



# TELEDYNE HASTINGS INSTRUMENTS

## HPM 4/5/6

### Vacuum Measurement

#### RANGES

- DV-4 (0.1 – 20 Torr)
- DV-5 (0.1 – 100 mTorr)
- DV-6 (1 – 1000 mTorr)

#### FEATURES

- Easy-to-Read Graphical Display
- Torr, mbar, and Pascal Units
- Battery Status Indicator
- Protective Covering
- Rugged Carrying Case
- Detachable Cable
- Compatible with Calibration Reference Tubes

#### APPLICATIONS

- Cryogenics/Vacuum Insulation
- Refrigeration / HVAC
- Power/Transformer Fill & Maintenance
- Particle Accelerators

#### BENEFITS

- Long Battery Life
- Proven Reliability
- Easy Installation and Operation
- Low Cost

## HPM 4/5/6 Handheld Gauge



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## Description & Specifications

### DESCRIPTION

The Teledyne Hastings Instruments' HPM 4/5/6 is a hand-held, battery-operated digital vacuum gauge based on the highly successful VT/CVT-Series of "Hastings Gauges" which have generated loyal customers for over 50 years. A reputation has been built on exceptional stability, accuracy, and reliability under the most demanding conditions.

The HPM 4/5/6 features a precision A/D converter along with a microprocessor to measure the thermocouple vacuum gauge tube's signal output. The microprocessor converts the measurement to a pressure reading by employing the gauge tube's well-defined output/pressure relationship. The result is displayed using a bright, easy-to-read graphical display.

The HPM 4/5/6 is compatible with three of THI's most popular gauge tube families: DV-4, DV-5 and DV-6. These tubes utilize THI's rugged but sensitive noble metal thermocouples that are designed specifically for each range. Tubes are matched and interchangeable without calibration adjustments. They are compensated for temperature and rate of temperature change and are corrosion resistant.

The qualities that divide a mediocre vacuum gauge from an exceptional one are often not readily visible. The integrity with which our products are built is something you'll experience in use, and appreciate time and again. Teledyne Hastings Instrument's thorough design, intelligent construction and proprietary manufacturing techniques are the foundation of our reputation for excellence. Stringent quality controls ensure we remain true to that reputation. Our customers know that we are the vacuum product manufacturer that they can trust today, and in the future. It's an accomplishment that we are proud to own.

### SPECIFICATIONS (HPM 4/5/6)

<b>Range</b>	DV-4 Series 0.1 – 20 Torr DV-5 Series 0.1 – 100 mTorr DV-6 Series 1 – 1000 mTorr
<b>Accuracy</b> (when calibrated with gauge tube)	DV-4 Series ± (20% of reading + 0.02 Torr) (max) DV-5 Series ± (20% of reading + 0.1 mTorr) (max) DV-6 Series ± (15% of reading + 1 mTorr) (max)
<b>Cable (CB-HPM-4/5/6)</b>	Detachable and replaceable
<b>Battery</b>	9 VDC alkaline
<b>Approximate Battery Life</b>	>30 hours (with included alkaline battery)
<b>Operating Temperature</b>	-18°C to 55°C with supplied alkaline battery -20°C to 60°C with alternate lithium battery
<b>Rugged</b>	MIL-STD-810G Method 514.6
<b>Weight</b>	HPM 4/5/6 and Case 1.58 lb (0.72 kg) HPM 4/5/6 Only 0.73 lb (0.33 kg)
<b>Temperature Coefficient</b> (Includes Tube Effects)	DV-4 (1.25 % of reading + 2.2 mTorr) / °C DV-5 (0.1% of reading + 0.08 mTorr) / °C DV-6 (-0.25% of reading + 0.2 mTorr) / °C

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Conflat® is a registered trademark of Varian Associates, Inc.

