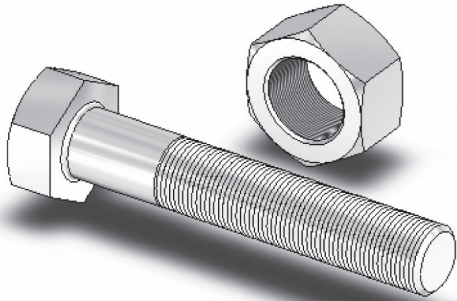


Hex Bolts and Nuts for Flanges to B16.1-125#, B16.5-150#

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

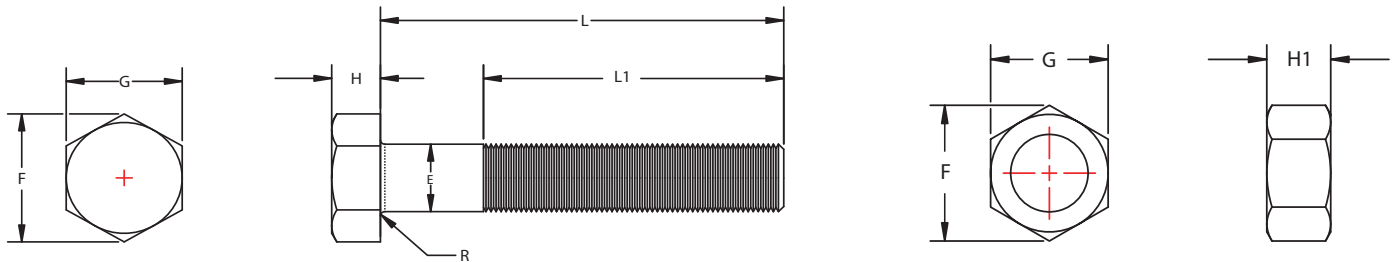
UNITED



| Nominal Size | Part No. | E | G | F | H | HI | R | L ₁ | 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 | 3/4 | 0.866 | 11/32 | 7/16 | 0.01-0.03 | 1.25 | 2.00 |
| 5/8 x 2-1/2 | BN7025-062-250* | 0.642 | 15/16 | 1.083 | 27/64 | 35/64 | 0.02-0.06 | 1.50 | 2.50 |
| 5/8 x 3 | BN7025-062-300* | 0.642 | 15/16 | 1.083 | 27/64 | 35/64 | 0.02-0.06 | 1.50 | 3.00 |
| 3/4 x 3-1/2 | BN7025-075-350* | 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 | BN7025-075-450* | 0.768 | 1-1/8 | 1.299 | 1/2 | 41/64 | 0.02-0.06 | 1.75 | 4.50 |
| 7/8 x 4 | BN7025-082-400* | 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 | BN7025-082-450* | 0.895 | 1-5/16 | 1.516 | 37/64 | 3/4 | 0.02-0.06 | 2.00 | 4.50 |
| 1 x 4-1/2 | BN7025-100-450* | 1.022 | 1-1/2 | 1.732 | 43/64 | 55/64 | 0.03-0.09 | 2.25 | 4.50 |
| 1-1/8 x 5 | BN7025-112-500* | 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 | BN7025-112-550* | 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 | BN7025-125-650* | 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 | BN7025-150-700* | 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 | BN7025-150-750* | 1.531 | 2-1/4 | 2.598 | 1 | 1-9/32 | 0.03-0.09 | 3.25 | 7.50 |
| 1-1/2 x 8 | BN7025-150-800* | 1.531 | 2-1/4 | 2.598 | 1 | 1-9/32 | 0.03-0.09 | 3.25 | 8.00 |

* Diameters 1-1/8" and larger are UNC8

*Add suffix "Z" for Zinc Plated Carbon Steel or "G" for Hot Dipped Galvanized Carbon Steel



- Hex head steel bolts to ANSI B18.2.1 with hex 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 steel material to conform to ASTM A307 specification for carbon steel externally threaded standard fasteners, Grade B.
- Zinc Plated per ASTM B633



