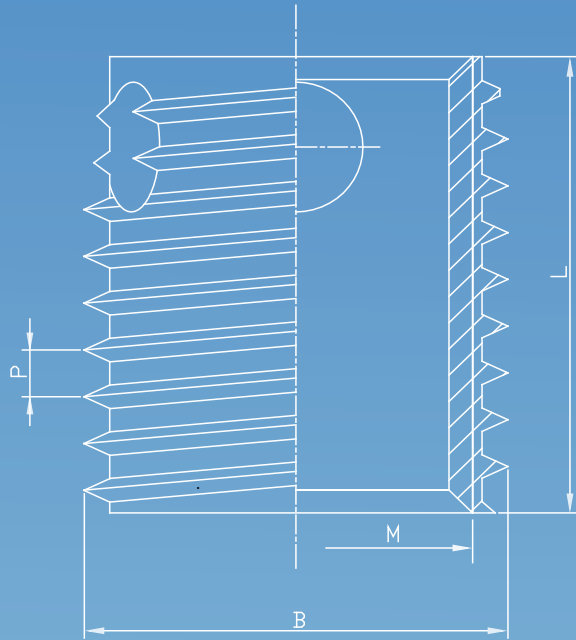


GEMTEK®



GNSAT



自攻螺套 *Threaded Inserts*

GNSAT系列自攻螺套



GNSAT自攻螺套是同时具有内外螺纹并带有切削槽或切削孔的紧固件,广泛应用于强化软质材料工件(铜、铝、塑胶、硬质木材、其他轻质合金等)之间的连接。

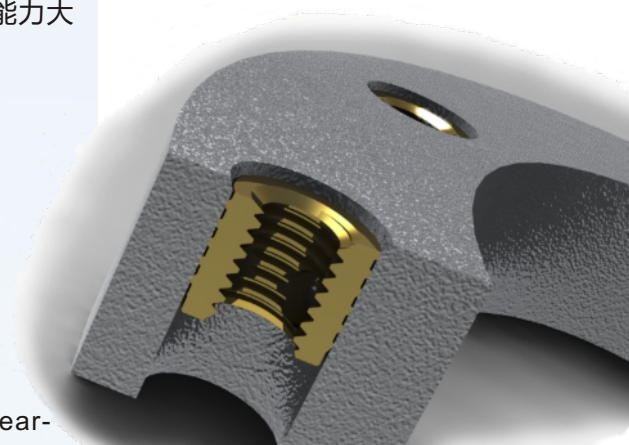
GNSAT series inserts are self-tapping threaded fasteners with external and internal threads, as well as cutting slots or cutting bores performing the self-tapping on workpieces made of soft materials such as brass, aluminum, plastic, hardwood and other light alloys.

GNSAT螺套连接的优点:

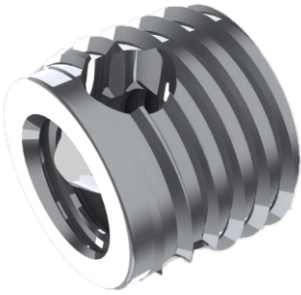
- ◆ 大大提高软质材料如铝, 铜等连接的强度, 使之抗拉拔能力大大提高, 寿命延长, 耐磨性更好, 而且耐反复拆装。
- ◆ 可用于内螺纹的修复, 保护昂贵的铸件或成型注塑件。
- ◆ 安装方便, 成本低廉。手动和自动均可轻松安装。
- ◆ 简化基材的设计和加工, 无需加工额外的螺纹孔。
- ◆ 内螺纹采用通用标准螺纹, 方便选用安装螺丝。
- ◆ 可提供多个系列产品, 适应不同工况。

Advantages of GNSAT:

- ◆ Provide high tensile strength, long service life, high wear-resistance and reusability on workpiece made of soft material such as Al, brass and etc..
- ◆ Effective and economical way to repair the tripping and damaged thread to protect the castings and moldings.
- ◆ Easy to install and suitable for both manual and automatic installation.
- ◆ Simplify casting and molding design and processing, no additional internal threads needed.
- ◆ Standard internal thread, easy to select corresponding screws.
- ◆ Available in types to satisfy various applications.

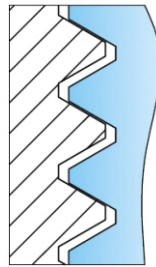


技术特点 Technical Features



外螺纹上的自攻螺套与工件基材紧密结合,拥有更大的接触面积,大大提高了连接强度。

External self-tapping thread flanges make contact area bigger than normal thread, which enable higher strength.



点接触
point contact
一般螺纹



面接触
surface contact
GNSAT外螺纹

当用于轻质合金时,抗拉拔能力超过配合的8.8级螺栓的屈服强度(参见图1)。

When used in light alloys, for example, a degree of pull-out is achieved which far exceeds the yield strength of a mating 8.8 screw (ref. chart1).

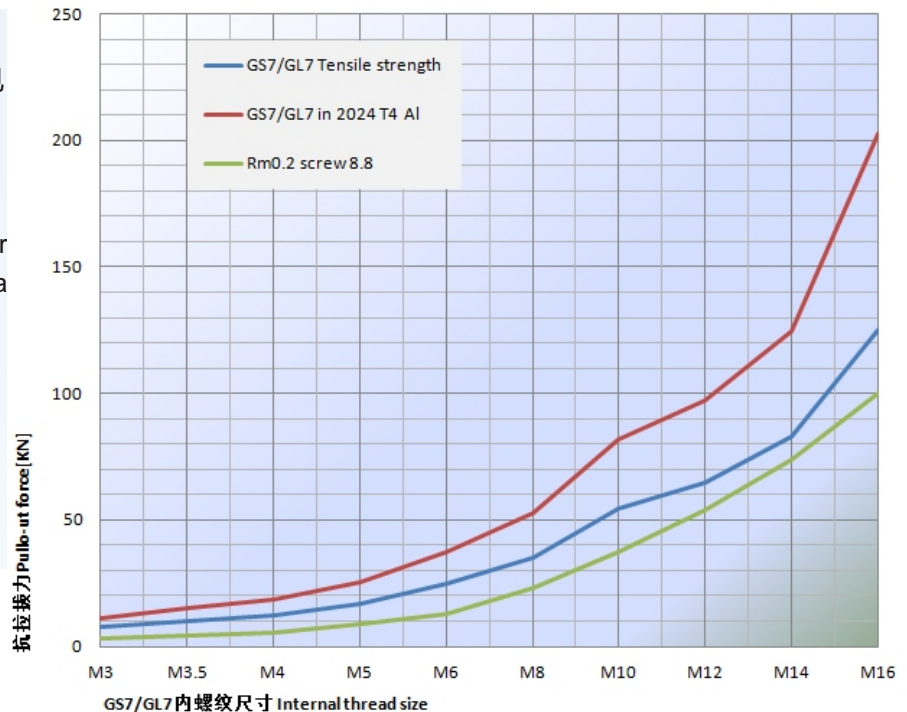
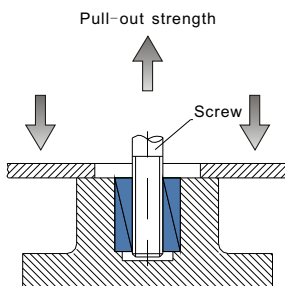


