

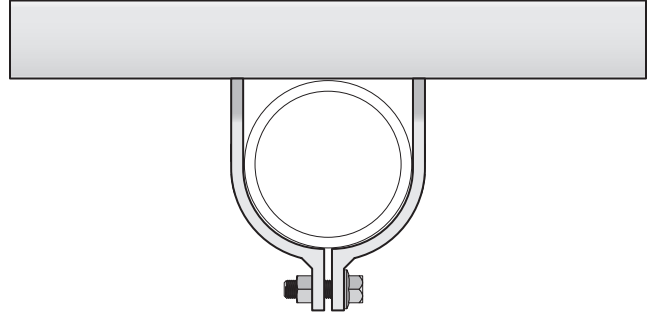
Pipe Clamps

CHAMPION STRUT™ PIPE CLAMP DESIGN LOAD DATA

Care should be taken to recognize the two different piping system loadings, overhead (Type 1) and vertical (Type 2). Champion Strut pipe clamps show the recommended loading for each type of application.

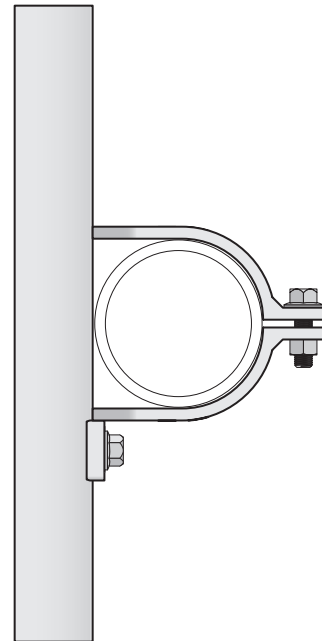
Type 1 Design Loading

Type 1 Design Loading represents piping being supported overhead below the channel. The design loads shown represent a 3:1 safety factor.



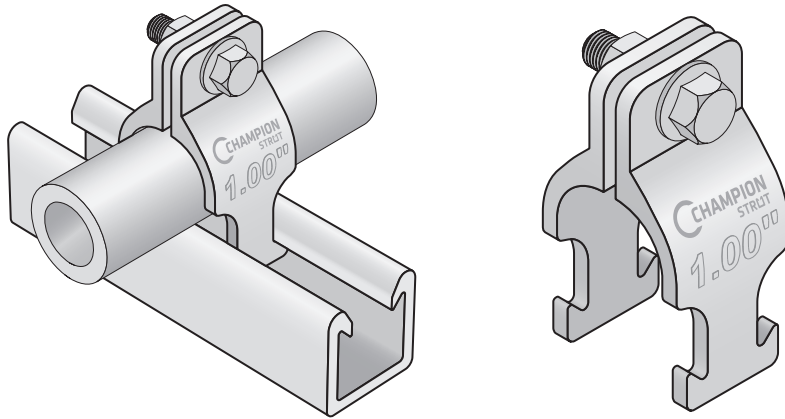
Type 2 Design Loading

Type 2 Design Loading represents piping being supported with the addition of a physical “Stop-Lock Assembly” (CS-SL-500) which assists in prohibiting slippage of the vertically supported piping within the channel. The “Stop-Lock” should be installed directly beneath the pipe clamp as illustrated. It is recommended the “Stop-Lock Assembly” be used for all vertical piping applications. The design loads shown represent a 3:1 safety factor.



CHAMPION STRUT™ RIGID PIPE CLAMPS

Champion Strut rigid pipe clamps are made from glass-reinforced polyurethane and are IPS-sized to fit the OD (outside diameter) of SCH40 and SCH80 PVC piping and conduit as well as IPS-sized steel piping and steel/fiberglass conduits. The Champion Strut rigid clamps are designed to be used within (and not to exceed) operating temperatures up to 160°F. Care should be taken not to exceed the recommended torque values shown.

