



力帆&力本精密工业（中国）有限公司

Self-tapping Threaded Insert 自攻螺套技术手册

In-sail®



PROFILE

COMPANY 公司简介

力帆&力本（中国）运营中心

力帆&力本（中国）运营中心隸屬於力山企業集團。集團自1982年於臺灣成立以來、一直堅持向客戶快速、準確地提供緊固系統零件、自動化零件、電子五金件、模具配件、機械加工工具等各種高質量的工業零部件。集團多年來致力於研發創新，以核心技術為中心，包括：環保製程技術、精密模具技術、數控加工技術、粉末冶金技術等。集團不僅具完善的研發管理制度，更在智權管理上努力耕耘，積極地以提升華人之國際競爭力為己任，並在企業社會責任與節能、減排、綠化、循環等環境保護方面全力推動與奉獻；

力山企業集團成立33年來，已經建立起5個產品製造中心，分佈於臺灣，新加坡，墨西哥，江蘇和廣東。購置了大量的精密製造設備，如數控車床，數控銑床，數控磨床，精密壓機和注塑機等3600餘套，具備系統的工業零件製造能力。也組建獨立運營中心3個（臺灣運營中心，新加坡運營中心和深圳運營中心），負責全球客戶的商務合作和技術支持。

力帆精密&力本五金，以力山企業集團為依託，將與注重品質和交期的客戶攜手共進、為全球製造工業的發展貢獻我們的智慧和力量。

- 1、各式組裝系統零件（緊固件，焊接件等）
- 2、精密金屬加工零件與工程塑膠組件
- 3、汽車，醫療，3C產品用之機械精密零組件
- 4、自動化用各種精密零組件
- 5、塑膠和衝壓模具用精密配件
- 6、各式機械加工工具和量具



In-saiL® Build the Chinese Dream!
力帆，扬帆中国梦!

In-saiL® & Leadum(China)Operation Center

In-saiL® & Leadum (China) Operation Center is part of Leasan Enterprise. Since its establishment in Taiwan in 1982, Leasan Enterprise Group has always insisted on quickly and accurately provide customers with various high-quality parts like fastening system parts, automation parts, electronic hardware, mold parts, and machining tools. The group has been committed to R&D and innovation for many years, focusing on core technologies, including environmental protection technology, precision molds technology, CNC machining technology, powder metallurgy technology. The group not only a sound R&D management system but also works actively to enhance the international competitiveness of the Chinese mission in the management and fully promotes corporate social responsibility and energy conservation, emission reduction, greening, recycling, and other environmental protection and dedication.

Leasan Enterprise Group was established 33 years ago, it has established 5 manufacturing centers, which there are located in Taiwan, Singapore, Mexico, Jiangsu, and Guangdong. The purchase of a large number of high-precision manufacturing equipment, such as CNC lathes, CNC milling machines, CNC grinders, precision presses, and injection molding machines are more than 3,600 sets, with a systematic industrial part manufacturing capabilities. 3 independent operation centers (Taiwan operation center, operation center in Singapore, and Shenzhen operation center) have also been established to be responsible for business cooperation and technical support for the global customers.

In-saiL® & Leadum Precision relying on Leasan Enterprise Group will work together with customers who focus on quality and delivery and contribute our wisdom and strength to the development of the global manufacturing industry.

1. All kinds of assembled parts system (fasteners, welding parts, etc.)
2. Precision metal machining parts and engineering plastic components
and mechanical precision components
3. The automotive, medical, 3C products using
4. Automation of various precision components
5. Plastic precision parts and stamping dies
6. Kinds of machining tools and gauges

Product Capability / 制造能力



01



02



03



04



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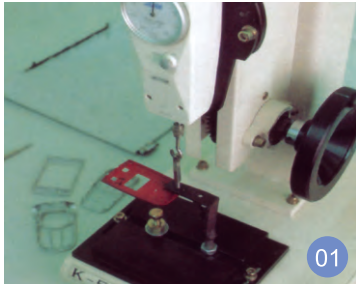
- Auto-lathe turning:
PE : $\Phi 0.5-20\text{mm}$ Tol. $\pm 0.01\text{mm}$
- CNC lathe turning:
PE : $\Phi 0.5-250\text{mm}$ Tol. $\pm 0.005\text{mm}$
- CNC Milling:
800X600mm (LxW), Tol. $\pm 0.01\text{mm}$
- Grinding:
Tol. $\pm 0.002\text{mm}$
- Screw heading & rolling:
Metric M0.8-M36
Unified Imperial #0-2"
- Stamping:
1200T max
- 自动车床加工: 直径0.5-20mm
公差 0.01mm
- 数控车床加工: 直径0.5-250mm
公差 0.005mm
- 数控铣削加工: 800X600mm
公差 $\pm 0.01\text{mm}$
- 外圆磨削加工: 公差 $\pm 0.002\text{mm}$
- 螺丝加工: 公制 M0.8-M36
英制 #0-2"
- 冲压加工: 1200 吨位内

- 01 Automatic Lathe / 自动车床
- 02 Ultraprecision Machining / 超精加工
- 03 CNC Lathe / 数控车床
- 04 CNC Machine / CNC 加工中心
- 05 Screw Machine / 螺丝机
- 06 Stamping Equipment / 冲压设备
- 07 Injection machine / 注塑机
- 08 Precision Grinding / 精密磨削

In-saiL® & Leadum is your choice!

力帆&力本 值得信赖!

Quality Management / 品质控制



01



02



03



04

Superior product quality whilst protecting resources as much as possible is a matter of course for us. After all, precision is our business.

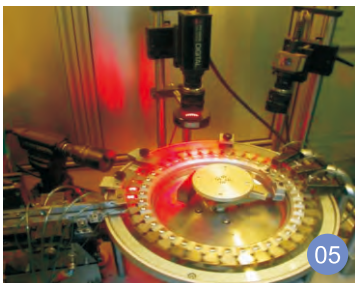
We set up total management quality systems following ISO9001:2018, from the IQC to IPQC to OQC, we strictly execute customer quality requirement to achieve quality target.

In-saiL woned advanced quality control and inspection facilities, is capable to perform mechanical property, diemension & contour and corrosion-resistance test at the incoming, in-process, and outgoing stages.

高质量的产品和环境保护都是我们所要追求的目标，我们产品的高质量最多的体现于高精度。

力帆精密依照ISO9001: 2018建立了完整的品质系统，从IQC到PQC再到OQC，严格管制，全员参与。严格遵照客户要求，达成品质目标。

力帆精密有先进的品质管控和检测设备，能够来料加工，制程和成品检查各阶段实施诸如机械性能检测，尺寸和轮廓检测及耐腐蚀验证等。



05



06



07



08

Types of machines

- 1 Pull Tester / 拉力计
- 2 Projector / 投影仪
- 3 Durometer / 硬度计
- 4 Coating Analyzer / 镀层分析仪
- 5 Automatic Optic Inspector / 全自动品检机
- 6 CMM / 三次元
- 7 Salt Spray Tester / 盐雾测试机
- 8 Automated Screw Threaded Inspection / 螺纹全检机

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Self-tapping threaded insert

10



L3020/L3022

10

L3020/L3022 series inserts are the most widely used one among all of the threaded self-tapping inserts. Its two slots function as the cutting edge and slightly renders an inward screw locking performance.

L3020/L3022系列产品在所有自攻螺套产品中使用最为广泛,其两个开槽起到切削的作用并且略微有点向内的锁紧力。



L302

11

L302/L302 series inserts are the most widely used one among all of the threaded self-tapping inserts. Its two slots function as the cutting edge and slightly renders an inward screw locking performance.

L302/L302系列产品在所有自攻螺套产品中使用最为广泛,其两个开槽起到切削的作用并且略微有点向内的锁紧力。



L3021

12

The L3021 series is a headed version of L302 series. The head can greatly enhance the pull-out and torque resistance.

L3021 型在L3020型上加了法兰,可以大大提高拉拔力和扭力。



L3070/L3072/L3080/
L3082

13

L3070/L3072/L3080/L3082 series are used in difficult-cutting materials three cutting holes perform the self-tapping action.

L3070/L3072/L3080/L3082 系列产品用于相对难切削的材料,三个孔用来做自攻切削。



L3071/L3073/L3081/
L3083

14

Headed version of L3070/L3072/L3080/L3082 series insert, to be used in some applications for higher pull-out strength.

在L3070/L3072/L3080/L3082型上加了法兰,用在某些需要更高拉拔强度的应用场所



L317/L318

15

L317/L318 series inserts are used to absorb extreme torsion and vibration. The anti-rotation function is achieved by inserting a notch pin per DIN1473 standard

L317/L318系列产品特别设计用来增加扭力和抗震能力,其功能是通过插入一根符合DIN1473标准的销轴实现的。



L3370/L3372/L3380/
L3382

16

This insert's cutting holes are blind, used in some applications where no cutting chips allowed to drop in to the borehole.

这个螺套的切削孔是盲孔,它主要用在不允许有切削碎屑落入基材孔中的场所。



L303

17

Thin wall version of L3020 series insert, to be used in thin-walled plastics or light alloys.

L3020系列的薄壁型产品,用在薄壁塑胶或者轻质合金产品上。



L347/L348

18

Thin wall version of L3070/L3080 series insert, to be used in thin-walled materials.

L3070/L3080系列的薄壁型产品,用在薄壁产品上。



L3570/L3580

19

L3570/L3580 series is the blind design version of L3370/L3380 series.

L3570/L3580系列产品是L3370/L3380系列的盲孔版。



L304

20

The threaded insert with cutting bores is a self-tapping fastener for the repair of torn and damaged aprsk plug retaining threads in cylinder heads.

带切削孔的自攻螺套,有效修复受损螺纹。



L374/L375

21

Brass or stainless steel knife threaded insert for wood.

黄铜或不锈钢材质螺套,在木材上提供螺纹。

	L701(L376)	22	Die cast zinc alloy hexdrive thread inserts for wood-flush.	压铸锌合金六角驱动自攻螺套，装入后与基材齐平。
	L702(L377)	23	Die cast zinc alloy hexdrive thread inserts for wood-flanged.	压铸锌合金六角驱动自攻螺套，带法兰。
	L801(LDIN7965)	24	Similar to DIN 7965, slotted and with full internal thread, for easy automatic insertion.	类似于DIN7965，带一字槽和倒花槽更适合简单的自攻插入。
	L802(LB)	25	Comply to DIN 7965, slotted and with full internal thread, for easy automatic insertion.	类似于DIN 7965，开槽和完整的内螺纹，便于自攻插入。
	L803(LBV)	27	Without slot, similar to DIN 7965, well suited for automatic insertion.	无槽类型，尺寸符合DIN7965，非常适合自攻插入。
	L804(LBA)	28	Without slot, similar to DIN 7965, well suited for automatic insertion.	外螺纹加长导向，方便快速装配，特殊的长度增强了自攻强度，内部全通螺纹。
	L805(LBL)	29	Without slot, with threaded blind hole suitable for heavy duty applications due its length.	无槽，盲孔螺纹，外螺纹加长线径，可提供较大的载力。
	L806(LC)	31	Slotted and thin-walled.	开槽，薄壁款型。
	L807(LCA)	32	They are identical with type LC, but with an unthreaded lead.	在LC款型的基础上增加了导向段，方便安装。
	L808(LCV)	33	Without slot, comply with the type LC.	无槽，其余同LC款型。
	L703(LDVZ)	34	Die cast, short version for thin walled shaped wood, with internal thread stop, only for soft wood.	压铸工艺的金属牙螺套，盲孔类型，用于较软的木材。
	L809(LD)	35	With sealing collar on the slotted end.	带槽和密封圈的自攻螺套。
	L810(LE)	36	Slotted and with metric external thread, for assembly in harder materials.	带槽和公制外螺纹，用于装配在较硬材料。

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	L811(LSKD)	37	With hex drive, sealing collar and unthreaded lead,	带内六角槽和导向段。
	L812(LSKDL)	38	With hex drive and a sealing collar, left-hand outside thread and right-hand internal thread.	带内六角槽和法兰，外螺纹为左旋，内螺纹为右旋。
	L813(LSK)	39	With hex socket drive, an unthreaded lead supports easy assembly.	带内六角槽，加长的导向段，方便安装。
	L814(LSKL)	40	With hex socket drive and threaded blind hole, slim flanks and the unthreaded lead support easy assembly.	带内六角槽，内螺纹盲孔设计，拥有导向段，方便安装。
	L815(LSRD)	41	With internal star drive (EN ISO 10664), allows high torque values, comply with type LSKD.	在LSKD基础上增加型六角槽，提供高扭矩。
	L3090/L3092	42	Threaded insert self-tapping, or thread-forming with hexagonal socket.	带切槽的自攻螺母，用于木材、塑料和复合材料。
	L816(DG)	43	Tapping preparations, internal and external thread design.	自攻埋置，内外螺纹设计。
	Tap-Tek	44	The insert is designed and manufactured with three cutting flutes which provide self-tapping function and the storage of swarf.	导向设计，提供自攻和切屑功能。
	L362(AG)	45	Internal and external thread with two slots provide cutting edges similar to a tap can be automatic tapping installation.	自攻埋置，尾部带切屑槽。
	L363(BG)	46	Internal and external thread with two slots provide cutting edges similar to a tap can be automatic tapping installation.	自攻埋置，尾部带切屑槽。
	L364(CG)	47	Simple marking improves the efficiency.	制作简单，提高效率。
	L378	48	With small head, 3 special cutting slots prevent chips in the thread.	较小头部，外螺纹带3个切屑槽。
	L379	49	Small head diameter, with shaped cutting groove.	较小头部，带异形切屑槽。
	L381	50	This type is a tapered universal insert for thermoplastics (thermal installation, self-tapping and cold insertion).	安装于锥形孔，可用于自攻、热压和冷压安装。

	L3821/L3822	51	Internal and external thread with two slots which provide cutting edges is similar to a automatic tap.	尾部带切削槽，自攻埋植。
	L3831/L3832	52	Internal and external thread with two slots which provide cutting edges is similar to a automatic tap.	尾部带切削槽，自攻埋植。
	L3840/L3841/L3845	53	Self-tapping inserts series, designed for thermoplastics and thermosetting plastics.	自攻埋植，用于热塑性和热固性塑胶。
	L3850/L3851	54	3 special cutting slots prevent chips in the thread.	外螺纹带3个切削槽。
	L3860	55	Self-tapping inserts provide easily installed, strong permanent threads for wood, particle board, ABS, foamed plastic and other soft materials.	自攻埋植，安装方便，用于木材，塑料板，ABS，发泡塑料等软质材料。
	L3870/L3874	56	Self-tapping inserts provide easily installed, strong permanent threads for wood, particle board, ABS, foamed plastic and other soft materials.	自攻埋植，用于塑胶，软金属和木材。
	L3882/L3883	57	This type consists of a tapered basic body with internal thread, additional internal hexagon and a special external thread.	适用于热塑性塑胶，高强度和扭转型螺纹提供外部左旋螺纹特殊版本提高反向锁定。
	L389	58	The threaded bush is mechanically anchored without additional securing pins or washers and without chemical adhesion or sealing materials.	通过机械方式锚定，不需要额外的安全销，垫片，胶水等密封材料。
	L390	60	The sealing ring version is designed for gas and liquid-tight joints.	带密封圈是为密封气体和液体设计的。
	L391	61	Safety flange with sealing flange, with sealing ring, effective sealing gases and liquids.	带密封法兰和密封圈，有效的密封气体和液体。
	L392	62	Closed version/blind hole, with sealing ring, gas and liquid-tight.	盲孔设计，带密封圈，密封气体和液体。
	L393	63	HP - High power, with or without sealing ring.	高强度设计，带或不带密封圈。

Installation recommendation / 安装孔参数推荐表

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Installation instruction about threaded insert self-tapping / 安装说明

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Other Products / 其它产品

66

Fields of application:

Self-tapping threaded inserts are used throughout the whole of the metal and plastics processing industry.

- Automotive industry, passenger and commercial vehicles.
Engines, transmissions, wide range of supply parts such as wing mirrors, radiators, bumpers etc.
- Plant and equipment construction.
Flange joints, construction equipment, oil burners etc.
- Household appliance and office machinery production.
Vacuum cleaners, cameras, sun lamps, drills etc.
- Electrical and laboratory supplies.
Capacitors, heavy current, radio and telecommunication systems, dental technology equipment.
- Military applications.
Tanks, aircraft etc.



Product features:

- Self-tapping threaded insert has a large effective shearing surface, so ensuring a higher degree of pull-out strength, self-tapping threaded inserts M4 is often sufficient instead of a cut M5 thread.
- Self-tapping threaded insert is driven subsequently into the finished work-piece. This means a higher casting machine output, no rejects due to incorrectly cast-in insert components, no moulding sand trapped in the thread.
- A pre-cast or pre-drilled retaining hole with normal tolerance requirements is sufficient for driving in the self-tapping threaded insert. The thread is always precisely positioned.
- The work steps required with wire inserts-thread tapping, breaking off trunnions etc. as well as costly wearing tools (special thread drills, limit plug gauges etc.) are not needed with the special system.
- Self-tapping threaded insert is insensitive to small areas of shrinkage. Special eyetem prevents damage caused by torn threads.

Example for finding the article number:

Self-tapping threaded insert to works standard series L3020 with internal thread A = M4 made of case-hardened zinc plated and yellow chromated steel: L302 0 05.SYZ; with hexagonal socket: L302 2 05.SYZ.

Tolerances Thread:

ISO 2768-m

Materials:

Brass C3604
SUS303
SUS430F
Carbon steel 1215

Article No. ...B
Article No. ...SS
Article No. ...SS430
Article No. ...S

Finish:

Plain	Article No. ...
Blue zinc plated	Article No. ...BZ
Yellow zinc plated	Article No. ...YZ
Color zinc plated	Article No. ...CZ
White zinc plated	Article No. ...WZ
Zinc-nickel alloy plated	Article No. ...ZN

Other materials, designs and finishes on request.

L3020 / L3022

Features

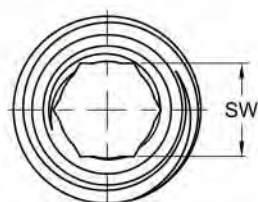
- L3020/L3022 series inserts are most widely used, slots work as cutting edges, it has a slight inward screw locking performance.

特征

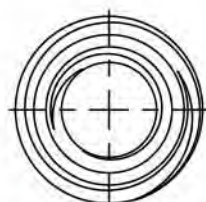
- L3020/L3022 系列产品使用最为广泛，属于槽型切削类，稍微有一点螺纹自锁的特性。



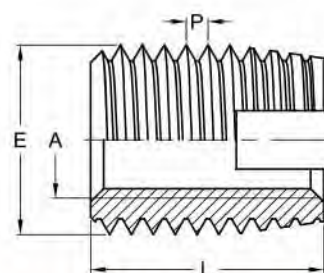
Technical Data



Type L3022



Type L3020



Drawing No. ...0...	A Internal thread	E External thread	P Pitch	L Length	SW ^{+0/-1} Hexagonal socket ...2...	D Minimum borehole depth for blind holes
L302...01	M2	4.5	0.5	6	—	8
L302...02	M2.5	4.5	0.5	6	—	8
L302...03	M3	5	0.5	6	—	8
L302...04	M3.5	6	0.75	8	—	10
L302...05	M4	6.5	0.75	8	3.2	10
L302...06	M5	8	1	10	4.1	13
L302...07	M6(a)	9	1	12	—	15
L302...08	M6	10	1.5	14	4.9	17
L302...09	M8	12	1.5	15	6.6	18
L302...10	M10	14	1.5	18	8.3	22
L302...11	M12	16	1.5	22	10.1	26
L302...12	M14	18	1.5	24	—	28
L302...13	M16	20	1.5	22	—	27
L302...14	M18	22	1.5	24	—	29
L302...15	M20	26	1.5	27	—	32
L302...16	M22	26	1.5	30	—	36
L302...17	M24	30	1.5	30	—	36
L302...18	M27	34	1.5	30	—	36
L302...19	M30	36	1.5	40	—	46

Dimensions in mm; Other sizes, special designs and materials on request.

