



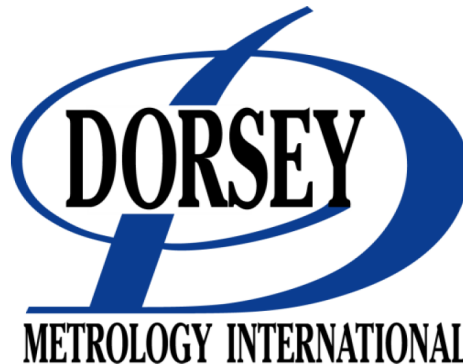
# **Borbolla**

**METROLOGY**

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01 800 122 MIDE (6433)



# Dorsey Metrology International

## Dimensional Measurement Instruments

A leader in producing quality measurement instruments for over 60 years



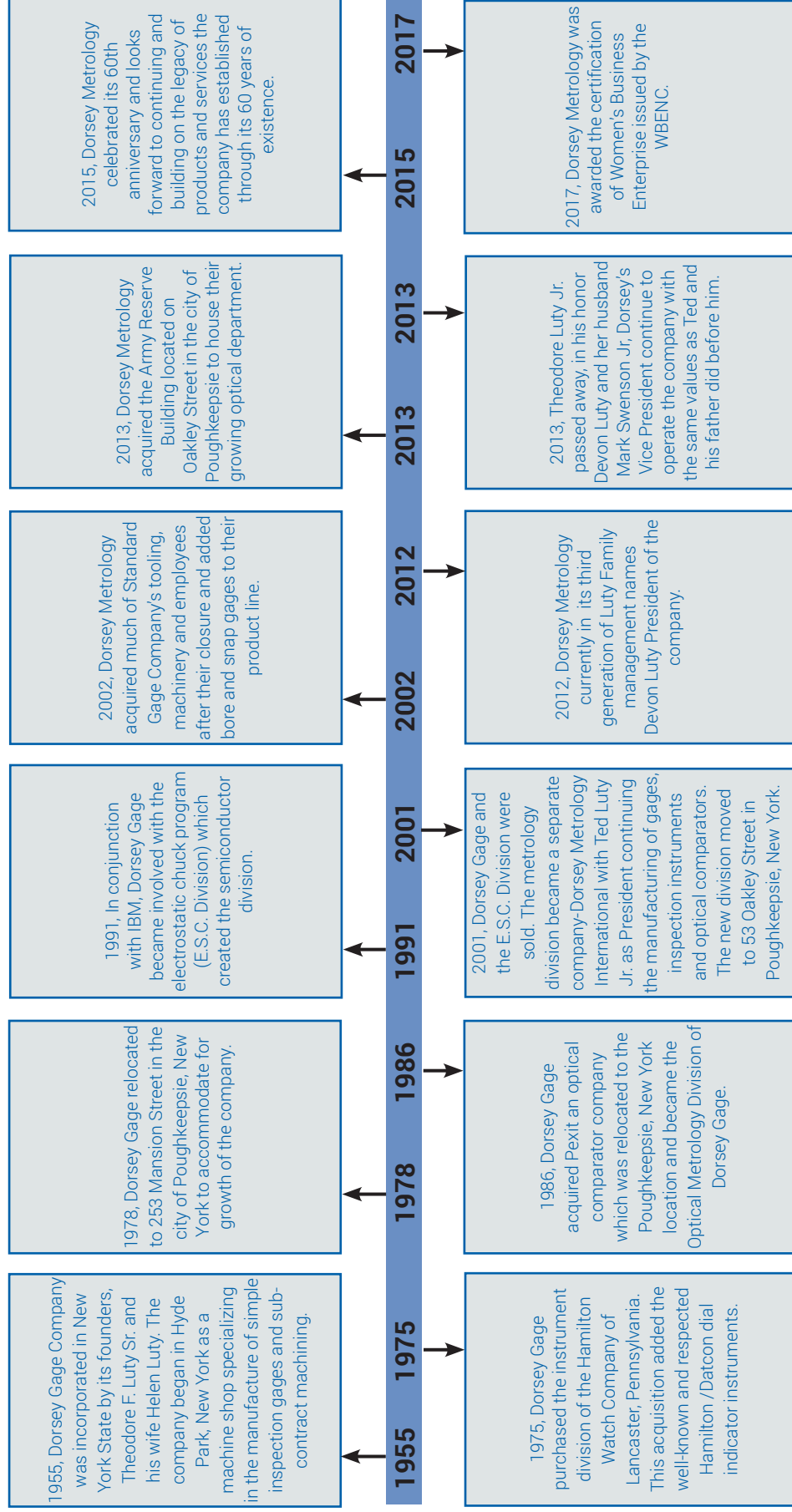
### 2018 Catalog

Your Precision Problem Solver



Products are proudly  
made in the USA

# History of Dorsey Metrology International



Theodore Francis Luty



Theodore Luty Jr.



Devon Luty, President

Various changes and company growth have been made throughout Dorsey Metrology's 60 year history but the quality and attention to detail that have been invested in our products has not changed. Proudly producing our products in the United States of America we have put the satisfaction of our customers first. Dorsey has not only offered various products for measuring needs as well as optical comparators but have always offered the customer the option to create a specific product that meets their needs.

As Dorsey Metrology moves forward into the future we will not forget the lessons of our past and we will continue to maintain our high quality standards. We will continuously improve our products to help our company and our customers remain competitive and successful.

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As you review our catalog, you will see we address a wide range of measurement applications, many with alternative approaches to achieve the same purpose, as well as unique items not available elsewhere. As an organization we value our reputation as a problem solver.

In addition to providing these catalog instruments our company is also ready to be of service by suggesting gages for any application, standard or special. To take advantage of our service, simply forward a part print identifying the dimensions that you wish. We will return a quotation listing the gages we suggest for these applications.



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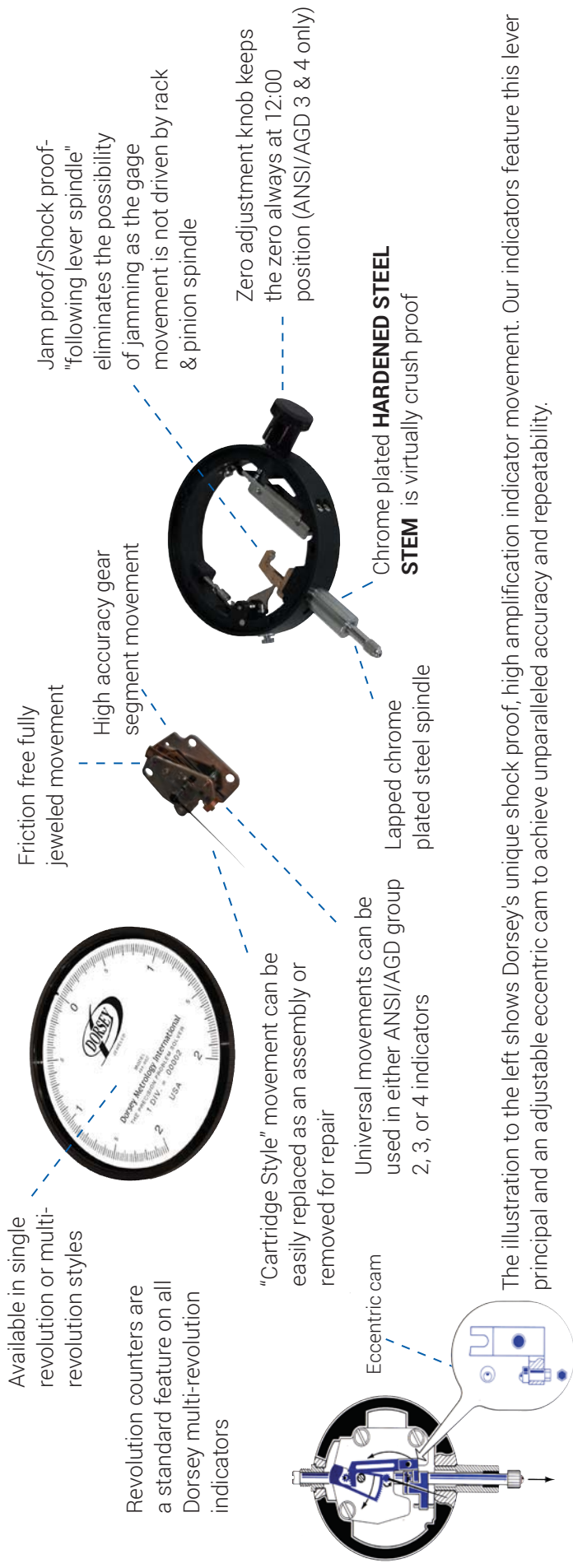
SCOPE OF ACCREDITATION

97- 98



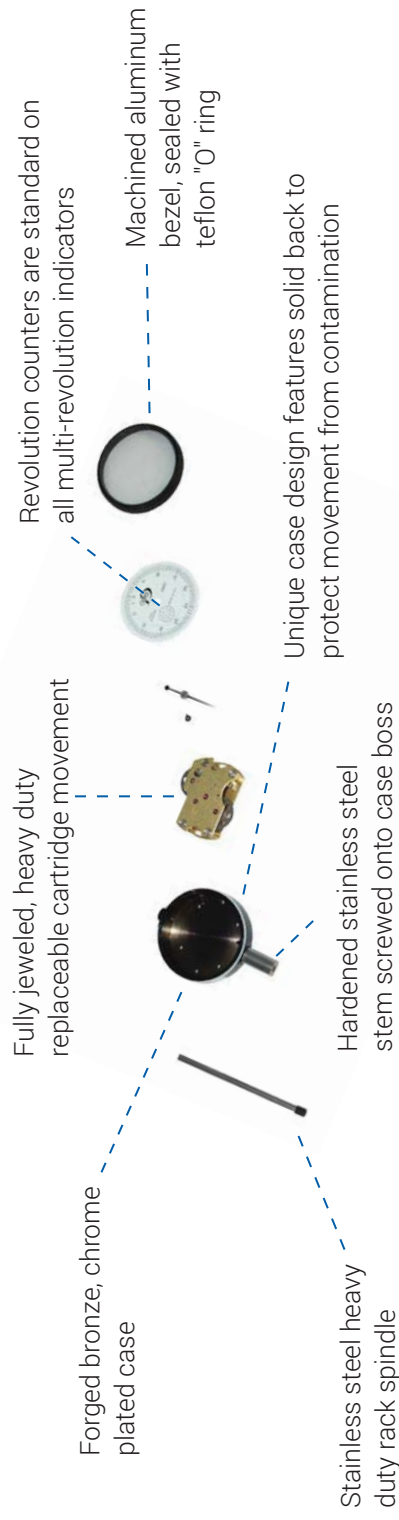
## HIGH AMPLIFICATION DIAL INDICATORS

Dorsey's high amplification dial indicators feature a shock proof "following" type jeweled movement utilizing the unique lever principle of amplification and lightweight low inertia segmented precision gears for unparalleled accuracy and repeatability.



## TRADITIONAL DIAL INDICATORS

Dorsey's traditional rack and pinion dial indicators feature heavy duty forged bronze cases, massive gears & spindles, and fully jeweled hardened stainless steel cartridge style movements.



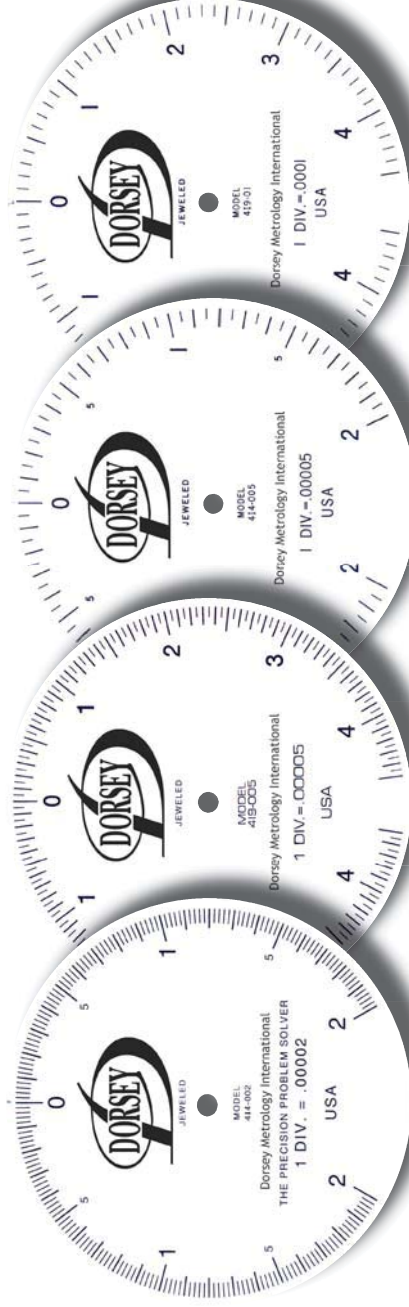
## 20 MILLIONTHS THAT YOU CAN ACTUALLY READ! FEATURES:

- ✓ Available with ISO 17025 certification.
- ✓ High amplification movement permits:
  - > Graduations as fine as 0.00002".
  - > Improved readability and minimized judgement error.
  - > Performance comparable to more expensive gaging methods.
  - > Convenient portability - no external connections required.
  - > Interchangeability - can be used in the same environment as any other mechanical dial indicator.
  - > Simplified service - complete movement is easily removed from the case for cleaning or direct replacement at low cost.
- ✓ Lever principle of amplification - minimizes effect of spindle sideshake. Linearity and repeatability maintained through millions of cycles.
- ✓ 3-5/8" bezel - conforms to ANSI/AGD standards.
- ✓ Adjustable gaging force - easily adjustable from 2 to 5 oz. by externally accessible screw.
- ✓ External zero adjustment knob - makes possible the advantage of adjusting indicator hand to zero rather than rotating bezel to 'zero' hand.
- ✓ Optional lifting lever or cable release. Use lifting lever only when indicator is back mounted. Cable release may be used when indicator is back or stem mounted for enhanced stability of gaging setup.

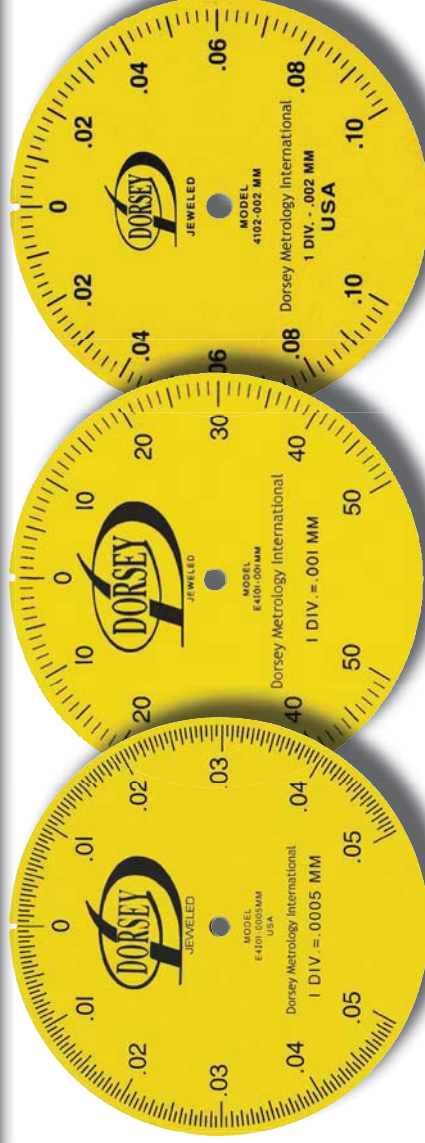


See page 15 for accessories & contacts and page 4 for back options

## THE MOST PRECISE INDICATOR ON THE PLANET!

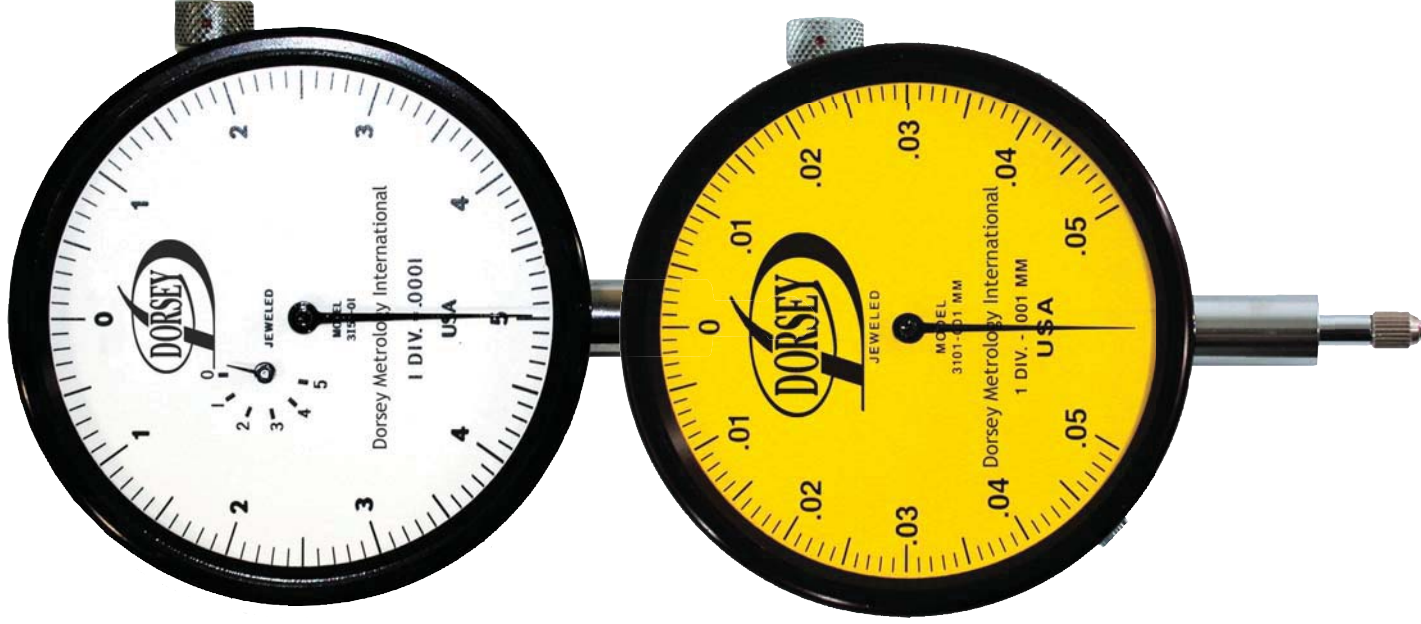


INCH MODEL	414-002	419-005	414-005	419-01
Graduation	.00002"	.00005"	.00005"	.0001"
Total Travel	.004"	.009"	.004"	.009"
Dial	.002"-0-.002"	.0045"-0-.0045"	.002"-0-.002"	.0045"-0-.0045"
Revolutions	1 Rev.	1 Rev.	1 Rev.	1 Rev.
Accuracy	less than +/- .00002"	less than +/- .00005"	less than +/- .00005"	less than +/- .0001"
Repeatability	+/- 10 millionths (.000010")	+/- 10 millionths (.000010")	+/- 10 millionths (.000010")	+/- 20 millionths (.00002")



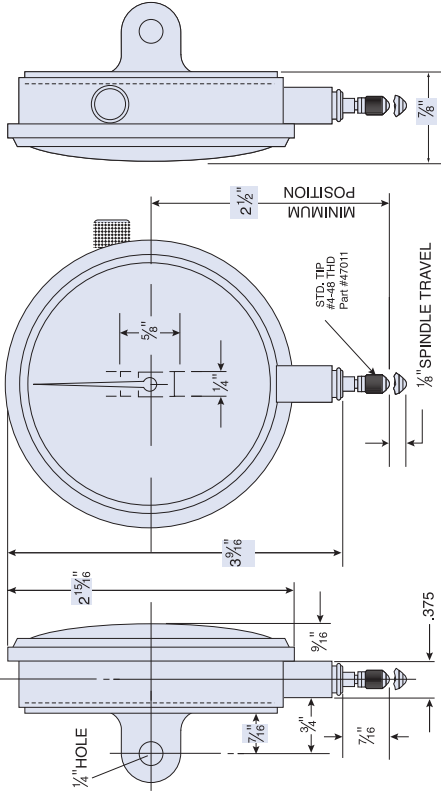
METRIC MODEL	4101-0005mm	4101-001mm	*4102-002mm
Graduation	0.0005mm	0.001mm	0.002mm
Total Travel	0.1mm	0.1mm	0.2mm
Dial	0.05-0-0.05mm	0.05-0-0.05mm	0.10-0-0.10mm
Revolutions	1 Rev.	1 Rev.	1 Rev.
Accuracy	less than +/- 0.0005mm	less than +/- 0.001mm	less than +/- 0.002mm
Repeatability	+/- 0.0001mm	+/- 0.0002mm	+/- 0.0004mm

\*Special order



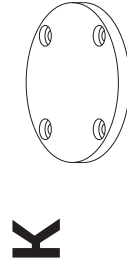
## FEATURES:

- ✔ Available with ISO 17025 certification.
- ✔ High amplification movement - graduations as fine as .00005". Improves readability and minimizes judgement error.
- ✔ Lever principle of amplification - minimizes effect of spindle sideshake. Linearity and repeatability maintained through millions of cycles.
- ✔ 2-15/16" Bezel - fits many existing fixtures. Conforms to ANSI//AGD standards.
- ✔ Adjustable gaging force - easily adjusts from 2 to 5 ounces by externally accessible screw.
- ✔ External zero adjustment knob makes possible the advantage of adjusting indicator hand to zero rather than rotating bezel to 'zero' hand.
- ✔ Optional lifting lever or cable release. Use lifting lever only when indicator is back mounted. Cable release may be used when indicator is back or stem mounted and enhances stability of gaging setup.
- ✔ Optional tolerance hands or shaded dials to facilitate production gaging.

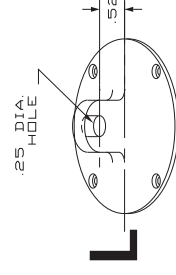


See page 15 accessories and contacts options

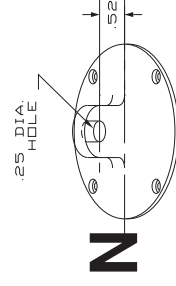
## Indicator back options for Group 3 & 4



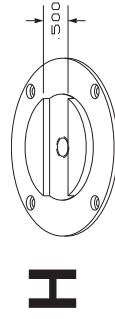
Flat  
Part # 49162



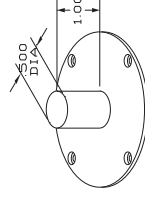
Lugback  
Part# 49161



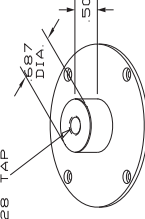
Offset Lugback  
Part # 49160



Sideback  
Part # 49188



Screwback  
Part # 49201

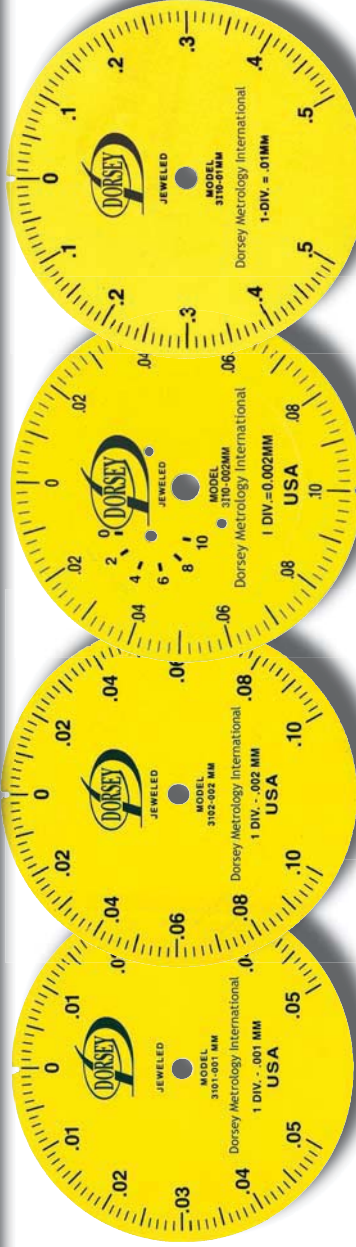


Postback  
Part #49293



MODEL	314-005	319-01	3150-01	*3140-05	*31100-05
Graduation	.00005"	.0001"	.0001"	.0005"	.0005"
Total Travel	.004"	.009"	.050"	.040"	.100"
Dial	.002"-0-.002"	.0045"-0-.0045"	0-.005"-0	.02"-0-.02"	0-.010"-0
Revolutions	1 Rev.	1 Rev.	5 Rev.	1 Rev.	5 Rev.
Accuracy	+/- .00005"	+/- .0001"	+/- .0001"	+/- .0005"	+/- .0005"
Repeatability	+/- .00002"	+/- .00002"	+/- .00002"	+/- .0001"	+/- .0001"

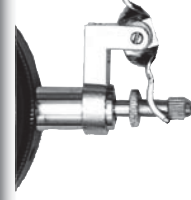
\* Special order



MODEL	3101 -001 mm	3102-002mm	*3110-002mm	3110-01mm
Graduation	0.001mm	0.002mm	0.002mm	0.01mm
Total Travel	0.1mm	0.2mm	1.0mm	1.0mm
Dial	0.05-0-0.05mm	0.10-0-0.10mm	0.5-0-0.5mm	0.05-0-0.05mm
Revolutions	1 Rev.	1 Rev.	5 Rev.	1 Rev.
Accuracy	+/- .001mm	+/- .002mm	+/- 0.002mm	+/- 0.01mm
Repeatability	+/- 0.0005mm	+/- 0.0005mm	+/- 0.0005mm	+/- 0.002mm

\* Special order

AGD/ANSI GROUP 3 & 4	
ACCESSORIES	PART #
Bottom Mounted Lifting Lever	49341
Tolerance Hands	49156
Cable Release	47935
Special Shaded Dials	As Quoted



Bottom mounted lifting lever



Cable retraction for spindle

Tolerance hands

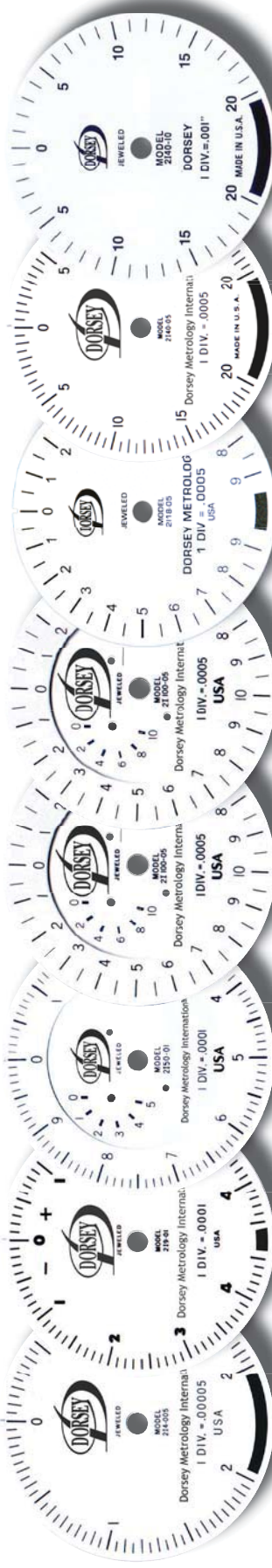




# GROUP 2 ULTRA HIGH AMPLIFICATION

845-454-3111 | 800-549-4243

Dials can be supplied to your specification. See page 14 for options.



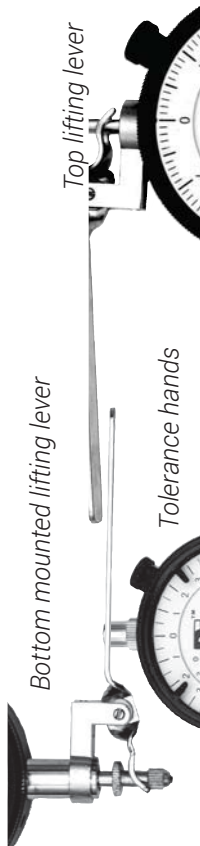
MODEL	214-005	219-01	2150-01	21100-025	21100-05	2118-05	2140-05	2140-10
Graduation	.00005"	.0001"	.0001"	.00025"	.0005"	.0005"	.0005"	.001"
Total Travel	.004"	.009"	.050"	.100"	.100"	.018"	.040"	.040"
Dial	.002"-0-.002"	.0045"-0-.0045"	0-.005"-0	0-010"-0	0-010"-0	.009"-0-.009"	.020"-0-.020"	.020"-0-.020"
Revolutions	1 Rev.	1 Rev.	5 Rev.	5 Rev.	5 Rev.	1 Rev.	1 Rev.	1 Rev.
Accuracy	+/- .00005"	+/- .0001"	+/- .0001"	+/- .00025"	+/- .0005"	+/- .0005"	+/- .0005"	+/- .0005"
Repeatability	+/- .00001"	+/- .00002"	+/- .00002"	+/- .00005"	+/- .0001"	+/- .0001"	+/- .0001"	+/- .0001"



MODEL	2101-001mm	2102-002mm	2110-002mm	2125-005mm	2104-005mm	2110-01mm	S2/MM
Graduation	0.001mm	0.002mm	0.002mm	0.005mm	0.005mm	0.01mm	.0001" (0.002mm)
Total Travel	0.1mm	0.2mm	1.0mm	2.5mm	0.4mm	1.0mm	.010" / 0.24mm
Dial	0.05-0-0.05mm	0.1-0-0.1mm	0-1mm-0	0-25mm-0	0.2-0-0.2mm	0.5-0-0.5mm	0-.005"-0
Revolutions	1 Rev.	1 Rev.	5 Rev.	5 Rev.	1 Rev.	1 Rev.	1 Rev.
Accuracy	+/- 0.001mm	+/- 0.002mm	+/- 0.002mm	+/- 0.005mm	+/- 0.005mm	+/- 0.01mm	+/- .0001" (0.002mm)
Repeatability	+/- 0.0002mm	+/- 0.0004mm	+/- 0.0004mm	+/- 0.001mm	+/- 0.001mm	+/- 0.002mm	+/- .00002" (0.0005mm)



For extended indicator stem of 3 inches add D4- as prefix. Example: D4-2150-01



Bottom mounted lifting lever

Top lifting lever

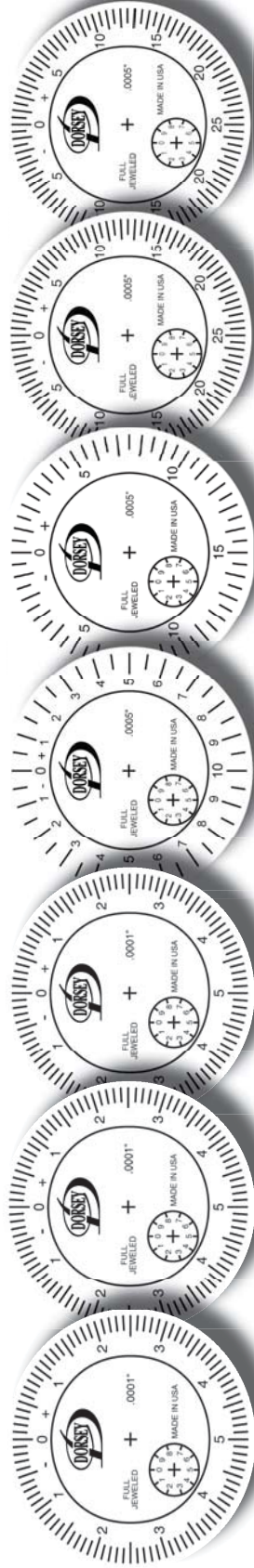
Tolerance hands

For perpendicular indicator add -90 as suffix. Example: 2101-001mm-90

ACCESSORIES	AGD 2 PART #
Bottom Mounted Lifting Lever	49341
Top Mounted Lifting Lever	49340
Tolerance Hands	49255
Special Shaded Dials	As Quoted

## FEATURES:

- ✓ Precision rack and pinion design.
- ✓ Protective case opens from front to protect movement from contamination.
- ✓ Fully jeweled movement with rev. counter.
- ✓ Forged bronze, chrome plated case.
- ✓ Screwed-on, hardened steel, chrome plated stem.
- ✓ Universal .375" diameter stem with #4-48 spindle thread.
- ✓ Balanced and continuous dial faces available.

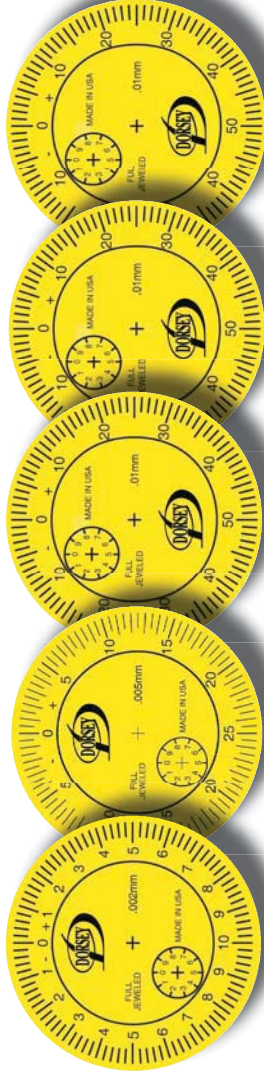


MODEL	2DM025-01	2DM100-01	2DM500-01	2DM050-05	2DM075-05	2DM125-05	2DM250-05
Graduation	.0001"	.0001"	.0001"	.0005"	.0005"	.0005"	.0005"
Total Travel	.025"	.100"	.500"	.050"	.075"	.125"	.250"
Revolutions	2.5 Rev.	10 Rev.	50 Rev.	2.5 Rev.	2.5 Rev.	2.5 Rev.	5 Rev.
Travel/Rev.	.010"	.010"	.010"	.020"	.030"	.050"	.050"



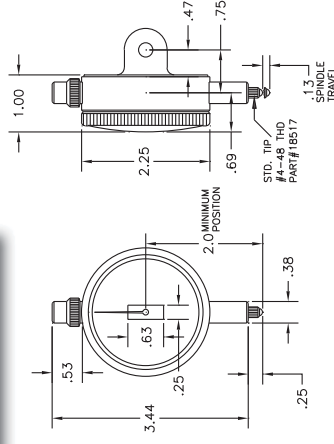
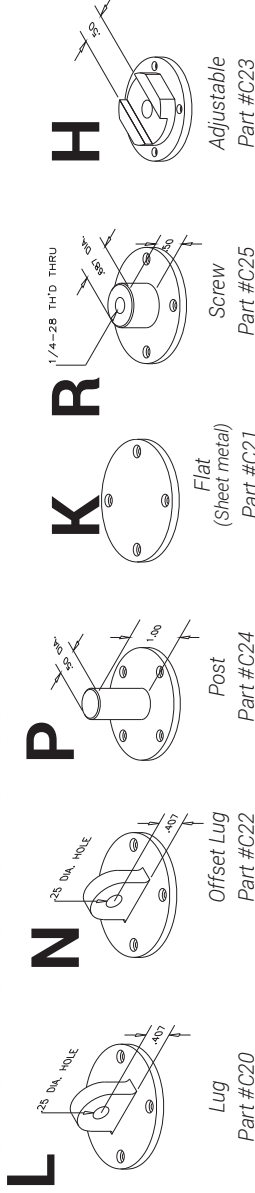
MODEL	2DM500-05	2DM1000-05	2DM125-10	2DM250-10	2DM500-10	2DM1000-10	2DMMM
Graduation	.0005"	.0005"	.001"	.001"	.001"	.001"	.0001"/0.002mm
Total Travel	.500"	1.00"	.125"	.250"	.500"	1.00"	.010"/0.24mm
Revolutions	10 Rev.	20 Rev.	5 Rev.	2.5 Rev.	5 Rev.	10 Rev.	1 Rev.
Travel/Rev.	.050"	.050"	.050"	.100"	.100"	.100"	.010"/0.24mm

TRADITIONAL DIAL INDICATORS, GROUP 2-CONTINUED



MODEL	2DM005-002mm	2DM012-005mm	2DM5-01mm	2DM10-01mm	2DM25-01mm
Graduation	0.002mm	0.005mm	0.01mm	0.01mm	0.01mm
Total Travel	.5mm	1.25mm	5mm	10mm	25mm
Revolutions	2.5 Rev.	2.5 Rev.	5 Rev.	10 Rev.	25 Rev.
Travel/Rev.	0.200mm	0.50mm	1.0mm	1.0mm	1.0mm

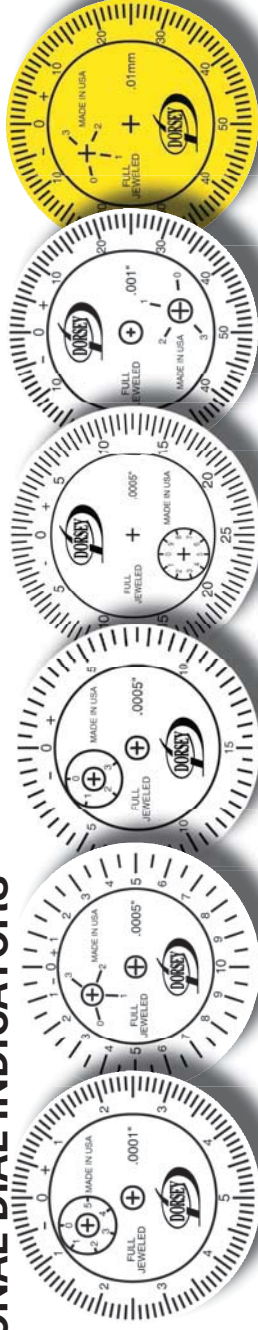
BACK OPTIONS FOR GROUP 2



The letter designating the indicator back follows the letter designating the dial format.  
 Example #1: 2I50-01B      H      Example #2: 2DM100-01B      H

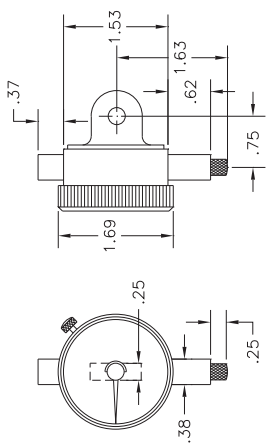
See page 14 for dial face options, 15 for accessories and contacts

GROUP 1 TRADITIONAL DIAL INDICATORS

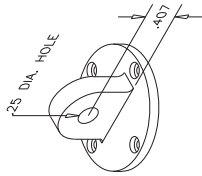


MODEL	1DM025-01	1DM050-05	1DM075-05	1DM125-05	1DM250-10	1DM2-01mm
Graduation	.0001"	.0005"	.0005"	.0005"	.001"	0.01mm
Total Travel	.025"	.050"	.075"	.125"	.250"	2.5mm
Revolutions	2.5 Rev.	2.5 Rev.	2.5 Rev.	2.5 Rev.	2.5 Rev.	2.5 Rev.
Travel/Rev.	.010"	.020"	.030"	.050"	.100"	1.0mm

## BACK OPTIONS FOR GROUP 1-CONTINUED

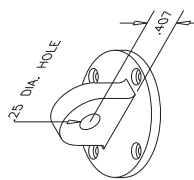


**L**



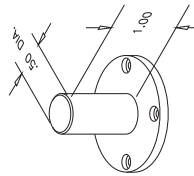
Lug  
Part #C201

**N**



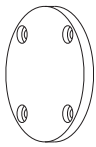
Offset Lug  
Part #C221

**P**



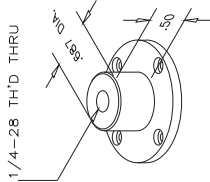
Post  
Part #C241

**K**



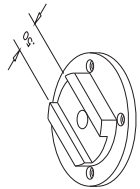
Flat  
Part #C211

**R**



Screw  
Part #C251

**H**



Adjustable  
Part #C231

The letter designating the indicator back follows the letter designating the dial format.

