

AP Dynamometer

The world leader in dynamometers
since 1937



CE

DILLON

Force Measurement Equipment

Dillon Dynamometer — Nobody does it better!

Originally designed to measure the tension on telephone wires, the Dynamometer has proven to have limitless versatility as a tension and weight measuring instrument. It is used for such diverse jobs as suspended weighing; mounting cables for bridges; adjusting tension on guy wires; field testing chain, rope, wire—anything requiring precision force or tension measurement.



Utility Lines

Certificate of Calibration

An official Certificate of Calibration traceable to NIST, dated and signed, accompanies each new or factory serviced Dillon Model AP dynamometer. Experienced technicians calibrate each instrument on an individual basis making certain that all parts are carefully adjusted and that every unit is within stated accuracy tolerances before it leaves the factory.

Popular Applications



Utility Lines



Airplane Engines

Load Monitoring



Dillon is the leader in dynamometers with the largest installed population throughout the world. The sturdy design, top grade components and premium coatings make it last for years in severe environments and applications: the pounding aboard military vehicles, rough handling in field measurements and even use underwater! Embraced by industrial contractors across the globe, we are confident the AP will satisfy your most demanding applications.

Worldwide distribution network

Dillon supports its customers with a worldwide distribution network. In addition to the US and Canada, we serve fifty-seven other countries. Every Dillon distributor offers application assistance to sales and product support. Their experienced representatives are knowledgeable experts in the force measurement field and can satisfy virtually any need.

¹ Dillon recommends short intervals in clean water followed with rinse and drain.

Feature for feature — Dillon Dynamometer sets the standard.

Accuracy: $\pm 0.5\%$ of full scale capacity for precise data.

Broadest range of capacities and resolutions are certain to fit your needs.

Wide temperature range for use in nearly any environment (-50 to 140°F / -45 to 60°C)

Large safety factor for overload protection and long life.

No batteries required.

Dial size choice for the best in portability or visibility.

Anti-parallax dial and pointer produce accurate readings from any perspective.

Maximum hand retains peak load point and is easily reset.

Zero control cancels preset loads (backside).

High strength case resists heavy blows.

Generous shackle openings mate with most hooks and hardware.

High specification materials on all load components. Heat treated to tight tolerances.

Durable powder coat paint provides outstanding protection.

Offset load beam eases tension measurement.

Approvals: CE on all capacities excluding 50K.

ASME b30.26 compliant on 20,000 lb (10,000 kg) and below.



5" (125 mm) diameter AP dynamometer includes a rugged ABS plastic carry case with die-cut foam inserts. Capacities of 30,000 lb (15,000 kg) and above are shipped in a heavy-duty reinforced plywood crate. An optional steel carry case is available for 10" (250 mm) diameter dynamometers up to 20,000 lb (10,000 kg) capacity.

Options



Standard Zero positioning

The standard zero position is 9 o'clock for both the 5" and 10" dial sizes. Photo shows a standard position of 9 o'clock.



Nonstandard Zero positioning

Capacities up to 20,000 lb can be supplied with the zero at 12, 3 or 6. Photo shows a nonstandard position of 12 o'clock.

Model AP Mechanical Dynamometer Capacities and Increments

Pound Capacities

5" (125 mm) Dial Size		10" (125 mm) Dial Size	
Part Number	Capacity x Division	Part Number	Capacity x Division
30006-0019	500 x 5	NA	
30006-0027	1000 x 10	30007-0026	1000 x 5
30006-0035	2000 x 20	30007-0034	2000 x 10
30006-0043	4000 x 25	NA	
30006-0050	5000 x 50	30007-0059	5000 x 20
30006-0076	8000 x 50	NA	
30006-0084	10,000 x 100	30007-0083	10,000 x 50
30006-0092	15,000 x 100	NA	
30006-0100	20,000 x 200	30007-0109	20,000 x 100
NA		30784-0017	30,000 x 200
NA		30784-0033	50,000 x 200*

ASME b30.26 compliant on 20,000 lb (10,000 kg) and below.

*Not CE approved.

