



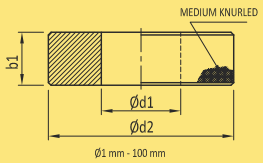
PLAIN GAUGES & MASTERS

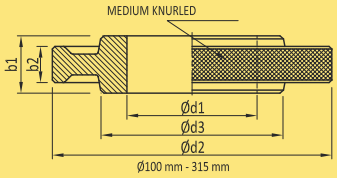


Master Setting Ring

RANGE: 1.5 - 315 mm







ød1		ød2	b1
ABOVE	UPTO & INC.		
1.5	2.5	22	4
2.5	5.0	22	5
5.0	10.0	32	8
10.0	15.0	38	10
15.0	20.0	45	12
20.0	25.0	53	14
25.0	32.0	63	16
32.0	40.0	71	18
40.0	50.0	85	20
50.0	60.0	100	20
60.0	70.0	112	24
70.0	80.0	125	24
80.0	90.0	140	24
90.0	100.0	160	24

ød1		Size Tolerance (mm)	Roundess & Parallelism (mm)
ABOVE	UPTO & INC.		
1	3	±0.0015	0.0003
3	6	±0.002	0.0004
6	10	±0.002	0.0004
10	18	±0.0025	0.0005
18	30	±0.003	0.0006
30	50	±0.0035	0.0007
50	80	±0.004	0.0008
80	120	±0.005	0.001
120	180	±0.006	0.0012
180	250	±0.007	0.0014
250	315	±0.008	0.0016

ød1		ød2	ød3	THICKNESS	
ABOVE	UPTO & INC.			b1	b2
100.0	110.0	170	132	28	14
110.0	120.0	180	140	28	16
120.0	130.0	190	150	28	16
130.0	140.0	200	160	28	18
140.0	150.0	212	170	28	18
150.0	160.0	224	180	28	20
160.0	170.0	236	190	32	20
170.0	180.0	250	200	32	20
180.0	190.0	265	212	32	22
190.0	200.0	280	224	32	22
200.0	212.0	300	236	32	22
212.0	224.0	315	250	32	25
224.0	236.0	335	265	36	25
236.0	250.0	355	280	36	28
250.0	265.0	375	300	36	28
265.0	280.0	400	315	36	28
280.0	300.0	425	335	36	32
300.0	315.0	450	355	36	32

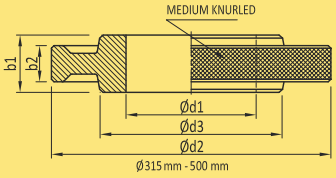
FEATURES

- Used for setting any kind of measuring instruments like horizontal comparators, length measuring machines for ID checking, dial bore gauges etc.
- Made from oil hardening non shrinking gauge steel, hardened and tempered to 60-62 HRC.
- Subzero treated at -80°C for long –term dimensional stability.
- Actual dimensions duly etched.
- Calibrated at 20°C under Standards Room conditions against National/International traceable standards.
- Certificate of calibration is provided along with each master traceable to National/International standards. Certificate under NABL (as per ISO 17025) as per request.
- Manufactured as per DIN2250-1 Type C.
- Master Setting Rings also supplied in standard set consisting of sizes –
  Set 1: Ø4.0, Ø5.0, Ø6.0 & Ø8.0 mm
  Set 2: Ø10.0, Ø12.0, Ø16.0 , Ø20.0 & Ø25.0 mm

Master Setting Ring

LARGE DIAMETER MASTER SETTING RING





ød1		ød2	ød3	THICKNESS	
ABOVE	UPTO & INC.			b1	b2
315	325	450	365	36	32
325	340	460	380	36	32
340	350	460	390	36	32
350	360	460	390	40	36
360	370	500	420	40	36
370	380	510	430	40	36
380	390	520	440	40	36
390	400	530	450	40	36
400	410	540	460	45	40
410	420	550	470	45	40
420	430	560	480	45	40
430	440	570	490	45	40
440	450	580	500	45	40
450	460	590	510	45	40
460	470	600	510	45	40
470	480	610	520	45	40
480	490	620	530	45	40
490	500	620	540	45	40