Example #1: 2150-01B

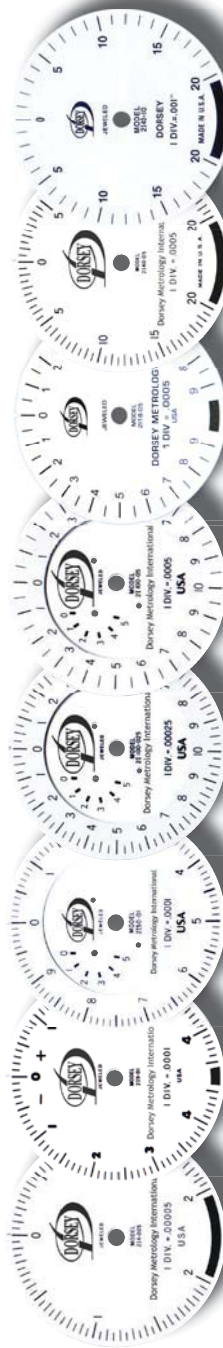
Example #2: 2DM100-01B

H

H

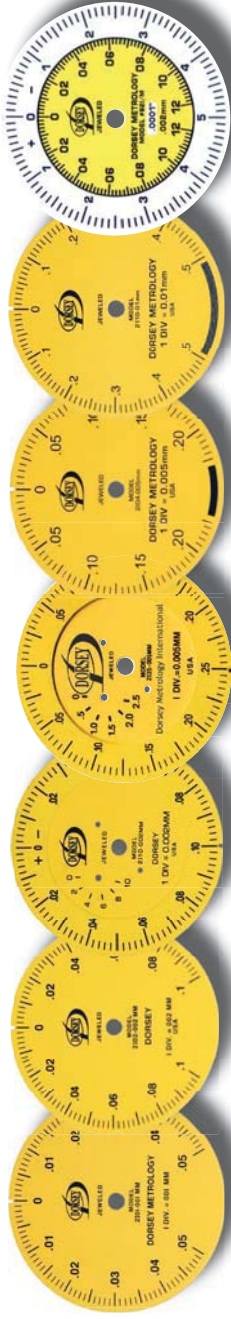
## HIGH AMPLIFICATION FEATURES

- ✓ Shock proof fully jeweled Dorsey high amplification movement.
- ✓ Cartridge style movement assembly is easily replaced to limit gage downtime.
- ✓ Heavy duty aluminum housing.
- ✓ Directly interchangeable with Standard Gage® Brown and Sharp bore gaging products.
- ✓ All resolutions feature .125" spindle travel.



Model	DS-214-005	DS-219-01	DS-2150-01	DS-21100-025	DS-21100-05	DS-2118-05	DS-2140-05	DS-2140-10
Graduation	.00005"	.0001"	.0001"	.00025"	.0005"	.0005"	.0005"	.001"
Total Travel	.004"	.009"	.050"	.100"	.100"	.018"	.040"	.002"
Dial	.002"-0-.002"	.0045"-0-.0045"	0-.005"-0	0-10"-0	0-10"-0	.009"-0-.009"	.020"-0-.020"	.002"-0-.002"
Revolutions	1 Rev.	1 Rev.	3 Rev.	3 Rev.	3 Rev.	1 Rev.	1 Rev.	1 Rev.
Accuracy	+/- 0.00005"	+/- 0.0001"	+/- 0.0001"	+/- 0.00025"	+/- 0.0005"	+/- .0005"	+/- 0.0005"	+/- 0.001"
Repeatability	+/- 0.00001"	+/- 0.00002"	+/- 0.00002"	+/- 0.00005"	+/- 0.0001"	+/- .0001"	+/- 0.0001"	+/- 0.0005"

## ULTRA HIGH AMPLIFICATION-CONTINUED



Model	DS-2101-001mm	DS-2102-002mm	DS-2110-002mm	DS-2125-005mm	DS-2104-005mm	DS-2110-01mm	DS-S21/M
Graduation	0.001mm	0.002mm	0.002mm	0.005mm	0.005mm	0.01mm	.0001" (0.002mm)
Total Travel	0.1mm	0.2mm	1.0mm	2.5mm	0.4mm	1.0mm	.010" / 0.24mm
Dial	0.05-0-0.05mm	0.10-0-0.10mm	0-1.0mm-0	0-25mm-0	0.2-0-0.2mm	0.5-0-0.5mm	0-.050"-0
Revolutions	1 Rev.	1 Rev.	3 Rev.	3 Rev.	1 Rev.	1 Rev.	1 Rev.
Accuracy	+/- 0.001mm	+/- 0.002mm	+/- 0.002mm	+/- 0.005mm	+/- 0.005mm	+/- 0.01mm	+/- .0001" (.002mm)
Repeatability	+/- 0.0002mm	+/- 0.0004mm	+/- 0.0004mm	+/- 0.001mm	+/- 0.001mm	+/- 0.002mm	+/- .00002" (.0005mm)



For perpendicular indicator unit add -90 as suffix.

Example: DS-2140-05-90

High Amplification Series only

## TRADITIONAL MOVEMENT (RACK &amp; PINION MOVEMENT) FEATURES

- ✓ Precision rack and pinion design.
- ✓ Protective case opens from front to protect movement from contamination.
- ✓ Fully jeweled movement with rev. counter.

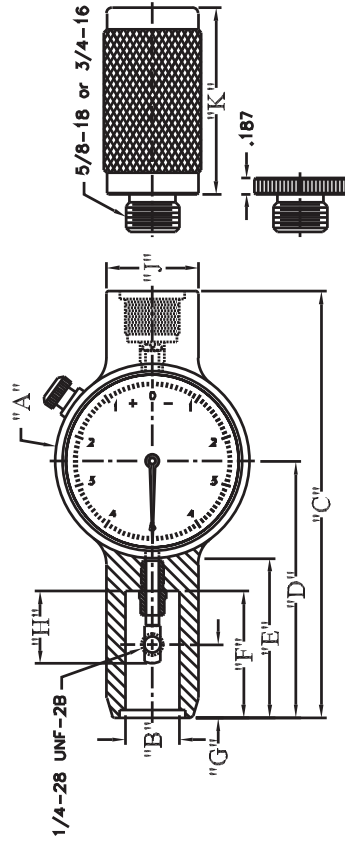


Model	DS-2DM025-01	DS-2DM100-01	DS-2DM050-05	DS-2DMIM	DS-2DM005-002mm	DS-2DM012-005mm	DS-2DM5-01mm
Graduation	.0001"	.0001"	.0005"	.0001"/0.002mm	0.002mm	0.005mm	0.01mm
Total Travel	.025"	.100"	.050"	.010" / 0.24mm	.5mm	1.25mm	5mm
Revolutions	2.5 Rev.	10 Rev.	5 Rev.	1 Rev.	2.5 Rev.	2.5 Rev.	5 Rev.
Travel/Rev.	.010"	.010"	.020"	.010"/0.24mm	0.200mm	0.50mm	1.0mm

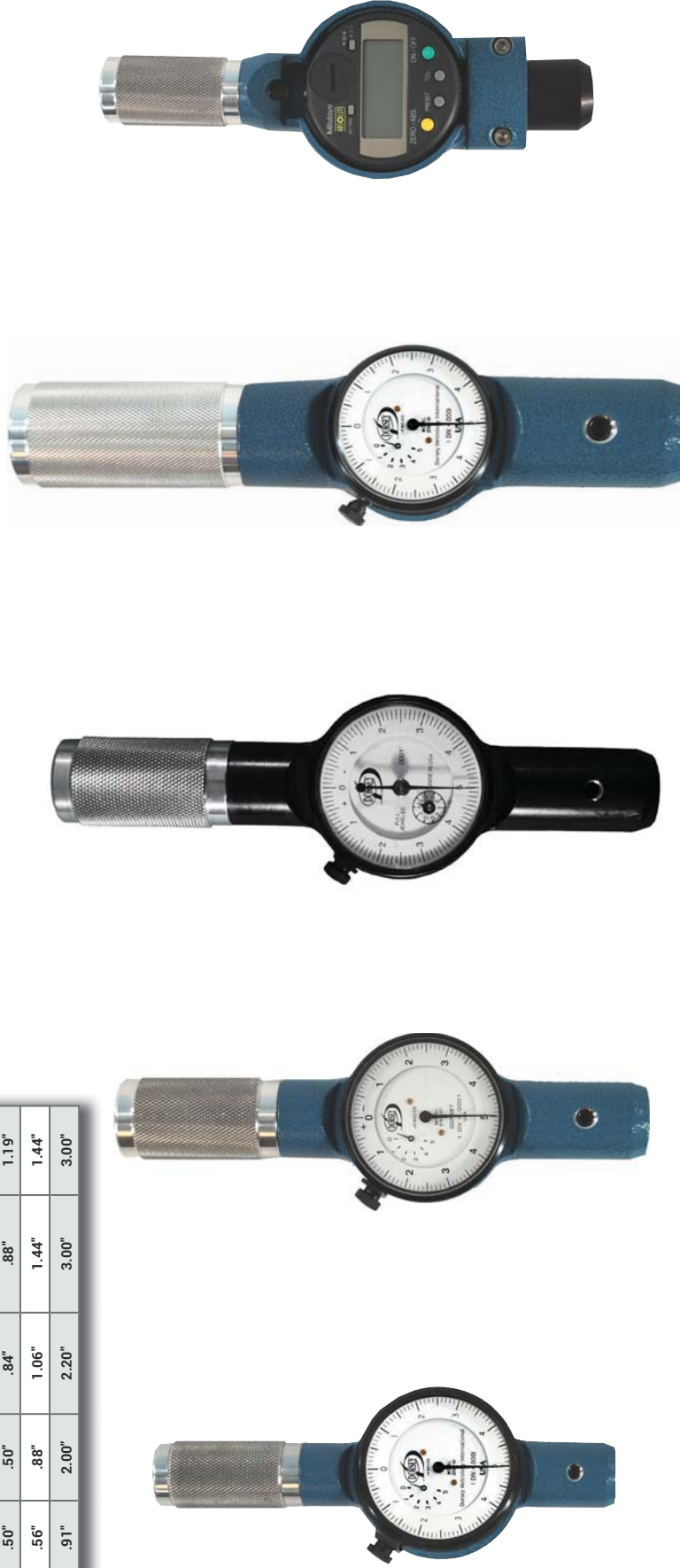
## TECHNICAL SPECIFICATIONS

Dorsey offers an integrated indicator housing for just about any application.

DIAL UNIT HOUSINGS			
DIM.	AGD 1	SMALL AGD2	1" SHAFT AGD 3
A	1.90"	2.25"	2.75"
B	.38"	.62"	1.00"
C	3.50"	5.25"	6.5"
D	2.42"	3.16"	3.81"
E	1.50"	1.90"	2.45"
F	1.00"	1.50"	2.00"
G	.36"	.84"	1.06"
H	.50"	.84"	1.19"
J	.56"	1.06"	1.44"
K	.91"	2.20"	3.00"



## INDICATOR HOUSING OPTIONS



For .500" dia. shaft  
Part # Example:  
DS-2150-01-2






For .625" dia. shaft  
Part # Example:  
DS-2150-01  
Standard unit

For .625" dia shaft  
Part # Example:  
DS-2DM025-01

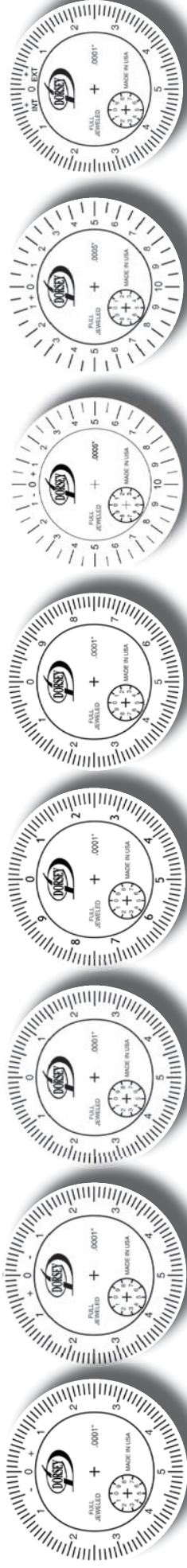
For 1" dia. shaft  
Part # Example:  
DS-2150-01-5

Digital or independent dial indicator housing  
Pt # DX4-81035 for most digital indicators

Dorsey offers the most popular styles of digital indicators to complement our gages. Use the matrix below to select the proper indicator for your application. Please note that we offer many other digital indicators. Contact us if your requirements are not met by these selections.

	PART#	RANGE	RESOLUTION	ACCURACY	FEATURES/DESCRIPTION
 STYLE 1	MT543-XX1	.500" / 12.7mm	.00005" / 0.001mm	< .0008"	ID-S series, SPC output, inch/metric select, rotating face, capacitive system, 20,000 hour battery life.
	MT543-XX2	.500" / 12.7mm	.00005" / .0001" / .0005" inch and 0.001mm / 0.01mm Metric Selectable	< .00012"	This ID-C series includes large digital readout display, Inch/Metric switchable, go/ no-go feature by setting upper & lower limits, and SPC data output, rotating face, 5,000 hour battery life.
	MT543-XBG	.500" / 12.7mm	.00005" / 0.001mm	< .00012"	This ID-C series is designed for ID/bore gage applications, digital readout and analog bar graph displays, Inch/Metric switchable, minimum value holding function, go/no-go feature and SPC data output, 2,000 hour battery life.
	MT543-XX3	.500" / 12.7mm	.00001"-.05" / 0.0002 - 1mm	< .00012"	Programmable model Inch/Metric 2:1 and 4:1 Digital Indicator
 STYLE 2	A2500-C	.250"	.0001" / 0.002mm	+/- .0001"	Numeric & analog visual display, inch/metric selectable, floating zero, rotating bezel, incremental measuring mode, high/low tolerance settings, min/max hold reading, TIR, absolute/preset measuring mode, max/min reading and display/freeze reading hold, programmable lock combination, data output.
	A3500-C	.250"	.00005" / 0.001mm	+/- .00005"	
	A2600-C	.600"	.0001" / 0.002mm	+/- .00005"	
	A2110-C	1.00"	.0001" / 0.002mm	+/- .00005"	
	Q2500-C	.250"	.0001" / 0.002mm		
	Q3500-C	.250"	.00005" / 0.001mm		
 STYLE 3	M2034101	+/- .040"/1.00mm	.00001" / 0.0002mm .00002" / 0.0005mm .00005" / 0.001mm .0001" / 0.002mm .0002" / 0.005mm .0005" / 0.01mm .001" / 0.02mm	+/- .020" = 0.25%	Digital readout and analog bar graph display, Inch/Metric and resolution switchable, deviation from zero or preset capabilities for actual size, auto power down, Go/No-go feature and data output.
	M2034201	+/- .040"/1.00mm		+/- .040" = 0.50%	Utilizes the features above plus hold, min/max & TIR functions, multiplier function for ratios and two point difference measurement.
 STYLE 4	M2033101	+/- .040"/1.00mm	Digital Display .00002" / 0.0005mm .00005" / 0.001mm .0005" / 0.001mm .0001" / 0.002mm	+/- 0.50%	Inch/Metric, resolution switchable Digital readout and analog fan display, min/max TIR, hold and reset function without output.
	M2033111	+/- .040"/1.00mm	Analog Display .0005" / 0.001mm .0001" / 0.002mm .001" / 0.02mm	+/- 0.50%	Includes same features as above, but also includes RS232 output.
 STYLE 5	FV545301 350	.50"/12.5mm	.00005" / 0.001mm	+/- .00012"/.003mm	Mark VI electronic indicator, USB/RS232 output, wireless, 10,000 hours battery life, bezel rotates 270 degrees.
	FV545301 550	1.00"/25mm		+/- .00016"/.004mm	

Note: All indicator part numbers shown above include a standard flat back. Contact us for other optional backs & accessories.



## A B E F G X Y Z

A	B	E	F	G	X	Y	Z
Balanced Numbering (Plus on right. Minus on left.)	Balanced Numbering (Plus and minus omitted)	Continuous Clockwise Numbering	Continuous Counter-Clockwise Numbering	Preloaded	Reversed Action	No Charge	Both internal and external on outer dial for ID/OD gages
Note: For Snap/OD gages	Note: For Bore/ID gages			When the indicator contact is fully depressed, the Rev. counter shows "0" and the large hand is at 6 o'clock	Indicator spindle is spring loaded up A.K.A. pushdown indicator		

The letter designating the dial format follows the indicator part number. Example #1: 2I50-01B, Example #2: 2DM100-01B

## SPECIAL SHADED DIALS



## TRADITIONAL DIAL INDICATOR OPTIONS



Internal hole attachment 1.68" depth  
Part #C28



Internal hole attachment  
.81" depth  
Part #C29



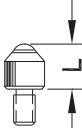

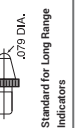
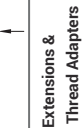
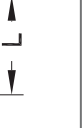
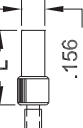
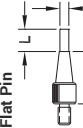
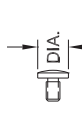

Right angle attachment  
Part #C30

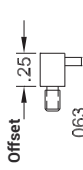
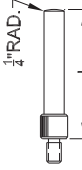
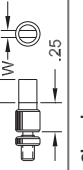

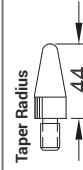






Top left lifting lever  
Part #C77  
Part #C77R

# INDICATOR ACCESSORIES & CONTACTS

845-454-3111 | 800-549-4243

CONTACTS	PART #	MATERIAL	L	W	DIA/ or RAD
 Ball	18517	Steel	.235"		(#2 Std), .125" Ball
	47011	Steel	.276"		(#3 & 4 Std), .125" Ball
	18518	Steel	.375"		.125" Ball
	18519	Ruby	.276"		.125" Ball
	18520	Carbide	.276"		.250" Radius
 Blank (Soft)	47936	Ruby	.276"		.180" Radius
	47066	Steel	1.00"		.156" Dia.
 Extended Range Standard for Long Range Indicators	16631	Steel	.236"		
	4082-ES	Carbide		Steel	.125" Dia.
 Extended Shovel	18531	Steel	.32"		.156" Dia.
	47072	Steel	.500"		.156" Dia.
 Extensions & Thread Adapters	47071	Steel	1.000"		.156" Dia.
	162	Steel	.30"		4-48 male to M 2.5
	163	Steel	.30"		M 2.5 male to 4-48
	164	Steel	.37"		5-44 male to 4-48
	47937	Steel	.250"		.156" Dia.
 Flat .156" TYP.	47076	Steel	.500"		.156" Dia.
	47079	Steel	.750"		.156" Dia.
	47074	Steel	1.00"		.156" Dia.
	18532	Carbide	.250"		.156" Dia.
	18533	Carbide	.500"		.156" Dia.
 Flat Pin .47"	18534	Carbide	.750"		.156" Dia.
	18535	Carbide	1.00"		.156" Dia.
	18524	Steel	.100"		.020" Dia.
	18525	Steel	.100"		.040" Dia.
	18526	Steel	.200"		.060" Dia.
 Mushroom .47"	18527	Steel	.500"		.080" Dia.
	297-S	Steel			.250" Dia.
	297-C	Carbide			.250" Dia.
 Needle .44"	298-S	Steel			.500" Dia.
	110	Steel	.250"		.250" Dia.
3655	Steel				

	PART#	MATERIAL	L	DIA/ or RAD
 Offset .25" .063 DIA.	2740	Steel		
	2740-C	Carbide		
 Radius 1/4" RAD.	47075	Steel	.500"	.156" Dia., .25" Rad.
	47080	Steel	.750"	.156" Dia., .25" Rad.
	47073	Steel	1.000"	.156" Dia., .25" Rad.
	112	Steel	.250"	.187" Dia., .25 Rad.
 Rail L W .25"	18528	Steel	.100"	
	18529	Steel	.150"	
	18530	Steel	.200"	
 Shovel 3/12 DIA. .31"	4082-SN	Steel		With locknut
	4085-CSN	Carbide		With locknut
	4082-ESN	Carbide		Extended / nut
 Taper Flat D L	18522	Carbide	.375"	.040" Dia.
	47077	Steel	1.00"	.060" Dia.
	47943	Carbide	1.00"	.060" Dia.
 Taper Radius L .44"	302-S	Steel		
	302-C	Carbide		
	175-1			.040" Thick
 Contact Spacer	175-2			.060" Thick
	175-3			.090" Thick
Use between indicator and spindle to extend contact reach.				
 Stem Bushing	125			
	Used to adapt 8mm indicator stem to 3/8" hole.			
 Helping Spring	120			.230" Dia. X 5"
	Used in conjunction with part #110 mushroom shoulder contact to increase spindle pressure.			



# MODULES AND REMOTE TRANSMITTERS

- ✓ All Dorsey dimensional measurement instruments that are used with digital indicators can be connected to wireless transmitters.
- ✓ The real time wireless data collection and recording system efficiently sends the measurement files to a base station, saving time and eliminating errors.
- ✓ The electronically collected measurement can be used for a variety of purposes:
  - > To enter data directly into any statistical process control (SPC), data acquisition (DAQ) software or take real-time data directly into Windows applications such as Excel, Minitab, SPC software, etc.
  - > The dimensional readings taken in real time can be sent to interface with the CNC controllers of machine tools to automatically adjust the machine settings for part size variations and trends.



DYN Groove Gage



#6 Bore Gage



ID Indicating Plug Gage



SDN Snap Gage with bench stand



SSG Snap Gage



Countersink Gage



J-2 Jaw Gage



LDF Series Large Diameter Gage

Dorsey Metrology and MicroRidge have come together to offer the MobileCollect Wireless on any Dorsey Instrument available with variety of manufacturer's digital indicators such as Mahr-Federal, Mitutoyo, Starrett, and Sylvac-Fowler. The MobileCollect is a great alternative to their proprietary wireless data collections systems but both options are available.

**MobileCollect**

*wireless on the move*  
MicroRidge Systems Inc.

Tel: 541-593-1656

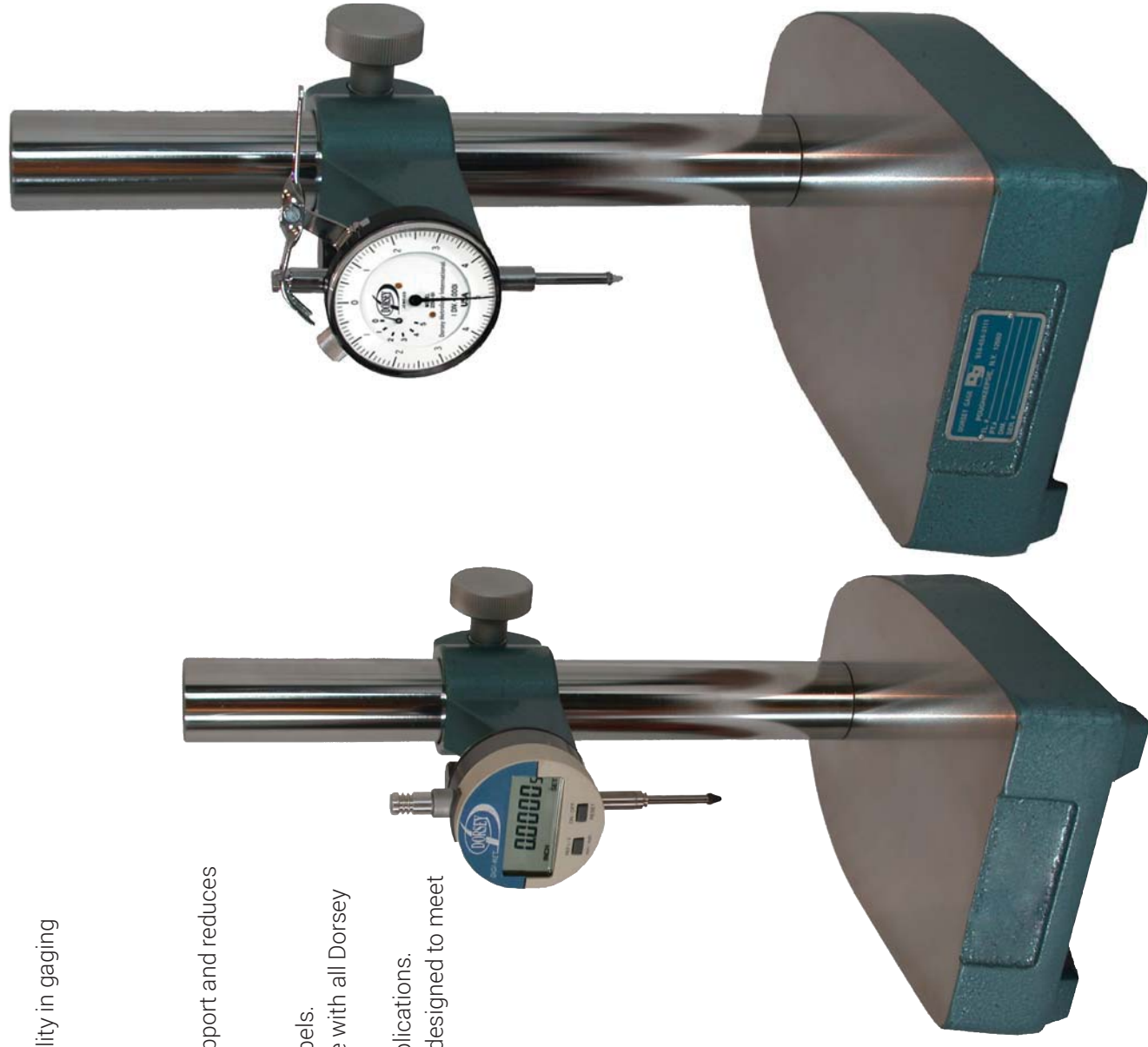
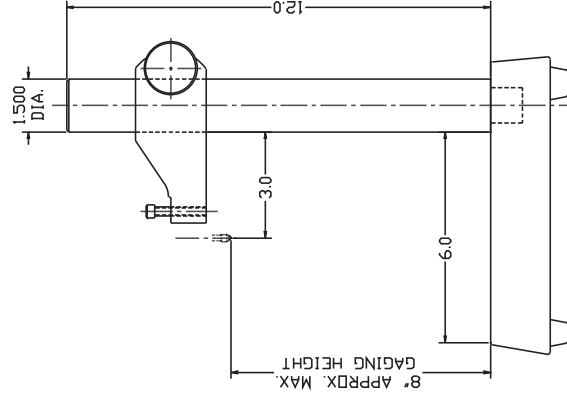
www.microridge.com



The Dorsey E1 comparator stand is specially designed for use in production and shop areas. The comparator stand has a large base and 3" throat clearance to give the user maximum flexibility for measuring various size pieces. This product may be used with any of Dorsey's dial or digital indicators.

## FEATURES:

- ✓ Rugged design - built to meet requirements for greater versatility in gaging equipment.
- ✓ 6" x 5.88" base - greater work area.
- ✓ 9" maximum gaging capacity.
- ✓ 3" throat clearance - will accommodate various size parts.
- ✓ Three point head clamping - assures positive dial indicator support and reduces damage due to overtightening.
- ✓ Portable from one location to another.
- ✓ Recessed nameplate - provides area for shop identification labels.
- ✓ Accommodates all AGD indicators - specially designed for use with all Dorsey indicators with a horizontal mounting lug.
- ✓ Adjustment head can be locked and sealed for production applications.
- ✓ Special applications: rests, nests, and holding fixtures can be designed to meet specific part configurations.
- ✓ Cast iron base and chrome plated column.



DESCRIPTION	
48656	E1 STAND
48656-S3	E1 STAND WITH FINE ADJUSTMENT HEAD

# S2 COMPARATOR STAND

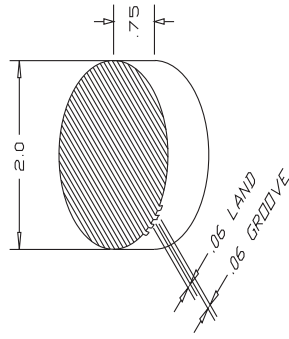
The S2 precision comparator stand was designed for manufacturing areas requiring high accuracy such as grinding and inspection departments. It is recommended for use with all Dorsey high amplification dial and digital indicators, but will accommodate other gaging devices having a standard .375" or 8mm diameter mounting stem. The S2N production and shop area comparator stand is specifically designed without fine adjustment for use with digital indicators, long range indicators, and electronic probes with remote readouts. The S2N stand maximum gaging height is 4.0" inches and the throat clearance is 2.4".

## FEATURES:

- ✔ Unique fine adjustment head - Dorsey's frictionless reed spring design prevents backlash and drifting. Ensures rapid, precise zero positioning of any dial indicator. Permits Dorsey high amplification dial indicators or other gaging instruments of equal sensitivity to perform to their full capability of measuring to millionths of an inch repetitively and accurately.
- ✔ Ground and chrome plated columns provide maximum wear and corrosion resistance.
- ✔ Precision machined and ground cast base ensures perpendicularity of column to anvil.
- ✔ Anvils for the S2 and S2N are made from hardened and lapped high grade tool steel.

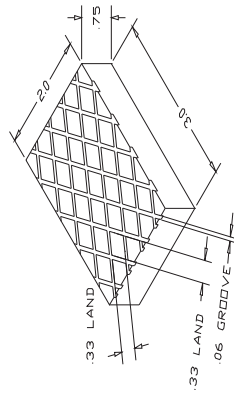
Part# 47141

Straight serrated surface anvil 2" dia.



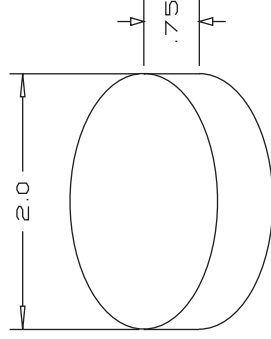
Part# 47139

Flat diamond serrated surface anvil 2"x3"



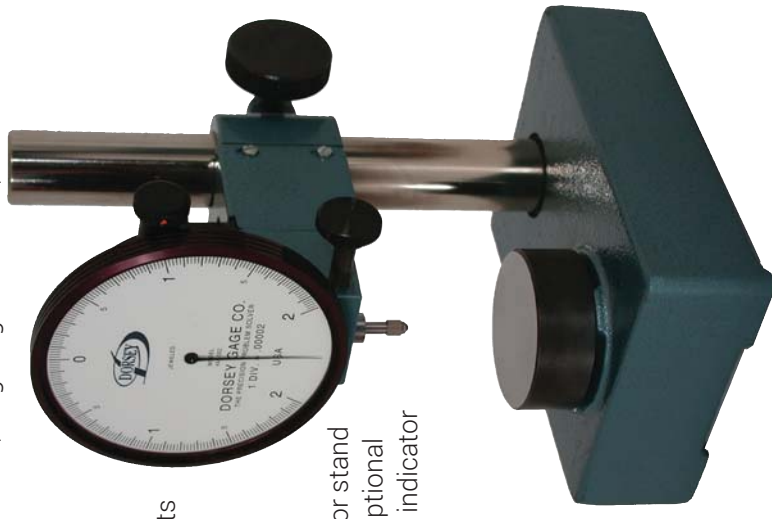
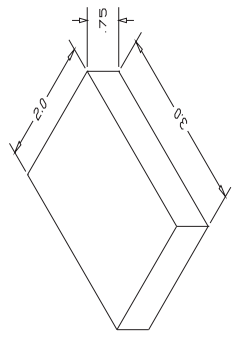
Part# 47113

Flat surface anvil 2" dia.

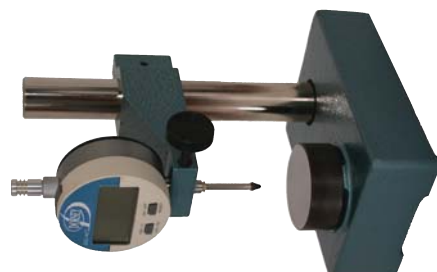
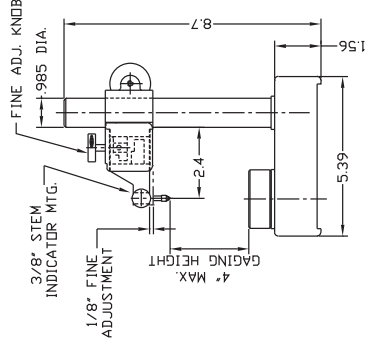


Part# 47138

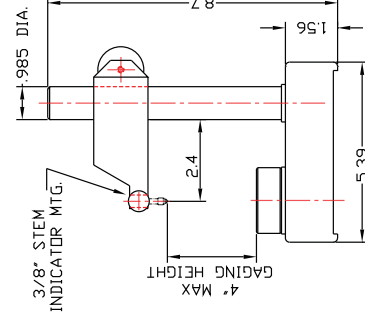
Flat surface anvil 2"x3"



S2 comparator stand shown with optional #414-002 dial indicator



S2N comparator stand shown with optional extended range digital indicator



PART #	DESCRIPTION
47145	S2 STAND WITHOUT ANVIL
S2-HEAD	FINE ADJUSTMENT HEAD ONLY
47145N	S2N STAND WITHOUT ANVIL

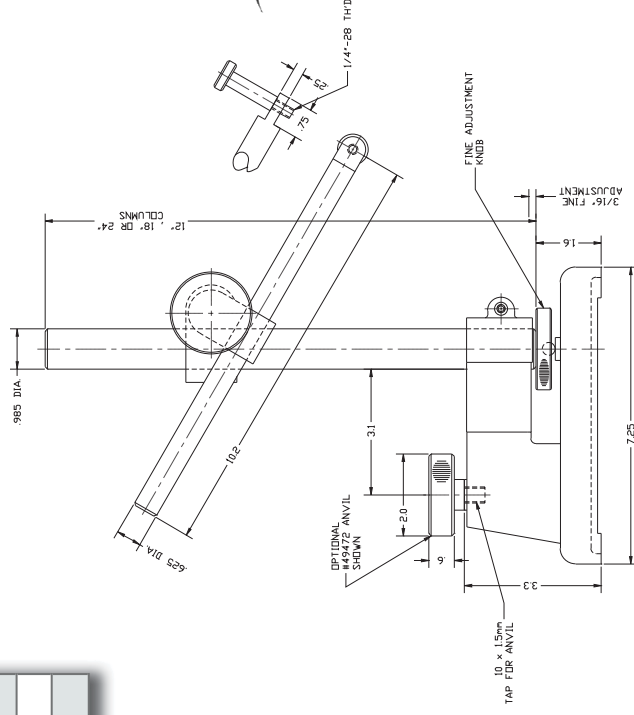
For Anvil options, please see above

The Dorsey S4 height stand is designed for making comparative height measurements. It is designed primarily for transfer measurements on a surface plate but the optional anvil also permits its use as a conventional comparator stand. This stand will accommodate mechanical, electronic, digital, or pneumatic probes with a standard mounting lug. The Model S4 stand can be adjusted vertically, horizontally, and radially to adapt to any height gaging situation.

## FEATURES:

- ✓ Fine adjustment base - original frictionless reed spring mechanism assures "no tilt" vertical adjustment of the column.
- ✓ Wide fine adjustment range - total .19" range permits more rapid gaging setup.
- ✓ Interchangeable columns - sturdy chrome plated steel columns, 12", 18" and 24" are easily interchangeable in the field to meet various height measuring requirements.
- ✓ Triangular support - three precision flats on base assure stability of gaging setup when transferring height measurements on surface plate.
- ✓ Positive clamping design - split bushing arrangement provides positive locking on cross arm assembly.
- ✓ Optional anvil - provisions in base for field installation of optional hardened and lapped steel anvil increases versatility of the stand.

ORDERING INFORMATION	PART #
S4 Stand with 12" column	49451
S4 Stand with 18" column	49456
S4 Stand with 24" column	49457
OPTIONAL 2" diameter anvil	49472



### The Fine Adjustment Base

*By rotating the adjustment wheel, the column is raised or lowered. Motion parallel to the longitudinal axis of the column is maintained by the reed-spring assembly. Downward pressure on the wheel is sustained by the coil spring, preventing backlash and drift.*

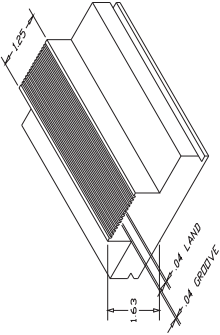
# S3 COMPARATOR STAND

The S3 precision comparator stand was designed for manufacturing areas requiring high accuracy, such as grinding and inspection departments. It is recommended for use with all Dorsey high amplification dial and digital indicators, but it will also accommodate other gaging devices having a standard .375" or 8mm diameter mounting stem. The maximum gaging height is 8.5" as standard and the throat clearance is 3.13".

