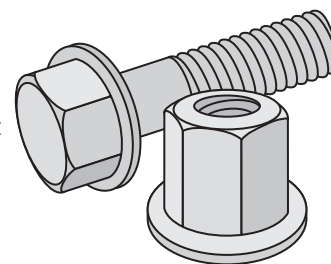


Fasteners

CHAMPION STRUT™ FIBERGLASS-REINFORCED POLYURETHANE HARDWARE

Champion Strut fiberglass-reinforced hardware is manufactured from glass-reinforced polyurethane resin. Polyurethane is a superior grade, corrosion-resistant thermoplastic material that displays exceptional physical properties including toughness, flexibility and resistance to abrasion and temperature. Polyurethane resins exhibit impressive hardness and can be manufactured to be bowling ball hard. Polyurethane combines the toughness of metal with the elasticity of rubber. Parts made from fiberglass reinforced polyurethane resins often outlast rubber, wood and metals by 20 to 1. Additional glass-reinforced polyurethane benefits include extreme resistance to repeated bending without fracture, high load-bearing capacity and outstanding resistance to weather, ozone, radiation, oil, gasoline and many solvents.

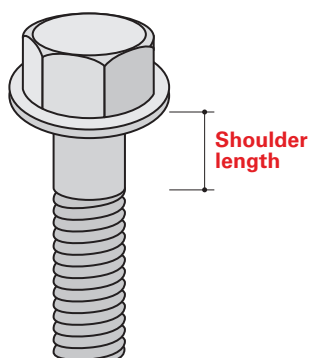


CHAMPION STRUT™ FIBERGLASS-REINFORCED POLYURETHANE BOLTS

Champion Strut fiberglass-reinforced bolts are available in two styles; hex head flange and hex head cap screw. The hex head flange bolts incorporate a molded washer collar flange that equally distributes torque pressure where the hex flange bolt head meets the mating surface thereby eliminating the need for a separate washer and minimizing the need for additional hardware.

FIBERGLASS-REINFORCED POLYURETHANE HEX FLANGE BOLTS

Fiberglass-reinforced hex flange bolts are available in sizes from 1/4" diameter through 1/2" diameter. Hex flange bolts are packaged in bags containing 25 pieces.



	ITEM NO	BOLT SIZE (IN)	SHOULDER LENGTH (IN)*	THREAD SHEAR (LBS)	SHANK SHEAR (LBS)	TORQUE*
<input type="checkbox"/>	CS-FB-250-075	1/4" x 3/4"	Full thread	110	210	10**
<input type="checkbox"/>	CS-FB-250-100	1/4" x 1"	Full thread	110	210	10**
<input type="checkbox"/>	CS-FB-250-150	1/4" x 1-1/2"	1/2"	110	210	10**
<input type="checkbox"/>	CS-FB-375-100	3/8" x 1"	Full thread	250	470	3*
<input type="checkbox"/>	CS-FB-375-125	3/8" x 1-1/4"	Full thread	250	470	3*
<input type="checkbox"/>	CS-FB-375-150	3/8" x 1-1/2"	Full thread	250	470	3*
<input type="checkbox"/>	CS-FB-375-200	3/8" x 2"	1/2"	250	470	3*
<input type="checkbox"/>	CS-FB-375-250	3/8" x 2-1/2"	3/4"	250	470	3*
<input type="checkbox"/>	CS-FB-375-300	3/8" x 3"	1"	250	470	3*
<input type="checkbox"/>	CS-FB-500-100	1/2" x 1"	Full thread	450	870	8*
<input type="checkbox"/>	CS-FB-500-125	1/2" x 1-1/4"	Full thread	450	870	8*
<input type="checkbox"/>	CS-FB-500-150	1/2" x 1-1/2"	Full thread	450	870	8*
<input type="checkbox"/>	CS-FB-500-200	1/2" x 2"	Full thread	450	870	8*
<input type="checkbox"/>	CS-FB-500-250	1/2" x 2-1/2"	Full thread	450	870	8*
<input type="checkbox"/>	CS-FB-500-300	1/2" x 3"	1/2"	450	870	8*
<input type="checkbox"/>	CS-FB-500-350	1/2" x 3-1/2"	1"	450	870	8*

* Torque values displayed are in ft/lbs unless noted otherwise.

