# TELEDYNE HASTINGS

### THERMOCOUPLE GAUGE TUBES/SENSORS

## **INSTRUMENTS**

#### **FEATURES**

- Corrosion-Resistant
- Non-Contaminating
- Stable Calibration
- Rugged Under Demanding Conditions
- Color Coded For Easy Identification

#### **APPLICATIONS**

- Refrigeration
- Vacuum Furnaces
- Freeze Drying
- · Air Conditioning
- Pharmaceutical Production
- Cryogenics
- Accelerators
- Manufacture of Thermal Food Containers



Thermocouple Gauge Tubes



#### **DESIGN FEATURES**

Teledyne Hastings Instruments (THI)
Thermocouple Gauge Tubes/Sensors are
precision sensing devices designed to
provide accurate measurement and control
of vacuum. Fully compensated for both
temperature and rate of temperature change,
the tubes are renowned worldwide for their
dependability, and boast a history of success
that has endured for over 60 years.

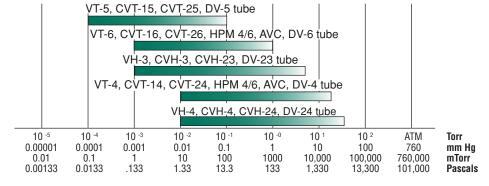
THI Thermocouple Gauge Tubes/Sensors use the rugged but sensitive, time-tested THI thermopile sensor. Short, firmly connected thermocouples have no suspended weld to an external heater.

Proprietary tooling and process control improvements offer extended service life for these gauge tubes/sensors.



Vacuum Gauge Meters/Controllers

#### **Thermocouple Gauge Pressure Ranges**





#### THERMOCOUPLE GAUGE TUBES/SENSORS

#### **SELECTION CHART**

(For proper accuracy and performance, THI Vacuum Gauges should always be used with the proper range of THI Vacuum Gauge Tubes.)

Instrument Series	Vacuum Range	Color Band*	1/8" NPT Standard Gauge Tube	1/8" NPT Ruggedized Tube	VCR® SS-4-VCR-3	1.33" CF™	KF-16	KF-25	1/8" NPT Stainless Shell	Glass 3/8" OD
VT-5, CVT-15/25	0-100 mTorr	Red	DV-5M	_	DV-5M-VCR	_	_	_	_	
VT-6, CVT-16/26, HPM 4/6	0-1000 mTorr	Yellow	DV-6M	DV-6R	DV-6M-VCR	DV-6R-CF	DV-6M-KF-16	DV-6M-KF-25	5 DV-36	DV-20
VH-3, CHV-3/23	0-5 Torr	Orange	DV-23	_	DV-23-VCR	_	DV-23-KF-16	DV-23-KF-25	<u> </u>	
VT-4, CVT-14/24, HPM 4/6	0-20 Torr	Purple	DV-4D	DV-4R	DV-4D-VCR	_	DV-4D-KF-16	DV-4D-KF-25	5 DV-34	_
HVC-282	0-20 Torr	Blue	DV-273	_	_	_	_	_	_	_
VH-4, CVH-4/24	0-50 Torr	White	DV-24	_	_		DV-24-KF-16	DV-24-KF-25	_	_

<sup>\*</sup>Note: Color band is not used on all tubes.

#### **GAUGE TUBE TYPES**

Standard Gauge Tube: Nickel-plated hermetically sealed base with glass, stainless steel, and nickel-plated components with color-coded base.

Ruggedized Gauge Tube: Nickel-plated hermetically sealed base with glass, stainless steel, and nickel-plated components.

**Glass Gauge Tube:** Constructed of Corning #7052 type glass or equivalent. 10mm O.D. smooth tubulation.

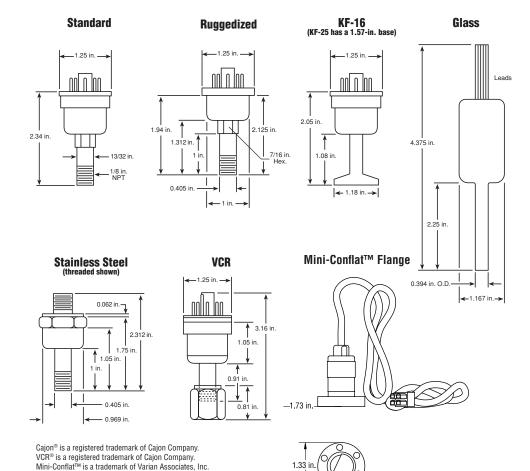
**Stainless Steel Gauge Tube:** A weatherproof, corrosion-resistant tube which can withstand high temperatures as well as extremely high gas line over-pressurization.

**VCR Gauge Tube:** Includes female nut connection. 9/16-18 UNF, female threads with 0.75 hex, Cajon® #SS-4-VCR-3 and #SS-4-VCR-1.

**KF-16 and KF-25 Gauge Tubes:** Standard gauge tube with KF flanges. Simplifies installation while providing a reliable seal.

**Conflat™ Flange Connection Gauge Tubes:** Available for special vacuum configurations.

Teledyne Hastings Instruments reserves the right to change or modify the design of its equipment without any obligation to provide notification of change or intent to change.



#### **Your Customer Service Representative**



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