Packaged Bolt & Nut Packs (water resistant)

| Part No. | Class 125/150 Flange Size | Bolt Diameter and Length | No. of Bolts per Poly Bag | Master Box (Qty. of Sets) |
|----------|---------------------------|--------------------------|---------------------------|---------------------------|
| FBZ015 | 1 | 1/2" x 2" | 4 | 64 |
| | 1-1/4 | | | |
| FBZ03 | 2 | 5/8" x 2-1/2" | 4 | 20 |
| | 3 | | | |
| FBZ04 | 4 | 5/8" x 3" | 8 | 16 |
| | 5 | | | |
| FBZ08 | 6 | 3/4" x 3-1/2" | 8 | 8 |
| | 8 | | | |
| FBZ12 | 10 | 7/8" x 4" | 12 | 4 |
| | 12 | | | |
| FBZ14 | 14 | 1" x 4-1/2" | 12 | 1 |
| FBZ16 | 16 | 1" x 4-1/2" | 16 | 1 |
| FBZ18 | 18 | 1-1/8" x 5" | 16 | 1 |
| FBZ20 | 20 | 1-1/8" x 5" | 20 | 1 |
| FBZ24 | 24 | 1-1/4" x 5-1/2" | 20 | 1 |
| FBZ30 | 30 | 1-1/4" x 6-1/2" | 14 | 2 boxes |
| FBZ36 | 36 | 1-1/2" x 7" | 8 | 4 boxes |
| FBZ42 | 42 | 1-1/2" x 7-1/2" | 9 | 4 boxes |
| FBZ48 | 48 | 1-1/2" x 8" | 11 | 4 boxes |



WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.



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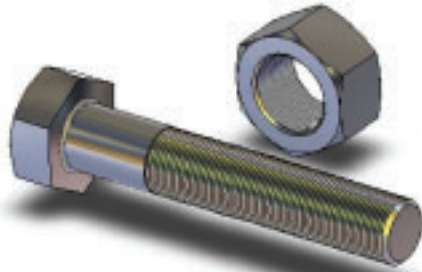
Jacksonville, Florida

Stainless Steel Hex Bolts and Nuts

SS 304 and SS 316

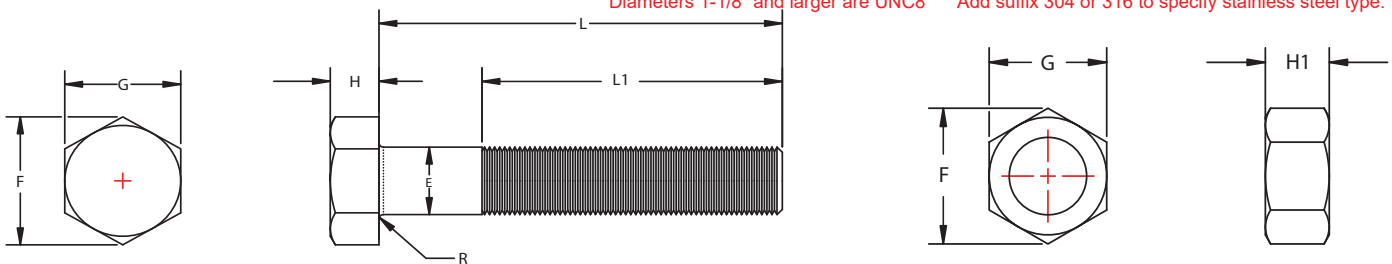
For Flanges to B16.125#, B16.5-150#

UNITED



| Nominal Size | Part No. | E | G | F | H | HI | R | L ₁ | 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 |

* Diameters 1-1/8" and larger are UNC8 *Add suffix 304 or 316 to specify stainless steel type.



Packaged Bolt & Nut Packs (water resistant)

- 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.

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 |
| FBS42-304 | 24 | 1-1/2" x 7-1/2" | 36 | 9 | 4 boxes |
| FBS48-304 | 28 | 101.2: x 8" | 44 | 11 | 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 |
| FBS42-316 | 24 | 1-1/2" x 7-1/2" | 36 | 9 | 4 boxes |
| FBS48-216 | 28 | 1-1/2" x 8" | 44 | 11 | 4 boxes |



WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.



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