



LDF Series



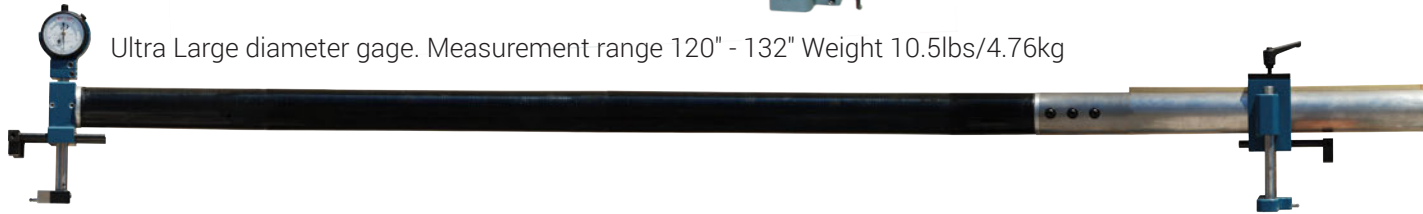
LDVA Series



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, I.D. / O.D. 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.



LDB Series



LDR Series



LDRA Series



LDAR - Midget Reed Series



LDF-PD pitch diameter gage



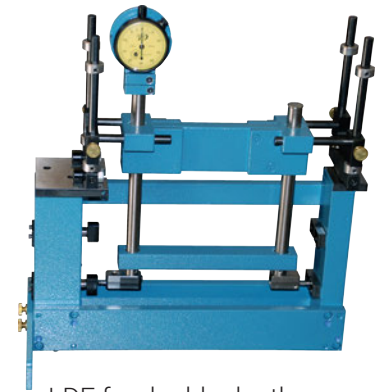
LDF with hump frame



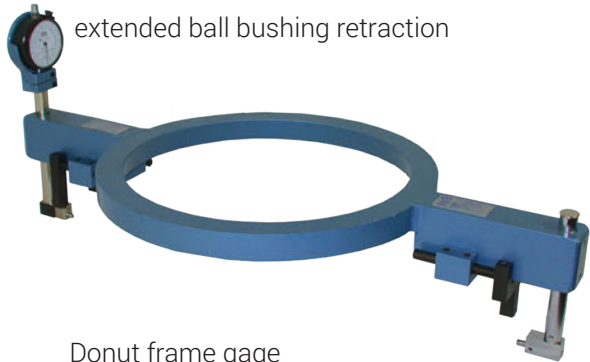
LD-EBB Series
extended ball bushing retraction



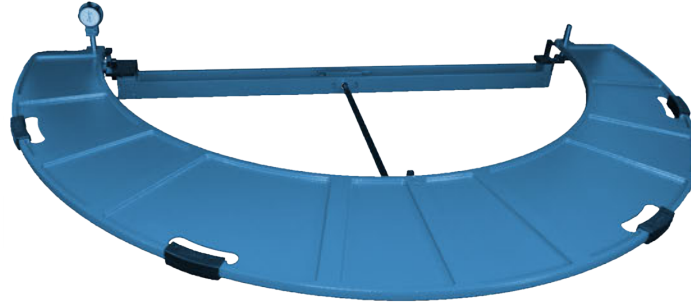
LD - Swing gage, where the heads rotate inward for long retraction



