



INSERTS FOR PLASTICS

塑膠專用螺母

Wherever you are...

we have the solution!

ADVANTAGES

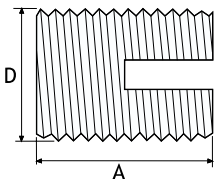
- High pull-out resistance
- Ideal where jack-out loading is unavoidable
- Can carry high loads in weak plastics

特點

- 外螺牙具有自攻牙之功能。
- 提供高扭拉力及防震功能。
- 可避免被 Jack Out (頂出)。

SELECTION OF INSERT OR STUD

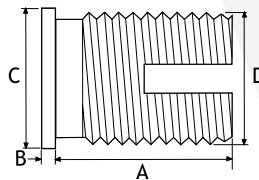
INSERTS



PRODUCT CODE [SCT]

型號

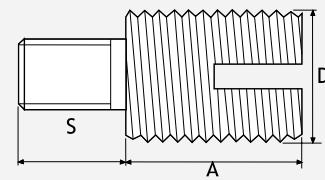
HEADED INSERTS



PRODUCT CODE [HSCT]

型號

STUD



PRODUCT CODE [SCTS]

型號

ISO METRIC (公制)

Unit: Millimetres

Product Code	Thread Size	Insert Length A	Stud Length (For SCTS only) S										Head Height B	Head Ø C	Insert Ø D MAX	For Thermoplastics Rec.Hole Size -0.00+0.10	Rec.Hole Size For Thermosetting -0.00+0.10	Min. Wall Thickness
型	螺牙	標準長度	公件長度										頭厚	頭外徑	外徑	熱可塑性塑膠孔直徑	熱固性塑膠孔直徑	最少肉厚
SCT-B HSCT-B SCTS-B	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	Evaluated by pre-production tests
	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	
	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	
	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	
	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	
	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	
	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	
	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	
	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	

Other lengths possible on quotation. 其它長度也可估價。

UNIFIED (英制)

Unit: Inches

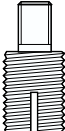
Product Code	Thread Size	Insert Length A	Stud Length (For SCTS only) S										Head Height B	Head Ø C	Insert Ø D MAX	For Thermoplastics Rec.Hole Size -0.000 +0.004	Rec.Hole Size For Thermosetting -0.00+0.10	Min. Wall Thickness
型	螺牙	標準長度	公件長度										頭厚	頭外徑	外徑	熱可塑性塑膠孔直徑	熱固性塑膠孔直徑	最少肉厚
SCT-B HSCT-B SCTS-B	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	Evaluated by pre-production tests
	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	
	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	
	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	
	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	
	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	
	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	
	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	
	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	
	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	
	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	
	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	
	1/2	.866	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	

Other lengths possible on quotation. 其它長度也可估價。

STANDARD MATERIAL: BRASS (B)
Other materials possible on quotation

標準材質: 黃銅 (B)
其它長度也可估價。

SPECIFYING AN INSERT & STUD

INSERTS (METRIC)						STUDS (METRIC)								
	SCT	—	B	—	M3		SCTS	—	B	—	M3	×	5.0	
	PRODUCT CODE		MATERIAL		THREAD SIZE		PRODUCT CODE		MATERIAL		THREAD SIZE		STUD LENGTH	
	型號		材質		螺牙		型號		材質		螺牙		公件長度	
	HSCT	—	B	—	632		SCTS	—	B	—	632	×	3/16	
INSERTS (INCHES)						STUDS (INCHES)								

BOSS DESIGN SPECIFICATION

HOLE PREPARATION

Hole diameter will vary with the type of plastic material used - hard plastics will require larger holes than softer plastics etc. For this reason, the data table shows the hole size ranges recommended for thermoplastics and thermosetting plastics. Exact hole size is best determined by pre-production trials - please consult the P.S.M Technology Centre. It is recommended that moulded holes are used. A 60° countersink at the top of the hole is strongly recommended in order to avoid the risk of chipping to the surrounding surface. The depth of the countersink should be equal to the external thread pitch of the insert. Tapers on moulded holes should be 1° inclusive.

TYPE OF LOADING

Direct torque loads should be avoided with this type of insert.

INSTALLATION

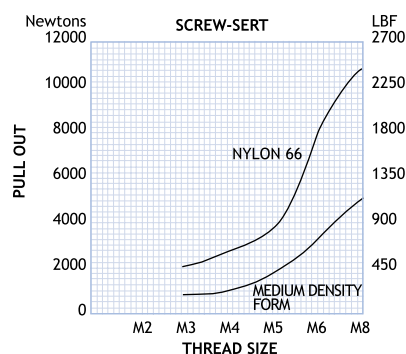
The insert is installed using traditional tapping principles. Installation can be carried out using a hand tool (for low volumes), a tapping head attachment for a pillar drill, a standard tapping machine or fully automatic installation equipment.

WALL THICKNESS

This must be evaluated by pre-production tests in conjunction with the P.S.M Technology Centre - contact your local Sales Office for advice.

PERFORMANCE DATA

The complexity of materials and variations in service conditions make it impossible to detail fastener performance for specific applications. The charts below give a general guide and show the relative performance of the inserts in the range.



塑膠孔徑之設計

1. 螺母規格之塑膠孔徑建議值，請參考規格表。
2. 塑膠成型後，內孔徑之脫模斜度應於1度以內。
3. 塑膠孔徑上須有高度為1個 pitch 的60度導角。

組裝方式

組裝扭力不可大於螺母之裝置扭力。

裝置

有專用之手動及自動裝置工具，請洽 P.S.M 技術人員。

塑膠孔肉厚

1. 建議肉厚值，請參考規格表。
2. 肉厚值可視不同塑膠材質，而略作調整，但請先與 P.S.M 技術人員聯系，必要時我們將協助測試及作最適當之建議。

測試數據

1. P.S.M 使用各種精密之測試儀器，針對常用之塑膠材料作出各類型螺母可承受之拉力的測試參考數據
2. P.S.M 為服務客戶，非常歡迎客戶委託代作測試，我們將提供完整及詳盡之測試報告及必要之建議。

