

# (STI) Screw Thread Insert Plug Gages

HEMCO

Screw Thread Insert Plug Gages, Go and NoGo, are specified whenever a wire insert is used to repair a damaged thread or provide for a stronger thread to mating thread application. These gages are designed to check the oversize thread condition needed to allow the wire insert to maintain a standard pitch diameter after insertion.

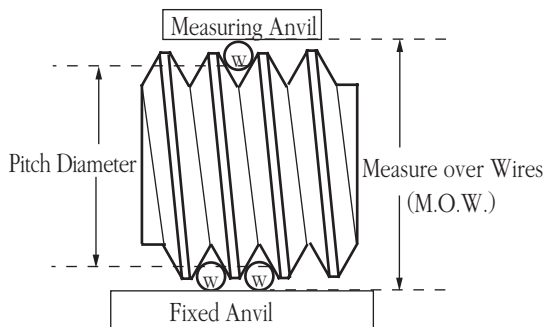
Nominal Sizes			
#2-56 UNC	#8-32 UNC	5/16-18 UNC	1/2-20 UNF
#3-48 UNC	#8-36 UNF	5/16-24 UNC	9/16-12 UNC
#4-40 UNC	#10-24 UNC	3/8-16 UNC	9/16-18 UNF
#4-48 UNC	#10-32 UNF	3/8-24 UNF	5/8-11 UNC
#5-40 UNC	#12-24 UNC	7/16-14 UNC	5/8-18 UNF
#6-32 UNC	1/4-20 UNC	7/16-20 UNF	3/4-10 UNC
#6-40 UNF	1/4-28 UNF	1/2-13 UNC	3/4-16 UNF

Made to X tolerance unless specified.

## Thread Measuring Wires

- ❑ Calibrated Thread Wires for 60° Threads
- ❑ Packaged as a set with a slip identifying their measuring constant.

The most accurate and universally recognized method of obtaining pitch diameter measurements of thread plug or setting plug gages is by means of using 3 hardened steel measuring wires laid into opposite sides of the thread, as shown in the diagram. Precise measurements with proper pressures over these wires minus the appropriate constant equals the measured pitch diameter.



Unified & American 60 Degree - Standard Sizes - Steel							
Threads Per Inch	Nominal Best Wire Size	Threads Per Inch	Nominal Best Wire Size	Threads Per Inch	Nominal Best Wire Size	Threads Per Inch	Nominal Best Wire Size
120	.00481	40	.01443	16	.03608	6	.09623
100	.00577	36	.01604	14	.04124	5-1/2	.10497
96	.00601	32	.01804	13	.04441	5	.11547
90	.00642	30	.01925	12	.04811	4-1/2	.12830
80	.00722	28	.02062	11-1/2	.05020	4	.14434
72	.00802	27	.02138	11	.05249	3-1/2	.16496
64	.00902	26	.02221	10	.05774	3	.17765
56	.01031	24	.02406	9	.06415	3	.19245
50	.01155	22	.02624	8	.07217	2-3/4	.20995
48	.01203	20	.02887	7-1/2	.07698	2-1/2	.23094
44	.01312	18	.03208	7	.08248	2	.68868
Metric 60 Degree - Standard Sizes - Steel							
Pitch mm	Nominal Best Wire Size mm	Pitch mm	Nominal Best Wire Size mm	Pitch mm	Nominal Best Wire Size mm	Pitch mm	Nominal Best Wire Size mm
2	.1155	6	.3464	1.5	.8660	4.5	2.5981
.225	.1299	.7	.4041	1.75	1.0104	5.0	2.8868
.25	.1443	.75	.4330	2.0	1.1547	5.5	3.1754
.3	.1732	.8	.4619	2.5	1.4434	6.0	3.4641
.35	.2021	.9	.5196	3.0	1.7321	7.0	4.0415
.4	.2309	1.0	.5774	3.5	2.0207	8.0	4.6188
.45	.2598	1.25	.7217	4.0	2.3094	9.0	5.1962
.5	.2887					10.0	5.7735