图1: GS7/GL7系列抗拉拔力
Chart1: GS7/GL7 series pull-out resistance force



抗拉试验示意图

技术参数 *Technical Performance*

抗拉拔强度 *Pull-out strength*

将安装好的螺套从基材中拔出所需要的轴向拉力。使用拉力试验机测试。

测试条件：

- ◆ 14.9级螺栓
- ◆ 工件

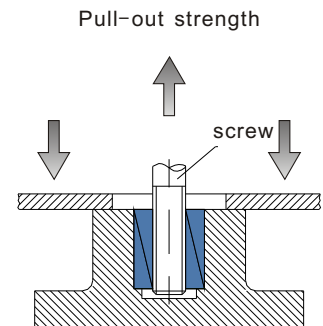
参考数据见对应产品表。

The axial force required to pull the insert out of the base material. This test is performed using a qualified tensile testing machine.

Test Condition:

- ◆ 14.9 grade bolt
- ◆ work piece

Ref. the corresponding product charts for data.



过扭扭矩 *overtorque*

安装完成后，使螺套继续旋转直到螺纹破坏所需要的最大扭矩。

使用校验好的扭力扳手测试。

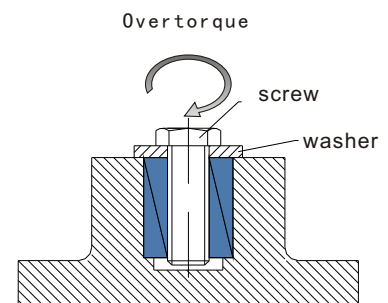
测试条件：

- ◆ 14.9级螺栓
- ◆ 加硬垫片
- ◆ 工件

The rotational torque required to rotate the insert in the base material. A calibrated torque wrench could be used for this test.

Test condition:

- ◆ 14.9 grade bolt
- ◆ Harden plain washer
- ◆ Work piece

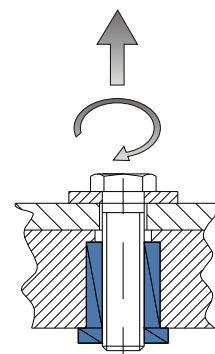


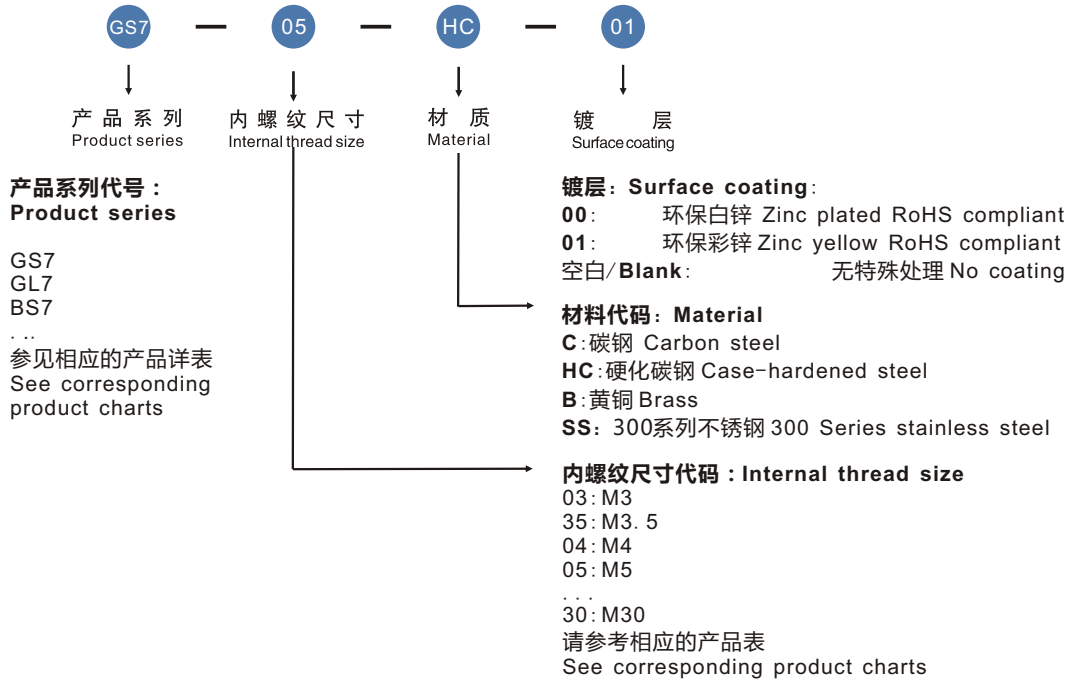
反向抗拉抗扭 *Reverse Tensile and overtorque*

对于有轴向重载荷的应用，螺套安装后可进行如图所示的试验。

This is recommended for high tensile load applications. Appropriate consideration has to be given to friction between the screw head and mating part.

Rotational & Tensile Applied opposite headed end (Pull-Through)



料号规则 *Part Number Designation*

例如：料号GS705HC01表示产品系列为GS7，内螺纹尺寸为M5，材质为碳钢硬化处理，表面镀环保黄锌的产品。

Exp. : Self-tapping thread insert of series GS7 with internal thread M5 made of case-hardened steel, zinc yellow RoHS compliant: *GS705HC01*

以上产品为GEMTEK公司标准产品。非标准产品请咨询我们的技术支持人员。

For non-standard products please contact GEMTEK technical engineers.

