

# AP Dynamometer

The world leader in dynamometers  
since 1937



**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.



## ***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***

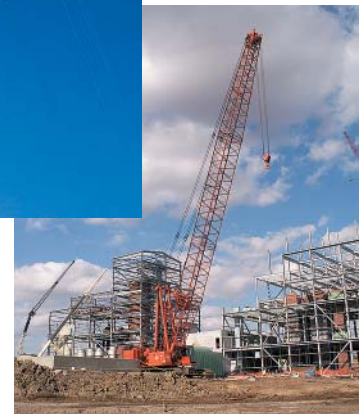


*Utility Lines*



*Towers*

*Material Handling*



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 complete service capabilities from application assistance to sales and product support. Their experienced representatives are knowledgeable experts in the force measurement field and can satisfy virtually any need.

# 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 30K and 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.

<sup>1</sup> Dillon recommends short intervals in clean water followed with rinse and drain.

## Options



### Zero positioning

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



### Klaxon signal alarm

Mounted on rear of the Dynamometer and sounds an alarm at a preset load point.



Dillon also manufactures electronic dynamometers and quick-attach tension meters.

## Model AP Mechanical Dynamometer Capacities and Increments

### POUND CAPACITIES

5" (125 mm) Dial Size		10" (250 mm) Dial Size	
Part Number	Capacity x Division Size	Part Number	Capacity x Division Size
30006-0019	500 x 5	NA	
30006-0027	1,000 x 10	30007-0026	1,000 x 5
30006-0035	2,000 x 20	30007-0034	2,000 x 10
30006-0043	4,000 x 25	NA	
30006-0050	5,000 x 50	30007-0059	5,000 x 20
30006-0076	8,000 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

125 mm (5") Dial Size		250 mm (10") Dial Size	
Part Number	Capacity x Division Size	Part Number	Capacity x Division Size
30006-0134	500 x 5	NA	
30006-0159	1,000 x 10	30007-0158	1,000 x 5
30006-0126	2,000 x 20	30007-0125	2,000 x 10
30006-0167	4,000 x 25	NA	
NA		30007-0174	5,000 x 20
30006-0118	10,000 x 100	30007-0117	10,000 x 50
NA		30784-0058	20,000 x 100

For dimensional information and other specifications, see the Model AP Dynamometer specifications sheet available from an authorized Dillon distributor, the website at [www.dillonforce.com](http://www.dillonforce.com) or call the factory.

### 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.

### DILLON USA

1000 Armstrong Drive  
Fairmont, MN 56031

**Toll-Free:** (800) 368-2031

**Phone:** (507) 238-8796

**Fax:** (507) 238-8258

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



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[www.dillon-force.co.uk](http://www.dillon-force.co.uk)

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Force Measurement Equipment

A division of Avery Weigh-Tronix, LLC

# Model AP Mechanical Dynamometer

**Accuracy:** ± 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 User's Guide and signed calibration card.

**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 30,000 lb and 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 <i>(with optional steel case)</i>	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"



# AP Dynamometer Specifications

**DILLON**



**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		
MED	30006-0084	10,000 x 100	30007-0083	10,000 x 50	5:1
	30006-0092	15,000 x 100	N/A		
HIGH	30006-0100	20,000 x 200	30007-0109	20,000 x 100	5:1
	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

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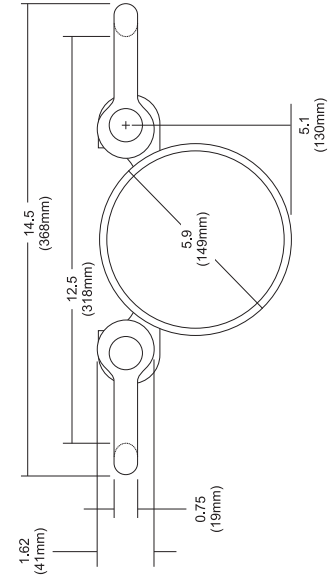
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# Model AP Dynamometer Dimensions

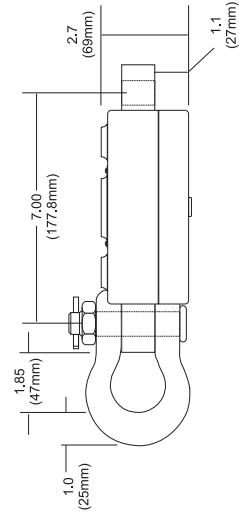
Dimensions in inches (mm)  
 Drawing scales differ between capacities  
 Dimensions subject to manufacturer /supplier tolerances and  
 are subject to change without notice.