M2/M2.5 are only suitable for low-strength materials, as the shear resistance of studs in the driving tools may be insufficient.

Part number designation

Model code - A (Internal thread) x L (Length) - E (External thread) + Material + Finish

L3020-M3x6.0-E5.0B L3020 Insert, M3x6.0-E5.0, Brass C3604

L3020-M3x6.0-E5.0SBZ L3020 Insert, M3x6.0-E5.0, Steel 1215, Blue zinc plated



L302

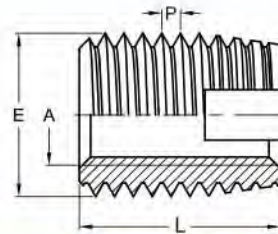
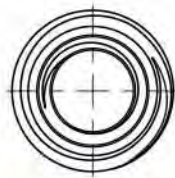
Features

- L302 series inserts are most widely used, slots work as cutting edges, it has a slight inward screw locking performance.

特征

- L302系列产品使用最为广泛，属于槽型切削类，稍微有一点螺纹自锁的特性。

Technical Data



	Drawing No.	A Internal thread	E External thread	P Pitch	L Length	D Minimum corehole depth for blind holes
Whitworth B.S.84 Internal Thread Tolerance: medium	L302020	1/4	10	1.5	14	17
	L302021	5/16	12	1.5	15	18
	L302022	3/8	14	1.5	18	22
	L302023	7/16	16	1.5	22	26
	L302024	1/2	18	1.5	22	26
	L302025	5/8	20	1.5	22	27
UNC Unified Coarse Thread ANSI B1.1/BS 1580 Internal Thread Tolerance: 2B	L302026	4-40	5	0.5	6	8
	L302027	6-32	6	0.75	8	10
	L302028	8-32	6.5	0.75	8	10
	L302029	10-24	8	1	10	13
	L302030	1/4-20	10	1.5	14	17
	L302031	5/16-18	12	1.5	15	18
	L302032	3/8-16	14	1.5	18	22
	L302033	7/16-14	16	1.5	22	26
	L302034	1/2-13	18	1.5	22	28
	L302035	5/8-11	20	1.5	22	27
UNF Unified Fine Thread ANSI B1.1/BS 1580 Internal Thread Tolerance: 2B	L302036	4-48	5	0.5	6	8
	L302037	6-40	6	0.75	8	10
	L302038	8-36	6.5	0.75	8	10
	L302039	10-32	8	1	10	13
	L302040	1/4-28	10	1.5	14	17
	L302041	5/16-24	12	1.5	15	18
	L302042	3/8-24	14	1.5	18	22
	L302043	7/16-20	16	1.5	22	26

Dimensions in mm.

Other sizes, special designs and materials on request.

L3021

Features

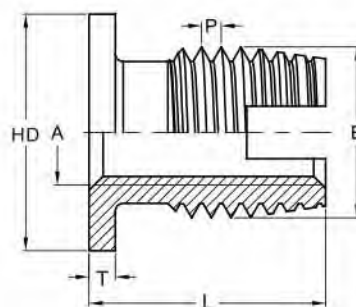
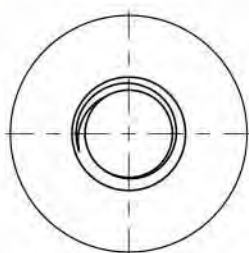
- Headed version of L3020 series Insert, to be used in some applications for higher pull-out strength.

特征

- 在L3020型上加了法兰，用在某些需要更高拉拔强度的应用场所。



Technical Data



Drawing No.	A Internal thread	E External thread	P Pitch	HD Head diameter	T Head height	L Length	D Minimum borehole depth for blind holes
L302101	M4	6.5	0.75	9	1	9	10
L302102	M5	8	1	11	1	11	12
L302103	M6	10	1.5	13	1.5	15.5	16
L302104	M8	12	1.5	15	1.5	16.5	17
L302105	M10	14	1.5	17	1.5	19.5	20

Dimensions in mm.

Other sizes, special designs and materials on request.

Part number designation

Model code - A (Internal thread) x L (Length) - HD (Head diameter) + Material + Finish

L3021-M4x9.0-HD9.0B L3021 Insert, M4x9.0-HD9.0, Brass C3604

L3021-M4x9.0-HD9.0SBZ L3021 Insert, M4x9.0-HD9.0, Steel 1215, Blue zinc plated

L3070 / L3072 / L3080 / L3082



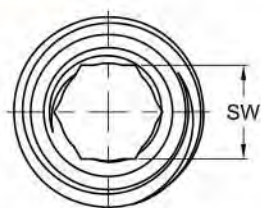
Features

- L3070/L3072/L3080/L3082 series are used in difficult-cutting materials three cutting holes perform the self-tapping action.

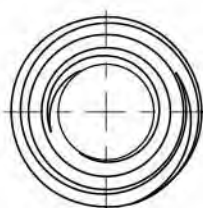
特征

- L3070/L3072/L3080/L3082 系列产品用于相对难切削的材料,三个孔用来做自攻切削。

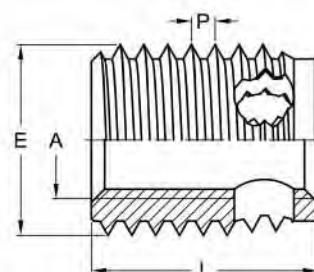
Technical Data



Type L3072/L3082



Type L3070/L3080



Drawing No. ...0...	A Internal thread	E External thread	P Pitch	L Length	SW ^{+0.1 0} Hexagonal socket ...2...	D Minimum borehole depth for blind holes
L307...01	M3	5	0.6	4	-	6
L308...01				6		8
L307...02	M3.5	6	0.8	5	-	7
L308...02				8		10
L307...03	M4	6.5	0.8	6	3.2	8
L308...03				8		10
L307...04	M5	8	1	7	4.1	9
L308...04				10		13
L307...05	M6	10	1.25	8	4.9	10
L308...05				12		15
L307...06	M8	12	1.5	9	6.6	11
L308...06				14		17
L307...07	M10	14	1.5	10	8.3	13
L308...07				18		22
L307...08	M12	16	1.75	12	10.1	15
L308...08				22		26
L307...09	M14	18	2	14	-	17
L308...09				24		28
L307...10	M16	20	2	14	-	17
L308...10				24		28

Dimensions in mm; Other sizes, special designs and materials on request.

Part number designation

Model code - A (Internal thread) x L (Length) - E (External thread) + Material + Finish

L3070-M3x4.0-E5.0B L3070 Insert, M3x4.0-E5.0, Brass C3604



L3071 / L3073 / L3081 / L3083

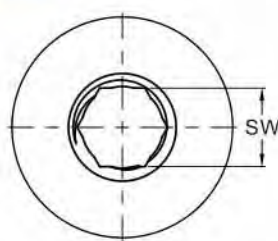
Features

- Headed version of L3070/LF3072/LF3080/LF3082 series Insert, to be used in some applications for higher pull-out strength.

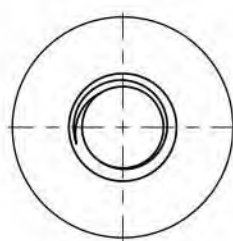
特征

- 在L3070/L3072/L3080/L3082型上加了法兰，用在某些需要更高拉拔强度的应用场所。

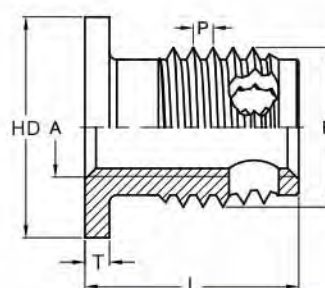
Technical Data



Type L3073/L3083



Type L3071/L3081



Drawing No.	A Internal thread	E External thread	P Pitch	HD Head diameter	T Head height	L Length	D Minimum borehole depth for blind holes
L307101	M5	8	1	11	1	8	9
L308101	M5	8	1	11	1	11	13
L307102	M6	10	1.25	13	1.5	9.5	10
L308102	M6	10	1.25	13	1.5	13.5	15
L307103	M8	12	1.5	15	1.5	10.5	11
L308103	M8	12	1.5	15	1.5	15.5	17
L307104	M10	14	1.5	17	1.5	11.5	13
L308104	M10	14	1.5	17	1.5	19.5	22

Drawing No.	A Internal thread	E External thread	P Pitch	HD Head diameter	T Head height	L Length	SW ^{±0.1} Hexagonal socket	D Minimum borehole depth for blind holes
L307301	M5	8	1	11	1	8	4.1	9
L308301	M5	8	1	11	1	11	4.1	13
L307302	M6	10	1.25	13	1.5	9.5	4.9	10
L308302	M6	10	1.25	13	1.5	13.5	4.9	15
L307303	M8	12	1.5	15	1.5	10.5	6.6	11
L308303	M8	12	1.5	15	1.5	15.5	6.6	17
L307304	M10	14	1.5	17	1.5	11.5	8.3	13
L308304	M10	14	1.5	17	1.5	19.5	8.3	22

Dimensions in mm.

Other sizes, special designs and materials on request.

L317 / L318

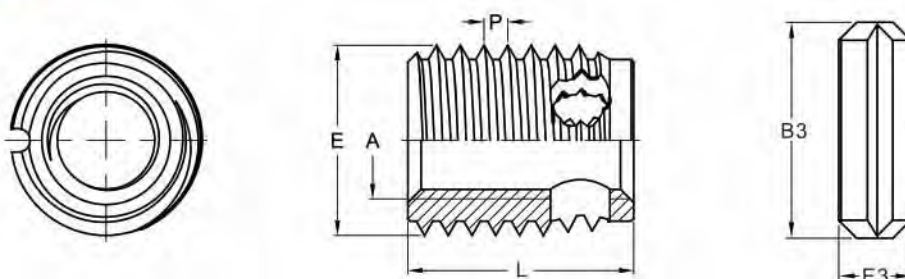
Features

- It is developed based on L307/L308 series insert by insert a pin between insert and borehole to enhance the anti-rotation function.

特征

- 在L3070/L3080系列基础上发展而来，通过在螺套和基材孔间插入销钉轴来增强抗扭性能。

Technical Data



Drawing No.	A Internal thread	E External thread	P Pitch	L Length	D Minimum borehole depth	B3 Notched stud length	E3 Notched stud width
L317001	M4	6.5	0.8	6	8	4	2
L318001				8	10	6	2
L317002	M5	8	1	7	9	4	2
L318002				10	13	6	2
L317003	M6	10	1.25	8	10	6	2
L318003				12	15	10	2
L317004	M8	12	1.5	9	11	6	2
L318004				14	17	10	2
L317005	M10	14	1.5	10	13	6	2
L318005				18	22	16	2
L317006	M12	16	1.75	12	15	10	2
L318006				22	26	16	2
L317007	M14	18	2	14	17	10	2
L318007				24	28	16	2
L317008	M16	20	2	14	17	10	2
L318008				24	28	16	2

Dimensions in mm.

Other sizes, special designs and materials on request.

Part number designation

Model code - A (Internal thread) x L (Length) - E (External thread) + Material + Finish

L317-M4x6.0-E6.5B L317 Insert, M4x6.0-E6.5, Brass C3604

L317-M4x6.0-E6.5SBZ L317 Insert, M4x6.0-E6.5, Steel 1215, Blue zinc plated

L3370 / L3372 / L3380 / L3382



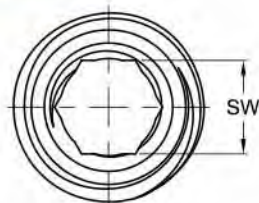
Features

- This insert's cutting holes are blind, used in some applications where no cutting chips allowed to drop in to the borehole.

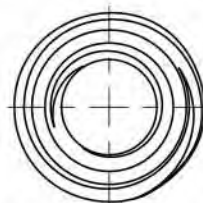
特征

- 这个螺套的切削孔是盲孔,它主要用在不允许有切削掉入基材孔中的场所。

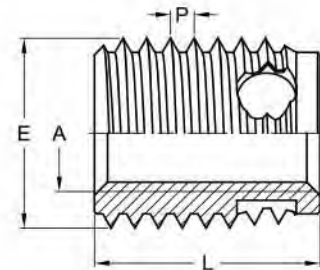
Technical Data



Type L3372/L3382



Type L3370/L3380



Drawing No. ...0...	A Internal thread	E External thread	P Pitch	L Length	SW ^{+0.1} / ₀ Hexagonal socket ...2...	D Minimum borehole depth for blind holes
L337...01	M3	5	0.6	4	-	6
L338...01				6		8
L337...02	M3.5	6	0.8	5	-	7
L338...02				8		10
L337...03	M4	6.5	0.8	6	3.2	8
L338...03				8		10
L337...04	M5	8	1	7	4.1	9
L338...04				10		13
L337...05	M6	10	1.25	8	4.9	10
L338...05				12		15
L337...06	M8	12	1.5	9	6.6	11
L338...06				14		17
L337...07	M10	14	1.5	10	8.3	13
L338...07				18		22
L337...08	M12	16	1.75	12	10.1	15
L338...08				22		26
L337...09	M14	18	2	14	-	17
L338...09				24		28
L337...10	M16	20	2	14	-	17
L338...10				24		28

Dimensions in mm.

Other sizes, special designs and materials on request.

Part number designation

Model code - A (Internal thread) x L (Length) - E (External thread) + Material + Finish

L3370-M3x4.0-E5.0B L3370 Insert, M3x4.0-E5.0, Brass C3604



L303

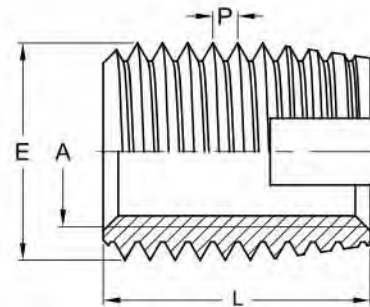
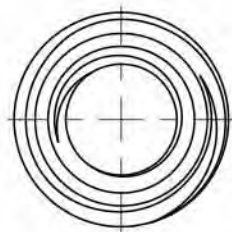
Features

- Thin wall version of L3020 series insert, to be used in thin-walled plastics or light alloys.

特征

- L3020系列的薄壁型产品，用在薄壁塑胶或者轻质合金产品上。

Technical Data



Drawing No.	A Internal thread	E External thread	P Pitch	L Length	H Location hole diameter, non-ductile alloys, NF metals	D Minimum borehole depth for blind holes
L303001	M3	4.5	0.5	6	4.2 to 4.3	8
L303002	M3.5	5	0.6	6	4.7 to 4.8	8
L303003	M4	6	0.7	6	5.6 to 5.7	8
L303004	M5	7	0.8	8	6.6 to 6.7	10
L303005	M6	8	1.0	10	7.5 to 7.6	13
L303006	M8	10	1.25	12	9.2 to 9.4	15
L303007	M10	12	1.5	15	11.2 to 11.4	18

Dimensions in mm.

Other sizes, special designs and materials on request.

Part number designation

Model code - A (Internal thread) x L (Length) - E (External thread) + Material + Finish

L303-M3x6.0-E4.5B L303 Insert, M3x6.0-E4.5, Brass C3604

L303-M3x6.0-E4.5SBZ L303 Insert, M3x6.0-E4.5, Steel 1215, Blue zinc plated

L347 / L348

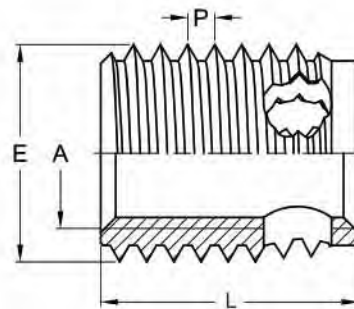
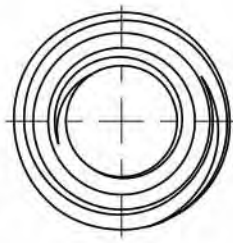
Features

- Thin wall version of L3070/L3080 series insert, to be used in thin-walled materials.

特征

- L3070/L3080系列的薄壁型产品，用在薄壁产品上。

Technical Data



Drawing No.	A Internal thread	E External thread	P Pitch	L Length	H Location hole diameter, non-ductile alloys, NF metals	D Minimum borehole depth for blind holes
L347001	M3.5	5	0.6	5	4.7 to 4.8	7
L347002	M4	6	0.7	6	5.6 to 5.7	8
L347003	M5	6.5	0.8	7	6.1 to 6.2	9
L347004	M6	8	1	8	7.5 to 7.7	10
L347005	M8	10	1.25	9	9.4 to 9.6	11
L347006	M10	12	1.5	10	11.2 to 11.5	13
L347007	M12	14	1.75	12	13.2 to 13.5	15

Drawing No.	A Internal thread	E External thread	P Pitch	L Length	H Location hole diameter, non-ductile alloys, NF metals	D Minimum borehole depth for blind holes
L348001	M3.5	5	0.6	8	4.7 to 4.8	10
L348002	M4	6	0.7	8	5.6 to 5.7	10
L348003	M5	6.5	0.8	10	6.1 to 6.2	13
L348004	M6	8	1	12	7.5 to 7.7	15
L348005	M8	10	1.25	14	9.4 to 9.6	17
L348006	M10	12	1.5	18	11.2 to 11.5	22
L348007	M12	14	1.75	22	13.2 to 13.5	26

Dimensions in mm.

Other sizes, special designs and materials on request.

Part number designation

Model code - A (Internal thread) x L (Length) - E (External thread) + Material + Finish

L347-M3.5x5.0-E5.0B L347 Insert, M3.5x5.0-E5.0, Brass C3604

L3570 / L3580

Features

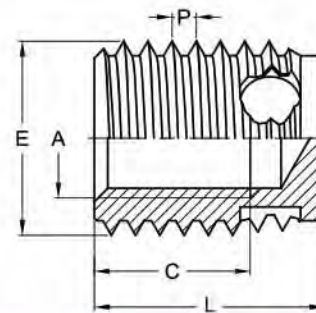
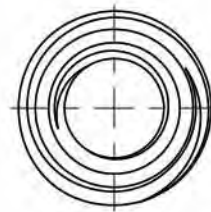
- L3570/L3580 series is the blind design version of L3370/L3380 series.

特征

- L3570/L3580系列产品是L3370/L3380系列的盲孔版。



Technical Data



Drawing No.	A Internal thread	E External thread	P Pitch	L Length	C Thread depth	D Minimum borehole depth for blind holes
L357001	M4	6.5	0.8	6	3.2	8
L358001				8	4.5	10
L357002	M5	8	1	7	4	9
L358002				10	6	13
L357003	M6	10	1.25	8	4.8	10
L358003				12	7	15
L358004	M8	12	1.5	14	8.8	17
L358005	M10	14	1.5	18	11	22
L358006	M12	16	1.75	22	14	26

Dimensions in mm.

Other sizes, special designs and materials on request.