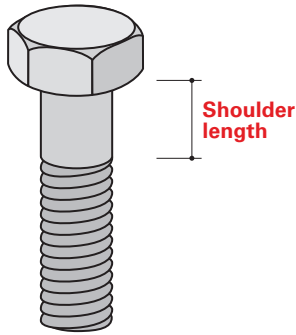
** Torque values displayed are in/lbs.

Values shown represent a 3:1 safety factor.



FIBERGLASS-REINFORCED POLYURETHANE HEX HEAD CAP SCREWS

Fiberglass reinforced hex head cap screws are available in sizes 5/16", 3/8", 1/2" and 5/8" diameters. Hex head cap screws are packaged in bags containing 25 pieces.



	ITEM NO	BOLT SIZE (IN)	SHOULDER LENGTH (IN)*	THREAD SHEAR (LBS)	SHANK SHEAR (LBS)	TORQUE*
<input type="checkbox"/>	CS-HB-312-100	5/16" x 1"	Full thread	250	470	3
<input type="checkbox"/>	CS-HB-312-125	5/16" x 1-1/4"	Full thread	250	470	3
<input type="checkbox"/>	CS-HB-312-150	5/16" x 1-1/2"	1/4"	250	470	3
<input type="checkbox"/>	CS-HB-312-200	5/16" x 2"	1/2"	250	470	3
<input type="checkbox"/>	CS-HB-375-100	3/8" x 1"	Full thread	250	470	3
<input type="checkbox"/>	CS-HB-375-125	3/8" x 1-1/4"	Full thread	250	470	3
<input type="checkbox"/>	CS-HB-375-150	3/8" x 1-1/2"	Full thread	250	470	3
<input type="checkbox"/>	CS-HB-375-200	3/8" x 2"	3/8"	250	470	3
<input type="checkbox"/>	CS-HB-375-250	3/8" x 2-1/2"	3/4"	250	470	3
<input type="checkbox"/>	CS-HB-375-300	3/8" x 3"	1"	250	470	3
<input type="checkbox"/>	CS-HB-500-100	1/2" x 1"	Full thread	450	870	8
<input type="checkbox"/>	CS-HB-500-125	1/2" x 1-1/4"	Full thread	450	870	8
<input type="checkbox"/>	CS-HB-500-150	1/2" x 1-1/2"	1/4"	450	870	8
<input type="checkbox"/>	CS-HB-500-200	1/2" x 2"	1/2"	450	870	8
<input type="checkbox"/>	CS-HB-500-250	1/2" x 2-1/2"	3/4"	450	870	8
<input type="checkbox"/>	CS-HB-500-300	1/2" x 3"	1"	450	870	8
<input type="checkbox"/>	CS-HB-625-125	5/8" x 1-1/4"	Full thread	700	1,360	12
<input type="checkbox"/>	CS-HB-625-150	5/8" x 1-1/2"	Full thread	700	1,360	12
<input type="checkbox"/>	CS-HB-625-200	5/8" x 2"	Full thread	700	1,360	12
<input type="checkbox"/>	CS-HB-625-250	5/8" x 2-1/2"	1/4"	700	1,360	12
<input type="checkbox"/>	CS-HB-625-300	5/8" x 3"	Full thread	700	1,360	12
<input type="checkbox"/>	CS-HB-625-350	5/8" x 3-1/2"	Full thread	700	1,360	12

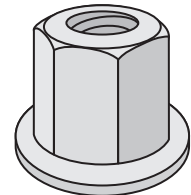
* Torque values displayed are in ft/lbs unless noted otherwise. Values shown represent a 3:1 safety factor.

CHAMPION STRUT™ FIBERGLASS-REINFORCED HEX NUTS

Champion Strut fiberglass reinforced hex nuts are available in two styles; hex head flange and hex head. The hex head flange nuts incorporate a molded washer collar flange that distributes torque pressure where the hex flange nut meets the mating surface thereby eliminating the need for a separate washer and minimizing the need for additional hardware.