LDF for double depths

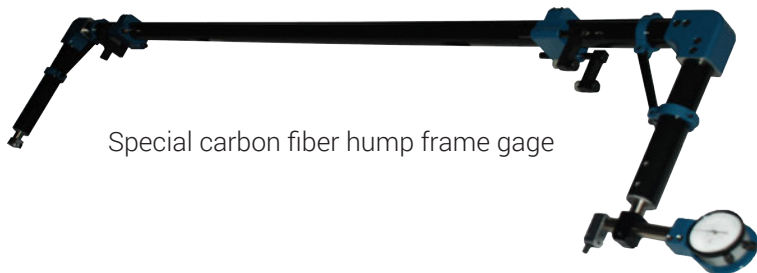


Donut frame gage



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

LDA SERIES- ID/OD ADJUSTABLE FRAME

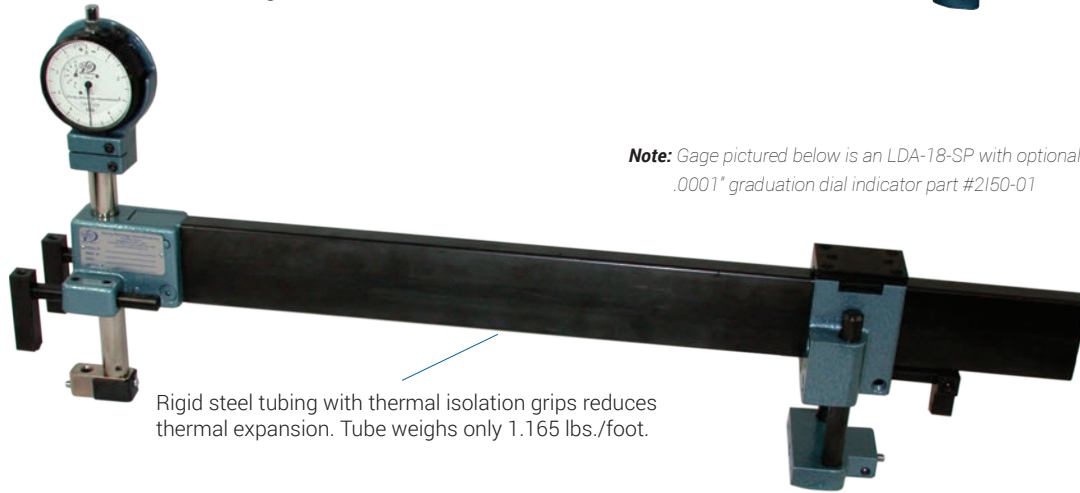
Our most popular adjustable series of ID/OD gage uses rigid steel tubing, cast end blocks, and a precision right angle transfer mechanism similar to our bore gages which give accurate and sensitive readings.

Available in Carbon Fiber



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

Lightweight carbon fiber material. Approximately 50% lighter than steel.



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

Rigid steel tubing with thermal isolation grips reduces thermal expansion. Tube weighs only 1.165 lbs./foot.



- ✓ 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.



Optional perpendicular indicator unit

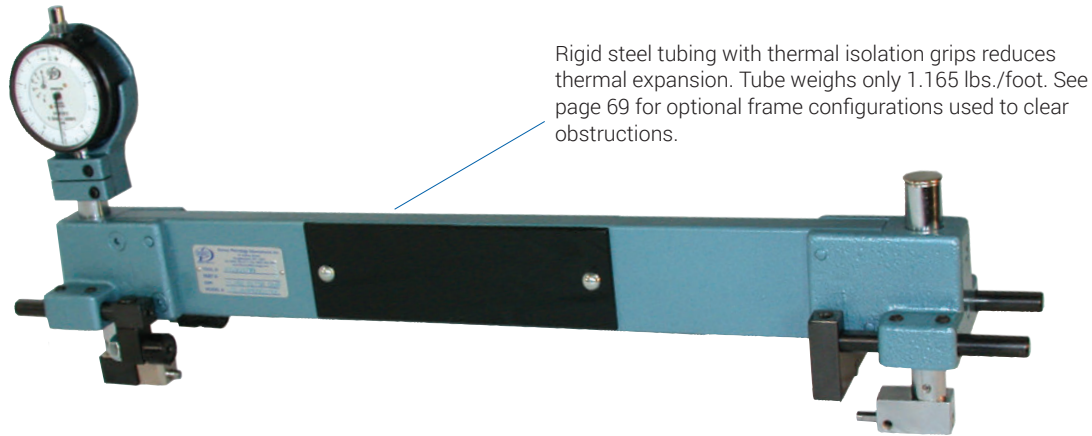
See page 72 for SMA series companion setmasters

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
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.



Rigid steel tubing with thermal isolation grips reduces thermal expansion. Tube weighs only 1.165 lbs./foot. See page 69 for optional frame configurations used to clear obstructions.