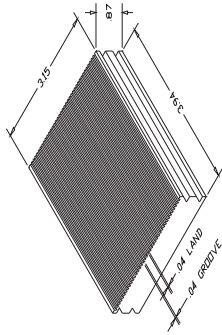
## FEATURES:

- ✔ Unique fine adjustment head - Dorsey's frictionless reed spring design prevents backlash and drifting. Ensures rapid, precise zero positioning of any dial indicator. Permits Dorsey high amplification dial indicators or other gaging instruments of equal sensitivity to perform to their full capability of measuring to millionths of an inch repetitively and accurately.
- ✔ Rugged construction - provides maximum gaging stability permitting measurements in millionths.
- ✔ Ground and chrome plated columns provide maximum wear and corrosion resistance.
- ✔ Precision machined cast base and anvil supports - ensures perpendicularity of column to anvil.
- ✔ Selection of hardened and lapped anvils - increases the capability of the stands to accommodate many part configurations.

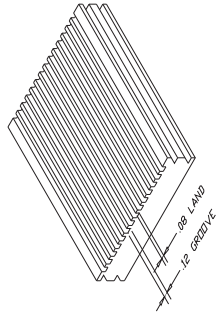
PART #	DESCRIPTION
47405	S3 STAND WITHOUT ANVIL
S3-HEAD	S3 FINE ADJUSTMENT HEAD ONLY



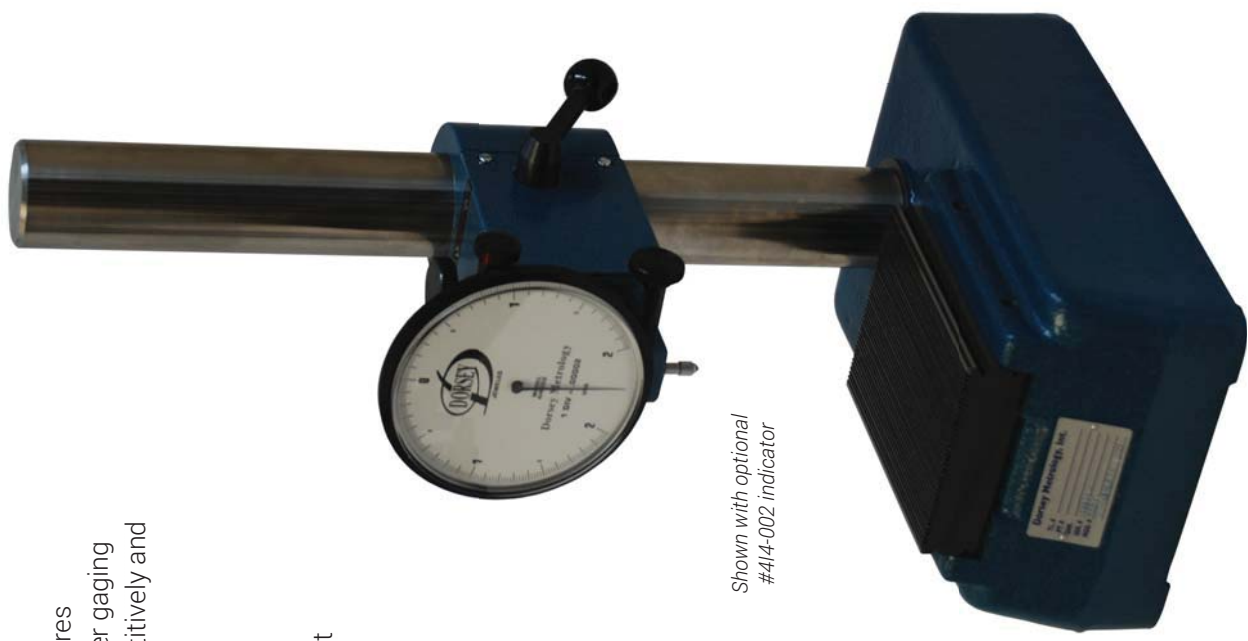
Part# 47403  
Rail type anvil 1.25" x 3.88"



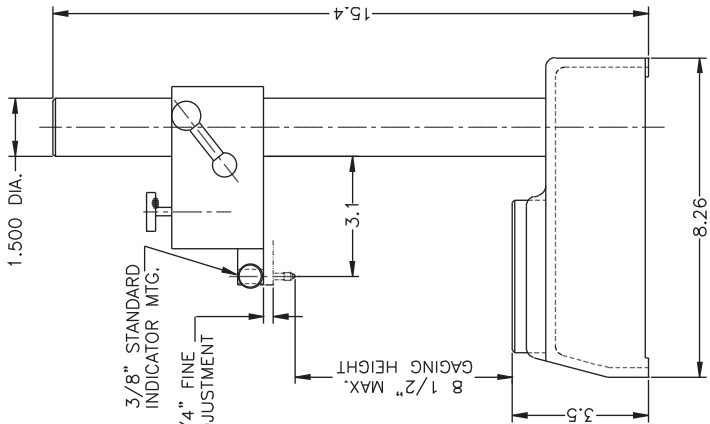
Part# 47402  
Thin serration and flat reversible anvil



Part# 47404  
Wide serration and flat reversible anvil



Shown with optional  
#414-002 indicator

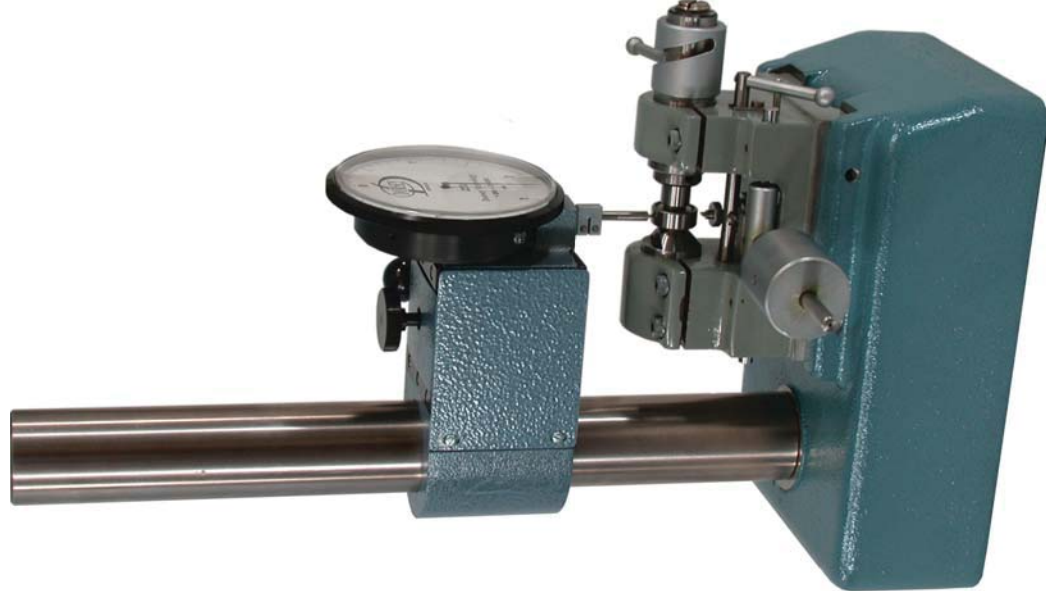
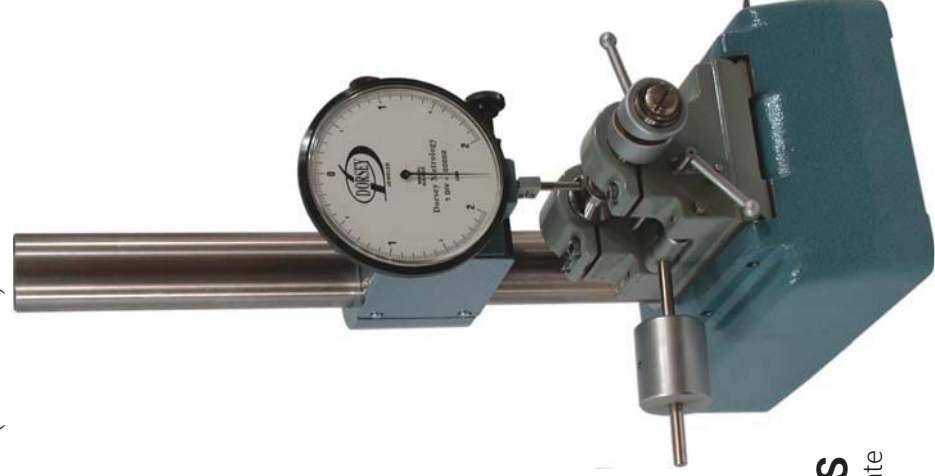


The S3 comparator stand anvil can be replaced with a radial play fixture and accessories to check the internal clearance of miniature bearings. Miniature bearing radial play fixture, part # 49388-3-01 is capable of checking bearings ID range .040"-.870" OD range up to 1.0".

## FEATURES:

- ✓ S3 stand.
- ✓ Radial play attachment.
- ✓ Choice of standard anvil set which includes the carrier, anvil, and clamp assembly.
- ✓ Special radial play contact.
- ✓ Variable pressure weight arm assembly adjustable from 6.5 to 16 oz. of upward force.
- ✓ Dial indicator model # 414-002 (.00002 graduation) or #4101-0005mm (0.0005mm).

STANDARD ANVILS (CHOICE OF ONE WITH PURCHASE)	
Anvil Set No.	Bearing Bore Diameter
49388-3-01	Gage with 1 Anvil
493-SET	Gage with 9 Anvils
49373	.0400"
49374	.0469"
49375	.0550"
49376	.0781"
49377	.0937"
49378	.1250"
49379	.1562"
49380	.1875"
49381	.2500"
*INQUIRE ABOUT COMPLETE PACKAGE	



Additional arbor bearing sets are available for any size requirement. Please contact us for details.

## INTERMEDIATE AND LARGE SIZE BEARINGS

Dorsey also offers fixtures to inspect radial play on large and intermediate sized bearings. Contact us for details.

# FAST CHECK THICKNESS GAGE

Recommended for quick thickness checks of flat sheet materials and wide variety of small parts. Supplied with hardened steel gaging contacts, lifting levers, and clockwise continuous dial indicators. Special frames, throat depths, and contacts can be made to suit application. **Available with ISO 17025 certification.**



**Part #FC1** 1/2" dia. anvils, 1" opening, 2" throat depth, with 2DM1500-10F .001" Grad. dial with .5" travel

**Part #FC1-NI** Frame and contacts, less indicator



**Part #FC2** Tube wall thickness

1.5" opening, 2" throat depth, .312 dia. lower anvil with part# 2DM1000-10F .001" Grad. dial with 1" travel

**Part #FC2-NI** Frame and contact, less indicator



**Part #FC3** Spherical contacts

1.5" opening, 1" throat depth with part# 2DM1000-10F .001" Grad. dial with 1" travel

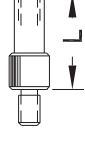
**Part #FC3-NI** Frame and contacts, less indicator



Indicator sold  
separately

## FEATURES:

- ✓ Ground & hardened steel base.
- ✓ Base is .75" wide x .62" high.
- ✓ Holes located 1" and then 2" from end.
- ✓ Includes 3/8" dia indicator collet.
- ✓ Available with dial or digital indicators.



BASES	
DESCRIPTION	PART #
2" long, 1 central hole	C-512
3" long, 1 central hole	C-513
4" long, 2 holes	C-514
6" long, 3 holes	C-516
8" long, 3 holes	C-518

CONTACT EXTENSIONS	
DESCRIPTION	PART #
Contact	112
1" Extension	47071
2" Extension	47071-2
3" Extension	47071-3
4" Extension	47071-4
5" Extension	47071-5
Contact/extension set 6pc	DDGCS

## "V" BASE DIAL DEPTH GAGE

Used to measure depths of small holes, engravings, rivets, or slots with extreme accuracy. Knife edge base with center cut permits unobstructed view of point for exact positioning.



Shown is DDG-125C

## FEATURES:

- ✓ .125" Range.
- ✓ .0005" Graduation dial indicator.
- ✓ Ground hardened steel base.
- ✓ Base is 2.5" x .5".
- ✓ Interchangeable hardened steel gaging contact.
- ✓ Also available with digital indicator.

PART #	DESCRIPTION
DDG-125B	"V" Base dial depth gage with .0005" graduation, .125" range balanced dial (Mil. Spec.)
DDG-125C	"V" Base dial depth gage with .0005" graduation, .125" range continuous dial
2DM125-05AY	Replacement indicator, .0005" graduation, .125" range, balanced dial, push down series
2DM125-05GY	Replacement indicator, .0005" graduation, .125" range, continuous dial, push down series
DDG-125NI	"V" Base with contact, less indicator
DDG-CASE	Fitted Storage Box

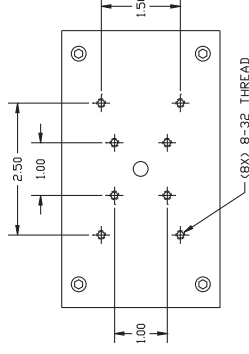
# BG DIRECT & BG2 BENCH GAGE

BG Series bench gages are universal indicating depth or flush pin gages used to check depths, lengths, face concentricity, or locations. The BG Direct utilizes various models of dial or digital indicators. The indicator is protected from damage as it is enclosed beneath the gage itself. The rest plate is 3" x 5" hardened and ground steel which has a series of threaded holes. Special nesting rests or holding fixtures and clamps can be mounted to orient parts for measurement of specific dimensions.

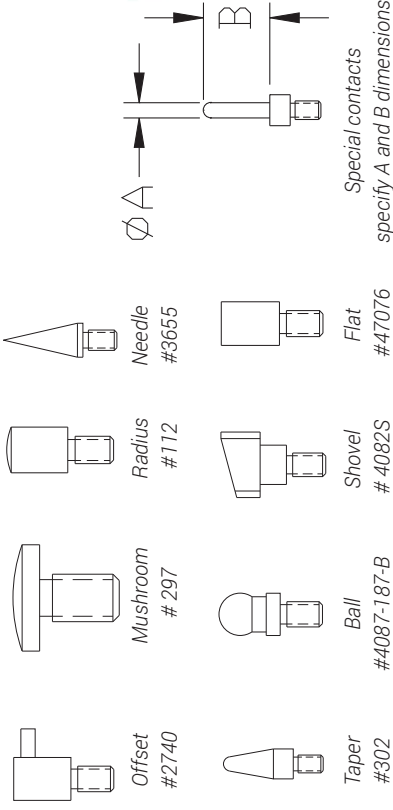
PART #	DESCRIPTION
BGD	Model BG Direct with Part #112 steel pin contact and (1" range, .001" graduation) dial indicator
BGD-NI	Model BG Direct with Part #112 steel pin contact less indicator
BGD-SET	Model BG Direct with set of steel contacts (shown below) (1" range, .001" graduation) dial indicator
BGD-SETNI	Model BG Direct with set of steel contacts less indicator
BGD-CASE	Fitted Storage Case



BG Direct



Top Plate Hole Pattern



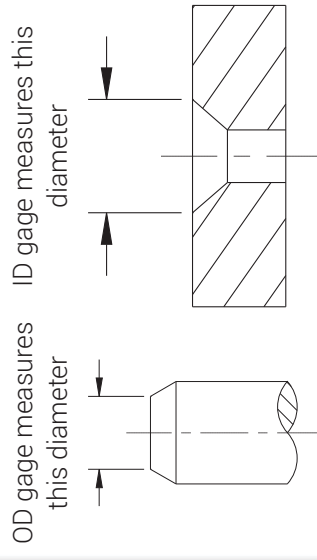
BG2 Bench Gage

The BG2 utilizes a right angle movement that offers substantial benefits. The indicator, in a protective housing, is mounted above the rest plate in a position that minimizes operator eye movement. The gaging mechanism is reversible, retractable, has a 3" range of measurement travel, and .075" of gaging travel.

PART #	DESCRIPTION
BG2	Model BG with Part #112 steel pin contact and (.0005" graduation) dial indicator
BG2-NI	Model BG with Part #112 steel pin contact and less indicator
BG2-SET	Model BG with set of steel contacts (shown above) and (.0005" graduation) dial indicator
BG2-SETNI	Model BG with set of steel contacts less indicator
BGD-CASE	Fitted Storage Case

**FEATURES:**

- ✓ Hardened and ground steel plunger and rest plate.
- ✓ Masters on any flat surface, no special master required.
- ✓ The angle of the gage must be larger than the angle of the part to be inspected.
- ✓ Measures the top diameter directly on the dial indicator or digital indicator.
- ✓ 3 Blade contact ensures accurate, repeatable readings.
- ✓ .001" / 0.02mm dial indicator, standard.
- ✓ Inch or metric dial or digital indicators available.
- ✓ Optional ring gage setting masters are available.



OD gage measures this diameter

ID gage measures this diameter

Digital Models Countersink & Chamfer Models  
 Programmable model Inch / metric, 2:1 and 4:1 digital indicator ordering # CG90  
 2:1 Ratio Digital Indicator with .0005" / 0.01mm graduation for DC-90-ID and DO-90-OD ordering # PG4600-3-45001  
 4:1 Ratio Digital Indicator with .0005" / 0.01mm graduation for DC-127-ID and DO-127-OD ordering # PG4600-3-45002  
 4:1 Ratio Digital Indicator with .001" / 0.02mm graduation for DC-127-ID and DO-127-OD ordering # PGI600-3-45001

ID- COUNTERSINK MODEL 0-90°				OD- CHAMFER MODEL 0-90°			
RANGE	INCH PART#	METRIC PART#	DIGITAL PART#	RANGE	INCH PART#	METRIC PART#	DIGITAL PART#
0-3/8"	DC-90-375	DC-90-375M	DC-90-375-D	1/8-1/2"	DO-90-500	DO-90-500M	DO-90-500-D
0-1/2"	DC-90-500	DC-90-500M	DC-90-500-D	3/16-1"	DO-90-1000	DO-90-1000M	DO-90-1000-D
0-1"	DC-90-1000	DC-90-1000M	DC-90-1000-D	1-2"	DO-90-2000	DO-90-2000M	DO-90-2000-D
1-2"	DC-90-2000	DC-90-2000M	DC-90-2000-D	2-3" *	DO-90-3000	DO-90-3000M	DO-90-3000-D
2-3"	DC-90-3000	DC-90-3000M	DC-90-3000-D	3-4" *	DO-90-4000	DO-90-4000M	DO-90-4000-D
3-4"	DC-90-4000	DC-90-4000M	DC-90-4000-D	<b>OD-CHAMFER MODEL 90-127°</b>			
RANGE	INCH PART#	METRIC PART#	DIGITAL PART#	RANGE	INCH PART#	METRIC PART#	DIGITAL PART#
0-3/8"	DC-127-375	DC-127-375M	DC-127-375-D	1/8-1/2"	DO-127-500	DO-127-500M	DO-127-500-D
0-1/2"	DC-127-500	DC-127-500M	DC-127-500-D	3/16-1"	DO-127-1000	DO-127-1000M	DO-127-1000-D
0-1"	DC-127-1000	DC-127-1000M	DC-127-1000-D	1-2"	DO-127-2000	DO-127-2000M	DO-127-2000-D
1-2"	DC-127-2000	DC-127-2000M	DC-127-2000-D	2-3" *	DO-127-3000	DO-127-3000M	DO-127-3000-D
2-3"	DC-127-3000	DC-127-3000M	DC-127-3000-D	3-4" *	DO-127-4000	DO-127-4000M	DO-127-4000-D
3-4"	DC-127-4000	DC-127-4000M	DC-127-4000-D	<b>ID- COUNTERSINK MODEL 90-127°</b>			
RANGE	INCH PART#	METRIC PART#	DIGITAL PART#	RANGE	INCH PART#	METRIC PART#	DIGITAL PART#
0-3/8"	DC-127-375	DC-127-375M	DC-127-375-D	1/8-1/2"	DO-127-500	DO-127-500M	DO-127-500-D
0-1/2"	DC-127-500	DC-127-500M	DC-127-500-D	3/16-1"	DO-127-1000	DO-127-1000M	DO-127-1000-D
0-1"	DC-127-1000	DC-127-1000M	DC-127-1000-D	1-2"	DO-127-2000	DO-127-2000M	DO-127-2000-D
1-2"	DC-127-2000	DC-127-2000M	DC-127-2000-D	2-3" *	DO-127-3000	DO-127-3000M	DO-127-3000-D
2-3"	DC-127-3000	DC-127-3000M	DC-127-3000-D	3-4" *	DO-127-4000	DO-127-4000M	DO-127-4000-D
3-4"	DC-127-4000	DC-127-4000M	DC-127-4000-D	<b>OD-CHAMFER MODEL 90-127°</b>			
RANGE	INCH PART#	METRIC PART#	DIGITAL PART#	RANGE	INCH PART#	METRIC PART#	DIGITAL PART#
0-3/8"	DC-127-375	DC-127-375M	DC-127-375-D	1/8-1/2"	DO-127-500	DO-127-500M	DO-127-500-D
0-1/2"	DC-127-500	DC-127-500M	DC-127-500-D	3/16-1"	DO-127-1000	DO-127-1000M	DO-127-1000-D
0-1"	DC-127-1000	DC-127-1000M	DC-127-1000-D	1-2"	DO-127-2000	DO-127-2000M	DO-127-2000-D
1-2"	DC-127-2000	DC-127-2000M	DC-127-2000-D	2-3" *	DO-127-3000	DO-127-3000M	DO-127-3000-D
2-3"	DC-127-3000	DC-127-3000M	DC-127-3000-D	3-4" *	DO-127-4000	DO-127-4000M	DO-127-4000-D
3-4"	DC-127-4000	DC-127-4000M	DC-127-4000-D	<b>ID- COUNTERSINK MODEL 90-127°</b>			
RANGE	INCH PART#	METRIC PART#	DIGITAL PART#	RANGE	INCH PART#	METRIC PART#	DIGITAL PART#
0-3/8"	DC-127-375	DC-127-375M	DC-127-375-D	1/8-1/2"	DO-127-500	DO-127-500M	DO-127-500-D
0-1/2"	DC-127-500	DC-127-500M	DC-127-500-D	3/16-1"	DO-127-1000	DO-127-1000M	DO-127-1000-D
0-1"	DC-127-1000	DC-127-1000M	DC-127-1000-D	1-2"	DO-127-2000	DO-127-2000M	DO-127-2000-D
1-2"	DC-127-2000	DC-127-2000M	DC-127-2000-D	2-3" *	DO-127-3000	DO-127-3000M	DO-127-3000-D
2-3"	DC-127-3000	DC-127-3000M	DC-127-3000-D	3-4" *	DO-127-4000	DO-127-4000M	DO-127-4000-D
3-4"	DC-127-4000	DC-127-4000M	DC-127-4000-D	<b>OD-CHAMFER MODEL 90-127°</b>			
RANGE	INCH PART#	METRIC PART#	DIGITAL PART#	RANGE	INCH PART#	METRIC PART#	DIGITAL PART#
0-3/8"	DC-127-375	DC-127-375M	DC-127-375-D	1/8-1/2"	DO-127-500	DO-127-500M	DO-127-500-D
0-1/2"	DC-127-500	DC-127-500M	DC-127-500-D	3/16-1"	DO-127-1000	DO-127-1000M	DO-127-1000-D
0-1"	DC-127-1000	DC-127-1000M	DC-127-1000-D	1-2"	DO-127-2000	DO-127-2000M	DO-127-2000-D
1-2"	DC-127-2000	DC-127-2000M	DC-127-2000-D	2-3" *	DO-127-3000	DO-127-3000M	DO-127-3000-D
2-3"	DC-127-3000	DC-127-3000M	DC-127-3000-D	3-4" *	DO-127-4000	DO-127-4000M	DO-127-4000-D
3-4"	DC-127-4000	DC-127-4000M	DC-127-4000-D	<b>ID- COUNTERSINK MODEL 90-127°</b>			
RANGE	INCH PART#	METRIC PART#	DIGITAL PART#	RANGE	INCH PART#	METRIC PART#	DIGITAL PART#
0-3/8"	DC-127-375	DC-127-375M	DC-127-375-D	1/8-1/2"	DO-127-500	DO-127-500M	DO-127-500-D
0-1/2"	DC-127-500	DC-127-500M	DC-127-500-D	3/16-1"	DO-127-1000	DO-127-1000M	DO-127-1000-D
0-1"	DC-127-1000	DC-127-1000M	DC-127-1000-D	1-2"	DO-127-2000	DO-127-2000M	DO-127-2000-D
1-2"	DC-127-2000	DC-127-2000M	DC-127-2000-D	2-3" *	DO-127-3000	DO-127-3000M	DO-127-3000-D
2-3"	DC-127-3000	DC-127-3000M	DC-127-3000-D	3-4" *	DO-127-4000	DO-127-4000M	DO-127-4000-D
3-4"	DC-127-4000	DC-127-4000M	DC-127-4000-D	<b>OD-CHAMFER MODEL 90-127°</b>			
RANGE	INCH PART#	METRIC PART#	DIGITAL PART#	RANGE	INCH PART#	METRIC PART#	DIGITAL PART#
0-3/8"	DC-127-375	DC-127-375M	DC-127-375-D	1/8-1/2"	DO-127-500	DO-127-500M	DO-127-500-D
0-1/2"	DC-127-500	DC-127-500M	DC-127-500-D	3/16-1"	DO-127-1000	DO-127-1000M	DO-127-1000-D
0-1"	DC-127-1000	DC-127-1000M	DC-127-1000-D	1-2"	DO-127-2000	DO-127-2000M	DO-127-2000-D
1-2"	DC-127-2000	DC-127-2000M	DC-127-2000-D	2-3" *	DO-127-3000	DO-127-3000M	DO-127-3000-D
2-3"	DC-127-3000	DC-127-3000M	DC-127-3000-D	3-4" *	DO-127-4000	DO-127-4000M	DO-127-4000-D
3-4"	DC-127-4000	DC-127-4000M	DC-127-4000-D	<b>ID- COUNTERSINK MODEL 90-127°</b>			

\* Special Order

ID – Countersink Dial Indicator Models  
 AX321-ID for DC-90- ID models ordering # B10915-D  
 AX341-ID for DC-127- ID models ordering # B10910-D

OD – Chamfer Dial Indicator Models  
 AX321-OD for DO-90- OD models ordering # B10715-D  
 AX341-OD for DO-127- OD models ordering # B10710-D

# SPECIAL APPLICATIONS

[www.dorseymetrology.com](http://www.dorseymetrology.com)

In addition to its already diverse product line of precision dimensional gaging instruments, Dorsey offers special applications to accommodate a variety of needs.

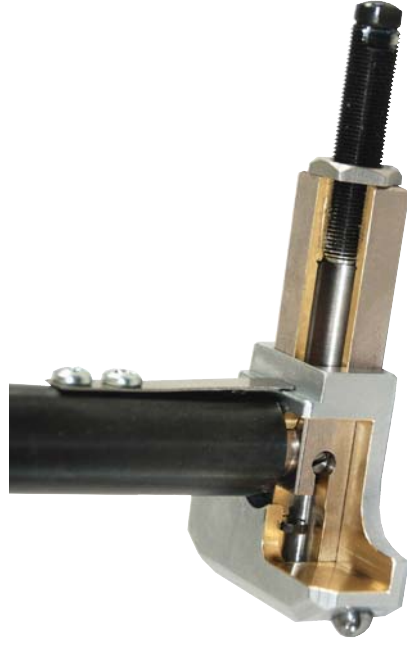


Bore gages are comparative instruments designed to check hole diameter and condition. These bore gages use the principle of two point gaging and three point centralization. The gaging contacts are diametrically opposed which allows the most accurate reading of a bore. The reference contact is constructed to allow range extensions and adapters to be added to change the measuring size of the gage without loss of accuracy or balance. During use, the gage is inserted on an angle for easy entry into the bore. The centralizer ensures locating on the true diameter. The gage is "rocked" and the indicator is observed to find the lowest measurement to obtain a true diameter reading.

Dorsey offers a variety of reference masters from specific size master rings to Dorsey's corresponding family of adjustable bore gage setmasters.

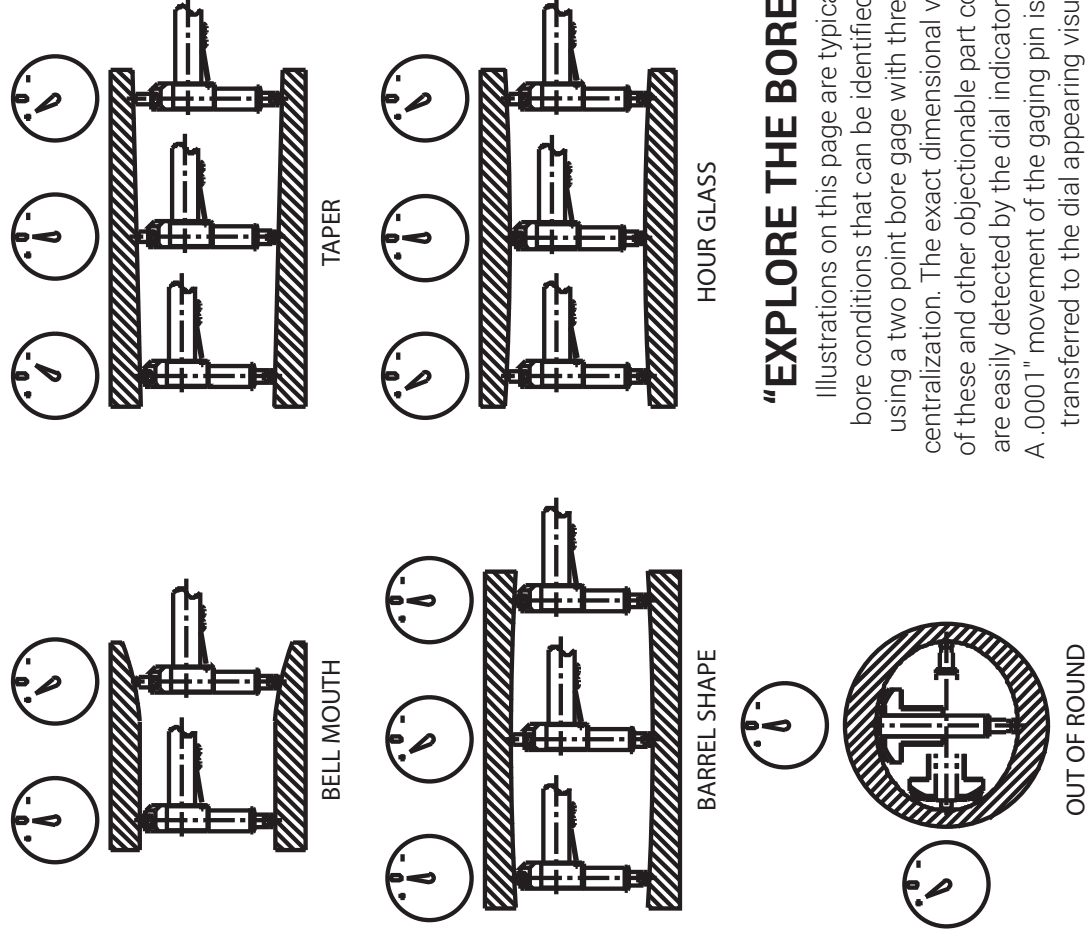
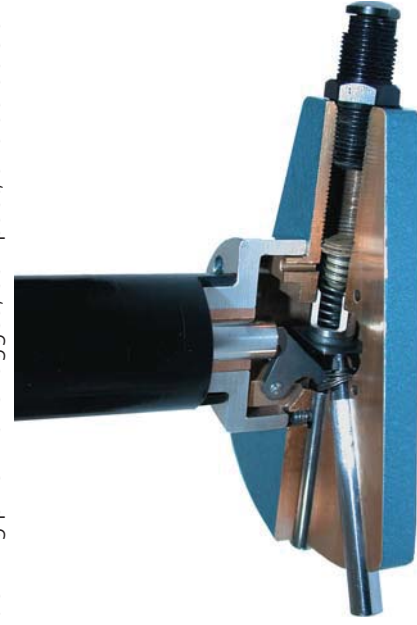
### DBL SERIES BORE GAGES

The independent dynamic centralizer secures two carbide balls on one easy to clean and compact unit.



### DORSEY STANDARD BORE GAGES

A single piece gaging head encloses both gaging pin centralizing pins in one rugged, compact, and durable unit.



### "EXPLORE THE BORE"

Illustrations on this page are typical of bore conditions that can be identified while using a two point bore gage with three point centralization. The exact dimensional variations of these and other objectionable part conditions are easily detected by the dial indicator reading. A .0001" movement of the gaging pin is instantly transferred to the dial appearing visually as approximately 1/16".

# DBL SERIES - INTERNAL DIAL BORE GAGES

www.dorseymetrology.com

DBL self centralizing bore gages are ideal for toolroom and production applications. Easy to use, easy to disassemble, and easy to clean. Only 4 moving parts are used in this precision economical gage.



Optional shock proof dial indicator with .001", .0005", .0001", or .00005" (.001mm, .002mm, .01mm) resolution available in single or multi revolution models

Accepts low profile indicator housing or dial unit housing

Stainless steel plunger is encased in lightweight extension tubing. Custom lengths available

Ergonomic and massive thermal isolation handle

Dynamic centralizer ensures accurate and repeatable centralization

Integrated range extension/contact. Replaceable contacts available in steel, carbide, or diamond

Robust external centralizer reed spring

Proven cam transfer is accurate and linear over its entire range

Standard carbide centralizing ball contacts

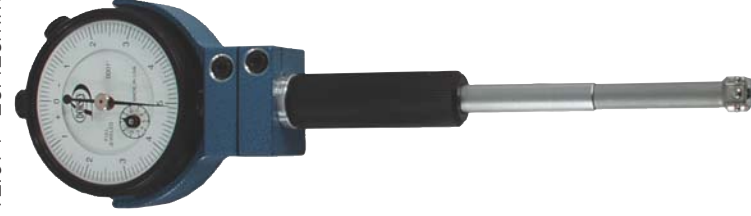
**2 Point**  
Recommended for smaller diameters (Standard Feature)

DBL bore gages are designed to be lightweight, versatile, accurate, and are ideal for toolroom and production applications. The DBL series bore gages feature two point gaging and three point centralization. The gaging contacts are diametrically opposed, providing the most accurate reading of the bore. The reference contact accepts various length range extensions and adapters to change the measuring size of the gage without the loss of accuracy or balance. The independent external centralizer with two fixed carbide ball locators aligns and self-centers the gaging pin and reference contact during operation. The centralizer ensures locating and reading the true diameter.

**DBL-248**  
.248 - .501"  
6.299 - 12.725mm



**DBL-499**  
.499 - 1.001"  
12.674 - 25.425mm



**DBL-998**  
.998 - 1.501"  
25.349 - 38.125mm



**DBL-1499**  
1.499 - 3.00"  
38.0746 - 76.200mm



**DBL-300**  
3.00 - 6.00"  
76.200 - 152.400mm



All DBL series gages include carbide centralizing contacts, a .0001" or 0.002mm graduation dial indicator, and fitted wooden storage box.

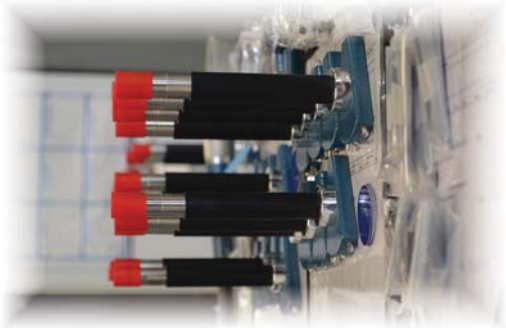
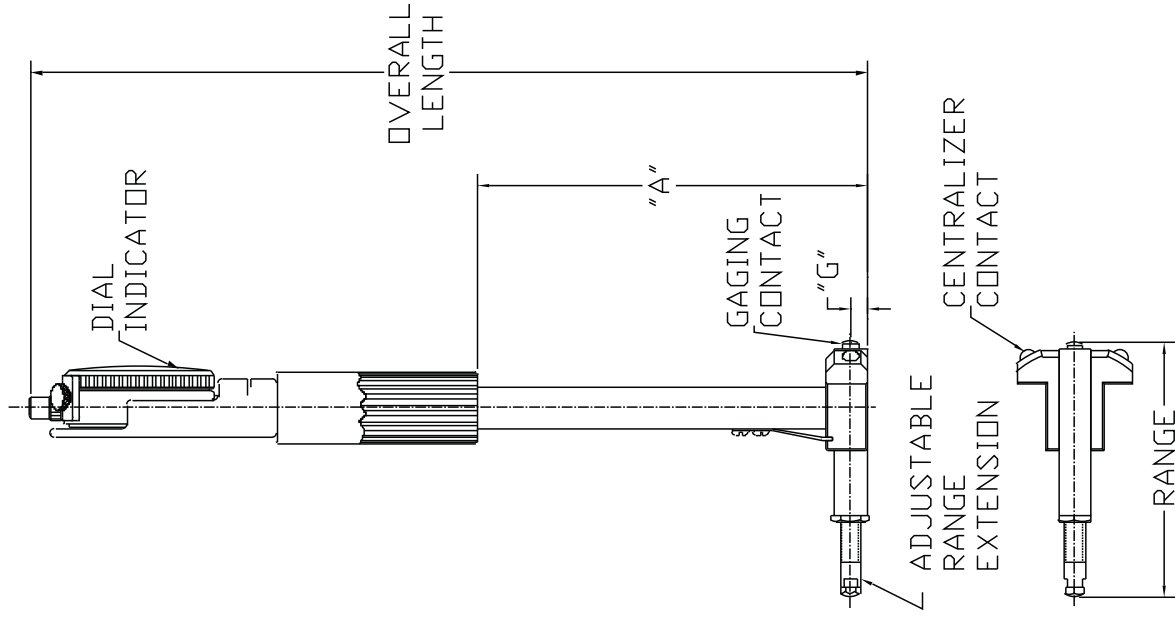
Other options available: carbide or diamond contacts, extra lengths, 2 and 3 point depth stops, choice of any Dorsey "high amplification", "traditional" or digital indicators, single rev models, and digital indicators.