FIBERGLASS-REINFORCED POLYURETHANE HEX HEAD FLANGE NUTS

Fiberglass reinforced hex head flange nuts are available in sizes from 3/8" diameter through 5/8" diameter. Hex head flange nuts are packaged in bags containing 25 pieces.



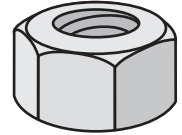
	ITEM NO	NUT SIZE (IN)	THREAD SHEAR (LBS)	HEIGHT (IN)	TORQUE* (FT/LBS)
<input type="checkbox"/>	CS-FN-375	3/8" – 16	500	.75"	3
<input type="checkbox"/>	CS-FN-500	1/2" – 13	1,200	.855"	8
<input type="checkbox"/>	CS-FN-625	5/8" – 11	2,200	1.22"	12

* Torque values shown represent a 3:1 safety factor.



FIBERGLASS-REINFORCED POLYURETHANE HEX HEAD NUTS

Fiberglass-reinforced hex head nuts are available in sizes from 1/4" diameter through 5/8" diameter. Hex head nuts are packaged in bags containing 25 pieces.



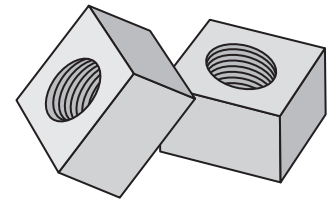
	ITEM NO	NUT SIZE (IN)	THREAD SHEAR (LBS)	HEIGHT (IN)	TORQUE* (FT/LBS)
<input type="checkbox"/>	CS-HN-250	1/4" – 20	150	.218"	10**
<input type="checkbox"/>	CS-HN-312	5/16" – 18	150	.218"	10**
<input type="checkbox"/>	CS-HN-375	3/8" – 16	460	.328"	3
<input type="checkbox"/>	CS-HN-500	1/2" – 13	800	.437"	8
<input type="checkbox"/>	CS-HN-625	5/8" – 11	1,000	.546"	12

* Torque values shown represent a 3:1 safety factor.

** Torque value displayed is in/lbs.

VINYL ESTER FIBERGLASS SQUARE NUTS

Vinyl ester fiberglass square nuts are available in sizes from 3/8" diameter through 5/8" diameter. They are manufactured from pultruded vinyl ester square material and are ideal for applications that require higher thread shear. Square nuts are packaged in bags containing 25 pieces.

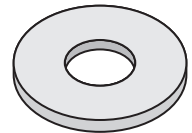


	ITEM NO	NUT SIZE (IN)	THREAD SHEAR (LBS)	HEIGHT (IN)	TORQUE* (FT/LBS)
<input type="checkbox"/>	CS-SN-375	3/8" – 16	1,300	.437"	10
<input type="checkbox"/>	CS-SN-500	1/2" – 13	1,700	.562"	10
<input type="checkbox"/>	CS-SN-625	5/8" – 11	1,700	.687"	10

* Load values shown represent a 3:1 safety factor.

CHAMPION STRUT™ POLYURETHANE FLAT WASHERS

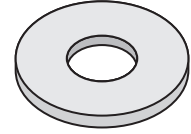
Champion Strut flat washers are made from 1/8" thick glass reinforced polyurethane and are available for 3/8" diameter through 5/8". Washers are recommended for the connections that utilize hex head cap screws and hex head nuts. Polyurethane washers are packaged in bags containing 25 pieces.



	ITEM NO	SIZE (IN)	OUTSIDE DIAMETER (IN)
<input type="checkbox"/>	CS-PW-312	5/16"	1.00"
<input type="checkbox"/>	CS-PW-375	3/8"	1.00"
<input type="checkbox"/>	CS-PW-500	1/2"	1.00"
<input type="checkbox"/>	CS-PW-625	5/8"	1.25"

CHAMPION STRUT™ PVC FLAT WASHERS

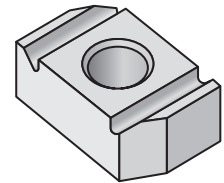
Champion Strut flat washers are made from PVC and are available for 1/4" diameter through 5/8." PVC washers are recommended for the connections that utilize hex head cap screws and hex head nuts. PVC washers are packaged in bags containing 25 pieces.



