






**HI-TORK** The Hi-Tork threaded insert range for thermoplastics has been developed to give height pull out and torque performance. The characteristic form of the fastener coupled to the special but easily molded form of the installation hole, ensures that the high performance is maintained while allowing wider than normally accepted tolerances from the moulding process.

## ADVANTAGES

-  HIGH PULL OUT AND TORQUE PERFORMANCE.
-  CAPABLE OF PROVIDING "BOLT BREAK PERFORMANCE"
-  ESPECIALLY RECOMMENDED FOR HIGH FILL PLASTICS
-  TOLERANT OF VARIATIONS FOR MOLDING PROCESS
-  PROVIDES HIGH PROCESS CAPABILITY

# HI-TORK™ INSERTS



## DESIGN GUIDE

### HOLE PREPARATION

The special Hi-Tork form is specifically designed for moulding. Dimensions for the hole are detailed in diagram and table overleaf.

### INSTALLATION

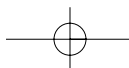
The fastener may be installed using either a pre-heating process or using heat generated by ultrasonics. Where pre-heating process is used, care must be exercised to ensure that the fastener softens but does not melt the plastic.

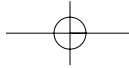
### WALL THICKNESS

A general guide to minimum wall thickness of the installation hole is given in the data table but this will vary dependent upon the nature of the plastic. Where thinner walls are required, these can be accommodated, but consultation with the PSM Technology Center and production testing is strongly advised.

### PERFORMANCE DATA

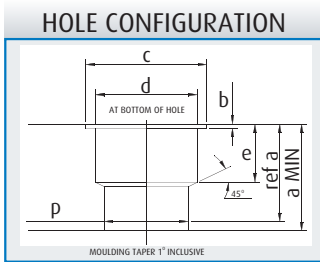
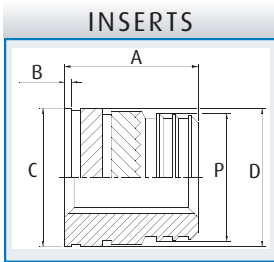
The complexity of materials and variations in service conditions make it impossible to detail actual fastener performance in individual applications. Please consult with the PSM Technology Center for recommendations and testing.





# TECHNICAL DATA

# HI-TORK



SERIES HT  
STANDARD MATERIALS - 360 Brass

## DIMENSIONS

ISO Metric	A (mm)	B (mm)	C (mm)	D (mm)	P (mm)
M4	9.6	0.5	9.0	9.0	8.2
M5	11.0	0.5	10.5	10.5	9.7
M6	11.0	0.5	12.0	12.0	11.2
M8	11.0	0.5	13.7	13.7	12.9
M10	11.0	0.5	15.2	15.2	14.5

## HOLE DIMENSIONS

ISO Metric	a (mm)	a1 (mm)	b (mm)	c (mm)	d (mm)	e (mm)	p (mm)	Minimum Wall Thickness (mm)
M4	11.0	9.6	0.9	10.0	8.3	6.5	7.4	3.5
M5	12.0	11.0	0.9	11.4	9.9	6.5	8.6	4.5
M6	12.0	11.0	0.9	13.0	11.3	6.5	10.4	6.0
M8	12.0	11.0	0.9	14.0	13.0	6.5	12.1	8.0
M10	12.0	11.0	0.9	16.0	14.6	6.5	13.7	10.0

## PERFORMANCE DATA

ISO Metric	Pull Out (Newtons)	Torque Out (Newtons)
M4	4100	10
M5	5550	12
M6	7610	20
M8	7800	30
M10	8535	40

## HOW TO SPECIFY

Product	HT-B-M6
Material	HT-B-M6
Thread Size	HT-B-M6

HI-TORK™ INSERTS