Kilogram Capacities

5" (125 mm) Dial Size		10" (125 mm) Dial Size	
Part Number	Capacity x Division	Part Number	Capacity x Division
30006-0134	500 x 5	NA	
30006-0159	1000 x 10	30007-0158	1000 x 5
30006-0126	2000 x 20	30007-0125	2000 x 10
30006-0167	4000 x 25	NA	
NA		30007-0174	5000 x 20
30006-0118	10,000 x 100	30007-0117	10,000 x 50
NA		30784-0058	20,000 x 100

Specifications and dimensional details are available from an authorized Dillon Distributor or the website at www.dillon-force.com.

Dillon also manufactures highly accurate electronic dynamometers, crane scales and quick-attach tension meters.



AUTHORIZED DISTRIBUTORS

Ask the experts. Dillon distributors offer complete service capabilities from application assistance to sales and product support. Their experienced representatives are the most knowledgeable experts that you will find in the force measurement industry. We recommend that you consult these capable specialists for all of your measuring needs.

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Force Measurement Equipment

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AP Dynamometer Specifications

DILLON

CE

Pound Capacities

5" (125 mm) Dial Size		10" (250 mm) Dial Size		Ultimate Safety Factor
Part Number	Cap x Division Size	Part Number	Cap x Division Size	
LOW	30006-0019 500 x 5	N/A		5:1
	30006-0027 1,000 x 10	30007-0026 1,000 x 5		5:1
	30006-0035 2,000 x 20	30007-0034 2,000 x 10		5:1
	30006-0043 4,000 x 25	N/A		5:1
	30006-0050 5,000 x 50	30007-0059 5,000 x 20		5:1
	30006-0076 8,000 x 50	N/A		
	30006-0084 10,000 x 100	30007-0083 10,000 x 50		5:1
MED	30006-0092 15,000 x 100	N/A		
	30006-0100 20,000 x 200	30007-0109 20,000 x 100		5:1
HIGH	N/A	30784-0017 30,000 x 200		5:1
	N/A	30784-0033 50,000 x 200*		3:1

*Not CE approved.

ASME b30.26 compliant on 20,000 lb (10,000 kg) and below.

Kilogram Capacities

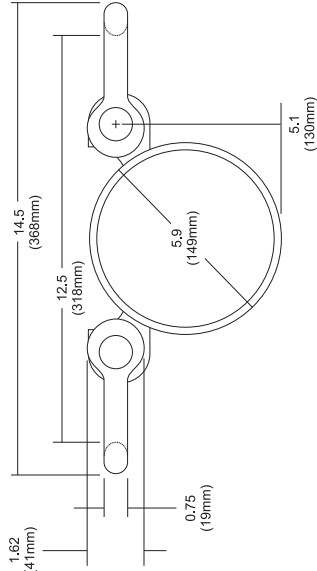
5" (125 mm) Dial Size		10" (250 mm) Dial Size		Ultimate Safety Factor
Part Number	Cap x Division Size	Part Number	Cap x Division Size	
LOW	30006-0134 500 x 5	N/A		
	30006-0159 1000 x 10	30007-0158 1000 x 5		5:1
	30006-0126 2000 x 20	30007-0125 2000 x 10		5:1
	30006-0167 4000 x 25	N/A		5:1
	N/A	30007-0174 5000 x 20		5:1
MED	30006-0118 10000 x 100	30007-0117 10000 x 50		5:1
HIGH	N/A	30784-0058 20000 x 100		4:1

Model AP Dynamometer Dimensions

Dimensions in inches (mm)
Drawing scales differ between capacities
Dimensions subject to manufacturer /supplier tolerances and
are subject to change without notice.

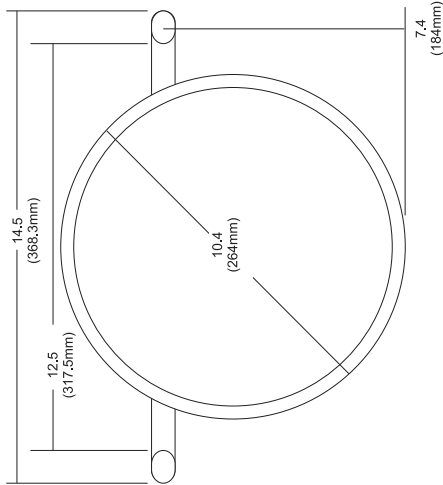
Low & Medium Capacities 500-20,000 lb / 200-10,000 kg