Part number designation

Model code - A (Internal thread) x L (Length) - E (External thread) + Material + Finish

L3570-M4x6.0-E6.5B L3570 Insert, M4x6.0-E6.5, Brass C3604

L3570-M4x6.0-E6.5SBZ L3570 Insert, M4x6.0-E6.5, Steel 1215, Blue zinc plated

L304



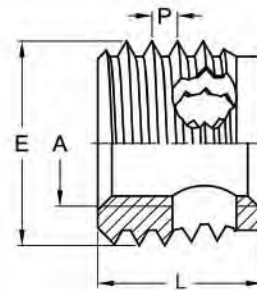
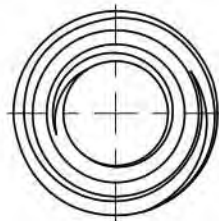
Features

- The threaded insert with cutting bores is a self-tapping fastener for the repair of torn and damaged spark plug retaining threads in cylinder heads.

特征

- 带切削孔的自攻螺套，有效修复受损螺纹。

Technical Data



Drawing No.	A Internal thread	P Internal pitch	DIN	E External thread	P External pitch	L Length	Hole diameter
L304001	M14	1.25	72502	17.7	1.25	9	17.0
L304002	M14	1.25	72502	17.7	1.25	15	17.0
L304003	M18	1.5	72501	21.7	1.25	9	21.0

Dimensions in mm.

Other sizes, special designs and materials on request.

Part number designation

Model code - A (Internal thread) x L (Length) - E (External thread) + Material + Finish

L304-M14x9.0-E17.7B L304 Insert, M14x9.0-E17.7, Brass C3604

L304-M14x9.0-E17.7SBZ L304 Insert, M14x9.0-E17.7, Steel 1215, Blue zinc plated

L374 / L375

Features

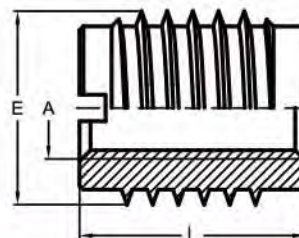
- External knife threads provide superior holding power in hard and soft wood products. Use wherever field assembly or disassembly could lead to thread erosion or stripping.

特征

- 外螺纹提供卓越的抗拉力，在木质产品上提供螺纹。



Technical Data



Brass knife thread inserts - for wood

Drawing No.	A Internal thread	L Length	E External thread	Hole diameter
L374001	4-40	.375	.328	1/4"
L374002	6-32	.375	.328	1/4"
L374003	8-32	.375	.328	1/4"
L374004	10-24	.500	.453	3/8"
L374005	10-32	.500	.453	3/8"
L374006	1/4-20	.500	.453	3/8"
L374007	1/4-28	.500	.453	3/8"
L374008	5/16-18	.625	.593	1/2"
L374009	5/16-24	.625	.593	1/2"
L374010	3/8-16	.625	.593	1/2"
L374011	3/8-24	.625	.593	1/2"
L374012	M3-0.5	.375	.328	1/4"
L374013	M4-0.7	.375	.328	1/4"
L374014	M5-0.8	.500	.453	3/8"
L374015	M6-1.0	.500	.453	3/8"
L374016	M8-1.25	.625	.593	1/2"

Stainless steel knife thread inserts - for wood

Drawing No.	A Internal thread	L Length	E External thread	Hole diameter
L375001	8-32	.375	.328	1/4"
L375002	10-24	.500	.453	3/8"
L375003	1/4-20	.500	.453	3/8"

Other sizes, special designs and materials on request.
Hole size requirements may vary depending on material and tools.

L701 (L376)



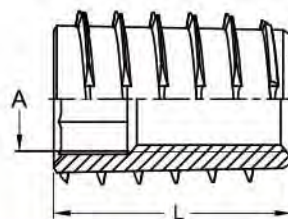
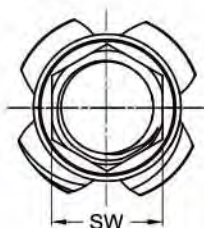
Features

- An inexpensive insert for use in ready-to-assemble furniture, drawer pulls and wherever ease of assembly or avoidance of thread stripping.

特征

- 成本低，用于现成家具组装，安装方便。

Technical Data



Drawing No.	A Internal thread	L Length	SW Hexagonal socket	Pilot hole diameter
L701001	M4	10mm	4	6.0-6.5
L701002	M5	13mm	5	8.3-9.0
L701003	M6	13mm	6	9.0-9.5
L701004	M6	20mm	6	9.0-9.5
L701005	M8	13mm	8	11.3-11.5
L701006	M8	20mm	8	11.3-11.5
L701007	M8	25mm	8	11.3-11.5
L701008	8-32	10mm	4	6
L701009	10-24	13mm	5	7
L701010	10-32	13mm	5	7
L701011	1/4-20	13mm	6	9
L701012	1/4-20	20mm	6	9
L701013	5/16-18	20mm	8	11
L701014	5/16-18	25mm	8	11

Other sizes, special designs and materials on request.
Hole size requirements may vary depending on material and tools.

L702 (L377)

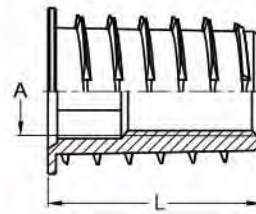
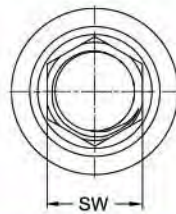
Features

- An inexpensive insert for use in ready-to-assemble furniture, drawer pulls and wherever ease of assembly or avoidance of thread stripping.

特征

- 成本低，用于现成家具组装，安装方便。

Technical Data



Drawing No.	A Internal thread	L Length	SW Hexagonal socket	Pilot hole diameter
L702001	M4	10mm	4	6.1-7.0
L702002	M4	20mm	4	6.1-7.0
L702003	M5	10mm	5	8.0-8.5
L702004	M5	13mm	5	8.0-8.5
L702005	M5	20mm	5	8.0-8.5
L702006	M6	10mm	6	8.8-9.5
L702007	M6	13mm	6	8.8-9.5
L702008	M6	16mm	6	8.8-9.5
L702009	M6	20mm	6	8.8-9.5
L702010	M6	25mm	6	8.8-9.5
L702011	M8	13mm	8	10.7-11.5
L702012	M8	18mm	8	10.7-11.5
L702013	M8	25mm	8	10.7-11.5
L702014	M10	13mm	10	13.0-13.5
L702015	M10	25mm	10	13.0-13.5
L702016	8-32	10mm	4	6
L702017	10-24	11mm	5	7
L702018	10-24	20mm	5	7
L702019	10-32	11mm	5	7
L702020	10-32	13mm	5	7
L702021	10-32	20mm	5	7
L702022	1/4-20	13mm	6	9
L702023	1/4-20	20mm	6	9
L702024	1/4-20	25mm	6	9
L702025	5/16-18	13mm	8	11
L702026	5/16-18	25mm	8	11
L702027	3/8-16	13mm	10	12
L702028	3/8-16	25mm	10	12

Other sizes, special designs and materials on request.



L801 (LDIN7965)

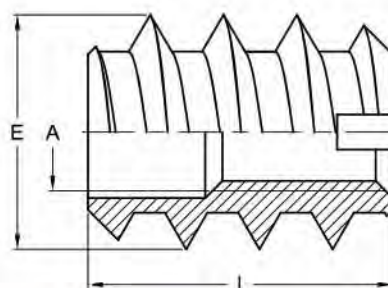
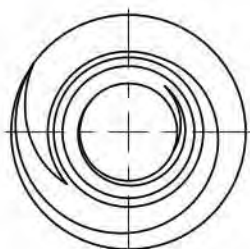
Features

- Similar to DIN7965, slotted and with recess accommodation for excess wood shavings, suitable for easy automatic insertion.

特征

- 类似于DIN7965，带一字槽和刨花槽更适合简单的自动插入。

Technical Data



Drawing No. L801... ..	E External thread	A Internal thread	L Length code										Pilot hole diameter
			0	1	2	3	4	5	6	7	8	9	
L80101	6	M3	8 ⁽¹⁾	10	12	15	18	-	-	-	-	-	5.0
L80102	8	M4	8	10 ⁽¹⁾	12	15	18	20	-	-	-	-	6.5
L80103	10	M5	-	10	12 ⁽¹⁾	15	18	20	25	-	-	-	8.5
L80104	12	M6	-	-	12	15 ⁽¹⁾	18	20	25	30	-	-	10.5
L80105	14	M8	-	-	-	15	18 ⁽¹⁾	20	25	30	40	50	12.5
L80106	16	M8	-	-	-	15	18 ⁽¹⁾	20	25	30	40	50	14.5
L80107	18.5	M10	-	-	-	15	18	20	25 ⁽¹⁾	30	40	50	13.0
L80108	22	M12	-	-	-	15	18	20	25	30 ⁽¹⁾	40	50	20.0
L80109	25	M16	-	-	-	-	-	20	25	30 ⁽¹⁾	40	50	22.5
L80110	29	M20	-	-	-	-	-	-	25	30 ⁽¹⁾	40	50	26.0

(1) Preferred size.

Other sizes, special designs and materials on request.

Part number designation

Model code - A (Internal thread) x L (Length) - E (External thread) + Material + Finish

L801-M3x8.0-E6.0B L801 Insert, M3x8.0-E6.0, Brass C3604

L801-M3x8.0-E6.0SBZ L801 Insert, M3x8.0-E6.0, Steel 1215, Blue zinc plated



L802 (LB)

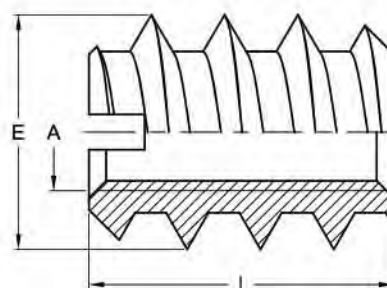
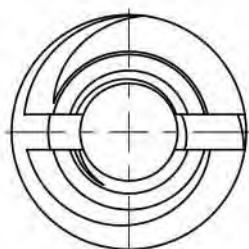
Features

- Sizes comply with DIN 7965, slotted and with full internal thread, for easy automatic insertion.

特征

- 类似于DIN 7965,开槽和完整的内螺纹,便于自动插入。

Technical Data



Drawing No.	E External thread	A Internal thread	L Length	Pilot hole diameter	Pilot hole diameter stainless
L802001	6	M3	6	5.0	—
L802002	6.5	M4	8	5.5	—
L802003	6.5	M4	8	5.5	—
L802004	6.5	M4	10	5.5	—
L802005	8	M4	6	6.0	—
L802006	8	M4	8	6.0	—
L802007	8	M4	10	6.0	6.5-7.0
L802008	8	M4	10	6.0	—
L802009	8	M4	12	6.0	—
L802010	9	M5	12	8.0	—
L802011	10	M5	8	8.0-8.5	—
L802012	10	M5	10	8.0-8.5	—
L802013	10	M5	12	8.0-8.5	8.0-8.5
L802014	10	M5	14	8.0-8.5	—
L802015	12	M6	8	10.0-10.5	—
L802016	12	M6	10	10.0-10.5	—
L802017	12	M6	11	10.0-10.5	—
L802018	12	M6	12	10.0-10.5	10.0-10.5
L802019	12	M6	14	10.0-10.5	—
L802020	12	M6	15	10.0-10.5	10.0-10.5
L802021	12	M6	18	10.0-10.5	—
L802022	12	M6	20	10.0-10.5	—

Other sizes, special designs and materials on request.

Technical Data

Drawing No.	E External thread	A Internal thread	L Length	Hole diameter	Pilot hole diameter stainless
L802023	12	M6	24	10.0-10.5	-
L802024	14	M8	12	12.0-12.5	-
L802025	14	M8	14	12.0-12.5	-
L802026	14	M8	15	12.0-12.5	12.0-12.5
L802027	14	M8	18	12.0-12.5	-
L802028	16	M8	18	13.0-13.5	14.0-14.5
L802029	16	M8	23	13.5-13.5	-
L802030	16	M8	30	13.5-13.5	-
L802031	16	M8	40	13.5-13.5	-
L802032	16	M10	18		14.0-14.5
L802033	18.5	M10	15	15.5-16.0	-
L802034	18.5	M10	20	15.5-16.0	-
L802035	18.5	M10	25	15.5-16.0	-
L802036	18.5	M10	30	15.5-16.0	-
L802037	22	M12	20	19.0	-
L802038	22	M12	25		18.5-19.0
L802039	22	M12	30	19.0	18.5-19.0
L802040	22	M14	25	19.0	-
L802041	22	M14	30	19.0	-
L802042	25	M16	25		21.0-21.5
L802043	25	M16	30		21.0-21.5

Other sizes, special designs and materials on request.

Part number designation

Model code - A (Internal thread) x L (Length) - E (External thread) + Material + Finish

L802-M3x6.0-E6.0B L802 Insert, M3x6.0-E6.0, Brass C3604

L802-M3x6.0-E6.0SBZ L802 Insert, M3x6.0-E6.0, Steel 1215, Blue zinc plated



L803 (LBV)

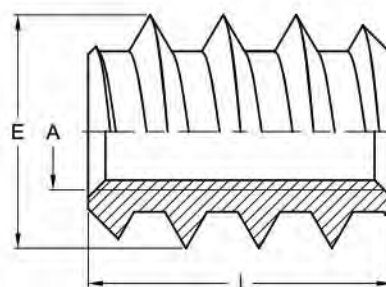
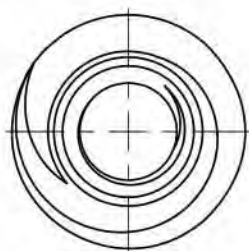
Features

- Without slot, sizes comply with DIN7965, well suited for automatic insertion.

特征

- 无槽类型，尺寸符合DIN7965，非常适合自攻插入。

Technical Data



Drawing No.	E External thread	A Internal thread	L Length	Pilot hole diameter
L803001	6	M3	8	5.5
L803002	8	M4	8	6.0
L803003	8	M4	10	6.0
L803004	10	M5	8	8.0-8.5
L803005	10	M5	10	8.0-8.5
L803006	10	M5	12	8.0-8.5
L803007	10	M5	14	8.0-8.5
L803008	12	M6	12	10.0
L803009	12	M6	15	10.0
L803010	13	M8	15	11.0
L803011	13	M8	18	11.0
L803012	14	M8	15	12.0
L803013	14	M8	18	12.0
L803014	16	M8	18	13.0
L803015	18.5	M10	20	16.0
L803016	18.5	M10	25	16.0
L803017	22	M12	30	19.0
L803018	25	M16	30	22.0

Other sizes, special designs and materials on request.

Part number designation

Model code - A (Internal thread) x L (Length) - E (External thread) + Material + Finish

L803-M3X8.0-E6.0B L803 Insert, M3X8.0-E6.0, Brass C3604

L803-M3X8.0-E6.0SBZ L803 Insert, M3X8.0-E6.0, Steel 1215, Blue zinc plated



L804 (LBA)

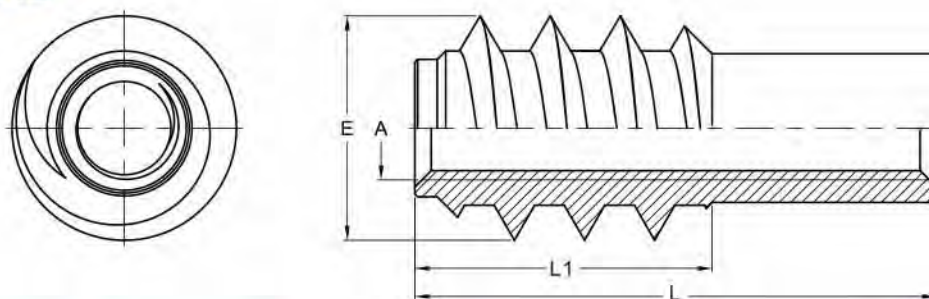
Features

- The long unthreaded external lead allows quick assembly of the workpiece to be fastened. The exceptional length increases the shear strength, with full internal thread.

特征

- 外螺纹加长导向，方便快速装配，特殊的长度增强了自攻强度，内部全通螺纹。

Technical Data



Drawing No.	E External thread	A Internal thread	L Length	L1 External thread length	Pilot hole diameter
L804001	10	M6	28	14	8.5-9.0
L804002	12.5	M8	32	17	10.5-11.0

Other sizes, special designs and materials on request.

Part number designation

Model code - A (Internal thread) x L (Length) - E (External thread) + Material + Finish

L804-M6x28.0-E10.0B L804 Insert, M6x28.0-E10.0, Brass C3604

L804-M6x28.0-E10.0SBZ L804 Insert, M6x28.0-E10.0, Steel 1215, Blue zinc plated



L805 (LBL)

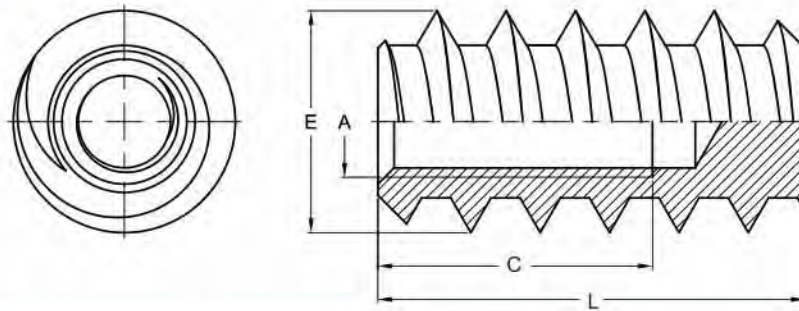
Features

- Without slot, with threaded blind-hole suitable for heavy duty applications due its length.

特征

- 无槽，盲孔螺纹，外螺纹加长线程，可提供较大的载力。

Technical Data



Drawing No.	E External thread	A Internal thread	L Length	C Thread depth	Pilot hole diameter
L805001	8	M4	10	5	6.0-6.5
L805002	8	M4	12	7	6.0-6.5
L805003	10	M5	12	6	8.0-8.5
L805004	10	M5	15	10	8.0-8.5
L805005	10	M5	18	12	8.0-8.5
L805006	10	M5	20	15	8.0-8.5
L805007	10	M5	25	15	8.0-8.5
L805008	10	M5	30	15	8.0
L805009	12	M6	15	10	9.5-10.0
L805010	12	M6	18	11	9.5-10.0
L805011	12	M6	20	14	9.5-10.0
L805012	12	M6	30	15	9.5-10.0
L805013	12	M6	35	15	9.5-10.0
L805014	12	M6	40	15	10.0
L805015	12	M6	50	15	10.0
L805016	12	M6	60	15	10.0
L805017	12	M6	80	15	10.0
L805018	16	M8	18	12	12.5-13.5
L805019	16	M8	20	12	12.5-13.5
L805020	16	M8	25	15	12.5-13.5
L805021	16	M8	30	18	12.5-13.5
L805022	16	M8	35	18	12.5-13.5

Other sizes, special designs and materials on request.

Technical Data

Drawing No.	E External thread	A Internal thread	L Length	C Thread depth	Pilot hole diameter
L805023	16	M8	40	18	12.5–13.5
L805024	16	M8	50	18	13.0
L805025	16	M8	60	18	13.0
L805026	16	M8	70	18	13.0
L805027	16	M8	80	18	13.0
L805028	16	M8	100	18	13.0
L805029	18.5	M10	20	12	15.0–15.5
L805030	18.5	M10	25	17	15.0–15.5
L805031	18.5	M10	30	20	15.0–15.5
L805032	18.5	M10	40	20	15.0–15.5
L805033	18.5	M10	50	20	15.0–15.5
L805034	18.5	M10	60	20	14.5
L805035	18.5	M10	70	20	14.5
L805036	18.5	M10	80	20	14.5
L805037	18.5	M10	100	20	14.5
L805038	22	M12	30	17	17.5–18.0
L805039	22	M12	40	24	17.5–18.0
L805040	22	M12	60	24	17.5–18.0
L805041	22	M12	80	24	18.0
L805042	22	M12	100	24	18.0
L805043	25	M16	40	24	21.0–21.5
L805044	25	M16	60	24	21.0–21.5
L805045	25	M16	80	24	21.0
L805046	25	M16	100	24	21.0

Other sizes, special designs and materials on request.