# DBL SERIES - INTERNAL DIAL BORE GAGES

www.dorseymetrology.com

MODEL	RANGE (inches)	OVERALL LENGTH (inches)	RANGE (metric)	"A" GAGING DEPTH (inches)	"C" DIMENSION (inches)	GAGING CONTACT TRAVEL	
						STANDARD (inches)	OPTIONAL (inches)
DBL-248-S	.248-.501	6.31	6.299-12.725	2.25	.140	.010	.016
DBL-248-C	.248-.501	6.31	6.299-12.725	2.25	.140	.010	.016
DBL-499-S	.499-1.001	9.75	12.674-25.425	3.00	.188	.016	.022
DBL-499-C	.499-1.001	9.75	12.674-25.425	3.00	.188	.016	.022
DBL-998-S	.998-1.501	9.75	25.349-38.125	3.00	.188	0.25	.050
DBL-998-C	.998-1.501	9.75	25.349-38.125	3.00	.188	0.25	.050
DBL-1499-S	1.499-3.00	10.75	38.0746-76.200	4.00	.188	.025	.050
DBL-1499-C	1.499-3.00	10.75	38.0746-76.200	4.00	.188	.025	.050
DBL-300-S	3.00-6.00	11.75	76.200-152.400	5.00	.250	.025	.070
DBL-300-C	3.00-6.00	11.75	76.200-152.400	5.00	.250	.025	.070
SPECIAL RANGE MODELS							
DBL-365-S	.365-.620	6.31	9.271-15.748	2.25	.140	.010	.016
DBL-620-S	.620-1.001	9.75	15.748-25.425	3.00	.188	.016	.022
DBL-200-S	2.00-4.00	10.75	50.800-101.600	4.00	.188	.025	.050
DBL-400-S	4.00-10.00	11.75	101.60-254.000	5.00	.250	.025	.070

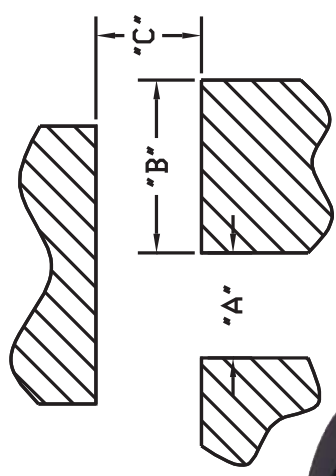
Note: For optional gaging contact travel add -GC to part #.  
 For gage less indicator, add -NI to part #.  
 Special gaging depths available per application.  
 -S - Steel, -C - Carbide



Proudly made in the USA

Also available with ISO 17025 certifications.

This type of gaging is used during machining or jig grinding operations to avoid disturbing machine tool setup. It's also used to avoid obstructions in the measurement area. Price includes fitted storage case.



DBL-499-OSS



DBL-1499-OSS



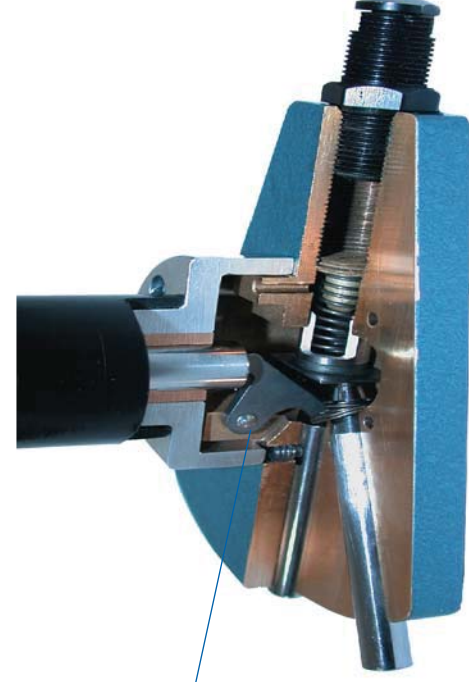
Dorsey Products - proudly made in the USA

MODEL	ORDERING INFORMATION		
	INCHES		
	DIAMETER "A"	"B"	"C"
DBL-499-OSS	.5"-1"	3"	1.56"
DBL-499-OSC	.5"-1"	3"	1.56"
DBL-998-OSS	1"-1.5"	5"	2.00"
DBL-998-OSC	1"-1.5"	5"	2.00"
DBL-1499-OSS	1.5"-3"	5"	2.00"
DBL-1499-OSC	1.5"-3"	5"	2.00"

## A TIME PROVEN DESIGN MADE BETTER BY DORSEY

This design of rugged production line bore gages has been an industry standard for more than 75 years. Dorsey offers precise replacement models built to the same exacting specifications but with a choice of any of Dorsey's "High Amplification", "Traditional", or digital indicators. We continue to provide the original Standard Gage Company® customers with high quality interchangeable parts. We also build bore gages with modifications, special gages, and new models to meet their current and future needs.

- ✓ **Available with ISO 17025 certification.**
- ✓ Comfortable & ergonomic, this well balanced handle can be removed to gain clearance in restricted areas.
- ✓ Optional shock proof dial indicator with .001", .0005", .0001", or .00005" (.001mm, .002mm, .01mm) resolution available in single or multi revolution models. Available with Dorsey's digital housings for use with most digital indicator models.
- ✓ Precisely machined cast phosphor bronze gaging head for sensitivity and durability.
- ✓ Thermally insulated high impact resistant shield protects extension tubing.
- ✓ Unique "tandem" centralizer uses matched and lapped components to ensure accurate and repeatable centralization.
- ✓ Precision machined aluminum dial unit housing.
- ✓ Replaceable contacts available in steel, carbide, or diamond.
- ✓ Stainless steel extension tubing in a wide variety of standard and special lengths.



*Proven bell crank transfer is accurate and linear over its entire range.*



**STYLE 1** - All sizes utilize the same dial unit housing for extreme versatility.

Size 1  
.63" - 1.00"  
16mm - 25.4mm

Size 2  
1.00" - 1.53"  
25.4 - 38.9mm

Size 3  
1.50" - 2.16"  
38.1 - 54.8mm

Size 4  
2.12" - 3.13"  
54.0 - 79.5mm

Size 5  
3.09" - 6.13"  
78.5 - 156mm

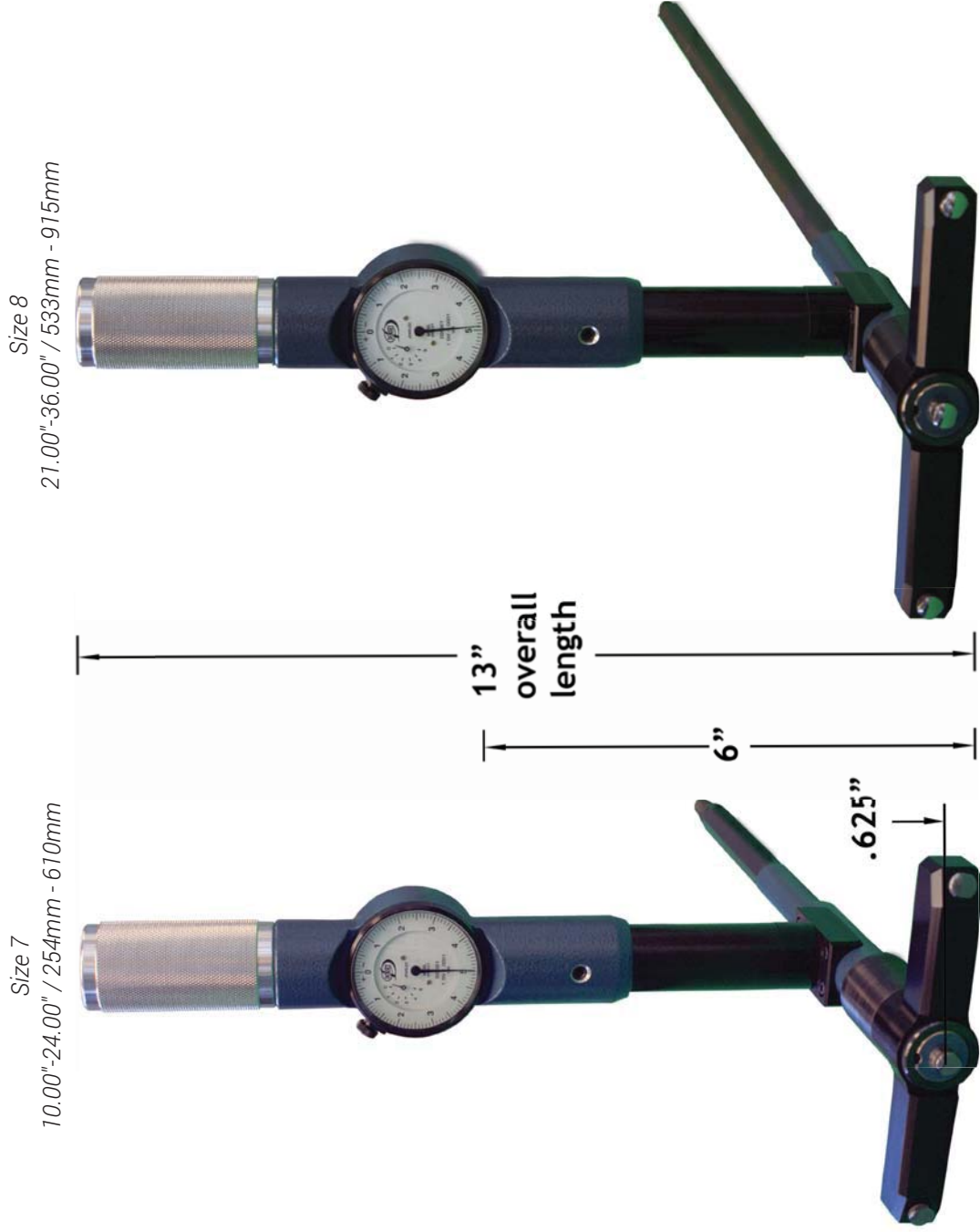
Size 6  
6.00" - 12.13"  
152.5 - 308.0mm



## A TIME PROVEN DESIGN EXPANDED TO MEASURE LARGE BORE SIZES

Style 1- Both models utilize the same robust 1" heavy duty dial unit housing with a choice of various resolutions and spindle travel in both inch or metric readings.

- ✓ Both the #7 and #8 bore gages measure .625" from the bottom of a blind bore.
- ✓ The standard gaging depth is 6" but can be supplied with depth extensions to 144".
- ✓ Besides these large bore gages, we also offer two companion bore gage setting masters that are set to size with gage block combinations. Setmaster # DBM-12000 (12"-24") and # DBM-24000 (20" to 36") are adjustable, more convenient to handle, and less expensive than a library of traditional large rings.



## OPTIONAL: BORE GAGE DEPTH EXTENSIONS

4" DEPTH EXTENSION
5" DEPTH EXTENSION
6" DEPTH EXTENSION
8" DEPTH EXTENSION
10" DEPTH EXTENSION
12" DEPTH EXTENSION
14" DEPTH EXTENSION
16" DEPTH EXTENSION
24" DEPTH EXTENSION
30" DEPTH EXTENSION
36" DEPTH EXTENSION
Other Lengths Available
37-72"
72-144"

There are 5 optional styles that are designed especially for applications where space restrictions or gaging positions are not suitable for the use of the Style 1.



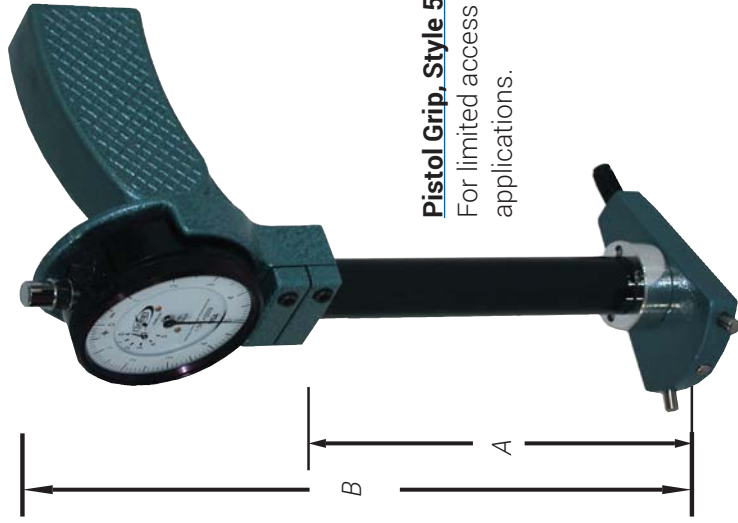
**Right Angle, Style 2**

For jig boring or jig grinding machine operations; designed to avoid disturbing the machine tool setup. Also for restricted areas or applications that might be hazardous to the operator's hand.



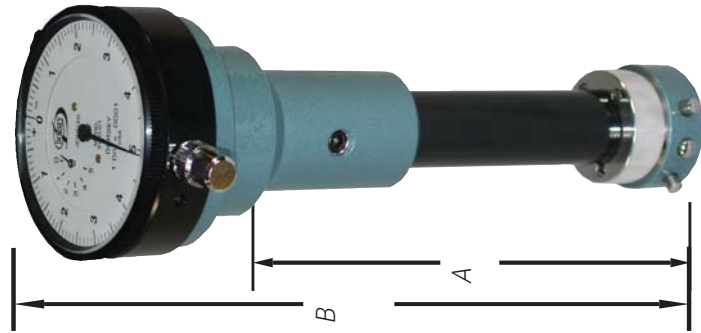
**Flush Mount, Style 7**

For limited access applications.



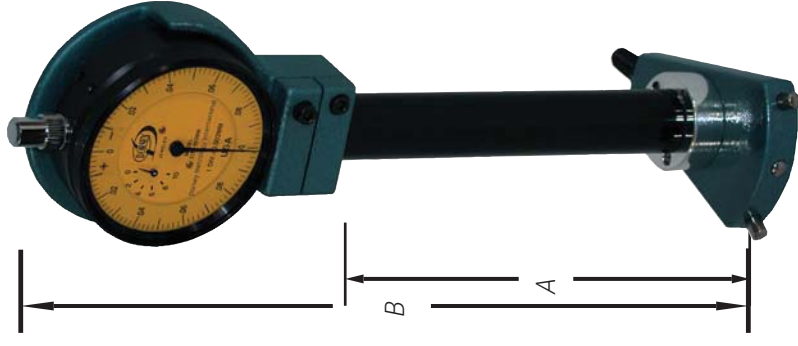
**Pistol Grip, Style 5**

For limited access applications.



**Perpendicular, Style 4**

For vertical axis bores below eye level.



**Vertical, Style 3**

For vertical axis bores at eye level; best choice for bench inspection applications.

GAGE SIZE	STANDARD STYLE 1			RIGHT ANGLE STYLE 2			VERTICAL STYLE 3			PERPENDICULAR STYLE 4			PISTOL GRIP STYLE 5		FLUSH STYLE 7	
	A	B	MIN	A	B	C	A	B	A	B	A	B	STD	MIN	A	B
1	2.70"	2.70"	7.27"	-	-	-	-	-	-	-	-	-	-	-	-	-
2	5.00"	2.31"	8.12"	2.53"	3.88"	6.25"	6.00"	2.31"	8.75"	6.00"	2.31"	8.13"	1.63"	1.63"	5.75"	-
3	5.00"	2.63"	10.50"	2.53"	3.88"	6.25"	6.00"	2.63"	9.00"	6.00"	2.63"	8.13"	1.63"	1.63"	5.75"	-
4	5.00"	2.63"	10.50"	2.53"	3.88"	6.25"	6.00"	2.63"	9.00"	6.00"	2.63"	8.13"	1.63"	1.63"	5.75"	-
5	6.00"	2.63"	11.50"	2.53"	3.83"	6.25"	6.00"	2.63"	9.00"	6.00"	2.63"	8.13"	1.63"	1.63"	5.75"	-
6	6.00"	2.63"	12.00"	2.50"	4.44"	6.69"	6.00"	5.50"	9.44"	6.00"	4.00"	8.13"	3.00"	3.00"	9.38"	1.50"

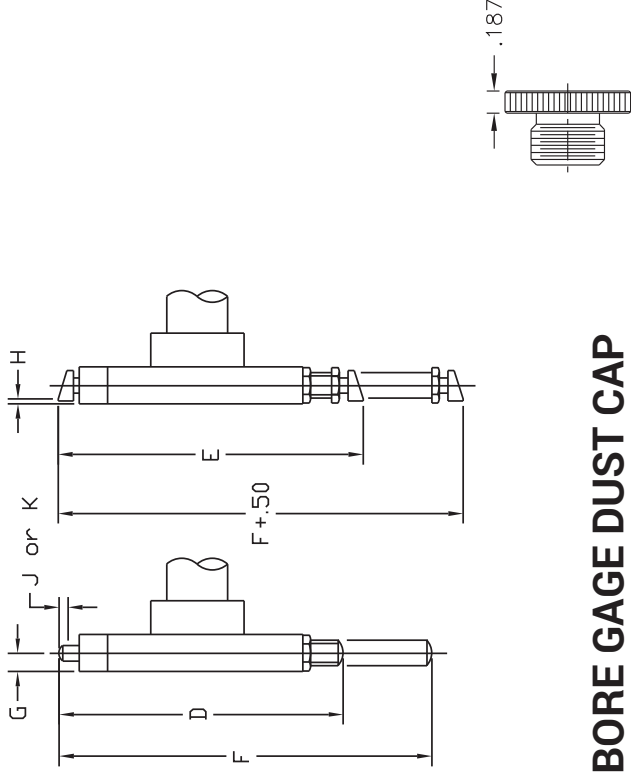
D = Standard gaging range  
 E = Gaging range with optional offset contacts  
 F = Maximum gaging range with extension adapters  
 G = Standard center line  
 H = Offset center line modification add H to part #  
 J = Standard gaging plunger travel  
 K = Optional extended plunger travel add K to part #

## GAGE-HEAD DIMENSIONS (ALL STYLES)

SIZE	D		E	F	G	H	J	K	RANGE EXTENSION ADAPTER PART #
	MIN	MAX							
1	.63"	1.00"	-	-	.100"	-	.015"	-	-
2	1.00"	1.53"	1.19"	1.75"	.195"	.140"	.025"	.050"	DS-B0-85929
3	1.50"	2.16"	1.69"	3.13"	.224"	.156"	.025"	.050"	DS-B0-85934
4	2.12"	3.13"	2.56"	3.56"	.224"	.032"	.025"	.075"	DS-B0-85942
5	3.09"	6.13"	3.50"	6.44"	.224"	.032"	.025"	.075"	DS-B0-85952
6	6.00"	12.13"	6.44"	12.63"	.312"	.032"	.030"	.100"	DS-B0-85966

## BORE GAGE EXTENSION HOUSING #3, 4 & 5

EXTENSION HOUSING ASSEMBLY	
PART #	DESCRIPTION
DX2-81005-03	3" "A" LENGTH EXTENSION
DX2-81005-04	4" "A" LENGTH EXTENSION
DX2-81005-05	5" "A" LENGTH EXTENSION
DX2-81005-06	6" "A" LENGTH EXTENSION
DX2-81005-08	8" "A" LENGTH EXTENSION
DX2-81005-10	10" "A" LENGTH EXTENSION
DX2-81005-12	12" "A" LENGTH EXTENSION
DX2-81005-14	14" "A" LENGTH EXTENSION
DX2-81005-16	16" "A" LENGTH EXTENSION
DX2-81005-18	18" "A" LENGTH EXTENSION
DX2-81005-24	24" "A" LENGTH EXTENSION
DX2-81005-30	30" "A" LENGTH EXTENSION
DX2-81005-36	36" "A" LENGTH EXTENSION
Other Lengths Available	
37-71"	
72-144"	



## BORE GAGE DUST CAP

- ✔ Replaces standard handle.
- ✔ Minimize overall length ("B" dimension).

SIZE	REDUCES "B" DIM. BY	PART #
2-6	2.06"	DS-B0-84725
6 Heavy Duty	2.81"	DS-B0-84731

## MODELS 2,3,4,5

### FEATURES:

- ✓ Industry's most popular dial bore gage now available in an easy-to-use combination kit.
- ✓ Standard with jeweled shock proof indicator movement.
- ✓ Available with a wide variety of indicators including .00005" or 0.001mm.
- ✓ Replaces separate dial bore gages covering the same ranges as models # 2, 3, 4, and 5.
- ✓ Considerable cost savings.
- ✓ Convenient carrying case.
- ✓ Ideal for small shops or short production runs.
- ✓ Interchangeable gage heads and range extensions to cover diameters from 1.000" to 8.000" or 25.4mm to 203.2mm.

PART #	DESCRIPTION
DS-B1-K2345	WITH .0001" GRAD DIAL INDICATOR
DS-B1-K2345M	WITH 0.002mm GRAD DIAL INDICATOR

## EXTRA LENGTH BORE GAGE EXTENSIONS:

Bore gage extension housings with gaging depths up to 36" are normally manufactured from stainless steel tubing. See the price list for ordering data for each model. Bore gages with extra length extensions beyond 36" are now standard in carbon fiber. Most long bore gages are normally produced from stainless steel tubing up to 72" depths. Traditionally, beyond this length, the #4, #5 and #6 bore gages are constructed using segmented steel tubing. All extra length bore gage tubing are now provided with carbon fiber extensions that are lighter weight, more thermally stable, and structurally stronger.



#6 Dorsey/Standard bore gage with 5' steel extension housing. The Weight is 7¾ lbs/3.52kg (less range extensions).

#4 Dorsey/Standard bore gage with 4' carbon fiber extension housing. The weight is 2½ lbs/1.13kg (less range extensions).

#6 Dorsey/Standard bore gage with 4' carbon fiber extension housing. The weight is 4 lbs/1.8kg (less range extensions).

## Available in Carbon Fiber

Maximum Recommended Gaging Depths

GAGE SIZE	INCH DEPTH
SIZE #2	60" maximum
SIZE #3	72" maximum
SIZE #4	96" maximum
SIZE #5	144" maximum
SIZE #6	144" maximum

# DORSEY STANDARD BORE GAGES

GAGE SIZE	DS-		B1-		1		2		1		0		4		-12		TRADITIONAL PART NUMBER
	INDICATOR GRADUATION	HIGH AMPLIFICATION INDICATOR	PART NUMBER	TRADITIONAL INDICATOR	Style	Indicator	Contacts	GAGE SIZE	INDICATOR GRADUATION	HIGH AMPLIFICATION INDICATOR	PART NUMBER	TRADITIONAL INDICATOR	TRADITIONAL PART NUMBER	Indicator	Gage Size	A Length	
.63" - 1.00"	.0005 <sup>s</sup>	DS-214-005	DS-B1-10101											DS-214-005	DS-B1-10103		
	.0001 <sup>s</sup>	DS-219-01	DS-B1-11101											DS-219-01	DS-B1-11103		
	.0001 <sup>s</sup>	DS-2150-01	DS-B1-12101											DS-2150-01	DS-B1-12103	DS-2DM025-01	DS-B2-12103
	.00025 <sup>s</sup>	DS-21100-025	DS-B1-10111											DS-21100-025	DS-B1-10113		
	.0005 <sup>s</sup>	DS-2140-05	DS-B1-13101											DS-2140-05	DS-B1-13103		
	.0005 <sup>s</sup>	DS-21100-05	DS-B1-14101											DS-21100-05	DS-B1-14103	DS-2DM050-05	DS-B2-14103
	NONE	LESS INDICATING UNIT	DS-B1-15101											NONE	DS-B1-15103		
	0.010mm <sup>s</sup>	DS-2110-01mm	DS-B1-16101											DS-2110-01mm	DS-B1-16103	DS-2DM5-01mm	DS-B2-16103
	0.005mm	DS-2125-005mm	DS-B1-17101											DS-2125-005mm	DS-B1-17103	DS-2DM012-005mm	DS-B2-17103
	0.002mm	DS-2110-002mm	DS-B1-18101											DS-2110-002mm	DS-B1-18103	DS-2DM005-002mm	DS-B2-18103
16 - 25.4mm	0.002mm <sup>s</sup>	DS-2102-002mm	DS-B1-19101											DS-2102-002mm	DS-B1-19103		
	0.001mm <sup>s</sup>	DS-2101-001mm	DS-B1-10121											DS-2101-001mm	DS-B1-10123		
	.0001 <sup>s</sup> / .002mm <sup>s</sup>	S2LM	DS-B1-12101M											S2LM	DS-B1-12103M		
	.0005 <sup>s</sup> / 0.001mm	DIGITAL	DS-B5-10101											DIGITAL	DS-B5-10103		
	.0005 <sup>s</sup>	DS-214-005	DS-B1-10102											DS-214-005	DS-B1-10104		
	.0001 <sup>s</sup>	DS-219-01	DS-B1-11102											DS-219-01	DS-B1-11104		
	.0001 <sup>s</sup>	DS-2150-01	DS-B1-12102	DS-2DM025-01										DS-2150-01	DS-B1-12104	DS-2DM025-01	DS-B2-12104
	.00025 <sup>s</sup>	DS-21100-025	DS-B1-10112											DS-21100-025	DS-B1-10114		
	.0005 <sup>s</sup>	DS-2140-05	DS-B1-13102											DS-2140-05	DS-B1-13104		
	.0005 <sup>s</sup>	DS-21100-05	DS-B1-14102	DS-2DM050-05										DS-21100-05	DS-B1-14104	DS-2DM050-05	DS-B2-14104
1.00 - 1.53"	NONE	LESS INDICATING UNIT	DS-B1-15102											NONE	DS-B1-15104		
	0.010mm <sup>s</sup>	DS-2110-01mm	DS-B1-16102	DS-2DM5-01mm										DS-2110-01mm	DS-B1-16104	DS-2DM5-01mm	DS-B2-16104
	0.005mm	DS-2125-005mm	DS-B1-17102	DS-2DM012-005mm										DS-2125-005mm	DS-B1-17104	DS-2DM012-005mm	DS-B2-17104
	0.002mm	DS-2110-002mm	DS-B1-18102	DS-2DM005-002mm										DS-2110-002mm	DS-B1-18104	DS-2DM005-002mm	DS-B2-18104
	0.002mm <sup>s</sup>	DS-2102-002mm	DS-B1-19102											DS-2102-002mm	DS-B1-19104		
	0.001mm <sup>s</sup>	DS-2101-001mm	DS-B1-10122											DS-2101-001mm	DS-B1-10124		
	.0001 <sup>s</sup> / .002mm <sup>s</sup>	S2LM	DS-B1-12102M											S2LM	DS-B1-12104M		
	.0005 <sup>s</sup> / 0.001mm	DIGITAL	DS-B5-10102											DIGITAL	DS-B5-10104		
	.0005 <sup>s</sup>	DS-214-005	DS-B1-10102											DS-214-005	DS-B1-10105		
	.0001 <sup>s</sup>	DS-219-01	DS-B1-11105											DS-219-01	DS-B1-11105		
25.4 - 38.9mm	.0001 <sup>s</sup>	DS-2150-01	DS-B1-12105											DS-2150-01	DS-B1-12105	DS-2DM025-01	DS-B2-12105
	.00025 <sup>s</sup>	DS-21100-025	DS-B1-10115											DS-21100-025	DS-B1-10115		
	.0005 <sup>s</sup>	DS-2140-05	DS-B1-13105											DS-2140-05	DS-B1-13105		
	.0005 <sup>s</sup>	DS-21100-05	DS-B1-14105											DS-21100-05	DS-B1-14105	DS-2DM050-05	DS-B2-14105
	NONE	LESS INDICATING UNIT	DS-B1-15105											NONE	DS-B1-15105		
	0.010mm <sup>s</sup>	DS-2110-01mm	DS-B1-16105	DS-2DM5-01mm										DS-2110-01mm	DS-B1-16105	DS-2DM5-01mm	DS-B2-16105
	0.005mm	DS-2125-005mm	DS-B1-17105	DS-2DM012-005mm										DS-2125-005mm	DS-B1-17105	DS-2DM012-005mm	DS-B2-17105
	0.002mm	DS-2110-002mm	DS-B1-18105	DS-2DM005-002mm										DS-2110-002mm	DS-B1-18105	DS-2DM005-002mm	DS-B2-18105
	0.002mm <sup>s</sup>	DS-2102-002mm	DS-B1-19105											DS-2102-002mm	DS-B1-19105		
	0.001mm <sup>s</sup>	DS-2101-001mm	DS-B1-10125											DS-2101-001mm	DS-B1-10125		
.0001 <sup>s</sup> / .002mm <sup>s</sup>	S2LM	DS-B1-12105M											S2LM	DS-B1-12105M			
.0005 <sup>s</sup> / 0.001mm	DIGITAL	DS-B5-10105											DIGITAL	DS-B5-10105			

s = single revolution indicator.

## OPTIONAL CONTACT POINTS

OPTION	1	2	4	5	7	8
Gaging Contact	Steel	Carbide	Diamond	Carbide	Diamond	Offset Contact Configuration
Centralizing Contact	Steel	Steel	Steel	Carbide	Carbide	H Dimension

## WOODEN STORAGE BOX



DS Series bore gages are shipped in disposable shipping containers. To order a fitted wooden storage box please refer to the chart below.

GAGE SIZE	INDICATOR GRADUATION	HIGH AMPLIFICATION INDICATOR	PART NUMBER	TRADITIONAL INDICATOR	TRADITIONAL PART NUMBER
6.00 - 12.13"	.00005 <sup>s</sup>	DS-214-005	DS-B1-10106		
	.0001 <sup>s</sup>	DS-219-01	DS-B1-11106		
	.0001 <sup>*</sup>	DS-2150-01	DS-B1-12106	DS-2DM025-01	DS-B2-12106
	.00025 <sup>s</sup>	DS-21100-025	DS-B1-10116		
	.0005 <sup>s</sup>	DS-2140-05	DS-B1-13106		
	.0005 <sup>*</sup>	DS-21100-05	DS-B1-14106	DS-2DM050-05	DS-B2-14106
	NONE		DS-B1-15106		
	0.010mm <sup>s</sup>	DS-2110-01mm	DS-B1-16106	DS-2DM5-01mm	DS-B2-16106
	0.005mm	DS-2125-005mm	DS-B1-17106	DS-2DM012-005mm	DS-B2-17106
	0.002mm	DS-2110-002mm	DS-B1-18106	DS-2DM005-002mm	DS-B2-18106
152.5 - 308.0mm	0.002mm <sup>s</sup>	DS-2102-002mm	DS-B1-19106		
	0.001mm <sup>s</sup>	DS-2101-001mm	DS-B1-10126		
	.0001 <sup>*</sup> / .00005 <sup>s</sup>	S2LM	DS-B1-12106M		
	.00005 <sup>s</sup> / 0.001mm	DIGITAL	DS-B5-10106		T
	.00005 <sup>s</sup>	DS-214-005	DS-B1-10107		
	.0001 <sup>s</sup>	DS-219-01	DS-B1-11107		
	.0001 <sup>*</sup>	DS-2150-01	DS-B1-12107	DS-2DM025-01	DS-B2-12107
	.00025 <sup>s</sup>	DS-21100-025	DS-B1-10117		
	.0005 <sup>s</sup>	DS-2140-05	DS-B1-13107		
	.0005 <sup>*</sup>	DS-21100-05	DS-B1-14107	DS-2DM050-05	DS-B2-14107
10.00 - 24.00"	NONE		DS-B1-15107		
	0.010mm	DS-2110-01mm	DS-B1-16107	DS-2DM5-01mm	DS-B2-16107
	0.005mm	DS-2125-005mm	DS-B1-17107	DS-2DM012-005mm	DS-B2-17107
	0.002mm	DS-2110-002mm	DS-B1-18107	DS-2DM005-002mm	DS-B2-18107
	0.002mm <sup>s</sup>	DS-2102-002mm	DS-B1-19107		
	0.001mm	DS-2101-001mm	DS-B1-10127		
	.0001 <sup>*</sup> / .002mm	S2LM	DS-B1-12107M		
	.00005 <sup>s</sup> / 0.001mm	DIGITAL	DS-B5-10107		
	.00005 <sup>s</sup>	DS-214-005	DS-B1-10108		
	.0001 <sup>s</sup>	DS-219-01	DS-B1-11108		
254 - 610mm	.0001 <sup>*</sup>	DS-2150-01	DS-B1-12108	DS-2DM025-01	DS-B2-12108
	.00025 <sup>s</sup>	DS-21100-025	DS-B1-10118		
	.0005 <sup>s</sup>	DS-2140-05	DS-B1-13108		
	.0005 <sup>*</sup>	DS-21100-05	DS-B1-14108	DS-2DM050-05	DS-B2-14108
	NONE		DS-B1-15108		
	0.010mm	DS-2110-01mm	DS-B1-16108	DS-2DM5-01mm	DS-B2-16108
	0.005mm	DS-2125-005mm	DS-B1-17108	DS-2DM012-005mm	DS-B2-17108
	0.002mm	DS-2110-002mm	DS-B1-18108	DS-2DM005-002mm	DS-B2-18108
	0.002mm <sup>s</sup>	DS-2102-002mm	DS-B1-19108		
	0.001mm	DS-2101-001mm	DS-B1-10128		
21.00 - 36.00"	.0001 <sup>*</sup> / .002mm	S2LM	DS-B1-12108M		
	.00005 <sup>s</sup> / 0.001mm	DIGITAL	DS-B5-10108		
	.00005 <sup>s</sup>	DS-214-005	DS-B1-10108		
	.0001 <sup>s</sup>	DS-219-01	DS-B1-11108		
	.0001 <sup>*</sup>	DS-2150-01	DS-B1-12108	DS-2DM025-01	DS-B2-12108
	.00025 <sup>s</sup>	DS-21100-025	DS-B1-10118		
	.0005 <sup>s</sup>	DS-2140-05	DS-B1-13108		
	.0005 <sup>*</sup>	DS-21100-05	DS-B1-14108	DS-2DM050-05	DS-B2-14108
	NONE		DS-B1-15108		
	0.010mm	DS-2110-01mm	DS-B1-16108	DS-2DM5-01mm	DS-B2-16108
533 - 915mm	0.005mm	DS-2125-005mm	DS-B1-17108	DS-2DM012-005mm	DS-B2-17108
	0.002mm	DS-2110-002mm	DS-B1-18108	DS-2DM005-002mm	DS-B2-18108
	0.002mm <sup>s</sup>	DS-2102-002mm	DS-B1-19108		
	0.001mm	DS-2101-001mm	DS-B1-10128		
	.0001 <sup>*</sup> / .002mm	S2LM	DS-B1-12108M		
	.00005 <sup>s</sup> / 0.001mm	DIGITAL	DS-B5-10108		

PART #	GAGE SIZE
DX2-89952	2
DX2-89953	3
DX2-89954	4
DX2-89955	5
DX2-89956	6
DX2-89927	COMBINATION KIT

## FEATURES:

- ✓ Range ext up to 36" are available.
- ✓ Larger than 36" available by special request.
- ✓ All models come with steel contacts but carbide and diamond contacts are also available.

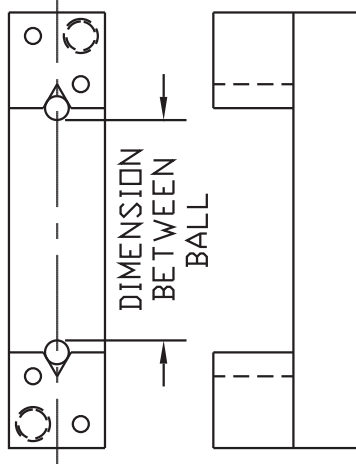
<sup>s</sup> = single revolution indicator.

# INTERNAL PITCH DIAMETER BORE GAGE

The Internal Pitch Diameter gage is ideally suited to check the internal pitch diameter of gears and splines. It can also be used to check any internal dimension where centralization is not necessary. Production models are available for a specific "best wire size" dimension. Models over 1.25" are supplied with interchangeable screw-in contacts. Special Fixed "V" masters are available to suit the application.

## FEATURES:

- ✓ Carbide ball contacts (best wire size).
- ✓ Interchangeable screw in contacts.
- ✓ Can be used to check PD or major root diameter of gears and splines.
- ✓ Optional fitted storage case available.



Order Model:  
PD-1000-A

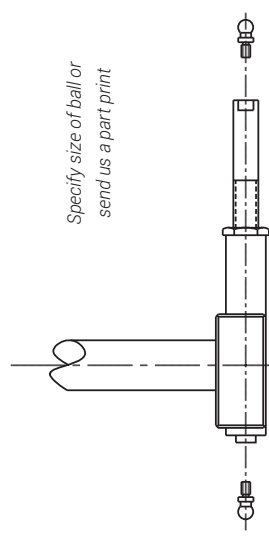
"V" Style pitch diameter  
setmaster, built per  
application

\* Indicator sold separately

INTERCHANGEABLE CARBIDE CONTACTS	
DIAMETER	PART #
.1250"	4082-125-B
.1875"	4082-187-B
.2500"	4082-250-B
SPECIALS QUOTED PER APPLICATION	

PART #	CONTACT TYPE	GAGING DEPTH (INCHES)	BOTTOM OF HEAD TO CENTERLINE OF CONTACT	FRAME STYLE	BETWEEN BALL/ROLL DIMENSION	STORAGE BOX PART #
PD-500	FIXED	3"	.188"	DBL-499	.50" - 1.25"	9005
DSPD-1000-A	INTERCHANGEABLE	5"	.224"	DS # 3	1.25" - 3.00"	DX2-89953
PD-1000-A	INTERCHANGEABLE	4"	.188"	DBL-998	1.25" - 3.00"	9005
DSPD-3000-A	INTERCHANGEABLE	6"	.224"	DS # 5	3.00" - 6.00"	DX2-89955
PD-3000-A	INTERCHANGEABLE	5"	.250"	DBL-300	3.00" - 6.00"	9005
DSPD-6000-A	INTERCHANGEABLE	6"	.312"	DS # 6	6.00" - 13.00"	DX2-89956

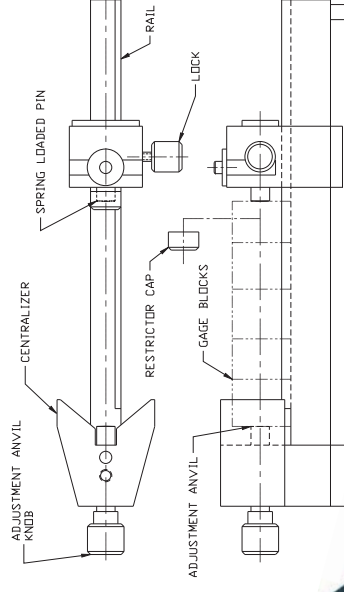
To order a fitted wooden storage box see the chart.



