




SCREW-SERT is a self-tapping insert suitable for installation into a wide range of thermoplastic and thermosetting plastic materials. They are particularly suitable for applications involving high jack-out loading and materials with low core strengths. Headed and stud versions also available

ADVANTAGES

-  HIGH PULL-OUT RESISTANCE
-  IDEAL WHERE JACK-OUT LOADING IS UNAVOIDABLE
-  CAN CARRY HIGH LOADS IN WEAK PLASTICS



DESIGN GUIDE

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 thermoplastic 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. Taper 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

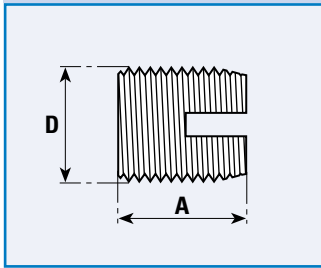
The complexity of materials and variations in service conditions make it impossible to detail fastener performance for specific applications. The charts on page 29 give a general guide.

TECHNICAL DATA

SCREW-SERT

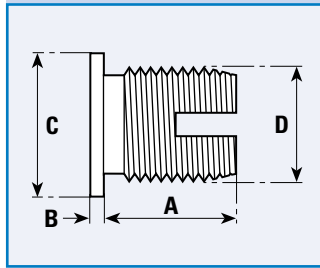
SCREW-SERT™ INSERTS & STUDS

INSERTS



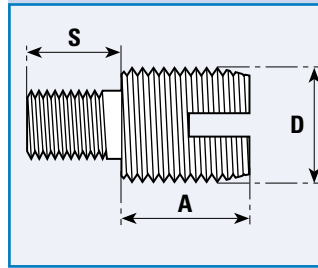
Product Code SCT

HEADED INSERTS



Product Code HSCT

STUDS



Product Code SCTS

STANDARD MATERIALS - Brass (B) Hardened Steel (S) - Other materials possible on quotation

DIMENSIONS

INTERNAL THREAD SIZES		A	B	C	D	Rec. Hole Size Thermoplastics	Rec. Hole Size Thermosets	Min. Wall Thickness
Unified	ISO Metric	mm	mm	mm	mm	mm	mm	mm
4	2.5	6.0	0.58	6.0	4.5	4.0-4.1	4.1-4.3	Evaluate by pre- production tests
-	3	6.0	0.58	6.5	5.0	4.5-4.6	4.6-4.8	
6	3.5	8.0	0.73	7.5	6.0	5.3-5.4	5.5-5.7	
8	4	8.0	0.89	8.0	6.5	5.8-5.9	6.0-6.2	
10	5	10.0	1.06	9.5	8.0	7.1-7.2	7.3-7.6	
1/4	6	14.0	1.32	12.0	10.0	8.6-8.8	9.0-9.4	
5/16	8	15.0	1.32	14.0	12.0	10.6-10.8	11.0-11.4	
3/8	10	18.0	1.57	16.0	14.0	12.6-12.8	13.0-13.4	
1/2	12	22.0	1.57	18.0	16.0	14.6-14.8	15.0-15.4	

A = Standard lengths
Other lengths possible on quotation.

Standard Stud Lengths (Dimensions 'S')

MILLIMETRES	5	6	8	10	12	14	16	18	20	25
INCHES	3/16	1/4	5/16	3/8	7/16	1/2	5/8	3/4	7/8	1

HOW TO SPECIFY

INSERTS

PRODUCT CODE	SCT-B-M3
MATERIAL	SCT-B-M3
THREAD SIZE	SCT-B-M3

HEADED INSERTS

PRODUCT CODE	HSCT-B-M3
MATERIAL	HSCT-B-M3
THREAD SIZE	HSCT-B-M3

STUDS

PRODUCT CODE	SCTS-B-M4-10mm
MATERIAL	SCTS-B-M4-10mm
THREAD SIZE	SCTS-B-M4-10mm
LENGTH (if applicable)	SCTS-B-M4-10mm