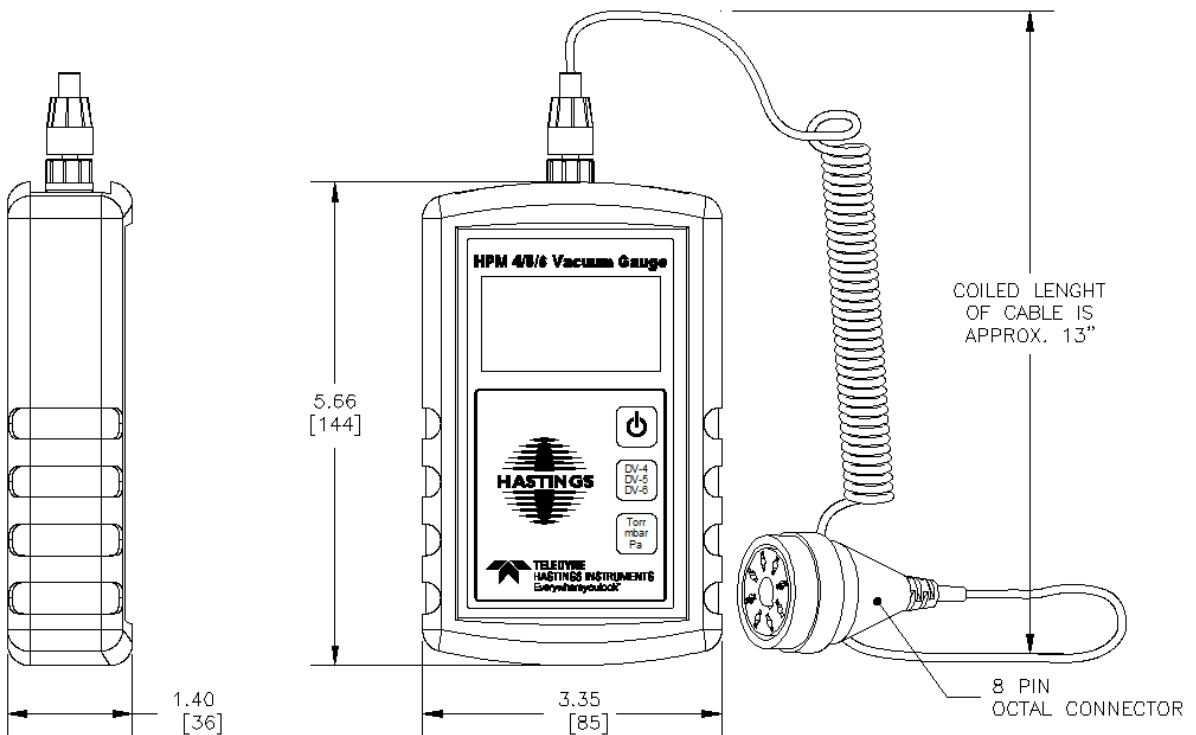
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# HPM 4/5/6 Ordering Code

Model Number
HPM 4/5/6

### HPM 4/5/6 Shipment Includes

- HPM 4/5/6
- Detachable Cable
- 9 Volt Battery
- Protective Enclosure
- Carrying Case 12"W x 8 1/2"H x 2 1/2"D



# Gauge Tube Selection Chart

Instrument Series	DV-4 Series	DV-5 Series	DV-6 Series
Vacuum Range	0.1-20 Torr	0.1-100 mTorr	1-1000 mTorr
Color Band	Purple	Red	Yellow
1/8" NPT - Standard	DV-4D	DV-5M	DV-6M
1/8" NPT - Ruggedized	DV-4R	----	DV-6R
VCR	DV-4D-VCR	DV-5M-VCR	DV-6-VCR
KF-16	DV-4D-KF-16	----	DV-6-KF-16
KF-25	DV-4D-KF-25	----	DV-6-KF-25
Mini-CF	----	----	DV-6R-CF
Stainless (high temp/pressure) *	DV-34	----	DV-36
Robust with Protective Cup	----	----	DV-6S
Glass 3/8" OD	----	----	DV-20
Reference Tubes	DB-16D	DB-18	DB-20

Note: Color band is not used on all tubes.

\* Need adapter cable: OM-1-MSF or OM-3T-MSFT

For proper accuracy and performance, Teledyne Hastings Vacuum Gauges should always be used with the proper range of Teledyne Hastings Vacuum Gauge Tubes.



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