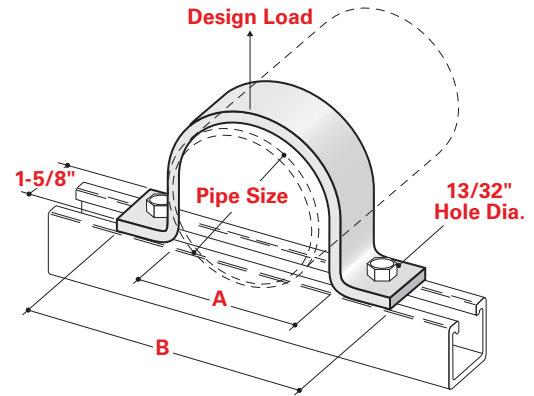


	ITEM NO	NOMINAL SIZE (IN)	IPS PIPING SIZE (IN)	DESIGN LOADS (LBS)		FRP BOLT SIZE (IN)	FRP BOLT TORQUE (FT/LBS)
				TYPE 1	TYPE 2		
<input type="checkbox"/>	CS-PC-050	1/2"	0.84"	226	91	3/8" x 1-1/4"	3
<input type="checkbox"/>	CS-PC-075	3/4"	1.05"	226	91	3/8" x 1-1/4"	3
<input type="checkbox"/>	CS-PC-100	1"	1.32"	226	91	3/8" x 1-1/4"	3
<input type="checkbox"/>	CS-PC-125	1-1/4"	1.66"	226	91	3/8" x 1-1/4"	3
<input type="checkbox"/>	CS-PC-150	1-1/2"	1.90"	226	91	3/8" x 1-1/4"	3
<input type="checkbox"/>	CS-PC-200	2"	2.37"	226	91	3/8" x 1-1/4"	3
<input type="checkbox"/>	CS-PC-250	2-1/2"	2.87"	226	91	3/8" x 1-1/4"	3
<input type="checkbox"/>	CS-PC-300	3"	3.50"	226	91	3/8" x 1-1/4"	3
<input type="checkbox"/>	CS-PC-400	4"	4.50"	301	126	3/8" x 1-1/4"	3
<input type="checkbox"/>	CS-PC-500	5"	5.56"	301	126	3/8" x 1-1/4"	3
<input type="checkbox"/>	CS-PC-600	6"	6.63"	301	126	3/8" x 1-1/4"	3
<input type="checkbox"/>	CS-PC-800	8"	8.63"	301	126	3/8" x 1-1/4"	3

Note: Design loads indicated represent a 3:1 safety factor. Torque value displayed is in ft/lbs. Pipe clamps are supplied with 3/8" nut and bolt hardware.

CHAMPION STRUT™ TWO-HOLE PIPE CLAMPS

Champion Strut two-hole pipe clamps are designed for securing IPS-sized piping and conduit to Champion Strut channels or other material type channels. These two-hole pipe clamps can be used in both Type 1 and Type 2 loading applications. The Champion Strut two-hole pipe clamps are manufactured from a fire-retardant, glass-reinforced polyester resin. Larger diameter clamps for special applications are also available. Please contact the Champion Fiberglass factory for pricing and availability on vinyl ester hangers and non-standard pipe clamp sizes.