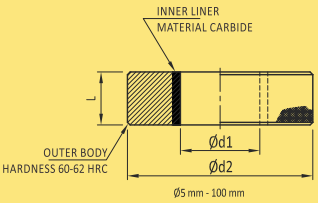
ød1		Size Tolerance (mm)	Roundess & Parallelism (mm)
ABOVE	UPTO & INC.		
315	400	± 0.009	0.003
400	450	± 0.010	0.004
450	500	± 0.010	0.004

FEATURES

- Range: Ø315 mm to Ø500 mm.
- Used for setting of measuring instruments like horizontal comparators, length measuring machines for ID checking, dial bore gauges etc.
- Made from high quality oil hardened non-shrinking gauge steel, hardened and tempered to 60-62 Hrc.
- Subzero treated at -80°C for long term dimensional stability.
- Certificate of calibration is provided along with each master traceable to National/International standards
- Manufactured with the highest levels of precision based on the DIN 2250 standard.

CARBIDE MASTER SETTING RING





ød1		ød2	L
ABOVE	UPTO & INC.		
5.0	10.0	32.0	12.0
10.0	15.0	38.0	12.0
15.0	20.0	45.0	12.0
20.0	25.0	53.0	20.0
25.0	32.0	63.0	20.0
32.0	40.0	71.0	20.0
40.0	50.0	85.0	20.0
50.0	60.0	100.0	20.0
60.0	70.0	112.0	20.0
70.0	80.0	125.0	20.0
80.0	90.0	140.0	20.0
90.0	100.0	160.0	20.0

ød1		Size Tolerance (mm)	Roundess & Parallelism (mm)
ABOVE	UPTO & INC.		
5.0	10.0	± 0.0025	0.0015
10.0	20.0	± 0.003	0.0015
20.0	32.0	± 0.004	0.0015
32.0	50.0	± 0.005	0.0020
50.0	80.0	± 0.006	0.0020
80.0	100.0	± 0.006	0.0025

FEATURES

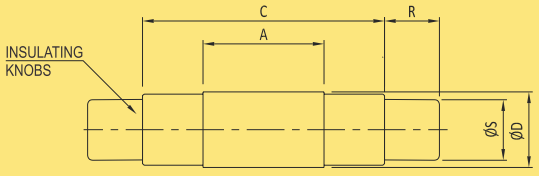
- Range: Ø5 mm to Ø100 mm.
- Carbide sleeve press fit in steel body for high wear resistance
- Used for setting any kind of measuring instruments like horizontal comparators, length measuring machines for ID checking, dial bore gauges etc.
- Steel body Sub-zero treated at -80°C for long –term dimensional stability.
- Actual dimensions duly etched.
- Calibrated at 20°C under Standards Room conditions against National/International traceable standards.
- Certificate of calibration is provided along with each master traceable to National/International standards. Certificate under NABL (as per ISO 17025) as per request.