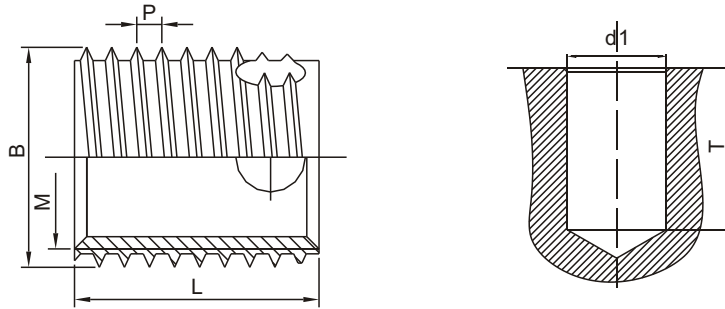


GS7/GL7系列

切削孔型自攻螺套适用于难切削的材料,有更尖更浅的外螺纹, 根据长度不同分成两个系列。

GS7/GL7 Series

Because of the sharper and lower external thread, this self-tapping threaded inserts with cutting holes are used in difficult-cutting materials.



料号 Part No.	内螺纹尺寸 Internal thread size M	外螺纹尺寸 External thread size B P		长度 Length L	拔出力 Pull-out resistance N(2AlSi12 Die cast)(*)	拔出力 Pull-out resistance N(2024 T4 AL)(*)	安装孔的直径 Assembly hole diameter (Rm=tensile strength, HB=brinell hardness) d1			盲孔深度 Minimum assembly hole depth min T1
		B	P				Rm<300 HB<150	300<Rm<350 150<HB<200	Rm>350 HB>200	
GS703... GL703...	M3	5	0.6	4.1 6.1	7500	11000	4.6+0.1	4.7	4.7+0.1	6 8
GS735... GL735...	M3.5	6	0.8	5.1 8.1	10000	15000	5.5+0.1	5.6	5.6+0.1	7 10
GS704... GL704...	M4	6.5	0.8	6.1 8.1	12500	18700	6.0+0.1	6.1	6.1+0.1	8 10
GS705... GL705...	M5	8	1	7.1 10.1	17000	25500	7.4+0.1	7.5+0.1	7.6+0.1	9 13
GS706... GL706...	M6	10	1.25	8.1 12.1	25000	37500	9.3+0.1	9.4+0.1	9.5+0.1	10 15
GS708... GL708...	M8	12	1.5	9.1 14.1	35000	52500	11.1+0.1	11.2+0.1	11.3+0.2	11 17
GS710... GL710...	M10	14	1.5	10.1 18.1	54500	81750	13.1+0.1	13.2+0.1	13.3+0.2	13 22
GS712... GL712...	M12	16	1.75	12.1 22.1	65000	97500	15.0+0.1	15.1+0.1	15.2+0.2	15 26
GS714... GL714...	M14	18	2	14.1 24.1	83000	124500	17.0+0.1	17.1+0.1	17.2+0.2	17 28
GS716... GL716...	M16	20	2	14.1 24.1	125000	202500	19.0+0.1	19.1+0.1	19.2+0.2	17 28

*拔出力测试值仅适用于GL7系列产品,材质为Y15Pb硬化碳钢。
Pull out resistance are only for GL7 series made of Y15Pb.

设计公差: 符合ISO2768-m

螺纹标准: 内螺纹参考ISO-6H, 外螺纹为特殊设计的自攻牙螺纹。

供货材料代码:

C: 碳钢

HC: 硬化碳钢

B: 黄铜

SS: 300系列不锈钢

订购编号规则请参考第4页。

Tolerance: ISO2768-m

Thread: internal thread as per ISO-6H, external thread is special designed.

Material code:

C: Carbon steel

HC: Case-hardened steel

B: Brass

SS: 300 series stainless steel

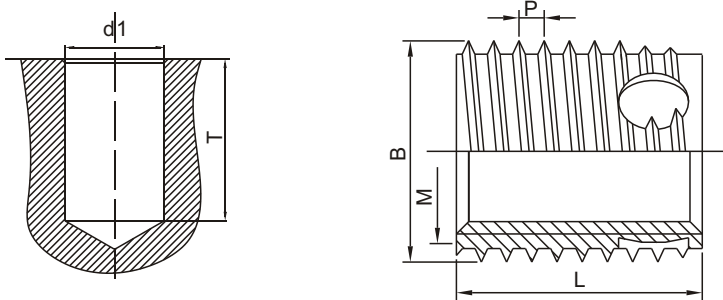
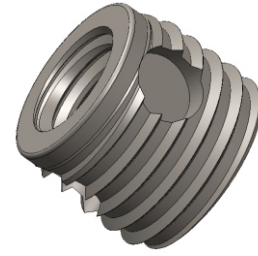
See page 4 for full part number designation.

BS7/BL7系列

盲孔型切削自攻螺套适用于不能有碎屑的应用。自攻时产生的碎屑能够自动存储在盲孔中，不会影响产品安装。

BS7/BL7 Series

The self-tapping threaded inserts with blind cutting bores are used for application in which no chip is permitted during self-tapping process. The cutting bores are worked as chip reservoirs.