Bore gages are comparative instruments used to compare parts being manufactured to known dimensions. "Setting" the bore gage to a known dimension requires the use of a reference master. The master ring is the most common type reference master used in the industry and each ring is limited to one specific hole size. This means that a master ring inventory can reflect a large investment. Dorsey's adjustable bore gage setmasters maintain all the advantages of master rings, but provide the added feature of adjustability. Within the specified capacity of each Dorsey "Setmaster", any dimension can be set by easily adjusting the master to a preset combination of gage blocks.

## FEATURES:

- ✓ Only five setmasters are required to cover a range between .25" and 36".
- ✓ Mastering cycle repeatability within .000050".
- ✓ Setting cycle repeatability within +/- .00010".
- ✓ Ring correlation accuracy within +/- .00010".
- ✓ Used to set Dorsey DBL or Dorsey/Standard Series bore gages.
- ✓ Can also be used to set many other brands of bore gages - contact us for details.



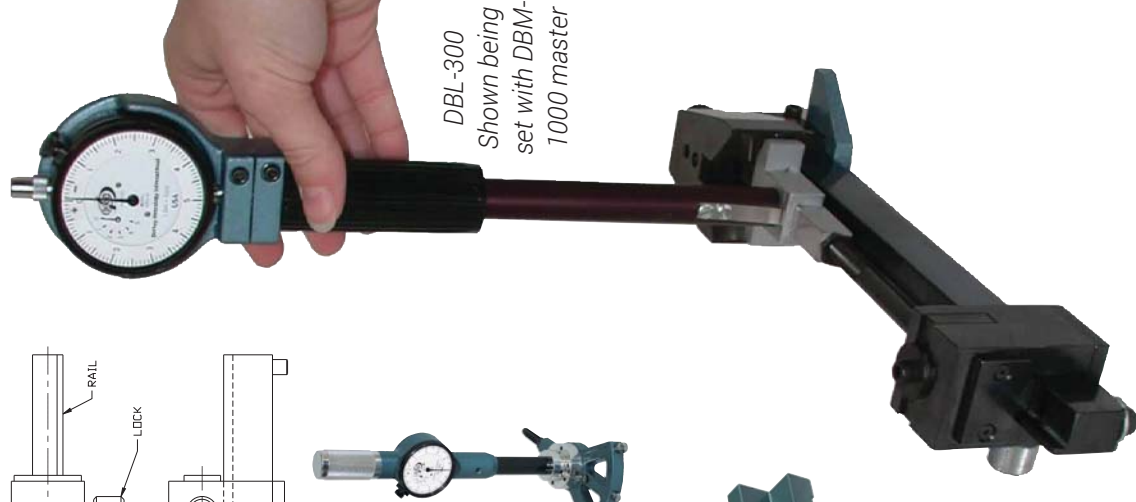
DBM-24000 20"-36"

DBM-12000 12"-24"

DBM-1000 1"-6"

DBM-6000 6"-13"

DBM-250 .25"-1"



DBL-300  
Shown being  
set with DBM-  
1000 master

Dorsey's indicating plug gages are used for repetitive bore measurement applications where extreme accuracy is important. These high accuracy gages often take the place of air or electronic bore gages.

## FEATURES:

- Self centering plug head eliminates operator influence for extremely accurate applications.
- Non tipping design offers fast, simple, and accurate results.
- Carbide contacts are housed and protected by a dedicated hardened steel sleeve which is ground approximately .001" smaller than the lower limit of the bore being inspected.
- Single dial unit housing can be used with interchangeable plug heads.
- Plug heads: choice of 3 "H" dimensions allows measurement of thru bores, blind holes, or super blind holes.



Part# DX4-81035

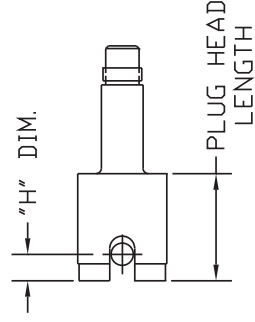
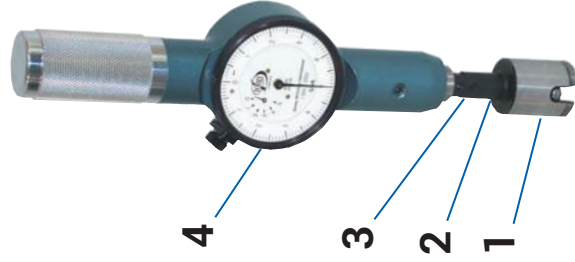
Digital indicator housing  
(indicator not included)



## HOW TO ORDER:

- Select measurement head size, specify check diameter and min/max bore sizes
- Determine if extension is required
- Select adapter # for dial unit housing
- Select an indicating device (see pages 10 & 11)

PLUG HEAD DIAMETER		THRU BORES H=.400"	BLIND BORES		SUPER BLIND BORES H=.039"
INCHES	MM	HEAD	HEAD	H DIM	HEAD PART #
.098 - .117	2.5 - 2.9	N/A	D240-035	1.5mm	N/A
.118 - .157	3.0 - 4.0	D240-400	D240-040	1.5mm	D240-500
.158 - .236	4.1 - 6.0	D240-405	D240-050	1.8mm	D240-505
.237 - .472	6.1 - 12.0	D240-410	D240-052	2.5mm	D240-510
.473 - .787	12.1 - 20.0	D240-415	D240-055	2.5mm	D240-515
.788 - 1.181	20.1 - 30.0	D240-420	D240-060	2.5mm	D240-520
1.182 - 1.574	30.1 - 40.0	D240-425	D240-065	3.5mm	D240-525
1.575 - 2.362	40.1 - 60.0	D240-430	D240-070	3.5mm	D240-530
2.363 - 3.150	60.1 - 80.0	D240-435	D240-075	4.0mm	D240-535
3.151 - 3.937	80.1 - 100.0	D240-440	D240-080	4.0mm	D240-540
3.938 - 4.331	100.1 - 110.0	D240-445	D240-085	4.0mm	D240-545
4.332 - 4.724	110.1 - 120.0	D240-450	D240-090	4.0mm	D240-550
4.725 - 5.118	120.1 - 130.0	D240-455	D240-095	4.0mm	D240-555
5.119 - 5.512	130.1 - 140.0	D240-460	D240-100	4.0mm	D240-560
5.513 - 5.906	140.1 - 150.0	D240-465	D240-105	4.0mm	D240-565
5.907 - 6.299	150.1 - 160.0	D240-470	D240-110	4.0mm	D240-570
6.300 - 6.693	160.1 - 170.0	D240-475	D240-115	4.0mm	D240-575
6.694 - 7.087	170.1 - 180.0	D240-480	D240-120	4.0mm	D240-580
7.088 - 7.480	180.1 - 190.0	D240-485	D240-125	4.0mm	D240-585
7.481 - 7.874	190.1 - 200.0	D240-490	D240-130	4.0mm	D240-590
7.875 - 9.000	200.1 - 230.0	D240-616	D240-617	4.0mm	N/A
PART# 1199	Plug head adapter, (to 5/8 dial unit housing)				
-C	Chrome plated plug head				
-DS	Depth stop				
D240-315	Right angle attachment w/ .040" (1mm) Travel				



DEPTH STOP	
PART #	DESCRIPTION
-DS3	FOR PLUG OD LESS THAN 3.151"/80mm
-DS6	FOR PLUG OD LESS THAN 3.142"/80.1 TO 6.299"/160mm
-DS9	FOR PLUG OD LESS THAN 6.300"/160.1 TO 9.00"/230mm
WOODEN STORAGE BOX	D240B-3 UP TO 3" DIAMETER D240B-6 UP TO 6" DIAMETER
DEPTH EXTENSIONS FOR USE ON HEADS WITH DIAMETERS GREATER THAN .49" (12.5mm)	
PART #	DESCRIPTION
D240-309	3.9" (100mm) X .47" (12mm) DIAMETER
D240-310	9.8" (250mm) X .47" (12mm) DIAMETER
D240-311	19.7" (500mm) X .47" (12mm) DIAMETER
D240-312	29.5" (750mm) X .47" (12mm) DIAMETER
D240-313	40" (1000mm) X .47" (12mm) DIAMETER

The RLBG Series retractable bore gages are designed per application. They are primarily used to check deep holes where long retraction is required. Recessed diameters and grooves can be checked for size, taper, or out of roundness. Trigger action retracts and expands contacts. The gage has a fast, smooth, and uniform gaging pressure over its entire range.



**Deep Depths Available in Carbon Fiber**

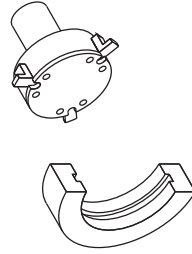
### DESIGN FEATURES:

- ✓ Cast aluminum or lightweight composite pistol grip housing.
- ✓ Gage can be designed to retract into or away from the indicator.
- ✓ Fixed or interchangeable contacts.
- ✓ Depth stop or scale-on-shaft facilitates checking at a specific depth.
- ✓ Single piece or multiple screw together gaging shafts.
- ✓ 2 or 3 point measurement.

### RETRACTABLE BORE GAGE APPLICATIONS

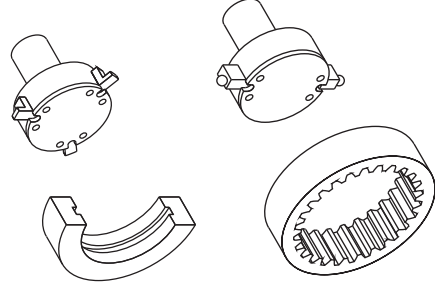
#### Groove measurement

Precise groove measurements can be made easily and accurately.



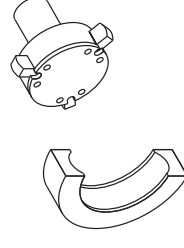
#### Spline & Gear measurement

Spline or gear measurement of pitch diameter or major diameter is available.



#### Spherical or irregular shape measurement

Spherical shaped contacts can be useful in deep bores where holding the bore gage straight in the bore is difficult. Depth stops are also very helpful in the alignment of bore gages.



#### Ball race or radius groove measurement

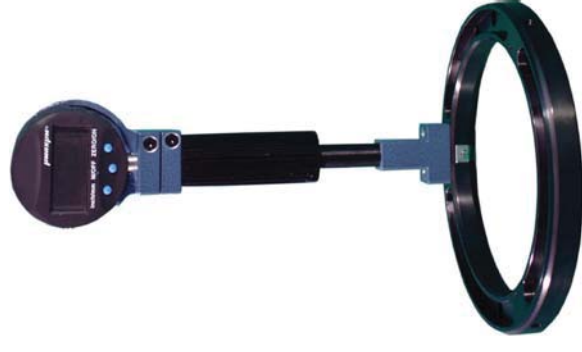
The RLBG can be configured to quickly and accurately check ball races and spherical grooves.



Indicating disc gages are used to measure ID's or OD's around shafts and other obstructions such as grooves, stepped areas, boss type obstacles in the shaft area, or any other configuration that prevents the use of a standard snap, bore, or straight frame shallow diameter gage. Indicating disc gages feature the principle of two point measurement and fixed centralizing locators. Disc gages are made for a specific size with adjustment contacts for minimal bore changes.

## FEATURES:

- ✓ Two point measurement.
- ✓ Fixed centralizing locators.
- ✓ .025" gaging contact travel.
- ✓ Can be used with digital or dial indicator.
- ✓ Available with perpendicular indicator.
- ✓ Standard 2 point contact or optional 3 point contact.



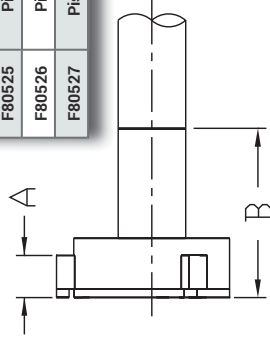
Dorsey Products -  
proudly made in the USA

ID	
PART #	WITHIN DIAMETER RANGE (INCHES)
IDG-ID-75	.50 - 1.75
IDG-ID-200	1.75 - 2.75
IDG-ID-300	2.75 - 3.75
IDG-ID-400	3.75 - 4.75
IDG-ID-500	4.75 - 5.75
IDG-ID-600	5.75 - 6.75
IDG-ID-700	6.75 - 7.75
IDG-ID-800	7.75 - 8.75

OD	
PART #	WITHIN DIAMETER RANGE (INCHES)
IDG-OD-200	1.50-2.75
IDG-OD-300	2.75-3.75
IDG-OD-400	3.75-4.75
IDG-OD-500	4.75-5.75
IDG-OD-600	5.75-6.75
IDG-OD-700	6.75-7.75
IDG-OD-800	7.75-8.75

*Dorsey Gage requires part print to quote and build.*

These retractable bore gages are ideal for inspection on the shop floor. They feature a series of 24 interchangeable heads and 2 handles to accommodate the complete range of diameters between .236" and 7.87".



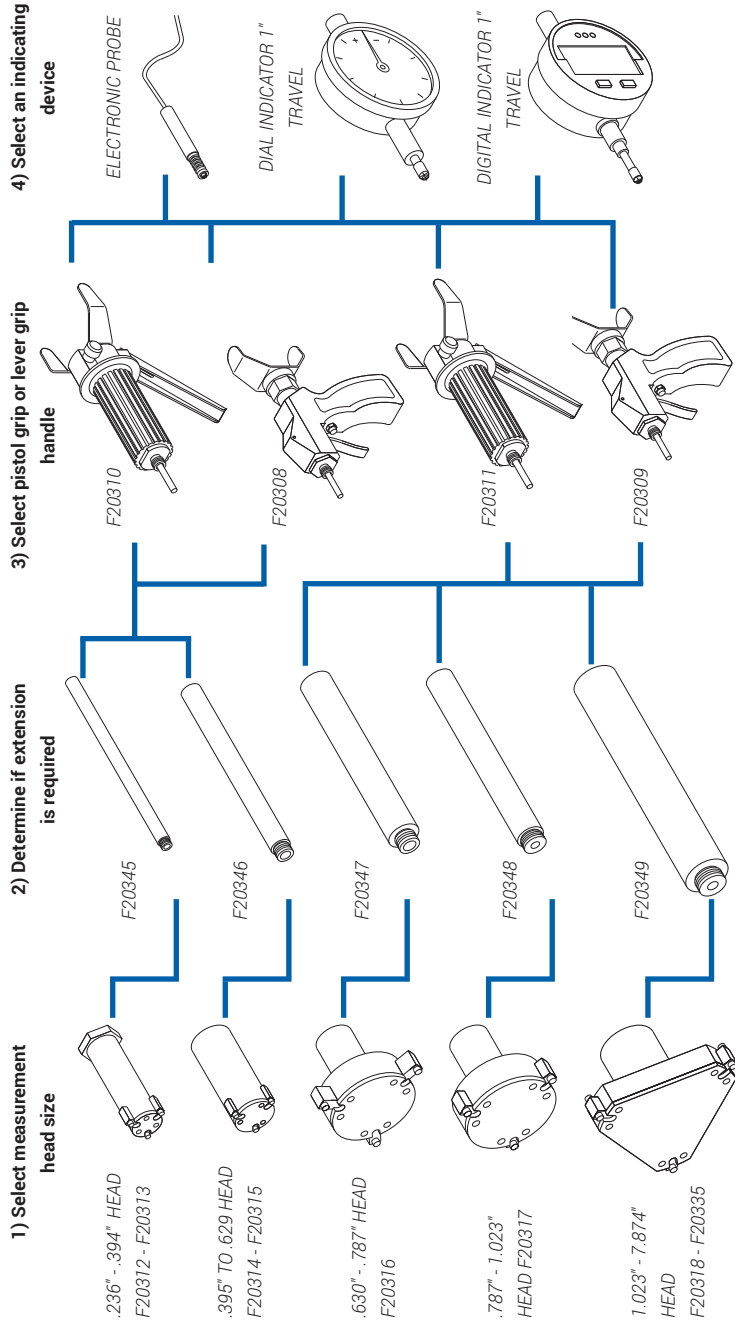
PART #	PISTOL GRIP & LEVER HANDLE DESCRIPTION
F20308	Pistol grip for .236" - .629" diameter
F20309	Pistol grip for .630" - 7.87" diameter
F20310	Lever grip for .236" - .629" diameter
F20311	Lever grip for .630" - 7.87" diameter

PART #	FITTED STORAGE CASE DESCRIPTION
F80524	Pistol grip head and master 16-40mm
F80525	Pistol grip head and master 41-60mm
F80526	Pistol grip head and master 61-80mm
F80527	Pistol grip head and master 81-100mm

HEAD PART #	HEAD SIZE		LINE A		LINE B		MASTER SETTINGS BILATERAL CLASS	
	MM	INCH	INCH	INCH	INCH	INCH	PART #	INCH
F20312	6-8	.236-.315	.109	2.36	F21162	.2912		
F20313	8-10	.315-.394	.118	2.36	F21164	.3437		
F20314	10-13	.394-.511	.157	2.36	F21167	.3475		
F20315	13-16	.511-.630	.236	2.36	F21172	.5025		
F20316	16-20	.630-.787	.295	2.36	F21177	.7187		
F20317	20-26	.787-1.023	.433	2.36	F21185	.9062		
F20318	26-32	1.023-1.260	.433	2.36	F21191	1.0312		
F20319	32-40	1.260-1.575	.433	2.75	F21205	1.4062		
F20320	40-50	1.575-1.968	.591	2.75	F21450	1.7500		
F20321	50-60	1.968-2.362	.591	2.75	F21451	2.1875		
F20322	60-70	2.362-2.756	.591	2.75	F21452	2.5625		
F20323	70-80	2.756-3.150	.591	2.75	F21453	2.9375		
F20324	80-90	3.150-3.543	.591	2.75	F21454	3.3437		
F20325	90-100	3.543-3.937	.591	2.75	F21455	3.7500		
F20326	100-110	3.937-4.330	.767	2.75	F21456	4.1250		
F20327	110-120	4.330-4.724	.767	2.75	F21457	4.5625		
F20328	120-130	4.724-5.118	.767	2.75	F21458	4.9062		
F20329	130-140	5.118-5.512	.767	2.75	F21459	5.3125		
F20330	140-150	5.512-5.906	.767	2.75	F21460	5.7187		
F20331	150-160	5.906-6.299	.767	2.75	F21461	6.1093		
F20332	160-170	6.299-6.693	.866	2.75	F21462	6.5000		
F20333	170-180	6.693-7.087	.866	2.75	F21463	6.9062		
F20334	180-190	7.087-7.480	.866	2.75	F21464	7.2912		
F20335	190-200	7.480-7.874	.866	2.75	F21465	7.6875		

## INDIVIDUAL GAGE SELECTION GUIDE



EXTENSIONS FOR LONGER DEPTHS		
PART #	GAGE HEAD	INCH
F20345	F20312 - F20313	100mm 3.937"
F20346	F20314 - F20315	100mm 3.937"
F20347	F20316	100mm 3.937"
F20348	F20317	150mm 5.905"
F20349	F20318 - F20335	150mm 5.905"
F20338	Adapter for Bowlers/Fowler's head	
F20337	Adapter for Mitutoyo Borematic	

PART #	OPTIONS DESCRIPTION
F20336	Stand for pistol grip bore gage
E8G1	Ultra protective housing for pistol grip

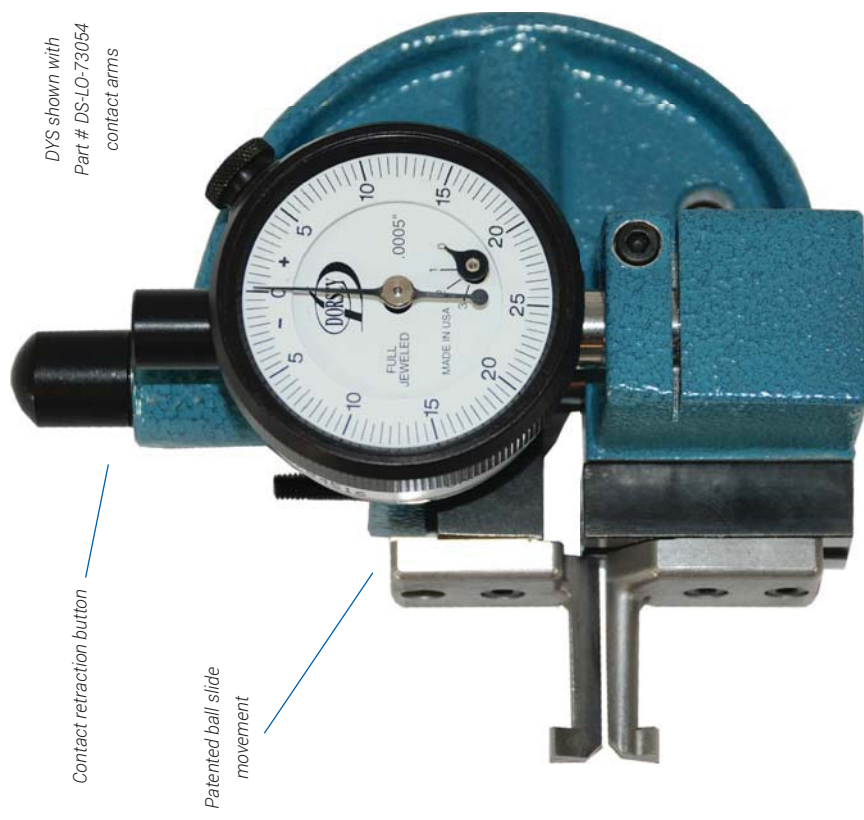
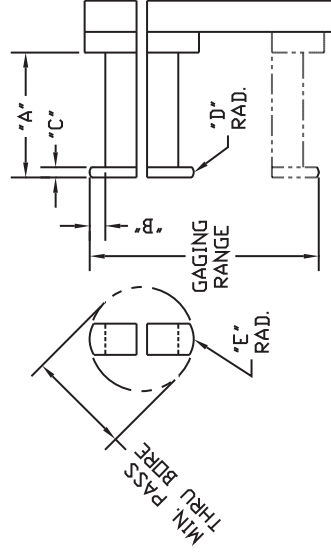
Dorsey's Dynamike Model DYS groove gage combines a lightweight, compact, rigid cast frame and a patented ball bushing slide with a series of interchangeable gaging arms to suit virtually any application.

## FEATURES:

- ✓ .25" (6mm) of gaging travel / retraction.
- ✓ .25" to .75" (6mm-19mm) diameter range.
- ✓ 1.25" (32mm) long precision ground adjustment rail.
- ✓ Can accommodate dial or digital indicator.
- ✓ Retraction pulls away from indicator.



*Gage shown is DYS with special metric indicator, part# 2305 arms, and part # 18967 bench stand*



*DYS shown with Part # DS-LO-73054 contact arms*

*Shown actual size*

The DYS Groove Gage is supplied per model # below with DYS Groove Gage body, model # 1DM125-05 dial indicator, .0005" graduation, and the appropriate contact arm set for the range noted below:

PART #	RANGE	MIN / BORE	TYPE	"A" Dim.	"B" Dim.	"C" Dim.	CONTACT ARM #
DYS-250-2	.250 - .500	.187	2 Point	.500	.030	.030	# 2305-2
DYS-250-3	.250 - .500	.187	3 Point	.500	.030	.030	# 2305-3
DYS-500-2	.500 - .750	.350	2 Point	1.000	.075	.060	# 2306-2
DYS-500-3	.500 - .750	.350	3 Point	1.000	.075	.060	#2306-3
DYS-Blank*	To Suit	.370	2 Point	.750	.097	.125	# DS-LO-73054*

PART #	DESCRIPTION
DYS-FRAME	DYS Groove Gage body only, less gaging arms and indicator
18967	For the Bench Stand used with the DYS gages
2335	Clamp nut used with part # 2305 & #2306 contact arms
DS-LO-2335	Clamp nut used with part # DS-LO-73054

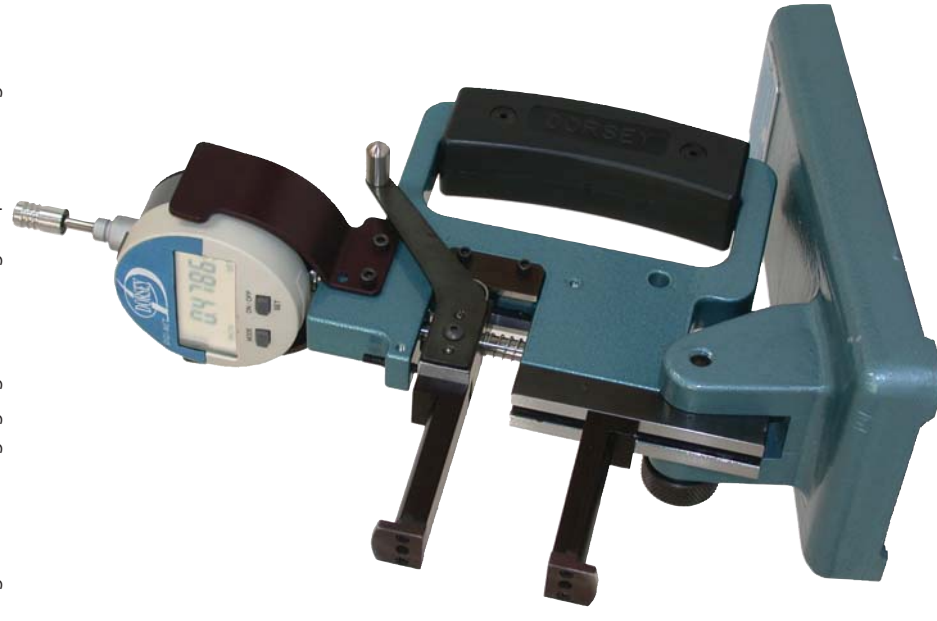
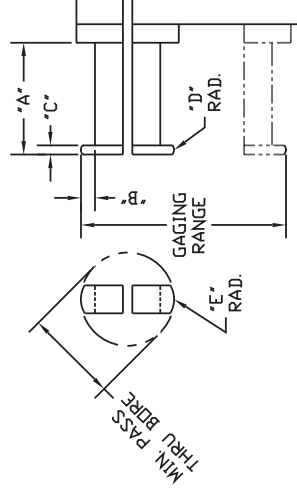
\*Note #1: Blank contacts can be used as supplied or modified to suit a specific application.

\*Note #2: For pricing on special gaging arms to suit a specific application, submit the part print with your quotation. Arms can be ordered separately.

Dorsey's Dynamike Model DYN groove gage combines a patented ball bushing slide with a series of gaging arms to suit almost any application. Gaging contact retraction is accomplished by using a conveniently mounted thumb lever while gaging range adjustment is accomplished by sliding the static gaging arm along its precision ground rail.

## FEATURES:

- ✔ .500" (13mm) of gaging travel/retraction.
- ✔ .75" to 3.50" (19mm - 88mm) diameter range.
- ✔ 3" Long precision ground adjustment rail.
- ✔ Precision machined cast jig plate frame.
- ✔ Thermal isolation grips.
- ✔ Can accommodate any of Dorsey "High Amplification", "Traditional", or digital indicator.
- ✔ Retraction pulls away from indicator.
- ✔ Indicator can be rotated 360 degrees to suit any application.



The DYN Groove Gage is supplied per model # below with DYN Groove Gage body, model # 2DMI125-05 dial indicator, .0005" graduation, and the appropriate contact arm set for the range noted below.

PART #	RANGE	MIN / BORE	TYPE	"A" Dim.	"B" Dim.	"C" Dim.	CONTACT ARM #
DYN-750-2	.750 - 2.00	.500	2 Point	1.50	.125	.125	# 2405-2
DYN-750-3	.750 - 2.00	.500	3 Point	1.50	.125	.125	# 2405-3
DYN-2000-2	2.00 - 3.50	2.000	2 Point	2.00	.125	.125	# 2465-2
DYN-2000-3	2.00 - 3.50	2.000	3 Point	2.00	.125	.125	# 2465-3
DYN-Blank-S*	To Suit	.370	2 Point	.750	.097	.125	# DS-LO-73054*
DYN-Blank-L*	To Suit	.850	2 Point	1.44	.206	.190	# DS-LO-73055*

\*Note #1: Blank contacts can be used as supplied or modified to suit a specific application.

\*Note #2: For pricing on special gaging arms to suit a specific application, submit the part print with your quotation. Arms can be ordered separately.

PART #	DESCRIPTION
DYN-FRAME	DYN Groove Gage body only, less gaging arms and indicator
48502-S	For the Bench Stand used with the DYN gages
2335	Clamp nut used with part # 2405 & #2465 contact arms
DS-LO-2335	Clamp nut used with part # DS-LO-73054 AND # DS-LO-73055

Dorsey's universal measuring gage was designed to combine our proven patented precision linear movement with a frame that accommodates a wide variety of contacts. This gage can precisely measure various internal and external dimensions such as diameters, grooves, splines, tapers, wall thickness, counterbores, hole locations, and even threads.

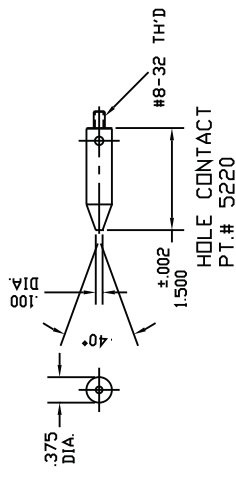
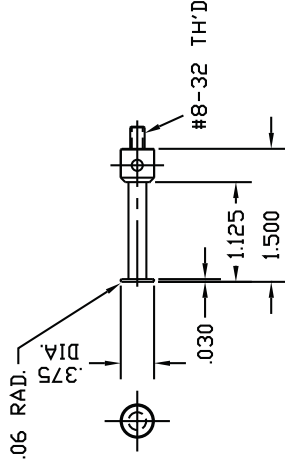
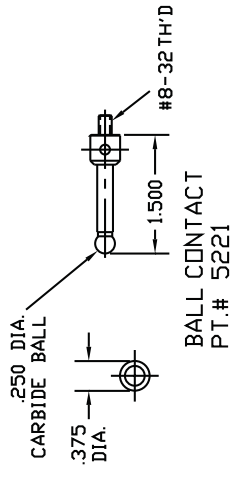
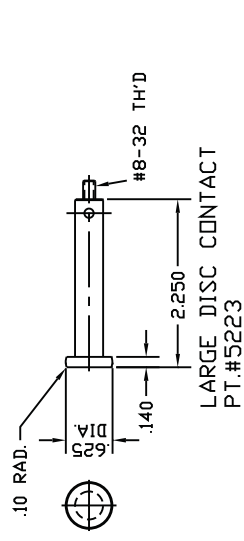
## FEATURES:

- ✔ Patented linear slide with 1" (25.4 mm) of gaging travel / retraction.
- ✔ Indicator can be rotated 360 degrees to suit application.
- ✔ Measurement range up to 5" ID / 2/5" OD.
- ✔ Lightweight precision machined jig plate frame.
- ✔ Can accommodate dial or digital indicators.

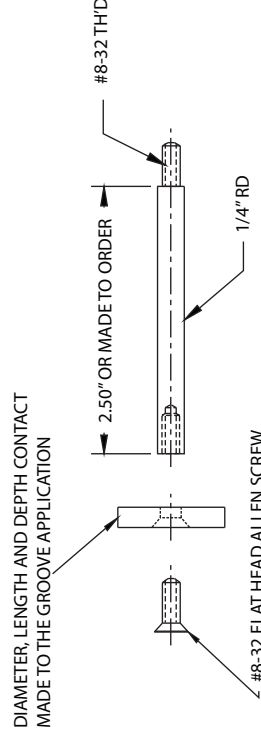
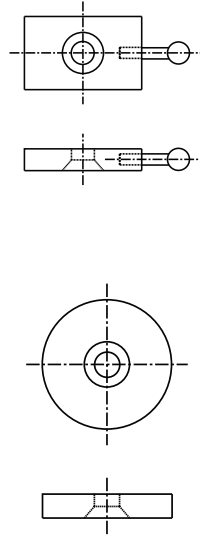


\*Indicator sold separately

MODEL	DESCRIPTION
UG-1	Universal gage complete with standard disc contact (part #5211-2)
UG-KIT	Universal gage complete with standard disc contact (part #5211-2), ball contacts (part #5213), .25" disc contacts (part #5214), digital indicator (part #F15830), and fitted storage case
48502-S	Bench Stand for UG



SMALL DISC CONTACT  
PT.#5222



DIAMETER, LENGTH AND DEPTH CONTACT  
MADE TO THE GROOVE APPLICATION

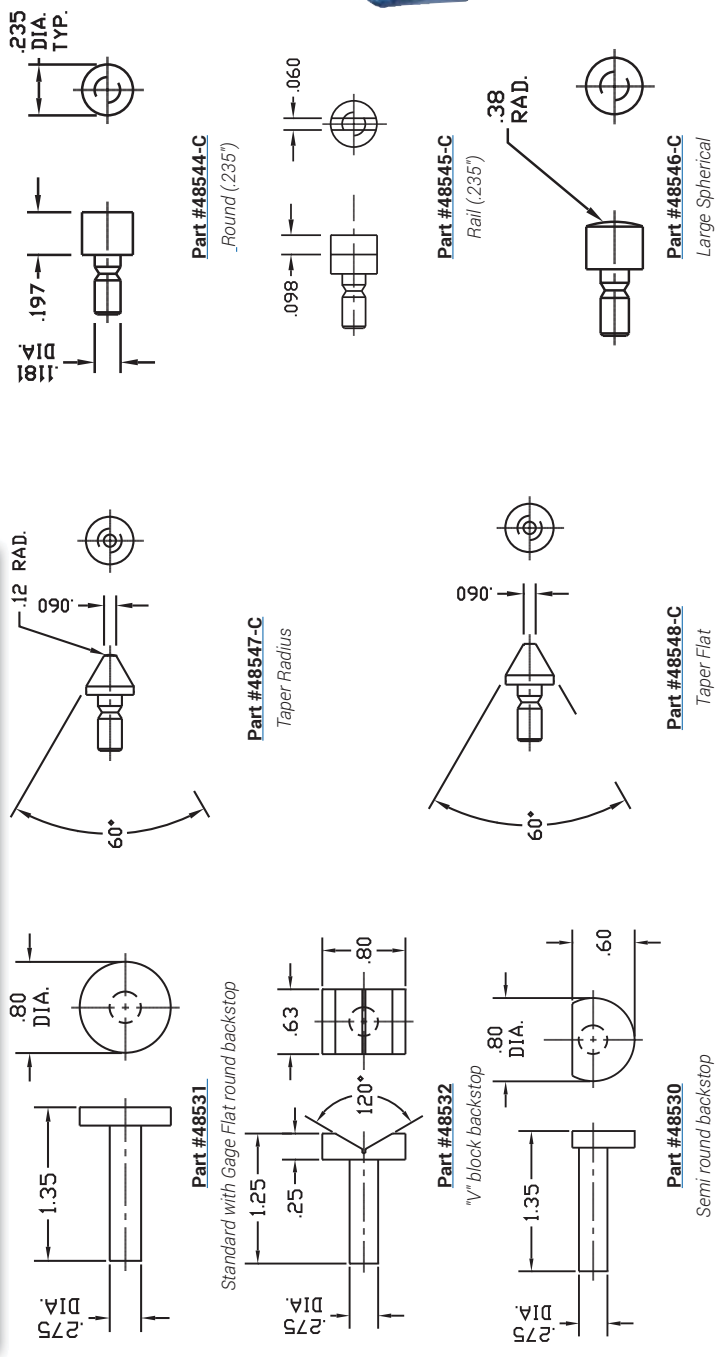
Contact designed specific to groove which can be manufactured by Dorsey for the customer. Send print part, Dorsey will help with the contact design.

## FEATURES:

- ✓ Checks multiple shapes. A combination of contact points, backstops, and accessories may be selected and custom assembled to meet the most exacting needs.
- ✓ Comparative measurements can be made of almost any shape: diameters, spheres, grooves, shafts, flats, etc.
- ✓ Specifically designed for Dorsey's high amplification dial indicators with graduations as fine as .00002" (0.0005mm).
- ✓ Two frame sizes are available.
- ✓ Hand held or mounted on an optional bench stand.
- ✓ Utilizes dial and digital indicators as well as electronic transducers. Display on electronic columns or remote digital devices. SPC compatible.
- ✓ Tailstock fine adjustment of 1" maintains contact parallelism throughout the gaging range.
- ✓ Standard thumb actuated retraction of .100" makes part loading easy.
- ✓ Contacts suitable for most applications can be supplied from a wide variety in stock. All anvils utilize shank-lock design for maximum holding pressure.
- ✓ Several backstop designs are available to accommodate a variety of part configurations.

Part #48554 shown with dial indicator (part #414-002) and bench stand (part #48502-V). Indicator sold separately.

