

Limits and Tolerances for Plain Limit Gauges

BS 969: 1982

Gauge size limits at 20° C for ranges of work piece tolerance in metric units: millimetres.

METRIC

Work piece tolerance		Gauge	Wear all'ce	Plug Gauge limits				Ring or Gap Gauge limits			
from	up to & incl	tolerance	Go only	Go		Not Go		Go		Not Go	
0.009	0.018	0.001	0.001	0.002	0.001	0.0	-0.001	-0.001	-0.002	0.001	0.0
0.018	0.032	0.002	0.001	0.003	0.001	0.0	-0.002	-0.001	-0.003	0.002	0.0
0.032	0.058	0.003	0.002	0.005	0.002	0.0	-0.003	-0.002	-0.005	0.003	0.0
0.058	0.100	0.004	0.004	0.008	0.004	0.0	-0.004	-0.004	-0.008	0.004	0.0
0.100	0.180	0.006	0.007	0.013	0.007	0.0	-0.006	-0.007	-0.013	0.006	0.0
0.180	0.320	0.009	0.012	0.021	0.012	0.0	-0.009	-0.012	-0.021	0.009	0.0
0.320	0.580	0.014	0.025	0.039	0.025	0.0	-0.014	-0.025	-0.039	0.014	0.0
0.580	1.000	0.025	0.048	0.073	0.048	0.0	-0.025	-0.048	-0.073	0.025	0.0
1.000	1.800	0.040	0.080	0.120	0.080	0.0	-0.040	-0.080	-0.120	0.040	0.0
1.800	3.200	0.050	0.155	0.205	0.155	0.0	-0.050	-0.155	-0.205	0.050	0.0

INCH

Work piece tolerance		Gauge	Wear all'ce	Plug Gauge limits				Ring or Gap Gauge limits			
from	up to & incl	tolerance	Go only	Go		Not Go		Go		Not Go	
0.00035	0.00070	0.00005	0.00005	0.00010	0.00005	0.0	-0.00005	-0.00005	-0.00010	0.00005	0.0
0.00070	0.00125	0.00010	0.00005	0.00015	0.00005	0.0	-0.00010	-0.00005	-0.00015	0.00010	0.0
0.00125	0.00230	0.00010	0.00010	0.00020	0.00010	0.0	-0.00010	-0.00010	-0.00020	0.00010	0.0
0.00230	0.00400	0.00015	0.00015	0.00030	0.00015	0.0	-0.00015	-0.00015	-0.00030	0.00015	0.0
0.00400	0.00700	0.00025	0.00030	0.00055	0.00030	0.0	-0.00025	-0.00030	-0.00055	0.00025	0.0
0.00700	0.01250	0.00035	0.00050	0.00085	0.00050	0.0	-0.00035	-0.00050	-0.00085	0.00035	0.0
0.01250	0.02300	0.00055	0.00100	0.00155	0.00100	0.0	-0.00055	-0.00100	-0.00155	0.00055	0.0
0.02300	0.04000	0.00100	0.00190	0.00290	0.00190	0.0	-0.00100	-0.00190	-0.00290	0.00100	0.0
0.0400	0.0700	0.0016	0.0032	0.0048	0.0032	0.0	-0.0016	-0.0032	-0.0048	0.0016	0.0
0.0700	0.1250	0.0020	0.0061	0.0081	0.0061	0.0	-0.0020	-0.0061	-0.0081	0.0020	0.0

Gauge size limits at 20 degrees Celcius for ranges of work piece tolerances.

Errors in size and form of the gauge

to be contained within these limits.

Work piece tolerances less than 0.009mm (0.00035 in.) should be measured directly.