

Measuring Equipment



Groz is a leading manufacturer of quality tools & precision equipment to industry worldwide.

Over the years we have developed into a respected global leader. Our first class reputation has been built on the continuing ethos of striving for excellence in the products we make & services we provide.

Our aim is to build on our reputation & continue to exceed customer expectations. Working towards this, we have now extended our vast range to **Precision Measuring Equipment.**

On-going R&D has helped our engineers create a carefully crafted range that will offer quality, value & utility - the hallmark of the Groz range

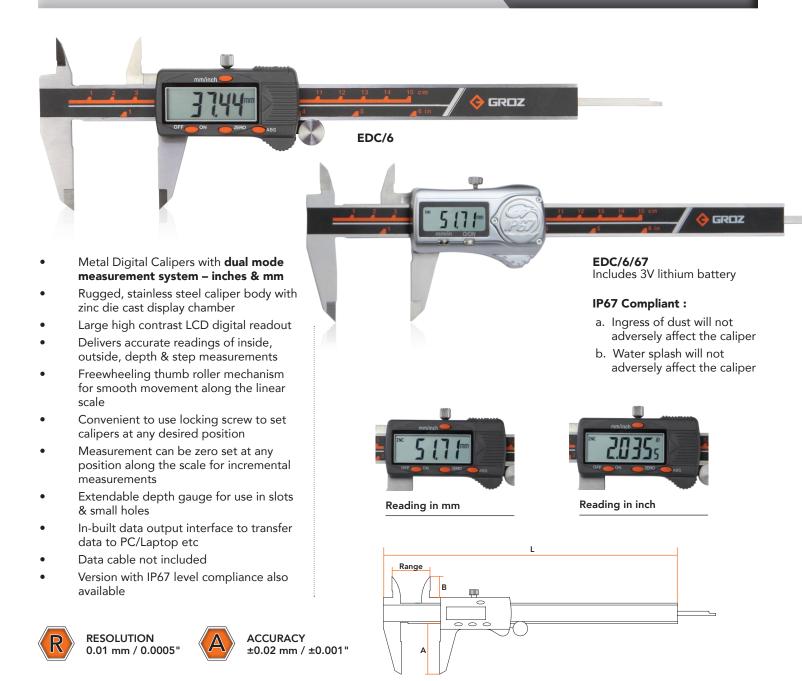


For an insight into the full range of our precision tools & equipment, call for a complete catalogue or visit our webpage at

www.groz-tools.com



1 DIGITAL CALIPERS



Cat Nu	Ord Nr.	Range		Accı	Accuracy		A		В		L	
Cat. Nr.	Ora INI.	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	
EDC/6	16023	0 - 150	0 - 6	± 0.02	± 0.001	39.50	1.60	16.00	0.60	236.00	9.30	
EDC/8	16024	0 - 200	0 - 8	± 0.02	± 0.001	50.00	2.00	19.50	0.76	286.00	11.25	
EDC/12	16025	0 - 300	0 - 12	± 0.02	± 0.001	59.25	2.33	21.00	21.00	400.00	16.4	
IP67 Compliant												
EDC/6/67	16026	0 - 150	0 - 6	± 0.02	± 0.001	39.50	1.60	15.00	0.59	236.00	9.30	



2 DIGITAL OUTSIDE MICROMETERS



- Superior tool designed to measure, record & display dimensions in inches & mm
- Balanced Frame Design: Steel frame prevents flexing ensuring greater accuracy in measurement. Insulation at top and bottom end of the frame safeguards against data distortion due to thermal expansion
- Extra large, high contrast LCD digital read out
- Non wearing carbide tipped anvil & measuring faces ensure accurate measurements over a long period of time
- Zero setting at any position along the scale
- Two Measuring Modes : Absolute & Incremental
- **Unique Ball Attachment :** Each piece comes with a standard ball attachment that converts a regular micrometer into a pipe micrometer, enabling measurement of pipes, tubes, etc.
- Supplied with master on all sizes except 0-25mm / 0-1"
- Integral data output interface to transfer data to PC / Laptop etc. Data cable not included
- Comes complete with SR44 battery
- Data cable not included
- Available in two variants: IP54 & IP65 level compliance



IP54 Compliant:

