



AMETEK® Model HK Deadweight Tester

- ❑ **Accurate to $\pm 0.025\%$ of Indicated Reading**
- ❑ **Five Ranges**
 - 10 to 300 PSIG
 - 10 to 500 PSIG
 - 10 to 700 PSIG
 - 10 to 1000 PSIG
 - 10 to 1500 PSIG
- ❑ **Prefill Supplied for Quick Filling Large Static Output Volumes**
- ❑ **NIST Traceable**

PRODUCT DESCRIPTION

The AMETEK HK Pneumatic Deadweight Tester is a primary standard used to calibrate pressure and differential pressure gauges, transmitters, transducers, recorders and controllers, and that can provide a reference pressure in process control applications.

The HK tester is self-regulating with accuracy independent of the operator. These testers feature superior accuracy and repeatability and a prefill feature that minimizes the filling of large static output volumes before the test.

The HK tester is available in these ranges:

- ❑ 10 to 300 PSIG
- ❑ 10 to 500 PSIG
- ❑ 10 to 700 PSIG
- ❑ 10 to 1000 PSIG
- ❑ 10 to 1500 PSIG

The HK tester is very easy to setup and use. The unit's precision stainless steel weights are calibrated for international specific gravity of 980.665cm/sec².

FUNCTIONAL SPECIFICATIONS

Accuracy

± 0.025 PSI or $\pm 0.025\%$ of indicated reading (whichever is greater)

Repeatability

0.005% of output reading

Temperature Coefficient

0.00167% of output per °C based on 23°C

Maximum Supply Pressure

1500 PSIG (2000 PSI for HK-1500) Instrument quality air per ISA Quality Standard S 7.3.

Minimum Supply Pressure

150 PSIG or 150% of output pressure, whichever is greater

Flow Rate

3 SCFH at 10 PSIG output
50 SCFH at 1000 PSIG output
100 SCFH at 1500 PSIG output

PHYSICAL SPECIFICATIONS

Connections

0.25-inch OD tubing, ⁷/₁₆-20, 37° AN angle

Weight

Tester Only 18 to 31.5 lbs (8.2 - 14.3kg)
Weights 17.5 to 61.5 lbs (8.0 - 30.0kg)

Shipping Dimensions (L x W x H)

Tester 16.0 x 16.0 x 16.0-inches
(40.6 x 40.6 x 40.6 cm)
Weight Set Storage Case 2.0 x 12.0 x 12.0-inches
(5.1 x 30.5 x 30.5 cm)

Notes:

Deadweight tester and deadweight gauge accuracy is expressed as "Percent of Indicated Pressure". A 1000 psi tester with an accuracy of $\pm 0.01\%$ of indicated pressure will have an allowable error of 0.1 psi at 10 psi, ± 0.1 psi at 100 psi and ± 1.0 psi at 1000 psi. Generally, deadweight testers are used only in the upper 90% of the range.

ORDERING INFORMATION

MODEL HK HYDRAULIC DEADWEIGHT TESTER

Order Number	Description
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HK-	Base Number - 1st thru 3rd characters HK Deadweight Tester
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	Range, Minimum Increment and Weight Carrier & Ball - 4th thru 11th characters 1 PSI Minimum Increment, 10 PSI Carrier & Ball Weight
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300	10 - 300 PSI
300/C	10 - 300 PSI, with NIST Data
500	10 - 500 PSI
500/C	10 - 500 PSI, with NIST Data
700	10 - 700 PSI
700/C	10 - 700 PSI, with NIST Data
1000	10 - 1000 PSI
1000/C	10 - 1000 PSI, with NIST Data
1500	10 - 1500 PSI
1500/C	10 - 1500 PSI, with NIST Data

	0.1 kg/cm² Minimum Increment, 0.5 kg/cm² Carrier & Ball Weight
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70M	0.5 - 70 kg/cm ²
70M/C	0.5 - 70 kg/cm ² , with NIST Data

	10 kPa Minimum Increment, 50 kPa Carrier & Ball Weight
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2000N/C	50 - 2000 kPa, with NIST Data
4000N/C	50 - 4000 kPa, with NIST Data
5000N/C	50 - 5000 kPa, with NIST Data
7000N	50 - 7000 kPa
7000N/C	50 - 7000 kPa, with NIST Data
10000N/C	50 - 10000 kPa, with NIST Data

	0.1 Bar Minimum Increment, 0.5 Bar Carrier & Ball Weight
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20B/C	0.5 - 20 Bar, with NIST Data
40B/C	0.5 - 40 Bar, with NIST Data
50B/C	0.5 - 50 Bar, with NIST Data
70B	0.5 - 70 Bar
70B/C	0.5 - 70 Bar, with NIST Data
100B.1	7 - 100 Bar
100B.1/C	7 - 100 Bar, with NIST Data

	0.1 kg/km² Minimum Increment, 0.5 kPa/km² Bar Carrier & Ball Weight
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20M/C	0.5 - 20 kg/km ² , with NIST Data
40M/C	0.5 - 40 kg/km ² , with NIST Data
50M/C	0.5 - 50 kg/km ² , with NIST Data

HK-7000N/C

Sample Order Number

HK Deadweight Tester with a 50 - 7000 kPa range (minimum increments- 10 kPa), 0.025% stainless steel weight set, supplied with NIST Data and protective carrying case

TEST AND CALIBRATION INSTRUMENTS

AMETEK is a leading global manufacturer of electrical and electromechanical products for niche markets. Listed on the New York Stock Exchange (AME) since 1930, AMETEK's annual sales are approaching \$1 billion. Operations are in North America, Europe and Asia, with about one-third of sales to markets outside the United States.

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Manufacturer**

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