ORDERING INFORMATION	
PART #	DESCRIPTION
48554	0 - 1" range versatile snap gage with choice of one set of contacts
48555	1 - 2" range versatile snap gage with choice of one set of contacts
48502-V	Bench Stand for versatile snap gage

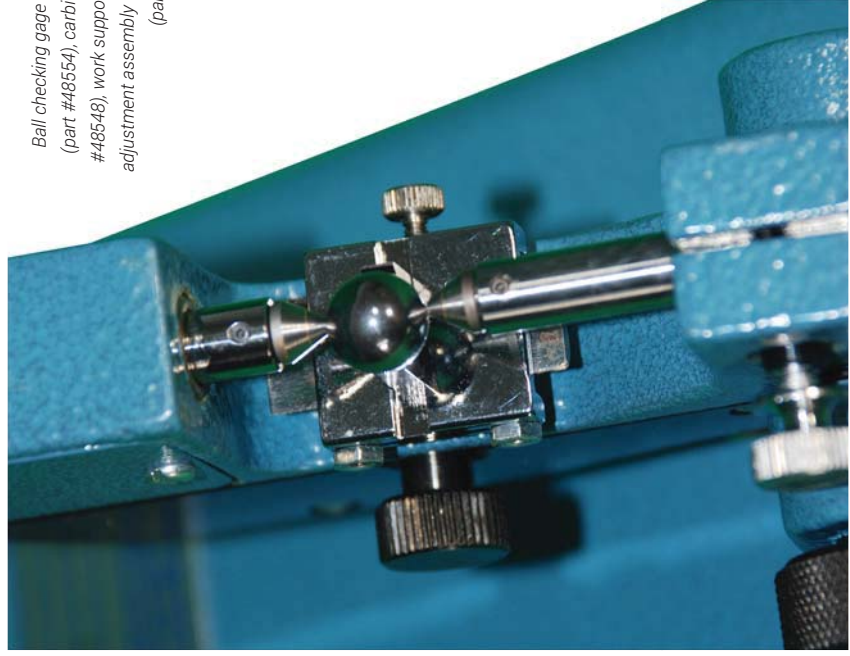


All blades installed on left side unless otherwise specified

# SNAP GAGE ASSEMBLY FOR BALL MEASUREMENTS

www.dorseymetrology.com

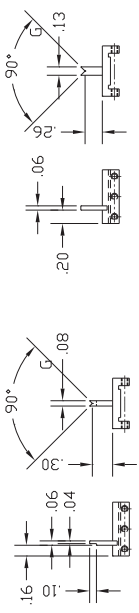
Measuring balls and other spherical items is one of the most popular applications of the Versatile Snap Gage. Two snap gage frames, 0-1" (Part #48554) and 1"-2" (Part #48555) cover the range of ball diameters from the smallest manufactured up to 2" diameter. The "V" backstops have been specially designed to facilitate the measurement of balls.



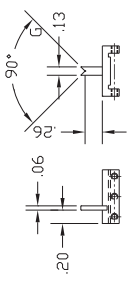
Ball checking gage shown is comprised of gage (part #48554), carbide tapered flat contacts (part #48555), work support (part #48569), work support adjustment assembly (part #48581), and bench stand (part #48502-V)



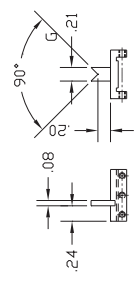
**Work Support Note:** Work support adjustment assembly part #48581 must be used with work support No. 1 through No. 6



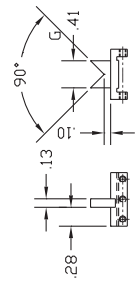
Work support No. 1  
**Part #48568**  
.060" - .100" balls



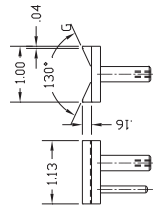
Work support No. 2  
**Part #48569**  
.100" - .160" balls



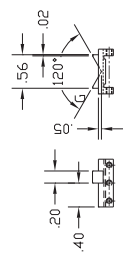
Work support No. 3  
**Part #48570**  
.160" - .250" balls



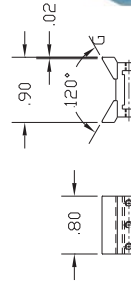
Work support No. 4  
**Part #48571**  
.250" - .500" balls



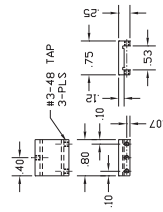
1/4" block screw controlled backstop  
**Part #48583**  
1.000" - 2.000" balls



Work support No. 5  
**Part #48572**  
.500" - 1.000" balls



Work support No. 6  
**Part #48574**  
1.000" - 1.750" balls



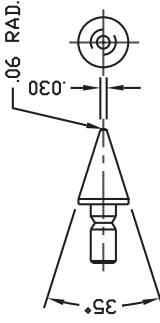
Work support blank  
**Part #48582**

The model J2 jaw gage features Dorsey's proven precision lapped chrome/steel bushing in a rigid cast iron frame. A series of interchangeable contacts and adjustable two axis rest stage along with a micrometer type adjustment tail stock combine to make the J2 jaw gage suitable for most high accuracy OD inspection tasks.

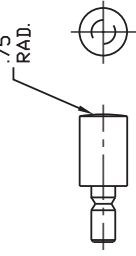
## FEATURES:

- ✓ Check diameters, widths, lengths, and locations. Ideal for screw machine and small parts applications.
- ✓ Specifically designed for Dorsey's high amplification dial indicators with graduations as fine as .00002" (0.0005mm).
- ✓ Utilizes dial and digital indicators or electronic displays and is SPC compatible.
- ✓ Standard thumb actuated retraction of .100" makes part loading easy.
- ✓ Tailstock fine adjustment of 1" maintains contact parallelism throughout the gaging range.
- ✓ Interchangeable contact points are available for a variety of part configurations. Each set of contacts utilizes a shank-lock design for maximum holding pressure.
- ✓ Backstop for locating the part may be adjusted both horizontally or vertically to suit the part configuration.

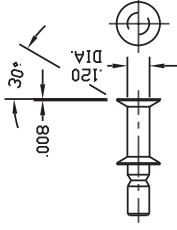
**Part #18807-C**  
Small spherical (.118")



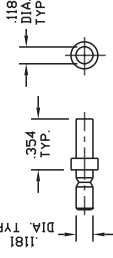
**Part #18809-C**  
Large spherical (.235")



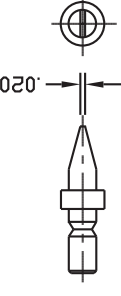
**Part #47957-S**  
Flange (.235")



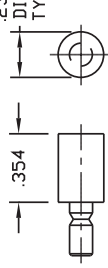
**Part #47950-C**  
Round flat (.118")



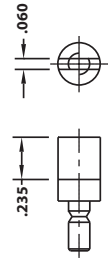
**Part #47951-C**  
Tapered Rail (.118")



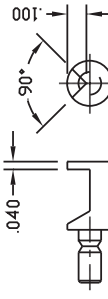
**Part #47953-C**  
Round flat (.235")



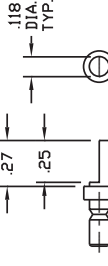
**Part #47954-C**  
Rail (.235")



**Part #47955-S**  
Offset Vee (.235")



**Part #47956-C**  
Semi-Round (.118")



**J-2 WITH #47950 CONTACTS**

All blades installed on left side  
unless otherwise specified

Gage shown features round carbide contacts (part #47950) and  
model #414-002 dial indicator (sold separately).

This design of rugged production line snap gages has been the industry standard for more than 75 years. Dorsey offers this easily adjusted gage built to the same exacting specifications and precision as the original Standard Gage® product. Interchangeable repair parts for Standard Gage® products are also available.

## FEATURES:

- ✓ .060" gaging travel is standard, optional with .100" or .500" .
- ✓ Adjustable gaging pressure.
- ✓ Lower anvil features 1" travel micrometer style adjustment with rapid lock nut.
- ✓ Well balanced precision machined aluminum jig plate frame with thermal isolation grips.
- ✓ Collet mounted indicator can be rotated to suit application.
- ✓ Available with any Dorsey dial or digital indicator.
- ✓ 5/8" square solid carbide lapped anvils with generous lead radius.
- ✓ Anvils are flat & parallel within .00015" below 4", .0002" in 4"-8", .0003" in 8-12", and .0005" above 12".
- ✓ Nylon backstop protects parts during loading.

Range	Flat 5/8" sq. anvils		
	2150-01 .0001" grad multi rev.	2110-002mm 0.002mm multi rev.	Without indicator
Inch	Metric		
0 - 1"	0 - 25mm	DS-S2-12371	DS-S2-15371
1 - 2"	25 - 51mm	DS-S2-12372	DS-S2-15372
2 - 3"	51 - 76mm	DS-S2-12373	DS-S2-15373
3 - 4"	76 - 102mm	DS-S2-12374	DS-S2-15374
4 - 5"	102 - 127mm	DS-S2-12375	DS-S2-15375
5 - 6"	127 - 152mm	DS-S2-12376	DS-S2-15376
6 - 7"	152 - 178mm	DS-S2-12377	DS-S2-15377
7 - 8"	178 - 203mm	DS-S2-12378	DS-S2-15378
8 - 9"	203 - 229mm	DS-S2-12379	DS-S2-15379
9 - 10"	229 - 254mm	DS-S2-12380	DS-S2-15380
10 - 11"	254 - 279mm	DS-S2-12381	DS-S2-15381
11 - 12"	279 - 305mm	DS-S2-12382	DS-S2-15382
12 - 13"	305 - 330mm	DS-S2-12383	DS-S2-15383
13 - 14"	330 - 356mm	DS-S2-12384	DS-S2-15384
14 - 15"	356 - 381mm	DS-S2-12385	DS-S2-15385
15 - 16"	381 - 406mm	DS-S2-12386	DS-S2-15386
16 - 17"	406 - 432mm	DS-S2-12387	DS-S2-15387
17 - 18"	432 - 458mm	DS-S2-12388	DS-S2-15388
18 - 19"	458 - 483mm	DS-S2-12389	DS-S2-15389
19 - 20"	483 - 508mm	DS-S2-12390	DS-S2-15390
20 - 21"	508 - 533mm	DS-S2-12391	DS-S2-15391
21 - 22"	533 - 559mm	DS-S2-12392	DS-S2-15392
22 - 23"	559 - 584mm	DS-S2-12393	DS-S2-15393
23 - 24"	584 - 610mm	DS-S2-12394	DS-S2-15394
48502-S			BENCH STAND



\* Shown with #2110-002 indicator and optional #48502-S bench stand

For snap gages with carbon fiber frame 5" diameter and above, add -CF to model number.

For example: DS-S2-12376-CF

## Available in Carbon Fiber

OPTIONAL CONTACT TRAVEL	INTERCHANGABLE BLADE ANVILS	
	PART #	A DIM. (WIDTH) B DIM. (HEIGHT)
To specify extended gaging contact travel, add "TXX" to end of part number. -T100 = .100" Travel -T500 = .500" Travel Lifting Lever (-L)	2274-1	.040" (1.0mm) .08" (2.0mm)
	2274-2	.060" (1.5mm) .12" (3.0mm)
	2274-3	.080" (2.0mm) .16" (4.0mm)
	2274-4	.100" (2.5mm) .20" (5.0mm)
	2274-5	.125" (3.2mm) .31" (7.9mm)
	2274-6	.156" (4.0mm) .31" (7.9mm)
	2274-7	.187" (4.7mm) .31" (7.9mm)

To specify a lifting lever, add "-L" to end of part number.

To specify side stops, add "SS" to end of part number. Note: Side stops are made to order.

Part # sequence: snap gage part #, contact travel, blade anvil, lifting lever, side stops

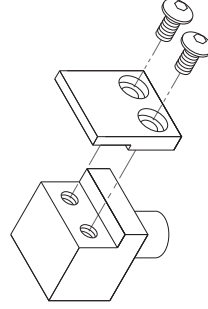
This rugged snap gage features a precision box-way range adjustment channel to protect the anvil shafts and maximize frame clearance.

## FEATURES:

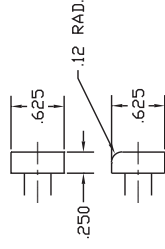
- ✔ .090" gaging travel is standard, optional with .500" .
- ✔ Precision box-way slide allows 1" of range adjustment.
- ✔ Rugged frame is machined from 5/8" thick aluminum jig plate.
- ✔ 5/8" solid carbide lapped anvils with generous lead radius.
- ✔ Anvils are flat and parallel within .00015" on frame sizes below 4", within .0002" on 4"-8" frames, .0003" on 8-12" frames and within .0005" above 12" .

- ✔ Heat insulating impact resistant handles.
- ✔ Adjustable nylon backstop protects parts.
- ✔ Collet mounted indicator can be rotated to suit application.
- ✔ May be used with any Dorsey "High Amplification", "Traditional", or digital indicator.

Range		Flat 5/8" sq. anvils	
		2150-01 .0001" grad multi rev.	Without indicator
Inch	Metric		
0 - 1"	0 - 25mm	SDN-00	SDN-00NI
1 - 2"	25 - 51 mm	SDN-100	SDN-100NI
2 - 3"	51 - 76mm	SDN-200	SDN-200NI
3 - 4"	76 - 102mm	SDN-300	SDN-300NI
4 - 5"	102 - 127mm	SDN-400	SDN-400NI
5 - 6"	127 - 152mm	SDN-500	SDN-500NI
6 - 7"	152 - 178mm	SDN-600	SDN-600NI
7 - 8"	178 - 203mm	SDN-700	SDN-700NI
8 - 9"	203 - 229mm	SDN-800	SDN-800NI
9 - 10"	229 - 254mm	SDN-900	SDN-900NI
10 - 11"	254 - 279mm	SDN-1000	SDN-1000NI
11 - 12"	279 - 305mm	SDN-1100	SDN-1100NI
12 - 13"	305 - 330mm	SDN-1200	SDN-1200NI
13 - 14"	330 - 356mm	SDN-1300	SDN-1300NI
14 - 15"	356 - 381mm	SDN-1400	SDN-1400NI
15 - 16"	381 - 406mm	SDN-1500	SDN-1500NI
16 - 17"	406 - 432mm	SDN-1600	SDN-1600NI
17 - 18"	432 - 458mm	SDN-1700	SDN-1700NI
18 - 19"	458 - 483mm	SDN-1800	SDN-1800NI
19 - 20"	483 - 508mm	SDN-1900	SDN-1900NI
20 - 21"	508 - 533mm	SDN-2000	SDN-2000NI
21 - 22"	533 - 559mm	SDN-2100	SDN-2100NI
22 - 23"	559 - 584mm	SDN-2200	SDN-2200NI
23 - 24"	584 - 610mm	SDN-2300	SDN-2300NI
48502-S		BENCH STAND	



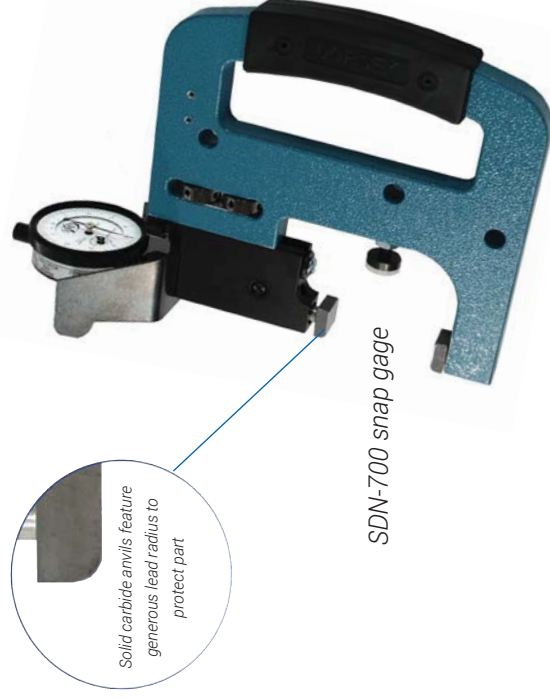
Blade type anvil  
Special sizes available



Part.#2029  
Standard carbide  
anvil

To specify a lifting lever, add "L" to end of part number.

To specify side stops, add "SS" to end of part number. Note: Side stops are made to order.



SDN-700 snap gage

Solid carbide anvils feature generous lead radius to protect part

OPTIONAL CONTACT TRAVEL	INTERCHANGEABLE BLADE ANVILS	
	PART #	B DIM. (HEIGHT)
To specify extended gaging contact travel, add "XX" to end of part number. -T100 = .100" Travel -T500 = .500" Travel Lever (L)	2274-1	.08" (2.0mm)
	2274-2	.12" (3.0mm)
	2274-3	.16" (4.0mm)
	2274-4	.20" (5.0mm)
	2274-5	.31" (7.9mm)
	2274-6	.31" (7.9mm)
	2274-7	.31" (7.9mm)

Part # sequence: snap gage part #, contact travel, blade anvil, lifting lever, side stops

# LONG RANGE SNAP GAGE OPTIONS

Dorsey's long range snap gages feature .50"/12mm of gaging travel and are used to replace many fixed disc setmasters. This option can be fitted to either the SDN or SSG series frame.

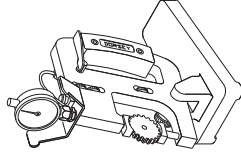
SDN FRAME		RANGE		SSG FRAME	
PART #	INCH	METRIC	PART #	INCH	METRIC
LRS-00	0 - 1"	0 - 25.4mm	LRS-15371	0 - 1"	0 - 25.4mm
LRS-100	.5 - 2"	12.7 - 50.8mm	LRS-15372	.5 - 2"	12.7 - 50.8mm
LRS-200	1.5 - 3"	38.1 - 76.2mm	LRS-15373	1.5 - 3"	38.1 - 76.2mm
LRS-300	2.5 - 4"	63.5 - 101.6mm	LRS-15374	2.5 - 4"	63.5 - 101.6mm
LRS-400	3.5 - 5"	88.9 - 127mm	LRS-15375	3.5 - 5"	88.9 - 127mm
LRS-500	4.5 - 6"	114.3 - 152.5mm	LRS-15376	4.5 - 6"	114.3 - 152.5mm
LRS-600	5.5 - 7"	139.7 - 177.8mm	LRS-15377	5.5 - 7"	139.7 - 177.8mm
LRS-700	6.5 - 8"	165.1 - 203.2mm	LRS-15378	6.5 - 8"	165.1 - 203.2mm
LRS-800	7.5 - 9"	190.5 - 228.6mm	LRS-15379	7.5 - 9"	190.5 - 228.6mm
	8.5 - 10"	215.9 - 254mm	LRS-15380	8.5 - 10"	215.9 - 254mm
	9.5 - 11"	241.3 - 279.4mm	LRS-15381	9.5 - 11"	241.3 - 279.4mm
	10.5 - 12"	266.7 - 304.8mm	LRS-15382	10.5 - 12"	266.7 - 304.8mm
	11.5 - 13"	292.1 - 330.2mm	LRS-15383	11.5 - 13"	292.1 - 330.2mm
	12.5 - 14"	317.5 - 355.6mm	LRS-15384	12.5 - 14"	317.5 - 355.6mm
	13.5 - 15"	342.9 - 381mm	LRS-15385	13.5 - 15"	342.9 - 381mm
	14.5 - 16"	368.3 - 406.4mm	LRS-15386	14.5 - 16"	368.3 - 406.4mm
	15.5 - 17"	393.7 - 431.8mm	LRS-15387	15.5 - 17"	393.7 - 431.8mm
	16.5 - 18"	419.1 - 457.2mm	LRS-15388	16.5 - 18"	419.1 - 457.2mm

## SDN STYLE

\*Indicator sold separately

## SSG STYLE

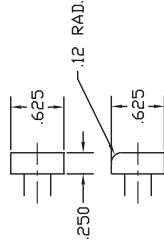
\*Indicator sold separately



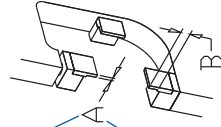
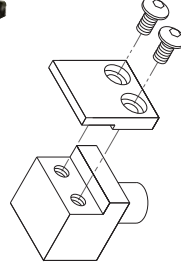
Self centering form anvils  
Applications include measurement of major diameter

SDN Series frame shown with 2 wire floating rolls and thumb retraction

LRS-15377 shown



Part #2029  
Standard carbide anvil

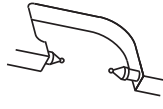


To specify side stops, add "SS" to end of part number.  
Note: Side stops are made to order.

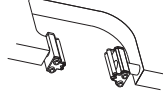
LRS Snap Gage with optional bench stand #48502-S

OPTIONAL CONTACT TRAVEL	INTERCHANGABLE BLADE ANVILS		
	PART #	A DIM.	B DIM.
To specify extended gaging contact travel, add "TXX" to end of part number.	2274-1	.040" (1.0mm)	.08" (2.0mm)
	2274-2	.060" (1.5mm)	.12" (3.0mm)
	2274-3	.080" (2.0mm)	.16" (4.0mm)
	2274-4	.100" (2.5mm)	.20" (5.0mm)
	2274-5	.125" (3.2mm)	.31" (7.9mm)
	2274-6	.156" (4.0mm)	.31" (7.9mm)
	2274-7	.187" (4.7mm)	.31" (7.9mm)

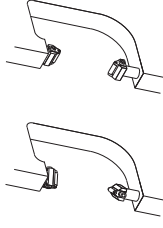
### PITCH DIAMETER GEAR AND SPLINE CONTACTS



**Fixed ball or roll contacts**  
Can be used in conjunction with side stops to check pitch diameter of helical gears



**2 wire or 3 wire self-aligning floating rolls on interchangeable carriers**  
Best suited for pitch diameter measurement on threads, screw forms, helical gears, and splines



**2 Wire or 3 wire floating carbide rolls on fixed carriers (plus special master)**  
Best suited for heavy production inspection of pitch diameter on threads, screw forms, helical gears, and splines

The following options can be specified on either the SSG, SDN, or LRS series snap gages.

Adjustable limit snap gages are an economical choice for the go/no go measurement of outside diameters or thicknesses. They are also known as AGD snap gages. Frames are machined from stabilized cast iron and are manufactured to ANSI B47-1-1988.

CS STYLE ANVILS			
RANGE		FRAME #	PART #
INCH	METRIC		
.00 - .195	0 - 5	00	Y88-10150
.195 - .385	5 - 9.8	00X	Y88-10151
.385 - .570	9.8 - 14.5	0	Y88-10152
.570 - .760	14.5 - 19.3	0X	Y88-10153
.00 - .25	0 - 6	1	Y86-10050
.25 - .50	6 - 12.7	2	Y86-10051
.50 - .75	12.7 - 19	2X	Y86-10052
.75 - 1.00	19 - 25.4	3	Y86-10053
1.00 - 1.25	25.4 - 31.8	3X	Y86-10054
1.25 - 1.50	31.8 - 38.1	4	Y86-10055
1.50 - 1.75	38.1 - 44.5	4X	Y86-10056
1.75 - 2.00	44.5 - 50.8	5	Y86-10057
2.00 - 2.25	50.8 - 57.2	5X	Y86-10058
2.25 - 2.50	57.2 - 63.5	6	Y86-10059
2.50 - 2.75	63.5 - 69.9	6X	Y86-10060
2.75 - 3.06	69.9 - 77.7	7	Y86-10061
3.06 - 3.44	77.7 - 87.4	7X	Y86-10062
3.44 - 3.81	87.4 - 96.8	8	Y86-10063
3.81 - 4.19	96.8 - 106.4	8X	Y86-10064
4.19 - 4.56	106.4 - 115.8	9	Y86-10065
4.56 - 4.94	115.8 - 125.5	9X	Y86-10066
4.94 - 5.31	125.5 - 134.9	10	Y86-10067
5.31 - 5.69	134.9 - 144.5	10X	Y86-10068
5.69 - 6.12	144.5 - 155.4	11	Y86-10069
6.12 - 6.62	155.4 - 168.1	11X	Y86-10070
6.62 - 7.12	168.1 - 180.8	12	Y86-10071
7.12 - 7.62	180.8 - 193.5	12X	Y86-10072
7.62 - 8.12	193.5 - 206.2	13	Y86-10073
8.12 - 8.62	206.2 - 218.9	13X	Y86-10074



Y87 Blade Style Anvil



Y86 CS Style Anvil



Y88 CS Style Anvil &amp; Blade Anvil

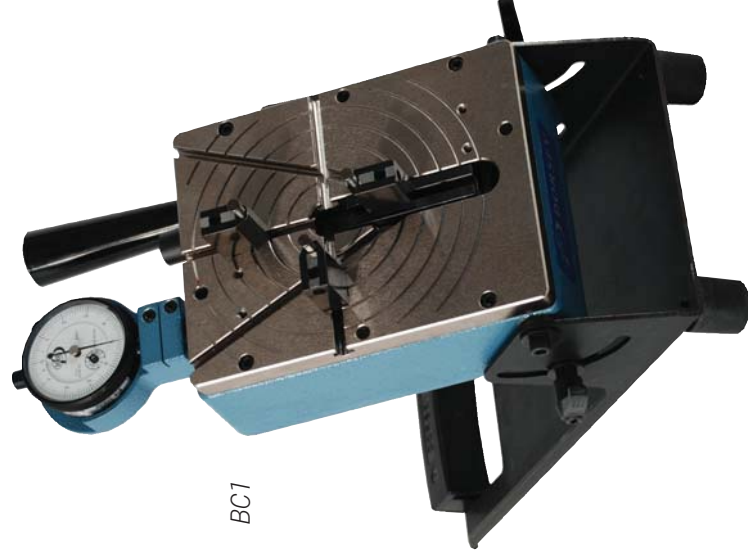
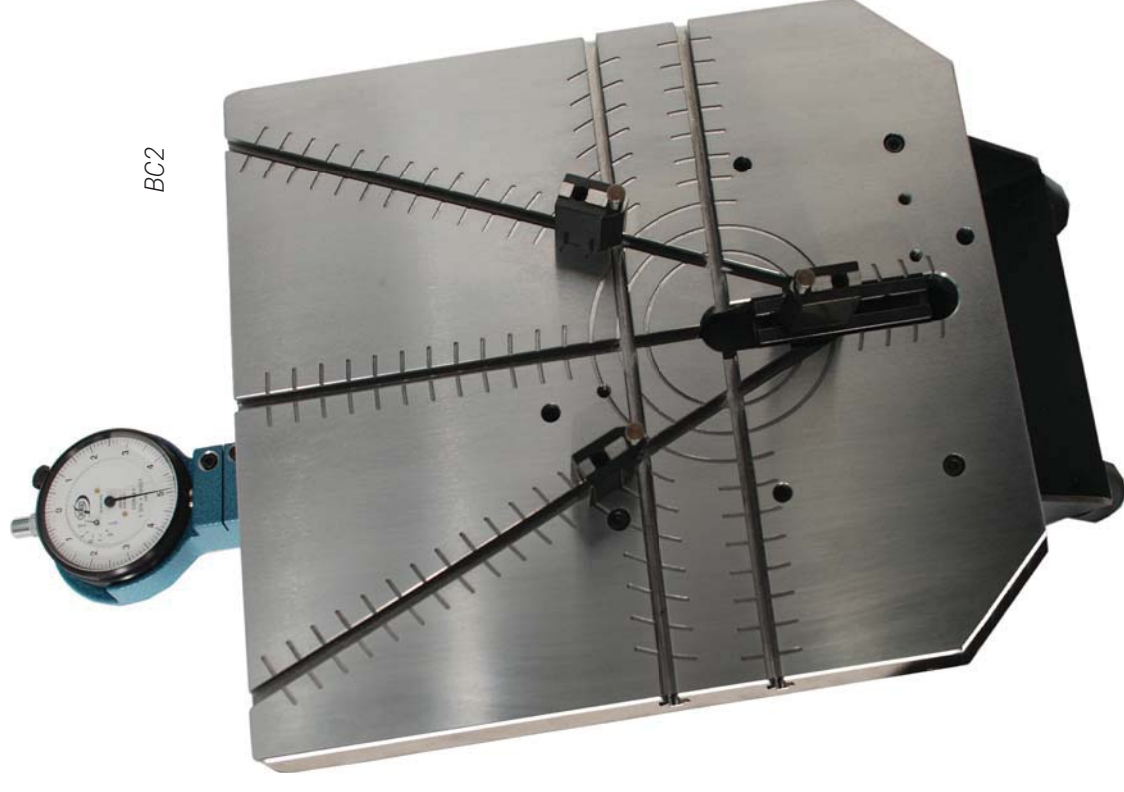
BLADE ANVILS			
RANGE		FRAME #	PART #
INCH	METRIC		
.00 - .195	0 - 5	00	Y88-10200
.195 - .385	5 - 9.8	00X	Y88-10201
.385 - .570	9.8 - 14.5	0	Y88-10202
.570 - .760	14.5 - 19.3	0X	Y88-10203
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
0 - .25	0 - 6	2X	Y87-10100
.25 - .50	6 - 12.7	3	Y87-10101
.50 - .75	12.7 - 19	3X	Y87-10102
.75 - 1.00	19 - 25.4	4	Y87-10103
1.00 - 1.25	25.4 - 31.8	4X	Y87-10104
1.25 - 1.50	31.8 - 38.1	5	Y87-10105
1.50 - 1.75	38.1 - 44.5	5X	Y87-10106
1.75 - 2.00	44.5 - 50.8	6	Y87-10107
2.00 - 2.25	50.8 - 57.2	6X	Y87-10108
2.25 - 2.63	57.2 - 66.8	7	Y87-10109
2.63 - 3.00	66.8 - 76.2	7X	Y87-10110
3.00 - 3.38	76.2 - 85.7	8	Y87-10111
3.38 - 3.75	85.7 - 95.3	8X	Y87-10112
3.75 - 4.12	95.3 - 104.6	9	Y87-10113
4.12 - 4.50	104.6 - 114.3	9X	Y87-10114
4.50 - 4.88	114.3 - 124	10	Y87-10115
4.88 - 5.25	124 - 133.4	10X	Y87-10116
5.25 - 5.75	133.4 - 146.1	11	Y87-10117
5.75 - 6.25	146.1 - 158.8	11X	Y87-10118
6.25 - 6.75	158.8 - 171.5	12	Y87-10119
6.75 - 7.25	171.5 - 184.2	12X	Y87-10120
7.25 - 7.75	184.2 - 196.9	13	Y87-10121
7.75 - 8.25	196.9 - 210	13X	Y87-10122

## ADJUSTABLE INSIDE / OUTSIDE DIAMETER FIXTURES

This comparator offers 2 or 3 point measurements for both ID and OD on one benchtop plate. Features include 2 or 3 point measurement, linear ball bushing movement, and a wide range of adjustment. The fixture can be positioned at any angle from horizontal to vertical to duplicate the machining process angle, eliminating deflection and deformation variation as potential sources of error. Hardened steel contact holders provide a work surface that ensures years of accurate, trouble free use.

### FEATURES:

- ✓ Gauge is supplied with model 2DM025-01 .0001" graduation 1:1 dial indicator, 3 contact holders, and BCC-GS25 contact set.
- ✓ Reversing the top plate selects either ID or OD
- ✓ Base with carrying handle features 90 degrees of adjustment with angle locking mechanism.
- ✓ .400" linear gaging or retraction range.
- ✓ Patented precision linear ball bushing gaging mechanism.
- ✓ Ground and plated work stage 5.25" x 6.75" on BC1 and 9.75" x 10.75" on BC2.
- ✓ Witness lines aid with gage alignment.
- ✓ 2 Hex adjustment wrenches.
- ✓ Special contacts designed per requested application.

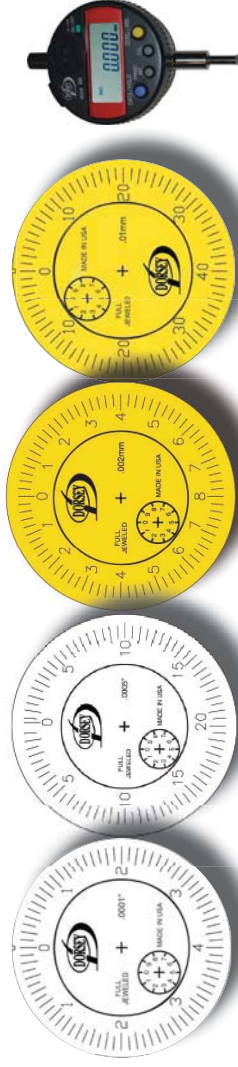


Note: Special ratio 4:5 dial indicator or electronically compensated digital indicator is recommended for 3 point non-diametric contact arrangement. See page 57 for optional indicators.

ORDERING INFORMATION					
PART #	DESCRIPTION	"T" CONFIGURATION		"Y" CONFIGURATION	
		ID RANGE	OD RANGE	ID RANGE	OD RANGE
BC1	Gaging Fixture with 3 contacts, 3 holders, and .0001" grad. indicator	.75" - 4.44"	.25" - 5.19"	.75" - 5.25"	.25" - 6.00"
BC1-NI	Same as above, less indicator				
BC2	Gaging Fixture with 3 contacts, 3 holders, and .0001" grad. indicator	2" - 8.44"	1.5" - 9.19"	2" - 10.00"	1.5" - 10.88"
BC2-NI	Same as above, less indicator				

## 4:5 RATIO INDICATORS FOR RECOMMENDED USE WITH 3 POINT "Y" CONFIGURATION

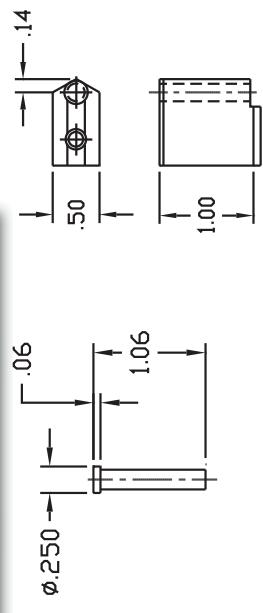
Example: .010 spindle travel is displayed as .008" on indicator



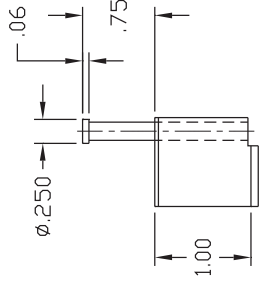
MODEL	2DMR025-01Z	2DMR125-05	2DMR005-002mm	2DMR5-01mm	MT543-312B
Graduation	.0001"	.0005"	0.002mm	0.01mm	Selectable
Total Travel	.020"	.100"	0.4mm	4.0mm	.500"/12mm
Revolutions	2.5 Rev.	2.5 Rev.	2.5 Rev.	5 Rev.	N/A
Travel/Rev.	.008"	.040"	0.16mm	0.8mm	N/A



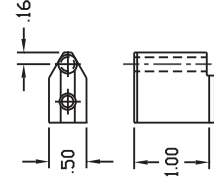
Dorsey Products - proudly made in the USA



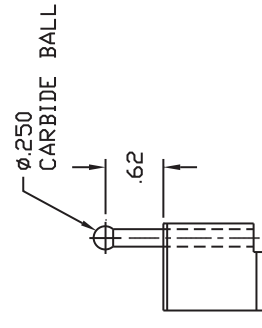
**Part #BCC-GS25**  
Steel groove contact



**Part #2760-S (Steel)**  
**Part #2760-C (Carbide)**  
Contact holder, sharp  
(1 required)



**Part #BCC-GS25**  
Shown in contact  
holder part #2760



**Part #BCC-CB25**  
Carbide ball contact

**Part #2759-S (Steel)**  
**Part #2759-C (Carbide)**  
Contact holder, flat  
(2 required)

**Part #BCC-CB25**  
Shown in contact  
holder part #2760

All Dorsey masters are ground and lapped to size then polished. Non-gaging surfaces are black oxide and the faces are surface ground. Blanks meet requirements of B47.1-1988 and gages are manufactured in accordance with ANSI B89.1.6-1984.

## PLUG GAGES/PIN GAGES:

Reversible wires, taper lock, tri-lock, whistle notch, go, no-go, reference, bilateral, or unilateral, with or without handles



\* Special sizes and part simulating masters are available upon request.

## RINGS:

Hardened Steel, bilateral tolerance



## THREAD GAGES:

ID, OD, taper lock, reversible, helical coil, UNC, UNF, UNEF, NPT, NPTF, ANPT, NPSF, titanium nitride coated, go, no-go, reference, bilateral, or unilateral, with or without handles



## DISCS:

Hardened Steel, bilateral tolerance



	SIZE RANGE	CLASS	TOLERANCE	RING PART #	DISC PART #
INCH METRIC	.150 - .230" 3.81 - 5.84mm	XX	.00002"	RXX-#.#####	DXX-#.#####
		X	.00004"	RX-#.#####	DX-#.#####
		Y	.00007"	RY-#.#####	DY-#.#####
INCH METRIC	.2301 - .365" 5.84 - 9.27mm	XX	.00002"	RXX-#.#####	DXX-#.#####
		X	.00004"	RX-#.#####	DX-#.#####
		Y	.00007"	RY-#.#####	DY-#.#####
INCH METRIC	.3651 - .510" 9.27 - 12.95mm	XX	.00002"	RXX-#.#####	DXX-#.#####
		X	.00004"	RX-#.#####	DX-#.#####
		Y	.00007"	RY-#.#####	DY-#.#####
INCH METRIC	.5101 - .825" 12.95 - 20.96 mm	XX	.00002"	RXX-#.#####	DXX-#.#####
		X	.00004"	RX-#.#####	DX-#.#####
		Y	.00007"	RY-#.#####	DY-#.#####
INCH METRIC	.8251 - 1.135" 20.96 - 28.83mm	XX	.00003"	RXX-#.#####	DXX-#.#####
		X	.00006"	RX-#.#####	DX-#.#####
		Y	.00009"	RY-#.#####	DY-#.#####
INCH METRIC	1.1351 - 1.510" 28.83 - 38.35mm	XX	.00003"	RXX-#.#####	DXX-#.#####
		X	.00006"	RX-#.#####	DX-#.#####
		Y	.00009"	RY-#.#####	DY-#.#####
INCH METRIC	1.5101 - 2.010" 38.35 - 51.05mm	XX	.00004"	RXX-#.#####	DXX-#.#####
		X	.00008"	RX-#.#####	DX-#.#####
		Y	.00012"	RY-#.#####	DY-#.#####
INCH METRIC	2.0101 - 2.510" 51.05 - 63.75mm	XX	.00004"	RXX-#.#####	DXX-#.#####
		X	.00008"	RX-#.#####	DX-#.#####
		Y	.00012"	RY-#.#####	DY-#.#####
INCH METRIC	2.5101 - 3.010" 63.75 - 76.45mm	XX	.00005"	RXX-#.#####	DXX-#.#####
		X	.00010"	RX-#.#####	DX-#.#####
		Y	.00015"	RY-#.#####	DY-#.#####
INCH METRIC	3.0101 - 3.510" 76.45 - 89.15mm	XX	.00005"	RXX-#.#####	DXX-#.#####
		X	.00010"	RX-#.#####	DX-#.#####
		Y	.00015"	RY-#.#####	DY-#.#####
INCH METRIC	3.5101 - 4.010" 89.15 - 101.85mm	XX	.00005"	RXX-#.#####	DXX-#.#####
		X	.00010"	RX-#.#####	DX-#.#####
		Y	.00015"	RY-#.#####	DY-#.#####
INCH METRIC	4.0101 - 4.510" 101.85 - 114.55mm	XX	.00005"	RXX-#.#####	DXX-#.#####
		X	.00010"	RX-#.#####	DX-#.#####
		Y	.00015"	RY-#.#####	DY-#.#####
INCH METRIC	4.5101 - 5.010" 114.55 - 127.25mm	XX	.000065"	RXX-#.#####	DXX-#.#####
		X	.00013"	RX-#.#####	DX-#.#####
		Y	.00019"	RY-#.#####	DY-#.#####
INCH METRIC	5.0101 - 5.510" 127.25 - 139.95mm	XX	.000065"	RXX-#.#####	DXX-#.#####
		X	.00013"	RX-#.#####	DX-#.#####
		Y	.00019"	RY-#.#####	DY-#.#####
INCH METRIC	5.5101 - 6.010" 139.95 - 152.65mm	XX	.000065"	RXX-#.#####	DXX-#.#####
		X	.00013"	RX-#.#####	DX-#.#####
		Y	.00019"	RY-#.#####	DY-#.#####
INCH METRIC	6.0101 - 7.010" 152.65 - 178.05mm	XX	.00008"	RXX-#.#####	DXX-#.#####
		X	.00016"	RX-#.#####	DX-#.#####
		Y	.00024"	RY-#.#####	DY-#.#####
INCH METRIC	7.0101 - 8.010" 178.05 - 203.45mm	XX	.00008"	RXX-#.#####	DXX-#.#####
		X	.00016"	RX-#.#####	DX-#.#####
		Y	.00024"	RY-#.#####	DY-#.#####



LDF Series



LDVA Series



LDA Series



LDD Series



Ultra Large diameter gage. Measurement range 120" - 132" Weight 10.5lbs/4.76kg

**Available in Carbon Fiber**

Carbon fiber diameter gages are lighter weight, more thermally stable, and structurally stronger.

