Willrich Precision Ph: 866-945-5742
email:sales@willrich.com

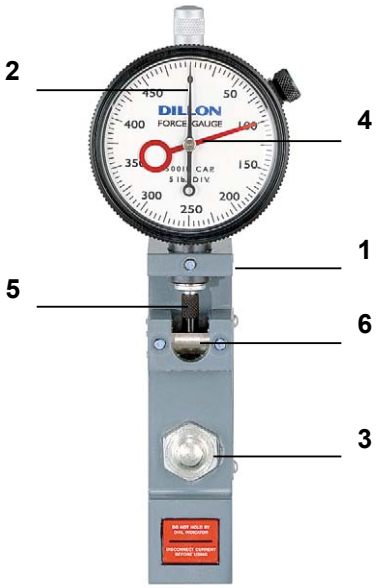
Slim line design for added versatility.

The Model U Force Gauge is an accurate (±1% of full range) mechanical compression-measurement instrument. Its slim-line design has repeatedly proven valuable in installations where space is at a premium.

The versatility of this simple instrument is demonstrated by the fact that it can be used as a hand-held device, permanently mounted on a flat surface plate, or used in test fixtures.

How the U Force Gauge Works

The Dillon Model U Force Gauge employs a deflection beam machined from aircraft quality alloy steel and heat treated to develop optimum strength and spring characteristics. A precision dial indicator is mounted at the null point of this beam.



1. Deflection beam
2. Indicator with zero at 6:00 position
3. Pressure fitting
4. Maximum pointer (optional)
5. Indicator plunger
6. Slanted anvil

Compression force is normally applied against a single pressure fitting mounted on the upper half of the beam. (For accurate calibration, designate the type of pressure fitting you wish to use with the U Force Gauge. They are of four types: domed, cupped, flat, or a flat nylon insert. Flat bottom gauges require only one fitting).

When load is exerted, the beam moves downward causing a slanted anvil on the free end to push against the indicator plunger. The indicator reading is a direct representation of the applied load.

Dillon offers a capacity for every job

U Force Gauges are available for measurement in pounds or kilograms. There are 6-pound capacities ranging from 25 x .25 to 5,000 x 50 lb. The 4 kilogram capacities range from 10 x .1 to 500 x 5 kg.

Dillon also offers high-capacity gauges with pounds capacities from 500 to 5,000 lb and a metric model with a capacity of 500 kg. High-capacity gauges all have flat-bottom design, and each includes one pressure fitting of your choice.

Options

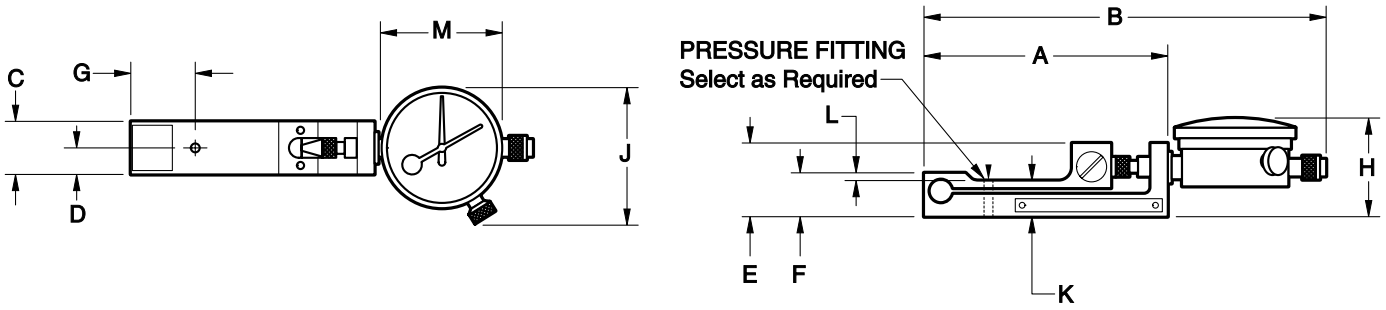
Zero position—The zero position on the indicator dial can be factory positioned at 12 o'clock, 3 o'clock, 6 o'clock, or 9 o'clock. The standard position is the 6 o'clock position.