Lightweight carbon fiber material. Approximately 50% lighter than steel.

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.

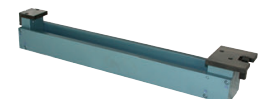


PART #	INCH	METRIC (mm)	STEEL PIN	CARBIDE BALL	STEEL SHOVEL	CARBIDE SHOVEL	EXTENDED CARBIDE SHOVEL	CARBON FIBER
	RANGE	RANGE	SP	CB	SS	CS	ES	CF
LDF-12	6 to 12	150 to 300	LDF-12-SP	LDF-12-CB	LDF-12-SS	LDF-12-CS	LDF-12-ES	LDF-12-XX-CF
LDF-18	12 to 18	301 to 460	LDF-18-SP	LDF-18-CB	LDF-18-SS	LDF-18-CS	LDF-18-ES	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



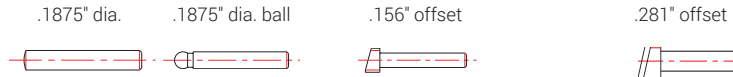
Optional perpendicular indicator unit

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.



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
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

Available in Carbon Fiber

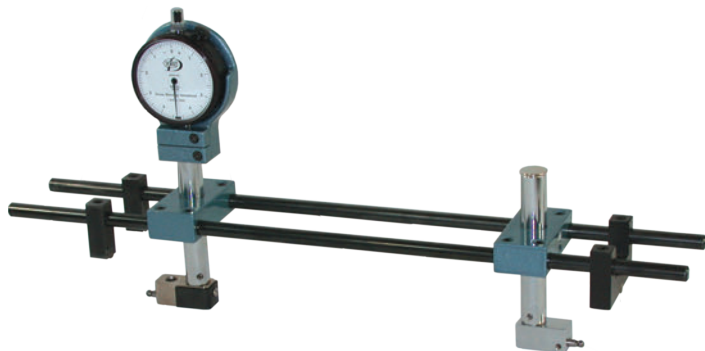


***Note:** Gage pictured below is an LDVA-18-SP-025 with steel pin contacts and optional high amplification dial indicator part #21100-025

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".



PART #	INCH	METRIC (mm)	STEEL PIN	CARBIDE BALL	STEEL SHOVEL	CARBIDE SHOVEL	EXTENDED CARBIDE SHOVEL
	RANGE	RANGE	SP	CB	SS	CS	ES
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



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

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 travel is that of indicator selected

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



**Note: Gage pictured below is an LDDA-24-CB with carbide ball contacts and optional high amplification dial indicator part #2150-01*

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



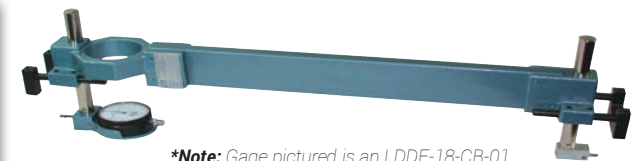
See page 72 for SMA series companion setmasters

LDDF SERIES- DIRECT READING FIXED FRAME

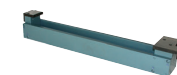
LDDF Series gages include all the same features as the LDDA shown above except both cast end blocks are rigidly bolted and pinned in place. This makes the LDDF stronger and lighter.