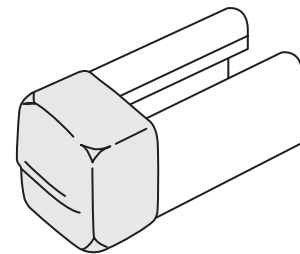


	ITEM NO	NOMINAL SIZE (IN)	IPS PIPING SIZE (IN)	BOLT SIZE (IN)	DESIGN LOAD		DIMENSIONS		MATERIAL SIZE (IN)	FRP BOLT TORQUE (FT/LBS)
					TYPE 1 (LBS)	TYPE 2 (LBS)	A (IN)	B (IN)		
<input type="checkbox"/>	CS-PS-050	1/2"	.84"	1/2"	135	50	.84"	4.84"	1/4" x 1-5/8"	4
<input type="checkbox"/>	CS-PS-075	3/4"	1.05"	1/2"	135	50	1.05"	5.05"	1/4" x 1-5/8"	4
<input type="checkbox"/>	CS-PS-100	1"	1.32"	1/2"	135	50	1.32"	5.32"	1/4" x 1-5/8"	4
<input type="checkbox"/>	CS-PS-150	1-1/2"	1.90"	1/2"	135	50	1.90"	5.90"	1/4" x 1-5/8"	4
<input type="checkbox"/>	CS-PS-200	2"	2.37"	1/2"	135	50	2.375"	6.375"	1/4" x 1-5/8"	4
<input type="checkbox"/>	CS-PS-250	2-1/2"	2.87"	1/2"	135	50	2.875"	6.875"	1/4" x 1-5/8"	4
<input type="checkbox"/>	CS-PS-300	3"	3.50"	1/2"	135	50	3.50"	7.50"	1/4" x 1-5/8"	4
<input type="checkbox"/>	CS-PS-350	3-1/2"	4.00"	1/2"	135	50	4.00"	8.00"	1/4" x 1-5/8"	4
<input type="checkbox"/>	CS-PS-400	4"	4.50"	1/2"	175	60	4.50"	8.50"	1/4" x 1-5/8"	4
<input type="checkbox"/>	CS-PS-500	5"	5.56"	1/2"	175	60	5.563"	9.563"	1/4" x 1-5/8"	4
<input type="checkbox"/>	CS-PS-600	6"	6.63"	1/2"	175	60	6.625"	10.625"	1/4" x 1-5/8"	4
<input type="checkbox"/>	CS-PS-800	8"	8.63"	1/2"	225	125	8.625"	12.625"	1/4" x 1-5/8"	4
<input type="checkbox"/>	CS-PS-1000	10"	10.75"	5/8"	225	125	10.75"	15.75"	1/4" x 1-5/8"	10
<input type="checkbox"/>	CS-PS-1200	12"	12.75"	5/8"	225	125	12.75"	16.25"	1/4" x 1-5/8"	10
<input type="checkbox"/>	CS-PS-1400	14"	14.00"	5/8"	250	150	14.00"	18.00"	3/8" x 1-5/8"	10
<input type="checkbox"/>	CS-PS-1600	16"	16.00"	5/8"	250	150	16.00"	20.00"	3/8" x 1-5/8"	10
<input type="checkbox"/>	CS-PS-1800	18"	18.00"	5/8"	250	150	18.00"	23.00"	3/8" x 1-5/8"	10

Note: Design loads indicated represent a 3:1 safety factor. Two-hole pipe straps should not be torqued above recommended values. Torque values displayed are in ft/lbs.

CHAMPION STRUT™ CHANNEL END-CAPS

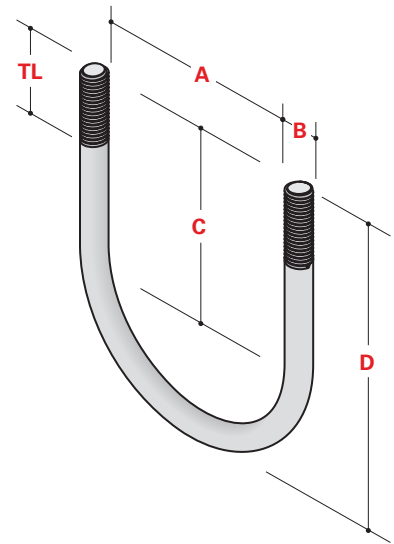
PVC channel end-caps are available for the CS-S and CS-SST series channels sized 1-5/8" x 3-1/4" (back-to-back) and 1-5/8" x 1-5/8" (single). These end-caps are available in black, white or red colors.



	ITEM NO	CHANNEL SIZE	COLOR
<input type="checkbox"/>	CS-EC-D-B	1-5/8" x 3-1/4"	Black
<input type="checkbox"/>	CS-EC-D-W	1-5/8" x 3-1/4"	White
<input type="checkbox"/>	CS-EC-D-R	1-5/8" x 3-1/4"	Red
<input type="checkbox"/>	CS-EC-S-B	1-5/8" x 1-5/8"	Black
<input type="checkbox"/>	CS-EC-S-W	1-5/8" x 1-5/8"	White
<input type="checkbox"/>	CS-EC-S-R	1-5/8" x 1-5/8"	Red

CHAMPION STRUT™ U-BOLTS

Champion Strut U-bolts provide a non-metallic composite alternative to traditional metallic U-bolts. Champion Strut U-bolts are available in standard and extended-reach sizes. All Champion Strut U-bolts are constructed from glass-reinforced polyurethane resin and are recommended for temperatures ranging from -40°F to +150°F. Each U-bolt is supplied with two polyurethane hex nuts. Additional nuts and washers can be purchased separately.



