

NO:0118/24.07



Fasteners for Sheet Metal 面板紧固件

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Nuts for Sheet Metal 压铆螺母



LAS/LAC/LLAS/LLAC 11

These fasteners provide load-bearing threads in thin sheets and permit up to 0.8mm adjustment for mating hole misalignment, have locking and non-locking threads.

自调功能可补偿孔的0.8mm安装误差，具有自锁和非自锁螺纹。



LB/LBS 12

Blind self-clinching fasteners apply for closed thread.

盲孔压铆螺柱，运用于需求封闭的螺纹。



LCLA 13

Aluminum self-clinching nuts.

铝压铆螺母。



LS/LSS/LCLS/LCLSS 14
LSP

Steel and stainless steel self-clinching nuts.

钢或不锈钢压铆螺母。



LSMPS 16

This type is for installation into ultra-thin sheets. The feature is with lower profile and can be mounted closer to the edge of a sheet than other self-clinching nuts.

此类压铆螺母适用于更接近边缘的位置用于超薄板。



LH/LHN/LHNL 17

Steel self-locking and non-locking nuts.

钢压铆螺母，自锁和非自锁类型。



LF 18

These fasteners are ideal for applications where a thin sheet requires load-bearing threads but still must remain smooth, with no protrusions on either surface.

齐平压铆螺母，非常适用于安装后对面板要求光滑的产品。



LFE/LFEO/LFEOX
LU/LUL 19

Minature self-clinching fasteners have locking and non-locking threads.

微型压铆螺母，提供自锁和非自锁螺纹。



LLK/LKS/LKAS 20

Provide self-locking performance without damaging the lock screw of fittings.

提供锁紧性能的同时不会损坏配件的螺纹。



LCFN 21

Nylon insert self-locking fasteners apply for smaller hole margins .

尼龙防松压铆螺母，可用于较小孔边距。



LPL/LPLC 22

Nylon insert self-locking fasteners can prevent the wear of threads.

尼龙防松压铆螺母，可防止螺丝磨损。

	LRAA	23	Aluminum self-tapping right angle fastener.	铝自攻直角扣件。
	LRAS	24	Steel threaded right angle fastener.	钢质螺纹直角扣件。
Studs and Pins for Sheet Metal 压铆螺栓/销钉				
	LCFHA/LCFHC LCHA/LCHC	25	Concealed-head aluminum and stainless steel self-clinching studs.	埋头铝螺栓和不锈钢螺栓。
	LFH/LFHS/LFHA	26	Flush-head studs are available to aluminum, steel, or stainless steel. They are also available to unthreaded on special order.	压铆螺钉，用于铝板，铁板，可接受无螺纹需求的定制。
	LFH/LFHS Unthread	27	Self-locking flush-head pins.	压铆平头销钉。
	LFH4/LFHP	28	Flush-head studs with high pushout and torque-out resistances.	高扭矩平头压铆螺栓。
	LFHL/LFHLS	29	Low-displacement head studs can be installed close to the edge of a sheet without causing the edge to bulge.	适合安装到靠近到板较小边缘，且产品不会凸起。
	LHFH/LHFHS/LHFHB	30	High strength, low cost, easy to install.	高强度，成本低，安装简易。
	LHFE	31	Studs with enlarged head diameter have high-strength connection.	头部直径加大的压铆螺栓.增加连接强度。
	LTFH/LTFHS	32	Non-flush for sheets as thin as .020" / 0.51 mm.	适合安装在最小厚度为 .020" / 0.51mm薄板上的凸头螺栓。
	LTPS	33	LTPS satisfy a wide range of position, pivot, and alignment applications.	LTPS用途广泛，容易安装，准确定位。

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Standoffs for Sheet Metal

压铆螺柱

	LSO/LSOA/LSOS	34	Thru-hole bolts with effect from the gauge or fixed to the chassis or circuit board.	通孔螺柱，用在机箱或电路板上起隔距或固定作用。
	LSO4	35	Thru-hole threaded for installation into stainless steel sheets as thin as .040" / 1.02 mm.	通孔螺纹，可应用于最薄至 .040" / 1.02 mm 的不锈钢板材。
	LSO/LSOA/LSOS Unthread	36	Thru-hole non-threaded can be effected the spacing.	通孔无螺纹，起间隔作用。
	LBSO/LBSOA LBSOS	37	Blind bolts with effect from the gauge or fixed to the chassis or circuit board.	盲孔螺柱，用在机箱或电路板上起隔距或固定作用。
	LBSO4	38	Blind threaded for installation into stainless steel sheets as thin as .040" / 1.02 mm.	盲孔螺纹，可应用于最薄至 .040" / 1.02 mm 的不锈钢板材。
	LTSO/LTSOA/LTSOS	39	Threaded standoffs for sheet as thin as .025" / 0.63 mm.	带螺纹螺柱，适用于薄至.025" /0.63mm板材中。
	LDSO/LDSOS	40	Threaded standoffs for close-to-edge applications.	带螺纹螺柱，安装于靠近板材边缘的环境中。
	LSSA/LSSS/LSSC	41	Interval PC board with other board or metal plate, simply press the button on the plate cylinder to ensure correct needed spacing for both.	可将PC或面板与其它板或金属底板隔开，并保证此二者间的所需的正确间距。
	LSKC	42	Using PC board or other parts slide into place quickly, playing a role interval.	可使用PC板或其它零件迅速滑动到位，起到间隔作用。
	LCSOS/LCSS	43	Stainless steel standoffs.	不锈钢压铆螺柱。

Captive Panel Screw and Hardware 面板紧固件

	LPF11/LPF11M LPF12/LPF12M LPF15/LPF15M	44	These panel fasteners have the characteristics of a universal slot or cross . Convex cap is easy to use.	此类面板紧固件具有万能槽或十字槽的特色.凸帽使用方便。
	LPF11MF/LPF12MF	45	Appropriate for close centerline-to-edge applications.	适用于贴近安装板边缘的应用环境。
	LPF11MW/LPF12MW	46	Compensates for mating hole misalignment.	有效补偿产品与配件孔的偏差。
	LPF11PM	47	Colorful self-clinching panel fastener assemblies.	彩色面板螺丝。
	LPF30/LPF31/LPF32	48	Convenient, large, slotted head for tool or finger operation.	头部宽大，并有一字槽设计，便于工具或手指操作。
	LPF50/LPF60 LPF52/LPF62	49	Low-profile panel fastener assembly with large knurled cap and Phillips recess for tool or hand operation.	紧凑型面板紧固件，其头部较大且带有十字凹槽,所以可以通过工具或手进行安装。
	LPFHV	50	Small, compact and low profile design for limited access areas.	设计紧凑，简洁，适用于比较狭小的操作空间。
	LPFC2/LPFS2	51	Available in steel or stainless steel. Tool or finger operation.	有碳钢和不锈钢两种材质供选,工具或手指操作均可。
	LPFC4	52	Install into stainless steel sheets HRB 88 or less.	适用于硬度不高于HRB88的不锈钢安装板。
	LPFC2P	53	Panel fastener assembly with Phillips recess for tool only operation.	这种面板紧固件仅能用工具安装。
	LPSL2/LPTL2	54	Locating pins, spring-loaded.	弹簧定位销。

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Sheet-To-Sheet Attachment 双面板紧固件

	LSF	55	Type LSF for permanent joining of two metal sheets.	LSF系列用于永久连接两个面板。
	LSPF	56	Type LSFP fasteners are made from precipitation hardened stainless steel for installation into stainless steel sheets where corrosion resistance may be required.	LSFP系列由沉淀硬化不锈钢制成，用于安装到耐腐蚀的不锈钢板。
	LSFW	57	Type LSFW is specially designed to allow pivoting of two sheets of metal. A wave washer provides the consistent torsion to allow repeatable rotation.	LSFW类型是专门针对两块金属板旋转。波形垫圈为重复的旋转提供了一直的扭力。
	LSFK	58	Type LSKF fasteners create a permanent , flush joining of metal to PCB/plastic panel.	LSFK系列紧固件可以构成一个永久的，快速的连接，使其连接到PC板上面。
	LSKC-F	59	These types allow detachable joining of two sheets.	此类型紧固件允许可分离的两板之间的连接。

Fasteners for Mounting into PCB PC板专用紧固件

	LKF2/LKFS2	60	Broaching standoffs, threaded or unthreaded for mounting on PC boards.	为PC板提供有螺纹/无螺纹的支撑柱。
	LKFE/LKFSE	61	Broaching standoffs, threaded or unthreaded for stacking or spacing.	为PC板提供有螺纹/无螺纹的间隔柱。
	LKSSB	62	The feature fo broaching standoffs is with spring action to hold PC board securely without screws or threaded hardware.	支撑柱有弹性功能可以牢固的支撑无螺纹紧固件的PC板。
	LSMTO	63	Surface mount standoffs.	表面安装支架紧固件。

Cable Tie-Mounts and Hooks for Sheet Metal 电缆线配件



LTD

64

Self-clinching tie-mounts provide secure attachment points for mounting wires to electronic chassis or enclosures.

压铆支架，为电子机箱或外壳安装电线提供安全的连接点。



LTDO

65

self-clinching hooks provide secure attachment points for mounting wires to electronic chassis or enclosures.

压铆挂钩，为电子机箱或外壳安装电线提供安全的连接点。

Weld Nuts 三点焊接螺母



LWN/LWNS

66

Weld nuts.

三点焊接螺母。

Finish Code / 表面处理代码

Finish / 表面处理	Code / 代码	Finish / 表面处理	Code / 代码
Zinc Blue / 镀蓝锌	ZU	Nickel Flash / 镀亮镍	NI
Zinc Black / 镀黑锌	ZB	Nickel Electroless / 无电解镍	EN
Zinc Yellow / 镀五彩锌	ZC	Chrome Flash / 镀亮铬	CR
Zinc Clear / 镀白锌	ZI	Tin Flash / 镀亮锡	ET
Black Anodize / 氧化黑色	BL	Passivation / 钝化	PS
Natural Anodize / 氧化本色	NA	Gold Plating / 镀金	AU
Gold Anodize / 氧化金色	GD	Sliver Plating / 镀银	AG
Copper Red / 镀红铜	RU	Titanium Plating / 镀钛	TI
Copper Yellow / 镀黄铜	YU	Cadmium Plating / 镀镉	CD
Nickel Over Copper / 镀铜底镍	CN	Zinc-Iron Alloy / 镀锌-铁合金	ZF
Tin Matt / 镀哑锡	DT	Chromate / 镍酸盐	CH
Flash Black Painting Coating / 喷黑漆	PC	Plain / 素材	X
Sn/Pb Plating / 镀锡铅合金	TP	Electro Painting / 电泳漆	EF
Sandblast and Anodize / 喷砂阳极	SA	Black Nitride and Dry to Touch Oil/黑色氮化处理	BN
Cadmium Plus Clear Chromate/镀镉钝化	CI	Cadmium Plus Metric Blue Chromate/镀蓝镉钝化	CB
Cadmium Plus Olive Drab Chromate/镀绿镉钝化	CO	Cadmium Plus Yellow Chromate/镀黄镉钝化	C
Copper Flash/镀亮铜	CU	Molybdenum Disulfide Dry Film Lubricant/干膜润滑剂	MD
Semi-bright Nickel/镀半光亮镍	N	Passivated Plus Clear Dry-film Lubricant 钝化加干膜润滑剂	CW
Zinc Plus Clear Chromate Plus Sealant Lubricant/镀白锌+润滑剂	LZ		

Floating-LAS LAC LLAS LLAC



Features

- ◆ Floating self-clinching fasteners.
- ◆ Locking and Non-locking Threads.
- ◆ These fasteners provide load-bearing threads in thin sheets and permit up to .030 inches / 0.8 mm adjustment for mating hole misalignment.

特征

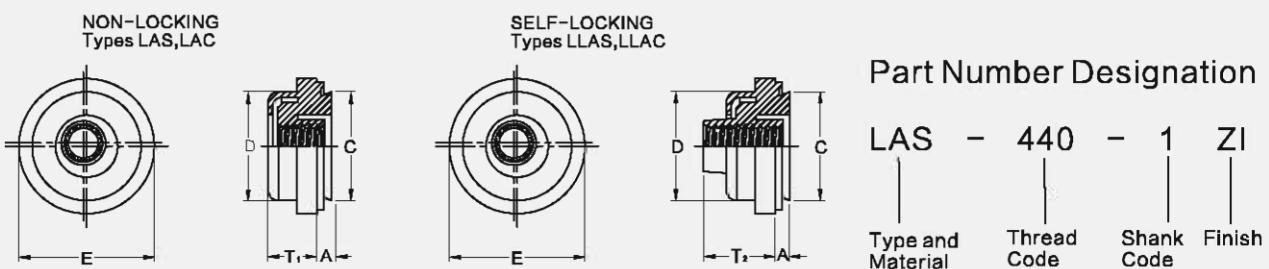
- ◆ 浮动压铆螺母。
- ◆ 提供自锁和非自锁类型。
- ◆ 自调节功能可补偿配合孔.030"/0.8mm 安装公差。

UNIFIED/unit:Inch

Thread Size	Type				Thread Code	Shank Code	A (Shank Max.)	Min. Sheet Thickness	Hole Size in Sheet +.003 -.000	C Max.	D Max.	E ± .015	T₁ Max.	T₂ Max.	Min. Dist. Hole C/L To Edge												
	Non-Locking		Self-Locking																								
	Fastener Material	Fastener Material	Steel	Stainless steel																							
.112-40 (#4-40)	LAS	LAC	LLAS	LLAC	440	1 2	.038 .054	.038 .054	.290	.289	.290	.36	.13	.19	.30												
.138-32 (#6-32)	LAS	LAC	LLAS	LLAC	632	1 2	.038 .054	.038 .054	.328	.327	.335	.39	.13	.20	.32												
						1 2	.038 .054	.038 .054	.368	.367	.365	.44	.13	.21	.34												
.164-32 (#8-32)	LAS	LAC	LLAS	LLAC	832	1 2	.038 .054	.038 .054	.406	.405	.405	.47	.17	.27	.36												
						1 2	.038 .054	.038 .054	.406	.405	.405	.47	.17	.27	.36												
.190-24 (#10-24)	LAS	LAC	LLAS	LLAC	024	1 2	.038 .054	.038 .054	.515	.514	.510	.60	.21	.31	.42												
						1 2	.038 .054	.038 .054	.515	.514	.510	.60	.21	.31	.42												
.190-32 (#10-32)	LAS	LAC	LLAS	LLAC	032	1 2	.038 .054	.038 .054	.515	.514	.510	.60	.21	.31	.42												
						1 2	.038 .054	.038 .054	.515	.514	.510	.60	.21	.31	.42												
.250-20 (1/4-20)	LAS	LAC	LLAS	LLAC	0420	2	.054	.054	.515	.514	.510	.60	.21	.31	.42												
.250-28 (1/4-28)	LAS	LAC	LLAS	LLAC	0428	2	.054	.054	.515	.514	.510	.60	.21	.31	.42												

ISO METRIC/unit:mm

Thread Size x Pitch	Type				Thread Code	Shank Code	A (Shank Max.)	Min. Sheet Thickness	Hole Size in Sheet +.08	C Max.	D Max.	E ± .04	T₁ Max.	T₂ Max.	Min. Dist. Hole C/L To Edge											
	Non-Locking		Self-Locking																							
	Fastener Material	Fastener Material	Steel	Stainless steel																						
M3 X 0.5	LAS	LAC	LLAS	LLAC	M3	1 2	.97 1.38	.97 1.38	7.37	7.35	7.37	9.14	3.31	4.83	7.62											
M4 X 0.7	LAS	LAC	LLAS	LLAC	M4	1 2	.97 1.38	.97 1.38	9.35	9.33	9.28	11.18	3.31	5.34	8.64											
						1 2	.97 1.38	.97 1.38	10.31	10.29	10.29	11.94	4.32	6.86	9.14											
M6 X 1	LAS	LAC	LLAS	LLAC	M6	2	1.38	1.38	13.08	13.06	12.96	15.24	5.34	7.88	10.67											



LB LBS



Features

- ◆ Blind self-clinching fasteners.
- ◆ Provide barrier to protect threads against foreign matte and also protect circuits from intrusion of extra long screws.

特征

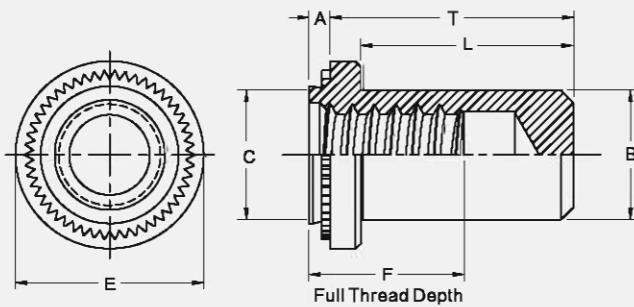
- ◆ 盲孔压铆螺柱。
- ◆ 封闭螺纹限制螺钉穿透，可隔绝外部物质。

UNIFIED/unit:Inch

Thread Size	Type		Thread Code	Shank Code	A (Shank) Max.	Min. Sheet Thickness	Hole Size in Sheet + .003 - .000	B Barrel Diameter Max.	C Shank Diameter Max.	E ± .010	F Min.	L Min.	T ± .010	Min. Dist. Hole C/L to Edge
	Fastener Material	Steel												
.112-40 (#4-40)	LB	LBS	440	1	.038	.040	.166	.150	.165	.25	.21	.335	.38	.19
.138-32 (#6-32)				2	.054	.056								
.164-32 (#8-32)	LB	LBS	832	1	.038	.040	.1875	.169	.187	.28	.23	.335	.38	.22
.190-32 (#10-32)				2	.054	.056								
.250-20 (1/4-20)	LB	LBS	0420	1	.054	.056	.250	.235	.249	.34	.28	.385	.44	.28
				2	.087	.090								

ISO METRIC/unit:mm

Thread Size x Pitch	Type		Thread Code	Shank Code	A (Shank) Max.	Min. Sheet Thickness	Hole Size in Sheet + 0.08	B Barrel Diameter	C Shank Diameter Max.	E ± 0.25	F Min.	L Min.	T ± .025	Min. Dist. Hole C/L to Edge
	Fastener Material	Steel												
M3 x 0.5	LB	LBS	M3	1	0.97	1	4.22	3.84	4.2	6.35	5.3	8.5	9.6	4.8
				2	1.38	1.4								
M4 x 0.7	LB	LBS	M4	1	0.97	1	5.41	5.2	5.38	7.95	7.1	9.8	11.2	6.9
				2	1.38	1.4								
M5 x 0.8	LB	LBS	M5	1	0.97	1	6.35	6.02	6.33	8.75	7.1	9.8	11.2	7.1
				2	1.38	1.4								
M6 x 1	LB	LBS	M6	1	1.38	1.4	8.75	7.8	8.73	11.1	7.8	12.7	14.3	8.6
				2	2.21	2.29								



Part Number Designation

LBS – 440 – 1 ZI

Type and Material Thread Code Shank Finish Code

LCLA



Features

- ◆ For load-bearing threads in thin sheets.
- ◆ Aluminum self-locking nuts.

特征

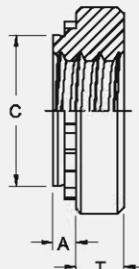
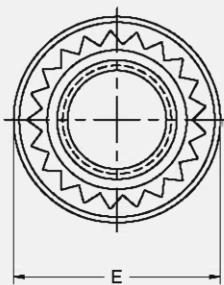
- ◆ 在薄板上面提供载螺纹。
- ◆ 铝压铆螺母。

UNIFIED/unit:Inch

Thread Size	Type	Fastener Material	Thread Code	Shank Code	(Shank) Max.	Min. Sheet Thickness	Hole Size In Sheet +.003 -.000	C Max.	E ± .010	T ± .010	Min. Dist. Hole C/L To Edge
	Aluminum										
.086-56 (#2-56)	LCLA	256	1	.038	.040	.040	.166	.165	.25	.07	.19
			2	.054	.056						
.112-40 (#4-40)	LCLA	440	1	.038	.040	.056	.1875	.187	.25	.09	.22
			2	.054	.056						
.138-32 (#6-32)	LCLA	632	1	.038	.040	.056	.213	.212	.28	.09	.27
			2	.054	.056						
.164-32 (#8-32)	LCLA	832	1	.038	.040	.056	.234	.233	.31	.13	.28
			2	.054	.056						
.190-24 (#10-24)	LCLA	024	1	.038	.040	.056	.296	.295	.37	.16	.31
			2	.054	.056						
.190-32 (#10-32)	LCLA	032	1	.038	.040	.056	.296	.295	.37	.16	.31
			2	.054	.056						
.250-20 (1/4-20)	LCLA	0420	1	.054	.056	.091	.344	.343	.44	.17	.34
			2	.087	.091						
			3	.120	.125						

ISO METRIC/unit:mm

Thread Size x Pitch	Type	Fastener Material	Thread Code	Shank Code	(Shank) Max.	Min. Sheet Thickness	Hole Size In Sheet +.008	C Max.	E ± 0.25	T ± 0.25	Min. Dist. Hole C/L To Edge
		Aluminum									
M2x 0.4	LCLA	M2	1	0.98	1	1.4	4.22	4.2	6.35	1.5	4.8
			2	1.38	1.4						
M3x 0.5	LCLA	M3	1	0.98	1	1.4	4.75	4.73	6.35	2	5.6
			2	1.38	1.4						
M3.5x 0.6	LCLA	M3.5	1	0.98	1	1.4	5.41	5.38	7.11	2	6.9
			2	1.38	1.4						
M4x 0.7	LCLA	M4	1	0.98	1	1.4	5.94	5.92	7.8	3	7.1
			2	1.38	1.4						
M5x 0.8	LCLA	M5	1	0.98	1	1.4	7.52	7.49	9.4	3.8	7.9
			2	1.38	1.4						
M6x 1	LCLA	M6	1	1.38	1.4	2.3	8.75	8.73	11.18	4.08	8.6
			2	2.21	2.3						



Part Number Designation

LCLA - 440 - 1

Type and Material Thread Code Shank Code

LS LSS LCLS LCLSS LSP

Features

- ◆ For load-bearing threads in thin sheets.
- ◆ Steel and stainless steel self-locking nuts.