Part number designation

Model code - A (Internal thread) x L (Length) - E (External thread) + Material + Finish

L805-M4x10.0-E8.0B L805 Insert, M4x10.0-E8.0, Brass C3604

L805-M4x10.0-E8.0SBZ L805 Insert, M4x10.0-E8.0, Steel 1215, Blue zinc plated

L806 (LC)

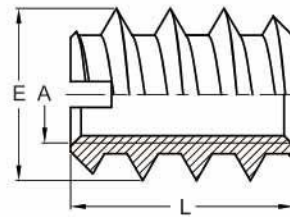
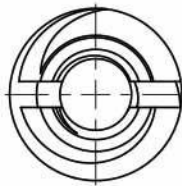
Features

- Slotted and thin-walled. One size pilot hole for both insert and screw.

特征

- 带槽，薄壁款型。

Technical Data



Drawing No.	E External thread	A Internal thread	L Length	Pilot hole diameter
L806001	8	M5	8	6.5-7.0
L806002	8	M5	10	6.5-7.0
L806003	8	M5	12	6.5-7.0
L806004	8	M5	15	6.5-7.0
L806005	9.3	M6	12	7.8-8.3
L806006	9.3	M6	17	7.8-8.3
L806007	9.3	M6	20	7.8-8.3
L806008	10	M6	10	8.0-8.5
L806009	10	M6	12	8.0-8.5
L806010	10	M6	14	8.0-8.5
L806011	10	M6	15	8.0-8.5
L806012	10	M6	17	8.0-8.5
L806013	10	M6	18	8.0-8.5
L806014	10	M6	20	8.0-8.5
L806015	12	M8	10	10.0-10.5
L806016	12	M8	12	10.0-10.5
L806017	14	M10X1	10	12.0-12.5
L806018	14	M10X1	12	12.0-12.5
L806019	14	M10X1	15	12.0-12.5
L806020	14	M10	15	12.0-12.5
L806021	14	M10	18	12.0-12.5
L806022	14	M10	20	12.0-12.5
L806023	14	M10	23	12.0-12.5
L806024	16	M10	14	12.5-13.5
L806025	16	M10	16	12.5-13.5
L806026	16	M10	18	12.5-13.5
L806027	16	M10	23	12.5-13.5
L806028	16	M10	36	12.5-13.5

Other sizes, special designs and materials on request.

L807 (LCA)

Features

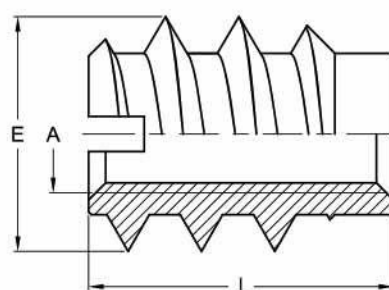
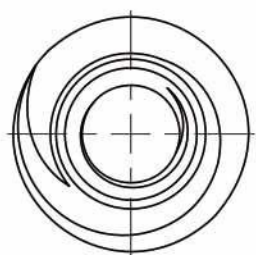
- They are identical with type LC, but with an unthreaded lead.

特征

- 带槽，薄壁款型，拥有导向段，安装方便。



Technical Data



Drawing No.	E External thread	A Internal thread	L Length	Pilot hole diameter
L807001	6.5	M4	8	5.5
L807002	8	M5	10	6.5-7.0
L807003	10	M6	12	8.0-8.5
L807004	12	M8	15	10.0-10.5
L807005	12	M8	18	10.0-10.5
L807006	12	M8	20	10.0-10.5
L807007	12	M8	25	10.0-10.5
L807008	12	M8	40	10.0-10.5
L807009	14	M10	18	12.0-12.5

Other sizes, special designs and materials on request.

Part number designation

Model code - A (Internal thread) x L (Length) - E (External thread) + Material + Finish

L807-M4x8.0-E6.5B L807 Insert, M4x8.0-E6.5, Brass C3604

L807-M4x8.0-E6.5SBZ L807 Insert, M4x8.0-E6.5, Steel 1215, Blue zinc plated

L808 (LCV)

Features

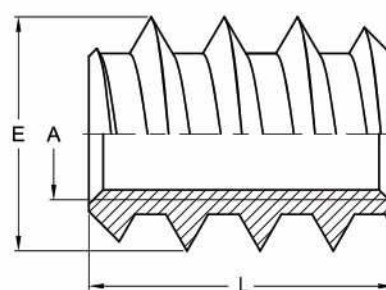
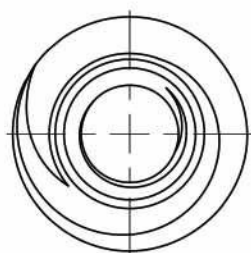
- Without slot, comply with the type LC, well for automatic insertion.

特征

- 无槽，薄壁款型。



Technical Data



Drawing No.	E External thread	A Internal thread	L Length	Pilot hole diameter
L808001	6.5	M4	8	5.5
L808002	6.4	M4	10	5.0-5.5
L808003	6.5	M4	10	5.5
L808004	8	M5	8	6.5-7.0
L808005	8	M5	12	6.5-7.0
L808006	9.3	M6	12	7.8-8.3
L808007	9.3	M6	17	7.8-8.3
L808008	10	M6	10	8.0-8.5
L808009	10	M6	12	8.0-8.5
L808010	10	M6	14	8.0-8.5
L808011	10	M6	15	8.0-8.5
L808012	10	M6	17	8.0-8.5
L808013	10	M6	18	8.0-8.5
L808014	10	M6	20	8.0-8.5
L808015	12	M8	10	10.0-10.5
L808016	12	M8	12	10.0-10.5
L808017	12	M8	15	10.0-10.5
L808018	12	M8	18	10.0-10.5
L808019	14	M10	15	12.0-12.5
L808020	14	M10	18	12.0-12.5
L808021	16	M10	15	12.5-13.5
L808022	16	M10	20	12.5-13.5

Other sizes, special designs and materials on request.



L703 (LDVZ)

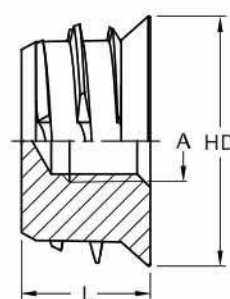
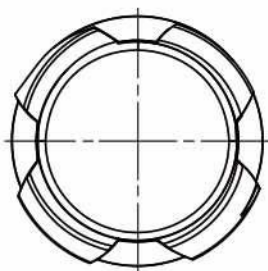
Features

- Die cast, short version for thin walled shaped wood, with internal thread stop.

特征

- 压铸工艺の木牙螺丝，盲孔类型，用于较软的木材。

Technical Data



Drawing No.	HD Head diameter	A Internal thread	L Length	Pilot hole diameter
L703001	16	M5	7	11.0-11.5
L703002	16	M6	7	11.0-11.5

Other sizes, special designs and materials on request.

Part number designation

Model code - A (Internal thread) x L (Length) - HD (Head diameter) + Material + Finish
L703-M5x7.0-HD16.0SCZ L703 Insert,M5x7.0-HD16.0,Steel 1215,Color zinc plated

L809 (LD)

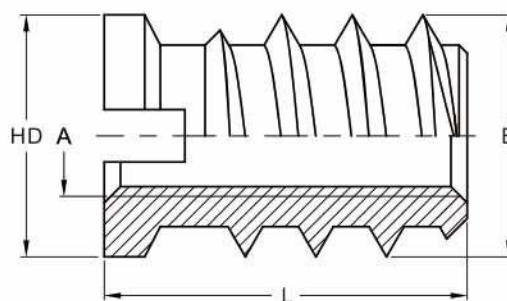
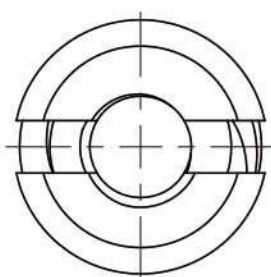
Features

- With sealing collar on the slotted end.

特征

- 带槽和密封盘的自攻螺套。

Technical Data



Drawing No.	A Internal thread	E External thread	HD Head diameter	L Length	Pilot hole diameter
L809001	M4	8	8	8	6.5-7.0
L809002	M4	8	8	10	6.5-7.0
L809003	M5	10	10	6	8.5-9.0
L809004	M5	10	10	8	8.5-9.0
L809005	M5	10	10	10	8.5-9.0
L809006	M5	10	10	12	8.0-8.5
L809007	M6	12	12	6	10.5-11.0
L809008	M6	12	12	7	10.5-11.0
L809009	M6	12	12	8	10.5-11.0
L809010	M6	12	12	11	10.0-10.5
L809011	M6	12	12	13	10.0-10.5
L809012	M8	14	14	14	12.0-12.5
L809013	M8	14	14	15	12.0-12.5

Other sizes, special designs and materials on request.

Part number designation

Model code - A (Internal thread) x L (Length) - HD (Head diameter) + Material + Finish

L809-M4x8.0-HD8.0B L809 Insert, M4x8.0-HD8.0, Brass C3604

L809-M4x8.0-HD8.0SBZ L809 Insert, M4x8.0-HD8.0, Steel 1215, Blue zinc plated



L810 (LE)

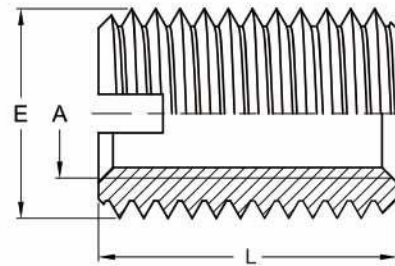
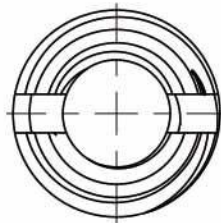
Features

- Slotted and with metric external thread, for assembly in harder materials.

特征

- 带槽和公制外螺纹，用于装配在较硬材料。

Technical Data



Drawing No.	E External thread	A Internal thread	L Length	Pilot hole diameter
L810001	M5X0.5	M3	6	4.5
L810002	M6.5X0.75	M4	8	5.6-5.8
L810003	M8X1.25	M4	5	6.5-6.6
L810004	M8X1.25	M4	8	6.5-6.6
L810005	M8X1.25	M5	5	6.5-6.6
L810006	M8X1	M5	10	6.9-7.0
L810007	M8X1.25	M5	15	6.5-6.6
L810008	M10X1.5	M6	8	8.3-8.5
L810009	M10X1.5	M6	12	8.3-8.5
L810010	M12X1.5	M8	10	10.3-10.5
L810011	M12X1.5	M8	12	10.3-10.5
L810012	M12X1.5	M8	15	10.3-10.5
L810013	M14X1.5	M10	15	12.3-12.5
L810014	M14X1.5	M10	18	12.3-12.5

Other sizes, special designs and materials on request.

Part number designation

Model code - A (Internal thread) x L (Length) - E (External thread) + Material + Finish

L810-M3x6.0-E5.0B L810 Insert, M3x6.0-E5.0, Brass C3604

L810-M3X6.0-E5.0SBZ L810 Insert, M3x6.0-E5.0, Steel 1215, Blue zinc plated

L811 (LSKD)

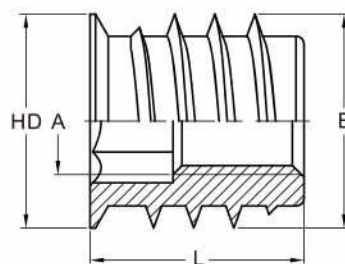
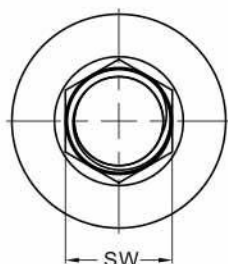
Features

- With hex drive, sealing collar and unthreaded lead.

特征

- 带内六角槽和导向段。

Technical Data



Drawing No.	A Internal thread	E External thread	HD Head diameter	L Length	SW Hexagonal socket	Pilot hole diameter
L811001	M4	8	8	8	4	6.5-7.0
L811002	M4	8	8	10	4	6.5-7.0
L811003	M4	8	8	12	4	6.5-7.0
L811004	M5	10	10	6	5	8.5-9.0
L811005	M5	10	10	8	5	8.5-9.0
L811006	M5	10	10	12	5	9.0
L811007	M5	10	10	15	5	9.0
L811008	M6	12	12	6	6	10.5
L811009	M6	12	12	7	6	10.5
L811010	M6	12	12	8	6	10.5
L811011	M6	12	12	12	6	10.0-10.5
L811012	M6	12	12	15	6	10.0-10.5
L811013	M6	12	12	18	6	10.0-10.5
L811014	M6	12	12	20	6	10.0-10.5
L811015	M8	13	13	15	8	11.0-11.5
L811016	M8	14	14	15	8	12.0-12.5
L811017	M8	14	14	18	8	12.0-12.5
L811018	M8	16	16	14	8	14.0-14.5
L811019	M8	16	16	18	8	14.0-14.5
L811020	M8	16	16	23	8	14.0-14.5
L811021	M10	18.5	18.5	20	10	16.0-16.5
L811022	M10	18.5	18.5	25	10	16.0-16.5
L811023	M12	22	22	25	12	20.0
L811024	M12	22	22	30	12	20.0
L811025	M16	25	25	30	17	23.0

Other sizes, special designs and materials on request.



L812(LSKDL)

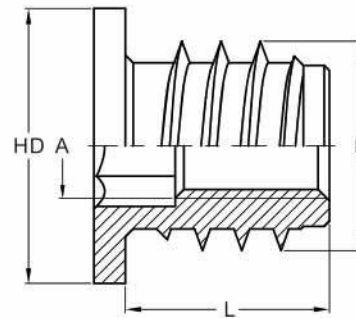
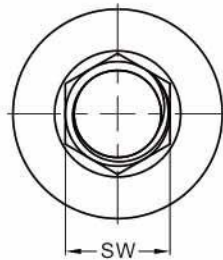
Features

- With hex drive and a sealing collar, left-hand outside thread and right-hand internal thread.

特征

- 带内六角槽和法兰，外螺纹为左旋，内螺纹为右旋。

Technical Data



Drawing No.	HD Head diameter	E External thread	L Length	A Internal thread	SW Hexagonal socket	Pilot hole diameter
L812001	15	10	16	M6	6	8.0-8.5
L812002	22	15.3	17	M8	10	12.5-13.5
L812003	22	15.3	17	M10	10	12.5-13.5

Other sizes, special designs and materials on request.

Part number designation

Model code - A (Internal thread) x L (Length) - HD (Head diameter) + Material + Finish

L812-M6x16.0-HD15.0B L812 Insert, M6x16.0-HD15.0, Brass C3604

L812-M6x15.0-HD15.0SBZ L812 Insert, M6x16.0-HD15.0, Steel 1215, Blue zinc plated

L813 (LSK)

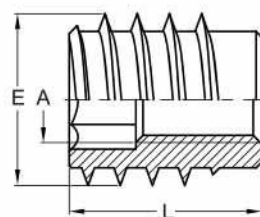
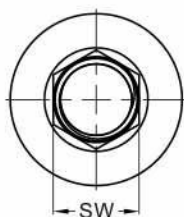
Features

- With hex socket drive. An unthreaded lead supports easy assembly.

特征

- 带内六角槽，加长的导向段，方便安装。

Technical Data



Drawing No.	E External thread	A Internal thread	L Length	SW Hexagonal socket	Pilot hole diameter
L813001	8	M4	8	4	7.0-7.5
L813002	8	M4	10	4	7.0-7.5
L813003	8	M4	12	4	7.0-7.5
L813004	10	M5	8	5	8.0-8.5
L813005	10	M5	10	5	8.0-8.5
L813006	10	M5	12	5	8.0-8.5
L813007	10	M5	14	5	8.0-8.5
L813008	12	M6	10	6	10.0-10.5
L813009	12	M6	12	6	10.0-10.5
L813010	12	M6	15	6	10.0-10.5
L813011	12	M6	18	6	10.0-10.5
L813012	12	M6	20	6	10.0-10.5
L813013	12	M6	23	6	10.0-10.5
L813014	12	M6	25	6	10.0-10.5
L813015	14	M8	12	8	12.0-12.5
L813016	14	M8	15	8	12.0-12.5
L813017	14	M8	18	8	12.0-12.5
L813018	14	M8	30	8	12.0-12.5
L813019	16	M8	14	8	14.0-14.5
L813020	16	M8	18	8	14.0-14.5
L813021	16	M8	23	8	14.0-14.5
L813022	16	M8	30	8	14.0-14.5
L813023	18.5	M10	15	10	16.0-16.5
L813024	18.5	M10	20	10	16.0-16.5
L813025	18.5	M10	25	10	16.0-16.5
L813026	18.5	M10	30	10	16.0-16.5
L813027	18.5	M10	40	10	16.0-16.5
L813028	22	M12	30	12	20.0
L813029	22	M12	40	12	20.0

L814 (LSKL)

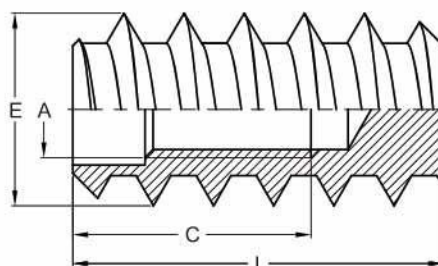
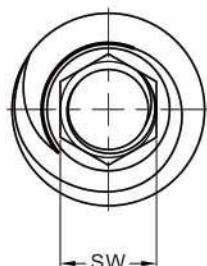
Features

- With hex socket drive and threaded blind hole. Slim flanks and the unthreaded lead support easy assembly.

特征

- 带内六角槽，内螺纹盲孔设计，拥有导向段，方便安装。

Technical Data



Drawing No.	E External thread	A Internal thread	L Length	C Thread depth	SW Hexagonal socket	Pilot hole diameter
L814001	12	M6	25	18	6	9.5-10.0
L814002	12	M6	30	20	6	9.5-10.0
L814003	12	M6	40	20	6	10.0
L814004	12	M6	50	21	6	10.0
L814005	12	M6	60	21	6	10.0
L814006	12	M6	80	21	6	10.0
L814007	16	M8	30	20	8	13.0-13.5
L814008	16	M8	40	22	8	13.0-13.5
L814009	16	M8	50	22	8	13.0
L814010	16	M8	60	22	8	13.0
L814011	16	M8	70	22	8	13.0
L814012	16	M8	80	23	8	13.0
L814013	16	M8	100	23	8	13.0
L814014	18.5	M10	30	21	10	15.5-16.0
L814015	18.5	M10	40	21	10	15.5-16.0
L814016	18.5	M10	50	21	10	15.5-16.0
L814017	18.5	M10	60	21	10	16.0
L814018	18.5	M10	70	21	10	16.0
L814019	18.5	M10	80	23	10	16.0
L814020	18.5	M10	100	23	10	16.0
L814021	22	M12	60	25	12	19.0-19.5
L814022	22	M12	80	25	12	19.0
L814023	22	M12	100	25	12	19.0
L814024	25	M16	60	25	14	22.0
L814025	25	M16	80	25	14	22.0
L814026	25	M16	100	25	14	22.0

Other sizes, special designs and materials on request.