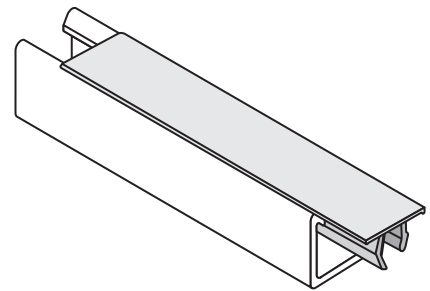
PIPE CLAMPS

	ITEM NO	PIPE NOMINAL DIAMETER (IN)	DIMENSIONS					LOAD RATINGS	
			A (IN)	B (IN)	C (IN)	D (IN)	TL (IN)	MAX REC. LOAD LBS	MAX REC. LOAD IN/LBS
<input type="checkbox"/>	CS-UB-050	1/2"	0.93"	0.375"	1.56"	2.41"	1.25"	75	20
<input type="checkbox"/>	CS-UB-075	3/4"	1.12"	0.375"	1.66"	2.60"	1.25"	75	20
<input type="checkbox"/>	CS-UB-100	1"	1.37"	0.375"	1.78"	2.85"	1.25"	75	20
<input type="checkbox"/>	CS-UB-125	1-1/4"	1.68"	0.375"	1.94"	3.16"	1.25"	75	20
<input type="checkbox"/>	CS-UB-150	1-1/2"	2.00"	0.375"	2.10"	3.47"	1.25"	75	20
<input type="checkbox"/>	CS-UB-200	2"	2.43"	0.500"	2.46"	4.18"	1.50"	75	20
<input type="checkbox"/>	CS-UB-250	2-1/2"	2.93"	0.500"	2.71"	4.68"	1.50"	75	20
<input type="checkbox"/>	CS-UB-300	3"	3.56"	0.500"	3.03"	5.31"	1.50"	75	20
<input type="checkbox"/>	CS-UB-350	3-1/2"	4.06"	0.500"	3.28"	5.81"	1.50"	75	20
<input type="checkbox"/>	CS-UB-400	4"	4.56"	0.500"	3.53"	6.31"	1.50"	75	20

Note: Design loads indicated represent a 3:1 safety factor. U-bolts should not be torqued above recommended values. Torque values displayed are in in/lbs.

CHAMPION STRUT™ CHANNEL CLOSURE STRIP

PVC closure strip is designed to close and provide a cover for the channel opening. Channel closure strip is provided in 5-ft lengths and is easily installed by pressing it into the channel opening.