特征

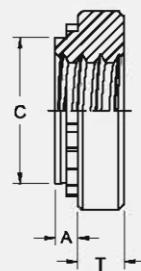
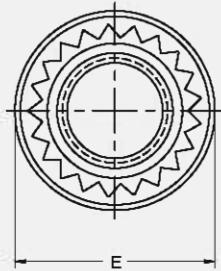
- ◆ 在薄板上面提供承载螺纹。
- ◆ 碳钢和不锈钢压铆螺母。



ISO METRIC/unit:mm

Thread Size x Pitch	Type			Thread Code	Shank Code	A (Shank) Max.	Min. Sheet Thickness	Hole Size In Sheet +0.08	C Max.	E ± 0.25	T ± 0.25	Min. Dist. Hole C/L To Edge
	Carbon Steel	Stainless Steel	Hardened stainless steel									
M2x0.4	LS	LCLS	NA	M2	0	0.77	0.8	4.22	4.2	6.35	1.5	4.8
					1	0.97	1					
					2	1.38	1.4					
M2.5x0.45	LS	LCLS	NA	M2.5	0	0.77	0.8	4.22	4.2	6.35	1.5	4.8
					1	0.97	1					
					2	1.38	1.4					
M3x0.5	LS	LCLS	LSP	M3	0	0.77	0.8	4.22	4.2	6.35	1.5	4.8
					1	0.97	1					
					2	1.38	1.4					
M3.5x0.6	LS	LCLS	NA	M3.5	0	0.77	0.8	4.75	4.73	7.11	1.5	5.6
					1	0.97	1					
					2	1.38	1.4					
M4x0.7	LS	LCLS	LSP	M4	0	0.77	0.8	5.41	5.38	7.87	2	6.9
					1	0.97	1					
					2	1.38	1.4					
M5x0.8	LSS	LCLSS	LSP	M5	0	0.77	0.8	6.35	6.33	8.64	2	7.1
					1	0.97	1					
					2	1.38	1.4					
M6x1	LS	LCLS	LSP	M6	0	0.89	0.92	8.75	8.73	11.18	4.08	8.6
					0	1.15	1.2					
					1	1.38	1.4					
					2	2.21	2.29					
M8x1.25	LS	LCLS	LSP	M8	1	1.38	1.4	10.5	10.47	12.7	5.47	9.7
					2	2.21	2.29					
M10x1.5	LS	LCLS	LSP	M10	1	2.21	2.29	14	13.97	17.35	7.48	13.5
					2	3.05	3.18					
M12X1.75	LS	NA	NA	M12	1	3.05	3.18	17	16.95	20.57	8.5	16

NA – Not Available



Part Number Designation

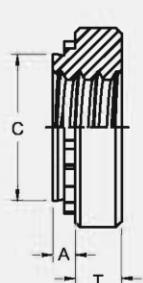
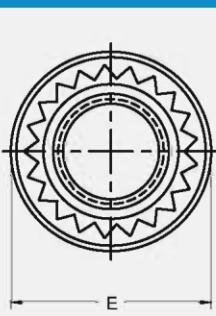
LS - 440 - 0 ZI

Type and Material Thread Code Shank Code Finish

UNIFIED/unit:Inch

Thread Size	Type			Hardened stainless steel	Thread Code	Shank Code	A (Shank Max.)	Min. Sheet Thickness	Hole Size In Sheet	C Max.	E	T	Min. Dist. Hole C/L To Edge
	Carbon Steel	Stainless Steel					.030	.030	.003 -.000	.165	.25	.07	.19
.086-56 (#2-56)	LS	LCLS	NA	256	0	.030	.030	.030	.166	.165	.25	.07	.19
					1	.038	.040	.040					
					2	.054	.056	.056					
.099-48 (#3-48)	LS	LCLS	NA	348	0	.030	.030	.030	.166	.165	.25	.07	.19
					1	.038	.040	.040					
					2	.054	.056	.056					
.112-40 (#4-40)	LS	LCLS	LSP	440	0	.030	.030	.030	.166	.165	.25	.07	.19
					1	.038	.040	.040					
					2	.054	.056	.056					
.138-32 (#6-32)	LS	LCLS	LSP	632	0	.030	.030	.030	.1875	.187	.28	.07	.22
					1	.038	.040	.040					
					2	.054	.056	.056					
.164-32 (#8-32)	LS	LCLS	LSP	832	0	.030	.030	.030	.213	.212	.31	.09	.27
					1	.038	.040	.040					
					2	.054	.056	.056					
.190-24 (#10-24)	LSS	LCLSS	NA	024	0	.030	.030	.030	.250	.249	.34	.09	.28
					1	.038	.040	.040					
					2	.054	.056	.056					
.190-32 (#10-32)	LSS	LCLSS	LSP	032	0	.030	.030	.030	.250	.249	.34	.09	.28
					1	.038	.040	.040					
					2	.054	.056	.056					
.216-24 (#12-24)	LS	LCLS	NA	1224	0	.030	.030	.030	.277	.276	.37	.13	.31
					1	.038	.040	.040					
					2	.054	.056	.056					
.250-20 (1/4-20)	LS	LCLS	LSP	0420	0	.045	.047	.047	.344	.343	.44	.17	.34
					1	.054	.056	.056					
					2	.087	.090	.090					
.250-28 (1/4-28)	LS	LCLS	NA	0428	0	.054	.056	.056	.344	.343	.44	.17	.34
					1	.087	.090	.090					
					2	.120	.125	.125					
.313-18 (5/16-18)	LS	LCLS	LSP	0518	0	.054	.056	.056	.413	.412	.50	.23	.38
					1	.087	.090	.090					
					2	.120	.125	.125					
.313-24 (5/16-24)	LS	LCLS	NA	0524	0	.054	.056	.056	.413	.412	.50	.23	.38
					1	.087	.090	.090					
					2	.120	.125	.125					
.375-16 (3/8-16)	LS	LCLS	LSP	0616	0	.087	.090	.090	.500	.499	.56	.27	.44
					1	.120	.125	.125					
					2	.235	.250	.250					
.375-24 (3/8-24)	LS	LCLS	NA	0624	0	.087	.090	.090	.500	.499	.56	.27	.44
					1	.120	.125	.125					
					2	.235	.250	.250					
.438-20 (7/16-20)	LS	NA	NA	0720	1	.087	.092	.092	.562	.561	.687	.311	.562
.500-13 (1/2-13)	LS	LCLS	NA	0813	1	.120	.125	.125	.656	.655	.81	.36	.63
.500-20 (1/2-20)	LS	LCLS	NA	0820	2	.235	.250	.250					

NA – Not Available



Type and Material
Thread Code
Shank Code
Finish

LS – 440 – 0 ZI

Part Number Designation

LSMPS



Features

- ◆ For load-bearing threads in thin sheets.
- ◆ Self-locking nuts for thin sheet.

特征

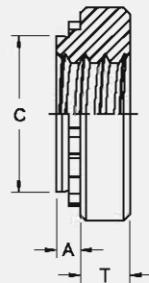
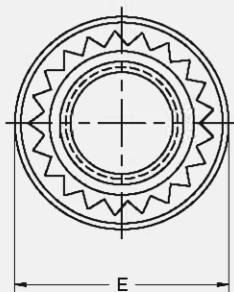
- ◆ 在薄板上提供承载螺纹。
- ◆ 适用于超薄板材。

UNIFIED/unit:Inch

Thread Size	Type		Thread Code	(Shank) Max.	Min. Sheet Thickness	Hole Size In Sheet +.003 -.000	C Max.	E ± .010	T ± .010	Min. Dist. Hole C/L To Edge	
	Fastener Material	Stainless Steel Hardened Stainless Steel								LSMPS	LSMPP
.086-56 (#2-56)	LSMPS	LSMPP	256	.024	.025	.136	.135	.220	.065	.15	.16
.112-40 (#4-40)	LSMPS	LSMPP	440	.024	.025	.166	.165	.220	.065	.17	.20
.138-32 (#6-32)	LSMPS	LSMPP	632	.024	.025	.187	.186	.252	.065	.20	.22

ISO METRIC/unit:mm

Thread Size X Pitch	Type		Thread Code	(Shank) Max.	Min. Sheet Thickness	Hole Size In Sheet +0.08	C Max.	E ± 0.25	T ± 0.25	Min. Dist. Hole C/L To Edge	
	Fastener Material	Stainless Steel Hardened Stainless Steel								LSMPS	LSMPP
M2.5 x 0.45	LSMPS	LSMPP	M2.5	0.61	0.64	3.8	3.79	5.6	1.4	3.7	3.9
M3 x 0.5	LSMPS	LSMPP	M3	0.61	0.64	4.24	4.22	5.6	1.4	4.3	5.1
M3.5 x 0.6	LSMPS	LSMPP	M3.5	0.61	0.64	4.75	4.73	6.4	1.4	5.1	5.5



Part Number Designation

LSMPS - 440

Type and Material

Thread Code

LH LHN LHNL



Features

- ◆ For load-bearing threads in thin sheets.
- ◆ Steel self-locking and non-locking nuts.

特征

- ◆ 在薄板上面提供承载螺纹。
- ◆ 钢压铆螺母，自锁和非自锁类型。

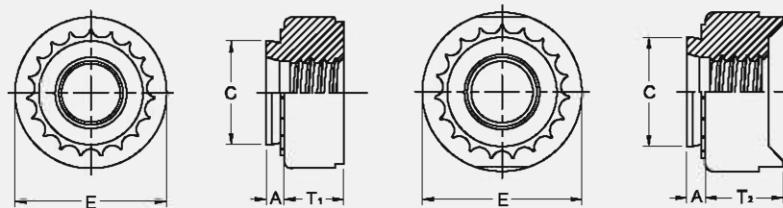
UNIFIED/unit:Inch

Thread Size	Type		Thread Code	(Shank) Max.	Min. Sheet Thickness	Hole Size In Sheet +.005 -.000	C Max.	E ±.010	T_1		T_2		Min. Dist. Hole C/L To Edge
	Non-Locking	Self-Locking							Non-locking ±.005	Self-locking ±.010			
.250-20 (1/4-20)	NA	LHNL	0420	.058	.058	.344	.343	.500			.189		.380
.313-18 (5/16-18)	NA	LHNL	0518	.058	.058	.413	.412	.575			.240		.420
.375-16 (3/8-16)	LH LHN	LHNL	0616	.058	.058	.500	.499	.650			.300		.480

ISO METRIC/unit:mm

Thread Size x Pitch	Type		Thread Code	(Shank) Max.	Min. Sheet Thickness	Hole Size In Sheet +.13	C Max.	E ±0.25	T_1		T_2		Min. Dist. Hole C/L To Edge
	Non-Locking	Self-Locking							Non-locking ±0.13	Self-locking ±0.25			
M6 x 1	NA	LHNL	M6	1.48	1.48	8.75	8.72	12.7			5		10
M8 x 1.25	NA	LHNL	M8	1.48	1.48	10.5	10.47	14.6			6.3		11
M10 x 1.5	LH LHN	LHNL	M10	1.48	1.48	12.7	12.67	16.5			7.9		12

NA – Not Available, use type LS instead.



Part Number Designation

LHNL - 0420 - LZ

Type and Material Thread Code Finish

Flush-LF



Features

- ◆ Flush self-clinching fasteners.
- ◆ Self-clinching flush nuts are designed to be completely flush in sheets as thin as .060 in. / 1.5 mm.

特征

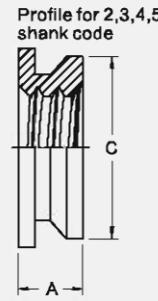
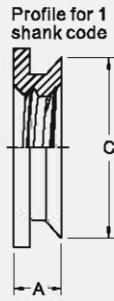
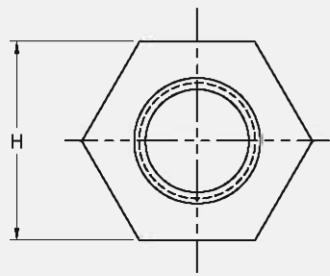
- ◆ 齐平压铆螺母。
- ◆ 紧固件的二面与板保持平齐，用于薄板，其厚度可薄至.060/1.5mm。

UNIFIED/unit:Inch

Thread Size	Type	Thread Code	Shank Code	A (Shank) Max.	Sheet Thickness	Hole Size In Sheet +.003-.000	C Max.	H Nom.	Min. Dist. Hole C/L To Edge
.086-56 (#2-56)	LF	256	1	.060	.060-.091	.172	.171	.188	.23
			2	.090	.091-UP				
.112-40 (#4-40)	LF	440	1	.060	.060-.091	.172	.171	.188	.23
			2	.090	.091-UP				
.138-32 (#6-32)	LF	632	1	.060	.060-.091	.213	.212	.250	.27
			2	.090	.091-UP				
.164-32 (#8-32)	LF	832	1	.060	.060-.091	.290	.289	.312	.28
			2	.090	.091-UP				
.190-32 (#10-32)	LF	032	1	.060	.060-.091	.312	.311	.343	.31
			2	.090	.091-UP				
.250-20 (1/4-20)	LF	0420	3	.120	.125-.156	.344	.343	.375	.34
			4	.151	.156-.187				
			5	.182	.187-UP				

ISO METRIC/unit:mm

Thread Size x Pitch	Type	Thread Code	Shank Code	A (Shank) Max.	Sheet Thickness	Hole Size In Sheet +0.08	C Max.	H Nom.	Min. Dist. Hole C/L To Edge
M2x0.4	LF	M2	1	1.53	1.53-2.23	4.37	4.35	4.8	6
			2	2.3	2.32-UP				
M2.5x0.45	LF	M2.5	1	1.53	1.53-2.23	4.37	4.35	4.8	6
			2	2.3	2.32-UP				
M3x0.5	LF	M3	1	1.53	1.53-2.23	4.37	4.35	4.8	6
			2	2.3	2.32-UP				
M4x0.7	LF	M4	1	1.53	1.53-2.23	7.37	7.35	7.9	7.2
			2	2.3	2.32-UP				
M5x0.8	LF	M5	1	1.53	1.53-2.23	7.92	7.9	8.7	8
			2	2.3	2.32-UP				
M6x1	LF	M6	3	3.05	3.18-3.96	8.74	8.72	9.5	8.8
			4	3.84	3.96-4.75				
			5	4.63	4.75-UP				



Part Number Designation

LF - 440 - 1
 Type and Material Thread Code Shank Code

LU LUL LFE LFEO LFEOX



Features

- ◆ Mintature self-clinching fasteners.
- ◆ Locking and Non-locking Threads.
- ◆ Used for over 0.02 in./.76mm sheet and it just needs small space with high strength.

特征

- ◆ 微型压铆螺母。
- ◆ 提供自锁和非自锁类型。
- ◆ 占用空间小，强度高，用于0.02"/0.76mm以上薄板。

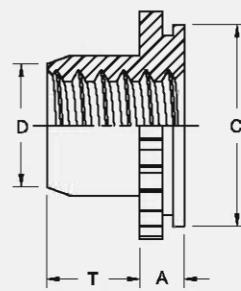
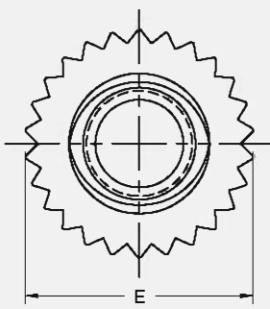
UNIFIED/unit:Inch

Thread Size	Type		Thread Code	Shank Code	(Shank) Max.	Sheet Thickness	Hole Size In Sheet +.003 -.005	C	D Max.	E ±.005	T +.015 -.000	Min. Dist. Hole C/L To Edge	Max. Hole In Attached Parts
	Non-locking	Self-locking											
.060-80 (#0-80)	LU	LUL	080	0	.020	.019-.022	.110	.1095	.076	.125	.050	.09	.080
.073-64 (#1-64)	LU	LUL	164	0	.020	.019-.022	.110	.1095	.090	.125	.050	.09	.093
.086-56 (#2-56)	LU	LUL	256	0	.020	.019-.022	.144	.1435	.106	.160	.065	.11	.106
.112-40 (#4-40)	LFEOX	LFEO	440		.040	.039-.045	.172	.171	.145	.192	.065	.14	.132
.138-32 (#6-32)	LFEOX	LFEO	632		.040	.039-.045	.213	.212	.180	.244	.075	.17	.158
.164-32 (#8-32)	LFEOX	LFEO	832		.040	.039-.045	.290	.289	.215	.322	.090	.20	.184
.190-32 (#10-32)	LFEOX	LFEO	032		.040	.039-.045	.290	.289	.245	.322	.110	.20	.210
1/4-20	LFEX	LFE	0420		.060	.059-.070	.344	.343	.318	.384	.120	.28	.270
1/4-28	LFEX	LFE	0428		.060	.059-.070							

ISO METRIC/unit:mm

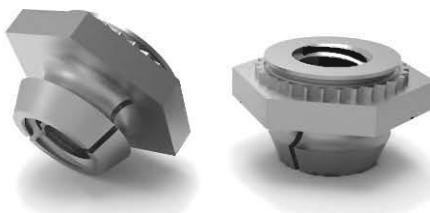
Thread Size x Pitch	Type		Thread Code	Shank Code	(Shank) Max.	Sheet Thickness	Hole Size In Sheet +.08	C	D Max.	E ±.13	T +.4	Min. Dist. Hole C/L To Edge	Max. Hole In Attached Parts
	Non-locking	Self-locking											
M2x 0.4	LU	LUL	M2	1	0.79	0.76-0.91	3.61	3.6	2.5	4.07	1.65	2.8	2.5
M3x 0.5	LFEOX	LFEO	M3		1.02	0.99-1.14							
	LFEX	LFE			1.53	1.5-1.78	4.39	4.37	3.96	4.88	1.9	3.6	3.5
M4x 0.7	LFEOX	LFEO	M4		1.02	0.99-1.14							
	LFEX	LFE			1.53	1.5-1.78	7.39	7.37	5.23	8.17	2.55	5.2	4.5
M5x 0.8	LFEOX	LFEO	M5		1.02	0.99-1.14							
	LFEX	LFE			1.53	1.5-1.78	7.39	7.37	6.48	8.17	3.05	5.2	5.5
M6x 1	LFEX	LFE	M6		1.53	1.5-1.78	8.74	8.72	7.72	9.74	3.3	7.1	6.5

Shank code applicable only to type LU and LUL fasteners.



Part Number Designation
 LFEXO - 440
 LUL - 256 - 1 CW
 Type and Material Thread Code Shank Code Finish

LLK LLKS LLKA



Features

- ◆ Self-locking fasteners permanently.
- ◆ Flange provides positive stop during installation.

特征

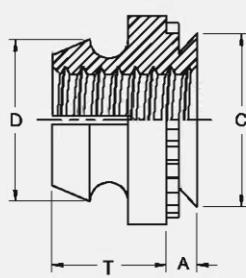
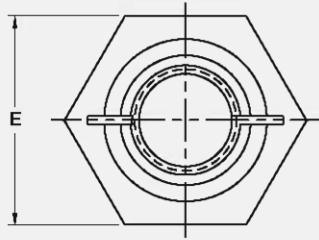
- ◆ 自锁功能的压铆螺母。
- ◆ 不会损坏配合件螺纹。

UNIFIED/unit:Inch

Thread Size	Type			Thread Code	Shank Code	A (Shank) Max.	Min. Sheet Thickness	Hole Size In Sheet +.003 -.000	C Max.	D Max.	E Nom.	T ±.010	Min. Dist. Hole C/L To Edge
	Carbon Steel	Stainless Steel	Aluminum										
.086-56 (#2-56)	LLK	LLKS	LLKA	256	1	.038	.040	.172	.171	.165	.250	.135	.156
.112-40 (#4-40)					2	.054	.056						
.138-32 (#6-32)	LLK	LLKS	LLKA	632	1	.038	.040	.187	.186	.185	.250	.135	.156
.164-32 (#8-32)					2	.054	.056						
.190-32 (#10-32)	LLK	LLKS	LLKA	832	1	.038	.040	.219	.218	.220	.312	.145	.187
					2	.054	.056						

ISO METRIC/unit:mm

Thread Size x Pitch	Type			Thread Code	Shank Code	A (Shank) Max.	Min. Sheet Thickness	Hole Size In Sheet +.08	C Max.	D Max.	E Nom.	T ±.25	Min. Dist. Hole C/L To Edge
	Carbon Steel	Stainless Steel	Aluminum										
M2.5 X 0.45	LLK	LLKS	LLKA	M2.5	1	0.97	1	4.37	4.35	4.45	6.35	3.43	3.9
					2	1.38	1.4						
M3 X 0.5	LLK	LLKS	LLKA	M3	1	0.97	1	4.75	4.73	4.85	6.35	3.43	4
					2	1.38	1.4						
M4 X 0.7	LLK	LLKS	LLKA	M4	1	0.97	1	6.76	6.73	6.2	8.73	4.45	5.2
					2	1.38	1.4						
M5 X 0.8	LLK	LLKS	LLKA	M5	1	0.97	1	7.92	7.9	7.75	9.53	5.21	5.6
					2	1.38	1.4						



Part Number Designation

LLK - 632 - 1 MD

Type and Material Thread Code Shank Code Finish

LCFN



Features

- ◆ Nylon insert self-locking fasteners.
- ◆ The thread locking performance meets the applicable standards of MIL-N-25027, and the bottom nylon can prevent the wear of threads.
- ◆ Close-to-edge applications.

特征

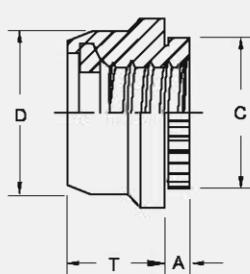
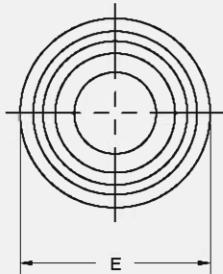
- ◆ 尼龙防松压铆螺母。
- ◆ 底部尼龙材质防止螺纹磨损，锁紧性符合MIL-N-5027标准。
- ◆ 适用于较小孔边距。

UNIFIED/unit:Inch

Thread Size	Type	Thread Code	Shank Code	A (Shank) ±.003	Min. Sheet Thickness	Hole Size In Sheet +.003 -.000	C ± .002	D ± .004	E +.001 -.004	T Max.	Min. Dist. Hole C/L To Edge
.112-40 (#4-40)	LCFN	440	1	.040	.043	.152	.162	.175	.203	.104	.115

ISO METRIC/unit:mm

Thread Size x Pitch	Type	Thread Code	Shank Code	A (Shank) ±.008	Min. Sheet Thickness	Hole Size In Sheet +.008	C ± .005	D ± .1	E +.03 -.1	T Max.	Min. Dist. Hole C/L To Edge
M3x0.5	LCFN	M3	1	1.02	1.1	3.86	4.11	4.45	5.16	2.65	2.93



Part Number Designation

LCFN - 440 - 1 ZI

Type and Material	Thread Code	Shank Code	Finish
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LPL LPLC



Features

- ◆ Nylon insert self-locking fasteners.
- ◆ The thread locking performance meets the applicable standards of MIL-N-25027, and the bottom nylon can prevent the wear of threads.

特征

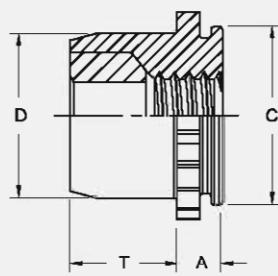
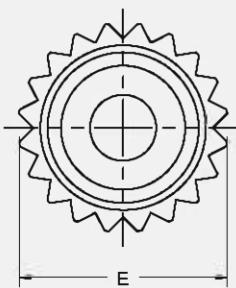
- ◆ 尼龙防松压铆螺母。
- ◆ 底部尼龙材质防止螺纹磨损，锁紧性符合MIL-N-5027标准。

UNIFIED/unit:Inch

Thread Size	Type		Thread Code	(Shank) Max.	Sheet Thickness	Hole Size In Sheet +.003 -.000	C Max.	D Max.	E Max.	T Max.	Min. Dist. Hole C/L To Edge	Max. Hole In Attached Parts
	Steel	Stainless Steel										
.112-40 (#4-40)	LPL	LPLC	440	.060	.040-.070	.234	.233	.215	.274	.130	.17	.132
.138-32 (#6-32)	LPL	LPLC	632	.060	.040-.070	.265	.264	.246	.305	.130	.19	.158
.164-32 (#8-32)	LPL	LPLC	832	.060	.040-.070	.297	.296	.278	.338	.155	.22	.184
.190-32 (#10-32)	LPL	LPLC	032	.060	.040-.070	.312	.311	.293	.353	.165	.25	.210

ISO METRIC/unit:mm

Thread Size x Pitch	Type		Thread Code	(Shank) Max.	Sheet Thickness	Hole Size In Sheet +0.08	C Max.	D Max.	E Max.	T Max.	Min. Dist. Hole C/L To Edge	Max. Hole In Attached Parts
	Steel	Stainless Steel										
M3x 0.5	LPL	LPLC	M3	1.53	1-1.78	6	5.98	5.52	7.01	3.56	4.32	3.5
M4x 0.7	LPL	LPLC	M4	1.53	1-1.78	7.5	7.48	7.01	8.54	4.2	5.59	4.5
M5x 0.8	LPL	LPLC	M5	1.53	1-1.78	8	7.98	7.52	9	4.45	6.35	5.5



Part Number Designation

LPLC - 440

LPL - 440 - ZI

Type and Material

Thread Code

Finish

R

LRAA**Features**

- ◆ Aluminum self-tapping right angle fastener.

特征

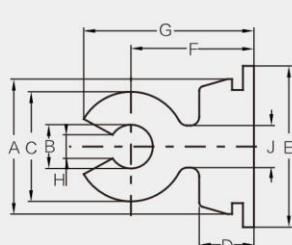
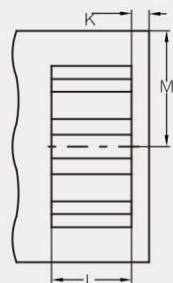
- ◆ 铝自攻直角扣件。

UNIFIED/unit:Inch

Thread Form Screw Size	Type	Material	Screw Size Code	Height Code	Length Code	L Length $\pm .003$	Min. Sheet Thick-ness	Hole Size In Sheet $+.002$ $-.001$	A $\pm .003$	B $\pm .004$	C Nom.	D Nom.	E $\pm .006$	F Height $\pm .006$	G Nom.	H $\pm .007$	J Nom.	K Min. Part Face to Edge	M Min. Dist. Hole C/L To Edge
#4-40	LRA	A	4	9	6	.183	.040	.312x.187 .312x.250	.308	.100	.250	.125	.368	.281	.389	.054	.096	.040	.35 .36
#6-32	LRA	A	6	10	8	.246	.040	.375x.250 .375x.312	.371	.123	.300	.125	.431	.312	.442	.066	.141	.040	.50 .55
#8-32	LRA	A	8	12	9	.277	.040	.406x.281 .406x.375	.402	.145	.350	.125	.462	.375	.525	.078	.157	.040	.58 .65

ISO METRIC/unit:mm

Thread Form Screw Size	Type	Material	Screw Size Code	Height Code	Length Code	L Length ± 0.08	Min. Sheet Thick-ness	Hole Size In Sheet $+.05$ $-.03$	A ± 0.08	B ± 0.1	C Nom.	D Nom.	E ± 0.15	F Height ± 0.15	G Nom.	H ± 0.18	J Nom.	K Min. Part Face to Edge	M Min. Dist. Hole C/L To Edge
M3x0.5	LRA	A	M3	7	4	3.89	1	8x4 8x6	7.89	2.77	6.35	3.18	9.42	7	9.27	1.5	2.87	1.02	9.1 10.7
M4x0.7	LRA	A	M4	9	7	6.89	1	10x7 10x9	9.89	3.68	8.89	3.18	11.43	9	12.19	1.97	4.06	1.02	14.7 16.3

**Part Number Designation**

LRAA 4 - 9 - 6

Type and Material	Screw Code	Height Code	Length Code
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R

LRAS

Features

- ◆ Steel threaded right angle fastener.