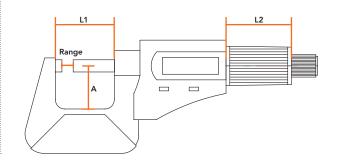
- a. Dust in the external environment will not adversely affect the micrometer
- b. Water splash from any direction will not adversely affect the micrometer





Reading in mm

Reading in inch



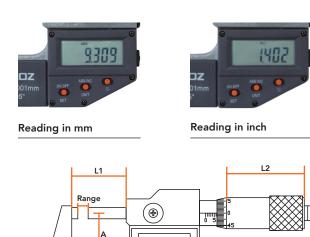
Cat. Nr.	Ord Nr.	Rar	Range		Accuracy		A		L1		L2	
	Ora Nr.	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	
IP54 Complian	IP54 Compliant											
MMED/1	16122	0 - 25	0 - 1	± 0.004	0.00016	22.60	0.89	28.00	1.10	34.00	1.34	
MMED/2	16123	25 - 50	1 - 2	± 0.004	0.00016	31.75	1.25	53.00	2.09	34.00	1.34	





IP65 Compliant:

- a. Ingress of dust will not adversely affect the micrometer
- b. Complete protection against water jet from any direction. Will not adversely affect the micrometer



0



Cata Na	Oud No	Rar	nge	Accuracy		Α		L1		L2	
Cat. Nr.	Ord Nr.	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch
IP65 Complian	IP65 Compliant										
MMED/1/65	16124	0 - 25	0 - 1	± 0.002	0.0001	22.60	0.89	28.00	1.10	48.50	1.91



3 OUTSIDE MICROMETERS



- Balanced Frame Design: Steel frame prevents flexing ensuring greater accuracy in measurement. Can be operated efficiently with one hand
- Non wearing carbide tipped anvil & measuring faces ensure accurate measurements over a long period of time
- Hardened spindle with precisely cut threads for smooth movement and high accuracy
- Satin chrome thimble and barrel with convenient to read deep etched graduations in black
- Ratchet stop for exact repetitive measurements
- Quick & easy zero adjustment with spanner wrench
- Supplied with master on all sizes except 0-25mm / 0-1"
- Available in inch & metric models



RESOLUTION 0.01 mm / 0.0001"

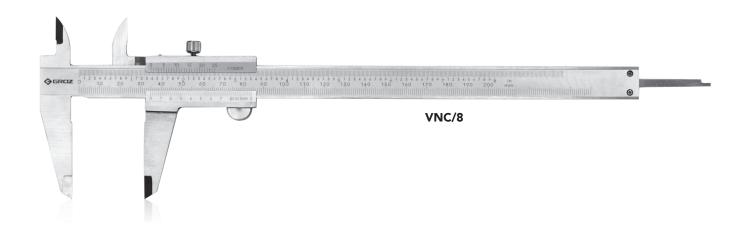
Cat. No.	Ord Nr.	Range	Accuracy			
Cat. Nr.	Ora INI.	mm	mm			
MM/0-25	16104	0 - 25	± 0.004			
MM/25-50	16105	25 - 50	± 0.004			
MM/50-75	16106	50 - 75	± 0.004			
MM/75-100	16107	75 - 100	± 0.004			
MM/100-125	16108	100 - 125	± 0.004			
MM/125-150	16109	125 - 150	± 0.004			
Sets						
MM/0-100/ST4	16110	Set of 4, Range: 0-25 mm, 25-50 mm 50-75 mm & 75-100 mm				
MM/0-150/ST6	16111	Set of 6, Range: 0-25mm, 25-50mm, 50-75mm, 75-100mm, 100-125mm & 125-150mm				

MM/0-150	/ST6	

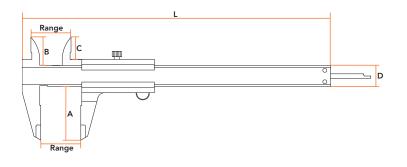
		Range	Accuracy		
Cat. Nr.	Ord Nr.	Inch	Inch		
MM/0-1	16112	0 - 1	± 0.0001		
MM/1-2	16113	1 - 2	± 0.0001		
MM/2-3	16114	2 - 3	± 0.0001		
MM/3-4	16115	3 - 4	± 0.0001		
MM/4-5	16116	4 - 5	± 0.0001		
MM/5-6	16117	5 - 6	± 0.0001		
Sets					
MM/0-4/ST4	16118	Set of 4, Range: 0-1 3-4"	1", 1-2", 2-3" &		
MM/0-6/ST6	16119	Set of 6, Range: 0-1", 1-2", 2-3", 3-4", 4-5" & 5-6"			