- ✓ 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*

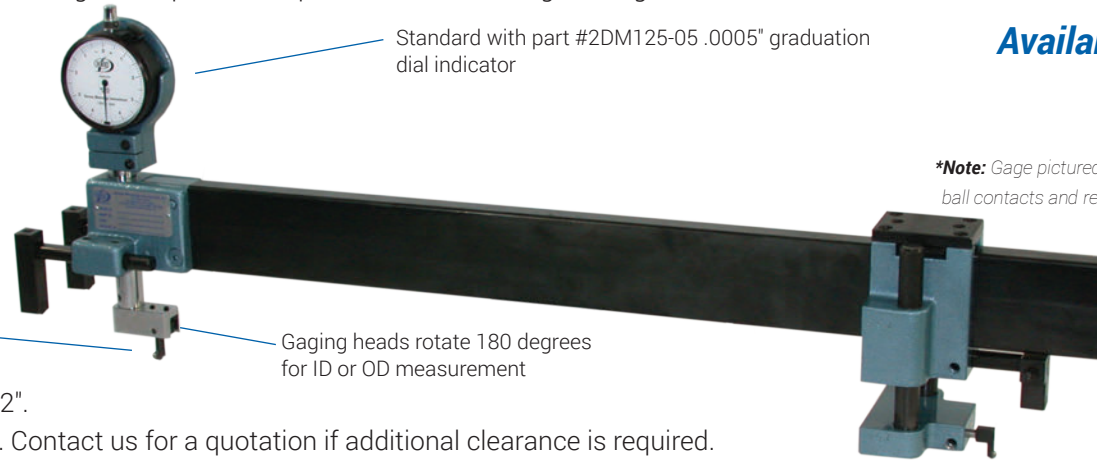


See page 73 for SMF series companion setmasters

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

Available in Carbon Fiber

**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*



See page 72 for SMA series companion setmasters

- ✓ 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.

PART #	TYPE	INCH	METRIC (mm)	CARBIDE BALL	CARBIDE HALF BALL	CARBON FIBER
		RANGE	RANGE	CB	HB	CF
LDLTA-12	Adjustable	6 to 12	150 to 300	LDLTA-12-CB	LDLTA-12-HB	LDLTA-12-XX-CF
LDLTF-12	Fixed	6 to 12	150 to 300	LDLTF-12-CB	LDLTF-12-HB	LDLTF-12-XX-CF
LDLTA-18	Adjustable	12 to 18	301 to 460	LDLTA-18-CB	LDLTA-18-HB	LDLTA-18-XX-CF
LDLTF-18	Fixed	12 to 18	301 to 460	LDLTF-18-CB	LDLTF-18-HB	LDLTF-18-XX-CF
LDLTA-24	Adjustable	18 to 24	461 to 610	LDLTA-24-CB	LDLTA-24-HB	LDLTA-24-XX-CF
LDLTF-24	Fixed	18 to 24	461 to 610	LDLTF-24-CB	LDLTF-24-HB	LDLTF-24-XX-CF
LDLTA-30	Adjustable	24 to 30	611 to 760	LDLTA-30-CB	LDLTA-30-HB	LDLTA-30-XX-CF
LDLTF-30	Fixed	24 to 30	611 to 760	LDLTF-30-CB	LDLTF-30-HB	LDLTF-30-XX-CF
LDLTA-36	Adjustable	30 to 36	761 to 915	LDLTA-36-CB	LDLTA-36-HB	LDLTA-36-XX-CF

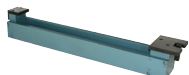
PART #	TYPE	INCH	METRIC (mm)	CARBIDE BALL	CARBIDE HALF BALL	CARBON FIBER
		RANGE	RANGE	CB	HB	CF
LDLTF-36	Fixed	30 to 36	761 to 915	LDLTF-36-CB	LDLTF-36-HB	LDLTF-36-XX-CF
LDLTA-42	Adjustable	36 to 42	916 to 1070	LDLTA-42-CB	LDLTA-42-HB	LDLTA-42-XX-CF
LDLTF-42	Fixed	36 to 42	916 to 1070	LDLTF-42-CB	LDLTF-42-HB	LDLTF-42-XX-CF
LDLTA-48	Adjustable	42 to 48	1071 to 1220	LDLTA-48-CB	LDLTA-48-HB	LDLTA-48-XX-CF
LDLTF-48	Fixed	42 to 48	1071 to 1220	LDLTF-48-CB	LDLTF-48-HB	LDLTF-48-XX-CF
LDLTA-54	Adjustable	48 to 54	1221 to 1370	LDLTA-54-CB	LDLTA-54-HB	LDLTA-54-XX-CF
LDLTF-54	Fixed	48 to 54	1221 to 1370	LDLTF-54-CB	LDLTF-54-HB	LDLTF-54-XX-CF
LDLTA-60	Adjustable	54 to 60	1371 to 1525	LDLTA-60-CB	LDLTA-60-HB	LDLTA-60-XX-CF
LDLTF-60	Fixed	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