Master Setting Disc

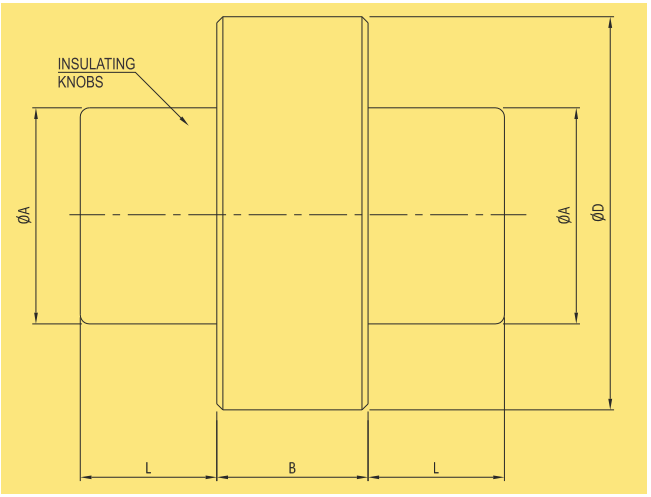
RANGE: 3 - 200 mm





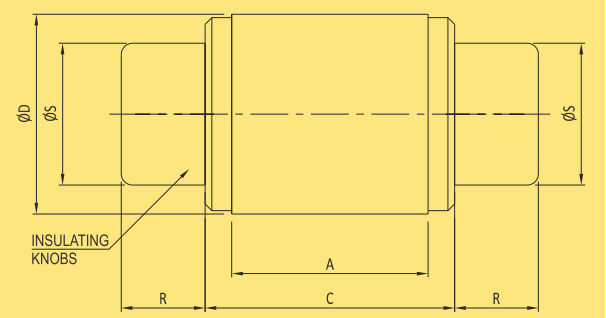


ØD		A	C	R	ØS
ABOVE	UPTO & INCLUDING				
3.0	3.81	9.52	17.46	11.1	2.4
3.81	5.84	11.11	19.05	11.1	3.2
5.84	9.27	12.7	20.64	11.1	5.6



ØD		B	ØA	L
ABOVE	UPTO & INCLUDING			
38.35	51.05	22.2	31.8	15.8
51.05	63.75	22.2	31.8	15.8
63.75	76.45	25.4	38.1	39.8
76.45	89.15	25.4	38.1	39.8
89.15	101.85	25.4	38.1	39.8
101.85	114.55	25.4	38.1	39.8
114.55	127.25	25.4	38.1	39.8
127.25	139.95	25.4	38.1	39.8
139.95	152.65	25.4	38.1	39.8
152.65	165.35	25.4	38.1	39.8
165.35	178.05	25.4	38.1	39.8
178.05	190.75	25.4	38.1	39.8
190.75	200.00	25.4	38.1	39.8

Above 200 mm upto 300 mm on request



ØD		A	C	R	ØS
ABOVE	UPTO & INCLUDING				
9.27	12.95	14.29	22.22	12.7	8.7
12.95	20.96	15.88	23.81	12.7	12.7
20.96	28.83	17.46	25.4	15.9	19
28.83	38.35	20.64	28.58	15.9	25.4

Nominal Diameter Range (mm)	Size Tolerance (mm)	Roundness & Parallelism
3-20.96	±0.0008	0.0005
20.96-38.35	±0.0011	0.0007
38.35-63.75	±0.0015	0.0010
63.75-114.55	±0.0019	0.0012
114.55-165.35	±0.0024	0.0016
165.35-200	±0.0030	0.0020

FEATURES

- Used for setting of measuring instruments like horizontal comparators, length measuring machines for OD checking.
- Made from oil hardened non shrinking gauge steel, hardened and tempered to 60-62 HRC
- Sub-zero treated at -80 °C for long term dimensional stability
- Actual dimensions duly etched
- Calibrated at 20 °C under standards room conditions against national/international traceable standards
- Certificate of calibration is provided along with each master traceable to national/international standards
- Certificate under NABL (as per ISO 17025) as per request
- Manufactured as per ASME B47.1 (blank design) & ASME B89.1.5 (for form tolerance class X , size tolerance class Y & surface finish class XXX)

Plain Plug Gauge

RANGE: 3 - 40 mm









FEATURES

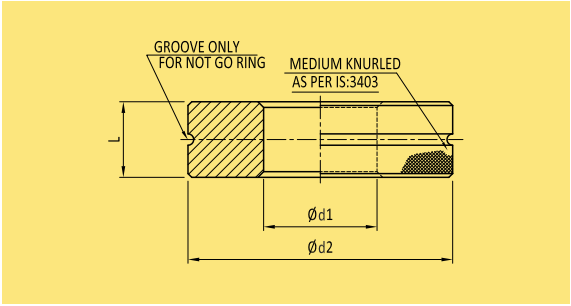
- Range: Ø 3 mm to Ø40 mm with tolerance class H7.
- Other size and tolerance classes on request.
- Made as per DIN 2245/DIN 7164/DIN 1938.
- Made from oil hardening non shrinking gauge steel, hardened, tempered, subzero treated, ground and lapped.
- Calibration certificate is provided along with each gauge traceable to National/International standards. Certificate under NABL (as per ISO 17025) on request.
- Plug gauge set consisting of size Ø3, Ø4, Ø5, Ø6, Ø8, Ø10 and Ø12 of tolerance class H7 can be supplied. Other sets on request.