5" dial design



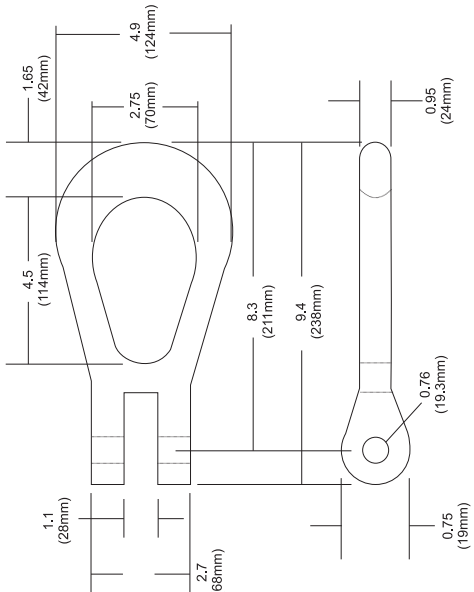
Front view

10" dial design

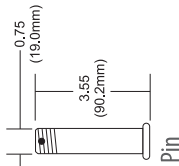
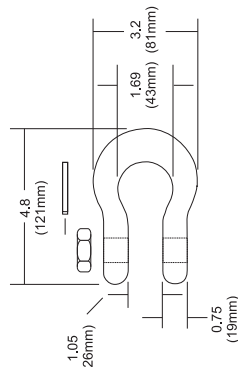