4 VERNIER CALIPERS



- Most popular caliper design manufactured to exacting tolerances
- Useful for inside and outside measurements, depth & step measurements
- Hardened stainless steel construction in satin chrome finish
- Vernier scale etched with permanent black graduations allows precise & convenient reading
- Free wheeling thumb roller mechanism for smooth movement along the linear scale
- Convenient to use locking screw to set calipers at any desired position - a feature very useful in application requiring repititive measurements
- Extendable depth gauge for use in slots & small holes







Cat Nr. DBA/3 Ord Nr. 16027 Depth Base Attachment

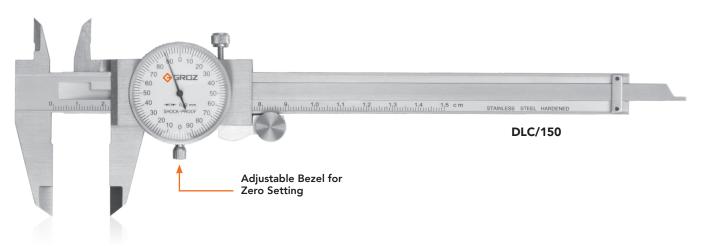


Slide-on attachment connects to the depth end of the caliper providing a base for spanning holes Suitable for use with manual, dial & digital calipers – 6"(150mm) & 8"(200mm)

Cat. Nr.	Ord Nr.	Range		Accuracy	L	Α	В	С	D
	Ord Nr.	mm	Inch	mm	mm	mm	mm	mm	mm
VNC/6	16043	0 - 150	0 - 6	± 0.02	229.00	40.00	20.00	15.00	16.00
VNC/8	16044	0 - 200	0 - 8	± 0.03	292.00	50.00	24.00	20.00	16.00
VNC/12	16045	0 - 300	0 - 12	± 0.04	405.00	61.50	26.00	20.00	20.00



5 DIAL CALIPERS

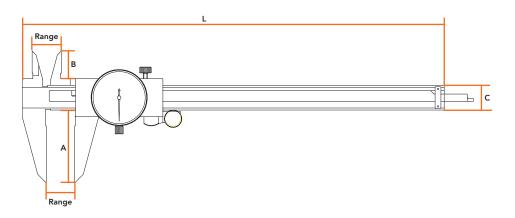


- Vernier Calipers with a large & clear dial read off
- Hardened stainless steel construction in satin chrome finish
- Vernier scale etched with permanent black graduations allows precise
 & convenient reading
- Covered rack prevents dirt & chips from entering the 'rack & gear' mechanism ensuring smooth operation
- Free wheeling thumb roller mechanism for smooth movement along the linear scale
- Convenient to use locking screw to set calipers at desired position; a feature very useful in applications requiring repetitive measurements
- Suitable for inside, outside, depth & step measurements
- Dial gauge has an adjustable bezel for zero setting



Reading in mm





Cat. Nr.	Oud Nu	Range Range per Revolution		Accuracy	Α	В	С	L
Cat. IVI.	Ord Nr.	mm	mm	mm	mm	mm	mm	mm
DLC/150	16062	0 - 150	2	± 0.02	39.40	16.00	16.00	236.00
DLC/200	16063	0 - 200	2	± 0.03	47.50	19.00	16.00	285.00
DLC/300	16064	0 - 300	2	± 0.04	62.00	21.00	20.00	410.00



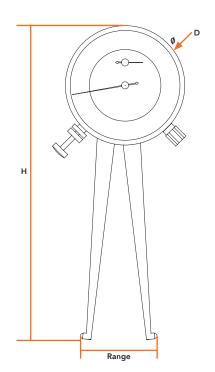
6 INTERNAL DIAL CALIPERS



- Designed for use in measuring bores of castings & inside reading in fabrications
- These are used as comparison gauges & should be used with an absolute measurement device such as a micrometer, setting ring, etc.
- Calipers are spring loaded & make point contact at constant measuring pressure
- Available in inch & metric sizes
- Dial gauge with adjustable bezel for zero setting



