IDEAL PRECISION
INSTRUMENT SERVICE, INC.

Your Single Source for Precision Instruments, Gaging, and Repair.

TOLERANCE CLASSES

ABOVE	TO & INCLUDING	XXX	XX	X	Y	Z
.010- .254mm	.825 20.96mm	.00001 .00025mm	.00002 .00051mm	.00004 .00102mm	.00007 .00178mm	.0001 .00254mm
.825- 20.96mm	1.510 38.35mm	.000015 .00038mm	.00003 .00076mm	.00006 .00152mm	.00009 .00229mm	.00012 .00305mm
1.510- 38.35mm	2.510 63.75mm	.00002 .00050mm	.00004 .00102mm	.00008 .00203mm	.00012 .00305mm	.00016 .00406mm
2.510- 63.75mm	4.510 114.55mm	.000025 .00063mm	.00005 .00127mm	.0001 .00254mm	.00015 .00381mm	.0002 .00508mm
4.510- 114.55mm	6.510 165.35mm	.000033 .00083mm	.000065 .00165mm	.00013 .00330mm	.00019 .00483mm	.00025 .00635mm
6.510- 165.35mm	9.010 228.85mm	.00004 .001mm	.00008 .00203	.00016 .00406mm	.00024 .00610mm	.00032 .00813mm
9.010- 228.85mm	12.010 305.05mm	.00005 .00125mm	.0001 .00254mm	.0002 .00508mm	.0003 .00762mm	.0004 .01016mm

Direction of Tolerances

Plug Gages

Go Member - Tolerance applied to the plus side.
No Go Member - Tolerance applied to the minus side.
Master (Bilateral) - Tolerance is equally split plus and minus

Ring Gages

Go Member - Tolerance applied to the minus side.
No Go Member - Tolerance applied to the plus side.
Master (Bilateral) - Tolerance is equally split plus and minus

Roundness and Taper and Hardness

Not to exceed 50% of Tolerance
Hardness should be between 58 and 64 as measured on the Rockwell C Scale