料号 Part No.	内螺纹尺寸 Internal thread size M	外螺纹尺寸 External thread size		长度 Length L	拔出力 Pull out strength N(2AlSi12) Die cast	拔出力 Pull-out resistance N(2024 T4 AL)(*)	安装孔的直径 Assembly hole diameter (Rm=tensile strength , HB=brinell hardness) d1			盲孔深度 Minimum assembly hole depth min T
		B	P				Rm<300 HB<150	300<Rm<350 150<HB<200	Rm>350 HB>200	
BS703... BL703...	M3	5	0.6	4.1 6.1			4.6+0.1	4.7	4.7+0.1	6 8
BS735... BL735...	M3.5	6	0.8	5.1 8.1			5.5+0.1	5.6	5.6+0.1	7 10
BS704... BL704...	M4	6.5	0.8	6.1 8.1	13000	19500	6.0+0.1	6.1	6.1+0.1	8 10
BS705... BL705...	M5	8	1	7.1 10.1	18000	27000	7.4+0.1	7.5+0.1	7.6+0.1	9 13
BS706... BL706...	M6	10	1.25	8.1 12.1	25000	37500	9.3+0.1	9.4+0.1	9.5+0.1	10 15
BS708... BL708...	M8	12	1.5	9.1 14.1	35500	53250	11.1+0.1	11.2+0.1	11.3+0.2	11 17
BS710... BL710...	M10	14	1.5	10.1 18.1	48000	72000	13.1+0.1	13.2+0.1	13.3+0.2	13 22
BS712... BL712...	M12	16	1.75	12.1 22.1	65000	97500	15.0+0.1	15.1+0.1	15.2+0.2	15 26
BS714... BL714...	M14	18	2	14.1 24.1	82500	12375	17.0+0.1	17.1+0.1	17.2+0.2	17 28
BS716... BL716...	M16	20	2	14.1 24.1			19.0+0.1	19.1+0.1	19.2+0.2	17 28

*拔出力测试值仅适用于BS7/BL7系列产品,材质为Y15Pb硬化碳钢。
Pull out resistance are only for BS7/BL7 series made of Y15Pb.

设计公差：符合ISO2768-m

Tolerance: ISO2768-m

螺纹标准：内螺纹参考ISO-6H，外螺纹为特殊设计的自攻牙螺纹。

Thread: internal thread as per ISO-6H, external thread is special designed.

供货材料代码：

Material code:

C: 碳钢

C: Carbon steel

HC: 硬化碳钢

HC: Case-hardened steel

B: 黄铜

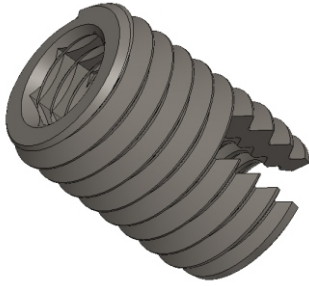
B: Brass

SS: 300系列不锈钢

SS: 300 series stainless steel

订购编号规则请参考第4页。

See page 4 for full part number designation.

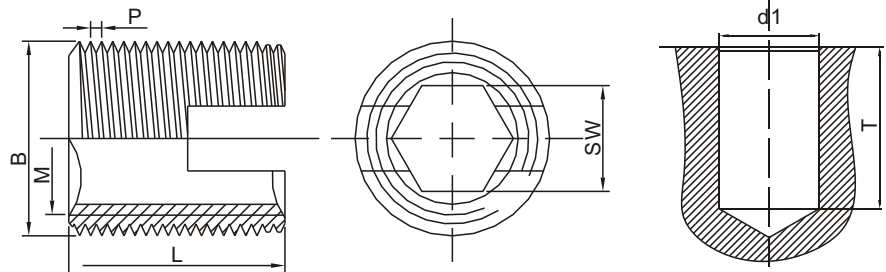


GH2系列

内六角安装槽使安装工具只需要顺时针旋转,可以缩短安装时间,简化设备。

GH2 Series

The hexagon socket design permits short installing time and simple tools which requires only clockwise rotation.



料号 Port number	内螺纹尺寸 Internal thread size M	外螺纹尺寸 External thread B P		长度 Length L	对边尺寸 Hexagonal socket SW+0.1	拔出力 Pull-out strength N(2AISI12) Die cast	拔出力 Pull-out resistance N(2024 T4 AL)(*)	安装孔的直径 Assembly hole diameter (Rm=tensile strength , HB=brinell hardness) d1			安装孔深度 Minimum assembly hole depth min T	最小壁厚 Minimum wall thickness min C
		Rm<300 HB<150	300<Rm<350 150<HB<200					Rm>350 HB>200				
GH204...	M4	6.5	0.75	8	3.2	10500	15700	5.9+0.1	6.0+0.1	6.1+0.1	10	8
GH205...	M5	8	1	10	4.1	15000	22500	7.2+0.1	7.3+0.2	7.5+0.1	13	10
GH205...	M6	10	1.5	14	4.9	28000	42000	8.8+0.2	9.0+0.2	9.2+0.2	17	14
GH208...	M8	12	1.5	15	6.6	36500	54700	10.8+0.2	11.0+0.2	11.2+0.2	18	15
GH210...	M10	14	1.5	18	8.3	45000	67500	12.8+0.2	13.0+0.2	13.2+0.1	22	18
GH212...	M12	16	1.5	22	10.1	59500	89200	14.8+0.2	15.0+0.2	15.2+0.2	27	22

*拔出力测试值仅适用于GH2系列产品,材质为Y15Pb硬化碳钢。
Pull out resistance are only for GH2 Series made of Y15Pb.

设计公差：符合ISO2768-m

螺纹标准：内螺纹参考ISO-6H，外螺纹为特殊设计的自攻牙螺纹。

供货材料代码：

- C： 碳钢
- HC： 硬化碳钢
- B： 黄铜
- SS： 300系列不锈钢

订购编号规则请参考第4页。

Tolerance: ISO2768-m

Thread: internal thread as per ISO-6H, external thread is special designed.

Material code:

- C: Carbon steel
- HC: Case-hardened steel
- B: Brass
- SS: 300 series stainless steel

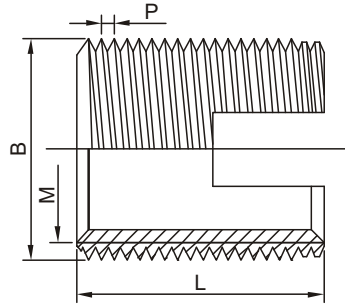
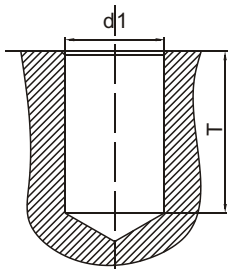
See page 4 for full part number designation.

GS3系列

薄壁，短系列，特别适用于塑料件的残留壁和轻质结构件。安装在金属基材上时需校核其抗拉强度和硬度值，必要时使用润滑油辅助安装，防止螺套碎裂。

GS3 Series

Special designed thin-walled and shortened version slotted threaded inserts are suitable for plastic with thin residual walls and for light-weight constructions. In critical cases, lubrication is recommended to prevent fracture of the inserts.