特征

- ◆ 钢质螺纹直角扣件。

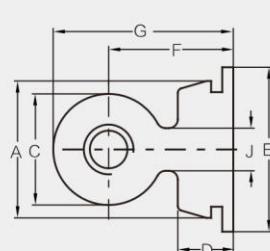
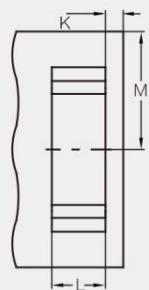


UNIFIED/unit:Inch

Thread Size	Type	Material	Thread Code	Height Code	Length Code	L Length ± .003	Min. Sheet Thickness	Hole Size In Sheet +.002 -.001	A ± .003	C Nom.	D Nom.	E ± .006	F Height ± .006	G Nom.	J Nom.	K Min. Part Face to Edge	M Min. Dist. Hole C/L To Edge
.112-40 (#4-40)	LRA	S	440	9	4	.121	.040	.312 x .125	.308	.250	.125	.370	.281	.406	.096	.040	.30
					6	.183		.312 x .187									.35
					8	.246		.312 x .250									.43
.138-32 (#6-32)	LRA	S	632	10	4	.121	.040	.375 x .125	.371	.300	.125	.433	.312	.462	.141	.040	.35
					8	.246		.375 x .250									.50
					10	.308		.375 x .312									.55
.164-32 (#8-32)	LRA	S	832	12	6	.183	.040	.406 x .187	.402	.350	.125	.464	.375	.550	.157	.040	.40
					9	.277		.406 x .281									.58
					12	.371		.406 x .375									.65

ISO METRIC/unit:mm

Thread Size x Pitch	Type	Material	Thread Code	Height Code	Length Code	L Length ± .008	Min. Sheet Thickness	Hole Size In Sheet +0.05 -0.03	A ± 0.08	C Nom.	D Nom.	E ± 0.15	F Height ± 0.15	G Nom.	J Nom.	K Min. Part Face to Edge	M Min. Dist. Hole C/L To Edge
M3x 0.5	LRA	S	M3	7	3	2.89	1	8x3	7.89	6.35	3.18	9.47	7	9.78	2.87	1.02	7.6
					4	3.89		8x4									9.1
					6	5.89		8x6									10.7
M4x 0.7	LRA	S	M4	9	4	3.89	1	10x4	9.89	8.89	3.18	11.48	9	13.21	4.06	1.02	10
					7	6.89		10x7									14.7
					9	8.89		10x9									16.3



Part Number Designation

LRAS 440 - 9 - 4 ZI

Type and Material	Thread Code	Height Code	Length Code	Finish
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R

Studs and Pins for Sheet Metal 压铆螺栓/销钉

LCHA LCFHA LCHC LCFHC

Features

- ◆ Aluminum and stainless steel studs.
- ◆ Mounted in a blind hole grinding.

特征

- ◆ 铝和不锈钢压铆螺钉。
- ◆ 安装在打磨的盲孔中。

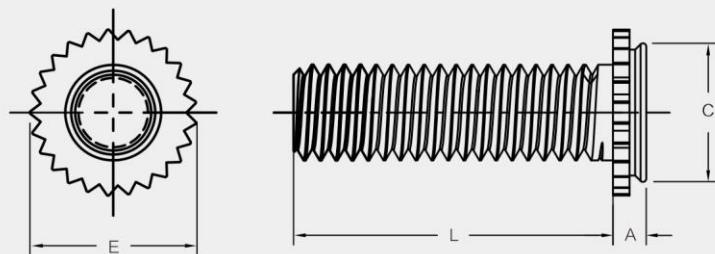
UNIFIED/unit:Inch

Thread Size	Type		Thread Code	Length Code "L" ± .015 (Length code is in 16ths of an inch)						Min. Sheet Thick-ness	Blind Mounting Hole Dia. +.003 -.000	Min. Depth of Blind Hole	A Max.	E ±.010	C Max.	Min. Dist. Hole C/L To Edge	Max. Hole In Attached Parts
	Fastener	Material		.250	.375	.500	.625	.750	1.00								
	Aluminum	Stainless Steel															
.112-40 (#4-40)	LCHA	LCHC	440	4	6	8	10	12	NA	.062 .093	.172	.043 .075	.041 .071	.205	.171	.156	.135
.138-32 (#6-32)	LCHA	LCHC	632	4	6	8	10	12	16	.062 .093	.213	.043 .075	.041 .071	.250	.212	.188	.160
.164-32 (#8-32)	LCHA	LCHC	832	4	6	8	10	12	16	.062 .093	.290	.043 .075	.041 .071	.328	.289	.219	.185
.190-32 (#10-32)	LCHA	LCHC	032	NA	6	8	10	12	16	.062 .093	.312	.043 .075	.041 .071	.350	.311	.250	.210
	LCFHA	LCFHC															

ISO METRIC/unit:mm

Thread Size x Pitch	Type		Thread Code	Length Code "L" ± 0.4 (Length code is in millimeters)								Min. Sheet Thick-ness	Blind Mounting Hole Dia. +.008	Min. Depth of Blind Hole	A Max.	E ± 0.25	C Max.	Min. Dist. Hole C/L To Edge	Max. Hole In Attached Parts
	Fastener	Material		.6	.8	1.0	1.2	1.6	2.0	NA									
	Aluminum	Stainless Steel																	
M3 X 0.5	LCHA	LCHC	M3	6	8	10	12	16	20	NA	1.6 2.4	4.37	1.1 1.91	1.04 1.8	5.21	4.35	4	3.6	
M4 X 0.7	LCHA	LCHC	M4	6	8	10	12	16	20	25	1.6 2.4	7.37	1.1 1.91	1.04 1.8	8.33	7.35	5.6	4.6	
M5 X 0.8	LCHA	LCHC	M5	NA	NA	10	12	16	20	25	1.6 2.4	7.93	1.1 1.91	1.04 1.8	8.89	7.9	6.4	5.6	
	LCFHA	LCFHC																	

NA – Not Available



Part Number Designation

LCHC – 632 – 6

Type and Material Thread Code Length Code

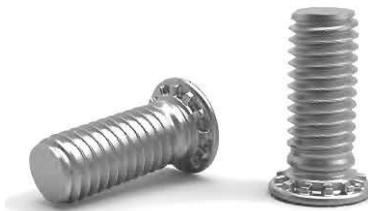
LFH LFHS LFHA

Features

- ◆ Flush-head bolts for thickness .040" / 1 mm of sheet and greater.

特征

- ◆ 应用于厚度为.040 "/1 mm 或者更厚板材内的平头螺栓。



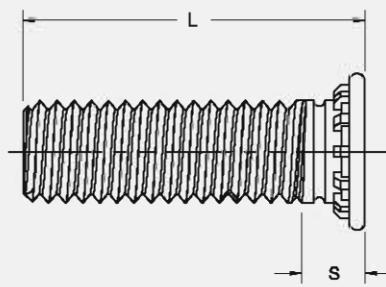
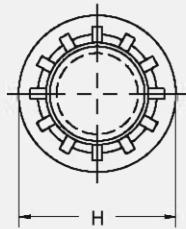
UNIFIED/unit:Inch

Thread Size	Type			Thread Code	Length Code "L" ±.015 (Length Code in 16ths of an inch)										Min. Sheet Thickness	Hole Size in Sheet +.003 -.000	Max. Hole in Attach. Parts	H ± .015	S Max.	Min. Dist. Hole C/L to Edge
	Fastener Material				.250	.312	.375	.500	.625	.750	.875	1.00	1.25	1.50						
	Steel	Stainless Steel	Alu-minum																	
.086-56 (#2-56)	LFH	LFHS	NA	256	4	5	6	8	10	12	NA	NA	NA	NA	.040	.085	.105	.144	.075	.187
.112-40 (#4-40)	LFH	LFHS	LFHA	440	4	5	6	8	10	12	14	16	NA	NA	.040	.111	.135	.176	.085	.219
.138-32 (#6-32)	LFH	LFHS	LFHA	632	4	5	6	8	10	12	14	16	20	24	.040	.137	.160	.206	.090	.250
.164-32 (#8-32)	LFH	LFHS	LFHA	832	4	5	6	8	10	12	14	16	20	24	.040	.163	.185	.237	.090	.281
.190-24 (#10-24)	LFH	LFHS	LFHA	024	NA	5	6	8	10	12	14	16	20	24	.040	.189	.210	.256	.100	.281
.190-32 (#10-32)	LFH	LFHS	LFHA	032	NA	5	6	8	10	12	14	16	20	24	.040	.189	.210	.256	.100	.281
.250-20 (1/4-20)	LFH	LFHS	LFHA	0420	NA	NA	6	8	10	12	14	16	20	24	.062	.249	.270	.337	.135	.312
.313-18 (5/16-18)	LFH	LFHS	NA	0518	NA	NA	NA	8	10	12	14	16	20	24	.093	.311	.333	.376	.160	.375

ISO METRIC/unit:mm

Thread Size x Pitch	Type			Thread Code	Length Code "L" ±.4 (Length Code in millimeters)										Min. Sheet Thickness	Hole Size in Sheet +0.08	Max. Hole in Attach. Parts	H ± .4	S Max.	Min. Dist. Hole C/L to Edge
	Fastener Material				.6	.8	10	12	15	18	NA	NA	NA	NA						
	Steel	Stainless Steel	Alu-minum																	
M2.5x0.45	LFH	LFHS	LFHA	M2.5	6	8	10	12	15	18	NA	NA	NA	NA	1	2.5	3.1	4.1	1.95	5.4
M3x 0.5	LFH	LFHS	LFHA	M3	6	8	10	12	15	18	20	25	NA	NA	1	3	3.6	4.6	2.1	5.6
M3.5x0.6	LFH	LFHS	LFHA	M3.5	6	8	10	12	15	18	20	25	30	NA	1	3.5	4.1	5.3	2.25	6.4
M4x0.7	LFH	LFHS	LFHA	M4	6	8	10	12	15	18	20	25	30	35	1	4	4.6	5.9	2.4	7.2
M5x0.8	LFH	LFHS	LFHA	M5	NA	8	10	12	15	18	20	25	30	35	1	5	5.6	6.5	2.7	7.2
M6x1	LFH	LFHS	LFHA	M6	NA	NA	10	12	15	18	20	25	30	35	1.6	6	6.6	8.2	3	7.9
M8x1.25	LFH	LFHS	NA	M8	NA	NA	NA	12	15	18	20	25	30	35	2.4	8	8.6	9.6	3.7	9.6

NA – Not Available



Part Number Designation

LFH - 440 - 5 ZI

Type and Material Thread Code Length Code Finish



LFH LFHS LFHA unthreaded

Features

- ◆ Flush-head pins for thickness .040" / 1 mm or thicker of sheet.

特征

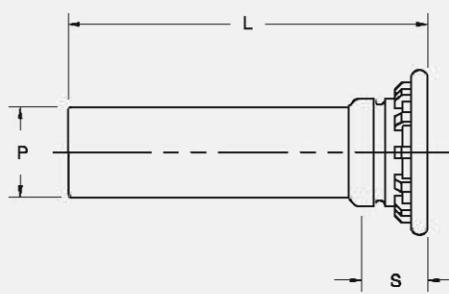
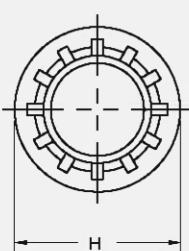
- ◆ 应用于厚度为 .040" / 1 mm 或更厚板材的平头销钉。

UNIFIED/unit:Inch

Nominal Pin Diameter P ±.002	Type			Pin Dia. Code	Length Code "L" ± .015 (Length Code in 16ths of an inch)										Min. Sheet Thickness	Hole Size in Sheet ± .003 +.000 -.000	H ± .015	S Max.	Min. Dist. Hole C/L to Edge	
	Fastener Material				.250	.312	.375	.500	.625	.750	.875	1.00	1.25	1.50						
	Steel	Stainless Steel	Alu-minum																	
.073	LFH	LFHN	LFHS	LFHA	073	4	5	6	8	10	NA	NA	NA	NA	.040	.085	.15	.075	.19	
.084	LFH	LFHN	LFHS	LFHA	084	4	5	6	8	10	12	NA	NA	NA	.040	.099	.16	.085	.22	
.094	LFH	LFHN	LFHS	LFHA	094	4	5	6	8	10	12	NA	NA	NA	.040	.111	.18	.085	.22	
.103	LFH	LFHN	LFHS	LFHA	103	4	5	6	8	10	12	NA	NA	NA	.040	.118	.18	.085	.22	
.106	LFH	LFHN	LFHS	LFHA	106	4	5	6	8	10	12	14	16	20	NA	.040	.125	.19	.090	.22
.116	LFH	LFHN	LFHS	LFHA	116	4	5	6	8	10	12	14	16	20	NA	.040	.137	.21	.090	.25
.120	LFH	LFHN	LFHS	LFHA	120	4	5	6	8	10	12	14	16	20	24	.040	.137	.21	.090	.25
.137	LFH	LFHN	LFHS	LFHA	137	4	5	6	8	10	12	14	16	20	24	.040	.157	.23	.090	.28
.141	LFH	LFHN	LFHS	LFHA	141	4	5	6	8	10	12	14	16	20	24	.040	.163	.24	.090	.28
.160	LFH	LFHN	LFHS	LFHA	160	4	5	6	8	10	12	14	16	20	24	.040	.189	.26	.100	.28
.167	LFH	LFHN	LFHS	LFHA	167	NA	5	6	8	10	12	14	16	20	24	.040	.189	.26	.100	.28
.173	LFH	LFHN	LFHS	LFHA	173	NA	5	6	8	10	12	14	16	20	24	.040	.197	.26	.100	.28
.207	LFH	LFHN	LFHS	LFHA	207	NA	5	6	8	10	12	14	16	20	24	.062	.236	.32	.135	.31
.215	LFH	LFHN	LFHS	LFHA	215	NA	NA	NA	8	10	12	14	16	20	24	.062	.250	.34	.135	.31
.223	LFH	LFHN	LFHS	LFHA	223	NA	NA	NA	8	10	12	14	16	20	24	.062	.250	.34	.135	.31
.273	LFH	LFHN	LFHS	LFHA	273	NA	NA	NA	8	10	12	14	16	20	24	.093	.312	.38	.160	.38
.281	LFH	LFHN	LFHS	LFHA	281	NA	NA	NA	8	10	12	14	16	20	24	.093	.312	.38	.160	.38

ISO METRIC/unit:mm

Nominal Pin Diameter P ±.05	Type			Pin Dia. Code	Length Code "L" ± 0.4 (Length Code in millimeters)										Min. Sheet Thickness	Hole Size in Sheet ± 0.08	H ± 0.4	S Max.	Min. Dist. Hole C/L to Edge		
	Fastener Material				.3 mm	.6	.8	1.0	1.2	1.5	1.8	2.0	2.5	3.0	NA	1	3.5	5.3	2.3	6.4	
	Steel	Stainless Steel	Alu-minum																		
3	LFH	LFHN	LFHS	LFHA	3 mm	6	8	10	12	15	18	20	25	30	NA	1	3.5	5.3	2.3	6.4	
4	LFH	LFHN	LFHS	LFHA	4 mm	NA	8	10	12	15	18	20	25	30	35	1	4.1	6	2.3	7.1	
5	LFH	LFHN	LFHS	LFHA	5 mm	NA	8	10	12	15	18	20	25	30	35	1	5.5	7.5	2.55	7.6	



Part Number Designation

LFH - 073 - 6 ZI

Type and Material Pin Dia. Code Length Code Finish Code

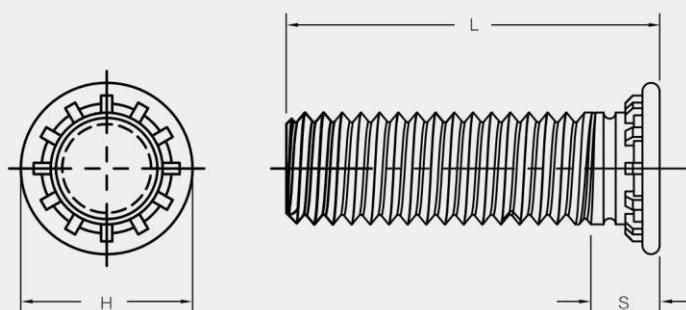
LFH4 LFHP

Features

- ◆ Permanent installation into stainless steel sheets as thin as .040" / 1 mm.
- ◆ For sheet hardness of 92 or less on the Rockwell "B" scale.
- ◆ Type LFHP is high corrosion resistant and ideal for medical, foodservice, and marine applications.

特征

- ◆ 可永久性安装于最小板料厚度为.040" / 1 mm 的不锈钢板材。
- ◆ 适用于硬度小于或等于HRB92的板材。
- ◆ LFHP系列产品具有高抗腐蚀性能，适用于医药，食品以及海运行业。



Part Number Designation

LFH4 - 440 - 8

Type and Material Thread Code Length Code

UNIFIED/unit:Inch

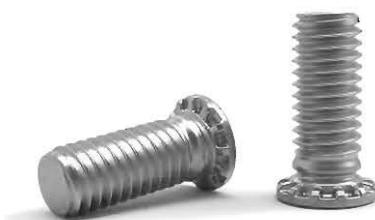
Thread Size	Type	Thread Code	Length Code "L" ± .015 (Length code in 16ths of an inch)										Sheet Thickness	Hole Size in Sheet +.003 -.000	Max. Hole in Attach. Parts	H ±.015	S Max.	Min. Dist. Hole C/L to Edge
			.250	.312	.375	.500	.625	.750	.875	1.00	1.25	1.50						
.112-40 (#4-40)	LFH4 LFHP	440	4	5	6	8	10	12	14	16	NA	NA	.040-.095	.111	.131	.176	.085	.219
.138-32 (#6-32)	LFH4 LFHP	632	4	5	6	8	10	12	14	16	20	24	.040-.095	.137	.157	.206	.090	.250
.164-32 (#8-32)	LFH4 LFHP	832	4	5	6	8	10	12	14	16	20	24	.040-.095	.163	.183	.237	.090	.281
.190-32 (#10-32)	LFH4 LFHP	032	NA	5	6	8	10	12	14	16	20	24	.040-.095	.189	.209	.256	.100	.281
.250-20 (1/4-20)	LFH4 NA	0420	NA	NA	6	8	10	12	14	16	20	24	.062-.117	.249	.269	.337	.135	.312

ISO METRIC/unit:mm

Thread Size x Pitch	Type	Thread Code	Length Code "L" ± 0.4 (Length Code in millimeters)												Sheet Thickness	Hole Size in Sheet +.08	Max. Hole in Attach. parts	H ± 0.4	S Max.	Min. Dist. Hole C/L to Edge
			6	8	10	12	15	18	20	25	NA	NA	1 - 2.4	3	3.3	4.6	2.1	5.6		
M3x 0.5	LFH4 LFHP	M3	6	8	10	12	15	18	20	25	NA	NA	1 - 2.4	3	3.3	4.6	2.1	5.6		
M4x 0.7	LFH4 LFHP	M4	6	8	10	12	15	18	20	25	30	35	1 - 2.4	4	4.7	5.9	2.4	7.2		
M5x 0.8	LFH4 LFHP	M5	NA	8	10	12	15	18	20	25	30	35	1 - 2.4	5	5.3	6.5	2.7	7.2		
M6x 1	LFH4 NA	M6	NA	NA	10	12	15	18	20	25	30	35	1.6 - 3	6	6.8	8.2	3	7.9		

NA – Not Available

LFHL LFHLS



Features

- ◆ Install closer to the edge of a sheet than standard studs without causing that edge to bulge.
- ◆ Flush-head for thickness .040" / 1 mm or thicker of sheet.

特征

- ◆ 比标准螺栓更适合安装靠近安装板边缘区域，且产品边缘区域不会凸起。
- ◆ 平头设计，应用于板厚.040"/1mm或者更厚的板上面。

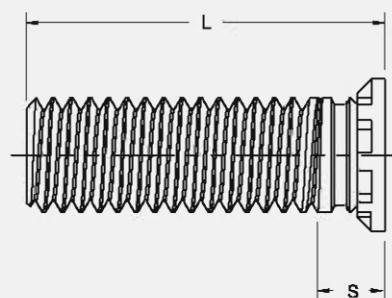
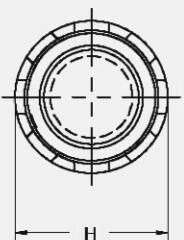
UNIFIED/unit:Inch

Thread Size	Type		Length Code "L" ±.015 (Length Code in 16ths of an inch)	Min. Sheet Thickness	Hole Size in Sheet +.003 -.000	Max. Hole in Attach. Parts	H ±.015	S Max.	Min. Dist. Hole C/L to Edge										
	Material	Thread Code																	
	Steel	Stainless Steel																	
.086-56 (#2-56)	LFHL	LFHLS	256	.250	.312	.375	.500	.625	.750	.875	1.00	1.25	1.50	.040	.085	.100	.112	.080	.098
.112-40 (#4-40)	LFHL	LFHLS	440	4	5	6	8	10	12	14	16	NA	NA	.040	.111	.126	.138	.085	.124
.138-32 (#6-32)	LFHL	LFHLS	632	4	5	6	8	10	12	14	16	20	24	.040	.137	.152	.164	.090	.150
.164-32 (#8-32)	LFHL	LFHLS	832	4	5	6	8	10	12	14	16	20	24	.040	.163	.178	.190	.090	.176
.190-32 (#10-32)	LFHL	LFHLS	032	NA	5	6	8	10	12	14	16	20	24	.040	.189	.204	.225	.100	.210

ISO METRIC/unit:mm

Thread Size x Pitch	Type		Length Code "L" ±.4 (Length Code in millimeters)	Min. Sheet Thickness	Hole Size in Sheet +0.08	Max. Hole in Attach. Parts	H ±.4	S Max.	Min. Dist. Hole C/L to Edge										
	Material	Thread Code																	
	Steel	Stainless Steel																	
M2.5x0.45	LFHL	LFHLS	M2.5	6	8	10	12	15	18	NA	NA	NA	NA	1	2.5	2.9	3.15	2.1	2.8
M3x0.5	LFHL	LFHLS	M3	6	8	10	12	15	18	20	25	NA	NA	1	3	3.2	3.65	2.1	3.3
M3.5x0.6	LFHL	LFHLS	M3.5	6	8	10	12	15	18	20	25	30	NA	1	3.5	3.9	4.15	2.3	3.8
M4x0.7	LFHL	LFHLS	M4	6	8	10	12	15	18	20	25	30	35	1	4	4.5	4.65	2.4	4.3
M5x0.8	LFHL	LFHLS	M5	NA	8	10	12	15	18	20	25	30	35	1	5	5.2	5.9	2.7	5.6

NA – Not Available



Part Number Designation

LFHL – 440 – 8 ZI

Type and Material Thread Code Length Code Finish

LHFH LHFHS LHFHB



Features

- ◆ For high-strength applications in sheets as thin as .050" / 1.3 mm.
- ◆ Type LHFHB for superior electrical/mechanical attachment in copper.