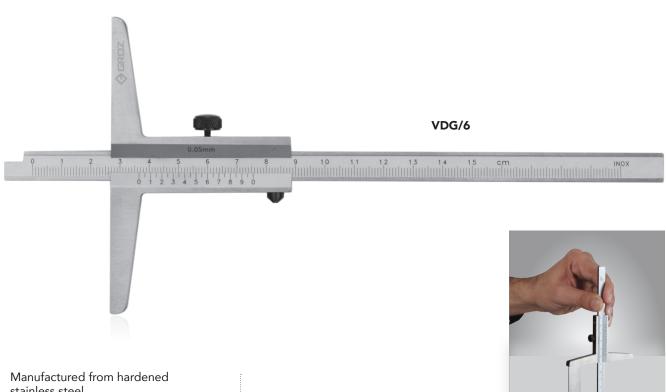




Cata Na	Ord Nr.	Ra	nge	Н			D		
Cat. Nr.	Ord Nr.	mm	Inch	mm	Inch	mm	Inch		
IDC/1M	16070	10 - 35	-	135.00	-	50.00	-		
IDC/1	16071	-	0.375 – 1.375	-	5.3	-	2		



VERNIER DEPTH GAUGES

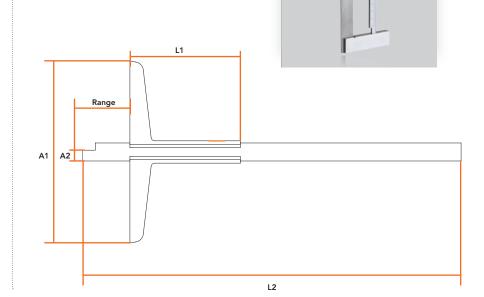


- stainless steel
- Designed for measuring depths of holes, slots & recesses and for inspecting jigs, fixtures and die work
- Vernier scale etched with permanent black graduations allows precise and convenient reading
- Free wheeling thumb screw for smooth movement along the linear scale
- Base Width: 100 mm
- Base Thickness: 7.0 mm
- Convenient to use locking screw to set calipers at desired position; a feature very useful in applications requiring repititive measurements





ACCURACY ±0.05 mm



Cat. Nr.	Ord Nr.	Range		A1	A2	L1	L2
Cat. IVI.	Ora Ni.	mm	Inch	mm	mm	mm	mm
VDG/6	16080	150	6	100.00	6.00	61.50	225.00
VDG/8	16081	200	8	100.00	6.00	61.50	275.00
VDG/12	16082	300	12	100.00	6.00	61.50	373.00

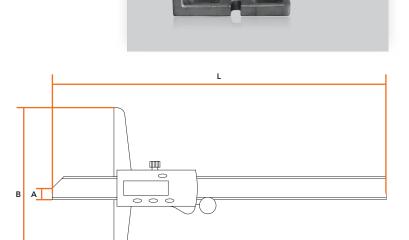


8 DIGITAL DEPTH GAUGES



- Metal Digital Depth Gauges with dual mode measurement system - inches & mm
- Large high contrast LCD digital readout
- Free wheeling thumb roller mechanism for smooth movement along the linear scale
- Integral data output interface to transfer data to PC/ Laptop
- Data Cable not included
- Measurement can be zero set at any position along the scale for incremental measurement
- Base Width: 4" (100 mm)
- Base Thickness: 9/32" (7.0 mm)
- Convenient to use locking screw to set caliper at any desired position; a feature very useful in applications requiring repititive measurements