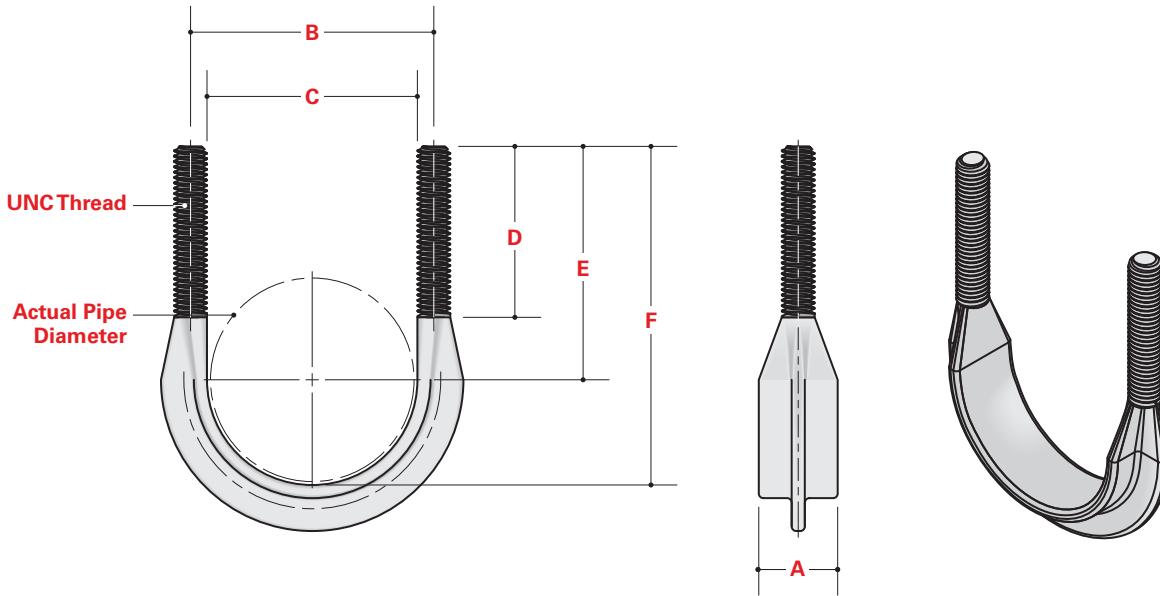


	ITEM NO	LENGTH
<input type="checkbox"/>	CS-CS-5	5 ft

Closure strip fits both CS-S and CS-SST series channels

CHAMPION STRUT™ EXTENDED-REACH U-BOLTS

Champion Strut extended-reach U-bolts provide a larger saddle area and longer threaded area than traditional metallic U-bolts. All extended-reach U-bolts are constructed from glass-reinforced polyurethane resin and are recommended for temperatures ranging from -40°F to +150°F. Each U-bolt is supplied with two polyurethane hex nuts. Additional nuts and washers can be purchased separately.



	ITEM NO	NOMINAL SIZE (IN)	IPS PIPING SIZE	DESIGN LOAD		UNC THREAD SIZE	FRP BOLT TORQUE (IN/LBS)
				TYPE 1 (LBS)	TYPE 2 (LBS)		
<input type="checkbox"/>	CS-UBE-100	1"	1.32"	300	150	3/8" – 16	40
<input type="checkbox"/>	CS-UBE-150	1-1/2"	1.90"	300	150	3/8" – 16	40
<input type="checkbox"/>	CS-UBE-200	2"	2.37"	300	150	1/2" – 13	80
<input type="checkbox"/>	CS-UBE-300	3"	3.50"	500	250	1/2" – 13	80
<input type="checkbox"/>	CS-UBE-400	4"	4.50"	500	250	1/2" – 13	80
<input type="checkbox"/>	CS-UBE-600	6"	6.625"	500	250	5/8" – 11	80

	ITEM NO	NOMINAL SIZE (IN)	DIMENSIONS							UNC THREAD SIZE	FRP BOLT TORQUE (IN/LBS)
			A (IN)	B (IN)	C (IN)	D (IN)	E (IN)	F (IN)	G (IN)		
<input type="checkbox"/>	CS-UBE-100	1"	.563"	1.75"	1.375"	1.875"	2.938"	3.00"	3.375"	3/8" – 16	40
<input type="checkbox"/>	CS-UBE-150	1-1/2"	.563"	2.375"	2.00"	2.125"	2.656"	3.656"	4.03"	3/8" – 16	40
<input type="checkbox"/>	CS-UBE-200	2"	.75"	2.938"	2.438"	2.375"	4.375"	5.593"	6.093"	1/2" – 13	80
<input type="checkbox"/>	CS-UBE-300	3"	.75"	4.125"	3.625"	2.625"	5.50"	7.313"	7.813"	1/2" – 13	80
<input type="checkbox"/>	CS-UBE-400	4"	.75"	5.125"	4.625"	2.625"	6.50"	8.513"	9.313"	1/2" – 13	80
<input type="checkbox"/>	CS-UBE-600	6"	.875"	7.375"	6.75"	3.25"	9.125"	12.313"	12.938"	5/8" – 11	80

Note: Design loads indicated represent a 3:1 safety factor. U-bolts should not be torqued above recommended values. Torque values displayed are in in/lbs.