Maximum pointer—Model U Force Gauges can include a maximum pointer which remains at peak load until it is reset.

Shockless dial indicator—Offers added protection in applications where force is applied or released rapidly.

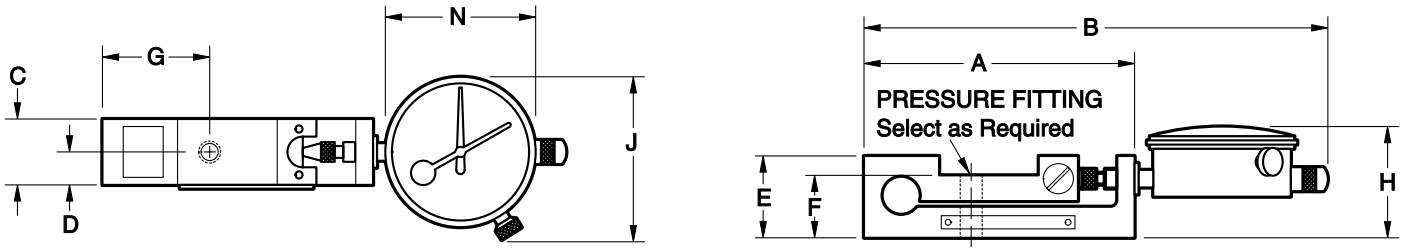
Dial orientation—The dial indicator can be factory positioned at 0° (standard), 90°, 180°, 270° clockwise. Photos on this page show standard dial orientation.

Note: maximum pointer and shockless dial indicator cannot be offered on the same unit.



Low-Range Flat-Bottom Model U Force Gauge

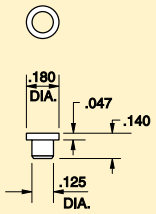
Part No.	Pounds	Part No.	Kilograms	A in. (mm)	B in. (mm)	C in. (mm)	D in. (mm)	E in. (mm)	F in. (mm)	G in. (mm)	H in. (mm)	J in. (mm)	K in. (mm)	L in. (mm)	M in. (mm)
30354-0017	25 x .25	30354-0066	10 x .1	3.28 (83.3)	5.50 (139.6)	.73 (18.5)	.36 (9.1)	.97 (24.6)	.56 (14.2)	.90 (22.8)	1.40 (35.5)	1.87 (47.5)	.46 (11.7)	.094 (2.4)	1.67 (42.4)
30354-0033	100 x 1	30354-0082	50 x .5	3.28 (83.3)	5.50 (139.6)	.73 (18.5)	.36 (9.1)	.97 (24.6)	.56 (14.2)	.90 (22.8)	1.40 (35.5)	1.87 (47.5)	.46 (11.7)	.094 (2.4)	1.67 (42.4)
30354-0058	250 x 2.5	30354-0090	100 x 1	3.28 (83.3)	5.50 (139.6)	.73 (18.5)	.36 (9.1)	.97 (24.6)	.56 (14.2)	.90 (22.8)	1.40 (35.5)	1.87 (47.5)	.46 (11.7)	.094 (2.4)	1.67 (42.4)



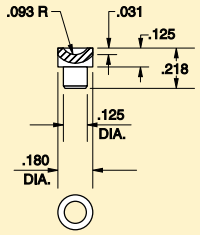
High-Range Flat Bottom Model U Force Gauge