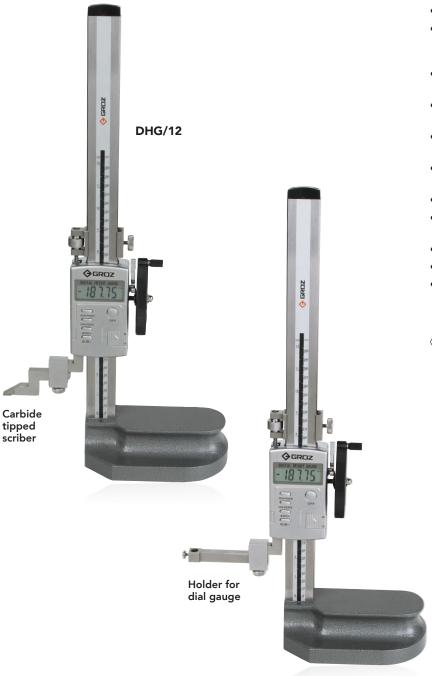




Cat. Nr.	Oud No	Ord Nr.		Accuracy		Α		В		L	
	Ord IVI.	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch
DDG/6	16090	150	6	±0.02	±0.001	6.00	0.24	100.00	4	230.00	9.06
DDG/8	16091	200	8	±0.03	±0.0015	6.00	0.24	100.00	4	280.00	11.23
DDG/12	16092	300	12	±0.04	±0.0015	6.00	0.24	100.00	4	377.00	14.84



9 DIGITAL HEIGHT GAUGES



 Cat. Nr.
 Ord Nr.
 Range

 DHG/12
 01636
 0 - 300
 0 - 12

 DHG/18
 01637
 0 - 460
 0 - 18

- Single Beam Construction
- Versatile solution for most height measurement applications, scribing & marking of workpieces, measuring run-out, center distance etc
- Hardened & ground base correctly designed to eliminate vibration
- Large easy to read LCD display with a resolution of 0.0005" (0.01mm)
- Vertical bar is accurately positioned & perfectly perpendicular to the base
- Hardened & ground carbide tipped scriber for durability
- Also included holder for 8mm stem dial gauge
- Fine adjustment provides accurate and precise positioning
- Locking handle to hold slide in position
- Can set zero at any position along the vertical
- Dial gauge not included

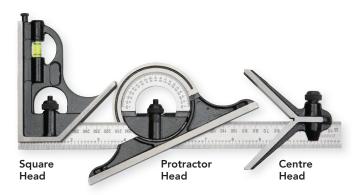




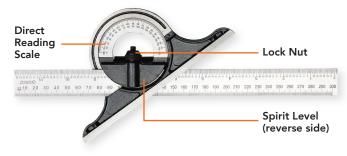




10 COMBINATION SQUARES









Cat. Nr. Ord Nr. Range 4 pc Combination Square. Includes 12" (300 mm) Rule, CSQ/12/4/ST 01070 Center Head, Protractor Head & Square Head 12" (300 mm) Steel Rule graduated in 0.50mm & 32nds RL/CSQ/12 01080 on one side & 1 mm & 64th on the reverse side CH/CSQ 01081 Center Head PH/CSQ 01082 Protractor Head SH/CSQ 01083 Square Head

- An exceptional set which combines several tools, substituting the use of try squares, miter, depth gauge, height gauge, marking gauge, level, plumb & a precision rule
- Constructed from Quality Cast Iron & complete with precision rule 12" (300 mm) long
- The individuals components of the Square are detailed as below:

Square Head: With a precision ground 90° square face & a 45° miter face. Highly versatile layout tool for scribing right angles & parallel lines. Also used as a measuring tool that can work as a try square, miter, depth gauge, height gauge & a level

Center Head: Used for accurately locating center of a cylindrical or square work piece

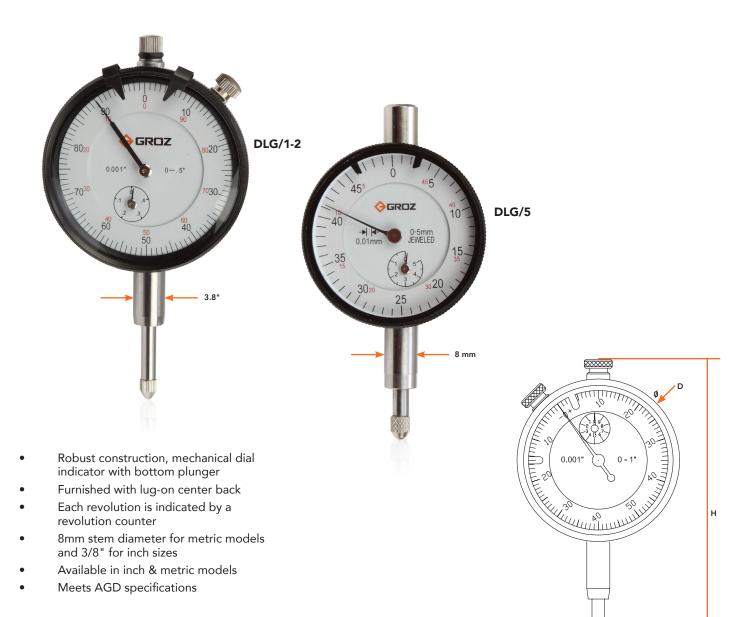
Protractor Head: Includes revolving turrets with direct reading double graduations from 0 to 180° in opposite directions. This permits accurate & quick direct reading of angles above or below the blade