料号 Part No.	内螺纹尺寸 Internal thread size M	外螺纹尺寸 External thread size		长度 Length L	拔出力 Pull out strength N(2AlSi12) Die cast	拔出力 Pull-out resistance N(2024 T4 AL)(*)	安装孔直径 Assembly hole diameter (Rm=tensile strength , HB=brinell hardness) d1		安装孔深度 Minimum assembly hole depth min T
		B	P				Soft plastic, hardwood	Hard, brittle plastic	
GS303...	M3	4.5	0.5	6			4.0+0.1	4.1+0.1	8
GS335...	M3.5	5	0.6	6			4.5+0.1	4.6+0.1	8
GS304...	M4	6	0.7	6	13000	19500	5.3+0.1	5.5+0.1	8
GS305...	M5	7	0.8	8	18000	27000	6.3+0.1	6.5+0.1	10
GS306...	M6	8	1.0	10	25000	37500	7.1+0.1	7.3+0.2	13
GS308...	M8	10	1.25	12	35500	53250	8.6+0.2	8.9+0.3	15
GS310...	M10	12	1.5	15	48000	72000	10.6+0.2	10.9+0.3	18

*拔出力测试值仅适用于GS3系列产品,材质为Y15Pb硬化碳钢。
Pull out resistance are only for GS3 Series made of Y15Pb.

设计公差：符合ISO2768-m

螺纹标准：内螺纹参考ISO-6H，外螺纹为特殊设计的自攻牙螺纹。

供货材料代码：

C： 碳钢

HC： 硬化碳钢

B： 黄铜

SS： 300系列不锈钢

订购编号规则请参考第4页。

Tolerance: ISO2768-m

Thread: internal thread as per ISO-6H, external thread is special designed.

Material code:

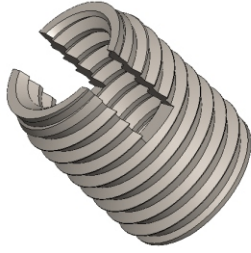
C: Carbon steel

HC: Case-hardened steel

B: Brass

SS: 300 series stainless steel

See page 4 for full part number designation.

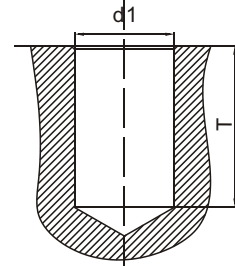
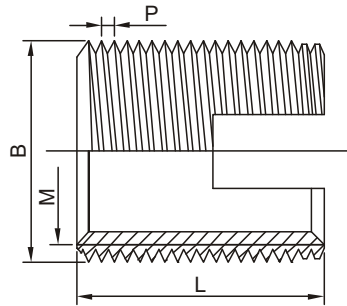


GS2系列

开槽型自攻螺套应用广泛，纵向槽自攻时作为切削刃,而且能够向内提供一定的锁紧力。

GS2 Series

The 2 slots on this threaded insert function as cutting edge and render an inward screw locking performance after self-tapping.



料号 Part No.	内螺纹尺寸 Internal thread M	外螺纹尺寸 External thread B P		长度 Length L	拔出力 Pull out strength N(2AlSi12) Die cast	拔出力 Pull-out resistance N(2024 T4 AL)(*)	安装孔的直径 Assembly hole diameter (Rm=tensile strength , HB=brinell hardness) d1			盲孔深度 Min hole depth min. T
		B	P				Rm<300 HB<150	300<Rm<350 150<HB<200	Rm>350 HB>200	
GS202...	M2	4.5	0.5	6.1	4200	6300	4.1+0.05	4.1+0.1	4.2+0.1	8
GS225...	M2.5	4.5	0.5	6.1	5100	7600	4.1+0.05	4.1+0.1	4.2+0.1	8
GS203...	M3	5	0.5	6.1	5800	8700	4.6+0.05	4.6+0.1	4.7+0.1	8
GS235...	M3.5	6	0.75	8.1	8700	13000	5.4+0.1	5.5+0.1	5.6+0.1	10
GS204...	M4	6.5	0.75	8.1	10500	15700	5.9+0.1	6.0+0.1	6.1+0.1	10
GS205...	M5	8	1	10.1	15000	22500	7.2+0.1	7.3+0.2	7.5+0.1	13
GS206a...	M6(a)	9	1	12.1	22000	33000	8.2+0.1	8.3+0.2	8.5+0.1	15
GS206...	M6	10	1.5	14.1	28000	42000	8.8+0.2	9.0+0.2	9.2+0.2	17
GS208...	M8	12	1.5	15.1	36500	54700	10.8+0.2	11.0+0.2	11.2+0.2	18
GS210...	M10	14	1.5	18.1	45000	67500	12.8+0.2	13.0+0.2	13.2+0.2	22
GS212...	M12	16	1.5	22.1	59500	89200	14.8+0.2	15.0+0.2	15.2+0.2	26
GS214...	M14	18	1.5	24.1	77000	115500	16.8+0.2	17.0+0.2	17.2+0.2	28
GS216...	M16	20	1.5	22.1	115000	172500	18.8+0.2	19.0+0.2	19.2+0.2	27
GS218...	M18	22	1.5	24.1			20.8+0.2	21.0+0.2	21.2+0.2	29
GS220...	M20	26	1.5	27.1			24.8+0.2	25.0+0.2	25.2+0.2	32
GS222...	M22	26	1.5	30.1			24.8+0.2	25.0+0.2	25.2+0.2	36
GS224...	M24	30	1.5	30.1			28.8+0.2	29.0+0.2	29.2+0.2	36
GS227...	M27	34	1.5	30.1			32.8+0.2	33.0+0.2	33.2+0.2	36
GS230...	M30	36	1.5	40.1			34.8+0.2	35.0+0.2	35.2+0.2	46

*拔出力测试值仅适用于GS2系列产品,材质为Y15Pb硬化碳钢。

Pull out resistance are only for GS2 Series made of Y15Pb.