Dorsey Metrology has built a reputation as a leader in the field of large component dimensional measurement. Dorsey's expertise brings together the largest selection of precise linear measurement movements, frame configurations, sizes, materials, contact point shapes, rest designs, and other accessories: all with the knowledge of how to apply them to any large part inspection requirement. With the Dorsey modular design system, it is possible to solve the inspection of almost any part configuration such as inside / outside diameters, ID / OD grooves, bearing raceways, lengths, large gear pitch diameters, and conical and angular shapes. Applications for these instruments include inspection of components used in aircraft engines and housings, generators, turbines, windmill parts, large bearings, gears, large shaft lengths, and ship building apparatus.



LDR Series



LDB Series



LDR Series



LDAR - Midget Reed Series

# DORSEY LARGE DIAMETER GAGES

www.dorseymetrology.com



LDF-PD pitch diameter gage



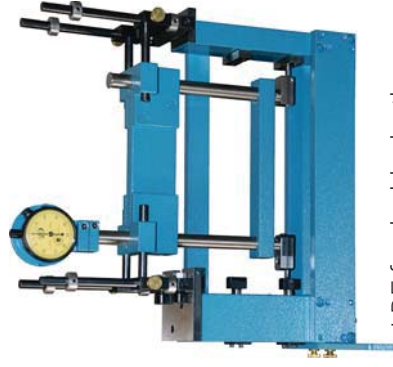
LDF with hump frame



LD-EBB Series  
extended ball bushing retraction



LD - Swing gage, where the heads rotate inward for long retraction



LDF for double depths



Donut frame gage



C-frame gage & master shown

**Available in Carbon Fiber**



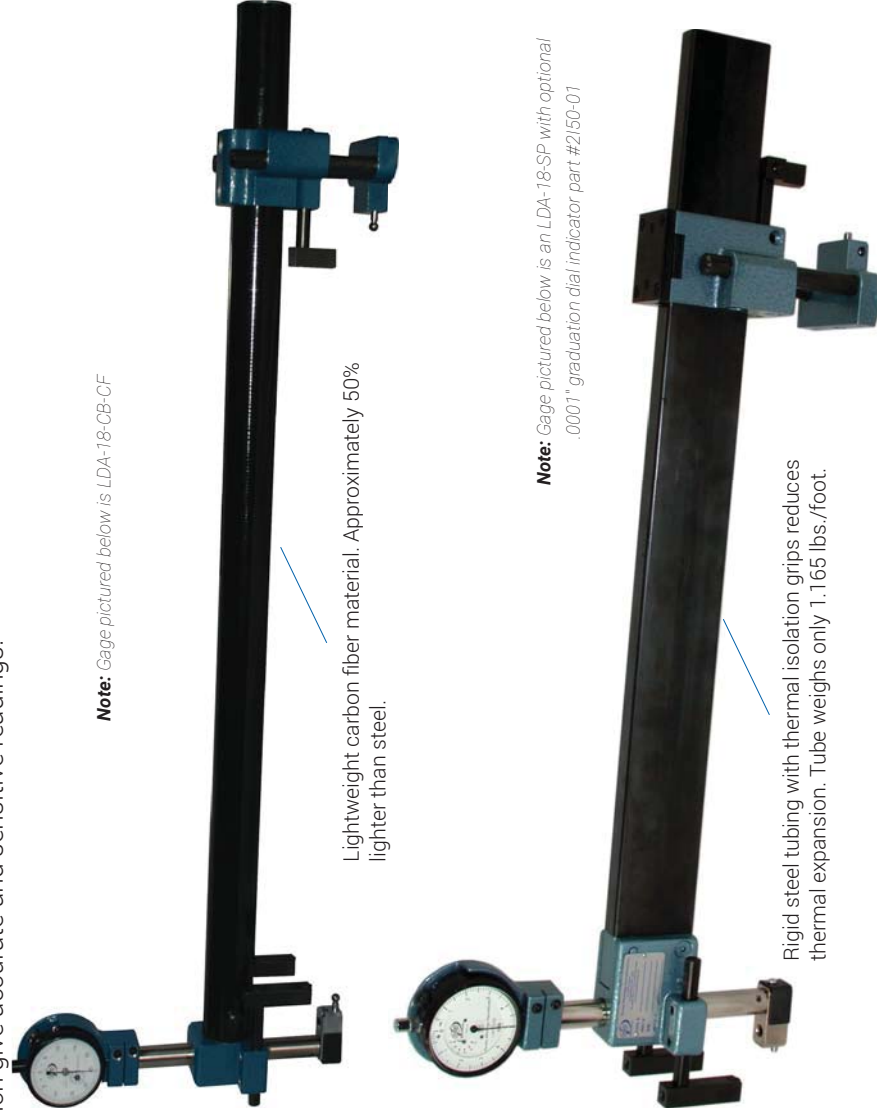
Special carbon fiber hump frame gage

Special carbon fiber frame gage with master



Checks 56.920"/1445.77mm diameter at 8.625"/219mm depth, weight 7.5 lbs/3.4kg

Our most popular adjustable series of ID/OD gage uses rigid steel tubing, cast end blocks, and a precision right angle transfer mechanism similar to our bore gages which give accurate and sensitive readings.



**Note:** Gage pictured below is LDA-18-CB-CF

**Note:** Gage pictured below is an LDA-18-SP with optional .0001" graduation dial indicator part #2150-01



Optional perpendicular indicator unit

## Available in Carbon Fiber

- ✓ Standard with part #2DM125-05 .0005" graduation dial indicator.
- ✓ Standard gaging depth range is 0-2". Optional gaging depth of 3", 4", or 5" is available.
- ✓ Standard LDA frame clearance is 1.25". Contact us for a quotation if additional clearance is required.
- ✓ Standard gaging contact travel is .100.
- ✓ Reference contact features .50" micrometer style fine adjustment which makes setting this gage fast and easy.
- ✓ Indicator and housing rotate 360 degrees for best viewing angle.
- ✓ Entire assembly rotates 180 degrees for ID/OD measurement.

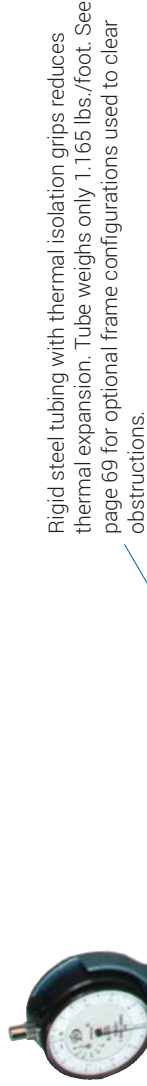
See page 72 for SMA series companion setmasters



PART #	INCH RANGE	METRIC (mm) RANGE	STEEL PIN	CARBIDE BALL	STEEL SHOVEL	CARBIDE SHOVEL	EXTENDED CARBIDE SHOVEL	CARBON FIBER
LDA-12	6 to 12	150 to 300	LDA-12-SP	LDA-12-CB	LDA-12-SS	LDA-12-CS	LDA-12-ES	LDA-12-XX-CF
LDA-18	12 to 18	301 to 460	LDA-18-SP	LDA-18-CB	LDA-18-SS	LDA-18-CS	LDA-18-ES	LDA-18-XX-CF
LDA-24	18 to 24	461 to 610	LDA-24-SP	LDA-24-CB	LDA-24-SS	LDA-24-CS	LDA-24-ES	LDA-24-XX-CF
LDA-30	24 to 30	611 to 760	LDA-30-SP	LDA-30-CB	LDA-30-SS	LDA-30-CS	LDA-30-ES	LDA-30-XX-CF
LDA-36	30 to 36	761 to 915	LDA-36-SP	LDA-36-CB	LDA-36-SS	LDA-36-CS	LDA-36-ES	LDA-36-XX-CF
LDA-42	36 to 42	916 to 1070	LDA-42-SP	LDA-42-CB	LDA-42-SS	LDA-42-CS	LDA-42-ES	LDA-42-XX-CF
LDA-48	42 to 48	1071 to 1220	LDA-48-SP	LDA-48-CB	LDA-48-SS	LDA-48-CS	LDA-48-ES	LDA-48-XX-CF
LDA-54	48 to 54	1221 to 1370	LDA-54-SP	LDA-54-CB	LDA-54-SS	LDA-54-CS	LDA-54-ES	LDA-54-XX-CF
LDA-60	54 to 60	1371 to 1525	LDA-60-SP	LDA-60-CB	LDA-60-SS	LDA-60-CS	LDA-60-ES	LDA-60-XX-CF

# LDF SERIES - ID/OD FIXED FRAME

LDF series production gages utilize fixed frames which are more rigid, lighter, and compact than LDA series adjustable gages. LDF gages are normally used for tight tolerances and built to order based on application requirements.



## Available in Carbon Fiber

- ✔ **Available with ISO 17025 certification.**
- ✔ Standard gaging depth range is 0-1". Optional gaging depth of 2" - 5" is available.
- ✔ Standard gaging contact travel is .100".
- ✔ Standard LDF frame clearance is .75".
- ✔ Standard with part #2DM125-05 .0005" graduation dial indicator.
- ✔ Three point hardened steel rests.
- ✔ Indicator and housing rotate 360 degrees for best viewing angle.
- ✔ LDF series requires a part print.



PART #	INCH RANGE	METRIC (mm) RANGE	STEEL PIN SP	CARBIDE BALL CB	STEEL SHOVEL SS	CARBIDE SHOVEL CS	EXTENDED CARBIDE SHOVEL ES	CARBON FIBER CF
LDF-12	6 to 12	150 to 300	LDF-12-SP	LDF-12-CB	LDF-12-SS	LDF-12-CS	LDF-12-ES	LDF-12-XX-CF
LDF-18	12 to 18	301 to 460	LDF-18-SP	LDF-18-CB	LDF-18-SS	LDF-18-CS	LDF-18-ES	LDF-18-XX-CF
LDF-24	18 to 24	461 to 610	LDF-24-SP	LDF-24-CB	LDF-24-SS	LDF-24-CS	LDF-24-ES	LDF-24-XX-CF
LDF-30	24 to 30	611 to 760	LDF-30-SP	LDF-30-CB	LDF-30-SS	LDF-30-CS	LDF-30-ES	LDF-30-XX-CF
LDF-36	30 to 36	761 to 915	LDF-36-SP	LDF-36-CB	LDF-36-SS	LDF-36-CS	LDF-36-ES	LDF-36-XX-CF
LDF-42	36 to 42	916 to 1070	LDF-42-SP	LDF-42-CB	LDF-42-SS	LDF-42-CS	LDF-42-ES	LDF-42-XX-CF
LDF-48	42 to 48	1071 to 1220	LDF-48-SP	LDF-48-CB	LDF-48-SS	LDF-48-CS	LDF-48-ES	LDF-48-XX-CF
LDF-54	48 to 54	1221 to 1370	LDF-54-SP	LDF-54-CB	LDF-54-SS	LDF-54-CS	LDF-54-ES	LDF-54-XX-CF
LDF-60	54 to 60	1371 to 1525	LDF-60-SP	LDF-60-CB	LDF-60-SS	LDF-60-CS	LDF-60-ES	LDF-60-XX-CF



Optional perpendicular indicator unit



See page 73 for SMF series companion setmasters

The LDVA is similar to the LDA series gage, except that it offers adjustment in the vertical axis to accommodate depths up to 5".

- Standard with part # 2DM125-05 .0005" graduation dial indicator.
- 5" vertical adjustment on rests allows frame clearance from 1.25" min. to 5.87" max.
- 5" vertical adjustment on gage heads.

**Available in Carbon Fiber**



PART #	INCH RANGE	METRIC (mm) RANGE	STEEL PIN	CARBIDE BALL	STEEL SHOVEL	CARBIDE SHOVEL	EXTENDED CARBIDE SHOVEL	CARBON FIBER
LDVA-12	6 to 12	150 to 300	LDVA-12-SP	LDVA-12-CB	LDVA-12-SS	LDVA-12-CS	LDVA-12-ES	LDVA-12-XX-CF
LDVA-18	12 to 18	301 to 460	LDVA-18-SP	LDVA-18-CB	LDVA-18-SS	LDVA-18-CS	LDVA-18-ES	LDVA-18-XX-CF
LDVA-24	18 to 24	461 to 610	LDVA-24-SP	LDVA-24-CB	LDVA-24-SS	LDVA-24-CS	LDVA-24-ES	LDVA-24-XX-CF
LDVA-30	24 to 30	611 to 760	LDVA-30-SP	LDVA-30-CB	LDVA-30-SS	LDVA-30-CS	LDVA-30-ES	LDVA-30-XX-CF
LDVA-36	30 to 36	761 to 915	LDVA-36-SP	LDVA-36-CB	LDVA-36-SS	LDVA-36-CS	LDVA-36-ES	LDVA-36-XX-CF
LDVA-42	36 to 42	916 to 1070	LDVA-42-SP	LDVA-42-CB	LDVA-42-SS	LDVA-42-CS	LDVA-42-ES	LDVA-42-XX-CF
LDVA-48	42 to 48	1071 to 1220	LDVA-48-SP	LDVA-48-CB	LDVA-48-SS	LDVA-48-CS	LDVA-48-ES	LDVA-48-XX-CF
LDVA-54	48 to 54	1221 to 1370	LDVA-54-SP	LDVA-54-CB	LDVA-54-SS	LDVA-54-CS	LDVA-54-ES	LDVA-54-XX-CF
LDVA-60	54 to 60	1371 to 1525	LDVA-60-SP	LDVA-60-CB	LDVA-60-SS	LDVA-60-CS	LDVA-60-ES	LDVA-60-XX-CF



See page 72 for SMVA series companion setmasters

## LDRA SERIES - ID/OD ADJUSTABLE RAIL FRAME

The LDRA gage uses twin parallel rails for a versatile and economical adjustable frame. End blocks and rest blocks act as reinforcing braces to the rail system once locked in their appropriate gaging positions.



- Sturdy .375" diameter twin rail frame
- 0-2" vertical adjustment on heads
- To order the LDRA Series, specify contact point.
- Standard LDRA frame clearance is .75".



SMRA 4-12 is the companion setmaster. See page 72.

PART #	INCH RANGE	METRIC (mm) RANGE	STEEL PIN	CARBIDE BALL	STEEL SHOVEL	CARBIDE SHOVEL	EXTENDED CARBIDE SHOVEL
LDRA-4-12	4 to 12	100 to 300	LDRA-4-12-SP	LDRA-4-12-CB	LDRA-4-12-SS	LDRA-4-12-CS	LDRA-4-12-ES

# LDDA - DIRECT READING ID/OD ADJUSTABLE FRAME

These direct reading gages feature lightweight rigid steel tubing, and cast end blocks to accommodate depths up to 5". The indicator contacts the part directly on this series of gage; therefore, retraction and gaging travel depend on the indicator selected.

Standard gaging depth is 0-2"  
Gaging units rotates 180 degrees  
for ID or OD measurement



Gaging travels is that of indicator selected  
Standard with part #2DM125-05 .0005" graduation dial indicator

Available in Carbon Fiber

- Standard gaging depth range is 0-2"
- Standard LDDA frame clearance is 1.25". Contact us for a quotation if additional clearance is required.

PART #	INCH	METRIC (mm)	STEEL PIN	CARBIDE BALL	STEEL SHOVEL	CARBIDE SHOVEL	EXTENDED CARBIDE SHOVEL	CARBON FIBER
	RANGE	RANGE	SP	CB	SS	CS	ES	CF
LDDA-12	6 to 12	150 to 300	LDDA-12-SP	LDDA-12-CB	LDDA-12-SS	LDDA-12-CS	LDDA-12-ES	LDDA-12-XX-CF
LDDA-18	12 to 18	301 to 460	LDDA-18-SP	LDDA-18-CB	LDDA-18-SS	LDDA-18-CS	LDDA-18-ES	LDDA-18-XX-CF
LDDA-24	18 to 24	461 to 610	LDDA-24-SP	LDDA-24-CB	LDDA-24-SS	LDDA-24-CS	LDDA-24-ES	LDDA-24-XX-CF
LDDA-30	24 to 30	611 to 760	LDDA-30-SP	LDDA-30-CB	LDDA-30-SS	LDDA-30-CS	LDDA-30-ES	LDDA-30-XX-CF
LDDA-36	30 to 36	761 to 915	LDDA-36-SP	LDDA-36-CB	LDDA-36-SS	LDDA-36-CS	LDDA-36-ES	LDDA-36-XX-CF
LDDA-42	36 to 42	916 to 1070	LDDA-42-SP	LDDA-42-CB	LDDA-42-SS	LDDA-42-CS	LDDA-42-ES	LDDA-42-XX-CF
LDDA-48	42 to 48	1071 to 1220	LDDA-48-SP	LDDA-48-CB	LDDA-48-SS	LDDA-48-CS	LDDA-48-ES	LDDA-48-XX-CF
LDDA-54	48 to 54	1221 to 1370	LDDA-54-SP	LDDA-54-CB	LDDA-54-SS	LDDA-54-CS	LDDA-54-ES	LDDA-54-XX-CF
LDDA-60	54 to 60	1371 to 1525	LDDA-60-SP	LDDA-60-CB	LDDA-60-SS	LDDA-60-CS	LDDA-60-ES	LDDA-60-XX-CF



See page 72 for SMA series companion setmasters

## LDDF SERIES- DIRECT READING FIXED FRAME

LDDF Series gages include all the same features as the LDDA shown above except both cast end blocks are rigidly bolted and pinned in place. This makes the LDDF stronger and lighter.

- Standard LDDF frame clearance is .75"

PART #	INCH	METRIC (mm)	STEEL PIN	CARBIDE BALL	STEEL SHOVEL	CARBIDE SHOVEL	EXTENDED CARBIDE SHOVEL	CARBON FIBER
	RANGE	RANGE	SP	CB	SS	CS	ES	CF
LDDF-12	6 to 12	150 to 300	LDDF-12-SP	LDDF-12-CB	LDDF-12-SS	LDDF-12-CS	LDDF-12-ES	LDDF-12-XX-CF
LDDF-18	12 to 18	301 to 460	LDDF-18-SP	LDDF-18-CB	LDDF-18-SS	LDDF-18-CS	LDDF-18-ES	LDDF-18-XX-CF
LDDF-24	18 to 24	461 to 610	LDDF-24-SP	LDDF-24-CB	LDDF-24-SS	LDDF-24-CS	LDDF-24-ES	LDDF-24-XX-CF
LDDF-30	24 to 30	611 to 760	LDDF-30-SP	LDDF-30-CB	LDDF-30-SS	LDDF-30-CS	LDDF-30-ES	LDDF-30-XX-CF
LDDF-36	30 to 36	761 to 915	LDDF-36-SP	LDDF-36-CB	LDDF-36-SS	LDDF-36-CS	LDDF-36-ES	LDDF-36-XX-CF
LDDF-42	36 to 42	916 to 1070	LDDF-42-SP	LDDF-42-CB	LDDF-42-SS	LDDF-42-CS	LDDF-42-ES	LDDF-42-XX-CF
LDDF-48	42 to 48	1071 to 1220	LDDF-48-SP	LDDF-48-CB	LDDF-48-SS	LDDF-48-CS	LDDF-48-ES	LDDF-48-XX-CF
LDDF-54	48 to 54	1221 to 1370	LDDF-54-SP	LDDF-54-CB	LDDF-54-SS	LDDF-54-CS	LDDF-54-ES	LDDF-54-XX-CF
LDDF-60	54 to 60	1371 to 1525	LDDF-60-SP	LDDF-60-CB	LDDF-60-SS	LDDF-60-CS	LDDF-60-ES	LDDF-60-XX-CF



\*Note: Gage pictured is an LDDF-18-CB-01 with carbide ball contacts and optional high amplification dial indicator part #219-01



See page 73 for SMF series companion setmasters

The LDLT series gage uses a 1:1 ratio lever principle. This method of motion transfer is used in conditions of limited accessibility, such as face grooves. This low friction transfer is also ideal for checking shallow angles at specified depths without incurring binding in the transfer.



Optional perpendicular indicator unit



Standard with part #2DM125-05 .0005" graduation dial indicator

Optional reverse action lever shown

Gaging heads rotate 180 degrees for ID or OD measurement



\*Note: Gage pictured below is an LDLTA-18-CB-RL-01 with carbide ball contacts and reverse action lever, optional high amplification dial indicator part #219-01

- ✓ Standard gaging depth range is 0-2".
- ✓ Standard frame clearance is 1-.25". Contact us for a quotation if additional clearance is required.
- ✓ Reverse action lever available.

See page 72 for SMA series companion setmasters

PART #	TYPE	INCH		METRIC (mm)	CARBIDE BALL	CARBIDE HALF BALL	CARBON FIBER
		RANGE	RANGE				
LDLTA-12	Adjustable	6 to 12	6 to 12	150 to 300	LDLTA-12-CB	LDLTA-12-HB	LDLTA-12-XX-CF
LDLTF-12	Fixed	6 to 12	6 to 12	150 to 300	LDLTF-12-CB	LDLTF-12-HB	LDLTF-12-XX-CF
LDLTA-18	Adjustable	12 to 18	12 to 18	301 to 460	LDLTA-18-CB	LDLTA-18-HB	LDLTA-18-XX-CF
LDLTF-18	Fixed	12 to 18	12 to 18	301 to 460	LDLTF-18-CB	LDLTF-18-HB	LDLTF-18-XX-CF
LDLTA-24	Adjustable	18 to 24	18 to 24	461 to 610	LDLTA-24-CB	LDLTA-24-HB	LDLTA-24-XX-CF
LDLTF-24	Fixed	18 to 24	18 to 24	461 to 610	LDLTF-24-CB	LDLTF-24-HB	LDLTF-24-XX-CF
LDLTA-30	Adjustable	24 to 30	24 to 30	611 to 760	LDLTA-30-CB	LDLTA-30-HB	LDLTA-30-XX-CF
LDLTF-30	Fixed	24 to 30	24 to 30	611 to 760	LDLTF-30-CB	LDLTF-30-HB	LDLTF-30-XX-CF
LDLTA-36	Adjustable	30 to 36	30 to 36	761 to 915	LDLTA-36-CB	LDLTA-36-HB	LDLTA-36-XX-CF
LDLTF-36	Fixed	30 to 36	30 to 36	761 to 915	LDLTF-36-CB	LDLTF-36-HB	LDLTF-36-XX-CF
LDLTA-42	Adjustable	36 to 42	36 to 42	916 to 1070	LDLTA-42-CB	LDLTA-42-HB	LDLTA-42-XX-CF
LDLTF-42	Fixed	36 to 42	36 to 42	916 to 1070	LDLTF-42-CB	LDLTF-42-HB	LDLTF-42-XX-CF
LDLTA-48	Adjustable	42 to 48	42 to 48	1071 to 1220	LDLTA-48-CB	LDLTA-48-HB	LDLTA-48-XX-CF
LDLTF-48	Fixed	42 to 48	42 to 48	1071 to 1220	LDLTF-48-CB	LDLTF-48-HB	LDLTF-48-XX-CF
LDLTA-54	Adjustable	48 to 54	48 to 54	1221 to 1370	LDLTA-54-CB	LDLTA-54-HB	LDLTA-54-XX-CF
LDLTF-54	Fixed	48 to 54	48 to 54	1221 to 1370	LDLTF-54-CB	LDLTF-54-HB	LDLTF-54-XX-CF
LDLTA-60	Adjustable	54 to 60	54 to 60	1371 to 1525	LDLTA-60-CB	LDLTA-60-HB	LDLTA-60-XX-CF
LDLTF-60	Fixed	54 to 60	54 to 60	1371 to 1525	LDLTF-60-CB	LDLTF-60-HB	LDLTF-60-XX-CF

## LDLTF SERIES - LEVER TRANSFER ADJUSTABLE

LDLTF Series gages include all the same features as the LDLTA shown above except both cast end blocks are rigidly bolted and pinned in place. This makes the LDLTF Series more rigid for tighter tolerances and lighter weight than the LDLTA.

- ✓ Standard LDLTF frame clearance is .75".
- ✓ Heavy duty reverse reference head (for LDLTF only).
- ✓ Reverse action lever available.



Available in Carbon Fiber

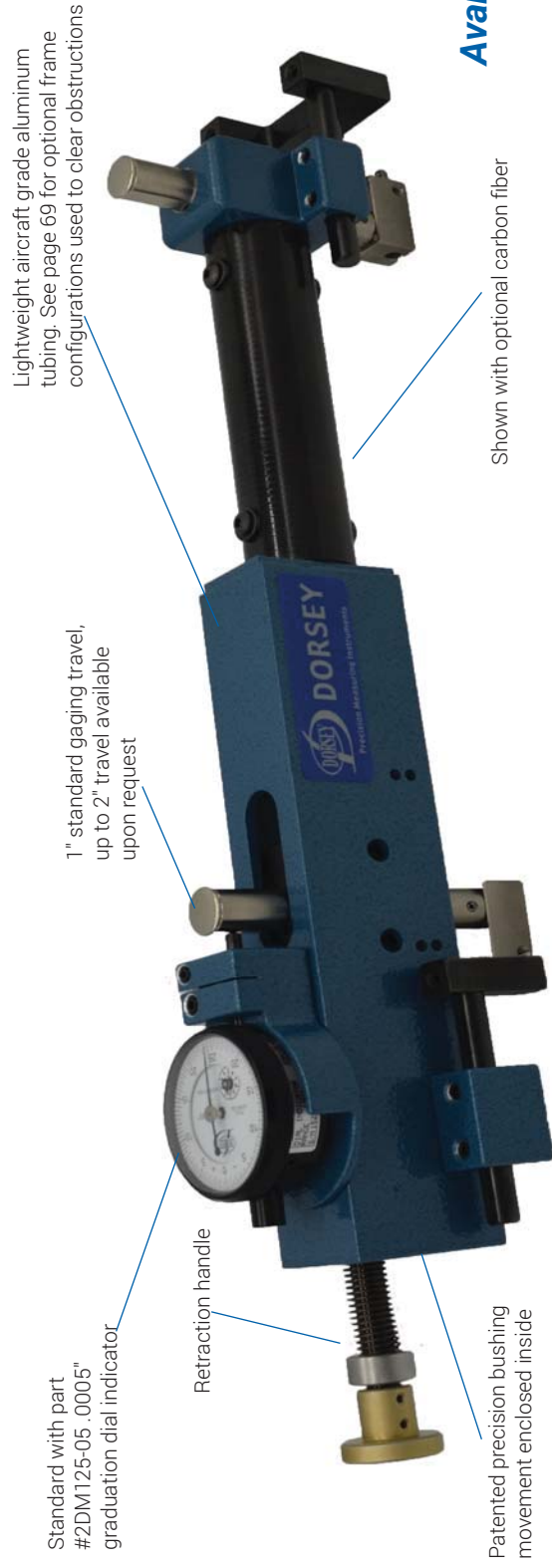


See page 73 for SMF series companion setmasters

# LBBS SERIES - PRECISION SLIDE MECHANISM

www.dorseymetrology.com

LBBS series gages use a precision bushing slide mechanism for applications where retraction is required beyond the range of the indicator. The movement is light, sensitive, and accurate while free of any side play. Ideal for applications to bypass obstructions, inspect grooves, contours, recesses, or retraction over the major diameter of a reverse taper. Models are available in fixed or adjustable frame designs.



Available in Carbon Fiber

PART #	INCH RANGE	METRIC (mm) RANGE	STEEL PIN SP	CARBIDE BALL CB	STEEL SHOVEL SS	CARBIDE SHOVEL CS	CARBON FIBER CF
LBBS-A-18	Up to 18	301 to 460	LBBS-A-18-SP	LBBS-A-18-CB	LBBS-A-18-SS	LBBS-A-18-CS	LBBS-A-18-XX-CF
LBBS-F-18	Up to 18	301 to 460	LBBS-F-18-SP	LBBS-F-18-CB	LBBS-F-18-SS	LBBS-F-18-CS	LBBS-F-18-XX-CF
LBBS-A-24	18 to 24	461 to 610	LBBS-A-24-SP	LBBS-A-24-CB	LBBS-A-24-SS	LBBS-A-24-CS	LBBS-A-24-XX-CF
LBBS-F-24	18 to 24	461 to 610	LBBS-F-24-SP	LBBS-F-24-CB	LBBS-F-24-SS	LBBS-F-24-CS	LBBS-F-24-XX-CF
LBBS-A-30	24 to 30	611 to 760	LBBS-A-30-SP	LBBS-A-30-CB	LBBS-A-30-SS	LBBS-A-30-CS	LBBS-A-30-XX-CF
LBBS-F-30	24 to 30	611 to 760	LBBS-F-30-SP	LBBS-F-30-CB	LBBS-F-30-SS	LBBS-F-30-CS	LBBS-F-30-XX-CF
LBBS-A-36	30 to 36	761 to 915	LBBS-A-36-SP	LBBS-A-36-CB	LBBS-A-36-SS	LBBS-A-36-CS	LBBS-A-36-XX-CF
LBBS-F-36	30 to 36	761 to 915	LBBS-F-36-SP	LBBS-F-36-CB	LBBS-F-36-SS	LBBS-F-36-CS	LBBS-F-36-XX-CF
LBBS-A-42	36 to 42	916 to 1070	LBBS-A-42-SP	LBBS-A-42-CB	LBBS-A-42-SS	LBBS-A-42-CS	LBBS-A-42-XX-CF
LBBS-F-42	36 to 42	916 to 1070	LBBS-F-42-SP	LBBS-F-42-CB	LBBS-F-42-SS	LBBS-F-42-CS	LBBS-F-42-XX-CF
LBBS-A-48	42 to 48	1071 to 1220	LBBS-A-48-SP	LBBS-A-48-CB	LBBS-A-48-SS	LBBS-A-48-CS	LBBS-A-48-XX-CF
LBBS-F-48	42 to 48	1071 to 1220	LBBS-F-48-SP	LBBS-F-48-CB	LBBS-F-48-SS	LBBS-F-48-CS	LBBS-F-48-XX-CF
LBBS-A-54	48 to 54	1221 to 1370	LBBS-A-54-SP	LBBS-A-54-CB	LBBS-A-54-SS	LBBS-A-54-CS	LBBS-A-54-XX-CF
LBBS-F-54	48 to 54	1221 to 1370	LBBS-F-54-SP	LBBS-F-54-CB	LBBS-F-54-SS	LBBS-F-54-CS	LBBS-F-54-XX-CF
LBBS-A-60	54 to 60	1371 to 1525	LBBS-A-60-SP	LBBS-A-60-CB	LBBS-A-60-SS	LBBS-A-60-CS	LBBS-A-60-XX-CF
LBBS-F-60	54 to 60	1371 to 1525	LBBS-F-60-SP	LBBS-F-60-CB	LBBS-F-60-SS	LBBS-F-60-CS	LBBS-F-60-XX-CF



See page 73 for fixed SMF series companion setmasters or page 72 for adjustable SMA series companion setmasters

This economical, heavy duty production gage features a rigid steel plate frame and our bullet proof reed spring gaging transfer. The LDAR mechanism is impervious to coolants, dirt, and contaminants and offers great repeatability.

- ✓ Three point hardened steel rests allow .375" frame clearance and can be adjusted to accommodate a wide variety of parts
- ✓ Standard with part #2DM125-05 .0005" graduation dial indicator
- ✓ Micrometer style fine adjustment makes setting this gage fast and easy
- ✓ 0 - .5" gaging depth adjustment
- ✓ +/- .050" gaging travel on reed mechanism



PART #	INCH		METRIC (mm)		STEEL DISC		CARBIDE DISC	
	RANGE		RANGE		SD	CD	SD	CD
LDAR-6	2" - 6"		50 - 150mm		LDAR-6-SD	LDAR-6-CD	LDAR-6-SD	LDAR-6-CD
LDAR-8	2" - 8"		50 - 200mm		LDAR-8-SD	LDAR-8-CD	LDAR-8-SD	LDAR-8-CD
7062			.437 Diameter Steel Conical Disc Contact					
7530			.500 Diameter Carbide Conical Disc Contact					



\*Note: Gage pictured is LDAR-8 with an optional .0001" graduation dial indicator part #2150-01

## LDAR SERIES

LDAR gages feature a lightweight tubular steel frame with a reed pantograph movement. The pantograph movement utilizes parallel springs to transfer motion and is well suited to production applications as dust, dirt, or coolant cannot harm or jam the mechanism.

- ✓ 3" of depth adjustment
- ✓ Reed movement is enclosed in lightweight steel tubular frame, eliminating the possibility of damage
- ✓ Three point rest system offers .625" frame clearance
- ✓ Standard with part #2DM125-05 .0005" graduation dial indicator

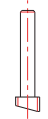
.625" dia. disc



.1875" dia. ball



.156" offset



PART #	INCH		METRIC (mm)		STEEL DISC		CARBIDE DISC		CARBIDE BALL		CARBIDE SHOVEL	
	RANGE		RANGE		SD	CD	SD	CD	CB	CS	SD	CD
LDAR-12	6 to 12		150 to 300		LDAR-12-SD	LDAR-12-CD	LDAR-12-SD	LDAR-12-CD	LDAR-12-SB	LDAR-12-CS	LDAR-12-SD	LDAR-12-CD
LDAR-18	12 to 18		301 to 460		LDAR-18-SD	LDAR-18-CD	LDAR-18-SD	LDAR-18-CD	LDAR-18-SB	LDAR-18-CS	LDAR-18-SD	LDAR-18-CD
LDAR-24	18 to 24		461 to 610		LDAR-24-SD	LDAR-24-CD	LDAR-24-SD	LDAR-24-CD	LDAR-24-SB	LDAR-24-CS	LDAR-24-SD	LDAR-24-CD
LDAR-30	24 to 30		611 to 760		LDAR-30-S	LDAR-30-CD	LDAR-30-S	LDAR-30-CD	LDAR-30-SB	LDAR-30-CS	LDAR-30-SD	LDAR-30-CD
LDAR-36	30 to 36		761 to 915		LDAR-36-SD	LDAR-36-CD	LDAR-36-SD	LDAR-36-CD	LDAR-36-SB	LDAR-36-CS	LDAR-36-SD	LDAR-36-CD
LDAR-42	36 to 42		916 to 1070		LDAR-42-SD	LDAR-42-CD	LDAR-42-SD	LDAR-42-CD	LDAR-42-SB	LDAR-42-CS	LDAR-42-SD	LDAR-42-CD
LDAR-48	42 to 48		1071 to 1220		LDAR-48-SD	LDAR-48-CD	LDAR-48-SD	LDAR-48-CD	LDAR-48-SB	LDAR-48-CS	LDAR-48-SD	LDAR-48-CD
LDAR-54	48 to 54		1221 to 1370		LDAR-54-SD	LDAR-54-CD	LDAR-54-SD	LDAR-54-CD	LDAR-54-SB	LDAR-54-CS	LDAR-54-SD	LDAR-54-CD
LDAR-60	54 to 60		1371 to 1525		LDAR-60-SD	LDAR-60-CD	LDAR-60-SD	LDAR-60-CD	LDAR-60-SB	LDAR-60-CS	LDAR-60-SD	LDAR-60-CD



See page 72 for SMA series companion setmasters

**Note:** specify .18" restrictor for CB or CS contacts, specify .62" restrictor for SD and CD contacts



The LDR Series gage uses a lightweight stainless steel tubular frame and a reed pantograph movement utilizes parallel reed springs to transfer motion and is well suited to production applications as dust, dirt, or coolant cannot harm or jam the mechanism.