Part No.	Pounds	Part No.	Kilograms	A in. (mm)	B in. (mm)	C in. (mm)	D in. (mm)	E in. (mm)	F in. (mm)	G in. (mm)	H in. (mm)	J in. (mm)	N in. (mm)
30482-0020	500 x 5	- - - -	- - - -	3.87 (98.0)	6.75 (171.3)	.98 (24.9)	.49 (12.4)	1.25 (31.5)	.92 (23.6)	1.52 (38.6)	1.67 (42.4)	2.44 (63.5)	2.25 (57.2)
30482-0053	1,000 x 10	30482-0079	500 x 5	3.87 (98.0)	6.75 (171.3)	.98 (24.9)	.49 (12.4)	1.25 (31.5)	.92 (23.6)	1.52 (38.6)	1.67 (42.4)	2.44 (63.5)	2.25 (57.2)
30478-0034	5,000 x 50	- - - -	- - - -	4.74 (120.1)	7.94 (201.5)	.98 (24.9)	.49 (12.4)	1.72 (43.7)	1.41 (35.5)	2.06 (52.3)	2.06 (52.3)	2.88 (72.8)	2.75 (69.9)

30160-0011



30156-0017



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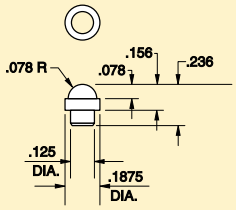

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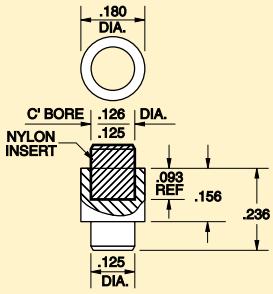

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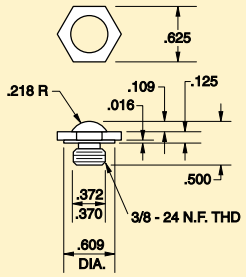
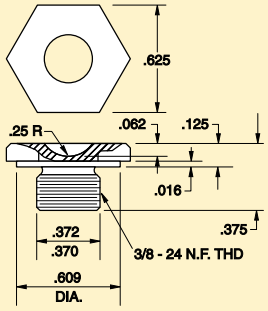
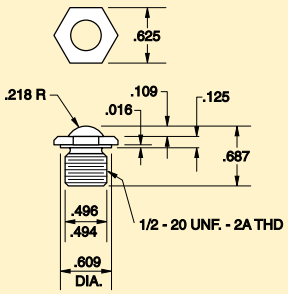


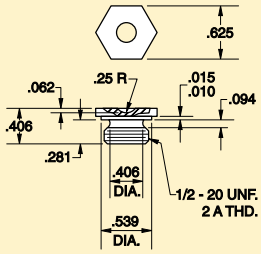
30378-0019



30434-0011



30125-0015



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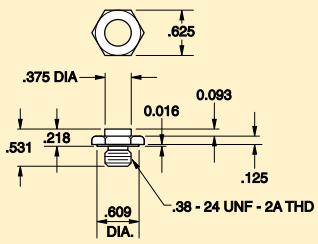
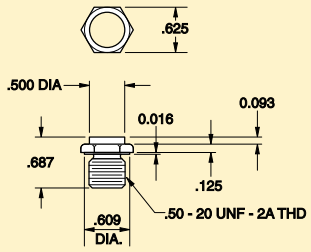


30475-0011



Select the right pressure fittings

Load is applied to the Dillon Model U Force Gauge through hardened pressure fittings. Each recessed-bottom gauge includes two fittings which you may choose from the following list. Each flat-bottom gauge includes one fitting which you may choose from the following list.

For 25 to 250 lb (10 to 100 kg) capacity gauges:

- Part No. 30160-0011 flat surface
- Part No. 30156-0017 cupped surface
- Part No. 30159-0014 domed surface
- Part No. 30158-0015 nylon insert

For 500 lb, 1000 lb, and 500 kg capacity gauges:

- Part No. 30483-0011 domed surface
- Part No. 30378-0019 cupped surface
- Part No. 30484-0010 flat surface

For 5,000 lb capacity gauges:

- Part No. 30434-0011 domed surface pressure fitting
- Part No. 30125-0015 cupped surface pressure fitting
- Part No. 30475-0011 flat surface

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.

Please call us or visit www.dillonforce.com for your nearest Dillon distributor.

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