L815 (LSRD)

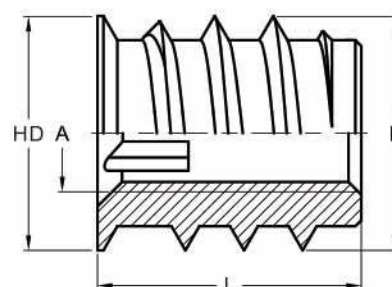
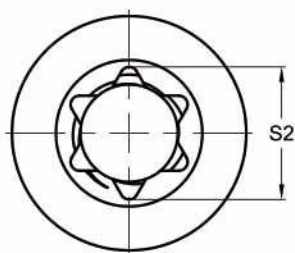
Features

- With internal star drive (EN ISO 10664), allows high torque values, comply with type LSKD.

特征

- 在LSKD基础上增星型六角槽，提供高扭矩。

Technical Data



Drawing No.	A Internal thread	E External thread	HD Head diameter	L Length	S2 Internal star drive	Pilot hole diameter
L815001	M4	8	8	10	T25	6.5–7.0
L815002	M5	10	10	12	T30	8.5–9.0
L815003	M6	12	12	12	T45	10.0–10.5
L815004	M6	12	12	15	T45	10.0–10.5
L815005	M8	14	14	15	T50	12.0–12.5
L815006	M8	16	16	18	T50	14.0–14.5
L815007	M10	18.5	18.5	20	T50	16.0–16.5
L815008	M12	22	22	25	T55	20.0

Other sizes, special designs and materials on request.

Part number designation

Model code - A (Internal thread) x L (Length) - HD (Head diameter) + Material + Finish

L815-M4x10.0-HD8.0B L815 Insert, M4x10.0-HD8.0, Brass C3604

L815-M4x10.0-HD8.0SBZ L815 Insert, M4x10.0-HD8.0, Steel 1215, Blue zinc plated

L3090 / L3092



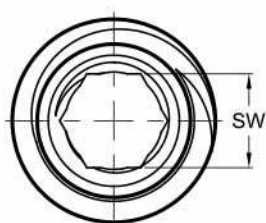
Features

- Threaded insert with cutting wear-and vibration res connections capable of withstanding high loads in: hardwood, softwood, soft plastic and composite materials.

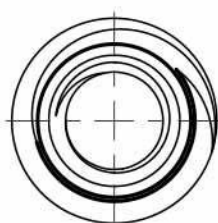
特征

- 带切削槽的自攻螺套，用于木材，塑胶和复合材料。

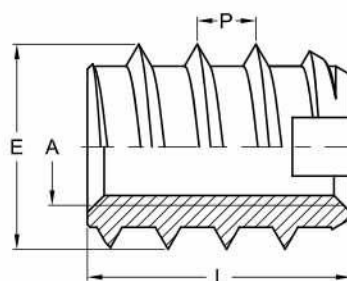
Technical Data



Type L3092



Type L3090



A Internal thread inch	Drawing No. inch	A Internal thread metric	Drawing No. metric	E External thread	P Pitch	L Length	sw ^{+0.1} / ₀ Hexa- gonal socket	H Hole Dia. softwood	H Hole diameter Plastic hardwood	D Hole depth
2-56	L309001	M2.5	L309012	5mm	1.6mm	0.236	-	0.138	0.142 to 0.150	0.315
4-40	L309002	M3	L309013	5.5mm	1.6mm	0.236	-	0.161	0.165 to 0.169	0.315
6-32	L309003	M3.5	L309014	6.5mm	1.6mm	0.315	-	0.181	0.185 to 0.189	0.394
8-32	L309004	M4	L309015	7mm	2.5mm	0.394	-	0.201	0.205 to 0.209	0.512
	L309204		L309215				3.2mm			
10-24	L309005	M5	L309016	9mm	3mm	0.472	-	0.26	0.264 to 0.272	0.591
	L309205		L309216				4.1mm			
1/4-20	L309006	M6	L309017	9mm	3mm	0.551	-	0.299	0.303 to 0.311	0.669
	L309206		L309217				4.9mm			
5/16-18	L309007	M8	L309018	13mm	4mm	0.787	-	0.389	0.398 to 0.406	0.906
	L309207		L309218				6.6mm			
3/8-16	L309008	M10	L309019	16mm	5mm	0.906	-	0.488	0.496 to 0.504	1.024
	L309208		L309219				8.3mm			
7/16-14	L309209	M12	L309220	19mm	5mm	1.024	10.1mm	0.606	0.614 to 0.622	1.181
1/2-13	L309010	M14	L309021	22mm	5mm	1.024	-	0.724	0.732 to 0.740	1.181
5/8-11	L309011	M16	L309022	24mm	5mm	1.024	-	0.803	0.811 to 0.819	1.181

All dimensions in inch unless otherwise noted.
Other sizes, special designs and materials on request.

Part number designation

Model code - A (Internal thread) x L (Length) - E (External thread) + Material + Finish

L3090-M2.5x6.0-E5.0B L3090 Insert,M2.5x6.0-E5.0,Brass C3604

L3090-M2.5x6.0-E5.0SBZ L3090 Insert,M2.5x6.0-E5.0,Steel 1215,Blue zinc plated

L816 (DG)



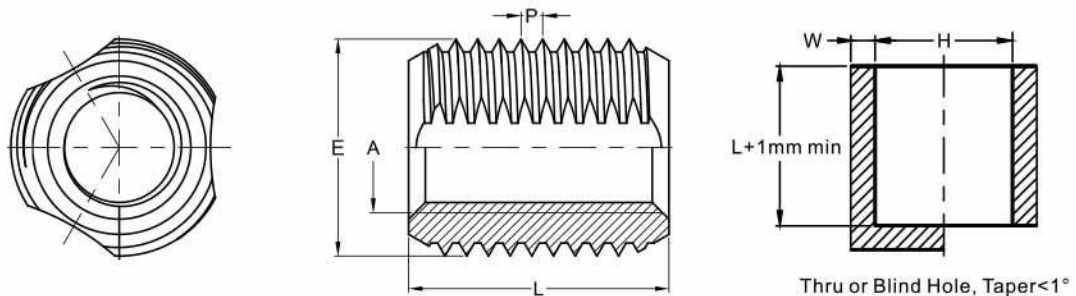
Features

- Self-tapping inserts series.
- Internal and external thread design.
- Designed for medium-hard and soft thermoplastic plastic.

特征

- 自攻埋植。
- 内外螺纹设计。
- 适用于硬度中等和柔软的热塑性塑胶 (ABS, PP etc)。

Technical Data



Drawing No.	A Internal thread	L Length	E External thread	P External pitch	H ^{+0.1} ₀ Rec. hole size	W Min. wall thickness
L816001	M3	6.0	5.0	0.5	4.6	1.65
L816002	M4	8.0	6.5	0.75	6.0	2.3
L816003	M5	10.0	8.0	1.0	7.3	2.7
L816004	M6	14.0	10.0	1.5	9.0	3.2

Standard material: Brass JIS 3604, stainless steel or aluminum can be available for request.
Other sizes, special designs and materials on request.

Part number designation

Model code - A (Internal thread) x L (Length) - E (External thread) + Material + Finish

L816-M3x6.0-E5.0B L816 Insert, M3x6.0-E5.0, Brass C3604

L816-M3x6.0-E5.0SBZ L816 Insert, M3x6.0-E5.0, Steel 1215, Blue zinc plated



Tap-Tek

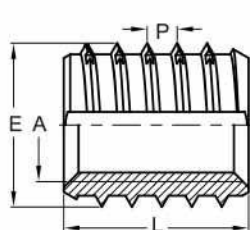
Features

- Self-tapping inserts series.
- Self-aligning pilot design.
- Designed for thermoplastics and thermosetting plastics.

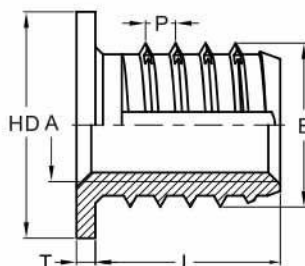
特征

- 自攻埋植。
- 自动对准导向设计，不易歪斜。
- 适用于热塑性塑料和热固性塑胶。

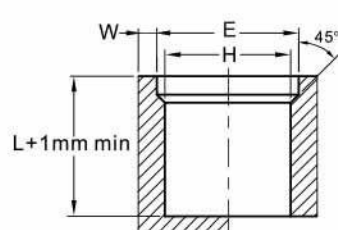
Technical Data



Type TT



Type TTH



Thru or Blind Hole, Taper <1°

A Internal thread	L Insert lengths			T Head height	HD Head diameter	E External thread	P External pitch	H ±0.1 Hole diameter	W Min. wall thickness
M2	4.00	4.80	—	—	—	3.50	0.79	3.2	1.25
M2.5	4.00	5.25	6.25	0.60	6.35/—	4.33	1.06	4.0	1.55
M3	4.00	5.25	6.25	0.75	7.10/4.70	4.73	1.06	4.3	1.65
M3.5	5.00	6.20	7.30	0.75	8.30/—	5.52	1.15	5.2	2.00
M4	5.60	7.10	8.40	0.75	8.70/6.30	6.31	1.27	6.0	2.30
M5	6.40	8.40	10.00	0.90	11.10/7.50	7.50	1.41	7.1	2.70
M6	7.90	9.80	12.00	1.00	12.00/8.60	8.69	1.59	8.2	3.15
M8	9.50	12.40	—	1.25	14.30/11.10	11.06	1.95	10.4	4.00
M10	12.00	16.00	—	1.50	18.00/—	13.95	1.95	13.3	5.10

Standard material: Brass JIS 3604, stainless steel or aluminum can be available for request.
Other sizes, special designs and materials on request.

Part number designation

Model code - A (Internal thread) x L (Length) - E (External thread) + Material + Finish
TT-M2x4.0-E3.5B TT Insert, M2x4.0-E3.5, Brass C3604

Model code - A (Internal thread) x L (Length) - HD (Head diameter) + Material + Finish
TTH-M2.5x4.0-HD6.35B TTH Insert with head, M2.5x4.0-HD6.35, Brass C3604

L362 (AG)



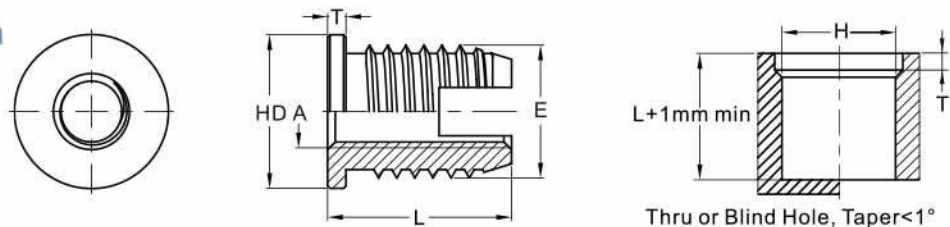
Features

- Internally and externally thread with two slots which provide cutting edges is similar to a automatic tap.
- Self-tapping inserts series.
- Can be installed with a tap wrench or drill.
- Design for thermoplastic and thermosetting plastics.

特征

- 尾部带切削槽。
- 自攻埋植。
- 安装用丝锥扳手和钻床。
- 用于热塑性和热固性塑胶。

Technical Data



Drawing No.	A Internal thread	L ±0.25 Insert length	T ±0.1 Head height	E ±0.13 External thread	HD Head diameter	H Rec.hole diameter	H diameter thermoset	H diameter thermoplastic
L362001	M2X0.4	5.80	0.51	3.10	4.72	3.28-3.23	.129-.127	.127-.124
L362002	M2.2X0.45	5.80	0.51	3.10	4.72	3.28-3.23	.156-.152	.152-.149
L362003	M2.5X0.45	7.57	0.64	3.35	5.54	3.96-3.86	.198-.194	.194-.190
L362004	M3X0.5	9.02	0.76	4.32	6.35	5.03-4.93	.230-.226	.226-.222
L362005	M3.5X0.6	9.02	0.76	4.32	6.35	5.03-4.93	.270-.264	.264-.259
L362006	M3X0.7	9.15	0.89	4.95	7.14	5.84-5.74	.270-.264	.264-.259
L362007	M5X0.8	10.27	1.02	5.89	9.53	6.86-6.71	.343-.336	.336-.330
L362008	M6X1	11.69	1.14	7.67	11.13	8.71-8.53	.343-.336	.336-.330

Drawing No.	A Internal thread	L ±0.10 Insert length	T ±.004 Head height	E ±.005 External thread	HD Head diameter	H Rec.hole diameter	H diameter thermoset	H diameter thermoplastic
L362009	2-56	.288	.020	.122	.186	.129-.127	3.28-3.23	3.24-3.17
L362010	4-40	.298	.025	.132	.218	.156-.152	3.28-3.23	3.24-3.17
L362011	6-32	.395	.030	.170	.250	.198-.194	3.96-3.86	3.86-3.78
L362012	8-32	.360	.035	.195	.281	.230-.226	5.03-4.93	4.93-4.83
L362013	10-24	.404	.040	.232	.375	.270-.264	5.03-4.93	4.93-4.83
L362014	10-32	.404	.040	.232	.375	.270-.264	5.84-5.74	5.74-5.63
L362015	1/4-20	.460	.045	.302	.438	.343-.336	6.86-6.71	6.71-6.58
L362016	1/4-28	.460	.045	.302	.438	.343-.336	8.71-8.53	8.58-8.38

Standard material: Brass JIS 3604, stainless steel or aluminum can be available for request.

Other sizes, special designs and materials on request.

Part number designation

Model code - A (Internal thread) x L (Length) - HD (Head diameter) + Material + Finish

L362-M2x5.8-HD4.7B L362 Insert, M2x5.8-HD4.7, Brass C3604

L363 (BG)



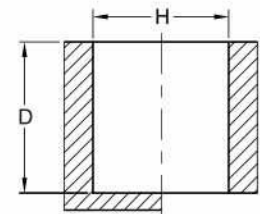
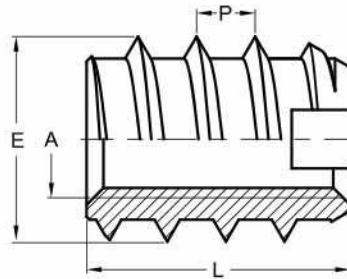
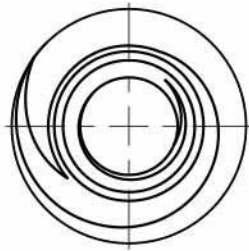
Features

- Internal and external thread with two slots which provide cutting edges is similar to a automatic tap.
- Self-tapping inserts series.
- Can be installed with a tap wrench or drill.
- Design for thermoplastic and thermosetting plastics.

特征

- 尾部带切削槽。
- 自攻埋植。
- 安装用丝锥扳手和钻床。
- 用于热塑性 and 热固性塑胶。

Technical Data



Thru or Blind Hole, Taper<1°

Drawing No.	A Internal thread	L Insert length	P External pitch	E External thread	H Hole Dia. softwood	H Hole Dia. hardwood	D Min. hole depth
L363001	M2.5	6	1.6	5.0	3.5	3.6-3.8	8
L363002	M3	6	1.6	5.5	4.1	4.2-4.3	9
L363003	M3.5	8	1.6	6.5	4.6	4.7-4.8	10
L363004	M4	10	2.5	7.0	5.1	5.2-5.3	13
L363005	M5	12	3.0	9.0	6.6	6.7-6.9	15
L363006	M6	14	4.0	10.0	7.6	7.7-7.9	17
L363007	M8	20	4.0	13.0	9.9	10.1-10.3	23
L363008	M10	23	5.0	16.0	12.4	12.6-12.8	26
L363009	M12	26	5.0	19.0	15.4	15.6-15.8	30
L363010	M14	26	5.0	22.0	18.4	18.6-18.8	30
L363011	M16	26	5.0	24.0	20.4	20.6-20.8	30

Standard material: Brass JIS 3604, stainless steel or aluminum can be available for request.
Other sizes, special designs and materials on request.

Part number designation

Model code - A (Internal thread) x L (Length) - E (External thread) + Material + Finish

L363-M2.5x6.0-E5.0B L360 Insert, M2.5x6.0-E5.0, Brass C3604

L363-M2.5x6.0-E5.0SBZ L360 Insert, M2.5x6.0-E5.0, Steel 1215, Blue zinc plated



L364 (CG)

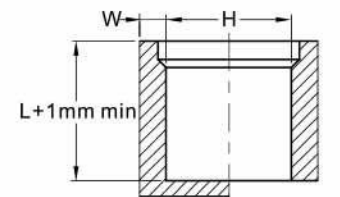
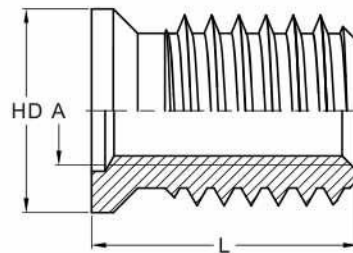
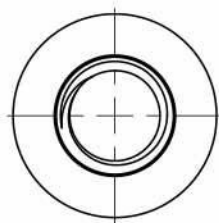
Features

- Self-tapping inserts series.
- Can be installed with a tap wrench or drill.
- Design for thermoplastic and thermosetting plastics.

特征

- 自攻埋植。
- 安装用丝锥扳手和钻床。
- 用于热塑性和热固性塑胶。

Technical Data



Thru or Blind Hole, Taper < 1°

Drawing No.	A Internal thread	L Insert length	HD Head diameter	H ± 0.1 Rec.hole diameter	W Min.wall thickness
L364001	M3	6.0	6.8	4.7	2.0
L364002	M4	8.0	7.8	5.6	3.0
L364003	M5	10.0	9.4	6.8	4.0
L364004	M6	14.0	11.2	7.6/8.5	4.0
L364005	M8	15.0	13.2	10.3/10.5	5.0
L364006	M10	18.0	15.2	11.8/12.5	5.0

Standard material: Brass JIS 3604, stainless steel or aluminum can be available for request.
Other sizes, special designs and materials on request.

Part number designation

Model code - A (Internal thread) x L (Length) - HD (Head diameter) + Material + Finish

L364-M3x6.0-HD6.8B L364 Insert, M3x6.0-HD6.8, Brass C3604

L364-M3x6.0-HD6.8SBZ L364 Insert, M3x6.0-HD6.8, Steel 1215, Blue zinc plated

L378

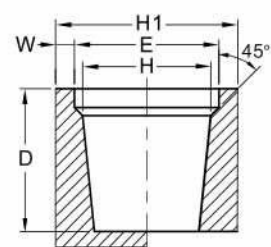
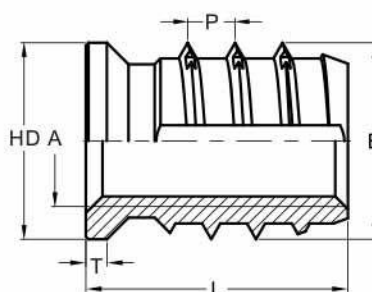
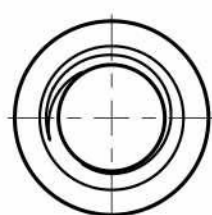
Features

- Self-tapping inserts series.
- Can be installed with a tap wrench or drill.
- Design for thermoplastic and thermosetting plastics.

特征

- 自攻埋植。
- 安装用丝锥扳手和钻床。
- 用于热塑性和热固性塑胶。

Technical Data



Thru or Blind Hole, Taper<8°

Drawing No.	A Internal thread	L Length	E External thread Nom.	P Pitch Nom.	HD Head Nom.	T Head height Nom.	H Hole Dia.	W Min. wall Thk.	H1 Min. boss Dia.	D Hole depth
L378001	M3	6.25 ± 0.20	4.73	1.06	4.7	0.75	4.1-4.4	1.65	7.7	6.9
L378002	M4	8.40 ± 0.20	6.31	1.27	6.3	0.80	5.8-6.1	2.30	10.7	9.3
L378003	M5	10.00 ± 0.25	7.50	1.41	7.5	0.80	6.9-7.2	2.70	12.6	11.0
L378004	M6	12.00 ± 0.25	8.69	1.59	8.6	0.90	8.0-8.4	3.15	14.7	13.2
L378005	M6	7.90 ± 0.25	8.69	1.59	8.6	0.90	8.0-8.4	3.15	14.7	8.7
L378006	M8	14.10 ± 0.30	11.06	1.95	11.1	1.00	10.1-10.6	4.00	18.6	15.6

Other sizes, special designs and materials on request.