特征

- ◆ 应用于薄至.050"/1.3mm面板的高强度螺栓。
- ◆ LHFHB系列产品用于在铜质板材内，具有较高电传导性能。

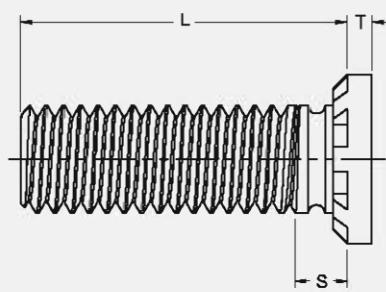
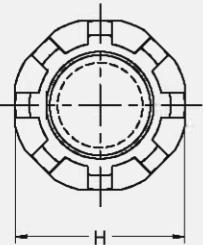
UNIFIED/unit:Inch

Thread Size	Type			Thread Code	Length Code "L" ± .015 (Length Code in 16ths of an inch)							Min. Sheet Thickness	Hole Size in Sheet +.005 -.000	Max. Hole in Attach. Parts	H ± .01	S Max.	T Max.	Min. Dist. Hole C/L to Edge
	Fastener Material				.500	.750	1.00	1.25	1.50	1.75	2.00							
	Steel	Stainless Steel	Phosphor Bronze															
.190-32 (#10-32)	LHFH	LHFHS	LHFHB	032	8	12	16	20	24	28	32	.050	.190	.252	.300	.105	.040	.415
.250-20 (1/4-20)	LHFH	LHFHS	LHFHB	0420	8	12	16	20	24	28	32	.060	.250	.312	.380	.125	.050	.460
.313-18 (5/16-18)	LHFH	LHFHS	LHFHB	0518	8	12	16	20	24	28	32	.075	.312	.374	.480	.140	.070	.500
.375-16 (3/8-16)	LHFH	LHFHS	LHFHB	0616	NA	12	16	20	24	28	32	.090	.375	.437	.580	.155	.085	.530

ISO METRIC/unit:mm

Thread Size x Pitch	Type			Thread Code	Length code "L" ± 0.4 (Length Code in millimeters)							Min. Sheet Thickness	Hole Size in Sheet +.13	Max. Hole in Attach. Parts	H ± 0.25	S Max.	T Max.	Min. Dist. Hole C/L to Edge
	Fastener Material				.500	.750	1.00	1.25	1.50	1.75	2.00							
	Steel	Stainless Steel	Phosphor Bronze															
M5x0.8	LHFH	LHFHS	LHFHB	M5	15	20	25	30	35	40	50	1.3	5	6.4	7.8	2.7	1.14	10.7
M6x1	LHFH	LHFHS	LHFHB	M6	15	20	25	30	35	40	50	1.5	6	7.5	9.4	2.8	1.27	11.5
M8x1.25	LHFH	LHFHS	LHFHB	M8	15	20	25	30	35	40	50	2	8	9.5	12.5	3.5	1.78	12.7
M10x1.5	LHFH	LHFHS	LHFHB	M10	15	20	25	30	35	40	50	2.3	10	11.5	15.7	4.1	2.29	13.7

NA – Not Available



Part Number Designation

LHFH – 032 – 8 ZI

Type and Material Thread Code Length Code Finish

LHFE



Features

- ◆ Enlarged head diameter provides high-strength in sheets as thin as .040" / 1 mm.

特征

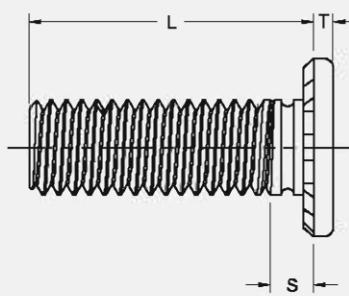
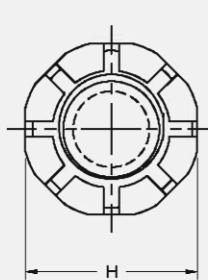
- ◆ 超大的头径设计使产品即便安装在最薄厚度至.040" /1 mm的板材内也能产生很高的强度。

UNIFIED/unit:Inch

Thread Code	Type	Fastener Material	Thread Code	Length Code "L" ±.015 (Length Code in 16ths of an inch)								Min. Sheet Thickness	Hole Size In Sheet +.005 -.000	H ±.01	S Max.	T Max.	Max. Hole In Attached Parts	Min. Dist. Hole C/L To Edge
	Steel			.500	.750	1.00	1.25	1.50	1.75	2.00								
	.190-32 (#10-32)	LHFE	032	8	12	16	20	24	28	32	.040	.190	.357	.102	.048	.280	.360	
.250-20 (1/4-20)	LHFE	0420	8	12	16	20	24	28	32	.040	.250	.462	.118	.060	.340	.470		
	LTHFE									.031			.109	.069		.446		
.313-18 (5/16-18)	LHFE	0518	8	12	16	20	24	28	32	.060	.312	.586	.133	.083	.402	.560		
	LTHFE									.031			.117	.099		.596		

ISO METRIC/unit:mm

Thread Code	Type	Fastener Material	Thread Code	Length Code "L" ±.04 (Length Code in Millimeters)								Min. Sheet Thickness	Hole Size In Sheet +.005 -.000	H ±.01	S Max.	T Max.	Max. Hole In Attached Parts	Min. Dist. Hole C/L To Edge
	Steel			.15	.20	.25	.30	.35	.40	.50								
M5 x 0.8	LHFE	M5		15	20	25	30	35	40	50	1	5	9.6	2.6	1.35	7.3	10	
M6 x 1	LHFE	M6	15	20	25	30	35	40	50	1	6	11.35	2.8	1.52	8.3	11.5		
	LTHFE									0.8			2.62	1.7		10.5		
M8 x 1.25	LHFE	M8	15	20	25	30	35	40	50	1.5	8	15.3	3.3	2.13	10.3	14.5		
	LTHFE									0.8			2.9	2.54		15		



Part Number Designation

LHFE - 032 - 8 ZI

Type and Material Thread Code Shank Code Finish

LTFH LTFHS



Features

- ◆ Non-flush for sheets as thin as .020" / 0.51 mm.

特征

- ◆ 适合安装在最小厚度为 .020" / 0.51mm 薄板上的凸头螺栓。

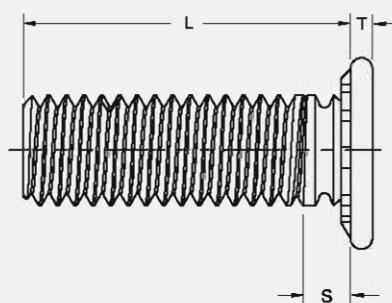
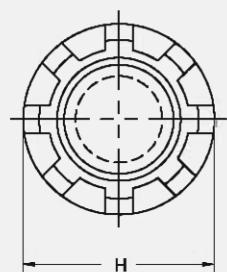
UNIFIED/unit:Inch

Thread Size	Type		Thread Code	Length Code "L" ±.015 (Length Code in 16ths of an inch)										Min. Sheet Thick-ness	Hole Size in Sheet +.003 -.000	Max. Hole in Attach. Parts	H ±.015	S Max.	T Max.	Min. Dist. Hole C/L to Edge
	Material	Steel		.250	.312	.375	.500	.625	.750	.875	1.00	1.25	1.50							
.086-56 (#2-56)	LTFH	LTFHS	256	4	5	6	8	10	12	NA	NA	NA	NA	.020	.085	.105	.141	.070	.025	.187
.112-40 (#4-40)	LTFH	LTFHS	440	4	5	6	8	10	12	14	NA	NA	NA	.020	.111	.131	.176	.070	.025	.219
.138-32 (#6-32)	LTFH	LTFHS	632	4	5	6	8	10	12	14	16	20	24	.020	.137	.157	.203	.070	.025	.250
.164-32 (#8-32)	LTFH	LTFHS	832	4	5	6	8	10	12	14	16	20	24	.020	.163	.183	.234	.070	.025	.281
.190-24 (#10-24)	LTFH	LTFHS	024	NA	5	6	8	10	12	14	16	20	24	.020	.189	.209	.250	.090	.025	.281
.190-32 (#10-32)	LTFH	LTFHS	032	NA	5	6	8	10	12	14	16	20	24	.020	.189	.209	.250	.090	.025	.281

ISO METRIC/unit:mm

Thread Size x Pitch	Type		Thread Code	Length Code "L" ± 0.4 (Length Code in millimeters)										Min. Sheet Thick-ness	Hole Size in Sheet +0.08	Max. Hole in Attach. Parts	H ±0.4	S Max.	T Max.	Min. Dist. Hole C/L to Edge	
	Material	Steel		Stain-less Steel	.6	.8	10	12	15	18	20	25	NA	NA							
M3x0.5	LTFH	LTFHS	M3	M3	6	8	10	12	15	18	20	25	NA	NA	0.51	3	3.3	4.5	1.8	0.64	5.6
M4x0.7	LTFH	LTFHS	M4	NA	8	10	12	15	18	20	25	30	35	NA	0.51	4	4.7	5.8	1.8	0.64	7.2
M5x0.8	LTFH	LTFHS	M5	NA	8	10	12	15	18	20	25	30	35	NA	0.51	5	5.3	6.4	2.3	0.64	7.2

NA – Not Available



Part Number Designation

LTFH – 440 – 8 ZI

Type and Material Thread Code Length Code Finish Code

LTPS



Features

- ◆ Flush-mounted, self-clinching pilot pins.
- ◆ Satisfied a wide range of positioning, pivot, and alignment applications.
- ◆ Chamfered end makes mating hole location easily.

特征

- ◆ 齐平安装，压铆导向销。
- ◆ 满足广泛的定位及应用。
- ◆ 倒角端使得配合孔的定位更加容易。

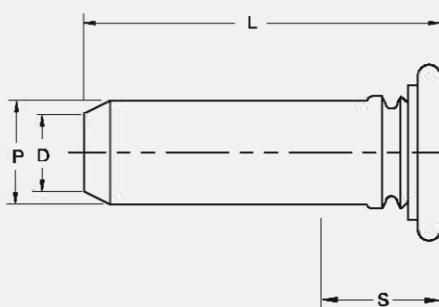
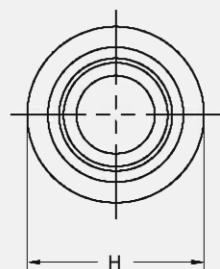
UNIFIED/unit:Inch

Pin Diameter $P \pm .002$	Type	Pin Diameter Code	Length Code "L" $\pm .015$ (Length Code in 16ths of an inch)					Min. Sheet Thickness	Hole Size in Sheet $+.003$ $-.000$	D $\pm .006$	H $\pm .015$	S Max.	Min. Distance Hole C/L to Edge
			.375	.500	.625	.750	1.00						
.125	LTPS	125	6	8	10	12	NA	.040	.144	.090	.205	.090	.250
.187	LTPS	187	6	8	10	12	16	.040	.205	.132	.270	.090	.280
.250	LTPS	250	NA	8	10	12	16	.040	.272	.177	.335	.090	.310

ISO METRIC/unit:mm

Pin Diameter $P \pm 0.05$	Type	Pin Diameter Code	Length Code "L" ± 0.4 (Length Code in millimeters)					Min. Sheet Thickness	Hole Size in Sheet $+0.08$	D ± 0.15	H ± 0.4	S Max.	Min. Distance Hole C/L to Edge
			3	4	5	6							
3	LTPS	3mm	8	10	12	16	NA	1	3.5	2.11	5.2	2.29	6.4
4	LTPS	4mm	8	10	12	16	NA	1	4.5	2.82	6.12	2.29	7.1
5	LTPS	5mm	NA	10	12	16	20	1	5.5	3.53	7.19	2.29	7.6
6	LTPS	6mm	NA	NA	12	16	20	1	6.5	4.24	8.13	2.29	7.9

NA – Not Available



Part Number Designation

LTPS – 125 – 8

Type and Material

Pin Diameter Code

Shank Code

LSO LSOA LSOS

Features

- ◆ Thru-hole standoffs with effect from the gauge or fixed to the chassis or circuit board.

特征

- ◆ 通孔螺柱，用在机箱或电路板上起隔距或固定作用。



UNIFIED/unit:Inch

Thread Code	Min. Sheet Thickness	Hole Size In Sheet +.003 -.000	B Counter-Bore Dia. +.005 -.005	C	H Nom.	Min. Dist. Hole C/L To Edge
440	.040	.166	.125	.165	.187	.23
6440	.040	.213	.125	.212	.250	.27
632	.040	.213	.156	.212	.250	.27
8632	.050	.281	.156	.280	.312	.31
832	.050	.281	.188	.280	.312	.31
032	.050	.281	.203	.280	.312	.31

ISO METRIC/unit:mm

Thread Code	Min. Sheet Thickness	Hole Size In Sheet +.008 -.005	B Counter-Bore Dia. +.013 -.013	C	H Nom.	Min. Dist. Hole C/L To Edge
M3	1	4.22	3.2	4.2	4.8	6
3.5M3	1	5.41	3.2	5.39	6.4	6.8
M3.5	1	5.41	3.9	5.39	6.4	6.8
M4	1.27	7.14	4.8	7.12	7.9	8
M5	1.27	7.14	5.35	7.12	7.9	8

UNIFIED/unit:Inch

Thread Size	Type			Thread Code	Length "L" +.002 -.005 (Length Code in 32nds of an inch)															
	Steel	Stainless Steel	Aluminum		.125	.187	.250	.312	.375	.437	.500	.562	.625	.687	.750	.812	.875	.937	1.00	1.062
.112-40 (#4-40)	LSO	LSOS	LSOA	440 6440	4	6	8	10	12	14	16	18	20	22	24	NA	NA	NA	NA	NA
.138-32 (#6-32)	LSO	LSOS	LSOA	632 8632	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34
.164-32 (#8-32)	LSO	LSOS	LSOA	832	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34
.190-32 (#10-32)	LSO	LSOS	LSOA	032																

D Dimension $\pm .010$

None

.187

.312

.437

ISO METRIC/unit:mm

Thread Size x Pitch	Type			Thread Code	Length "L" +0.05 -0.13 (Length Code in millimeters)												
	Steel	Stainless Steel	Aluminum		3	4	6	8	10	12	14	16	18	NA	NA	NA	
M3 x 0.5	LSO	LSOS	LSOA	M3 3.5M3													
M3.5x0.6				M3.5													
M4x0.7	LSO	LSOS	LSOA	M4	3	4	6	8	10	12	14	16	18	20	22	25	
M5x0.8				M5													

D Dimension $\pm .025$

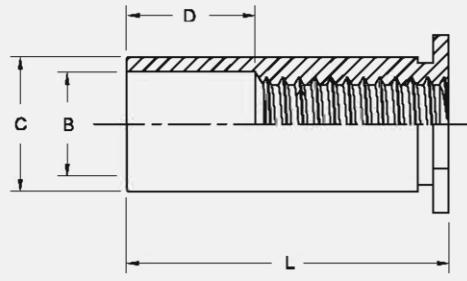
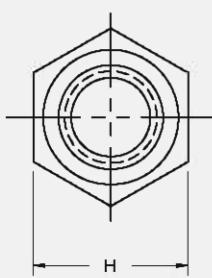
None

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8

11

NA – Not Available



Part Number Designation

LSOS – 440 – 12

Type and Material

Thread Code

Length Code

LS04

Features

- ◆ Thru-hole threaded for installation into stainless steel.

特征

- ◆ 通孔螺纹，用于安装到不锈钢基材上面。



UNIFIED/unit:Inch

Thread Code	Min. Sheet Thickness	Hole Size In Sheet	B	C	H	Norm.	Min. Dist. Hole C/L To Edge
		+.003 -.000	.005	.000 -.005			
440	.040	.166	.125	.165	.187	.23	
6440	.040	.213	.125	.212	.250	.27	
632	.040	.213	.156	.212	.250	.27	
8632	.050	.281	.156	.280	.312	.31	
832	.050	.281	.188	.280	.312	.31	
032	.050	.281	.203	.280	.312	.31	

ISO METRIC/unit:mm

Thread Code	Min. Sheet Thickness	Hole Size In Sheet	B	C	H	Norm.	Min. Dist. Hole C/L To Edge
		+0.08	.013	.013			
M3	1	4.22	3.25	4.2	4.8	6	
3.5M3	1	5.41	3.25	5.39	6.4	6.8	
M3.5	1	5.41	3.9	5.39	6.4	6.8	
M4	1.27	7.14	4.8	7.12	7.9	8	
M5	1.27	7.14	5.35	7.12	7.9	8	

UNIFIED/unit:Inch

Thread Size	Type	Thread Code	Length "L" +.002 -.005 (Length Code in 32nds of an inch)															
			.125	.187	.250	.312	.375	.437	.500	.562	.625	.687	.750	.812	.875	.937	1.00	1.062
.112-40 (#4-40)	LS04	440 6440	4	6	8	10	12	14	16	18	20	22	24	NA	NA	NA	NA	NA
.138-32 (#6-32)	LS04	632 8632	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34
.164-32 (#8-32)	LS04	832																
.190-32 (#10-32)	LS04	032	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34

D Dimension $\pm .010$

None

Length "L" +.002 -.005 (Length Code in 32nds of an inch)

.187

.312

.437

ISO METRIC/unit:mm

Thread Size x Pitch	Type	Thread Code	Length "L" +0.05 -0.13 (Length Code in millimeters)											
			3	4	6	8	10	12	14	16	18	NA	NA	NA
M3x0.5	LS04	M3 3.5M3	3	4	6	8	10	12	14	16	18	NA	NA	NA
M3.5x0.6		M3.5												
M4x0.7	LS04	M4	3	4	6	8	10	12	14	16	18	20	22	25
M5x0.8		M5												

D Dimension $\pm .025$

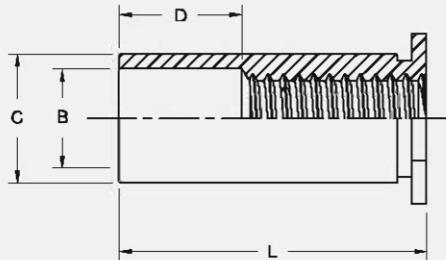
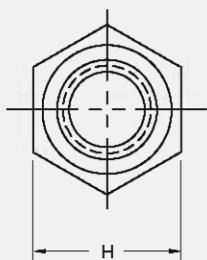
None

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11

NA – Not Available



Part Number Designation

LS04 – 440 – 12

Type and Material Thread Code Length Code

LSO LSOA LSOS Unthreaded

Features

- Thru-hole non-threaded with effect from the gauge or fixed to the chassis or circuit board.

特征

- 通孔无螺纹，用在机箱或电路板上起隔距或固定作用。



UNIFIED/unit:Inch

Thru-hole Code	Min. Sheet Thickness	Hole Size In Sheet	C	H	Min. Dist. Hole C/L To Edge
		+.003 -.000	+.000 -.005	Nom.	
4116	.040	.166	.165	.187	.23
6116	.040	.213	.212	.250	.27
6143	.040	.213	.212	.250	.27
8143	.050	.281	.280	.312	.31
8169	.050	.281	.280	.312	.31
8194	.050	.281	.280	.312	.31

ISO METRIC/unit:mm

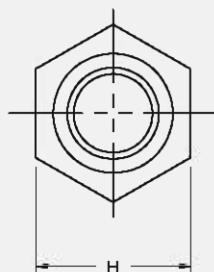
Thru-hole Code	Min. Sheet Thickness	Hole Size In Sheet	C	H	Min. Dist. Hole C/L To Edge
		+0.08	-0.13	Nom.	
43.1	1	4.22	4.2	4.8	6
63.1	1	5.41	5.39	6.4	6.8
63.6	1	5.41	5.39	6.4	6.8
83.6	1.27	7.14	7.12	7.9	8
84.1	1.27	7.14	7.12	7.9	8
85.1	1.27	7.14	7.12	7.9	8

UNIFIED/unit:Inch

B Thru-hole Diameter +.004 -.003	Type			Thru-hole Code	Length "L" +.002 -.005 (Length Code in 32nds of an inch)										
	Steel	Stainless Steel	Aluminum		.125	.187	.250	.312	.375	.437	.500	.562	.625	.687	.750
.116	LSO	LSOS	LSOA	4116 6116	4	6	8	10	12	14	16	18	20	22	24
.143	LSO	LSOS	LSOA	6143 8143	4	6	8	10	12	14	16	18	20	22	24
.169	LSO	LSOS	LSOA	8169 8194	4	6	8	10	12	14	16	18	20	22	24
.194															

ISO METRIC/unit:mm

B Thru-hole Diameter +.1 -.08	Type			Thru-hole Code	Length "L" +0.05 -0.13 (Length Code in millimeters)										
	Steel	Stainless Steel	Aluminum		3	4	6	8	10	12	14	16	18	20	
3.1	LSO	LSOS	LSOA	43.1 63.1	3	4	6	8	10	12	14	16	18	20	
3.6	LSO	LSOS	LSOA	63.6 83.6	3	4	6	8	10	12	14	16	18	20	
4.1	LSO	LSOS	LSOA	84.1 85.1	3	4	6	8	10	12	14	16	18	20	
5.1															



Part Number Designation

LSO - 4116 - 8 ZI

Type and Material Thru-hole Code Length Finish Code

LBSO LBSOA LBSOS

Features

- Blind standoffs with effect from the gauge or fixed to the chassis or circuit board.

特征

- 盲孔螺柱，用在机箱或电路板上起隔距或固定作用。



UNIFIED/unit:Inch

Thread Code	Min. Sheet Thickness	Hole Size In Sheet +.003 -.000	C +.000 -.005	H Nom.	Min. Dist. Hole C/L To Edge
440	.040	.166	.165	.187	.23
6440	.040	.213	.212	.250	.27
632	.040	.213	.212	.250	.27
8632	.050	.281	.280	.312	.31
832	.050	.281	.280	.312	.31
032	.050	.281	.280	.312	.31

ISO METRIC/unit:mm

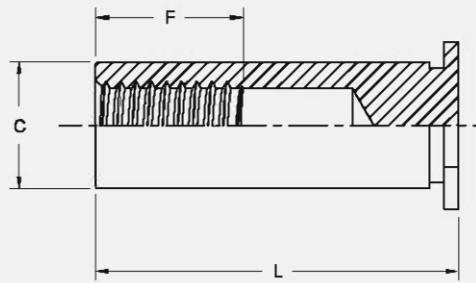
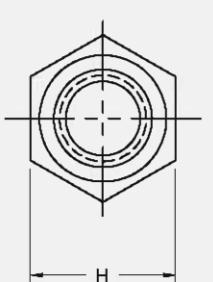
Thread Code	Min. Sheet Thickness	Hole Size In Sheet +.008	C -.013	H Nom.	Min. Dist. Hole C/L To Edge
M3	1	4.22	4.2	4.8	6
3.5M3	1	5.41	5.39	6.4	6.8
M3.5	1	5.41	5.39	6.4	6.8
M4	1.27	7.14	7.12	7.9	8
M5	1.27	7.14	7.12	7.9	8

UNIFIED/unit:Inch

Thread Size	Type			Thread Code	Length "L" +.002-.005 (Length Code in 32nds of an inch)												
	Steel	Stainless Steel	Aluminum		.312	.375	.437	.500	.562	.625	.687	.750	.812	.875	.937	1.00	1.062
.112-40 (#4-40)	LBSO	LBSOS	LBSOA	440 6440	10	12	14	16	18	20	22	24	26	28	30	32	34
.138-32 (#6-32)	LBSO	LBSOS	LBSOA	632 8632	10	12	14	16	18	20	22	24	26	28	30	32	34
.164-32 (#8-32)	LBSO	LBSOS	LBSOA	832	10	12	14	16	18	20	22	24	26	28	30	32	34
.190-32 (#10-32)	LBSO	LBSOS	LBSOA	032													
F Dimension Min.					.156	.187		.250								.375	

ISO METRIC/unit:mm

Thread Size x Pitch	Type			Thread Code	Length "L" +0.05-0.13 (Length Code in millimeters)										
	Steel	Stainless Steel	Aluminum		6	8	10	12	14	16	18	20	22	25	
M3x0.5	LBSO	LBSOS	LBSOA	M3 3.5M3	6	8	10	12	14	16	18	20	22	25	
M3.5x0.6				M3.5											
M4x0.7	LBSO	LBSOS	LBSOA	M4	6	8	10	12	14	16	18	20	22	25	
M5x0.8				M5											
F Dimension Min.					3.2	4	5	6.5						9.5	



Part Number Designation

LBSOS - 440 - 12

Type and Material Thread Code Length Code

LBSO4

Features

- ◆ Blind threaded for installation into stainless steel.

