

INSERTS

FOR

PLASTICS

塑膠專用螺母

Wherever you are...

we have the solution!

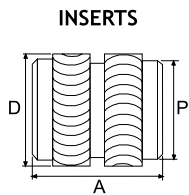
ADVANTAGES

- Low stress generating characteristics - ideal for amorphous thermoplastics
- Double ended - assists automatic feeding
- High torque resistance
- Self-aligning - assists Installation

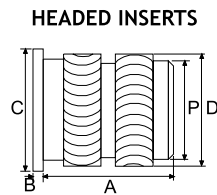
特點

- 適用於較易龜裂之塑膠材質及特殊裝置。
- 外型無方向性，方便自動送料加工。
- 提供高扭力之性能。
- 圓弧型花紋設計可減低埋植時所產生的應力。

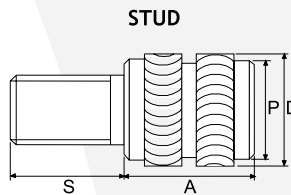
SELECTION OF INSERT OR STUD



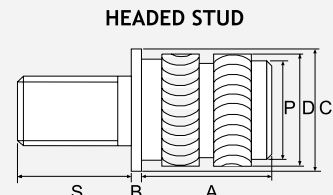
PRODUCT CODE [HL]
型號



PRODUCT CODE [HLH]
型號



PRODUCT CODE [HLTS]
型號



PRODUCT CODE [HLHS]
型號

ISO METRIC (公制)

Unit: Millimetres

Product Code 型	Thread Size 螺牙	Insert Length A 標準長度	Stud Lengths (For HLTS & HLHS only) S 公件長度										Head Height B 頭厚	Head ø C 頭外徑	Insert ø D 外徑	Pilot End ø P 圓頭	Rec.Hole Size -0.00 +0.10 孔直徑	Min. Wall Thickness 最少肉厚
			5	6	8	10	12	14	16	18	20	25						
HL-B	M2	3.9	5	6	8	10	12	14	16	18	20	25	0.51	4.8	3.5	3.1	3.2	1.4
	M2.5	5.8	5	6	8	10	12	14	16	18	20	25	0.58	5.5	4.4	3.9	4.0	1.8
HLH-B	M3	5.8	5	6	8	10	12	14	16	18	20	25	0.58	5.5	4.4	3.9	4.0	1.8
HLTS-B	M3.5	7.1	5	6	8	10	12	14	16	18	20	25	0.74	6.4	5.2	4.7	4.8	2.1
HLHS-B	M4	8.1	5	6	8	10	12	14	16	18	20	25	0.89	7.1	6.1	5.5	5.6	2.4
	M5	9.5	5	6	8	10	12	14	16	18	20	25	1.07	7.9	6.9	6.3	6.4	2.8
	M6	12.7	5	6	8	10	12	14	16	18	20	25	1.32	9.5	8.5	7.9	8.0	3.6
	M8	12.7	5	6	8	10	12	14	16	18	20	25	1.32	11.1	10.0	9.5	9.6	5.0

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

UNIFIED (英制)

Unit: Inches

Product Code 型	Thread Size 螺牙	Insert Length A 標準長度	Stud Lengths (For HLTS & HLHS only) S 公件長度										Head Height B 頭厚	Head ø C 頭外徑	Insert ø D 外徑	Pilot End ø P 圓頭	Rec.Hole Size -0.000 +0.004 孔直徑	Min. Wall Thickness 最少肉厚
			3/16	1/4	5/16	3/8	7/16	1/2	5/8	3/4	7/8	1						
HL-B	2-56	.155	3/16	1/4	5/16	3/8	7/16	1/2	5/8	3/4	7/8	1	.020	.187	.137	.123	.126	.055
	4-40	.228	3/16	1/4	5/16	3/8	7/16	1/2	5/8	3/4	7/8	1	.023	.217	.174	.154	.157	.071
HLH-B	6-32	.281	3/16	1/4	5/16	3/8	7/16	1/2	5/8	3/4	7/8	1	.029	.250	.206	.185	.189	.083
HLTS-B	8-32	.320	3/16	1/4	5/16	3/8	7/16	1/2	5/8	3/4	7/8	1	.035	.280	.239	.218	.220	.094
HLHS-B	10-24	.374	3/16	1/4	5/16	3/8	7/16	1/2	5/8	3/4	7/8	1	.042	.312	.270	.249	.252	.110
	10-32	.374	3/16	1/4	5/16	3/8	7/16	1/2	5/8	3/4	7/8	1	.042	.312	.270	.249	.252	.110
	1/4-20	.500	3/16	1/4	5/16	3/8	7/16	1/2	5/8	3/4	7/8	1	.052	.375	.333	.312	.315	.142
	1/4-28	.500	3/16	1/4	5/16	3/8	7/16	1/2	5/8	3/4	7/8	1	.052	.375	.333	.312	.315	.142
	5/16-18	.500	3/16	1/4	5/16	3/8	7/16	1/2	5/8	3/4	7/8	1	.052	.437	.393	.375	.378	.197
	5/16-24	.500	3/16	1/4	5/16	3/8	7/16	1/2	5/8	3/4	7/8	1	.052	.437	.393	.375	.378	.197

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

STANDARD MATERIAL: BRASS (B) 標準材質: 黃銅 (B)
Other materials possible on quotation 其它長度也可估價。

SPECIFYING AN INSERT & STUD

INSERTS (METRIC)				STUDS (METRIC)				
	HL	-	B	-	M3			
	PRODUCT CODE		MATERIAL		THREAD SIZE			
	型號		材質		螺牙			
	HLH	-	B	-	632	x	5.0	
	PRODUCT CODE		MATERIAL		THREAD SIZE		STUD LENGTH	
	型號		材質		螺牙		公件長度	
	HLHS	-	B	-	632	x	3/16	
	PRODUCT CODE		MATERIAL		THREAD SIZE		STUD LENGTH	
	型號		材質		螺牙		公件長度	
INSERTS (INCHES)				STUDS (INCHES)				

BOSS DESIGN SPECIFICATION

HOLE PREPARATION

Moulded holes are recommended wherever possible. The taper on a moulded hole should be 0.5° inclusive and the hole diameter recommended should apply at the point reached by the bottom of the insert. The top of the hole should not be chamfered or counterbored and care must be taken to avoid bell mousing. Hole diameter tolerance: -0.00 +0.10mm.

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 0.5 度以內。
3. 塑膠內孔徑公差值請設於 0.00+0.10mm 的範圍。
4. 塑膠內孔上方，可不必設計導角。

MOULDING PRACTICE

Mould design should be arranged to eliminate residual stresses in the area of the boss or hole into which the insert is to be installed.

模具規範

模具設計上應避免應力存在。

INSTALLATION

Heat-lok has been designed for installation using heat rather than ultrasonics, since direct heat best suits the plastic flow required by the insert profile.

裝置

1. 適用於熱熔加工。
2. 熱熔加工所須之壓力、時間及速度，須視塑膠材質及螺母大小而調整。

WALL THICKNESS

A general guide to minimum wall thickness is given in the data table but this will vary depending upon the nature of the plastic. Where thinner walls are required these can often be accommodated, but consultation with the P.S.M Technology Centre or Local Sales Office and pre-production testing is strongly advised.

塑膠孔肉厚

1. 建議肉厚，請參考規格表。
2. 肉厚可視不同塑膠材質，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。

PERFORMANCE DATA

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

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，非常歡迎客戶委托代作測試，我們將提供完整及詳盡之測試報告及必要之建議。

