

Precision-Made Hygienic Clamps for Pharmaceutical & Biotech Industries

Data Sheet 06-0030 Rev. 12/18



A complete line of hygienic clamps made specifically for the Pharmaceutical and Biotech Industries where joint cleanliness and efficiency are of paramount importance. These stainless steel clamps are made from investment castings to produce a high quality, precision fit assembly. They are designed to provide quick access to the joint for cleaning and inspection without sacrificing safety.

The SH Style Clamp: Standard in 316 Stainless Steel, it incorporates a two-pin hinge that allows for a more uniform compression on the gasket. Sizes range from 1/2" to 12" and are available in a two-bolt system (Type II in sizes 6" and larger) with either wing nuts or hex nuts (SHX) for greater torque control and more compact assembly.

The SSH Clamp: This high-pressure clamp is available in 304 or optional 316 Stainless Steel. Available tubing sizes range from 1/2" to 6". Hex nut material is available in the standard brass or stainless steel.

The ASME Clamp: Designed for pressure vessels, filter housings and other applications, this clamp ranges from 1" to 12". It is designed to meet the requirements of ASME section VIII Appendix 24 of the Pressure Vessel Code. All components of the ASME Clamp are made from fully traceable 316 Stainless Steel.

Schedule Pipe Clamps are also available for each of these clamp styles. Compared to common pipe flange connections, sanitary pipe connections cost less, provide lower maintenance costs, quicker & easier access, and greater cleanability. A list of pipe sizes for each clamp type can be found on the next page.

Fasteners for the SH Clamp are available in a wide variety of styles to meet the vast requirements of the industry. The standard ergonomic wing nut allows easy hand torquing while the conventional wing nut provides coverage of the bolt threads. This conventional style is also available with a hole for torque assistance and storage. Hex nut options include the standard dome nut, hex nut and spring loaded dome nut that keeps tension on the gasket during expansion and contractions of the ferrules due to temperature fluctuations. Non-galling options are also available.

All clamps are **CE compliant** per the Pressure Equipment Directive 97/23/EC and the Machinery Directive 98/37/EC. Please contact L.J. Star for gasket and ferrule options.

- Variety of fastener options
- Delivery from stock
- High pressure ratings
- Superior surface finish
- 316 stainless steel standard

- Large wing nuts for easy, accurate torquing
- Precision-manufactured for uniform gasket compression
- Unique groove profile provides higher clamping efficiency



Clamp Style Number Description		
	Wing Nut	Hex Nut
Single Bolt	SH Type I	SHX Type I
Double Bolt	SH Type II	SHX Type II
SH Denotes wing nut fastener.		
SHX Denotes hex nut fastener.		
Type I Denotes single bolt.		
Type II Denotes double bolt.		

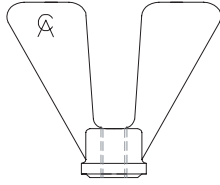
L.J. STAR
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L.J. Star Incorporated, P.O. Box 1116, Twinsburg, OH 44087

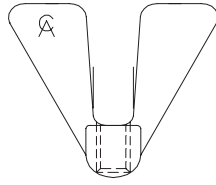
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CLAMP FASTENER OPTIONS

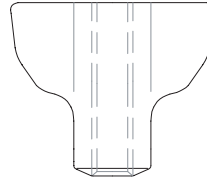
WING NUT OPTIONS



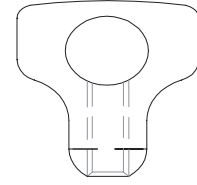
ERGONOMIC
STANDARD



ERGONOMIC
DOME

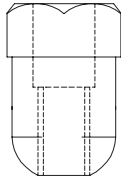


CONVENTIONAL
NO HOLE

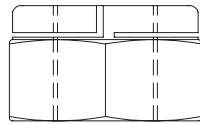


CONVENTIONAL
WITH HOLE

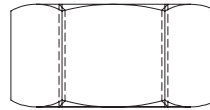
HEX NUT OPTIONS



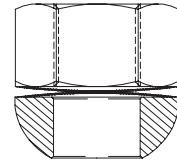
DOME NUT



LOCK NUT



STANDARD NUT



SPRING LOADED

STANDARD TUBING SIZES

PRESSURE RATINGS (PSIG)

CLAMP SIZE		MAX WORKING PRESSURE @ 300°F				MAX TEST PRESSURE			
TUBE OD	METRIC	S	SH	SSH	ASME	S	SH	SSH	ASME
1/2", 3/4"	-	363	725	1088	-	725	1450	2175	-
1", 1-1/2"	25-40	363	725	1088	2422	725	1450	2175	12108
2"	50	363	725	1088	1305	725	1450	2175	6525
2-1/2"	-	363	725	1088	-	725	1450	2175	-
3"	65	290	580	870	1305	580	1160	1740	6525
3-1/2"	80	290	580	870	-	580	1160	1740	-
4"	100	247	508	769	827	493	1015	1523	4133
5"	-	-	435	653	-	-	870	1305	-
6"	-	218	435	653	406	435	870	1305	2030
8"	-	-	290	464	218	-	580	928	1088
10"	250	-	232	-	145	-	464	-	725
12"	300	-	145	-	102	-	290	-	508

PIPE SCHEDULE SIZES

PRESSURE RATINGS (PSIG)

CLAMP SIZE		MAX WORKING PRESSURE 300°F				MAX TEST PRESSURE			
TUBE OD	METRIC	S	SH	SSH	ASME	S	SH	SSH	ASME
4"	-	218	435	653	-	435	870	1305	-
5"	125	-	435	653	-	-	870	1305	-
6"	150	-	363	551	319	-	725	1088	1595
8"	200	-	290	435	174	-	580	870	870
10"	-	-	232	-	-	-	464	696	-
12"	-	-	145	-	-	-	290	-	-

Note: ASME Clamp pressure ratings are calculated under the strict guidelines in the ASME Section VIII Code and incorporate a safety factor of 5.