特征

- ◆ 盲孔螺纹，用于安装到不锈钢基材上面。



UNIFIED/unit:Inch

Thread Code	Min. Sheet Thickness	Hole Size In Sheet +.003 -.000	C +.000 -.005	H Nom.	Min. Dist. Hole C/L To Edge
440	.040	.166	.165	.187	.23
6440	.040	.213	.212	.250	.27
632	.040	.213	.212	.250	.27
8632	.050	.281	.280	.312	.27
832	.050	.281	.280	.312	.31
032	.050	.281	.280	.312	.31

ISO METRIC/unit:mm

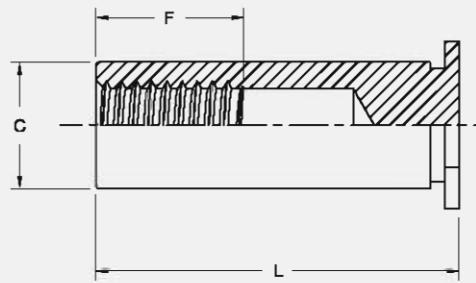
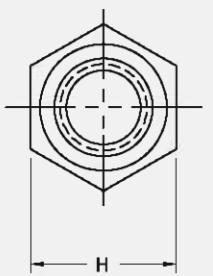
Thread Code	Min. Sheet Thickness	Hole Size In Sheet +.08	C -.013	H Nom.	Min. Dist. Hole C/L To Edge
M3	1	4.22	4.2	4.8	6
3.5M3	1	5.41	5.39	6.4	6.8
M3.5	1	5.41	5.39	6.4	6.8
M4	1.27	7.14	7.12	7.9	8
M5	1.27	7.14	7.12	7.9	8

UNIFIED/unit:Inch

Thread Size	Type	Thread Code	Length "L" +.002 -.005 (Length Code in 32nds of an inch)												
			.312	.375	.437	.500	.562	.625	.687	.750	.812	.875	.937	1.00	1.062
.112-40 (#4-40)	LBSO4	440 6440	10	12	14	16	18	20	22	24	26	28	30	32	34
.138-32 (#6-32)	LBSO4	632 8632	10	12	14	16	18	20	22	24	26	28	30	32	34
.164-32 (#8-32)	LBSO4	832	10	12	14	16	18	20	22	24	26	28	30	32	34
.190-32 (#10-32)	LBSO4	032													
F Dimension Min.			.156	.187	.250							.375			

ISO METRIC/unit:mm

Thread Size x Pitch	Type	Thread Code	Length "L" +0.05 -0.13 (Length Code in millimeters)									
			6	8	10	12	14	16	18	20	22	25
M3x 0.5	LBSO4	M3 3.5M3	6	8	10	12	14	16	18	20	22	25
M3.5x 0.6	LBSO4	M3.5										
M4x 0.7	LBSO4	M4	6	8	10	12	14	16	18	20	22	25
M5x 0.8	LBSO4	M5										
F Dimension Min.			3.2	4	5	6.5				9.5		



Part Number Designation

LBSO4 - 440 - 12

Type and Material Thread Code Length Code

LTSO LTSOA LTSOS

Features

- Threaded standoffs for sheet as thin as .025" / 0.63 mm.

特征

- 带螺纹螺柱，运用于薄至.025"/0.63mm板材中。



UNIFIED/unit:Inch

Thread Code	Min. Sheet Thickness	Hole Size In Sheet	C	D	H	Min. Dist. Hole CL To Edge
		+.003 -.000	+.000 -.005		Nom.	
256	.025	.166	.165	.200	.187	.23
6256	.025	.213	.212		.250	.27
440	.025	.166	.165	.220	.187	.23
6440	.025	.213	.212		.250	.27
632	.025	.213	.212	.270	.250	.27

ISO METRIC/unit:mm

Thread Code	Min. Sheet Thickness	Hole Size In Sheet	C	D	H	Min. Dist. Hole CL To Edge
		+0.08	-0.13		Nom.	
M25	0.63	4.22	4.2	5.2	4.8	5.8
6M25	0.63	5.41	5.39		6.4	7.1
M3	0.63	4.22	4.2	6.2	4.8	5.8
6M3	0.63	5.41	5.39		6.4	7.1
M35	0.63	5.41	5.39	7	6.4	7.1

UNIFIED/unit:Inch

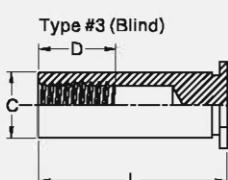
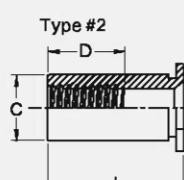
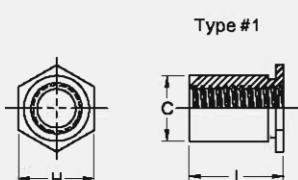
Thread Size	Type			Thread Code	Length "L" ± .003 For other lengths / thread depth data see chart below.											
	Steel	Stainless Steel	Aluminum		.090	.125	.187	.250	.312	.375	.437	.500	.562	.625	.687	.750
.086-56 (#2-56)	LTSO	LTSOS	LTSOA	256 6256	090 ⁽¹⁾	125 ⁽¹⁾	187 ⁽¹⁾	250 ⁽¹⁾	312 ⁽²⁾	375 ⁽²⁾	437 ⁽³⁾	500 ⁽³⁾	562 ⁽³⁾	625 ⁽³⁾	687 ⁽³⁾	750 ⁽³⁾
.112-40 (#4-40)	LTSO	LTSOS	LTSOA	440 6440	090 ⁽¹⁾	125 ⁽¹⁾	187 ⁽¹⁾	250 ⁽¹⁾	312 ⁽²⁾	375 ⁽²⁾	437 ⁽²⁾	500 ⁽³⁾	562 ⁽³⁾	625 ⁽³⁾	687 ⁽³⁾	750 ⁽³⁾
.138-32 (#8-32)	LTSO	LTSOS	LTSOA	632	NA	125 ⁽¹⁾	187 ⁽¹⁾	250 ⁽¹⁾	312 ⁽²⁾	375 ⁽²⁾	437 ⁽²⁾	500 ⁽²⁾	562 ⁽³⁾	625 ⁽³⁾	687 ⁽³⁾	750 ⁽³⁾

ISO METRIC/unit:mm

Thread Size x Pitch	Type			Thread Code	Length "L" ± 0.08 For other lengths / thread depth data see chart below.										
	Steel	Stainless Steel	Aluminum		2.00	3.00	4.00	6.00	8.00	10.00	12.00	14.00	16.00	18.00	19.00
M2.5 x 0.45	LTSO	LTSOS	LTSOA	M25 6M25	200 ⁽¹⁾	300 ⁽¹⁾	400 ⁽¹⁾	600 ⁽¹⁾	800 ⁽²⁾	1000 ⁽³⁾	1200 ⁽³⁾	1400 ⁽³⁾	1600 ⁽³⁾	1800 ⁽³⁾	1900 ⁽³⁾
M3 x 0.5	LTSO	LTSOS	LTSOA	M3 6M3	200 ⁽¹⁾	300 ⁽¹⁾	400 ⁽¹⁾	600 ⁽¹⁾	800 ⁽²⁾	1000 ⁽²⁾	1200 ⁽³⁾	1400 ⁽³⁾	1600 ⁽³⁾	1800 ⁽³⁾	1900 ⁽³⁾
M3.5 x 0.6	LTSO	LTSOS	LTSOA	M35	NA	300 ⁽¹⁾	400 ⁽¹⁾	600 ⁽¹⁾	800 ⁽¹⁾	1000 ⁽²⁾	1200 ⁽²⁾	1400 ⁽³⁾	1600 ⁽³⁾	1800 ⁽³⁾	1900 ⁽³⁾

(1) Type #1 (2) Type #2 (3) Type #3

NA – Not Available

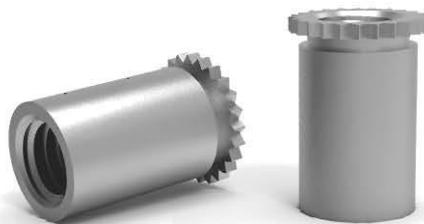


Part Number Designation

LTSOS - 440 - 250

Type and Material Thread Code Length Code

LDSO LDSOS



Features

- ◆ Threaded standoffs for close-to-edge applications.

特征

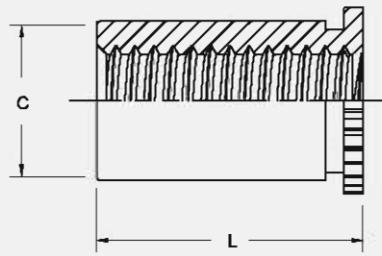
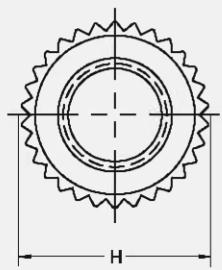
- ◆ 带螺纹螺柱，用于贴近面板边缘的应用。

UNIFIED/unit:Inch

Thread Size	Type		Thread Code	Length Code	Sheet Thickness	Hole Size In Sheet +.003 -.000	C Max.	H Nom.	L +.002 -.005	Min. Dist. Hole C/L To Edge
	Stainless Steel	Steel								
.112-40 (#4-40)	LDSOS	LDSO	440	250 275	.037 - .250	.166	.165	.194	.250 .275	.126

ISO METRIC/unit:mm

Thread Size x Pitch	Type		Thread Code	Length Code	Sheet Thickness	Hole Size In Sheet +.008	C Max.	H Nom.	L +.005 -.013	Min. Dist. Hole C/L To Edge
	Stainless Steel	Steel								
M3x 0.5	LDSOS	LDSO	M3	6.35 7	0.94 - 6.35	4.22	4.2	4.92	6.35 7	3.2



Part Number Designation

LDSOS - 440 - 275

Type and Material Thread Code Length Code

LSSA LSSS LSSC



Features

- ◆ Interval PC board with other board or metal plate, simply press the button on the plate cylinder.

特征

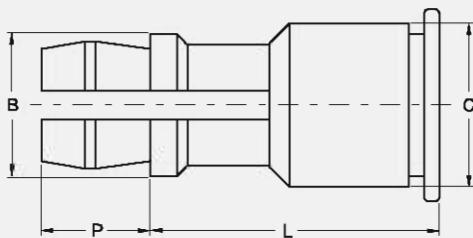
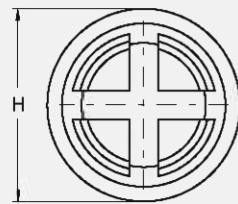
- ◆ 间隔PC板与其它板或金属板，只需将板按扣在柱体上。

UNIFIED/unit:Inch

Type			Top Panel Mounting Hole Diameter Code	Length Code "L" ± .005 (Length Code in 32nds of an inch)										B	C	P	H
Fastener Material	Aluminum	Carbon Steel		.250	.312	.375	.437	.500	.562	.625	.750	.875	1.00	± .005	Max.	± .005	± .005
	LSSA	LSSS		156	8	10	12	14	16	18	20	24	28	32	.188	.212	.141

ISO METRIC/unit:mm

Type			Top Panel Mounting Hole Diameter Code	Length Code "L" ± 0.13 (Length Code in millimeters)										B	C	P	H
Fastener Material	Aluminum	Carbon Steel		8	10	12	14	16	18	20	22	25	4.78	5.39	3.58	6.35	
	LSSA	LSSS		4mm													



Part Number Designation

LSSC - 156 - 10

Type and
Material

Top Panel
Mounting Hole
Diameter Code

Length
Code



Features

- ◆ You can use PC board or other parts slide into place quickly, playing a role interval.

特征

- ◆ 可使用PC板或其它零件迅速滑动到位，起到间隔作用。

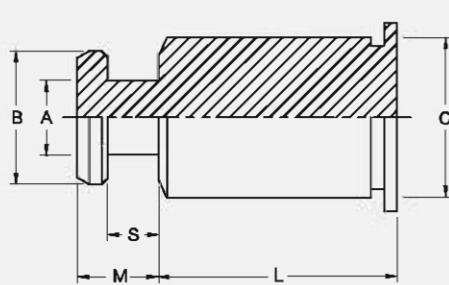
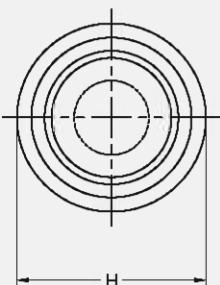


UNIFIED/unit:Inch

Type	Body Size - Sheet Code	Length "L" $\pm .005$ (Length Code in 32nds of an inch)														A $\pm .003$	B $\pm .003$	C Max.	S $\pm .003$	M Max.	H Nom	D Anvil Hole $+.003$ $-.000$
Stainless Steel	.063 .125 .188 .250 .312 .375 .437 .500 .562 .625 .750 .875 1.00																					
LSKC	6060	2	4	6	8	10	12	14	16	18	20	24	28	32	.099	.177	.212	.068	.108	.250	.216	

ISO METRIC/unit:mm

Type	Body Size - Sheet Code	Length "L" ± 0.13 (Length Code in millimeters)														A ± 0.08	B ± 0.08	C Max.	S ± 0.08	M Max.	H Nom	D Anvil Hole $+0.08$
Stainless Steel																						
LSKC	61.5	2	4	6	8	10	12	14	16	18	20	22	25	2.51	4.5	5.39	1.73	2.75	6.35	5.5		



Part Number Designation

LSKC - 6060 - 12

Type and Material

Baby Size-sheet Code

Length Code

LCSS LCSOS



Features

- ◆ Stainless steel standoffs.
- ◆ Mounted in a blind hole grinding.

特征

- ◆ 不锈钢压铆螺柱。
- ◆ 安装在打磨的盲孔中。

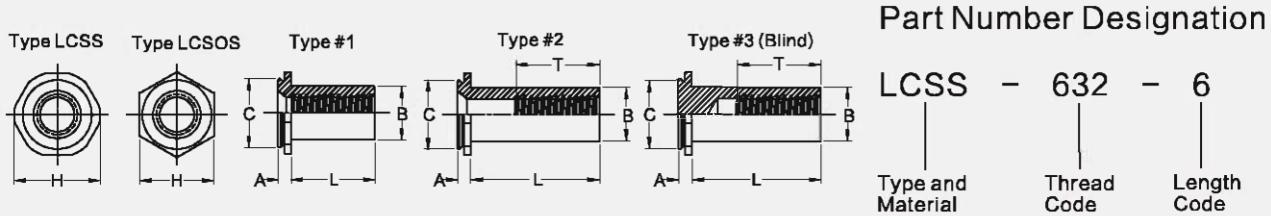
UNIFIED/unit:Inch

Thread Size	Type	Fastener Material	Thread Code	Length Code "L" (Length code is in 16ths of an inch) +.002 -.005								Min. Sheet Thickness	Blind Mounting Hole Dia. +.003 -.000	Min. Depth of Blind Hole	T Min. Depth Full Thread	A Max.	B Max.	C Max.	H Nom.	Min. Dist. Hole C/L To Edge	
				.187	.250	.312	.375	.500	.625	.750	1.00										
	Stainless Steel																				
.112-40 (#4-40)	LCSS LCSOS	440	3 ⁽¹⁾ 4 ⁽²⁾ 5 ⁽²⁾ 6 ⁽²⁾ 8 ⁽³⁾ 10 ⁽³⁾ 12 ⁽³⁾ 16 ⁽³⁾									.062 .093	.213	.043 .075	.188	.041 .072	.165	.212	.250	.188	
.138-32 (#6-32)	LCSS LCSOS	632	3 ⁽¹⁾ 4 ⁽¹⁾ 5 ⁽²⁾ 6 ⁽²⁾ 8 ⁽³⁾ 10 ⁽³⁾ 12 ⁽³⁾ 16 ⁽³⁾									.062 .093	.290	.043 .075	.250	.041 .072	.213	.289	.312	.219	
.164-32 (#8-32)	LCSS LCSOS	832	3 ⁽¹⁾ 4 ⁽¹⁾ 5 ⁽²⁾ 6 ⁽²⁾ 8 ⁽³⁾ 10 ⁽³⁾ 12 ⁽³⁾ 16 ⁽³⁾									.062 .093	.312	.043 .075	.250	.041 .072	.245	.311	.344	.250	
.190-32 (#10-32)	LCSS LCSOS	032	3 ⁽¹⁾ 4 ⁽¹⁾ 5 ⁽¹⁾ 6 ⁽¹⁾ 8 ⁽²⁾ 10 ⁽³⁾ 12 ⁽³⁾ 16 ⁽³⁾									.062 .093	.344	.043 .075	.375	.041 .072	.290	.343	.375	.281	
.250-20 (1/4-20)	LCSS LCSOS	0420	3 ⁽¹⁾ 4 ⁽¹⁾ 5 ⁽¹⁾ 6 ⁽¹⁾ 8 ⁽²⁾ 10 ⁽²⁾ 12 ⁽³⁾ 16 ⁽³⁾									.062 .093	.390	.043 .075	.375	.041 .072	.354	.389	.438	.375	

ISO METRIC/unit:mm

Thread Size x Pitch	Type	Fastener Material	Thread Code	Length Code "L" (Length code is in millimeters) +.05 - 0.13								Min. Sheet Thickness	Blind Mounting Hole Diameter +.08	Min. Depth of Blind Hole	T Min. Depth Full Thread	A Max.	B Max.	C Max.	H Nom.	Min. Dist. Hole C/L To Edge
				4 ⁽¹⁾	6 ⁽¹⁾	8 ⁽²⁾ 8 ⁽³⁾	10 ⁽³⁾	12 ⁽³⁾	16 ⁽³⁾	20 ⁽³⁾	25 ⁽³⁾									
M3 X 0.5	LCSS LCSOS	M3	4 ⁽¹⁾ 6 ⁽¹⁾ 8 ⁽²⁾ 8 ⁽³⁾	1.6 2.4	5.41	1.1 1.91	5	1.04 1.83	4.2	5.39	6.35	4.8								
M4 X 0.7	LCSS LCSOS	M4	4 ⁽¹⁾ 6 ⁽¹⁾ 8 ⁽²⁾ 10 ⁽³⁾	1.6 2.4	7.92	1.1 1.91	6.5	1.04 1.83	6.23	7.9	8.74	6.4								
M5 X 0.8	LCSS LCSOS	M5	4 ⁽¹⁾ 6 ⁽¹⁾ 8 ⁽¹⁾ 10 ⁽²⁾ 12 ⁽²⁾ 16 ⁽³⁾ 20 ⁽³⁾ 25 ⁽³⁾	1.6 2.4	8.74	1.1 1.91	9.6	1.04 1.83	7.37	8.72	9.53	7.2								
M6 X 1	LCSOS	M6	4 ⁽¹⁾ 6 ⁽¹⁾ 8 ⁽¹⁾ 10 ⁽²⁾ 12 ⁽²⁾ 16 ⁽³⁾ 20 ⁽³⁾ 25 ⁽³⁾	2.4	9.9	1.91	9.6	1.83	9	9.89	11.11	9.5								

(1) Type #1 (2) Type #2 (3) Type #3



LPF11 LPF11M LPF12 LPF12M LPF15 LPF15M

Features

- ◆ Shoulder on retainer provides positive stop during installation.
- ◆ Available in self-clinching, flaring, or floating mounting styles.
- ◆ Available with knurled or un-knurled metal cap, black metal cap, or a custom color plastic cap.

特征

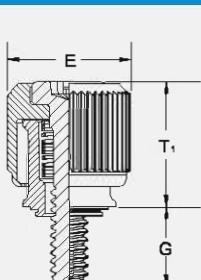
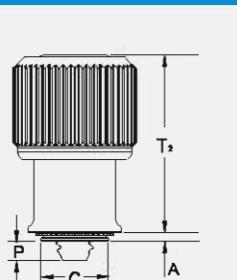
- ◆ 定位圈上的锯齿设计确保产品安装到位。
- ◆ 有压铆，翻边和浮动三种设计。
- ◆ 可提供带压花或无压花的金属帽，黑色金属帽或客户指定颜色的塑胶帽。

UNIFIED/unit:Inch

Thread Size	Type			Thread Code	Screw Length Code	A Max.	Min. Sheet Thickness	Hole Size In Sheet +.003 -.000	C Max. ± .010	E ± .025	G ± .025	P ± .025	T ₁ Nom.	T ₂ Nom.	Driver Size	Min. Dist. Hole C/L To Edge
	Knurled Cap	Smooth Cap	Semi-smooth Cap													
.112-40 (.#4-40)	LPF11	LPF12	LPF15	440	0	.036	.036	.219	.218	.417	.170	.000	.310	.450	#1	.28
	LPF11M	LPF12M	LPF15M		1						.230	.060				
					2						.290	.120				
.138-32 (#6-32)	LPF11	LPF12	LPF15	632	0	.036	.036	.250	.249	.450	.230	.000	.450	.640	#2	.29
	LPF11M	LPF12M	LPF15M		1						.290	.060				
					2						.350	.120				
.164-32 (#8-32)	LPF11	LPF12	LPF15	832	0	.036	.036	.312	.311	.514	.230	.000	.450	.640	#2	.33
	LPF11M	LPF12M	LPF15M		1						.290	.060				
					2						.350	.120				
.190-32 (#10-32)	LPF11	LPF12	LPF15	032	0	.036	.036	.312	.311	.514	.230	.000	.450	.640	#2	.33
	LPF11M	LPF12M	LPF15M		1						.290	.060				
					2						.350	.120				
.250-20 (1/4-20)	LPF11	LPF12	LPF15	0420	0	.036	.036	.375	.374	.575	.290	.000	.530	.790	#3	.46
	LPF11M	LPF12M	LPF15M		1						.350	.060				
					2						.410	.120				

ISO METRIC/unit:mm

Thread Size	Type			Thread Code	Screw Length Code	A Max.	Min. Sheet Thickness	Hole Size In Sheet +.008 -.000	C Max. ± .010	E ± .025	G ± .025	P ± .025	T ₁ Nom.	T ₂ Nom.	Driver Size	Min. Dist. Hole C/L To Edge
	Knurled Cap	Smooth Cap	Semi-smooth Cap													
M3X0.5	LPF11	LPF12	LPF15	M3	0	0.92	0.92	5.56	5.54	10.59	4.32	0	7.87	11.43	#1	7.11
	LPF11M	LPF12M	LPF15M		1						5.84	1.52				
					2						7.37	3.05				
M3.5X0.6	LPF11	LPF12	LPF15	M3.5	0	0.92	0.92	6.35	6.33	11.43	5.84	0	11.43	16.26	#2	7.37
	LPF11M	LPF12M	LPF15M		1						7.37	1.52				
					2						8.89	3.05				
M4X0.7	LPF11	LPF12	LPF15	M4	0	0.92	0.92	7.92	7.90	11.43	5.84	0	11.43	16.26	#2	8.38
	LPF11M	LPF12M	LPF15M		1						7.37	1.52				
					2						8.89	3.05				
M5X0.8	LPF11	LPF12	LPF15	M5	0	0.92	0.92	7.92	7.90	11.43	5.84	0	11.43	16.26	#2	8.38
	LPF11M	LPF12M	LPF15M		1						7.37	1.52				
					2						8.89	3.05				
M6X1	LPF11	LPF12	LPF15	M6	0	0.92	0.92	9.53	9.51	13.46	7.37	0	13.46	20.07	#3	11.68
	LPF11M	LPF12M	LPF15M		1						8.89	1.52				
					2						10.41	3.05				



Type
Thread Code
Screw Length Code
Finish

LPF11 – 832 – 0 BL

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LPF11MF LPF12MF



Features

- ◆ Appropriate for close centerline-to-edge applications.
- ◆ Does not require high installation force.
- ◆ Installs into any panel hardness.
- ◆ Installs flush on back side of panel.