**\*Note:** Gage pictured below is an LDR-18-CB-01 with optional .0001" graduation dial indicator part #219-01

PART #	ID/OD INCH	ID/OD METRIC (mm)
	RANGE	RANGE
LDR-12	4.5 to 12	115 to 305
LDR-18	12 to 18	305 to 460
LDR-24	18 to 24	460 to 610
LDR-36	24 to 36	640 to 915
LDR-48	36 to 48	915 to 1220
LDR-60	48 to 60	1220 to 1525
5557CB	.25" Dia. Carbide Ball Contacts (Each)	
5557HB	.25" Dia. Carbide Half Ball Contacts (Each)	



See page 72 for SMA series companion setmasters specify .25" wide restrictor

- ✔ Lightweight heat treated aerospace grade stainless steel tubing weighs only .817 lbs. per foot
- ✔ Standard with part #2DM125-05 .0005" graduation dial indicator
- ✔ Contacts feature 1" vertical depth adjustment
- ✔ Standard carbide ball contacts, 0.5" ball optional
- ✔ Carbide rest surfaces are offset 2" to resist tipping
- ✔ Indicator housing protects indicator
- ✔ Frictionless reed movement transfer with +/- .050" gaging travel
- ✔ Precision cam-lock fine adjustment mechanism makes setting this gage fast and easy

## LDB SERIES- ULTRA LIGHTWEIGHT FRAME WITH BALL BUSHING

LDB series gages use a lightweight stainless steel tubular frame and a precision ball bushing slide mechanism. This gage can be switched from ID to OD and is designed to be used where a full inch of gaging travel or retraction is desired.



**\*Note:** Gage pictured is LDB-14-CB-DI with an optional 1" travel digital indicator part #FV54520777

PART #	ID/OD INCH	ID/OD METRIC (mm)
	RANGE	RANGE
LDB-14	6.5 to 14	165 to 355
LDB-24	14 to 24	355 to 610
LDB-36	24 to 36	640 to 915
LDB-48	36 to 48	915 to 1220
LDB-60	48 to 60	1220 to 1525
7533	.625" Dia. Steel Disc Contact (Each)	
7534	.625" Dia. Carbide Disc Contact (Each)	
4082-187B	.1875" Dia. Carbide Ball Contacts (Each)	



See page 72 for SMA series companion setmasters

**Note:** specify .18" restrictor for CB contacts, specify .62" restrictor for SD and CD contacts

- ✔ Standard with part #2DM1000-05 .0005" graduation dial indicator
- ✔ Indicator housing protects indicator
- ✔ Carbide rest surfaces are offset 2" to resist tipping
- ✔ Full 1.00" of gaging travel
- ✔ Gaging depth adjustable to 5"
- ✔ Standard carbide ball contacts, optional contact choices: Steel Disc (-SD), Carbide Disc (-CD), or Carbide Ball (-CB)
- ✔ Gaging shafts can be inverted to accommodate disc contacts or perpendicular style contacts
- ✔ Precision cam-lock fine adjustment mechanism makes setting this gage fast and easy

When using large diameter gages, the part configuration, tooling, or fixturing can present obstacles that make part inspection impossible with standard frame gages. Below we have listed some typical frame configurations to help overcome these obstacles. Contact us for further details. **Please supply Dorsey with part print for quoting.**

**All special frames listed below are available in carbon fiber**



## HUMP FRAME

The gage shown here is an LDDF with a Hump Frame design. This design can be used on the LDF, LDDF, or the LDLTF to increase the rigidity of the vertical gaging shafts by extending the support castings up to 5.5" deeper. It is generally recommended to use this type of frame design if the gaging depth exceeds 6". Add "-HF" to the part # of the basic gage to select this option.



## DONUT FRAME

The gage shown here is an LDO with a Donut Frame design. This design can be used on LDF, LDDF, or LDLTF. The Donut Frame design permits the gage to completely encircle a large obstruction such as the part's hub, case, clamp, or fixture setup. Special size Donut Frames are also available.



## EXTENDED END BLOCK FRAME

Due to part configuration, it is sometimes necessary for the gage frame to rest internally or externally to the check dimension. Holding fixtures used during the machining operations can introduce further restrictions that may require gages to rest on fixture pads located outside or inside the part.



## BRIDGE FRAME

The gage shown here is an LDDF with a Bridge Frame design. This design permits the gage frame to bridge over short center obstructions such as posts, clamps, or raised contours. These castings extend and support the gaging extension shafts in order to gain measuring rigidity. This raises the frame 2.75". Add "-BF" to the part # of the basic gage for this option.



## "C" FRAME

LDC series "C" frame gages are used for applications where the gage cannot be placed directly over the part. The frame is intended to partially encircle the part and is "side loaded" during use. Cam style (LDF), lever style (LDLT), or direct read type (LDD) transfer mechanisms can be used on this frame.

**\*Note:** Shown here in carbon fiber. LDC Series gages are designed for a specific application. Contact us for details.

**All above gages require part print for quoting. Design charge and design approval is required.**

# PIN TYPE DIAL BORE

Pin type dial bore gages are an accurate, economical, and versatile alternative to the ID micrometer. These gages do not reference or rest on a datum surface and are therefore ideally suited for applications such as ID splines, gears, or threads.

How to order DS-B4 Pin gage assembly: select gage dial unit which includes gaging contacts and then select a spacer or adapter as required.

GAGE (INCLUDING DIAL UNIT AND GAGING CONTACTS)			
PART #	GRAD	RANGE	
DS-B4-219-01	.0001"	.009"	
DS-B4-2DM025-01	.0001"	.025"	
DS-B4-2150-01	.0001"	.050"	
DS-B4-2110-025	.00025"	.100"	
DS-B4-21100-05	.0005"	.100"	
DS-B4-2140-05	.0005"	.040"	
DS-B4-2140-10	.001"	.040"	
DS-B4-S21/M	.0001"/0.0025mm	.010"/.25mm	
DS-B4-2102-002mm	0.002mm	0.2mm	
DS-B4-2110-002mm	0.002mm	1.0mm	
DS-B4-2125-005mm	0.005mm	2.5mm	
DS-B4-2110-01mm	0.010mm	1.0mm	

**PMA Series adjustable setmaster**  
6" range and .50" fine adjustment

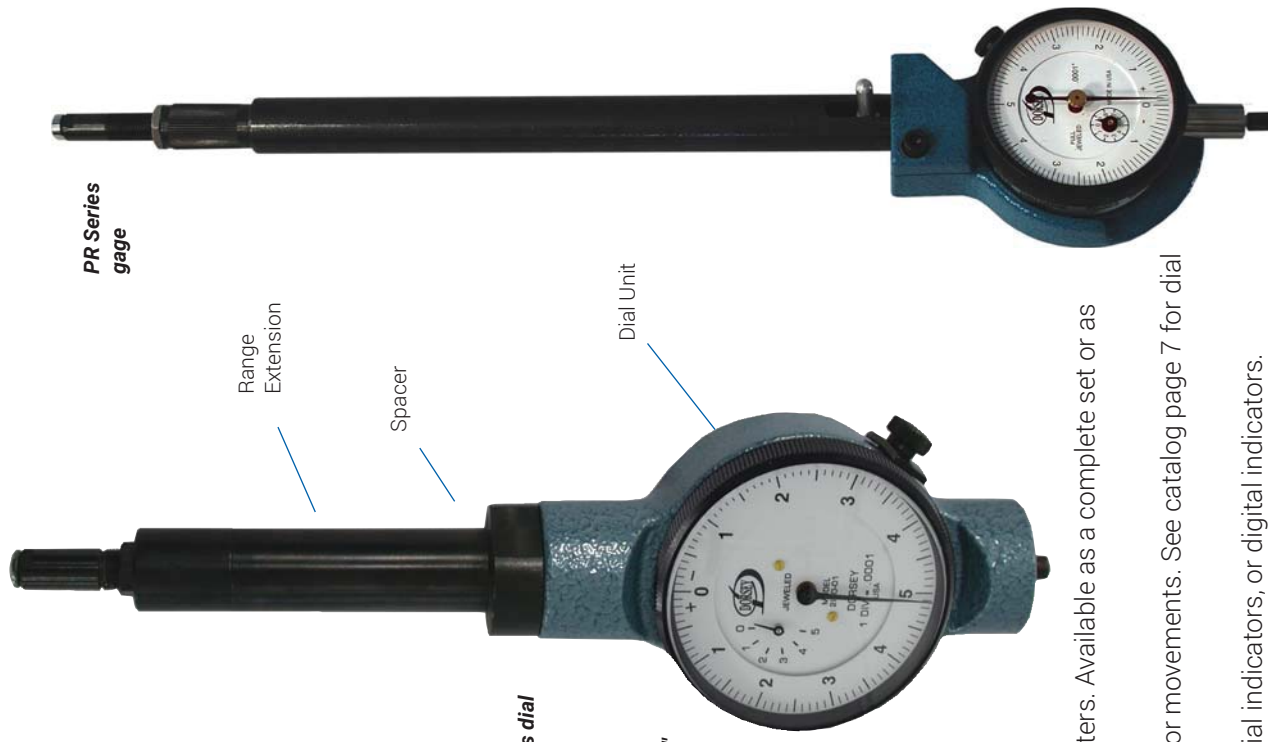


PART #	RANGE	
	INCHES	METRIC
PM-6	6 - 12"	150 to 300
PM-12	12 - 18"	300 to 450
PM-18	18 - 24"	450 to 600
PM-24	24 - 30"	600 to 750
PM-30	30 - 36"	750 to 900

PART #	SPACER LENGTH	RANGE	
		INCHES	METRIC
DS-B4-85140	Adapter	4.5 - 7	114 - 178
DS-B4-81845	3"	7 - 10	178 - 254
DS-B4-81849	6"	10 - 13	254 - 330
DS-B4-81853	9"	13 - 16	330 - 406
DS-B4-81857	12"	16 - 19	406 - 483
DS-B4-81861	15"	19 - 22	483 - 559
DS-B4-81865	18"	22 - 25	559 - 635
DS-B4-81869	21"	25 - 28	635 - 711
DS-B4-81873	24"	28 - 31	711 - 787
DS-B4-81877	27"	31 - 34	787 - 864
DS-B4-81881	30"	34 - 37	864 - 940
DS-B4-81885	33"	37 - 40	940 - 1016
DS-B4-81886	Full Set	4.5 - 40	114 - 1016

**DS-B4 series dial pin gage**

**\*Note: Gage pictured features DS-B4-21100-05 dial unit and DS-B4-81853 9" spacer**

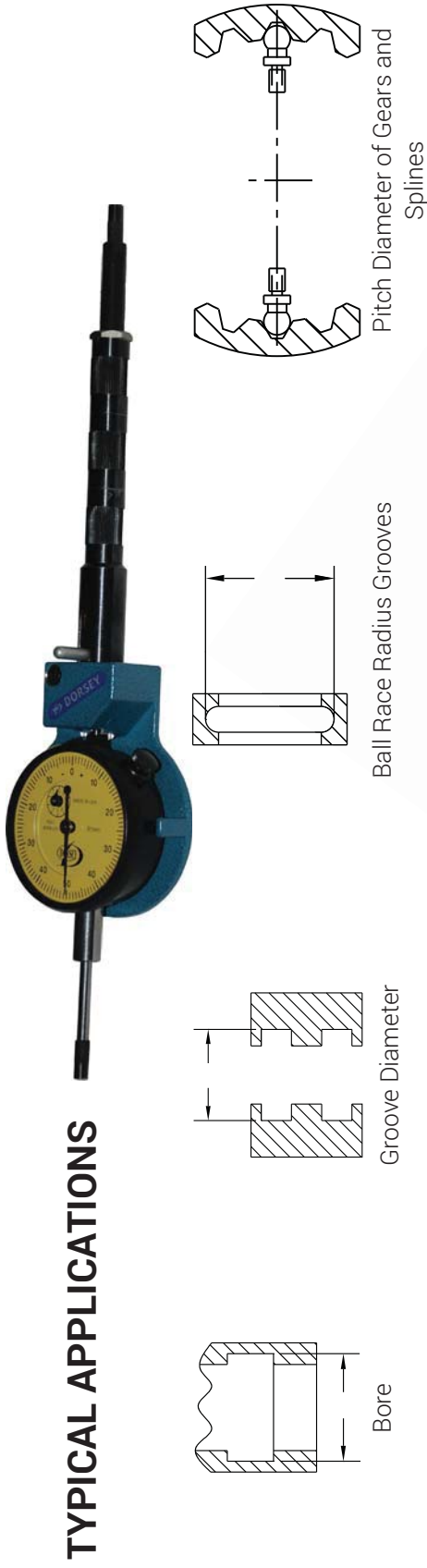


Gage kits include .0005" graduation dial indicator. Ball contacts are available for measuring pitch diameters. Available as a complete set or as an individual gage with a 3" range of adjustment.

DS-B4 series pin gages are available with a choice of any of Dorsey's #2 "High Amplification" dial indicator movements. See catalog page 7 for dial selections.

## RETRACTABLE PIN GAGES

Adjustable inside diameter pin gages are used to check straight bores, grooves, spherical radii, and spline and gear pitch diameters. A variety of interchangeable threaded contacts allows the gage to be altered to suit the application. The gage utilizes the principle and portability of an inside diameter micrometer with the accuracy, speed, and total retraction of the dial indicator range. The displays can be balanced, continuous dial, or digital indicators.

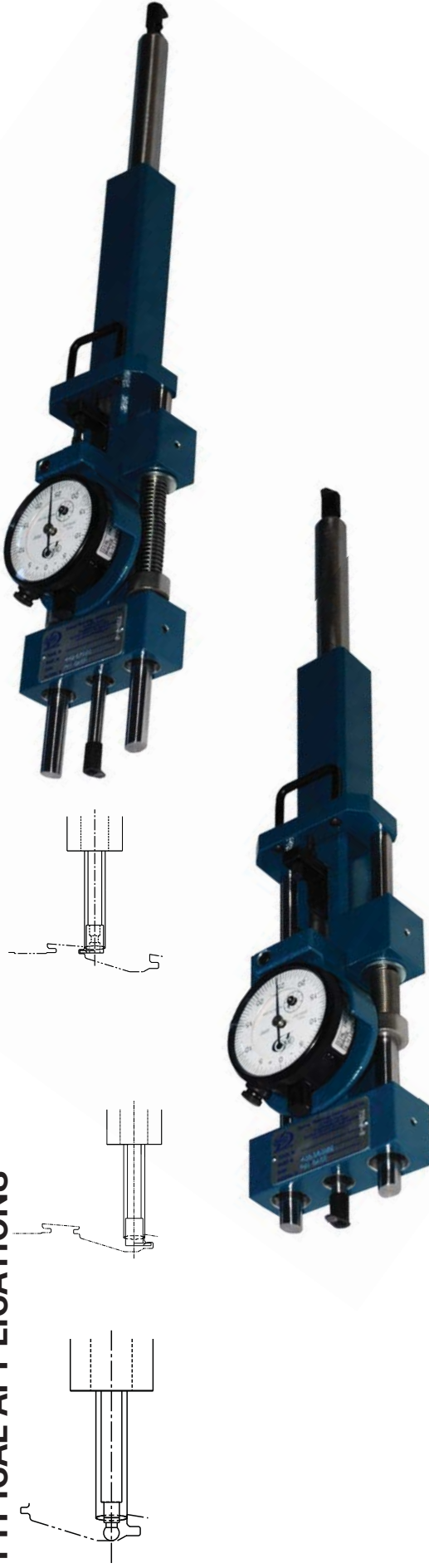


## TYPICAL APPLICATIONS

## SPECIAL RETRACTABLE PIN AND REST GAGES

Retractable pin gages are specially designed for entry into hard to reach areas and for checking a variety of measurement features. These gages require rests to locate on a datum face. In most cases, both the rest and movement require total retraction beyond the range of the readout to enter into recessed areas such as; under flange faces, spool cavities, or within deep grooves. These gages are used to check upper and lower "L" grooves, retaining grooves, and basic angular diameters from the datum surface, spherical radii, and other configurations. Companion part-simulating setting masters are also supplied upon request.

## TYPICAL APPLICATIONS



# SMA SERIES - ADJUSTABLE DIAMETER

SMA Series setmasters feature a precision ground steel rail as the rigid foundation for adjustability. These masters can be continuously reset for various dimensions.



**\*Note:** Companion to LDA, LDDA, LDUTA, LBBSA, LDR, LDB, and LDAR gages

- ✔ Optional restrictors:
  - > For .253" wide restrictor, add "-R25" to part # (Used with LDR or other gages with .25" contacts).
  - > For .628" wide restrictor, add "-R62" to part # (Used with LDAR, LDB, or other gages with .62" contacts).
- ✔ Certification of Conformance available.

MODEL #	RANGE
SMA-12	6 to 12
SMA-18	12 to 18
SMA-24	18 to 24
SMA-30	24 to 30
SMA-36	30 to 36
SMA-42	36 to 42
SMA-48	42 to 48
SMA-54	48 to 54
SMA-60	54 to 60

## SMRA SERIES SETMASTER

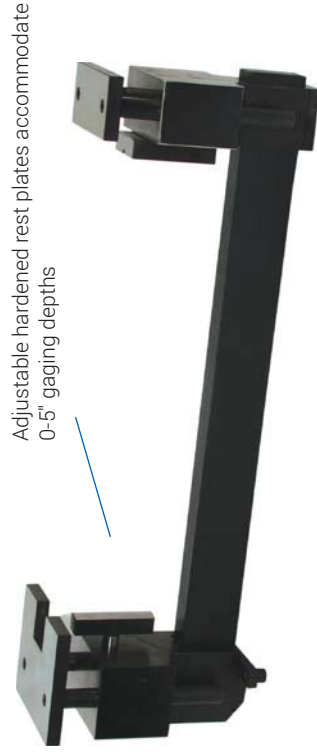


This setmaster has the same features and capabilities as the SMA but accommodates 4-12" of overall diameter and 0-1" depth adjustment to accommodate LDRA series gages.

MODEL #	INCH	METRIC (mm)
	RANGE	RANGE
SMRA-4-12	4 to 12	100 to 300

# SMVA SERIES- ADJUSTABLE DIAMETER/DEPTH

SMVA setmasters offer the same features as the SMA Series setmasters except that they allow for vertical adjustment to accommodate various gaging depths.



**\*Note:** Companion to LDVA or other adjustable gages with gaging depths between 0-5". Both SMA and SMVA Series are available with storage case.

MODEL #	RANGE
SMVA-12	6 to 12
SMVA-18	12 to 18
SMVA-24	18 to 24
SMVA-30	24 to 30
SMVA-36	30 to 36
SMVA-42	36 to 42
SMVA-48	42 to 48
SMVA-54	48 to 54
SMVA-60	54 to 60

SMF Series setmasters are designed to be used in a production environment where a specific set size is required. These masters use solid steel rails with precision ground end blocks bolted and doweled in place. A hardened steel restrictor is fixed to one side, while the adjustable anvil features .50" of micrometer style fine adjustment. The anvil can be continuously reset within its .5" range for various dimensions or it can be set, sealed, and pinned to a specific size.



**\*Note:** Setmaster pictured is part #SMF-18-GD1 set for an OD application.

**\*Note:** Companion to LDF, LDA, LDD, LDI, LDR, LDRA, LDB, LBBS Series Gages

#### Optional restrictors:

- > For .253" wide restrictor, add "-R25" to part # (Used with LDR or other gages with .25" contacts).
- > For .628" wide restrictor, add "-R62" to part # (Used with LDAR, LDB or other gages with .62" contacts).
- Angular anvil and restrictor set, 1" long for cone or inverted cone.
- Intermediate rest surfaces.
- Special anvil and restrictor for gage height more than .5".
- Roller rest guides for anvil rest plate.
- Set and sealed to a specific size with NIST traceable certification.
- Set, sealed, and pinned to size with ISO 17025 compliant certification.**

## SMFC- SERIES SETMASTER



Outrigger assembly for SMF or SSM series masters.

## VERTICAL SETMASTER STANDS



Part# 4350  
(used on SMF)

Part# 4394 (used on SMA)  
Part# 4395 (used on SSM)  
Up to 36"

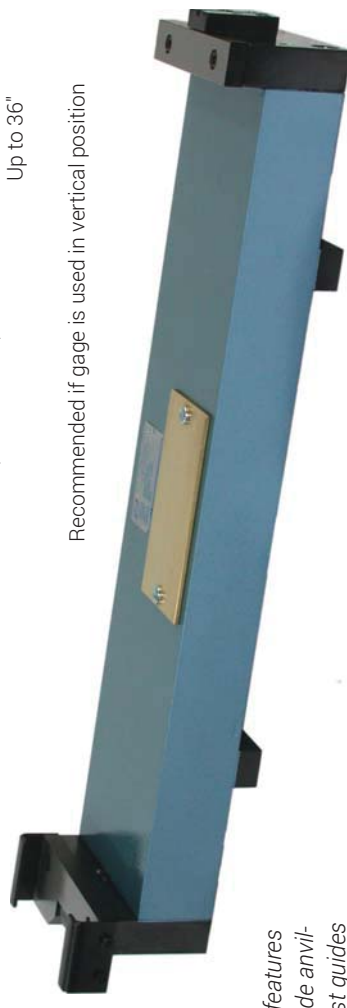
Recommended if gage is used in vertical position

## SSM SERIES SOLID FRAME SETMASTER

Solid setmasters are ground to a specific fixed size and are not adjustable. This setmaster is recommended for close tolerances and dedicated gages. The base can be made from tubular or solid steel, cast iron, or aluminum to better match the coefficient of thermal expansion of the part being machined. Anvils made from either hardened steel or carbide are available in a flat and parallel configuration or angular configuration.

Certification options:

- Set and sealed to a specific size with NIST traceable certification.
- Set and sealed to ISO 17025 compliant certification.**



**\*Note:** Setmaster shown features a cast iron bar base, carbide anvil-restrictor set, and roller rest guides



See page 69 for optional frame configurations used to clear obstructions



Standard with model #2DM125-05 .0005" graduation dial indicator

**Available in Carbon Fiber**

PART #	INCH RANGE	METRIC (mm) RANGE
DDG-12	6 to 12	150 to 300
DDG-18	12 to 18	301 to 460
DDG-24	18 to 24	461 to 610
DDG-30	24 to 30	611 to 760
DDG-36	30 to 36	761 to 915
DDG-42	36 to 42	916 to 1070
DDG-48	42 to 48	1071 to 1220
DDG-54	48 to 54	1221 to 1370
DDG-60	54 to 60	1371 to 1525

Dorsey DDG style Depth or Height gages are used to measure distances from one surface to another or from one surface to a machine/tool fixture. They are generally designed for a specific application. Depth units can be lever transfer type or direct reading. Gaging travel resolutions are per application requirements.

**Please supply Dorsey with part print for quoting. Requires design charge and design approval.**

## DDGM SETMASTER

The DDGM setmaster is the companion to the DDG series depth gage. It features solid steel precision ground base, hardened rest plates, and .25" of adjustment.

MODEL #	DIAMETER RANGE
DDGM-12	0 to 12
DDGM-18	12 to 18
DDGM-24	18 to 24
DDGM-30	24 to 30
DDGM-36	30 to 36
DDGM-42	36 to 42
DDGM-48	42 to 48
DDGM-54	48 to 54
DDGM-60	54 to 60



Optional perpendicular indicator unit



The MDG series of modular indicating depth gages are available as fixed or adjustable models. This versatile design allows the mixing and matching of components to build a gage which can suit any application. Designed to replace many dedicated flush pin gages, these gages feature a unique self-mastering mechanism, further eliminating the requirement for a setmaster. An offset contact can be used to check groove depths or locations.

## Features

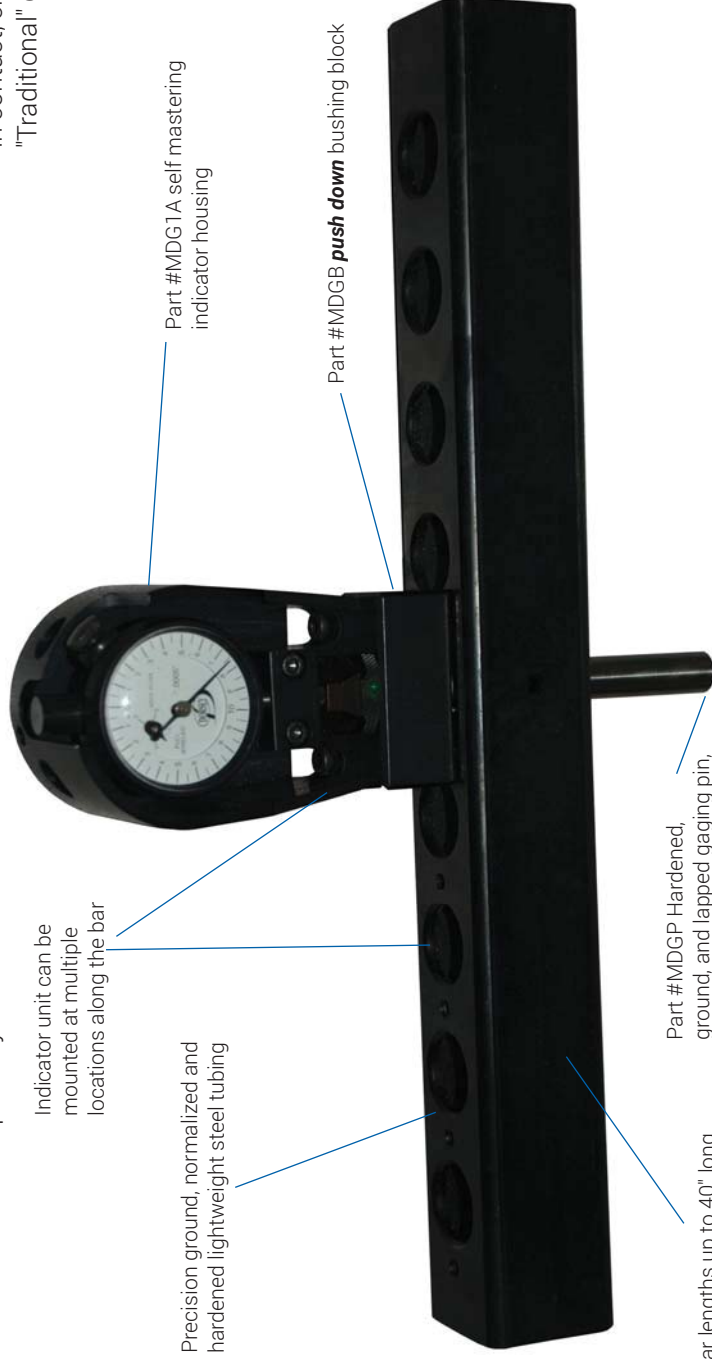
- ✓ Modular design offers maximum versatility.
- ✓ Frame style to suit any application.
- ✓ Heavy duty tube.
- ✓ Self-mastering adjustable and fixed models.
- ✓ A single gage can replace many flush pin gages.
- ✓ Accommodates ANSI AGD #1, #2 dial or digital indicators.
- ✓ Precision ground, stress relieved, and hardened frames and pins.
- ✓ Indicator is sold separately.

Indicator unit can be mounted at multiple locations along the bar

Precision ground, normalized and hardened lightweight steel tubing

Part #MDGP Hardened, ground, and lapped gaging pin, up to 36" long

Bar lengths up to 40" long

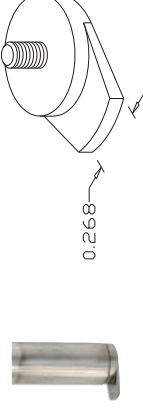


## To order MDG series depth gages (part # on next page):

1. Specify frame part # / bar length.
2. Specify pin length by solid pin part # or threaded pin part #.
3. Specify choice of indicator housing: #1 or #2 adjustable self-mastering housing - pull down, #1 or #2 adjustable self-mastering housing - pull up, #1 or #2 fixed series self-mastering housing.
4. Add desired options: extended rest sets, reversible thread-in contact, choice of any #2 "High Amplification", #1 or #2 "Traditional" dial indicators, or digital indicator.



Dorsey Products -  
proudly made in the USA



Part #5616 offset rest foot



1.5" x 1.5" Heavy Duty tube 3.5 lbs per ft.

BAR LENGTH	HEAVY DUTY FRAME PART #
13.25"	MDGHT13
15.75"	MDGHT15
18.38"	MDGHT18
21.00"	MDGHT21
26.25"	MDGHT30
31.50"	MDGHT40
39.36"	MDGHT47
47.23"	MDGHT49



Gaging pins 7/16" Dia.

MAX GAGING DEPTH	PIN LENGTH	SOLID PIN PART #	THREADED PIN PART #
2"	5.5"	MDGP2	MDGPT2
4"	7.5"	MDGP4	MDGPT4
6"	9.5"	MDGP6	MDGPT6
10"	13.5"	MDGP10	MDGPT10
12"	15.5"	MDGP12	MDGPT12
16"	19.5"	MDGP16	MDGPT16
20"	23.5"	MDGP20	MDGPT20
24"	27.5"	MDGP24	MDGPT24
30"	33.5"	MDGP30	MDGPT30
36"	39.5"	MDGP36	MDGPT36

## Extended rest kits

MDG series depth gage with optional extended rest kit used to provide additional frame clearance



Part # MDGRK2 Rest kit, 2" Tall

FRAME CLEARANCE	PART #
1.5"	MDGRK1
2"	MDGRK2
2.5"	MDGRK3

## Indicator Housing Assemblies

Adjustable self mastering indicator housing assembly

**push down**

(Indicator not included)

AGD 1 Part #MDGPD1

AGD 2 Part #MDGPD2



Adjustable self mastering indicator housing assembly

**push up**

(Indicator not included)

AGD 1 Part #MDGPI1

AGD 2 Part #MDGPI2



Fixed series self mastering indicator housing assembly for AGD # 1, #2 or digital indicators

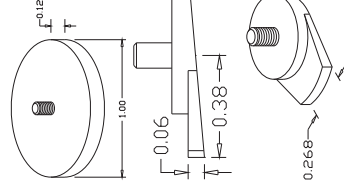
(Indicator not included)

Part #MDGF



## REVERSIBLE THREAD IN CONTACT

Requires MGPT series threaded pin



PART #	DESCRIPTION
5615	1" Disc Contact
5616	.75" Reversible Contact

Gaging used for solving your largest accuracy measurement problems!

This "ultra large diameter gage and setting master series" was developed to measure part sizes beyond those of the Dorsey Metrology traditional large diameter gage family. The ultra large series measures large parts in the range from 60"/1500mm to 240"/6000mm. These instruments are designed to be accurate, rigid, stable, lightweight, and durable.

**Please supply Dorsey with part print for quoting. Requires design charge and design approval.**



Dorsey has built a reputation as a leader in the field of large component measurement. Our experience brings together the largest selection of precise linear measurement movements, frame configurations, materials, contact point shapes, rest designs, and other accessories; all with the knowledge of how to apply them to any large part inspection requirement. With our modular design, it is possible to solve the inspection of almost any part configuration such as; inside/outside diameters, ID/OD grooves, bearing raceways, conical and angular shapes. Applications for these instruments include inspection of large elements used in generators, turbines, aircraft engine housings, windmill parts, large bearings, large gears, large shaft lengths, and ship building apparatus.



**Available in Carbon Fiber**

Carbon fiber gage

Measurement range 12" - 132" (3048 - 3353mm)

Weight 10.5lbs/4.76kg

Carbon fiber diameter gages are lighter weight, more thermally stable, and structurally stronger.

**ADJUSTABLE INSIDE/OUTSIDE PITCH DIAMETER GAGE**



**ADJUSTABLE ID/OD DIAMETER**



**INTERNAL BEARING RACEWAY GAGE**



**EXTERNAL BEARING RACEWAY GAGE**

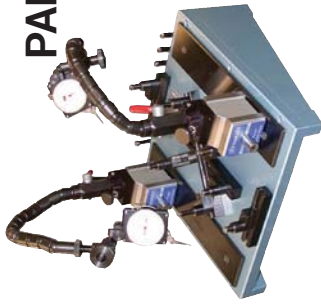


*Available in Carbon Fiber*

**SETTING MASTER**



The rotoround is an adjustable fixture used to check concentricities, runout, and/or TIR of one or more surfaces to a basic diameter. Three precision bearings set the primary datum plane and support the weight of the part while 2 roller bearings mounted on the angled base define the circular datum. Indicators then contact the part as it is being rotated to determine various parameters.



### PART# CPF

For parts 1-5" (25mm-130mm) in diameter. Fixture includes:

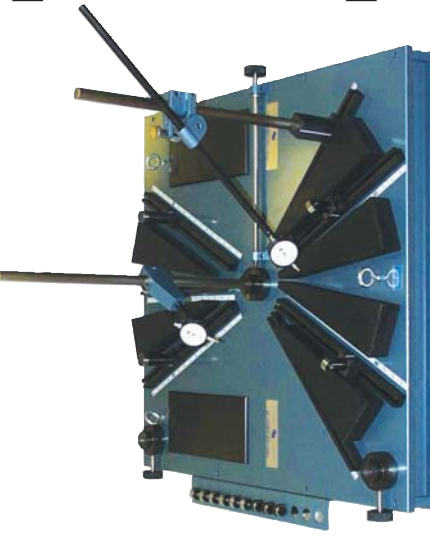
- ✓ .0001" grad. large format double dial test indicator.
- ✓ .00005" grad. large format double dial test indicator.
- ✓ Two sets of adjustable load bearings (3 each).
- ✓ Two sets of banking bearings (2 each): bearing number 9028 (.25" OD x .12" thick), bearing number 2426 (.312" OD x .12" thick).
- ✓ 15 degree angled base plate.
- ✓ Tool set with holder.
- ✓ Wooden storage box.

For parts 3-12" (75mm-300mm) in diameter with maximum weight of 150 lbs. (70Kg). Fixture includes:

- ✓ One .0005" grad. AGD group 2 dial indicator.
- ✓ Two .0001" grad. AGD group 2 dial indicator.
- ✓ One magnetic base stand.
- ✓ One indicating unit with right angle transfer.
- ✓ One adjustable height stand.
- ✓ Three sets of adjustable load bearings in .50" increments (3 each) bearing number 9020 .866 OD x .406" thick.
- ✓ One set of banking bearings (2 each): bearing number 9018 (.75" OD x .281" thick).
- ✓ 15 degree angled base plate with adjustable bridge gantry.
- ✓ Tool set with holder.
- ✓ Wooden shipping/storage case.



### PART# CPF-1



### PART# CPF-2

For parts 10-30" (250mm-760mm) in diameter with maximum weight up to 1000 lbs. (450Kg). Fixture includes:

- ✓ Two .0005" grad. AGD group 2 dial indicator.
- ✓ One magnetic base stand.
- ✓ One adjustable pole stand.
- ✓ Three sets of adjustable load bearings in .50" increments (3 each).
- ✓ One set of banking bearings (2 each): bearing number 9029 (1.10" OD x .562" thick).
- ✓ 15 degree angled base plate.
- ✓ Tool set with holder.
- ✓ Wooden shipping/storage crate.





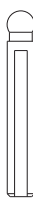


### PART# P-CPF-33824








As described in Pratt & Whitney overhaul manual, similar to CPF-2 but features:

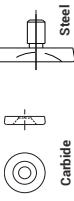


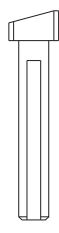

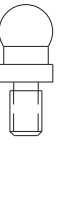
- ✓ Canted base.
- ✓ Rubber bumpers.
- ✓ Special bearing set.
- ✓ Additional post location.

Dorsey also manufactures a line of portable concentricity fixtures for use if your part cannot be placed on a CPF fixture. Contact us for details.

## REPLACEMENT CONTACTS

CONTACTS	PART #	MATERIAL
Pin (Reference) 	4060-P	Steel
Pin (Gaging) 	4030-P	Steel
One Way Radius (Reference) 	4060-OWR-S	Steel
One Way Radius (Gaging) 	4030-OWR-S	Steel
.187" Dia. Ball (Reference) 	4060-187-B	Carbide
.187" Dia. Ball (Gaging) 	4030-187-B	Carbide
.250" Dia. Ball (Reference) 	4060-250-B	Carbide

GAGING CONTACTS	PART #	MATERIAL
.250" Dia. Ball 	4030-250-B	Carbide
Shovel (Reference) 	4060-SS	Steel
Shovel 	4030-SS	Steel
Extended Shovel 	4030-CS	Carbide
GTE 	4030-ES	Carbide
Threaded 	4060-ES	Carbide
Threaded 	4060-M	Steel
	4030-M	Steel

CONTACTS	PART #	MATERIAL
LDAR-6 or 8 .50" Dia. Disc 	7062	Steel
LDAR .63" Dia. Disc 	7530	Carbide
LDAR Pin 	7533	Steel
LDAR Shovel 	7534	Carbide
LDAR .187" Dia. Ball 	7534-P	Steel
Thread in Ball Contact 	7534-S	Steel
	7534-CS	Carbide
	7534-187B	Carbide
	4082-187B	Steel

ABBREVIATION	DESCRIPTION	ABBREVIATION	DESCRIPTION
AA	Angular Anvil, SMF or SSM	ES	Extended Shovel, Carbide, Gage
ARS	Angular Anvil Reversible, SMA or SMVA	FC	Frame Clearance, Adjustable Gage
BF	Bridge Frame, Gage	FC125	Frame Clearance 1.25", Fixed Gage
CB	Carbide Ball Contact, Gage	FC175	Frame Clearance 1.75", Fixed Gage
CD	Carbide Disc .50" or .62 Dia., Gage	GC025	Gaging Contact Travel .025"
CF	C Frame, Gage	GC050	Gaging Contact Travel .050"
CF	C Frame Outtrigger, Set Master	DDR	Double Depth Rest
CS	Carbide Shovel Contact, Gage	GC075	Gaging Contact Travel .075"
DF-11	Donut Frame, 11" ID	GD3	Gaging Depth 3", Gage
DF-7	Donut Frame, 7" ID	GD4	Gaging Depth 4", Gage
DF-9	Donut Frame, 9" ID	GD5	Gaging Depth 5", Gage
DFS	Donut Frame, Special	GH	Gaging Height .5", Set Master

ABBREVIATION	DESCRIPTION
GH5	Gaging Height .5", Set Master
HCB	Half Carbide Ball, Gage
HF	Hump Frame, Gage
HRL	Heavy Duty Reverse Reference Head, LD/LTF
IRS	Intermediate Rest Surfaces, Set Master
NI	No Indicator, Gage
R25	Restrictor Width .25", Set Master
R62	Restrictor Width .62", Set Master
RL	Reverse Action Lever
RR	Roller Rests
SD	Steel Disc .44" or .62" Dia.
SP	Steel Pin Contact, Gage