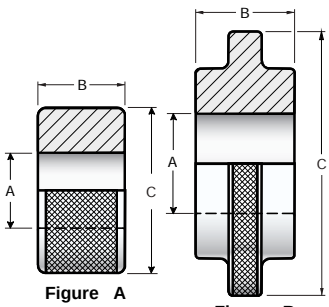
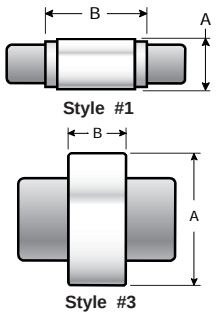
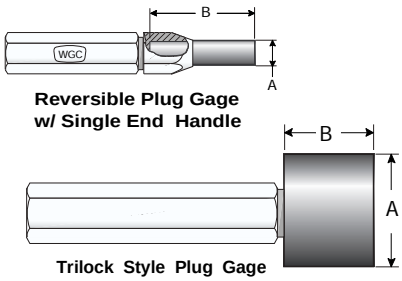
Setting Master Dimensional Data

See page 27 for order codes







Ring Gage Masters

Diameter A above - incl.	Dia. C	Dim. B	Gage Blank #	Figure
.040 - .060	.94	.19	00**	A
.060 - .070	.94	.25	sp**	A
.070 - .230	.94	.37	0**	A
.230 - .365	1.13	.56	1	A
.365 - .510	1.38	.75	2	A
.510 - .825	1.75	.94	3	A
.825 -1.135	2.13	1.13	4	A
1.135 -1.510	2.50	1.31	5	A
1.510 - 2.010	4.00	1.50	6	B
2.010 - 2.510	4.50	1.50	7	B
2.510 - 3.010	5.00	1.50	8	B
3.010 - 3.510	5.50	1.50	9	B
3.510 - 4.010	6.38	1.50	10	B
4.010 - 4.760	7.25	1.50	11	B
4.760 - 5.510	8.25	1.50	12	B
5.510 - 6.260	9.25	1.50	13	B
6.260 - 7.010	10.30	1.50	14	B
7.010 - 7.760	11.30	1.50	15	B
7.760 - 8.510	12.30	1.50	16	B
8.510 - 9.100	13.30	1.50	17	B

** In these sizes, Western provides a blank that is thicker than the A.N.S.I. standard for more reliable gage mastering.

Set Disc Masters

Diameter A above - incl.	Dim B	Gage Style
.150 - .230	1.19"	1
.230 - .365	1.31"	1
.365 - .510	1.44"	1
.510 - .825	1.56"	1
.825 - 1.135	1.69"	1
1.135 - 1.510	1.94"	1
1.510 - 2.510	.88"	3
2.510 - 8.010	1.00"	3

Master Setting Plugs

Diameter A above - incl.	Dim B	Gage Style
.060 - .825	2.00"	Reversible
.825 - .947	1.25"	Trilock
.947 - 1.135	1.37"	Trilock
1.135 - 1.510	1.50"	Trilock
1.510 - 2.010	.88"	Trilock
2.010 - 3.510	1.00"	Trilock
3.510 - 8.010	1.00"	Trilock

AMERICAN GAGE DESIGN TOLERANCES

Size above -incl. inch / *mm*	Tolerance - inch / µm XXX	XX	X	Y	Z
.029 - .825	.00001	.00002	.00004	.00007	.00010
.74 - 20.96	*.25*	*.51*	*1.02*	*1.78*	*2.54*
.825 - 1.510	.000015	.00003	.00006	.00009	.00012
20.96 - 38.35	*.38*	*.76*	*1.52*	*2.29*	*3.05*
1.510 - 2.510	.00002	.00004	.00008	.00012	.0001
38.35 - 63.75	*.51*	*1.02*	*2.03*	*3.05*	*4.06*
2.510 - 4.510	.000025	.00005	.00010	.00015	.0002
63.75 - 114.55	*.64*	*1.27*	*2.54*	*3.81*	*5.08*
4.510 - 6.510	.000033	.000065	.00013	.00019	.00025
114.55 - 163.35	*.83*	*1.65*	*3.30*	*4.83*	*6.35*
6.510 - 9.010	.00004	.00008	.00016	.00024	.00032
163.35 - 228.85	*1.02*	*2.03*	*4.06*	*6.10*	*8.13*

Bilateral / Unilateral Tolerances

A.G.D. classes define the total tolerance zone for the gage. Master gages are made with the A.G.D. class tolerance split equally (bilaterally). Go and NoGo fixed limit gages for functional testing of workpieces are normally unilaterally toleranced into the tolerance zone of the part. Thus, "Go Rings" and "No-Go Plug" gages are unilaterally minus toleranced. "No-Go Rings" and "Go Plug" gages are unilaterally plus toleranced. For example, a .5000" master ring gage, with a class "XX" tolerance (.00002") is finished to a diametrical tolerance of ±.00001". Ordered as a No-Go ring gage, the .5000" ring would be finished to +.00002"/.00000" diametrical tolerance.