特征

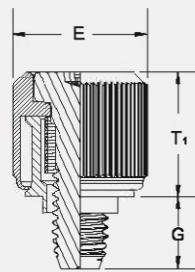
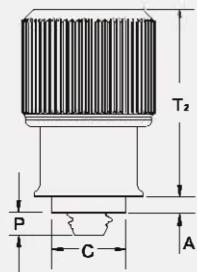
- ◆ 适用于贴近板边缘安装的环境。
- ◆ 安装时不需要很高的安装力。
- ◆ 适用于所有硬度的安装板。
- ◆ 平整的安装在面板的背面。

UNIFIED/unit:Inch

Thread Size	Type		Thread Code	Screw Length Code	A Max.	Min. Sheet Thickness	Hole Size In Sheet +.005 -.000	C Max.	E ± .010	G ± .025	P ± .025	T ₁ Nom.	T ₂ Nom.	Driver Size
	Knurled Cap	Smooth Cap												
.112-40 (#4-40)	LPF11MF	LPF12MF	440	0	.041	.031	.187	.186	.417	.170	.000	.310	.450	#1
				1						.230	.055			
				2						.290	.115			
.138-32 (#6-32)	LPF11MF	LPF12MF	632	0	.072	.060	.213	.212	.450	.290	.000	.450	.640	#2
				1						.290	.024			
				2						.350	.084			
.164-32 (#8-32)	LPF11MF	LPF12MF	832	0	.072	.060	.266	.265	.514	.230	.000	.450	.640	#2
				1						.290	.024			
				2						.350	.084			
.190-32 (#10-32)	LPF11MF	LPF12MF	032	0	.072	.060	.266	.265	.514	.230	.000	.450	.640	#2
				1						.290	.024			
				2						.350	.084			
.250-20 (1/4-20)	LPF11MF	LPF12MF	0420	0	.072	.060	.323	.322	.575	.290	.000	.530	.790	#3
				1						.350	.024			
				2						.410	.084			

ISO METRIC/unit:mm

Thread Size x Pitch	Type		Thread Code	Screw Length Code	A Max.	Min. Sheet Thickness	Hole Size In Sheet +0.1	C Max.	E ± .025	G ± 0.64	P ± 0.64	T ₁ Nom.	T ₂ Nom.	Driver Size
	Knurled Cap	Smooth Cap												
M3 x 0.5	LPF11MF	LPF12MF	M3	0	1.05	0.79	4.75	4.73	10.59	4.32	0	7.87	11.43	#1
				1						5.84	1.4			
				2						7.37	2.92			
M4 x 0.7	LPF11MF	LPF12MF	M4	0	1.83	1.52	6.76	6.74	13.06	5.84	0	11.43	16.26	#2
				1						7.37	0.61			
				2						8.89	2.13			
M5 x 0.8	LPF11MF	LPF12MF	M5	0	1.83	1.52	6.76	6.74	13.06	5.84	0	11.43	16.26	#2
				1						7.37	0.61			
				2						8.89	2.13			
M6 x 1	LPF11MF	LPF12MF	M6	0	1.83	1.52	8.2	8.18	14.61	7.37	0	13.46	20.07	#3
				1						8.89	0.61			
				2						10.41	2.13			



Part Number Designation

LPF11MF - 440 - 2

Type Thread Code Screw Length Code

LPF11MW LPF12MW

Features

- ◆ Compensates for mating hole misalignment.
- ◆ Install into any panel hardness.

特征

- ◆ 有效补偿产品与配件孔的偏差。
- ◆ 适用于所有硬度的安装板。

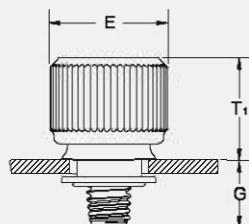
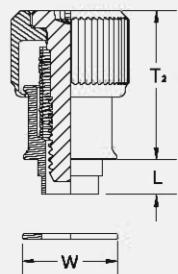


UNIFIED/unit:Inch

Thread Size	Type		Thread Code	Shank Code	Screw Length Code	A Max. Sheet Thickness	B Min.	Hole Size In Sheet +.003 -.001	E +.010	G Nom.	H Min.	L Nom.	T ₁ Nom.	T ₂ Nom.	Driver Size	Min. Total Float	W Nom.
	Knurled Cap	Smooth Cap															
.112-40 (#4-40)	LPF11MW	LPF12MW	440	1	1 2	.063	.111	.250	.417	.230 .290	.375	.137	.310	.450	#1	.073	.312
.138-32 (#6-32)	LPF11MW	LPF12MW	632	1	1 2	.063	.115	.283	.450	.290 .350	.413	.149	.450	.640	#2	.076	.344
.164-32 (#8-32)	LPF11MW	LPF12MW	832	1	1 2	.063	.121	.346	.514	.290 .350	.469	.157	.450	.640	#2	.076	.407
.190-32 (#10-32)	LPF11MW	LPF12MW	032	1	1 2	.063	.121	.346	.514	.290 .350	.469	.157	.450	.640	#2	.076	.407
.250-20 (1/4-20)	LPF11MW	LPF12MW	0420	1	1 2	.063	.128	.413	.575	.350 .410	.531	.157	.530	.790	#3	.081	.468

ISO METRIC/unit:mm

Thread Size x Pitch	Type		Thread Code	Shank Code	Screw Length Code	A Max. Sheet Thickness	B Min.	Hole Size In Sheet +.08 -.03	E ±0.25	G Nom.	H Min.	L Nom.	T ₁ Nom.	T ₂ Nom.	Driver Size	Min. Total Float	W Nom.
	Knurled Cap	Smooth Cap															
M3 x 0.5	LPF11MW	LPF12MW	M3	1	1 2	1.6	2.82	6.35	10.59	5.84 7.37	9.52	3.48	7.87	11.43	#1	1.85	7.92
M3.5 x 0.6	LPF11MW	LPF12MW	M3.5	1	1 2	1.6	2.92	7.19	11.43	7.37 8.89	10.49	3.78	11.43	16.26	#2	1.93	8.74
M4 x 0.7	LPF11MW	LPF12MW	M4	1	1 2	1.6	3.07	8.79	13.06	7.37 8.89	11.91	3.99	11.43	16.26	#2	1.93	10.34
M5 x 0.8	LPF11MW	LPF12MW	M5	1	1 2	1.6	3.07	8.79	13.06	7.37 8.89	11.91	3.99	11.43	16.26	#2	1.93	10.34
M6 x 1	LPF11MW	LPF12MW	M6	1	1 2	1.6	3.25	10.49	14.61	8.89 10.41	13.48	3.99	13.46	20.07	#3	2.06	11.89



Part Number Designation

LPF11MW - 632 - 1 - 1

Type	Thread Code	Shank Code	Screw Length Code
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LPF11PM**Features**

- ◆ Colorful self-clinching panel fastener assemblies.

特征

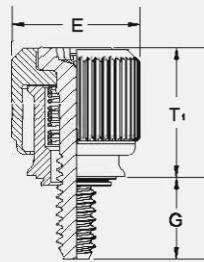
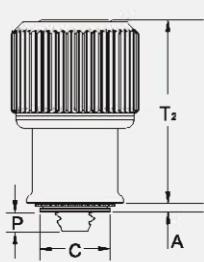
- ◆ 彩色面板螺丝。

UNIFIED/unit:Inch

Thread Size	Type	Thread Code	Screw Length Code	A (Shank) Max.	Min. Sheet Thickness	Hole Size In Sheet +.003 -.000	C Max.	E ± .010	G ± .025	P ± .025	T ₁ Nom.	T ₂ Nom.	Driver Size	Min. Dist. Hole C/L To Edge
	Knurled Cap													
.112-40 (#4-40)	LPF11PM	440	0	.036	.036	.219	.218	.417	.170	.000	.310	.450	#2	.28
			1						.230	.060				
			2						.290	.120				
.138-32 (#6-32)	LPF11PM	632	0	.036	.036	.250	.249	.450	.230	.000	.450	.640	#2	.29
			1						.290	.060				
			2						.350	.120				
.164-32 (#8-32)	LPF11PM	832	0	.036	.036	.312	.311	.514	.230	.000	.450	.640	#2	.33
			1						.290	.060				
			2						.350	.120				
.190-32 (#10-32)	LPF11PM	032	0	.036	.036	.312	.311	.514	.230	.000	.450	.640	#2	.33
			1						.290	.060				
			2						.350	.120				

ISO METRIC/unit:mm

Thread Size x Pitch	Type	Thread Code	Screw Length Code	A (Shank) Max.	Min. Sheet Thickness	Hole Size In Sheet +0.08	C Max.	E ± 0.25	G ± 0.64	P ± 0.64	T ₁ Nom.	T ₂ Nom.	Driver Size	Min. Dist. Hole C/L To Edge
	Knurled Cap													
M3 x 0.5	LPF11PM	M3	0	0.92	0.92	5.56	5.54	10.59	4.32	0	7.87	11.43	#2	7.11
			1						5.84	1.52				
			2						7.37	3.05				
M4 x 0.7	LPF11PM	M4	0	0.92	0.92	7.92	7.9	13.06	5.84	0	11.43	16.26	#2	8.38
			1						7.37	1.52				
			2						8.89	3.05				
M5 x 0.8	LPF11PM	M5	0	0.92	0.92	7.92	7.9	13.06	5.84	0	11.43	16.26	#2	8.38
			1						7.37	1.52				
			2						8.89	3.05				

**Part Number Designation**

LPF11PM - 632 - 0

Type

Thread Code

Screw Length Code



LPF30 LPF31 LPF32



Features

- ◆ Low-profile design satisfies many functional and cosmetic requirements.
- ◆ Convenient, large, slotted head for tool or finger operation.

特征

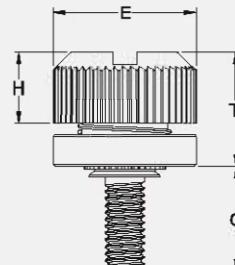
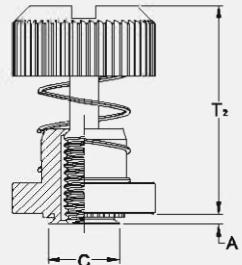
- ◆ 紧凑型设计满足各种功能性和装饰性要求。
- ◆ 头部宽大，并有一字槽设计，便于工具或手指操作。

UNIFIED/unit:Inch

Thread Size	Type	Thread Code	Screw Length Code	A (Shank) Max.	Min. Sheet Thickness	Hole Size In Sheet + .003 - .000	C Max.	E ± .010	G ± .015	H ± .005	T ₁ Max.	T ₂ Nom.	Min. Dist. Hole C/L To Edge
.112-40 (#4-40)	LPF30	440	30	.030	.030		.203	.202	.406	.300	.202	.325	.595
	LPF31			.035	.040								
	LPF32			.058	.060								
.138-32 (#6-32)	LPF30	632	30	.030	.030		.219	.218	.438	.300	.202	.325	.595
	LPF31			.035	.040								
	LPF32			.058	.060								
.164-32 (#8-32)	LPF30	832	30	.030	.030		.250	.249	.468	.300	.207	.330	.600
	LPF31			.035	.040								
	LPF32			.058	.060								
.190-32 (#10-32)	LPF30	032	30	.030	.030		.312	.311	.530	.300	.220	.335	.605
	LPF31			.035	.040								
	LPF32			.058	.060								
.250-20 (1/4-20)	LPF32	0420	35	.058	.060	.375	.374	.625	.350	.242	.385	.675	.38

ISO METRIC/unit:mm

Thread Size x Pitch	Type	Thread Code	Screw Length Code	A (Shank) Max.	Min. Sheet Thickness	Hole Size In Sheet + 0.08	C Max.	E ± 0.25	G ± 0.4	H ± 0.13	T ₁ Max.	T ₂ Nom.	Min. Dist. Hole C/L To Edge
M3X0.5	LPF31	M3	30	0.97	1		5.5	5.48	10.31	7.62	5.13	8.26	15.11
	LPF32			1.48	1.5								
M4X0.7	LPF31	M4	30	0.97	1		6.4	6.38	11.89	7.62	5.26	8.38	15.24
	LPF32			1.48	1.5								
M5X0.8	LPF31	M5	30	0.97	1		8	7.98	13.46	7.62	5.59	8.51	15.37
	LPF32			1.48	1.5								
M6X1	LPF32	M6	35	1.48	1.5	9.5	9.48	15.88	8.89	6.12	9.78	17.15	9.65



Part Number Designation

LPF30 - 832 - 30 CN

Type Thread Code Screw Length Code Finish

LPF50 LPF60 LPF52 PF62



Features

- ◆ Low-profile design satisfies many functional and cosmetic requirements.
- ◆ Type LPF50 with convenient large head and Phillips recess for tool or finger operation.
- ◆ Available with six-lobe recess.

特征

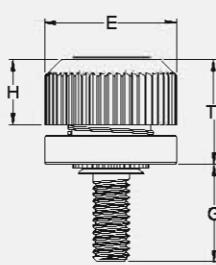
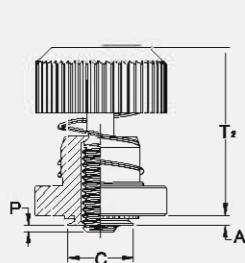
- ◆ 紧凑型设计满足各种功能性和装饰性要求。
- ◆ 产品头部宽大并有十字槽，便于用工具或手指操作。
- ◆ 可提供梅花槽头型。

UNIFIED/unit:Inch

Thread Size	Type	Knurled Cap	Smooth Cap	Thread Code	Screw Length Code	(Shank) Max.	Min. Sheet Thickness	Hole Size In Sheet +.003-.000	C Max.	E ±.010	G ±.025	H ±.008	P ±.025	T ₁ Max.	T ₂ Nom	Driver Size	Min. Dist. Hole C/L To Edge
.112-40 (# 4-40)	LPF50	LPF60	440		0	.030	.030	.203	.202	.406	.230	.207	.000	.340	.520	#1	.26
	LPF51	LPF61	440		1	.038	.040	.203	.202	.406	.230	.207	.000	.340	.520	#1	.26
	LPF52	LPF62	440		1	.058	.060	.203	.202	.406	.230	.207	.000	.340	.520	#1	.26
.138-32 (# 6-32)	LPF50	LPF60	632		0	.030	.030	.219	.218	.438	.230	.207	.000	.340	.520	#2	.28
	LPF51	LPF61	632		1	.038	.040	.219	.218	.438	.230	.207	.000	.340	.520	#2	.28
	LPF52	LPF62	632		1	.058	.060	.219	.218	.438	.230	.207	.000	.340	.520	#2	.28
.164-32 (# 8-32)	LPF50	LPF60	832		0	.030	.030	.250	.249	.468	.230	.217	.000	.340	.520	#2	.29
	LPF51	LPF61	832		0	.038	.040	.250	.249	.468	.230	.217	.000	.340	.520	#2	.29
	LPF52	LPF62	832		1	.058	.060	.250	.249	.468	.230	.217	.000	.340	.520	#2	.29
.190-32 (# 10-32)	LPF50	LPF60	032		0	.030	.030	.312	.311	.530	.290	.225	.000	.340	.530	#2	.33
	LPF51	LPF61	032		0	.038	.040	.312	.311	.530	.290	.225	.000	.340	.530	#2	.33
	LPF52	LPF62	032		1	.058	.060	.312	.311	.530	.290	.225	.000	.340	.530	#2	.33
.250-20 (1/4-20)	LPF52	LPF62	0420		0	.058	.060	.375	.374	.625	.340	.246	.000	.395	.600	#2	.38

ISO METRIC/unit:mm

Thread Size x	Type	Knurled Cap	Smooth Cap	Thread Code	Screw Length Code	(Shank) Max.	Min. Sheet Thickness	Hole Size In Sheet +0.08	C Max.	E ±.025	G ±.064	H ±.02	P ±.064	T ₁ Max.	T ₂ Nom	Driver Size	Min. Dist. Hole C/L To Edge
M3 x 0.5	LPF50	LPF60	M3		0	0.77	0.8	5.5	5.48	10.3	5.48	0	5.26	8.64	13.21	#1	6.6
	LPF51	LPF61	M3		0	0.97	1	5.5	5.48	10.3	5.48	0	5.26	8.64	13.21	#1	6.6
	LPF52	LPF62	M3		1	1.48	1.5	5.5	5.48	10.3	5.48	0	5.26	8.64	13.21	#1	6.6
M3.5 x 0.6	LPF50	LPF60	M3.5		0	0.77	0.8	5.56	5.54	11.1	5.48	0	5.26	8.64	13.21	#2	7.1
	LPF51	LPF61	M3.5		0	0.97	1	5.56	5.54	11.1	5.48	0	5.26	8.64	13.21	#2	7.1
	LPF52	LPF62	M3.5		1	1.48	1.5	5.56	5.54	11.1	5.48	0	5.26	8.64	13.21	#2	7.1
M4 x 0.7	LPF50	LPF60	M4		0	0.77	0.8	6.4	6.38	11.9	5.48	0	5.51	8.64	13.46	#2	7.4
	LPF51	LPF61	M4		0	0.97	1	6.4	6.38	11.9	5.48	0	5.51	8.64	13.46	#2	7.4
	LPF52	LPF62	M4		1	1.48	1.5	6.4	6.38	11.9	5.48	0	5.51	8.64	13.46	#2	7.4
M5 x 0.8	LPF50	LPF60	M5		0	0.77	0.8	8	7.98	13.5	5.48	0	5.72	8.64	13.46	#2	8.4
	LPF51	LPF61	M5		0	0.97	1	8	7.98	13.5	5.48	0	5.72	8.64	13.46	#2	8.4
	LPF52	LPF62	M5		1	1.48	1.5	8	7.98	13.5	5.48	0	5.72	8.64	13.46	#2	8.4
M6 x 1	LPF52	LPF62	M6		0	1.48	1.5	9.5	9.48	15.9	5.48	0	6.25	10.04	15.24	#2	9.7



Part Number Designation

LPF50 - 440 - 1 CN

 | | |
Type Thread Code Screw Length Code Finish

LPFHV



Features

- ◆ Low cost design.
- ◆ Small, compact and low profile design for limited access areas.
- ◆ Two screw lengths.
- ◆ Universal slot/Phillips recess standard.

特征

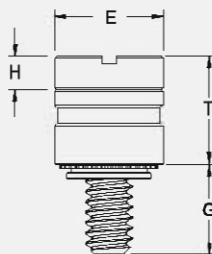
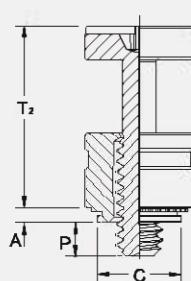
- ◆ 低成本设计。
- ◆ 设计紧凑，简洁，适用于比较狭小的操作空间。
- ◆ 备有两种螺丝长度。
- ◆ 标准一字槽/十字槽设计。

UNIFIED/unit:Inch

Thread Size	Type	Thread Code	Screw Length Code	A (Shank Max.)	Min. Sheet Thickness	Hole Size In Sheet + .003	C Max.	E ± .010	G ± .025	H ± .005	P ± .025	T ₁ Nom.	T ₂ Nom.	Driver Size	Min. Dist. Hole C/L To Edge
.112-40 (#4-40)	LPFHV	440	0 1	.036	.036	.203	.202	.260	.216 .316	.080 .095	.000	.260	.436	#1	.21
.138-32 (#6-32)	LPFHV	632	0 1	.036	.036	.219	.218	.276	.234 .359	.092	.000 .120	.290	.484	#2	.23
.164-32 (#8-32)	LPFHV	832	0 1	.036	.036	.252	.251	.309	.259 .371	.111	.000 .106	.335	.555	#2	.26

ISO METRIC/unit:mm

Thread Size x Pitch	Type	Thread Code	Screw Length Code	A (Shank Max.)	Min. Sheet Thickness	Hole Size In Sheet + 0.08	C Max.	E ± 0.25	G ± 0.64	H ± 0.13	P ± 0.64	T ₁ Nom.	T ₂ Nom.	Driver Size	Min. Dist. Hole C/L To Edge
M3 x 0.5	LPFHV	M3	0 1	0.92	0.92	5.5	5.49	6.95	5.55 7.56	2.03	0 1.9	6.69	11.25	#1	5.8
M3.5 x 0.6	LPFHV	M3.5	0 1	0.92	0.92	6	5.98	7.45	6.01 8.42	2.34	0 2.3	7.45	12.47	#2	6.3
M4 x 0.7	LPFHV	M4	0 1	0.92	0.92	6.4	6.38	7.85	6.59 9.39	2.79	0 2.7	8.5	14.1	#2	6.7



Part Number Designation

LPFHV - 632 - 0 CN

Type Thread Code Screw Length Code Finish

LPFS2 LPFC2



Features

- ◆ Available in steel or stainless steel.
- ◆ Tool or finger operation.
- ◆ Most sizes available in three screw lengths.

特征

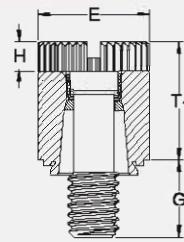
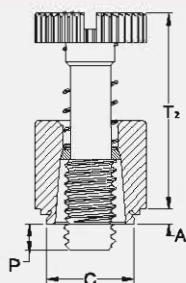
- ◆ 有碳钢和不锈钢两种材质可供选择。
- ◆ 工具或手指操作均可。
- ◆ 大部分产品都有三种螺丝长度供选择。

UNIFIED/unit:Inch

Thread Size	Type		Thread Code	Screw Length Code	A (Shank Max.)	Min. Sheet Thickness	Hole Size In Sheet + .003 -.000	C Max.	E ± .010	G ± .016	H ± .005	P ± .025	T₁ Max.	T₂ Nom.	Min. Dist. Hole C/L To Edge
	Stainless Steel	Steel													
.112-40 (#4-40)	LPFC2	LPFS2	440	40 62	.060	.060	.265	.264	.312	.250 .375	.072	.000 .125	.360	.540	.25
.138-32 (#6-32)	LPFC2	LPFS2	632	40 62 84	.060	.060	.281	.280	.344	.250 .375 .500	.072	.125 .250	.360	.540	.28
.164-32 (#8-32)	LPFC2	LPFS2	832	50 72 94	.060	.060	.312	.311	.375	.312 .437 .562	.082	.125 .250	.450	.690	.31
.190-32 (#10-32)	LPFC2	LPFS2	032	50 72 94	.060	.060	.344	.343	.406	.312 .437 .562	.082	.125 .250	.450	.690	.34
.250-20 (1/4-20)	LPFC2	LPFS2	0420	60 82 04	.060	.060	.413	.412	.468	.375 .500 .625	.097	.125 .250	.580	.880	.38

ISO METRIC/unit:mm

Thread Size x Pitch	Type		Thread Code	Screw Length Code	A (Shank Max.)	Min. Sheet Thickness	Hole Size In Sheet + 0.08	C Max.	E ± .25	G ± 0.4	H ± 0.13	P ± 0.64	T₁ Max.	T₂ Nom.	Min. Dist. Hole C/L To Edge
	Stainless Steel	Steel													
M3X0.5	LPFC2	LPFS2	M3	40 62	1.53	1.53	6.73	6.71	7.92	6.4 9.5	1.83	0 3.2	9.14	13.72	6.35
M4X0.7	LPFC2	LPFS2	M4	50 72 94	1.53	1.53	7.92	7.9	9.53	7.9 11.1 14.3	2.08	0 3.2 6.4	11.43	17.53	7.87
M5X0.8	LPFC2	LPFS2	M5	50 72 94	1.53	1.53	8.74	8.72	10.31	7.9 11.1 14.3	2.08	0 3.2 6.4	11.47	17.53	8.63
M6X1	LPFC2	LPFS2	M6	60 82 04	1.53	1.53	10.49	10.47	11.89	9.5 12.7 15.9	2.46	0 3.2 6.4	14.73	22.35	9.65



Part Number Designation

LPFC2 - 832 - 50

Type and Material Thread Code Screw Length Code

LPFC4

Features

- ◆ Install into stainless steel sheets HRB 88 or less.
- ◆ Fully concealed-head for tool only access.
- ◆ Assorted screw lengths for most applications.



特征

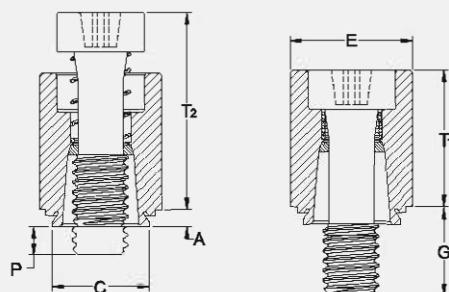
- ◆ 适用于硬度不高于HRB88的不锈钢安装板。
- ◆ 采用埋头设计，必须借助工具操作。
- ◆ 螺丝长度规格齐全。

UNIFIED/unit:Inch

Thread Size	Type	Thread Code	Screw Length Code	A (Shank) Max.	Min. Sheet Thickness	Hole Size In Sheet +.003 -.000	C Max.	E ± .010	G ± .016	P ±.025	T ₁ Max.	T ₂ Nom.	Driver Size	Min. Dist Hole C/L To Edge
.112-40 (#4-40)	LPFC4	440	40 62	.060	.060	.265	.264	.344	.250 .375	.000 .125	.370	.540	#1	.25
.138-32 (#6-32)	LPFC4	632	40 62 84	.060	.060	.281	.280	.375	.250 .375 .500	.000 .125 .250	.380	.540	#2	.28
.164-32 (#8-32)	LPFC4	832	50 72 94	.060	.060	.312	.311	.406	.312 .437 .562	.000 .125 .250	.480	.705	#2	.31
.190-32 (#10-32)	LPFC4	032	50 72 94	.060	.060	.344	.343	.437	.312 .437 .562	.000 .125 .250	.490	.705	#2	.34

ISO METRIC/unit:mm

Thread Size x Pitch	Type	Thread Code	Screw Length Code	A (Shank) Max.	Min. Sheet Thickness	Hole Size In Sheet +0.08	C Max.	E ± 0.25	G ± 0.4	P ±0.64	T ₁ Max.	T ₂ Nom.	Driver Size	Min. Dist Hole C/L To Edge
M3X0.5	LPFC4	M3	40 62	1.53	1.53	6.73	6.71	8.74	6.4 9.5	0 3.2	9.4	13.72	#1	6.35
M4X0.7	LPFC4	M4	50 72 94	1.53	1.53	7.92	7.9	10.31	7.9 11.1 14.3	0 3.2 6.4	12.19	17.91	#2	7.87
M5X0.8	LPFC4	M5	50 72 94	1.53	1.53	8.74	8.72	11.1	7.9 11.1 14.3	0 3.2 6.4	12.45	17.91	#2	8.63



Part Number Designation

LPFC4 - 832 - 50

Type

Thread Code

Screw Length Code

LPFC2P

Features

- ◆ Fully concealed-head for tool only access.
- ◆ Assorted screw lengths for most applications.



