



# SHZ

## Straight Hole Zert

“Straight Hole Zert” is designed to be installed into a wide variety of thermoplastics. The insert can be installed using Heat or Ultra-Sonics. The insert’s opposing helical knurls provide excellent torque and pull-out resistance. Headed, stud and headed stud variations are available. *Performance values are on page 34.*

### Plastic Materials

PA- Filled	PVC
PPS	PP
PBT	PE
PC / ABS Blends	HDPE
PA - Unfilled	PPO
POM (Acetal)	

### Installation

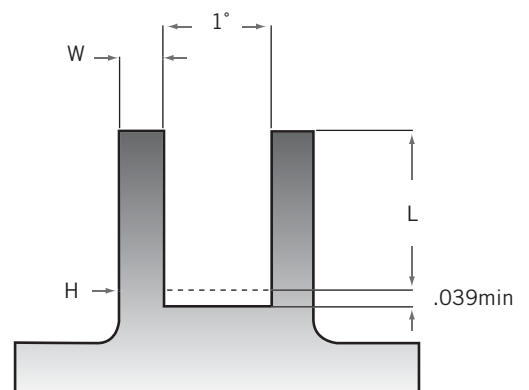
Direct Heat	Molded-In
Ultrasonics	Fully Automated

### Materials

Brass	(other materials may be available on request)
Stainless Steel	

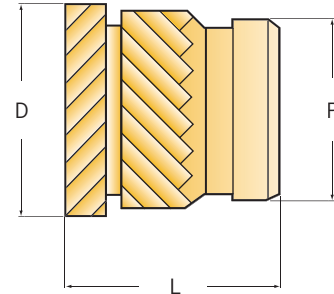
### Design Recommendations

“Straight Hole Zert” is designed to be installed into a straight hole with a maximum of a 1° inclusive taper. Holes should not be counter sunk or counter bored as this will decrease the fasteners performance. The recommended hole size applies at the point reached by the bottom of the insert. Hole size tolerance  $-0.000 + 0.004$  inches. When using heat to install the inserts, the heat should be sufficient to soften the plastic without it melting. This will allow for optimum performance without causing flash or degrading the plastic. Available In Brass and Stainless Steel. (other materials may be available on request)



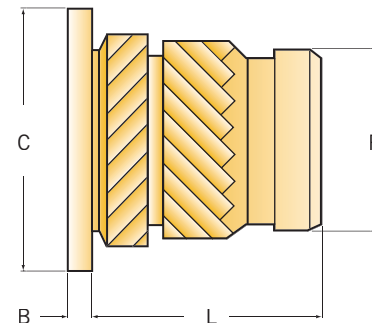
### Insert

## SHZ



### Headed Insert

## SHZH



# Straight Hole Zert

## Size Chart

Thread Size		B Head Thickness	C Head Dia.	D Insert Dia.	P Pilot Dia.	H Hole Size (+.004 -.000)	W Min. Wall Thickness
INCH	METRIC						
0 - 80	1	-	-	.116	.095	.100	.051
2 - 56	2	.021	.187	.141	.123	.126	.051
4 - 40	2.5, 3	.024	.218	.181	.154	.157	.063
6 - 32	3.5	.030	.250	.214	.185	.189	.071
8 - 32	4	.036	.281	.248	.218	.220	.083
10 - 24	-	.043	.312	.278	.249	.252	.102
10 - 32	5	.043	.312	.278	.249	.252	.102
1/4 - 20	6	.053	.375	.341	.312	.315	.130
1/4 - 28	-	.053	.375	.341	.312	.315	.130
5/16 - 18	8	.053	.437	.403	.374	.378	.177
5/16 - 24	-	.053	.437	.403	.374	.378	.177
3/8 - 16	10	.063	.551	.494	.465	.469	.236
3/8 - 24	-	.063	.551	.494	.465	.469	.236

