-316	7/8"	8035-082	8035-082-304	8035-082-316
7/8" x 3-1/2"	8025-082-350	8025-082-350-304	8025-082-350-316				
7/8" x 3-3/4"	8025-082-375	8025-082-375-304	8025-082-375-316				
7/8" x 8"	8025-082-800	8025-082-800-304	8025-082-800-316	1"	8035-100	8035-100-304	8035-100-316
1" x 4"	8025-100-400	8025-100-400-304	8025-100-400-316				
1" x 5"	8025-100-500	8025-100-500-304	8025-100-500-316				
1" x 6"	8025-100-600	8025-100-600-304	8025-100-600-316				
1-1/8" x 4-1/2"	8025-112-450	8025-112-450-304	8025-112-450-316	1-1/8"	8035-112	8035-112-304	8035-112-316
1-1/8" x 5"	8025-112-500	8025-112-500-304	8025-112-500-316				
1-1/4" x 5"	8025-125-500	8025-125-500-304	8025-125-500-316	1-1/4"	8035-125	8035-125-304	8035-125-316
1-1/4" x 6"	8025-125-600	8025-125-600-304	8025-125-600-316				
1-1/4" x 7"	8025-125-700	8025-125-700-304	8025-125-700-316				
1-1/2" x 6"	8025-150-600	8025-150-600-304	8025-150-600-316	1-1/2"	8035-150	8035-150-304	8035-150-316
1-1/2" x 7"	8025-150-700	8025-150-700-304	8025-150-700-316				

**NAPAC, Inc.**

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