特征

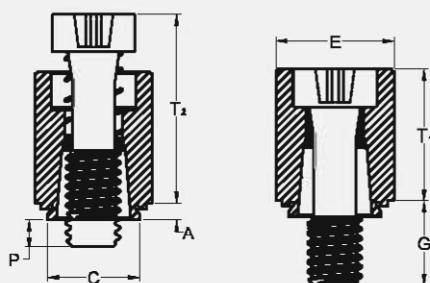
- ◆ 采用埋头设计，必须借助工具操作。
- ◆ 螺丝长度规格齐全。

UNIFIED/unit:Inch

Thread Size	Type	Thread Code	Screw Length Code	A (Shank) Max.	Min. Sheet Thickness	Hole Size +.003 -.000	C Max.	E ± .010	G ± .016	P ± .025	T ₁ Max.	T ₂ Nom.	Driver Size	Min. Dist. Hole C/L To Edge
.112-40 (#4-40)	LPFC2P	440	40 62	.060	.060	.265	.264	.312	.250 .375 .250 .500	.000 .125 .000 .250	.370	.540	#1	.25
.138-32 (#6-32)	LPFC2P	632	40 62 84	.060	.060	.281	.280	.344	.375 .375 .500	.125 .125 .250	.380	.540	#2	.28
.164-32 (#8-32)	LPFC2P	832	50 72 94	.060	.060	.312	.311	.375	.312 .437 .562	.000 .125 .250	.480	.705	#2	.31
.190-32 (#10-32)	LPFC2P	032	50 72 94	.060	.060	.344	.343	.406	.312 .437 .562	.000 .125 .250	.490	.705	#2	.34
.250-20 (1/4-20)	LPFC2P	0420	60 82 04	.060	.060	.413	.412	.468	.375 .500 .625	.000 .125 .250	.620	.905	#3	.38

ISO METRIC/unit:mm

Thread Size x Pitch	Type	Thread Code	Screw Length Code	A (Shank) Max.	Min. Sheet Thickness	Hole Size In Sheet + 0.08	C Max.	E ± 0.25	G ± 0.4	P ± 0.64	T ₁ Max.	T ₂ Nom.	Driver Size	Min. Dist. Hole C/L To Edge
M3X0.5	LPFC2P	M3	40 62	1.53	1.53	6.73	6.71	7.92	6.4 9.5 7.9	0 3.2 0	9.4	13.72	#1	6.35
M4X0.7	LPFC2P	M4	50 72 94	1.53	1.53	7.92	7.9	9.53	11.1 14.3	3.2 6.4	12.19	17.91	#2	7.87
M5X0.8	LPFC2P	M5	50 72 94	1.53	1.53	8.74	8.72	10.31	7.9 11.1 14.3	0 3.2 6.4	12.45	17.91	#2	8.63
M6X1.	LPFC2P	M6	60 82 04	1.53	1.53	10.49	10.47	11.89	12.7 15.9	3.2 6.4	15.75	22.99	#3	9.65



Part Number Designation

LPFC2P - 832 - 50

Type and Material Thread Code Screw Length Code

LPTL2 LPSL2

Features

- ◆ Reverse side of sheet is flush when plunger is retracted.
- ◆ Quick lockout feature holds plunger in retracted position.
- ◆ For use in sheets of HRB 80 or less.
- ◆ Available as type LPSL2 without lockout feature on special order.

特征

- ◆ 伸缩销拉紧时，安装板反面保持平整。
- ◆ 快速反扣功能可以使伸缩销保持在拉紧状态。
- ◆ 适用于硬度不高于HRB80的安装板中。
- ◆ LPSL2系列产品可根据订单要求提供无反扣功能的设计。

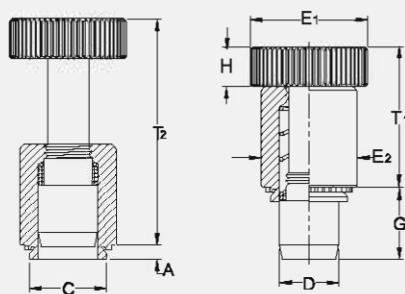


UNIFIED/unit:Inch

Type	Diameter Code	Length Code	A (Shank) Max.	Min. Sheet Thickness	Hole Size In Sheet +.003-.000	C Max	D +.000 -.005	E ₁ ± .010	E ₂ ± .010	G ± .010	H ± .010	T ₁ ± .010	T ₂ Nom	Min.Dist. Hole C/L To Edge
LPTL2	04	4	.058	.060	.328	.327	.250	.50	.406	.310	.17	.595	.895	.34
LPSL2	04	4	.058	.060	.328	.327	.250	.50	.406	.310	.17	.510	.780	.34

ISO METRIC/unit:mm

Type	Diameter Code	Length Code	A (Shank) Max.	Sheet Thickness	In Sheet +0.08	C	D	E ₁	E ₂	G	H	T ₁	T ₂ Nom.	Min.Dist. Hole C/L To Edge
LPTL2	04	4	1.47	1.53	8.33	8.31	6.35	12.7	10.3	7.87	4.32	15.11	22.73	8.64
LPSL2	04	4	1.47	1.53	8.33	8.31	6.35	12.7	10.3	7.87	4.32	12.95	19.81	8.64



Part Number Designation

LPTL2 - 04 - 4 CN

Type and Material Thread Code Length Code Finish Code

LSF**Features**

- ◆ Type LSF for permanent joining of two metal sheets.

特征

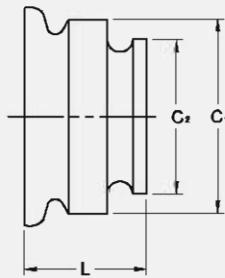
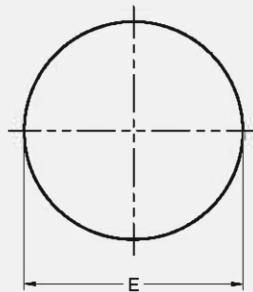
- ◆ LSF 属于永久性双金属片连接的紧固件。

**UNIFIED/unit:Inch**

Type and Size	Thickness Code	Panel 1		Panel 2		C ₁ Max	C ₂ Max	E Max	L Max	Min. Dist Hole C/L To Edge
		Thickness ±.003	Mounting Hole -.003 +.000	Thickness Min	Mounting Hole -.003 +.000					
LSF-3	0.8	.031	.118	.031	.098	.117	.097	.139	.059	.1
LSF-3	1.0	.039	.118	.039	.098	.117	.097	.148	.075	.1
LSF-3	1.2	.047	.118	.047	.098	.117	.097	.148	.091	.1
LSF-3	1.6	.063	.118	.063	.098	.117	.097	.148	.123	.1
LSF-5	0.8	.031	.197	.031	.157	.196	.156	.219	.059	.14
LSF-5	1.0	.039	.197	.039	.157	.196	.156	.219	.075	.14
LSF-5	1.2	.047	.197	.047	.157	.196	.156	.219	.091	.14
LSF-5	1.6	.063	.197	.063	.157	.196	.156	.219	.123	.14

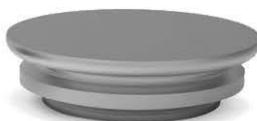
ISO METRIC/unit:mm

Type and Size	Thickness Code	Panel 1		Panel 2		C ₁ Max	C ₂ Max	E Max	L Max	Min. Dist Hole C/L To Edge
		Thickness ±0.08	Mounting Hole ±0.08	Thickness Min	Mounting Hole +0.08					
LSF-3	0.8	0.8	3	0.8	2.5	2.98	2.48	3.53	1.5	2.54
LSF-3	1.0	1.0	3	1.0	2.5	2.98	2.48	3.76	1.9	2.54
LSF-3	1.2	1.2	3	1.2	2.5	2.98	2.48	3.76	2.31	2.54
LSF-3	1.6	1.6	3	1.6	2.5	2.98	2.48	3.76	3.12	2.54
LSF-5	0.8	0.8	5	0.8	4	4.98	3.97	5.56	1.5	3.56
LSF-5	1.0	1.0	5	1.0	4	4.98	3.97	5.56	1.9	3.6
LSF-5	1.2	1.2	5	1.2	4	4.98	3.97	5.56	2.31	3.6
LSF-5	1.6	1.6	5	1.6	4	4.98	3.97	5.56	3.12	3.6

**Part Number Designation**

LSF - 3 0.8 ZI

Type and Material Size (Panel 1 Mounting Hole Code) Thickness Code Finish

LSFP**Features**

- ◆ Type LSFP fasteners are made from precipitation hardened stainless steel for installation into stainless steel sheets where corrosion resistance may be required.

特征

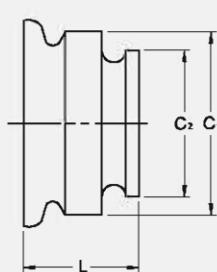
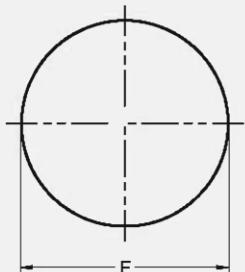
- ◆ LSFP系列紧固件是由沉淀硬化不锈钢材质制造，用来安装于不锈钢耐腐蚀的地方。

UNIFIED/unit:Inch

Type and Size	Thickness Code	Panel 1		Panel 2		C ₁ Max	C ₂ Max	E Max	L Max	Min. Dist Hole C/L To Edge
		Thickness ± .003	Mounting Hole ± .003 -.000	Thickness Min	Mounting Hole + .003 -.000					
LSFP-3	1.0	.039	.118	.039	.098	.177	.097	.148	.075	.1
LSFP-3	1.2	.047	.118	.047	.098	.177	.097	.148	.091	.1
LSFP-3	1.6	.063	.118	.063	.098	.177	.097	.148	.123	.1
LSFP-5	1.0	.039	.197	.039	.177	.196	.176	.219	.075	.14
LSFP-5	1.2	.047	.197	.047	.177	.196	.176	.219	.091	.14
LSFP-5	1.6	.063	.197	.063	.177	.196	.176	.219	.123	.14

ISO METRIC/unit:mm

Type and Size	Thickness Code	Panel 1		Panel 2		C ₁ Max	C ₂ Max	E Max	L Max	Min. Dist Hole C/L To Edge
		Thickness ± .003	Mounting Hole ± .003 -.000	Thickness Min	Mounting Hole + .003 -.000					
LSFP-3	1.0	1	3	1	2.5	2.98	2.48	3.76	1.90	2.54
LSFP-3	1.2	1.2	3	1.2	2.5	2.98	2.48	3.76	2.31	2.54
LSFP-3	1.6	1.6	3	1.6	2.5	2.98	2.48	3.76	3.12	2.54
LSFP-5	1.0	1	5	1	4.5	4.98	4.47	5.56	1.9	3.6
LSFP-5	1.2	1.2	5	1.2	4.5	4.98	4.47	5.56	2.31	3.6
LSFP-5	1.6	1.6	5	1.6	4.5	4.98	4.47	5.56	3.12	3.6

**Part Number Designation**

LSFP - 3 1.0
 Type and Material Size (Panel 1 Mounting Hole Code) Thickness Code

LSFW



Features

- The LSFW is specifically designed to allow pivoting of two sheets of metal. A wave washer provides the consistent torsion to allow repeatable rotation.

特征

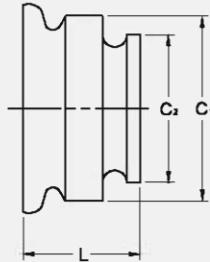
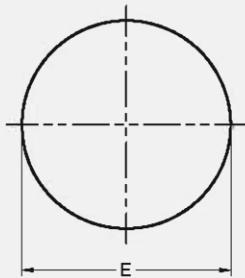
- LSFW系列紧固件是针对两块金属板可旋转的设计，波形垫圈提供了一致的扭力，允许重复旋转。

UNIFIED/unit:Inch

Type and Size	Thickness Code	Panel 1		Panel 2		C₁ Max	C₂ Max	E Max	L Max	Min. Dist Hole C/L To Edge
		Thickness ±.003	Mounting Hole -.003 +.000	Thickness Min	Mounting Hole -.003 +.000					
LSF-3	0.8	.031	.118	.031	.098	.117	.097	.139	.059	.1
LSF-3	1.0	.039	.118	.039	.098	.117	.097	.148	.075	.1
LSF-3	1.2	.047	.118	.047	.098	.117	.097	.148	.091	.1
LSF-3	1.6	.063	.118	.063	.098	.117	.097	.148	.123	.1
LSF-5	0.8	.031	.197	.031	.157	.196	.156	.219	.059	.14
LSF-5	1.0	.039	.197	.039	.157	.196	.156	.219	.075	.14
LSF-5	1.2	.047	.197	.047	.157	.196	.156	.219	.091	.14
LSF-5	1.6	.063	.197	.063	.157	.196	.156	.219	.123	.14

ISO METRIC/unit:mm

Type and Size	Thickness Code	Panel 1		Panel 2		C₁ Max	C₂ Max	E Max	L Max	Min. Dist Hole C/L To Edge
		Thickness ±0.08	Mounting Hole ±0.08	Thickness Min	Mounting Hole +0.08					
LSF-3	0.8	0.8	3	0.8	2.5	2.98	2.48	3.53	1.5	2.54
LSF-3	1.0	1.0	3	1.0	2.5	2.98	2.48	3.76	1.9	2.54
LSF-3	1.2	1.2	3	1.2	2.5	2.98	2.48	3.76	2.31	2.54
LSF-3	1.6	1.6	3	1.6	2.5	2.98	2.48	3.76	3.12	2.54
LSF-5	0.8	0.8	5	0.8	4	4.98	3.97	5.56	1.5	3.56
LSF-5	1.0	1.0	5	1.0	4	4.98	3.97	5.56	1.9	3.6
LSF-5	1.2	1.2	5	1.2	4	4.98	3.97	5.56	2.31	3.6
LSF-5	1.6	1.6	5	1.6	4	4.98	3.97	5.56	3.12	3.6



Part Number Designation

LSFW - 3 0.8 LZ

Type and Material Size Thickness Finish
 (Panel 1 Mounting Hole Code) (Panel 1 Mounting Hole Code)

LSFK



Features

◆ Type LSFK fasteners create a permanent, flush joining of metal to PCB-plastic panels. The fastener has two separate joining profiles. Squeezing the fasteners into place causes a cold-flow of the metal panel material into the fastener clinch profile and a broaching fit of the knurl into the PC Board or plastic panel.

特征

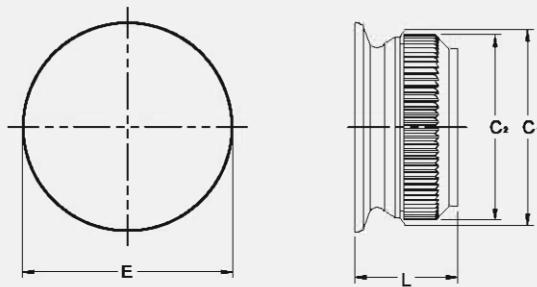
◆ LSFK系列紧固件在金属和PCB板之间创建一个永久的链接，该紧固件具有两个独立的结合型材，挤压紧固件到固定位置。

UNIFIED/unit:Inch

Type and Size	Thickness Code	Panel 1		Panel 2		C_1 Max	C_2 Max	E Max	L Max	Min. Dist Hole C/L To Edge
		Thickness $\pm .003$	Mounting Hole $\pm .003 - .000$	Thickness Min	Mounting Hole $+ .003 - .000$					
LSFP-3	1.0	.039	.118	.039	.098	.177	.097	.148	.075	.1
LSFP-3	1.2	.047	.118	.047	.098	.177	.097	.148	.091	.1
LSFP-3	1.6	.063	.118	.063	.098	.177	.097	.148	.123	.1
LSFP-5	1.0	.039	.197	.039	.177	.196	.176	.219	.075	.14
LSFP-5	1.2	.047	.197	.047	.177	.196	.176	.219	.091	.14
LSFP-5	1.6	.063	.197	.063	.177	.196	.176	.219	.123	.14

ISO METRIC/unit:mm

Type and Size	Thickness Code	Panel 1		Panel 2		C_1 Max	C_2 Max	E Max	L Max	Min. Dist Hole C/L To Edge
		Thickness $\pm .003$	Mounting Hole $\pm .003 - .000$	Thickness Min	Mounting Hole $+ .003 - .000$					
LSFP-3	1.0	1	3	1	2.5	2.98	2.48	3.76	1.90	2.54
LSFP-3	1.2	1.2	3	1.2	2.5	2.98	2.48	3.76	2.31	2.54
LSFP-3	1.6	1.6	3	1.6	2.5	2.98	2.48	3.76	3.12	2.54
LSFP-5	1.0	1	5	1	4.5	4.98	4.47	5.56	1.9	3.6
LSFP-5	1.2	1.2	5	1.2	4.5	4.98	4.47	5.56	2.31	3.6
LSFP-5	1.6	1.6	5	1.6	4.5	4.98	4.47	5.56	3.12	3.6



Part Number Designation

LSFK – 3 0.8 ZI

Type and Material	Size (Panel 1 Mounting Hole Code)	Thickness Finish
-------------------	-----------------------------------	------------------

LSKC-F

Features

- ◆ Clinch feature mounts fastener permanently into metal sheet
- ◆ Unique barrel design allows for quick "panel-to-panel" attachment and detachment
- ◆ Head is flush or sub-flush with one side of metal sheet
- ◆ Can be clinched into blind hole where concealed-head is required
- ◆ Makes horizontal or vertical component mounting possible



特征

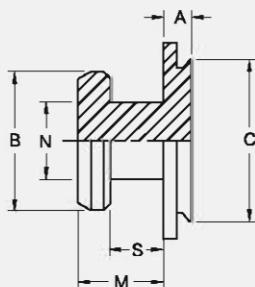
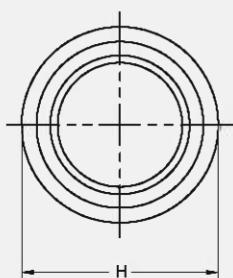
- ◆ 永久的压铆在面板之上。
- ◆ 独特的炮筒式设计，可以快速实现板对板之间的安装和拆卸。
- ◆ 头齐平或者与金属片的一侧齐平。
- ◆ 埋头设计用于压铆到盲孔。
- ◆ 使得水平或者垂直的安装成为可能。

UNIFIED/unit:Inch

Type	Face Mounting Designation Code	Sheet Thickness Code	A Max	B Max	C Max	H Nom.	M Max.	N ± .003	S ± .003
Stainless steel			.039	.177	.212	.237	.108	.099	.068
LSKC	F	1.5							

ISO METRIC/unit:mm

Type	Face Mounting Designation Code	Sheet Thickness Code	A Max	B Max	C Max	H Nom.	M Max.	N ± .008	S ± .008
Stainless steel			1	4.5	5.39	6.02	2.75	2.5	1.73
LSKC	F	1.5							



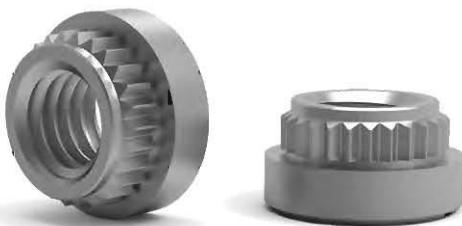
Part Number Designation

LSKC - F - 1.5

↓ ↓ ↓

Type and Material Face Mounting Designation Code Sheet Thickness Code

LKF2 LKFS2



Features

- ◆ Broaching nut.
- ◆ Internally threaded for mounting on PCboards.

特征

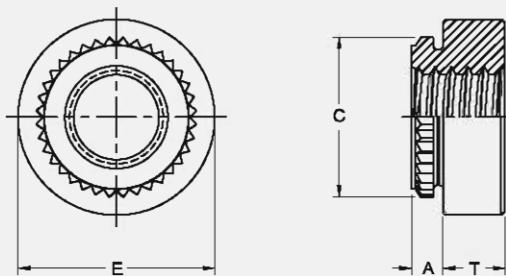
- ◆ 拉削螺母。
- ◆ 用于安装在PCB板上面，以形成内螺纹。

UNIFIED/unit:Inch

Thread Size	Type		Thread Code	A (Shank) Max.	Min. Sheet Thickness	Hole Size In Sheet +.003 -.000	C ± .003	E ± .005	T ± .005	Min. Dist. Hole CL To Edge
	Carbon steel	Stainless Steel								
.086-56 (#2-56)	LKF2	LKFS2	256	.060	.060	.147	.165	.219	.065	0.16
.112-40 (#4-40)	LKF2	LKFS2	440	.060	.060	.166	.184	.219	.065	0.17
.138-32 (#6-32)	LKF2	LKFS2	632	.060	.060	.213	.231	.281	.065	0.22
.164-32 (#8-32)	LKF2	LKFS2	832	.060	.060	.250	.268	.344	.096	0.25
.190-32 (#10-32)	LKF2	LKFS2	032	.060	.060	.272	.290	.375	.127	0.28

ISO METRIC/unit:mm

Thread Size	Type		Thread Code	A (Shank) Max.	Min. Sheet Thickness	Hole Size In Sheet +.08	C ± .08	E ± .13	T ± .13	Min. Dist. Hole CL To Edge
	Carbon steel	Stainless Steel								
M2X0.4	LKF2	LKFS2	M2	1.53	1.53	3.73	4.19	5.56	1.5	4.2
M2.5X0.45	LKF2	LKFS2	M2.5	1.53	1.53	4.22	4.68	5.56	1.5	4.4
M3X0.5	LKF2	LKFS2	M3	1.53	1.53	4.22	4.68	5.56	1.5	4.4
M4X0.7	LKF2	LKFS2	M4	1.53	1.53	6.4	6.81	8.74	2	6.4
M5X0.8	LKF2	LKFS2	M5	1.53	1.53	6.9	7.37	9.53	3	7.1



Part Number Designation

LKF2 - 832 ET

 |
 Type and Material | Thread Code | Finish

LKFE LKFSE



Features

- ◆ Broaching standoffs.
- ◆ Threaded or unthreaded for stacking or spacing.

特征

- ◆ 拉削螺母。
- ◆ 用于安装在PCB板上面以形成内螺纹。

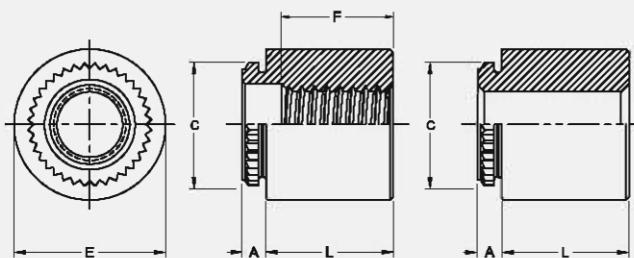
UNIFIED/unit:Inch

Thread Size	Thru Hole +.004 -.003	Type		Thread or Thru Hole Code	Length Code "L" ± .015 (Length Code in 16ths of an inch)								A Max	Min. Sheet Thickness	Hole Size in Sheet +.003 -.000	C ± .003	E ± .005	Min. Dist. Hole C/L to Edge	
		Carbon Steel	Stainless Steel		.125	.250	.375	.500	.625	.750	.875	1.00							
.112-40 (#4-40)	(2)	LKFE	LKFSE	440	4	8	12	16	20	24	NA	NA	.060	.060	.166	.184	.219	.17	
.138-32 (#6-32)	(2)	LKFE	LKFSE	632	4	8	12	16	20	24	28	32	.060	.060	.213	.231	.281	.22	
(2)	.116	LKFE	LKFSE	116	4	8	12	16	20	24	NA	NA	.060	.060	.166	.184	.219	.17	
(2)	.143	LKFE	LKFSE	143	4	8	12	16	20	24	28	32	.060	.060	.213	.231	.281	.22	
"F" Min Thread Length (Where Applicable)					Full			.375 ± .016			.375 Blind								

ISO METRIC/unit:mm

Thread Size X Pitch	Thru Hole +.004 -.003	Type		Thread or Thru Hole Code	Length Code "L" ± .015 (Length Code in 16ths of an inch)								A Max	Min. Sheet Thickness	Hole Size in Sheet +.003 -.000	C ± 0.08	E ± 0.13	Min. Dist. Hole C/L to Edge
		Carbon Steel	Stainless Steel		.3	.4	.6	.8	.10	.12	.14	.16						
M3X0.5	(2)	LKFE	LKFSE	M3	3	4	6	8	10	12	14	16	1.53	1.53	4.22	4.68	5.56	4.4
(2)	3.6	LKFE	LKFSE	3.6	3	4	6	8	10	12	14	16	1.53	1.53	5.41	5.87	7.14	5.5
(2)	4.2	LKFE	LKFSE	4.2	3	4	6	8	10	12	14	16	1.53	1.53	6.4	6.81	8.74	7.1
"F" Min Thread Length (Where Applicable)					Full			9.5										

(2) – Not Applicable NA – Not Available



Part Number Designation

LKFE - 632 - 12 ET

Type and Material Thread Code Length Code Finish

LKSSB



Features

- ◆ Interval PC board with other board or metal plate, simply press the button on the plate cylinder.