设计公差：符合ISO2768-m

Tolerance：ISO2768-m

螺纹标准：内螺纹参考ISO-6H，外螺纹为特殊设计的自攻牙螺纹。

Thread: internal thread as per ISO-6H, external thread is special designed.

供货材料代码:

Material code:

C: 碳钢

C: Carbon steel

HC: 硬化碳钢

HC: Case-hardened steel

B: 黄铜

B: Brass

SS: 300系列不锈钢

SS: 300 series stainless steel

订购编号规则请参考第4页。

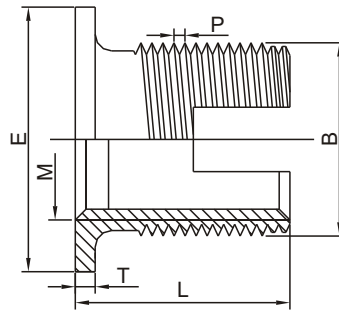
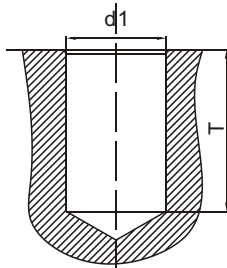
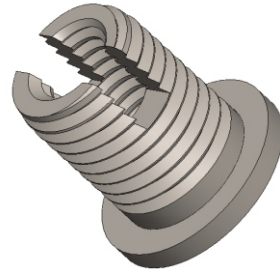
See page 4 for full part number designation.

FM2系列

增加的头部为自攻螺套增加了额外的抗拉拔和扭转能力。

FM2 Sereis

The head adds additional pull-out and torque resistance.



料号 Part No.	内螺纹尺寸 Internal thread M	外螺纹尺寸 External thread		头部直径 Head size E	头部高度 Head height T	长度 Length L	拔出力Pull-out strength N(2AlSi12) Die cast(*)	拔出力 Pull-out resistance N(2024 T4 AL)(*)	安装孔的直径 Assembly hole diameter (Rm=tensile strength, HB=brinell hardness) d1			安装孔深度 Minimum assembly hole depth min T
		B	P						Rm<300 HB<150	300<Rm<350 150<HB<200	Rm>350 HB>200	
FM204...	M4	6.5	0.75	9	1	9	10500	15700	5.9+0.1	6.0+0.1	6.1+0.1	10
FM205...	M5	8	1	11	1	11	15000	22500	7.2+0.1	7.3+0.2	7.5+0.1	12
FM206...	M6	10	1.5	13	1.5	15.5	28000	42000	8.8+0.2	9.0+0.2	9.2+0.2	16
FM208...	M8	12	1.5	15	1.5	16.5	36500	54700	10.8+0.2	11.0+0.2	11.2+0.2	17
FM210...	M10	14	1.5	17	1.5	19.5	45000	67500	12.8+0.2	13.0+0.2	13.2+0.1	20

*拔出力测试值仅适用于FM2系列产品,材质为Y15Pb硬化碳钢。
Pull out resistance are only for FM2 Series made of Y15Pb.

设计公差：符合ISO2768-m

螺纹标准：内螺纹参考ISO-6H，外螺纹为特殊设计的自攻牙螺纹。

供货材料代码：

C： 碳钢

HC： 硬化碳钢

B： 黄铜

SS： 300系列不锈钢

订购编号规则请参考第4页。

Tolerance： ISO2768-m

Thread: internal thread as per ISO-6H, external thread is special designed.

Material code:

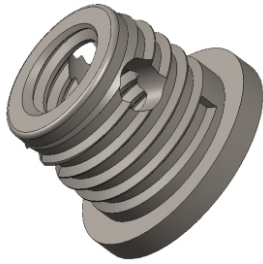
C: Carbon steel

HC: Case-hardened steel

B: Brass

SS: 300 series stainless steel

See page 4 for full part number designation.

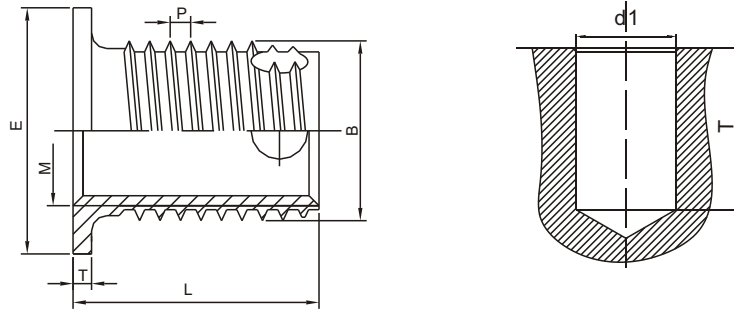


FS7/FL7系列

增加了头部的GS7/GL7系列产品，能够起到支撑，夹紧工件的作用，同时增强抗拉拔和抗扭能力。

FS7/FL7 Series

GS7/GL7 series with added head, which serves as supporter, for simultaneous fixture of several parts, increase pull-through and torque



料号 Part No.	内螺纹尺寸 Internal Thread M	外螺纹尺寸 External Thread		头部尺寸 Head size E	头部高度 Head high T	长度 Length L	拔出力Pull out strength N(2AlSi12) Die cast	拔出力 Pull-out resistance N(2024 T4 AL)(*)	安装孔的直径 Assembly hole Diameter (Rm=tensile strength, HB=brinell hardness) d1			盲孔深度 Minimum assembly hole depth min T
		B	P						Rm<300 HB<150	300<Rm<350 150<HB<200	Rm>350 HB>200	
FS705... FL705...	M5	8	1.0	11	1	8 11	18000	27000	7.4+0.1	7.5+0.1	7.6+0.1	9 13
FS706... FL706...	M6	10	1.25	13	1.5	9.5 13.5	25000	37500	9.3+0.1	9.4+0.1	9.5+0.1	10 15
FS708... FL708...	M8	12	1.5	15	1.5	10.5 15.5	35500	53250	11.1+0.1	11.2+0.1	11.3+0.2	11 17
FS710... FL710...	M10	14	1.5	17	1.5	11.5 19.5	48000	72000	13.1+0.1	13.2+0.1	13.3+0.2	13 22

*拔出力测试值仅适用于FS7/FL7系列产品,材质为Y15Pb硬化碳钢。
Pull out resistance are only for FS7/FL7 Series made of Y15Pb.