	ITEM NO	SIZE (IN)	OUTSIDE DIAMETER (IN)
<input type="checkbox"/>	CS-FW-250	1/4"	.49"
<input type="checkbox"/>	CS-FW-375	3/8"	1.00"
<input type="checkbox"/>	CS-FW-500	1/2"	1.25"
<input type="checkbox"/>	CS-FW-625	5/8"	1.50"

CHAMPION STRUT™ CHANNEL NUTS

Champion Strut channel nuts are engineered and designed to provide maximum surface area engagement and pull-out strength with the strut flanges of the CS-S Series fiberglass channels. These channel nuts can only be used with the CS-S Series fiberglass channels due to the unique design of the strut flanges. All channel nuts are manufactured from glass-reinforced polyurethane and are packaged in bags containing 25 pieces.



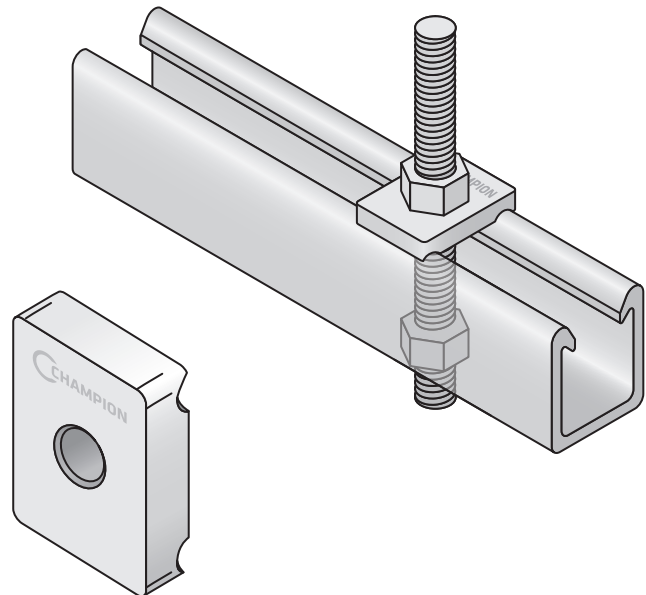
	ITEM NO	CHANNEL NUT SIZE (IN)	THREAD SHEAR (LBS)*	TORQUE* (FT/LBS)
<input type="checkbox"/>	CS-CN-375	3/8" – 16	460	3
<input type="checkbox"/>	CS-CN-500	1/2" – 13	460	3

* Torque values shown represent a 3:1 safety factor.

CHAMPION STRUT™ SADDLE CLIPS

Champion Strut saddle clips are injection molded from glass-reinforced polyurethane and available in 3/8" and 1/2" sizes. The saddle clips (also referred to as square washers) can be used to center and stabilize fiberglass all-thread rods when installing piping or conduit trapeze hanger supports. The saddle clips are packaged in bags containing 25 pieces.