Steel Rule: Precision Steel Rule with shoulder on one side. Rule is 300 mm long x 25 mm wide x 2 mm thick. Graduated with 0.50 mm & 32nds on one side & 1.0 mm & 64 ths on the reverse side





11 DIAL INDICATORS



Cat. Nr.	Ord Nr.	Range	Range per Revolution	Accuracy	Resolution	Dial Reading	AGD	D	н
DLG/5	16202	0 - 5 mm	0.50 mm	± 0.03 mm	0.01 mm	0-50	1	42.00 mm	79.00 mm
DLG/10	16203	0 - 10 mm	1.00 mm	± 0.03 mm	0.01 mm	0-100	2	58.00 mm	110.00 mm
DLG/1-2	16204	0 - 1/2 inch	0.10 inch	± 0.002 Inch	0.001 Inch	0-100	2	2.28 Inch	4.19 Inch
DLG/0-1	16205	0 - 1 inch	0.10 inch	± 0.002 Inch	0.001 Inch	0-100	2	2.28 Inch	4.67 Inch



12 DIGITAL INDICATORS



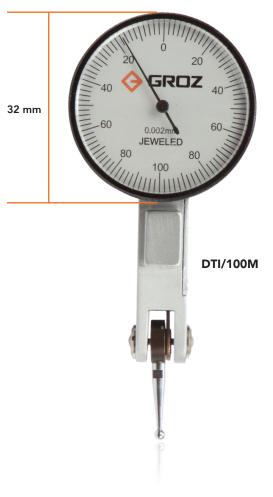


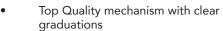
- A very versatile range of digital indicators available in two levels of precision – Standard & High Accuracy
- Robust construction
- Suitable for both inch & metric measurements
- Useful for absolute & tolerance measurement which allows for measure of upper & lower tolerances
- Supplied with flat & lug back
- Comes complete with CR 2032 : 3V battery

Cat. Nr.	Ord Nr.	Range		Accuracy		Resolution	
		mm	Inch	mm	Inch	mm inch	inch
Standard							
DGI/1	16220	0 - 12.70	0 - 1/2	± 0.02	± 0.0008	0.01	0.0005
High Accuracy							
DGI/2	16221	0 - 12.70	0 - 1/2	± 0.005	± 0.0002	0.001	0.00005



13 DIAL TEST INDICATORS





- Metric models inlcude 2 dovetail stem of dia 6 mm & 8 mm
- Inch model includes 2 dovetail stems of dia 5/32" & 3/8"



Cat. Nr.	Ord Nr.	Range	Accuracy	Resolution	Dial Reading
DTI/40M	16240	0 - 0.80 mm	±0.008 mm	0.01 mm	0 - 40 - 0
DTI/100M	16241	0 - 0.20 mm	±0.003 mm	0.002 mm	0 - 100 - 0
DTI/150	16242	0 - 0.03 inch	±0.0004 inch	0.0005 inch	0 - 15 - 0



14 ARTICULATING ARM MAGNETIC BASES



- Rigid and robust construction
- Unique design allows dial indicator with both 3/8" and 8 mm stems as well as test indicators with dovetail clamping mechanism to be set at any desired position
- 3 articulating joints lockable using a single knob
- Working angle 150°
- Base has a Vee groove that securely fastens on round ferrous jobs or machine table
- Supplied without dial gauge