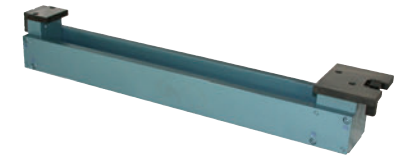
www.dorseymetrology.com

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	METRIC (mm)	STEEL PIN	CARBIDE BALL	STEEL SHOVEL	CARBIDE SHOVEL	CARBON FIBER
	RANGE	RANGE	SP	CB	SS	CS	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 accomodate 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
LDAR-6	2" - 6"	50 - 150mm	LDAR-6-SD	LDAR-6-CD
LDAR-8	2" - 8"	50 - 200mm	LDAR-8-SD	LDAR-8-CD
7062	.437 Diameter Steel Conical Disc Contact			
7530	.500 Diameter Carbide Conical Disc Contact			

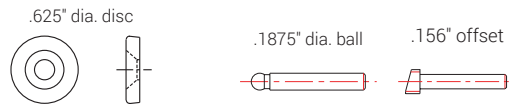
**Note: Gage pictured is LDAR-8 with an optional .0001" graduation dial indicator part #2150-01*



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



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



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. This 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*

- ✓ 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

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

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*

- ✓ 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

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)	
7530	.625" Dia. Carbide Disc Contact (Each)	
4082-B1875	.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

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.



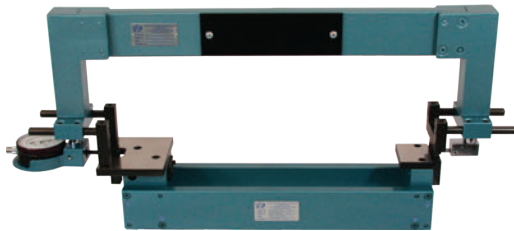
DONUT FRAME

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 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-B4-2I9-01	.0001"	.009"
DS-B4-2DM025-01	.0001"	.025"
DS-B4-2I50-01	.0001"	.050"
DS-B4-2I100-025	.00025"	.100"
DS-B4-2I100-05	.0005"	.100"
DS-B4-2I40-05	.0005"	.040"
DS-B4-2I40-10	.001"	.040"
DS-B4-S2I/M	.0001"/0.0025mm	.010"/.25mm
DS-B4-2I02-002mm	0.002mm	0.2mm
DS-B4-2I10-002mm	0.002mm	1.0mm
DS-B4-2I25-005mm	0.005mm	2.5mm
DS-B4-2I10-01mm	0.010mm	1.0mm