Part number designation

Model code - A (Internal thread) x L (Length) - HD (Head diameter) + Material + Finish

L378-M3x6.25-HD4.7B L378 Insert, M3x6.25-HD4.7, Brass C3604

L378-M3x6.25-HD4.7SBZ L378 Insert, M3x6.25-HD4.7, Steel 1215, Blue zinc plated

**L379**

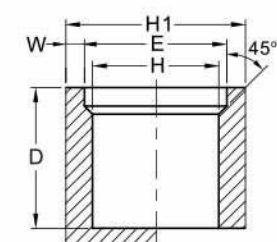
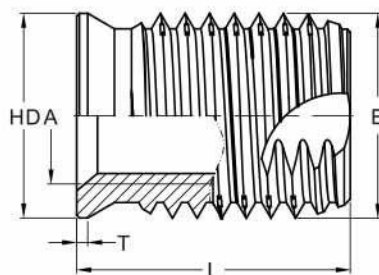
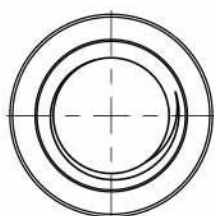
Features

- Self-tapping inserts series.
- Can be installed with a tap wrench or drill.
- Design for thermoplastic and thermosetting plastics.

特征

- 自攻埋植。
安装用丝锥扳手和钻床。
用于热塑性和热固性塑胶。

Technical Data



Thru or Blind Hole, Taper $\leq 1^\circ$

Drawing No.	A Internal thread	L Length ±0.125	E External thread Nom.	HD Head Nom.	T Head height ±0.1	H Hole diameter plastic	H Hole diameter metal	W Min. wall Thk.	H1 Min. boss Dia.	D Min. hole depth
L379001	M3	5.25	4.73	4.70	0.38	4.10-4.40	4.35-4.55	1.65	7.70	5.80
L379002	M3	6.25	4.73	4.70	0.38	4.10-4.40	4.35-4.55	1.65	7.70	6.90
L379003	M4	7.10	6.31	6.30	0.38	5.80-6.10	5.95-6.15	2.30	10.70	7.90
L379004	M4	8.40	6.31	6.30	0.38	5.80-6.10	5.95-6.15	2.30	10.70	9.30
L379005	M5	8.40	7.50	7.50	0.40	6.90-7.20	7.15-7.35	2.70	12.60	9.30
L379006	M5	10.00	7.50	7.50	0.40	6.90-7.20	7.15-7.35	2.70	12.60	11.00
L379007	M6	9.80	8.69	8.60	0.45	8.00-8.40	8.35-8.55	3.15	14.70	10.80
L379008	M6	12.00	8.69	8.60	0.45	8.00-8.40	8.35-8.55	3.15	14.70	13.20
L379009	M8	12.40	11.06	11.10	0.50	10.10-10.60	10.55-10.85	4.00	18.60	13.70
L379010	M8	14.00	11.06	11.10	0.50	10.10-10.60	10.55-10.85	4.00	18.60	15.40
L379011	M10	12.00	13.95	14.10	0.75	13.00-13.50	13.45-13.65	5.10	23.70	13.20
L379012	M10	16.00	13.95	14.10	0.75	13.00-13.50	13.45-13.65	5.10	23.70	17.60
L379013	M10	18.00	13.95	14.10	0.75	13.00-13.50	13.45-13.65	5.10	23.70	19.80

Other sizes, special designs and materials on request.

Part number designation

Model code - A (Internal thread) x L (Length) - HD (Head diameter) + Material + Finish

L379-M3x5.25-HD4.7B L379 Insert, M3x5.25-HD4.7, Brass C3604

L379-M3x5.25-HD4.7SBZ L379 Insert, M3x5.25-HD4.7, Steel 1215, Blue zinc plated

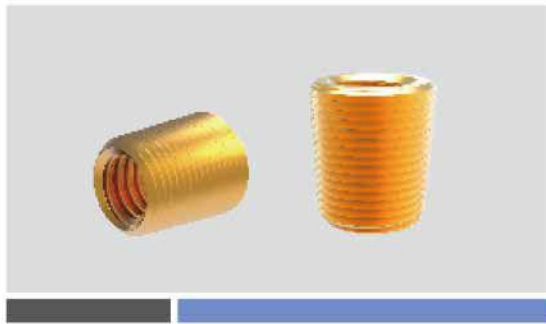
L381

Features

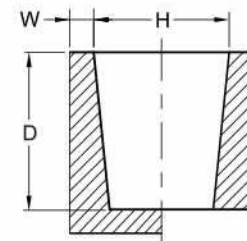
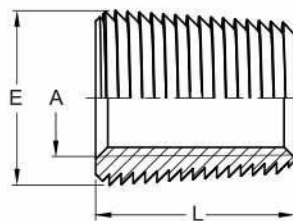
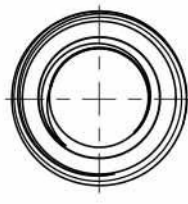
- Tried and trusted 8° taper angle and self-centring.
- Wide contact area before insertion, flexible installation by thermal insertion, self-tapping or cold insertion.

特征

- 安装于8度的锥形孔，可用于自攻、热熔和冷压安装。



Technical Data



Thru or Blind Hole, Taper<8°

Drawing No.	A Internal thread	E External thread	L Length	H ⁽¹⁾ +0.1 Hole size	D Min. hole depth	W Min. wall thickness
L381001	M2	4.1	4	3.8	5.0	1.5
L381002	M2.5	4.1	4	3.8	5.0	1.5
L381003	M3	4.7	5	4.4	6.0	1.8
L381004	M4	6.1	7.5	5.8	8.5	2.0
L381005	M5	7.3	9	6.9	10.0	2.0
L381006	M6	8.9	10	8.5	11.0	2.5
L381007	M8	11.3	12	10.9	13.0	3.0

Other sizes, special designs and materials on request.

(1) Guide value: dependent on component material. Alter after insertion tests, if necessary.

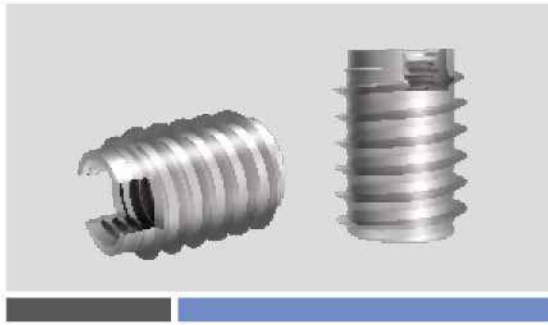
Part number designation

Model code - A (Internal thread) x L (Length) - E (External thread) + Material + Finish

L381-M2x4.0-E4.1B L381 Insert, M3x4.0-E4.1, Brass C3604

L381-M2x4.0-E4.1SBZ L381 Insert, M3x4.0-E4.1, Steel 1215, Blue zinc plated

L3821 / L3822



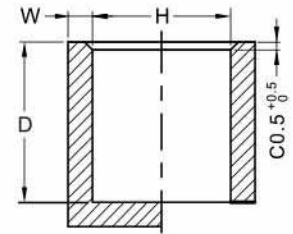
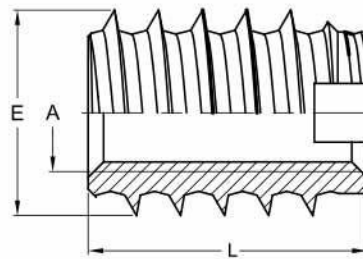
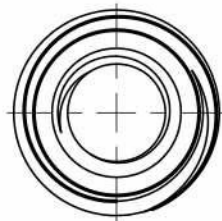
Features

- Internally and externally thread with two slots which provide cutting edges is similar to a automatic tap.
- Self-tapping inserts series.

特征

- 尾部带切削槽。
- 自攻埋植。

Technical Data



Thru or Blind Hole, Taper < 1°

Drawing No. Steel, unhardened	Drawing No. Brass	A Internal thread	L Length	E External thread	H ⁽¹⁾ Hole size	D Min. hole depth	W Min. wall thickness
L382101	L382201	M3	6.0	6.0	4.6 – 5.4	7.0	2.0
L382102	L382202	M4	8.0	7.0	5.6 – 6.6	9.0	3.0
L382103	L382203	M5	10.0	8.0	6.6 – 7.6	11.0	4.0
L382104	L382204	M6	14.0	10.0	8.1 – 9.4	15.0	4.0
L382105	L382205	M8	15.0	12.0	10.1 – 11.4	16.0	5.0
L382106	L382206	M10	18.0	14.0	12.1 – 13.4	19.0	5.0

Other sizes, special designs and materials on request.

(1) Guide value: dependent on component material. Alter after insertion tests, if necessary.

Part number designation

Model code - A (Internal thread) x L (Length) - E (External thread) + Material + Finish

L3822-M3x6.0-E6.0B L3822 Insert, M3x6.0-E6.0, Brass C3604

L3821-M3x6.0-E6.0SBZ L3821 Insert, M3x6.0-E6.0, Steel 1215, Blue zinc plated

L3831 / L3832



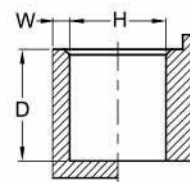
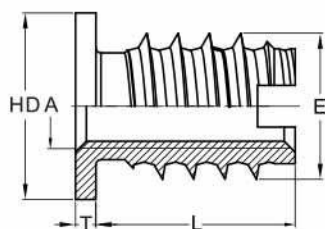
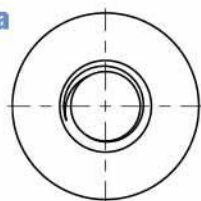
Features

- Self-tapping inserts series.
- Can be installed with a tap wrench or drill.
- Design for thermoplastic and thermosetting plastics.

特征

- 自攻埋植。
- 安装用丝锥扳手和钻床。
- 用于热塑性和热固性塑胶。

Technical Data



Thru or Blind Hole, Taper < 1°

	M3	M4	M5	M6	M8	M10
PE(soft)	4.6	5.6	6.6	8.1	10.1	12.1
PP						
PA 6						
PA 6.6						
PBT						
PE(hard)	4.8	5.8	6.8	8.3	10.3	12.3
PET						
POM						
ASA	5.0	6.0	7.0	8.5	10.5	12.5
SAN						
ABS						
PA 6 GF 30%						
PBT GF 30%						
PET CF 30%	5.2	6.2	7.2	8.7	10.7	12.7
PS						
PVC (hard)						
PA 6.6 GF 30%						
PC and PC+GF 30%	5.4	6.4	7.4	9.0	11.0	13.0
PPO/PPS GF 30%						
SMC						
ZMC		6.6	7.6	9.4	11.4	13.4
BMT						

Drawing No. steel, unhardened (1)	Drawing No. Brass (2)	A Internal thread	L Length (1)	L Length (2)	T Head height	E External thread	HD Head diameter	H Rec.hole diameter	D Min. depth (1)	D Min. depth (2)	W Min. wall Thk.
L383101	L383201	M4	9.5	8.0	1.0	7.0	10.0	5.6 – 6.6	10.5	9.0	3.0
L383102	L383202	M5	11.5	10.0	1.2	8.0	11.0	6.6 – 7.6	12.5	11.0	4.0
L383103	L383203	M6	16.0	14.0	1.4	10.0	13.0	8.1 – 9.4	17.0	15.0	4.0
L383104	L383204	M8	17.0	15.0	1.4	12.0	15.0	10.1 – 11.4	18.0	16.0	5.0

L3840 / L3841 / L3845



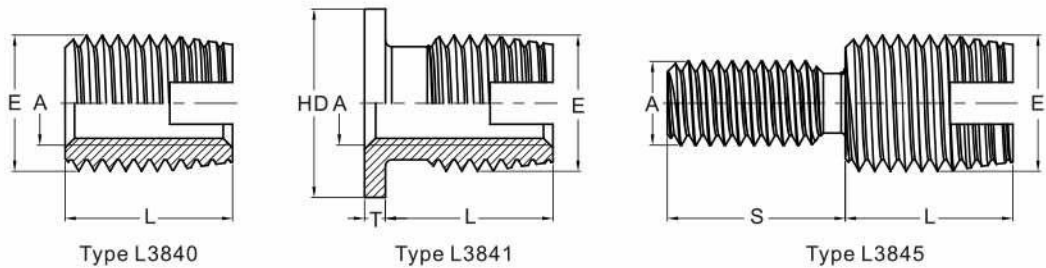
Features

- Self-tapping inserts series.
- Can be installed with a tap wrench or drill.
- Design for thermoplastic and thermosetting plastics.

特征

- 自攻埋植。
- 安装用丝锥扳手和钻床。
- 用于热塑性和热固性塑胶。

Technical Data



Drawing No.	A Internal thread	L Insert length	S Stud length (For L3845 only)												T Head height	HD Head diameter	E External thread	H ^{+0.1 0} Rec. hole size for thermoplastics	H ^{+0.1 0} Rec. hole size for Thermosetting
...001	M2.5	6.0	5	6	8	10	12	14	16	18	20	25	0.58	6.0	4.5	4.0-4.1	4.1-4.3		
...002	M3	6.0	5	6	8	10	12	14	16	18	20	25	0.58	6.5	5.0	4.5-4.6	4.6-4.8		
...003	M3.5	8.0	5	6	8	10	12	14	16	18	20	25	0.73	8.5	6.0	5.3-5.4	5.5-5.7		
...004	M4	8.0	5	6	8	10	12	14	16	18	20	25	0.89	8.0	6.5	5.8-5.9	6.0-6.2		
...005	M5	10.0	5	6	8	10	12	14	16	18	20	25	1.06	9.5	8.0	7.1-7.2	7.3-7.6		
...006	M6	14.0	5	6	8	10	12	14	16	18	20	25	1.32	12.0	10.0	8.6-8.8	9.0-9.4		
...007	M8	15.0	5	6	8	10	12	14	16	18	20	25	1.32	14.0	12.0	10.6-10.8	11.0-11.4		
...008	M10	18.0	5	6	8	10	12	14	16	18	20	25	1.57	16.0	14.0	12.6-12.8	13.0-13.4		
...009	M12	22.0	5	6	8	10	12	14	16	18	20	25	1.57	18.0	16.0	14.6-14.8	15.0-15.4		

Drawing No.	A Internal thread	L Insert length	S Stud length (For L3845 only)												T Head height	HD Head diameter	E External thread	H ^{+0.1 0} Rec. hole size for thermoplastics	H ^{+0.1 0} Rec. hole size for Thermosetting
...010	2-56	.236	3/16	1/4	5/16	3/8	7/16	1/2	5/8	3/4	7/8	1	.023	.236	.177	.157-.161	.161-.169		
...011	4-40	.236	3/16	1/4	5/16	3/8	7/16	1/2	5/8	3/4	7/8	1	.023	.236	.177	.157-.161	.161-.169		
...012	6-32	.315	3/16	1/4	5/16	3/8	7/16	1/2	5/8	3/4	7/8	1	.029	.295	.236	.209-.213	.217-.224		
...013	8-32	.315	3/16	1/4	5/16	3/8	7/16	1/2	5/8	3/4	7/8	1	.035	.312	.256	.228-.232	.236-.244		
...014	10-24	.394	3/16	1/4	5/16	3/8	7/16	1/2	5/8	3/4	7/8	1	.042	.374	.315	.283-.283	.287-.299		
...015	10-32	.394	3/16	1/4	5/16	3/8	7/16	1/2	5/8	3/4	7/8	1	.042	.374	.315	.280-.283	.287-.299		
...016	1/4-20	.551	3/16	1/4	5/16	3/8	7/16	1/2	5/8	3/4	7/8	1	.052	.472	.394	.339-.346	.354-.370		
...017	1/4-28	.551	3/16	1/4	5/16	3/8	7/16	1/2	5/8	3/4	7/8	1	.052	.472	.394	.339-.346	.354-.370		
...018	5/16-18	.591	3/16	1/4	5/16	3/8	7/16	1/2	5/8	3/4	7/8	1	.052	.551	.472	.417-.425	.433-.449		
...019	5/16-24	.591	3/16	1/4	5/16	3/8	7/16	1/2	5/8	3/4	7/8	1	.052	.551	.472	.417-.425	.433-.449		
...020	3/8-16	.709	3/16	1/4	5/16	3/8	7/16	1/2	5/8	3/4	7/8	1	.062	.630	.551	.496-.504	.512-.528		
...021	3/8-24	.709	3/16	1/4	5/16	3/8	7/16	1/2	5/8	3/4	7/8	1	.062	.630	.551	.496-.504	.512-.528		
...022	1/2	.886	3/16	1/4	5/16	3/8	7/16	1/2	5/8	3/4	7/8	1	.062	.709	.630	.575-.583	.591-.606		

L3850 / L3851



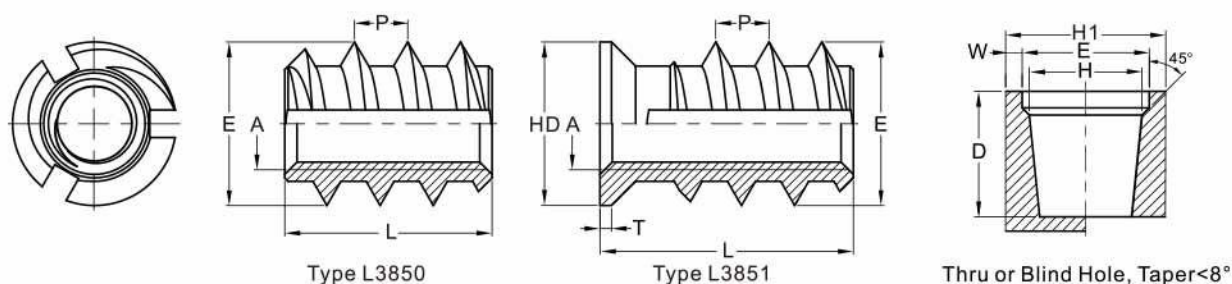
Features

- Self-tapping inserts series.
- Can be installed with a tap wrench or drill.
- Design for thermoplastic and thermosetting plastics.

特征

- 自攻埋植。
- 安装用丝锥扳手和钻床。
- 用于热塑性和热固性塑胶。

Technical Data



Drawing No.	A Internal thread	L Length ±0.125	E External thread Nom.	P Pitch Nom.	H Min. hole diameter	W Min. wall thickness	H1 Min. boss diameter	D Hole depth
L385001	M2.5	8.00	5.50	1.81	4.25-5.00	3.75	12.50	8.8
L385002	M3	8.00	5.50	1.81	4.25-5.00	3.75	12.50	8.8
L385003	M3.5	8.50	6.30	2.12	5.00-5.75	4.33	14.40	9.4
L385004	M4	9.00	7.10	2.31	5.70-6.50	4.90	16.30	9.9
L385005	M5	10.00	8.70	2.54	7.20-8.10	6.10	20.30	11.0
L385006	M6	12.00	10.00	2.82	8.40-9.30	7.00	23.30	13.2
L385007	M8	16.00	12.00	3.63	10.40-11.30	8.50	28.30	17.6

Drawing No.	A Internal thread	L Length ±0.125	E External thread Nom.	P Pitch Nom.	HD Head Nom.	T Head height Nom.	H Min. hole diameter	W Min. wall Thk.	H1 Min. boss diameter	D Hole depth
L385101	M3	9.00	5.50	1.81	5.50	0.50	4.25-5.00	3.75	12.50	9.9
L385102	M4	11.00	7.10	2.31	7.10	0.50	5.70-6.50	4.90	16.30	12.1
L385103	M5	12.00	8.70	2.54	8.70	0.50	7.20-8.10	6.10	20.30	13.2
L385104	M6	16.00	10.00	2.82	10.00	0.60	8.40-9.30	7.00	23.30	17.6
L385105	M8	20.00	12.00	3.63	12.00	0.70	10.4-11.3	8.50	28.30	22.0

Other sizes, special designs and materials on request.