Cat. Nr. Ord Nr.		Base D	Pimension (LxWxH)	Arm Length		Magnetic Pull
		mm	Inch	mm	Inch	kg
MB/30	03420	30 X 40 X 35	1-3/16 X 1-9/16 X 1-3/8	180	7-3/32	30
MB/80	03421	50 X 60 X 55	2 X 2-3/8 X 2-3/16	280	11	80
MB/80L	03422	50 X 60 X 55	2 X 2-3/8 X 2-3/16	340	13-3/8	80



15 FEELER (THICKNESS) GAUGES



- Feeler Gauges are used for adjusting & gauging spark plugs, distributor points and valve clearances or any other instance of measuring space between two points
- Stainless steel construction
- Each leaf is marked with its thickness
- Lock nut secures one or more leaves in position and each leaf is detachable if necessary
- Complete with a protective holder that helps to preserve trueness of the leaf edges

FLG/13/100

Includes the following metric sizes:

 $0.05~\rm{mm},\,0.10~\rm{mm},\,0.15~\rm{mm},\,0.20~\rm{mm},\,0.25~\rm{mm},\,0.30~\rm{mm},\,0.40~\rm{mm},\,0.50~\rm{mm},\,0.60~\rm{mm},\,0.70~\rm{mm},\,0.80~\rm{mm},\,0.90~\rm{mm},\,1.00~\rm{mm}$

FLG/20/150

Includes the following metric sizes:

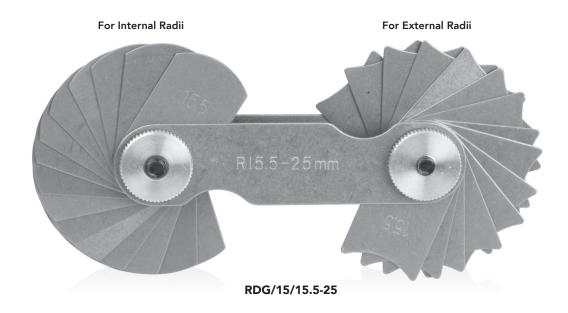
 $0.05~\rm{mm},\,0.10~\rm{mm},\,0.15~\rm{mm},\,0.20~\rm{mm},\,0.25~\rm{mm},\,0.30~\rm{mm},\,0.35~\rm{mm},\,0.40~\rm{mm},\,0.45~\rm{mm},\,0.50~\rm{mm},\,0.55~\rm{mm},\,0.60~\rm{mm},\,0.65~\rm{mm},\,0.70~\rm{mm},\,0.75~\rm{mm},\,0.80~\rm{mm},\,0.85~\rm{mm},\,0.90~\rm{mm},\,0.95~\rm{mm},\,1.00~\rm{mm}$



Cat. No.	O-d No	Number of	Range	Blade Length	Blade Width
Cat. Nr.	Ord Nr.	Leaves	Inch	mm	mm
FLG/13/100	01251	13	0.05 - 1	100	13
FLG/20/150	01250	20	0.05 - 1	150	13



16 RADIUS GAUGES



- Radius Gauges are used by tools & die-makers, machinist's, screw machine operators & pattern makers to check layouts, radii of tools, dies & patterns
- Useful for measuring external & internal radii
- Stainless Steel construction
- Leaves etched with dimensions in millimeters
- When not in use, the gauge can be rotated into the tools housing protecting the individual leaves
- Locking nut holds gauge in open or closed position



Cat. Nr.	Ord Nr.	Number of Leaves	Range	Sizes		
Cat. IVr.			mm	mm		
RDG/17/1-7	01260	17 Pairs	1 - 7	1.0, 1.25, 1.50, 1.75, 2.0, 2.25, 2.50, 2.75, 3.0, 3.50, 4.0, 4.5, 5.0, 5.50, 6.0, 6.50, 7.0		
RDG/16/7.5-15	01261	16 Pairs	7.5 - 15	7.5, 8.0, 8.5, 9.0, 9.5, 10.0, 10.5, 11.0, 11.5, 12.0, 12.5, 13.0, 13.50, 14.0, 14.50, 15.0		
RDG/15/15.5-25	01262	15 Pairs	15.5 - 25	15.50, 16.0, 16.50, 17.0, 17.50, 18.0, 18.50, 19.0, 19.50, 20.0, 21.0, 22.0, 23.0, 24.0, 25.0		



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