Inch	Thread	L Length	SHZ Part Number	SHZH Part Number
	0 - 80	.125	SHZ-080-125	-
2 - 56	.100	SHZ-256-100	-	
	.115	SHZ-256-115	-	
	.125	SHZ-256-125	SHZH-256-125	
4 - 40	.138	SHZ-256-138	-	
	.157	SHZ-256-157	SHZH-256-157	
	.096	SHZ-440-096	-	
	.140	SHZ-440-140	SHZH-440-140	
	.170	SHZ-440-170	-	
6 - 32	.226	SHZ-440-226	SHZH-440-226	
	.250	SHZ-440-250	-	
	.321	SHZ-440-321	-	
	.125	SHZ-632-125	-	
	.150	SHZ-632-150	SHZH-632-150	
	.205	SHZ-632-205	-	
8 - 32	.226	SHZ-632-226	-	
	.250	SHZ-632-250	-	
	.281	SHZ-632-281	SHZH-632-281	
	.375	SHZ-632-375	-	
	.115	SHZ-832-115	-	
10 - 32	.150	SHZ-832-150	-	
	.185	SHZ-832-185	SHZH-832-185	
	.250	SHZ-832-250	-	
	.281	SHZ-832-281	-	
	.321	SHZ-832-321	SHZH-832-321	
10 - 24	.185	SHZ-1032-185	-	
	.226	SHZ-1032-226	-	
	.250	SHZ-1032-250	SHZH-1032-250	
	.310	SHZ-1032-310	-	
	.375	SHZ-1032-375	SHZH-1032-375	
1/4 - 20	.400	SHZ-1032-400	-	
	.226	SHZ-1024-226	-	
	.250	SHZ-1024-250	-	
	.375	SHZ-1024-375	-	
1/4 - 28	.250	SHZ-2520-250	-	
	.312	SHZ-2520-312	SHZH-2520-312	
	.348	SHZ-2520-348	-	
5/16 - 18	.500	SHZ-2520-500	SHZH-2520-500	
	.500	SHZ-2528-500	SHZH-2528-500	
5/16 - 24	.500	SHZ-3118-500	SHZH-3118-500	
3/8 - 16	.500	SHZ-3124-500	SHZH-3124-500	
3/8 - 24	.500	SHZ-3716-500	SHZH-3716-500	
	.500	SHZ-3724-500	SHZH-3724-500	

Metric	Thread	L Length	SHZ Part Number	SHZH Part Number
	M2	2.50	SHZ-M2-2.50	-
3.18		SHZ-M2-3.18	-	
4.00		SHZ-M2-4.00	SHZH-M2-4.00	
M2.5	3.56	SHZ-M2.5-3.56	SHZH-M2.5-3.56	
	5.74	SHZ-M2.5-5.74	SHZH-M2-5.74	
	4.00	SHZ-M3-4.00	-	
M3	4.32	SHZ-M3-4.32	-	
	5.00	SHZ-M3-5.00	-	
	5.21	SHZ-M3-5.21	-	
	5.74	SHZ-M3-5.74	SHZH-M3-5.74	
M3.5	3.80	SHZ-M3.5-3.80	-	
	7.14	SHZ-M3.5-7.14	SHZH-M3.5-7.14	
M4	4.70	SHZ-M4-4.70	SHZH-M4-4.70	
	5.51	SHZ-M4-5.51	-	
	5.74	SHZ-M4-5.74	-	
	6.35	SHZ-M4-6.35	-	
M5	8.15	SHZ-M4-8.15	SHZH-M4-8.15	
	6.35	SHZ-M5-6.35	SHZH-M5-6.35	
	9.50	SHZ-M5-9.50	SHZH-M5-9.50	
M6	6.35	SHZ-M6-6.35	-	
	7.90	SHZ-M6-7.90	SHZH-M6-7.90	
	12.70	SHZ-M6-12.70	SHZH-M6-12.70	
M8	12.70	SHZ-M8-12.70	SHZH-M8-12.70	
M10	12.70	SHZ-M10-12.70	SHZH-M10-12.70	

\* Add "SS" to the end of the part number for stainless steel  
ex: SHZ-632-281-SS

SHZ Straight Hole Zert