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

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

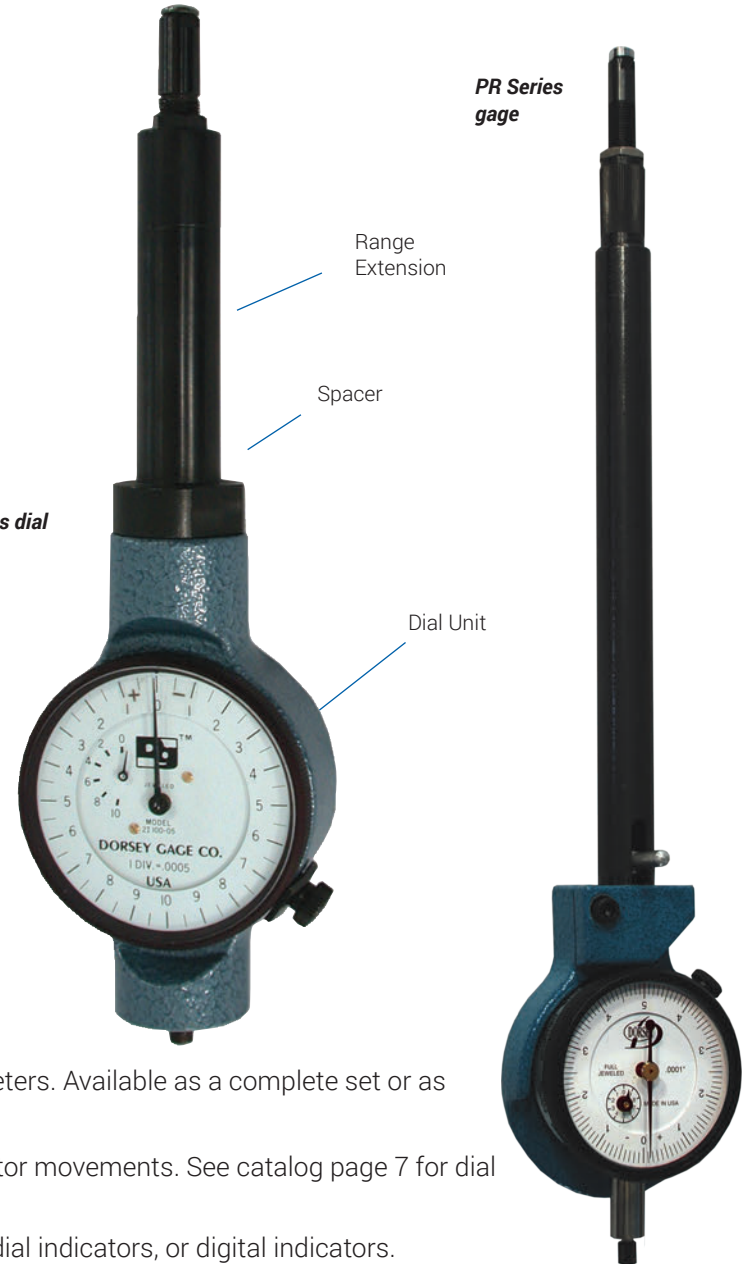


PIN GAGE MASTERS "PM SERIES"		
PART #	RANGE	
	INCHES	METRIC
PM-6	6 - 12"	150 to 300
PM-12	12 - 18"	300 to 450
PM-18	18 - 24"	450 to 600
PM-24	24 - 30"	600 to 750
PM-30	30 - 36"	750 to 900

RETRACTABLE PIN GAGE "PR SERIES"		
PR6	6 - 12"	150 to 300
PR12	12 - 18"	300 to 450
PR18	18 - 24"	450 to 600
PR24	24 - 30"	600 to 750
PR30	30 - 36"	750 to 900

**Note: Gage pictured features DS-B4-2I100-05 dial unit and DS-B4-81853 9" spacer*

DS-B4 series dial pin gage



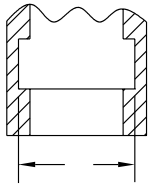
Gage kits include .0005" graduation dial indicator. Ball contacts are available for measuring pitch diameters. Available as a complete set or as an individual gage with a 3" range of adjustment.

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.

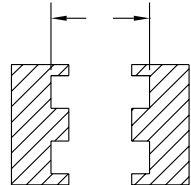
PR series pin gages are available with a choice of any of Dorsey's #2 "High Amplification", "Traditional" dial indicators, or digital indicators.

RETRACTABLE PIN GAGES

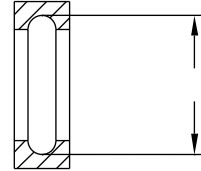
Adjustable inside diameter pin gages are used to check straight bores, grooves, spherical radii, and spline and gear pitch diameters. A variety of interchangeable threaded contacts allows the gage to be altered to suit the application. The gage utilizes the principle and portability of an inside diameter 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

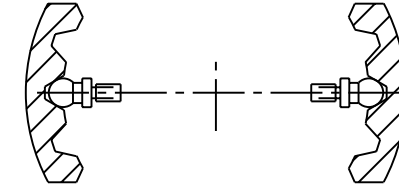
Bore



Groove Diameter



Ball Race Radius Grooves



Pitch Diameter of Gears and Splines

SPECIAL RETRACTABLE PIN AND REST GAGES

Retractable pin gages are specially designed for entry into hard to reach areas and for checking a variety 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