Part number designation

Model code - A (Internal thread) x L (Length) - E (External thread) + Material + Finish

L3850-M2.5x8.0-E5.5B L3850 Insert, M2.5x8.0-E5.5, Brass C3604

Model code - A (Internal thread) x L (Length) - HD (Head diameter) + Material + Finish

L3851-M3x9.0-HD5.5B L3851 Insert with head, M3x9.0-HD5.5, Brass C3604



L3860

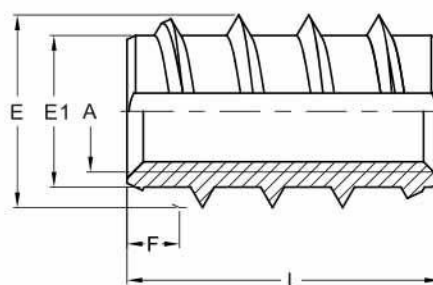
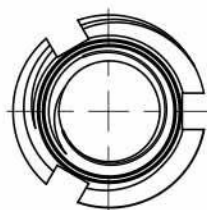
Features

- Self-tapping inserts provide easily installed, strong, permanent threads for wood, plasticboard, ABS, foamed plastics and other soft materials.

特征

- 自攻埋植，安装方便，用于木材，塑料板，ABS，发泡塑料等软质材料。

Technical Data



Drawing No. U.S.	Drawing No. Metric	A Internal thread U.S.	A Internal thread metric.	E External thread	L Length +.000/- .010	P Outside thread	E1 Thread diameter ±.005	F Chamfer	Starting hole size
L386001	L386009	4-40	M3.0X0.5	.218	.344	7/32-11	.166	.068	11/64
L386002	L386010	6-32	M3.5X0.6	.218	.344	7/32-11	.166	.068	11/64
L386003	L386011	8-32	M4.0X0.7	.250	.406	1/4-11	.197	.068	13/64
L386004		10-24		.296	.469	19/64-9	.231	.083	B(.238)
L386005	L386012	10-32	M5.0X0.8	.296	.469	19/64-9	.231	.083	B(.238)
L386006	L386013	250-20	M6.0X1.0	.375	.500	3/8-9	.310	.083	5/16
L386007	L386014	312-18	M8.0X1.25	.469	.500	15/32-9	.373	.083	3/8
L386008	L386015	375-16	M10.0X1.5	.562	.938	9/16-9	.464	.125	15/32

Other sizes, special designs and materials on request.

Recommended starting hole sizes: Tests should be conducted to determine the appropriate hole size for your specific application and base material.

Part number designation

Model code - A (Internal thread) x L (Length) - E (External thread) + Material + Finish

L3860-M3x8.74-E5.54B L3860 Insert,M3x8.74-E5.54,Brass C3604

L3860-M3x8.74-E5.54SBZ L3860 Insert,M3x8.74-E5.54,Steel 1215,Blue zinc plated

L3870 / L3874

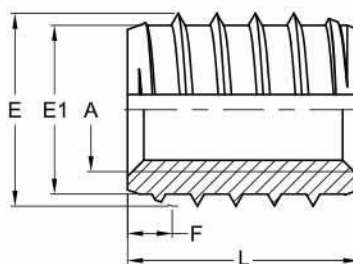
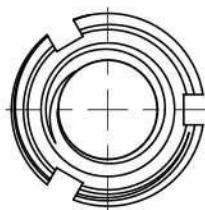
Features

- Self-tapping inserts provide strong threads for plastics, soft metals and wood.

特征

- 自攻埋植，用于塑胶塑，软金属和木材。

Technical Data



Drawing No. U.S.	Drawing No. Metric	A Internal thread U.S.	A Internal thread metric.	E External thread	L Length +.000/- .010	P Outside thread	E1 Thread dia. +.000/- .010	F Cha.	Starting hole size
L387001	L387008	2-56	M2.0X0.4	.141	.188	9/64-48	.122	.044	.124-.129
L387002	L387009	4-40	M3.0X0.5	.172	.234	11/64-40	.149	.074	.149-.156
L387003	L387010	6-32	M3.5X0.6	.218	.281	7/32-32	.189	.092	.190-.198
L387004	L387011	8-32	M4.0X0.7	.250	.328	1/4-32	.219	.092	.222-.230
L387005		10-24		.296	.375	19/64-24	.261	.102	.264-.270
L387006	L387012	10-32	M5.0X0.8	.296	.375	19/64-24	.261	.102	.264-.270
L387007	L387013	250-20	M6.0X1.0	.375	.484	3/8-20	.330	.130	.330-.343

Drawing No. U.S.	Drawing No. Metric	A Internal thread U.S.	A Internal thread metric.	E External thread	L Length +.000/- .010	P Outside thread	E1 Thread dia. +.000/- .010	F Cha.	Starting hole size
L387401	L387408	2-56	M2.0X0.4	.141	.141	9/64-48	.122	.035	.124-.129
L387402	L387409	4-40	M3.0X0.5	.172	.172	11/64-40	.149	.024	.149-.156
L387403	L387410	6-32	M3.5X0.6	.218	.218	7/32-32	.189	.054	.190-.198
L387404	L387411	8-32	M4.0X0.7	.250	.250	1/4-32	.219	.058	.222-.230
L387405		10-24		.296	.296	19/64-24	.261	.065	.264-.270
L387406	L387413	10-32	M5.0X0.8	.296	.296	19/64-24	.261	.065	.264-.270
L387407	L387414	1/4-20	M6.0X1.0	.375	.375	3/8-20	.330	.084	.330-.343

Other sizes, special designs and materials on request.

Recommended starting hole sizes: Tests should be conducted to determine the appropriate hole size for your specific application and base material.

Part number designation

Model code - A (Internal thread) x L (Length) - E (External thread) + Material + Finish

L3870-M2x4.78-E3.58B L3870 Insert, M2x4.78-E3.58, Brass C3604

L3882 / L3883



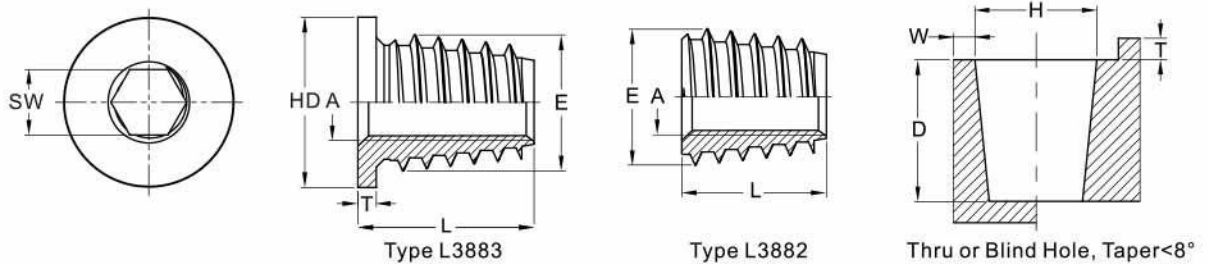
Features

- Suitable for thermoplastic parts.
- High-strength and torsion-proof threads
- Special version available with external left-hand thread for improved reverse locking.

特征

- 适用于热塑性塑胶
- 高强度和扭转型螺纹
- 提供外部左旋螺纹特殊版本提高反向锁定。

Technical Data



Drawing No. Brass	A Internal thread	H ^{+0.1} ₀ Hole diameter	L Length	E External thread	D Min. hole depth	W Min. wall thickness	SW Hexagonal socket
L388201	M4	7.10	8.00	7.74	9.00	5.00	3.20
L388202	M5	8.20	9.00	9.15	10.00	5.50	4.00
L388203	M6	9.50	11.00	10.70	12.00	6.00	5.00
L388204	M8	11.90	14.00	13.69	15.00	7.05	6.50

Drawing No. Brass, with flange	A Internal thread	H ^{+0.1} ₀ Hole diameter	L Length	T Head height	E External thread	HD Head diameter	H Min. hole depth	W Min. wall Thk.	SW Hexagonal socket
L388301	M4	7.20	10.40	1.4	7.68	10.00	9.00	5.00	3.20
L388302	M5	8.30	11.40	1.4	9.12	11.50	10.00	5.50	4.00
L388303	M6	9.60	13.40	1.4	10.67	13.00	12.00	6.00	5.00
L388304	M8	12.20	17.40	1.4	13.76	18.00	16.00	7.00	6.50

Other sizes, special designs and materials on request.

Part number designation

Model code - A (Internal thread) x L (Length) - E (External thread) + Material + Finish

L3882-M4x8.0-E7.74B L3882 Insert, M4x8.0-E7.74, Brass C3604

Model code - A (Internal thread) x L (Length) - HD (Head diameter) + Material + Finish

L3883-M4x10.4-HD10.0B L3883 Insert with head, M4x10.4-HD10.0, Brass C3604

L389

Features

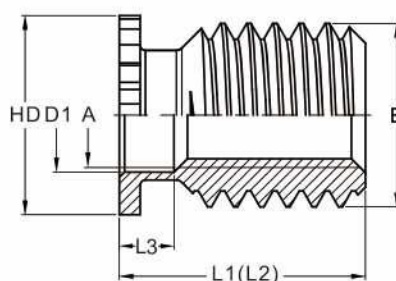
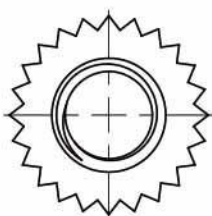
- Safety flange.
- Open version/through hole.
- Easy installation, Thread repair.

特征

- 带防松法兰设计。
- 通孔螺纹。
- 安装简单，螺纹修复。



Technical Data



Material: Steel, galvanic zink plated, colorless chromated

Drawing No.	A Internal thread	E External thread	P Pitch	D1 Hole size	L1 Length	L2 Length	L3 Depth	HD Head diameter	Knurl DIN 82
L389001	M4	M7	1	4.35	8	8.6	3.3	7.6	1.2
L389002	M5	M8	1.25	5.35	10	10.8	3.5	8.8	1.2
L389003	M6	M10	1.5	6.8	10	11	2.7	11	1.2
L389004	M6	M10	1.5	6.8	12	13	2.7	11	1.2
L389005	M8	M12	1.5	8.5	15	16	3.3	13	1.6
L389006	M10	M14	1.5	10.5	18	19	3.3	15	1.6
L389007	M12X1.5	M16	1.5	12.5	21	22	3.5	17	1.6
L389008	M12	M16	1.5	12.5	21	22	3.5	17	1.6
L389009	M14X1.5	M20	1.5	15.5	24	25	3.6	21	1.6
L389010	M14	M20	1.5	15.5	24	25	3.6	21	1.6
L389011	M16X1.5	M22	1.5	17.5	26	27	3.6	23	1.6
L389012	M16	M22	1.5	17.5	26	27	3.6	23	1.6

Other sizes, special designs and materials on request.

L1, L3= Length when assembled; L2 = Length in delivery conditions.

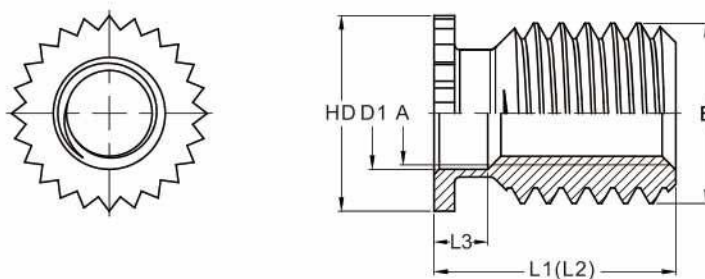
Part number designation

Model code - A (Internal thread) x P(Pitch) x L2 (Length) - E(External thread) - HD (Head diameter) + Material + Finish

L389-M4x8.6-M7-HD7.6SWZ

L389 Insert, L389-M4x8.6-M7-HD7.6S, Steel 1215, White zinc plated

Technical Data



Material: Stainless steel A1

Drawing No.	A Internal thread	E External thread	P Pitch	D1 Hole size	L1 Length	L2 Length	L3 Depth	HD Head diameter	Knurl DIN 82
L389013	M4	M7	1	4.35	8	8.6	3.3	7.6	1.2
L389014	M5	M8	1.25	5.35	10	10.8	3.5	8.8	1.2
L389015	M6	M10	1.5	6.8	12	12.8	3.5	10.8	1.2
L389016	M8	M12	1.5	8.5	15	16	4.5	12.9	1.6
L389017	M10	M14	1.5	10.7	18	19	4.6	15	1.6
L389018	M12	M16	1.5	12.5	21	22	4.5	17	1.6
L389019	M12X1.5	M16	1.5	12.5	21	22	4.5	17	1.6
L389020	M14	M20	1.5	15.5	24	25	4.8	21	1.6
L389021	M16	M22	1.5	17.5	26	27	4.8	23	1.6

Other sizes, special designs and materials on request.

L1, L3 = Length when assembled; L2 = Length in delivery conditions.

Part number designation

Model code - A (Internal thread) x P(Pitch) x L2 (Length) - E(External thread) - HD (Head diameter) + Material + Finish

L389-M4x8.6-M7-HD7.6SS

L389 Insert,M4x8.6-M7-HD7.6,SUS303

L390



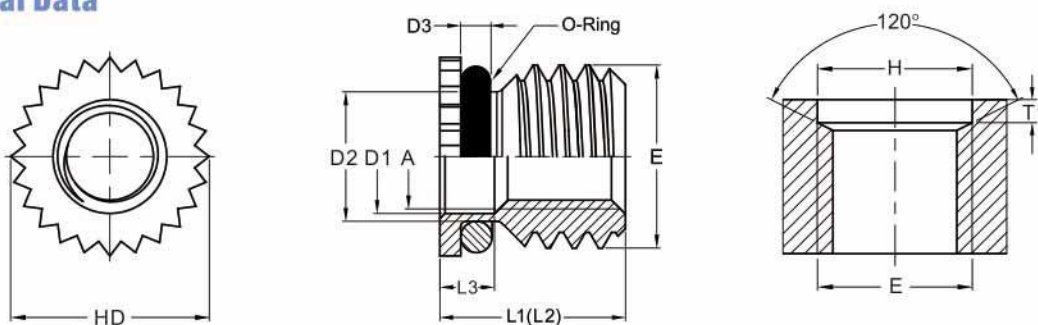
Features

- Safety flange.
- Open version/through hole.
- With sealing ring.
- Gas and liquid-tight.

特征

- 带防松法兰设计。
- 通孔螺纹。
- 带密封圈
- 密封气体和液体。

Technical Data



Material: Steel, galvanic zink plated, colorless chromated

Drawing No.	A	E	D1	L1	L2	L3	HD	Knurl DIN 82	D2XD3	Countersink			
										H	Tol.	T1	+Tol.
L390001	M10X1	M14X1.5	10.5	10	11	3.2	15	1.6	10X1.5	14	± 0.10	2.5	0.3
L390002	M12X1.5	M16X1.5	12.5	12	13	3.5	17	1.6	12X1.5	16	± 0.10	2.5	0.3
L390003	M14X1.5	M20X1.5	15.5	12	13	3.6	21	1.6	14X2.0	20	+0.15/-0.10	3.0	0.3
L390004	M16X1.5	M22X1.5	17.5	12	13	3.6	23	1.6	16X2.0	22	+0.15/-0.10	3.0	0.3
L390005	M18X1.5	M24X1.5	19.5	12	13	3.6	25	1.6	18X2.0	24	+0.15/-0.10	3.0	0.3
L390006	M20X1.5	M26X1.5	21.5	14	15	3.6	27	1.6	20X2.0	26	+0.15/-0.10	3.0	0.3
L390007	M22X1.5	M28X1.5	23.5	14	15	3.6	29	1.6	22X2.0	28	+0.15/-0.10	3.0	0.3
L390008	M24X1.5	M30X1.5	25.5	14	15	3.6	31	1.6	24X2.0	30	+0.15/-0.10	3.0	0.3
L390009	M26X1.5	M32X1.5	27.5	16	17	3.6	33	1.6	26X2.0	32	+0.15/-0.10	3.0	0.3

Other sizes, special designs and materials on request.

L1, L3 = Length when assembled; L2 = Length in delivery conditions.

Part number designation

Model code - A (Internal thread) x P (Pitch) x L2 (Length) - External thread x P (Pitch) - HD (Head diameter) + Material + Finish
L390-M10xP1.0x11.0-M14xP1.5-HD15.0SWZ L390 Insert, M10xP1.0x11.0-M14xP1.5-HD15.0, Steel 1215, White zinc plated

L391

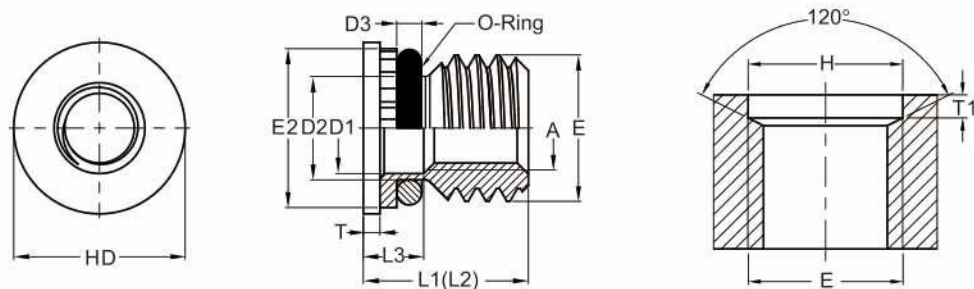
Features

- Safety flange.
- Open version/through hole.
- Easy installation, Thread repair.

特征

- 带防松法兰设计。
- 通孔螺纹。
- 安装简单，螺纹修复。

Technical Data



Material: Steel, galvanic zink plated, colorless chromated

Drawing No.	A	E	D1	HD	L1	L2	L3	T	E2	Knurl DIN 82	D2XD3	Countersink			
												H	Tol.	T1	+Tol.
L391001	M10X1	M14X1.5	10.5	16	11.0	12.0	4.0	0.8	15	1.6	10X1.5	14	± 0.10	2.5	0.3
L391002	M12X1.5	M16X1.5	12.5	18	14.5	15.5	4.4	0.8	17	1.6	12X1.5	16	± 0.10	2.5	0.3
L391003	M14X1.5	M20X1.5	15.5	22	14.5	15.5	4.5	1.0	21	1.6	14X2.0	20	+0.15/-0.10	3.0	0.3
L391004	M16X1.5	M22X1.5	17.5	24	14.5	15.5	4.5	1.0	23	1.6	16X2.0	22	+0.15/-0.10	3.0	0.3
L391005	M18X1.5	M24X1.5	19.5	26	14.5	15.5	4.7	1.2	25	1.6	18X2.0	24	+0.15/-0.10	3.0	0.3
L391006	M20X1.5	M26X1.5	21.5	28	15.5	16.5	4.7	1.2	27	1.6	20X2.0	26	+0.15/-0.10	3.0	0.3
L391007	M22X1.5	M28X1.5	23.5	30	15.5	16.5	4.7	1.2	29	1.6	22X2.0	28	+0.15/-0.10	3.0	0.3
L391008	M24X1.5	M30X1.5	25.5	32	15.5	16.5	4.7	1.2	31	1.6	24X2.0	30	+0.15/-0.10	3.0	0.3
L391009	M26X1.5	M32X1.5	27.5	34	17.5	18.5	4.7	1.2	33	1.6	26X2.0	32	+0.15/-0.10	3.0	0.3
L391010	M30X1.5	M36X1.5	31.5	38	17.5	18.5	4.7	1.2	37	1.6	30X2.0	36	+0.15/-0.10	3.0	0.3

Material: Stainless steel A1

Drawing No.	A	E	D1	HD	L1	L2	L3	T	E2	Knurl DIN 82	D2XD3	Countersink			
												H	Tol.	T1	+Tol.
L391011	M12X1.5	M16X1.5	12.5	18	14.5	15.5	4.8	0.8	18	1.6	12X1.5	16	± 0.10	2.5	0.3
L391012	M14X1.5	M20X1.5	15.5	22	14.5	15.5	5.5	0.8	22	1.6	14X2.0	20	+0.15/-0.10	3	0.3

Other sizes, special designs and materials on request.