设计公差：符合ISO2768-m

Tolerance: ISO2768-m

螺纹标准：内螺纹参考ISO-6H，外螺纹为特殊设计的自攻牙螺纹

Thread: internal thread as per ISO-6H, external thread is special designed.

供货材料代码:

Material code:

C: 碳钢

C: Carbon steel

HC: 硬化碳钢

HC: Case-hardened steel

B: 黄铜

B: Brass

SS: 300系列不锈钢

SS: 300 series stainless steel

订购编号规则请参考第4页

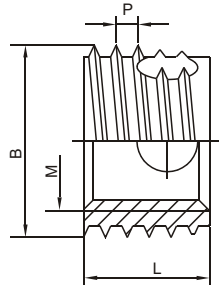
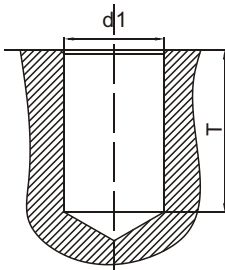
See page 4 for full part number designation

IN2系列

定制的内外螺纹，适用于板厚很小的应用。

IN2 Sereis

Special designed internal and external thread, and was applied in thin panel.



料号 Part No.	内螺纹尺寸 Internal thread M	内螺纹螺距 Internal thread pitch p	外螺纹尺寸 External thread B	外螺纹螺距 External thread pitch P	长度 Length L	安装孔直径 assembly hole diameter min d1*
IN208...	M8	0.75	11.6	0.75	6	11.2
IN210...	M10	1.0	13.6	1.0	7	13.2
IN212...	M12	1.0	15.6	1.0	7	15.1
IN214...	M14	1.25	17.7	1.25	9	17.1

*对一般应用，公差为±0.1。

Tolerance is ±0.1 for nominal application.

设计公差：符合ISO2768-m

Tolerance: ISO2768-m

螺纹标准：内螺纹参考ISO-6H，外螺纹为特殊设计的自攻牙螺纹。

Thread: internal thread as per ISO-6H, external thread is special designed.

供货材料代码：

C: 碳钢

HC: 硬化碳钢

B: 黄铜

SS: 300系列不锈钢

Material code:

C: Carbon steel

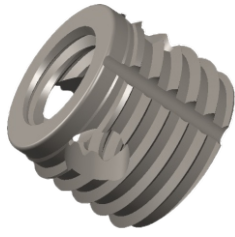
HC: Case-hardened steel

B: Brass

SS: 300 series stainless steel

订购编号规则请参考第4页。

See page 4 for full part number designation.

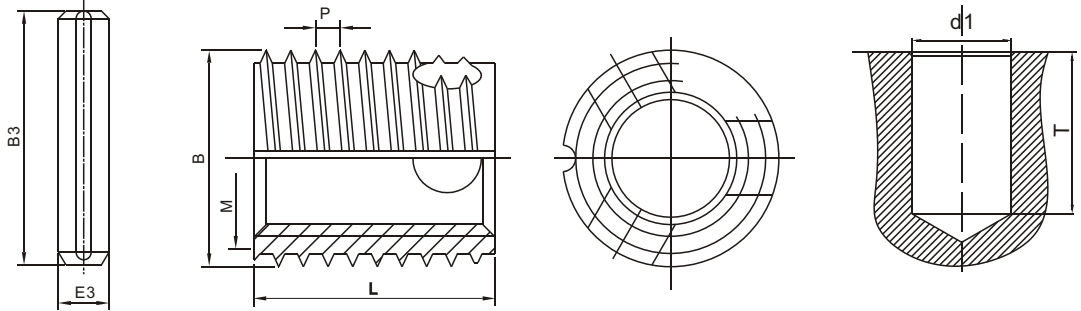


PS7/PL7系列

外螺纹上加工圆柱槽并安装圆柱销 (DIN1473), 适用于扭转力大, 振动剧烈的应用。

PS7/PL7 Series

Special cutting groove on external thread and assembled with a parallel stud (DIN1473). Great resistance to torsion and vibration is achieved.



料号 Part No.	内螺纹尺寸 Internal thread size M	外螺纹尺寸 External thread size B P		长度 Length L	拔出力 Pull out strength N(2AISI12) Die cast	拔出力 Pull-out resistance N(2024 T4 AL)(*)	安装孔的直径 Assembly hole diameter (Rm=tensile strength, HB=brinell hardness) d1			盲孔深度 Minimum assembly hole depth min T	抗扭销长度 stud length B3	抗扭销直径 stud diameter E3
		B	P				Rm<300 HB<150	300<Rm<350 150<HB<200	Rm>350 HB>200			
PS704... PL704...	M4	6.5	0.8	6.1 8.1	13000	19500	6.0+0.1	6.1	6.1+0.1	8 10	4 6	2 2
PS705... PL705...	M5	8	1	7.1 10.1	18000	27000	7.4+0.1	7.5+0.1	7.6+0.1	9 13	4 6	2 2
PS706... PL706...	M6	10	1.25	8.1 12.1	25000	37500	9.3+0.1	9.4+0.1	9.5+0.1	10 15	6 10	2 2
PS708... PL708...	M8	12	1.5	9.1 14.1	35500	53250	11.1+0.1	11.2+0.1	11.3+0.2	11 17	6 10	2 2
PS710... PL710...	M10	14	1.5	10.1 18.1	48000	72000	13.1+0.1	13.2+0.1	13.3+0.2	13 22	6 16	2 2
PS712... PL712...	M12	16	1.75	12.1 22.1	65000	97500	15.0+0.1	15.1+0.1	15.2+0.2	15 26	10 16	2 2
PS714... PL714...	M14	18	2	14.1 24.1	82500	12375	17.0+0.1	17.1+0.1	17.2+0.2	17 28	10 16	2 2
PS716... PL716...	M16	20	2	14.1 24.1			19.0+0.1	19.1+0.1	19.2+0.2	17 28	10 16	2 2

*拔出力测试值仅适用于PS7/PL7系列产品, 材质为Y15Pb硬化碳钢。
Pull out resistance are only for PS7/PL7 Series made of Y15Pb.