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

5" dial design

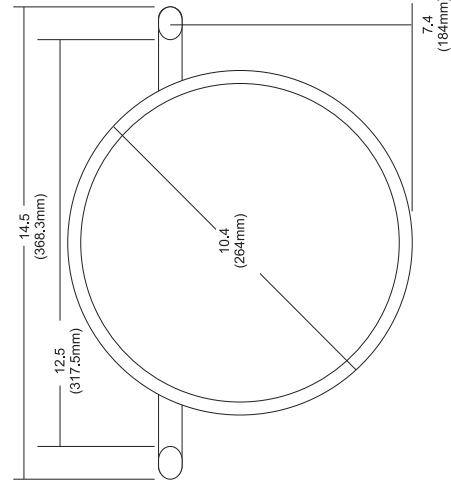


Front view

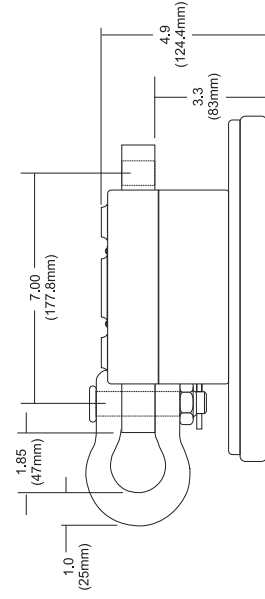


Side view

10" dial design

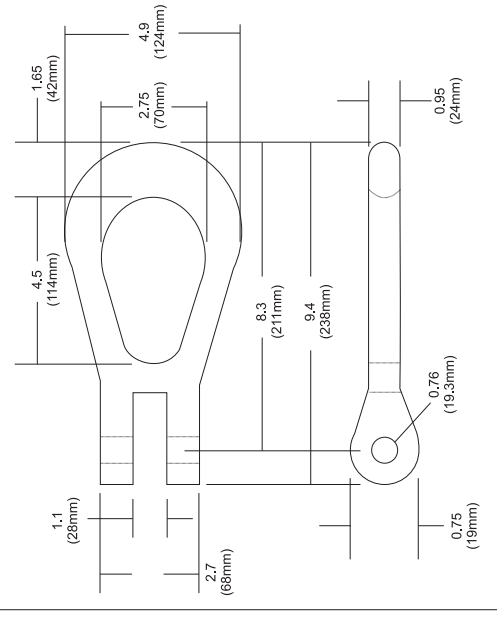


Front view

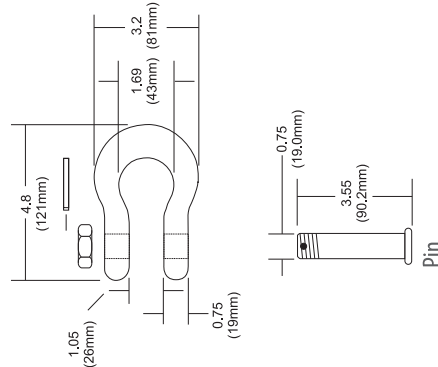


Side view

Optional Oversize Shackle

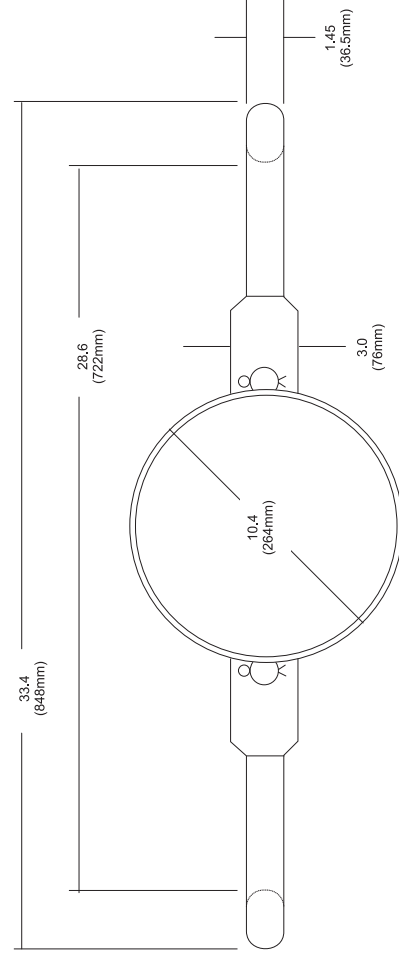


Standard Shackle



Pin

## High Capacities 30,000-50,000 lb / 15,000-20,000 kg



For smaller, lighter and/or anchor shackles see Dillon APxtreme.