L1, L3 = Length when assembled; L2 = Length in delivery conditions.

Part number designation

Model code - A (Internal thread) x P (Pitch) x L2 (Length) - External thread x P (Pitch) - HD (Head diameter) + Material + Finish
 L391-M10xP1.0x12.0-M14xP1.5-HD16.0SWZ L391 Insert, M10xP1.0x12.0-M14xP1.5-HD16.0, Steel 1215, White zinc plated
 L391-M12xP1.5x15.5-M16xP1.5-HD18.0SS L391 Insert, M12xP1.5x15.5-M16xP1.5-HD18.0, SUS303

L392



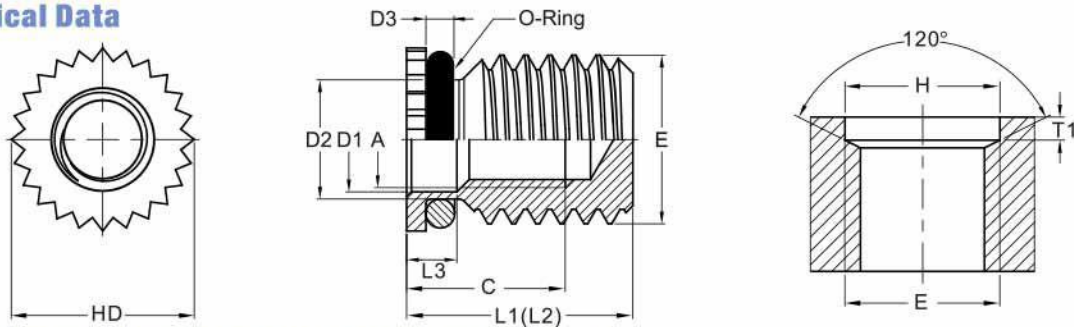
Features

- Safety flange
- Closed version/blind hole
- With sealing ring
- Gas and liquid-tight

特征

- 带防松法兰设计。
- 盲孔螺纹。
- 带密封圈。
- 密封气体和液体。

Technical Data



Material: Steel, galvanic zink plated, colorless chromated

Drawing No.	A	E	D1	L1	L2	L3	C	HD	Knurl DIN 82	D2XD3	Countersink			
											H	Tol.	T1	+Tol.
L392001	M5	M8	5.4	12	13	2.7	8.0	9	1.2	5X1.0	8	± 0.10	2.0	0.3
L392002	M6	M10	6.8	15	16	2.7	10.5	11	1.2	6X1.5	10	± 0.10	2.5	0.3
L392003	M8	M12X1.5	8.5	18	19	3.3	12.0	13	1.6	8X1.5	12	± 0.10	2.5	0.3
L392004	M10	M14X1.5	10.5	21	22	3.3	13.9	15	1.6	10X1.5	14	± 0.10	2.5	0.3
L392005	M12	M16X1.5	12.5	24	25	3.5	15.9	17	1.6	12X1.5	16	± 0.10	2.5	0.3
L392006	M14	M20X1.5	15.5	26	27	3.6	16.9	21	1.6	14X2.0	20	+0.15/-0.10	3.0	0.3
L392007	M16	M22X1.5	17.5	31	32	3.6	20.9	23	1.6	16X2.0	22	+0.15/-0.10	3.0	0.3

Material: Stainless steel A1

Drawing No.	A	E	D1	L1	L2	L3	C	HD	Knurl DIN 82	D2XD3	Countersink			
											H	Tol.	T1	+Tol.
L392008	M4	M7	4.35	12	13	3.3	8.2	7.6	1.2	4X1.0	7	± 0.10	1.8	0.3
L392009	M5	M8	5.35	12	13	3.5	8	8.8	1.2	5X1.0	8	± 0.10	2.0	0.3
L392010	M6	M10	6.8	15	16	3.5	10.5	10.8	1.2	6X1.5	10	± 0.10	2.5	0.3
L392011	M8	M12X1.5	8.5	18	19	4.5	12	12.9	1.6	8X1.5	12	± 0.10	2.5	0.3
L392012	M10	M14X1.5	10.7	21	22	4.6	13.9	15	1.6	10X1.5	14	± 0.10	2.5	0.3

Other sizes, special designs and materials on request.

L1, L3 = Length when assembled; L2 = Length in delivery conditions.

Part number designation

Model code - A (Internal thread) x L2 (Length) - External thread x P(Pitch) - HD (Head diameter) + Material + Finish

L392-M5x13.0-M8-HD9.0SWZ

L392 Insert, M5x13.0-M8-HD9.0, Steel 1215, White zinc plated

L392-M8x19.0-M12xP1.5-HD12.9SS

L392 Insert, M8x19.0-M12xP1.5-HD12.9, SUS303

L393



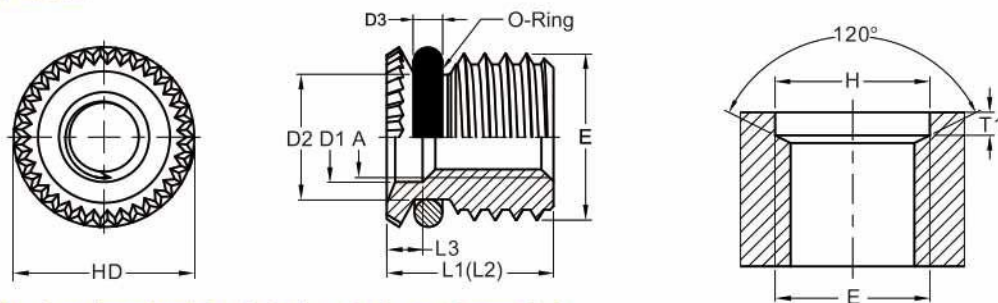
Features

- High power.
- Safety flange.
- Open version/through hole.
- With or without sealing ring.

特征

- 高强度。
- 带防松法兰设计。
- 通孔螺纹。
- 带或不带密封圈。

Technical Data



Material: Steel, galvanic zink plated, colorless chromated

Drawing No.	A	E	D1	L1	L2	L3	HD	Knurl DIN 82	D2XD3	Countersink			
										H	Tol.	T1	+Tol.
L393001	M5	M10	5.5	10	11.0	1.5	11	1.2	7X1.5	10	± 0.10	2.5	0.3
L393002	M6	M12X1.5	6.5	12	13.5	1.6	13	1.2	8X2.0	12	± 0.10	3.0	0.3
L393003	M8	M14X1.5	8.5	15	16.5	1.8	15	1.6	10X2.0	14	± 0.10	3.5	0.3
L393004	M10	M16X1.5	10.5	18	20.0	2.0	17	1.6	12X2.0	16	± 0.10	4.0	0.3
L393005	M12	M20X1.5	13.0	21	23.0	2.5	21	1.6	15X2.5	20	+0.15/-0.10	4.5	0.4
L393006	M14	M22X1.5	15.0	24	26.0	2.5	23	1.6	17X2.5	22	+0.15/-0.10	4.5	0.4
L393007	M16	M24X2.0	17.0	26	28.0	3.0	25	1.6	19X2.5	24	+0.18/-0.10	4.5	0.4

Material: Stainless steel A1

Drawing No.	A	E	D1	L1	L2	L3	HD	Knurl DIN 82	D2XD3	Countersink			
										H	Tol.	T1	+Tol.
L393008	M6	M12X1.5	6.5	12	13.5	4	13	1.2	8X2	12	± 0.10	3.0	0.3
L393009	M8	M14X1.5	8.5	15	16.5	4.2	15	1.6	10X2	14	± 0.10	3.5	0.3
L393010	M10	M16X1.5	10.5	18	20	4.2	17	1.6	12X2	16	± 0.10	4.0	0.3
L393011	M12	M20X1.5	13	21	23	5	21.2	1.6	15X2.5	20	+0.15/-0.10	4.5	0.3
L393012	M14	M22X1.5	15	24	26	5	23	1.6	17X2.5	22	+0.15/-0.10	4.5	0.3
L393013	M16	M24X2.0	17	26	28	5.5	25.2	1.6	19X2.5	24	+0.15/-0.10	4.5	0.3
L393014	M16X1	M24X2.0	17	26	28	5.5	25.2	1.6	19X2.5	24	+0.18/-0.10	4.5	0.3

Other sizes, special designs and materials on request.

L1, L3 = Length when assembled; L2 = Length in delivery conditions.

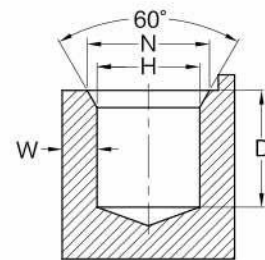
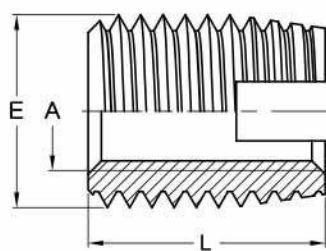
Part number designation

Model code - A (Internal thread) x L2 (Length) - External thread x P(Pitch) - HD (Head diameter) + Material + Finish

L393-M5x11.0-M10-HD11.0SWZ L393 Insert,M5x11.0-M10-HD11.0,Steel 1215,White zinc plated

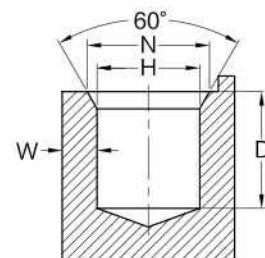
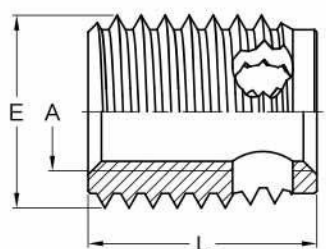
L393-M6x13.5-M12xP1.25-HD13.0SS L393 Insert,M6x13.5-M12xP1.25-HD13.0,SUS303

Installation recommendation 安装孔参数推荐表



Type 302

A Internal thread Metric	A Internal thread Inch	L Length	E External thread	H Rec. borehole diameter			D Minimum borehole depth for blind holes
				Plastic	Aluminum	Cast iron	
M2.5X0.45	2-56	6	M4.5X0.5	4.0-4.1	4.1-4.2	4.2-4.3	8
M3X0.5	4-40	6	M5X0.5	4.5-4.6	4.6-4.7	4.7-4.8	8
M3.5X0.6	6-32	8	M6X0.75	5.3-5.4	5.5-5.6	5.6-5.7	10
M4X0.7	8-32	8	M6.5X0.75	5.8-5.9	6.0-6.1	6.1-6.2	10
M5X0.8	10-24	10	M8X1.0	7.1-7.2	7.3-7.5	7.5-7.6	13
M6X1.0	12-24	12	M9X1.0	8.1-8.2	8.3-8.5	8.5-8.6	15
M6X1.0	1/4-20	14	M10X1.5	9.0-9.2	9.2-9.3	9.3-9.4	17
M8X1.25	5/16-18	15	M12X1.5	10.6-10.8	11.0-11.2	11.2-11.4	18
M10X1.5	3/8-16	18	M14X1.5	12.6-12.8	13.0-13.3	13.2-13.4	22
M12X1.75	7/16-14	22	M16X1.5	14.6-14.8	15.0-15.3	15.2-15.4	26
M14X2.0	1/2-13	24	M18X1.5	16.6-16.8	17.0-17.3	17.2-17.5	28
M16X2.0	5/8-11	22	M20X1.5	18.6-18.8	19.0-19.3	19.2-19.5	27
M18X2.5	3/4-10	24	M22X1.5	20.6-20.8	21.0-21.3	21.2-21.5	29
M20X2.5	7/8-9	27	M26X1.5	24.6-24.8	25.0-25.3	25.2-25.5	32



Type 307/308/337/338

A Internal thread Metric	A Internal thread Inch	L Length		E External thread	H Rec. borehole diameter		D Min. hole depth for blind holes	
		L307 L337	L308 L338		Plastic	Aluminum	L307 L337	L308 L338
M3X0.5	4-40	4	6	M5X0.6	4.6-4.7	4.7-4.8	6	8
M4X0.7	8-32	6	8	M6.5X0.8	6.0-6.1	6.1-6.2	8	10
M5X0.8	10-24	7	10	M8X1.0	7.4-7.5	7.6-7.7	9	13
M6X1.0	1/4-20	8	12	M10X1.25	9.3-9.4	9.5-9.6	10	15
M8X1.25	5/16-18	9	14	M12X1.5	11.1-11.3	11.3-11.5	11	17
M10X1.5	3/8-16	10	18	M14X1.5	13.1-13.3	13.3-13.5	13	22
M12X1.75	7/16-14	12	22	M16X1.75	15.0-15.2	15.3-15.5	15	26
M14X2.0	1/2-13	14	24	M18X2.0	17.0-17.2	17.3-17.5	17	28
M16X2.0	5/8-11	14	24	M20X2.0	19.0-19.2	19.3-19.5	17	28

Guideline values for countersink: $N=0.06$ to $0.08 \times E + E$

Guideline values for light alloys: $W=0.2$ to $0.6 \times E$

Guideline values for cast iron: $W=0.3$ to $0.5 \times E$

E=External thread[mm]

Other dimensions and specials on request.

Emergency installation using screw and nut

临时用六角螺栓螺母安装

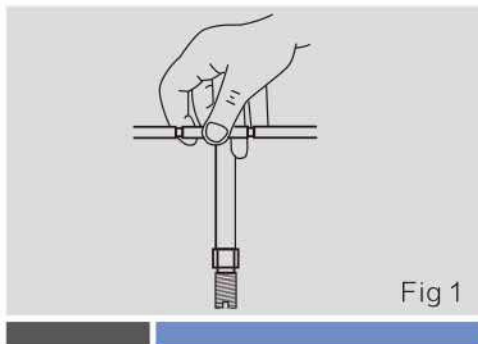
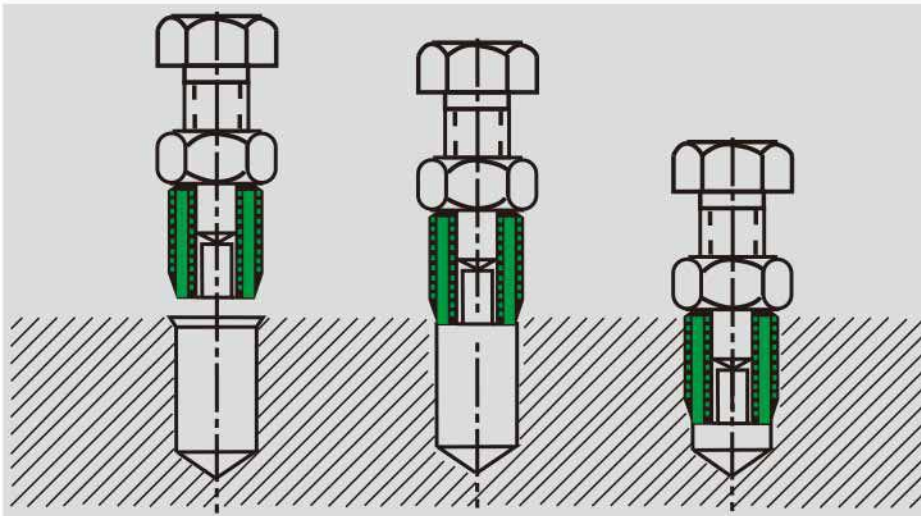


Fig 1

Manual insertion process / 手动工具安装

Step 1: Drill or mold a borehole of recommended or/and adjusted diameter and length (better countersink the borehole), fit the self-tapping insert onto the hand tool with the cutting hole/slot downwards, the tip of the hand tool should not exceed the hole top tip or slot upper edge (Fig 1).

步骤一：钻孔或者成型孔，孔径按照推荐并调整试验后的尺寸。将自攻螺套旋入手动安装工具，切槽或者切孔朝下，工具的尖端不要超过孔的上方尖点或者切槽的上边（如图1）。

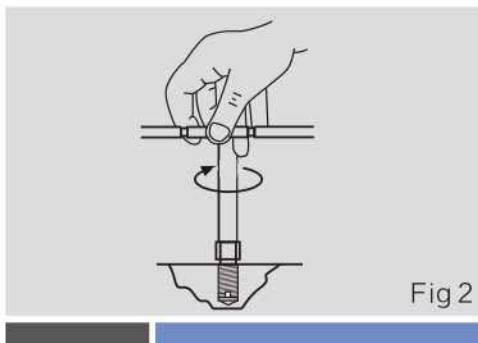


Fig 2

Step 2: Put the insert vertically (do not tilt) into the hole by turning the tool handle (Fig 2). At the start of tapping (1~2 pitches), check to see if there is any tilt, if yes, stop turning and re-align the tool. Do not reverse the tool when tapping is in progress.

步骤二：将螺套垂直旋入孔中。在初始旋入1~2个牙距的时候要确认是否偏斜，有的话即刻退出并重新对齐。注意不要自攻过程中反转安装工具。

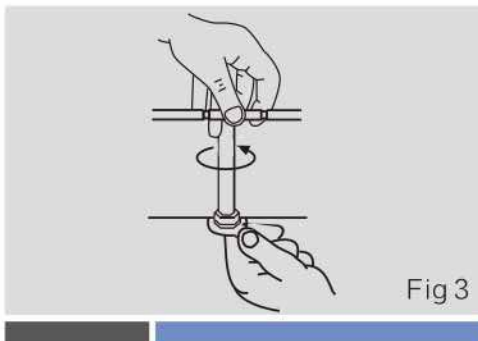


Fig 3

Step 3: When the insert has arrived at a predetermined depth (insert top 0.2mm lower than workpiece surface), tighten the hexagon part of the tool with a wrench, and then turn the hand counterclockwise to release the tool.

步骤三：当自攻螺套到达预计深度（螺套上端较工作表面沉下去0.2mm）后，用六角扳手顶住下方的六角螺母，逆时针方向转动以退出安装工具。

Other Products/其他类产品

塑胶专用螺母 Thread Inserts for Plastic Parts



螺套系列 Threaded Inserts



面板紧固件 Fasteners for sheet Metal



PCB端子 PCB Terminals



球头柱塞系列 Plungers



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地址：中国广东省深圳市龙华区昌永路和平工业园金星大厦B座13C

Jinxing Building 13C, Heping Industrial Zone, Changyong Road,
Longhua, Shenzhen, Guangdong, China.

Tel: +86-755-2900 2800 E-mail: sales@in-sail.com

Fax: +86-755-2900 2700 Website: <http://www.in-sail.com>

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