





*HEAT-LOK is designed for installation into notch sensitive amorphous thermoplastics by heat. It features rounded knurls, avoiding the stress raising sharp crests and roots which typify knurls used on most inserts. Headed and stud versions also available.*

## ADVANTAGES

-  LOW STRESS GENERATING CHARACTERISTICS - IDEAL FOR AMORPHOUS THERMOPLASTICS
-  DOUBLE ENDED - ASSISTS AUTOMATIC FEEDING
-  HIGH TORQUE RESISTANCE
-  SELF-ALIGNING - ASSISTS INSTALLATION



## DESIGN GUIDE

### 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 mouching. Hole diameter tolerance -0.00 +0.10mm.

### 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.

### 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.

### 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 your local Sales Office and pre-production testing is strongly advised.

### PERFORMANCE DATA

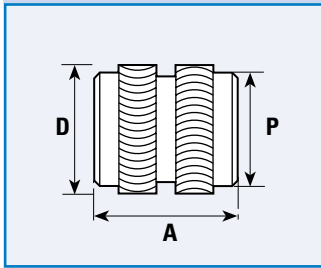
The complexity of materials and variations in service conditions make it impossible to detail fastener performance for specific applications. The charts on page 28 give a general guide.

# TECHNICAL DATA

# HEAT-LOK

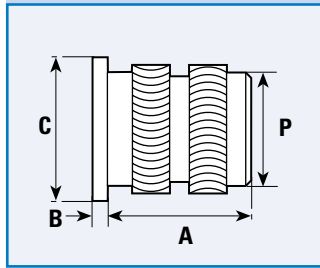
# HEAT-LOK™ INSERTS & STUDS

## INSERTS



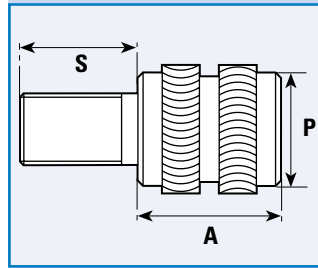
Product Code HL

## HEADED INSERTS



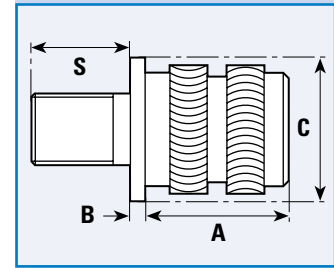
Product Code HLH

## STUDS



Product Code HLTS

## HEADED STUDS



Product Code HLHS

**STANDARD MATERIAL** - Brass (B) - Other materials possible on quotation

## DIMENSIONS

INTERNAL THREAD SIZES		A	B	C	D	P	Rec. Hole Size -0.00 +0.10	Min. Wall Thickness
Unified	ISO Metric	mm	mm	mm	mm	mm	mm	mm
2	2	3.9	0.51	4.8	3.5	3.1	3.2	1.4
-	2.5	5.8	0.58	5.5	4.4	3.9	4.0	1.8
4	3	5.8	0.58	5.5	4.4	3.9	4.0	1.8
6	3.5	7.1	0.74	6.4	5.2	4.7	4.8	2.1
8	4	8.1	0.89	7.1	6.1	5.5	5.6	2.4
10	5	9.5	1.07	7.9	6.9	6.3	6.4	2.8
1/4	6	12.7	1.32	9.5	8.5	7.9	8.0	3.6
5/16	8	12.7	1.32	11.1	10.0	9.5	9.6	5.0

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	HL-B-M3
MATERIAL	HL-B-M3
THREAD SIZE	HL-B-M3

### HEADED INSERTS

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

### STUDS

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

### HEADED STUDS

PRODUCT CODE	HLHS-B-M5-12mm
MATERIAL	HLHS-B-M5-12mm
THREAD SIZE	HLHS-B-M5-12mm
LENGTH (if applicable)	HLHS-B-M5-12mm