特征

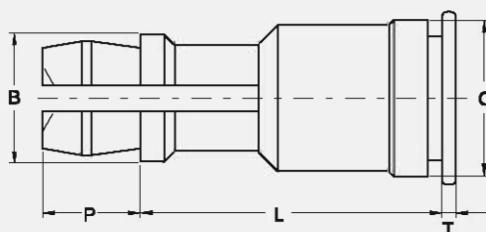
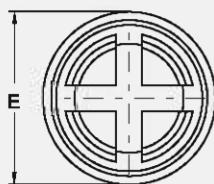
- ◆ 间隔PCB板与其它板或金属板，只需将板按扣在柱体上。

UNIFIED/unit:Inch

Type	Top Panel Mounting Hole Diameter Code	Length Code "L" ± .005 (Length Code in 32nds of an inch)										B	C	P	E	T
LKSSB	156	.250	.312	.375	.437	.500	.562	.625	.750	.875	1.00	.188	.226	.141	.250	.020
		8	10	12	14	16	18	20	24	28	32					

ISO METRIC/unit:mm

Type	Top Panel Mounting Hole Diameter Code	Length Code "L" ± 0.13 (Length Code in millimeters)										B	C	P	E	T
LKSSB	4mm	8	10	12	14	16	18	20	22	25	4.8	5.74	3.58	6.35	0.51	



Part Number Designation

LKSSB - 156 - 10

Type and
Material

Top Panel
Mounting Hole
Diameter Code

Shank
Code

LSMTSO



Features

- ◆ Type LSMTSO surface mount nuts and standoffs are available threaded and unthreaded

特征

- ◆ LSMTSO系列压铆紧固件是表面安装带螺纹或者不带螺纹的螺母或支撑卡柱。

UNIFIED/unit:Inch

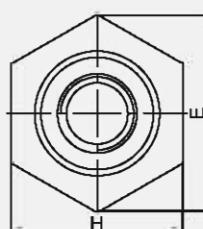
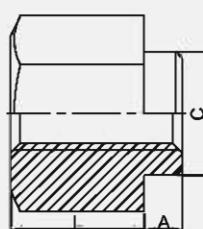
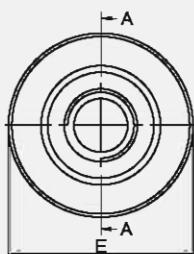
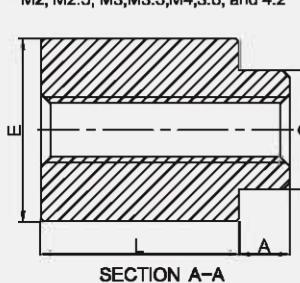
Thread Size	Thru Hole +.004 -.003	Type	Thread or Thru Hole Code	Length Code "L" ± .005 (Length code in 32nds of an inch)				Min Sheet Thickness	A Max	C Max	E Ref. ± .005	H Nom.	ΦH Hole size in sheet +.003 -.000	ΦD Min. Solder Pad	
				.062	.125	.250	.375								
.060-80 (#0-80)	-----	LSMTSO	080	2	4	----	----	.020	.019	.095	.144	-----	.125	.098	.165
.086-56 (#2-56)	-----	LSMTSO	256	2	4	8	12	.060	.060	.142	----	.219	----	.147	.244
.112-40 (#4-40)	-----	LSMTSO	440	2	4	8	12	.060	.060	.161	----	.219	----	.166	.244
.138-32 (#6-32)	-----	LSMTSO	632	2	4	8	12	.060	.060	.208	----	.281	----	.213	.306
.164-32 (#8-32)	-----	LSMTSO	832	2	4	8	12	.060	.060	.245	----	.344	----	.250	.369
-----	.116	LSMTSO	116	2	4	8	12	.060	.060	.161	----	.219	----	.166	.244
-----	.143	LSMTSO	143	2	4	8	12	.060	.060	.208	----	.281	----	.213	.306

ISO METRIC/unit:mm

Thread Size	Thru Hole +0.10 -0.08	Type	Thread or Thru Hole Code	Length Code "L" ± 0.13 (Length code in millimeters)								Min Sheet Thickness	A Max	C Max	E Ref. ± 0.13	H Nom.	ΦH Hole size in sheet +0.08	ΦD Min. Solder Pad	
				1	2	3	----	----	----	----	----								
S1	-----	LSMTSO	M1	1	2	3	----	----	----	----	----	0.5	0.48	2.41	3.66	-----	3.18	2.5	4.19
S1.2	-----	LSMTSO	M1.2	1	2	3	----	----	----	----	----	0.5	0.48	2.41	3.66	-----	3.18	2.5	4.19
S1.4	-----	LSMTSO	M1.4	1	2	3	----	----	----	----	----	0.5	0.48	2.41	3.66	-----	3.18	2.5	4.19
M1.6x0.35	-----	LSMTSO	M1.6	1	2	3	----	----	----	----	----	0.5	0.48	2.41	3.66	-----	3.18	2.5	4.19
M2x0.4	-----	LSMTSO	M2	-----	2	3	4	6	8	10	1.53	1.53	3.6	-----	5.56	-----	3.73	6.2	
M2.5x0.45	-----	LSMTSO	M25	-----	2	3	4	6	8	10	1.53	1.53	4.09	-----	5.56	-----	4.22	6.2	
M3x0.5	-----	LSMTSO	M3	-----	2	3	4	6	8	10	1.53	1.53	4.09	-----	5.56	-----	4.22	6.2	
M3.5x0.6	-----	LSMTSO	M35	-----	2	3	4	6	8	10	1.53	1.53	5.28	-----	7.14	-----	5.41	7.77	
M4x0.7	-----	LSMTSO	M4	-----	2	3	4	6	8	10	1.53	1.53	6.22	-----	8.74	-----	6.35	9.37	
-----	3.6	LSMTSO	3.6	-----	2	3	4	6	8	10	1.53	1.53	5.28	-----	7.14	-----	5.41	7.77	
-----	4.2	LSMTSO	4.2	-----	2	3	4	6	8	10	1.53	1.53	6.22	-----	8.74	-----	6.35	9.37	

Thread/thru hole sizes 2-56,4-40,6-32,8-32,116,143,
M2,M2.5,M3,M3.5,M4,3.6, and 4.2

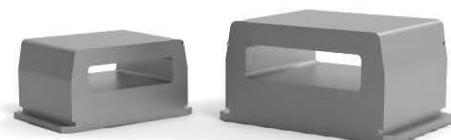
Thread sizes 080,S1, S1.2, S1.4 and M1.6



Part Number Designation

LSMTSO-440 - 8 ET

Type Thread or Thru Hole Code Length Code Finish Code



Features

- ◆ Self-clinching tie-mounts and hooks provide secure attachment points for mounting wires to electronic chassis or enclosures.

特征

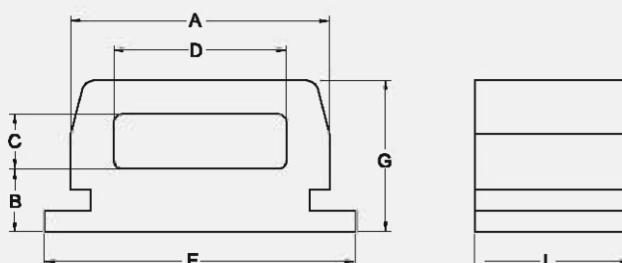
- ◆ 压铆搭支架和挂钩为安装电线电子机箱或外壳提供安全的连接点。

UNIFIED/unit:Inch

Type	Profile	Length Code	L Length ±.003	Sheet Thickness	Hole Size In Sheet +.002 -.001	A ±.003	B ±.006	C ±.006	D ±.006	E ±.006	G Height ±.006	K Min. Hole Edge To Sheet Edge	M Min. Hole Edge To Sheet Edge
LTD	40	4	.121	.040 - .050	.250 x .125	.246	.055	.065	.160	.308	.150	.040	.147
LTD	60	6	.184	.040 - .070	.312 x .187	.308	.075	.065	.205	.370	.180	.040	.196
LTD	175	12	.371	.040 - .125	.500 x .375	.496	.130	.095	.360	.562	.285	.040	.262

ISO METRIC/unit:mm

Type	Profile	Length Code	L Length ±.08	Sheet Thickness	Hole Size In Sheet +.05 -.03	A ±.08	B ±.15	C ±.15	D ±.15	E ±.15	G Height ±.15	K Min. Hole Edge To Sheet Edge	M Min. Hole Edge To Sheet Edge
LTD	40	4	3.07	1.02 - 1.27	6.35 x 3.18	6.25	1.4	1.65	4.06	7.82	3.81	1.02	3.73
LTD	60	6	4.67	1.02 - 1.78	7.93 x 4.75	7.82	1.91	1.65	5.21	9.4	4.57	1.02	4.98
LTD	175	12	9.42	1.02 - 3.18	12.7 x 9.53	12.6	3.3	2.4	9.14	14.28	7.24	1.02	6.65



Part Number Designation

LTD - 60 - 6 ZI

Type and Material Profile Length Code Finish

LTDO



Features

- ◆ Self-clinching tie-mounts and hooks provide secure attachment points for mounting wires to electronic chassis or enclosures.

特征

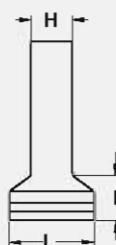
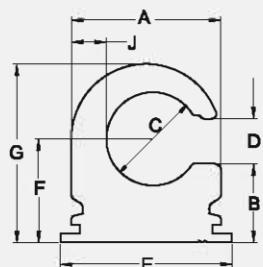
- ◆ 压铆搭支架和挂钩为安装电线电子机箱或外壳提供安全的连接点。

UNIFIED/unit:Inch

Type	Profile	Length Code	L Length ± .003	Sheet Thickness	Hole Size In Sheet +.002 -.001	A ± .003	B ± .006	C ± .006	D ± .006	E ± .006	F ± .005	G Height Norm.	H ± .010	I ± .010	J Nom.	K Min. Hole Edge To Sheet Edge	M Min. Hole Edge To Sheet Edge
LTDO	40	8	.246	.040 - .155	.250 x .375	.371	.213	.245	.130	.433	.285	.471	.12	.13	.083	.040	.147
LTDO	50	8	.246	.040 - .155	.250 x .438	.434	.228	.270	.130	.496	.300	.517	.12	.13	.102	.040	.196
LTDO	120	8	.246	.040 - .155	.250 x .562	.558	.255	.340	.140	.620	.335	.614	.12	.13	.139	.040	.262

ISO METRIC/unit:mm

Type	Profile	Length Code	L Length ± .08	Sheet Thickness	Hole Size In Sheet +0.05 -0.08	A ± .08	B ± .15	C ± .15	D ± .15	E ± .15	F ± .13	G Height Norm.	H ± .25	I ± .25	J Nom.	K Min. Hole Edge To Sheet Edge	M Min. Hole Edge To Sheet Edge
LTDO	40	8	6.25	1.02 - 3.94	6.35 x 9.53	9.42	5.41	6.22	3.3	11	7.24	11.96	3.05	3.3	2.11	1.02	3.73
LTDO	50	8	6.25	1.02 - 3.94	6.35 x 11.13	11.02	5.79	6.86	3.3	12.6	7.62	13.13	3.05	3.3	2.59	1.02	4.98
LTDO	120	8	6.25	1.02 - 3.94	6.35 x 14.27	14.17	6.48	8.64	3.56	15.75	8.51	15.6	3.05	3.3	3.53	1.02	6.65

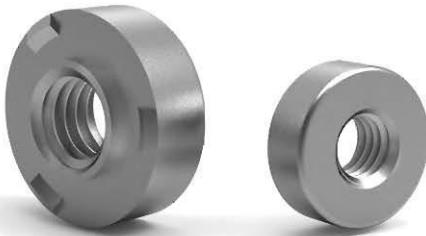


Part Number Designation

LTDO - 50 - 8 ZI

Type and Material Thread Code Length Code Finish

LWN



Features

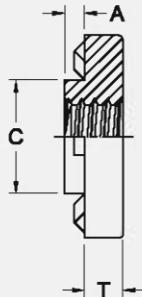
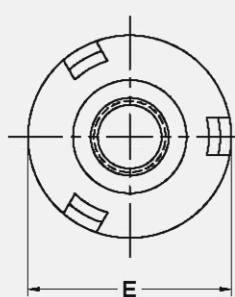
- ◆ Self-locating projection weld nuts prevent excessive wear.
- ◆ 特征
◆ 自定位凸焊螺母,可防止过量磨损。

UNIFIED/unit:Inch

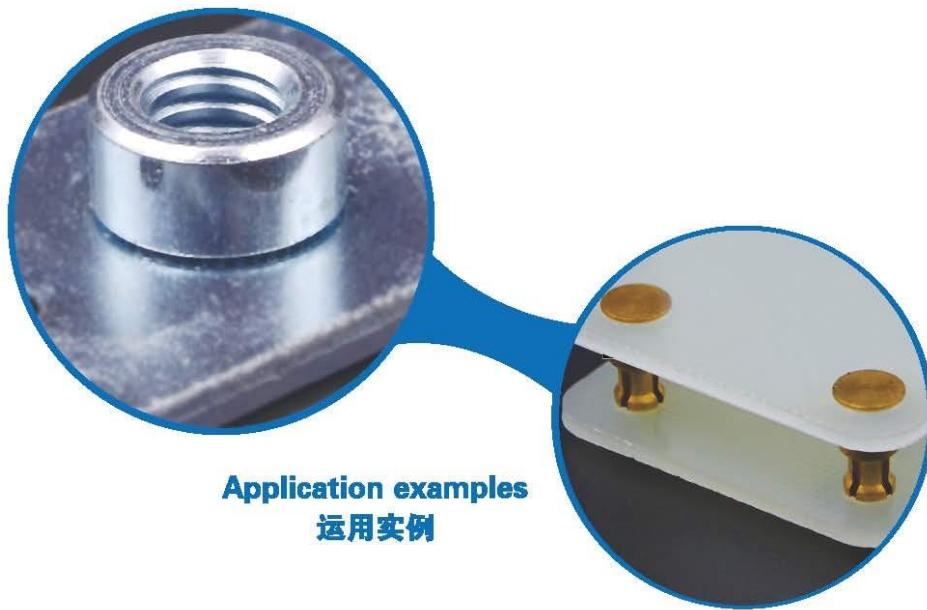
Thread Size	Type		Thread Code	Shank Code	A (Shank) Max.	Min. Sheet Thickness	Hole Size In Sheet +.004-.000	C Max.	E +.000-.010	T $\pm .004$	Min. Dist. Hole C/L To Edge
	Steel	Stainless Steel									
.112-40 (#4-40)	LWN	LWNS	440	0	.030	.030	.173	.171	.31	.063	.15
.138-32 (#6-32)	LWN	LWNS	632	0	.030	.030	.193	.191	.34	.093	.17
.164-32 (#8-32)	LWN	LWNS	832	0	.030	.030	.218	.216	.37	.107	.18
.190-24 (#10-24)	LWN	LWNS	024	0	.030	.030	.250	.248	.44	.155	.22
.190-32 (#10-32)	LWN	LWNS	032	0	.030	.030	.250	.248	.44	.155	.22
.250-20 (1/4-20)	LWN	LWNS	0420	0	.048	.050	.316	.315	.52	.185	.26

ISO METRIC/unit:mm

Thread Size x Pitch	Type		Thread Code	Shank Code	A (Shank) Max.	Min. Sheet Thickness	Hole Size In Sheet +0.1	C Max.	E -0.25	T ± 0.1	Min. Dist. Hole C/L To Edge
	Steel	Stainless Steel									
M3X0.5	LWN	LWNS	M3	0	0.76	0.77	4.4	4.37	7.85	1.5	4.47
M4X0.7	LWN	LWNS	M4	0	0.76	0.77	5.6	5.57	9.4	2.6	5.2
M5X0.8	LWN	LWNS	M5	0	0.76	0.77	6.4	6.33	11.2	3.8	5.65
M6X1	LWN	LWNS	M6	0	1.24	1.25	8.1	8.03	13.2	4.6	6.7



Part Number Designation
 LWNS - 632 - 0
 LWN - 632 - 0 CU
 Type and Material Thread Code Shank Code Finish



Application examples
运用实例



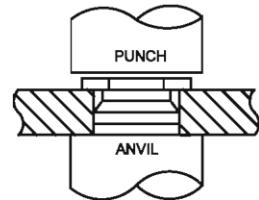
**According to customer demands,
we can do non-standard customization**
根据客户需求，进行非标定制

Installation instructions 安装说明

压铆螺母/Nuts for Sheet Metal

1. 在安装板上冲出或钻出相应尺寸的安装孔。不需进行诸如去毛刺之类的二次加工。
2. 如右图所示，将紧固件放入下模孔内，并将安装孔与紧固件的杆部对准。
3. 保持上下模平行，施加压力，使产品的头部完全进入板材中。

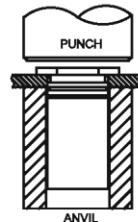
1. Punch or drill properly sized mounting hole in sheet. Do not perform any secondary operations such as deburring.
2. Place fastener into the anvil hole and place the mounting hole over the shank of the fastener as shown in diagram at right.
3. With punch and anvil surfaces parallel, apply squeezing force until the head of the nut comes into contact with the sheet material.



压铆螺柱/Standoffs for Sheet Metal

1. 安装孔的直径必须与产品匹配。
2. 不需要进行诸如去毛刺之类的二次加工。
3. 如图所示，将紧固件穿过安装孔并置于下模中。
4. 在上模与下模平行的情况下，施加一定的挤压力，将螺柱安装到板材中，安装完毕后，螺柱头平面与安装板面齐平。

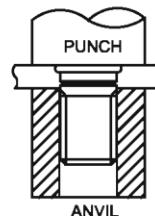
1. The correct diameter of mounting hole must be match the product.
2. Do not perform any secondary operations such as deburring.
3. Insert fasteners through mounting hole and into anvil as shown in drawing at right.
4. With punch and anvil surfaces parallel, apply only enough squeezing force to embed the standoff's head flush in the sheet.



压铆螺栓/销钉(平头) /Studs and Pins for Sheet Metal (Flush Head)

1. 自锁紧螺栓放入预先冲制或钻好的孔内，施加挤压力将产品安装到位。
2. 完成产品安装只需要一个平头的或带有凹槽的上模以及一个带孔的普通下模，以便在螺栓的头部和接触面下的板材间安装。施加的安装力使螺栓的头部推出的金属料挤入螺栓头下的容槽内进而嵌入安装板与安装板对接。

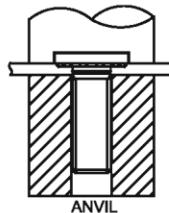
1. Self-clinching studs are installed by placing them in punched or drilled holes in the sheet material and squeezing them into place with any standard press.
2. All that required is a flat or recessed punch and a plain anvil having a hole to clear the thread diameter so that force is applied between the top of the stud head and underside of the sheet material. The squeezing action forces the ribs of the stud into the sheet, displacing sheet material, causing it to fill the annular groove under the head of the stud.



压铆螺栓/销钉(凸头) /Studs and Pins for Sheet Metal(Non-flush Head)

1. 给上模充分施加压力，使螺栓头部的筋嵌入安装板内。
2. 如图所示的标准上模设计给螺栓头部提供了间隙，同时也防止螺栓头部过分受力。

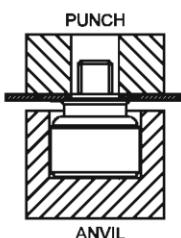
1. Apply squeezing force on the punch sufficient only to embed the ribs on the head of the stud into the sheet.
2. The illustration indicates suggested tooling for self-clinching studs. The standard punch design provides clearance for the stud head and reduces chances of over squeezing.



面板紧固件/Captive Panel Screws and Hardware

1. 在安装板上冲好相应尺寸的安装孔。不需进行诸如去毛刺之类的二次加工。
2. 将紧固件放入带有凹形槽的下模中，然后将安装板（最好是冲孔面）放在紧固件的柄端上方。
3. 保持上下模平行，施加挤压力，直到定位圈的裙边与安装板直接接触。

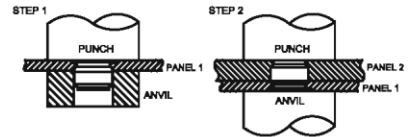
1. Punch properly sized mounting hole in sheet. Do not perform any secondary operations such as deburring.
2. Place fastener into recessed anvil, and place workpiece (preferably the punch side) over shank of fastener.
3. With installation punch and anvil surfaces parallel, apply squeezing force until the shoulder of the retainer comes in contact with the sheet material.



Installation instructions 安装说明

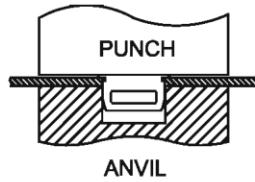
双面板紧固件/Sheet-to-sheet Attachment

1. 在两个面板上面预备适当的安装孔。
2. 使得面板1与冲床冲头平行。
3. 对面板2上面使用一定的压力。
1. Prepare properly sized mounting hole in both panels.
2. Using only Panel 1, with the punch and anvil surfaces parallel.
3. Place Panel 2 over fastener and apply squeezing force.



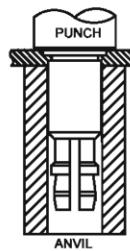
电缆线配件/Cable Tie-Mounts and Hooks for Sheet Metal

1. 在安装板上冲好相应尺寸的安装孔。不需进行诸如去毛刺之类的二次加工。
2. 将紧固件放入带有凹形槽的下模中。
3. 保持上下模平行，施加、挤压压力，使产品的头部完全进入板材中。
1. Punch a properly sized rectangular mounting hole in the sheet. Do not perform any secondary operations such as deburring.
2. Place the fastener through the mounting hole and into the anvil.
3. With the punch and anvil surfaces parallel, apply a squeezing force until the bottom of the fastener becomes flush with the sheet.



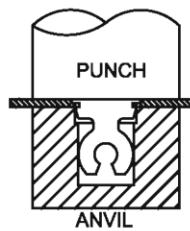
支撑卡柱/Support Card Column

1. 在安装板上冲好相应尺寸的安装孔。
2. 把紧固件通过面板的安装孔和凹模，如图纸所示。
3. 保持上下模平行，施加压力，使产品的头部完全进入板材中。
1. Punch or drill the properly sized mounting hole in the panel.
2. Place the fastener through the mounting hole of the panel and into the anvil as shown in the drawing.
3. With punch and anvil surfaces parallel, apply only enough squeezing force to embed the head flush with the panel.



直角压铆紧固件/Right Angle Clinch Fasteners

1. 安装孔的直径必须与产品匹配。不需要进行诸如去毛刺之类的二次加工。
2. 按右图所示，将紧固件穿过安装孔并置于下模中。
3. 在上模与下模平行的情况下，施加一定的挤压压力，将紧固件安装到板材中，安装完毕后，螺柱头平面与安装板面齐平。
1. Punch a properly sized rectangular mounting hole in the sheet. Do not perform any secondary operations such as deburring.
2. Place the fastener through the mounting hole and into the anvil as shown in the drawing to the right.
3. With the punch and anvil surfaces parallel, apply a squeezing force until the bottom of the fastener becomes flush with the sheet.



Other Products/其他类产品

塑胶专用螺母 Thread Inserts for Plastic Parts



螺纹嵌件 Threaded Inserts



面板紧固件 Fasteners for sheet Metal



PCB端子 PCB Terminals



球头柱塞系列 Plungers



拉铆螺母和铆焊钉 Rivet nuts/Rivets/Welding Fasteners



车、铣、冲压类 CNC Machining milling Stamping