Front view

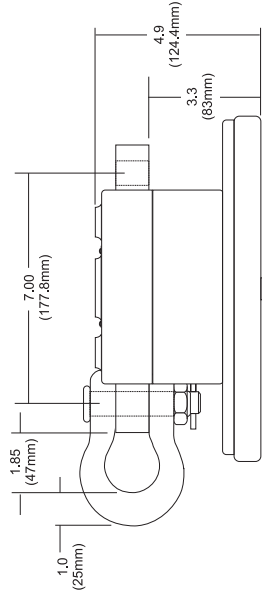
Optional Oversize Shackle



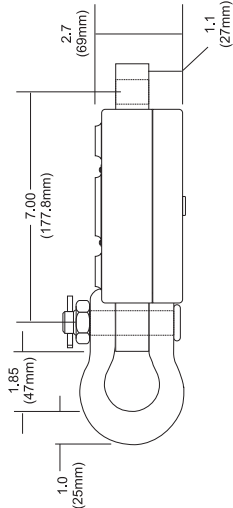
Standard Shackle



Pin



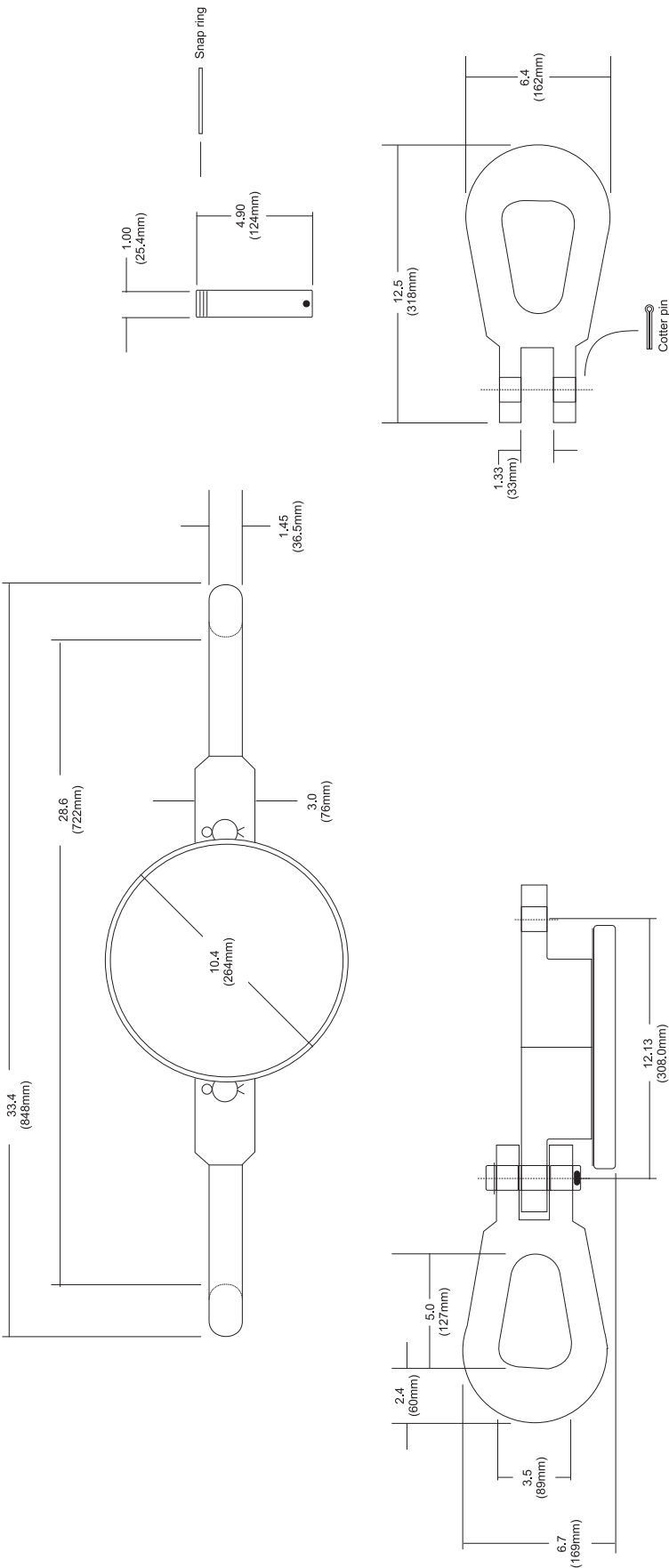
Side view



Side view

High Capacities

30,000-50,000 lb / 15,000-20,000 kg



Model AP Mechanical Dynamometer

Accuracy: $\pm 0.5\%$ of capacity

Temperature Range: -50° to 140° F (-45° to 60° C)

Ultimate Safety Factor:

See table on cover for minimum USF

Construction:

Pressure bar—

High-grade E4340 alloy steel or 7075-T651 aluminum

Shackles –

A4140 forged steel (machined from E4340 steel)

Shackle pins –

Machined from E4340 steel or 300 m steel

Case Housing:

5" models are equipped with high strength composite plastic case.

10" models use cast aluminum enclosure.

Corrosion Protection: Pressure bar protected with durable powder coat paint. Shackles and pins are electroless nickel plated. All integral machining and fasteners are produced from noncorrosive materials or have suitable plating.

Zero Control: Zero up to 20% of capacity. Zeroed load must be considered as part of ultimate load.

Calibration: Traceable to NIST.

Documentation: Includes users guide and signed calibration certificate.

Carry Case/Crate:

Low/Med capacity 5" dial – includes plastic carry case

Low/Med capacity 10" dial – optional steel carry case

All high capacity – includes reinforced plywood crate

Periodic Proof Loads: Controlled 150% proof loads permitted annually.

Approval: CE on all capacities excluding 50,000 lb

ASME b30.26 compliant on 20,000 lb (10,000 kg) and below

Warranty: 2 years parts and labor

Shipping and packing (approximate weights):

5" Low and Med Capacities

Net weight	9 lb
Shipping weight	15 lb
Shipping box	16" x 11" x 7"

10" Low and Med Capacities

Net weight	10 lb
Shipping weight	16 lb
Shipping weight (with optional steel case)	26 lb
Shipping box	14" x 14" x 7"

30,000 – 50,000 lb (20,000 kg) High Capacity

Net weight	64 lb
Shipping weight	98 lb
Shipping crate	37.5" x 13" x 10.5"



AUTHORIZED DISTRIBUTORS

Ask the experts. Dillon distributors offer complete service capabilities from application assistance to sales and product support. Their experienced representatives are the most knowledgeable experts that you will find in the force measurement industry. We recommend that you consult these capable specialists for all of your measuring needs.

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