设计公差: 符合ISO2768-m

螺纹标准: 内螺纹参考ISO-6H, 外螺纹为特殊设计的自攻牙螺纹

供货材料代码:

C: 碳钢
HC: 硬化碳钢
B: 黄铜
SS: 300系列不锈钢

订购编号规则请参考第4页

Tolerance: ISO2768-m

Thread: internal thread as per ISO-6H, external thread is special designed.

Material code:

C: Carbon steel
HC: Case-hardened steel
B: Brass
SS: 300 series stainless steel

See page 4 for full part number designation

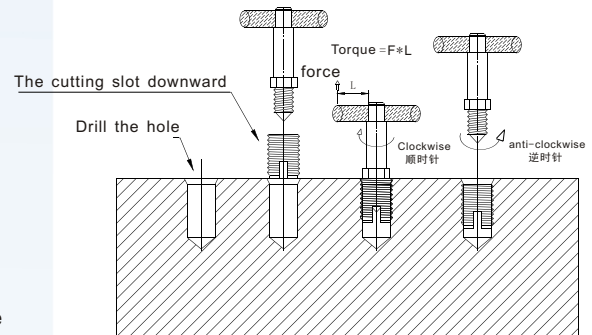
安装指南 *Install Guidance*

手动安装

1. 基材上预制合适的安装孔。
2. 将GNSAT螺套旋入专用工具，有切削孔或槽的一端朝下。
3. 将GNSAT螺套初旋一个螺距入基孔。
4. 确认工具已垂直后将螺套旋入。
5. 当螺套上端面略低于预制孔基材的表面约0.2mm后,停止旋入。
6. 反向取出工具。

Manual installation

1. Drilling the appropriate holes on the base material.
2. Twist the insert onto the driving tool with the cutting slot or cutting bore pointing downwards.
3. Drive the tool into pre-drilled hole after one round.
4. After making sure the tool to be vertical with the surface of work piece, drive the insert into the hole forcibly.
5. When the surface of the self-tapping insert is under the workpiece surface about 0.2mm, stop driving .
6. Extract the tool from hole in the opposite direction.



自动安装

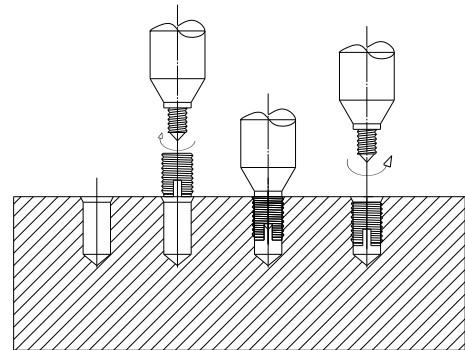
1. 基材上预制安装孔。
2. 确保安装孔和安装设备主轴对齐，设定对应的旋入深度。
3. 调整设备，使传动销调整至顺时针位。
4. 将螺套装入工具下端，确保切削孔或槽端向下。
5. 开动机器，将螺套旋入底孔后停止。
6. 反转机器，避免碰伤工件。

Automatic installation

1. Drill the hole with the correct diameter in the base material.
2. Precisely position the workpiece to ensure that the hole and machine spindle are in exact alignment (do not tilt). Set the machine to the precise driving depth.
3. Turn the machine to clockwise rotation.
4. Feed the insert towards the tool (slot or cutting hole downwards) and grip for the duration 2-4 revolutions
5. Actuate the operating lever of the machine until the insert cuts into the borehole.
6. Switch on the reversing function.

关于安装设备的详细设定，请咨询格姆特公司工程师。

For detail installation machine setting, Please contact GEMTEK engineer.



安装孔最小壁厚:

对轻质合金: 0.2-0.6倍的螺套外径

对铸铁: 0.3-0.5倍的螺套外径

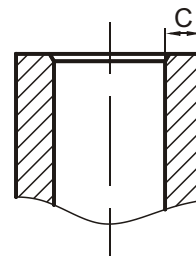
Min. Wall Thickness:

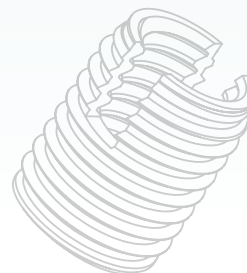
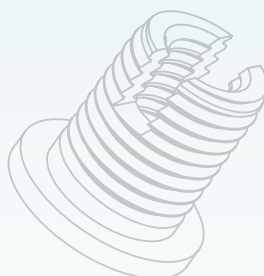
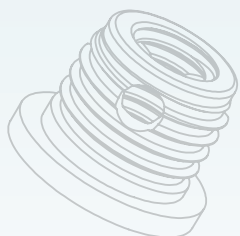
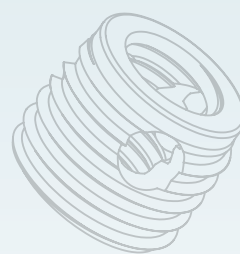
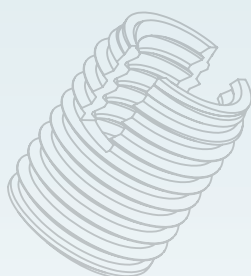
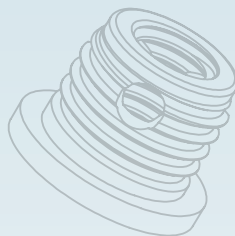
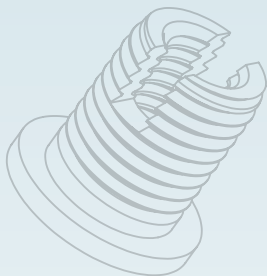
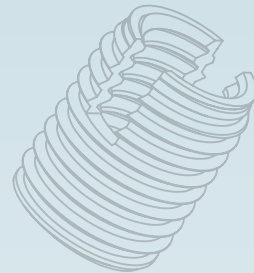
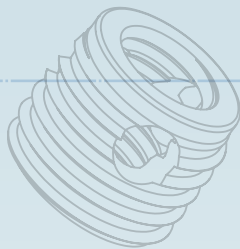
Light alloy: (0.2-0.6) X outside diameter

Cast iron: (0.3-0.5) X outside diameter

为了安装方便，建议预加工0.1-0.2MM的导向沉孔。

We recommend a 0.1-0.2 MM recess on workpiece for easy assembly.





GEMTEK®

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