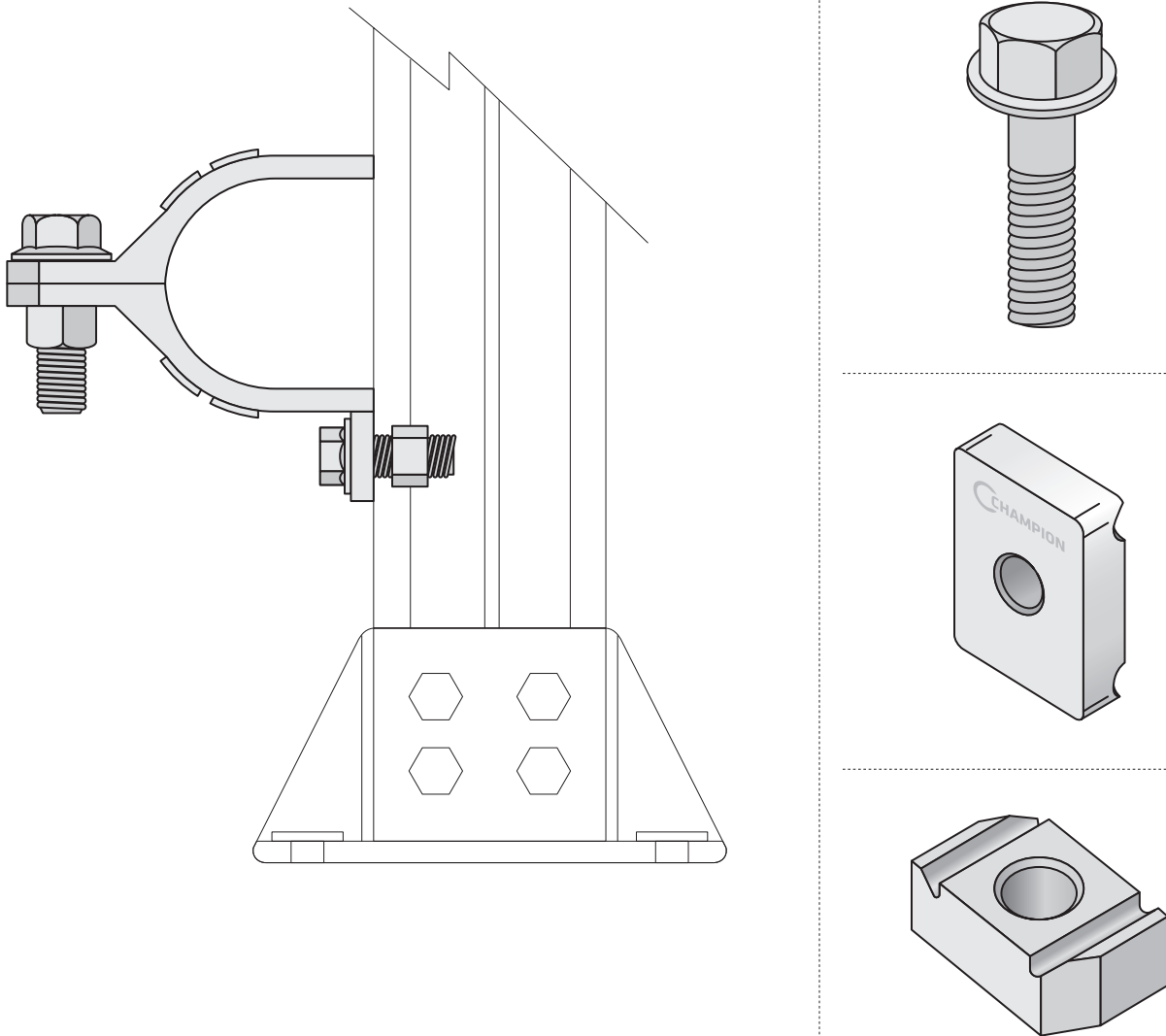
	ITEM NO	HOLE SIZE (IN)
<input type="checkbox"/>	CS-SC-375	3/8"
<input type="checkbox"/>	CS-SC-500	1/2"
<input type="checkbox"/>	CS-SC-625	5/8"



CHAMPION STRUT™ STOP-LOCK ASSEMBLY

Champion Strut stop-lock assemblies are recommended to reduce or eliminate potential slippage of piping or conduit installed in vertical channel applications. Stop-lock assemblies will also assist with applications that may be subjected to vibration or have regular contact with fluids.

The stop-lock assembly consists of three components; a polyurethane hex flange bolt, a saddle clip and a channel nut. The stop-lock assemblies are available in 3/8" and 1/2" sizes and can only be used with the CS-S Series fiberglass channels due to the unique design of the strut flanges.



	ITEM NO	CHANNEL NUT SIZE (IN)	FORCE* RESISTANCE (LBS)	TORQUE* (FT/LBS)
<input type="checkbox"/>	CS-SL-375	3/8" – 16	200	3
<input type="checkbox"/>	CS-SL-500	1/2" – 13	220	3

* Force resistance and torque values shown represent a 3:1 safety factor.