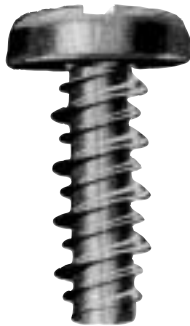


# HI-LO® PLUS™ FASTENERS

## SCREWS FOR PLASTIC AND OTHER LOW DENSITY MATERIALS



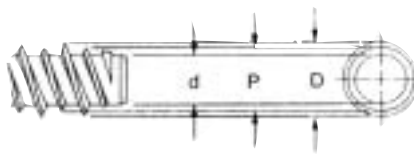
### THREAD ANGLE

Both the high and low threads have a sharper (30°) angle than conventional threads and incorporate a 45° angle step on their trailing flank. These slim threads penetrate deeply without weakening the material through stress-caused fracturing.

### SUPERIOR PERFORMANCE

The Hi-Lo Plus fastener, with its alternating high and low threads, effectively engages in a wide range of low density materials. This versatile fastener can be used in soft or hard plastics, die cast metals, particle board and wood.

In fastening effectiveness, the Hi-Lo Plus screw is greatly superior to other thread forms used in comparable applications. Other thread forming screws require larger holes to minimize the risk of cracking or splitting the material in which they are driven. Less material is therefore displaced and there is less thread engagement. This contributes to premature stripping.



HI-LO PLUS FASTENER

### THE HIGH TECH FASTENER FOR PLASTIC, WOOD, DIE CAST METALS AND OTHER MATERIALS

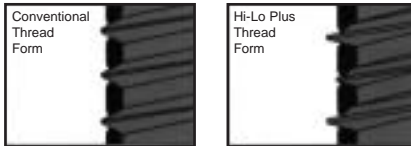
#### THREAD FORM

##### IN SOFT MATERIALS



The threads of the HI-LO PLUS fastener have a unique bi-level shape that directs the displaced material upward, flowing it around the threads.

##### IN HARD MATERIALS



Stress is directed upward rather than outward and material cracking and splitting is, therefore, minimized.

#### THREAD SPACING

##### CONVENTIONAL THREAD FORM



##### HI-LO PLUS THREAD FORM



In forming mating threads in the work piece, the unique Hi-Lo Plus screw accommodates the displaced material between the widely spaced high threads, actually increasing thread engagement while minimizing outward pressure.

#### HEAD STYLES

Heads on Hi-Lo Plus fasteners are made to standard ASNI/ASME dimensions.

#### HI-LO PLUS FASTENERS — Diameters (Inches)

SCREW SIZE	HIGH THREAD DIAMETER (D)		LOW THREAD DIAMETER (P)	POINT DIAMETER (d)	RECOMMENDED PILOT HOLE DIAMETER*
	MAX.	MIN.			
4-26	.1150	.1090	.096	.072	.086
5-22	.1270	.1200	.108	.078	.099
6-22	.1480	.1420	.129	.099	.110
7-21	.1580	.1520	.135	.099	.120
8-19	.1700	.1640	.145	.105	.128
10-18	.1950	.1890	.168	.122	.144
11-18	.2100	.2000	.183	.137	.162

\*These hole sizes are tentative and are provided as a guide only. Actual hole size could vary depending on type of plastic, boss diameter and length of thread engagement.

**Note:** Hi-Lo® Plus is a registered trademark of Illinois Tool Works Incorporated.