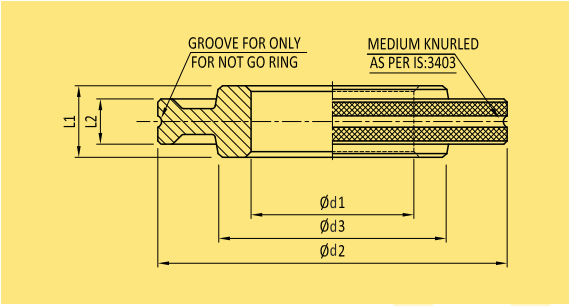


Plain Ring Gauge

RANGE: 1.5 - 315 mm







ød1		ød2	L	
ABOVE	UPTO & INC.		GO	NOT GO
1.5	2.5	22	6	4
2.5	5.0	22	10	5
5.0	10.0	32	12	8
10.0	15.0	38	14	10
15.0	20.0	45	16	12
20.0	25.0	53	18	14
25.0	32.0	63	20	16
32.0	40.0	71	24	18
40.0	50.0	85	32	20
50.0	60.0	100	32	20
60.0	70.0	112	32	24
70.0	80.0	125	32	24
80.0	90.0	140	32	24
90.0	100.0	160	32	24

ød1		ød2	ød3	GO		NOT GO	
ABOVE	UPTO & INC.			L1	L2	L1	L2
100.0	110.0	170	132	36	14	28	14
110.0	120.0	180	140	36	16	28	16
120.0	130.0	190	150	36	16	28	16
130.0	140.0	200	160	36	18	28	18
140.0	150.0	212	170	36	18	28	18
150.0	160.0	224	180	36	20	28	20
160.0	170.0	236	190	40	20	32	20
170.0	180.0	250	200	40	20	32	20
180.0	190.0	265	212	40	22	32	22
190.0	200.0	280	224	45	22	32	22
200.0	212.0	300	236	45	22	32	22
212.0	224.0	315	250	45	25	32	25
224.0	236.0	335	265	50	25	36	25
236.0	250.0	355	280	50	28	36	28
250.0	265.0	375	300	50	28	36	28
265.0	280.0	400	315	56	28	36	28
280.0	300.0	425	335	56	32	36	32
300.0	315.0	450	355	56	32	36	32

FEATURES

- GO & NOTGO ring gauges are manufactured as per IS 3485, DIN 2250-1/DIN2254 or as per customer specification.
- Made from high quality oil hardened non-shrinking gauge steel, hardened and tempered to 60-62 Hrc.
- Subzero treated at -80°C for long term dimensional stability.
- Certificate of calibration is provided along with each ring traceable to National/International standards.

Gauge Block Set / Measuring Pin



CARBIDE GAUGE BLOCK SET



FEATURES

- Manufactured from specially selected grade of carbide with hardness of 1400 HV.
- High resistance to wear & corrosion.
- Excellent surface finish with superior wringing quality.
- Good dimensional stability for long term use.
- Coefficient of thermal expansion: 5.5 ± 1.0 x 10-6 /°C.
- Standard Metric/Inch sets are available in Grade 'O'& Grade 'I' as per ISO 3650/BS4311.

STEEL GAUGE BLOCK SET



FEATURES

- Manufactured from special alloy steel heat treated to 800 HV giving very good wear resistance.
- Good dimensional stability for long term use.
- Coefficient of thermal expansion: 11.5 ± 1.0 x 10-6 /°C.
- Standard Metric/Inch sets are available in Grade 'O' & Grade 'I' as per ISO 3650/BS4311.

MEASURING PIN

RANGE: 0.5 - 20 mm



FEATURES

- Measuring pins are manufactured based on relevant IS specification from graded steel.
- Used for checking holes, centre distance between holes, as cylindrical masters for checking gear PCD, to check the slot width etc.
- Range: Ø0.5 mm to Ø20 mm.
- Metric and inch dimensions.
- Hardness: 60±2 HRC
- Material: Steel.
- Grade 1±0.001mm as per IS standard.
- Available in steps of 0.010mm, 0.020mm, 0.050mm.
- Pins with knob / without knob available.