

Model CM Precision Pressure Gauge



FEATURES

- $\pm 0.1\%$ F.S. accuracy – ASME B40.1, Grade 4A
- Ranges from 15-100,000 psi
- Solid front protective case
- High and low pressure limit stop
- Mirror band dial to eliminate parallax reading error
- Optional temperature compensation maintains 0.1% accuracy from -25 to $+125^\circ\text{F}$

Heise precision pressure gauges have continually set the quality standard by which all other pressure gauges are measured. Behind every Heise® product is a modern manufacturing facility certified to ISO9001 with NIST traceable standards maintained in accordance with MIL-STD-45662 and ANSI/NCSS Z-540.

But far beyond any specifications are the unwritten standards of excellence which have been set by our craftsmen. They have become the single most important ingredient in our success. It is this pride, skill and dedication that has become our history, and you can see it in every Heise precision pressure gauge that we make.

The Heise® precision pressure gauge case style features a solid-front aluminum case with a hinged ring. The dial has a polished mirror band for pointer reflection to prevent parallax error and is available in 6," 8½," 12," and 16" dial sizes in both lower and back connection. Pointer is a balanced-friction adjustable design with red knife edge tip for easy reading.

PRODUCT SPECIFICATIONS

HEISE® Model No.	CM		
Dial Size:	6"	8½"	12" 16"
Scale Length:	18"	25"	31½" 43¼"
Pointer Travel:	_____ 350° _____		
Case:	Cast aluminum, solid front. Blow out rear cover. Integral panel mounting flange		
Lens:	Polycarbonate,		
Dial:	Black figures on white, high resolution with mirror band		
Pointer:	Knife edge pointer to eliminate parallax errors		
Bourdon Tube:	Bleeder tipped for easy flushing or purging		
Socket Connections:	¼ NPT Female – Back Connect Autoclave F250-C (Aminco 45-11310) – Back Connect		
Ranges:	Gauge pressure - standard		
Repeatability:	$\pm 0.02\%$ F.S.		
Hysteresis:	$\pm 0.1\%$ F.S. ⁽¹⁾		
Total Accuracy:	$\pm 0.1\%$ F.S. Includes Certificate of NIST traceability		

OPTIONAL FEATURES

- Custom scales/units of measure
- Thermal compensation (maintains 0.1% accuracy from -25 to $+125^\circ\text{F}$)
- Slotted link (protects movement during sudden pressure release)
- Wall mounting brackets
- Peak load indicator
- Dual scale dial
- Compound, vacuum and absolute ranges (requires manual barometric compensation)

OPTIONAL PRESSURE INLET TYPE AND LOCATION

- ½ NPT – Male or Female – Back or Bottom
- ¼ NPT – Male or Female – Back or Bottom
- AND10050-4 – Female Only – Back or Bottom
- Autoclave F250-C – Female Only – Back or Bottom
- Aminco 45-11310 – Female Only – Back or Bottom
- MS33649-4 – Female Only – Back or Bottom
- MS33656-4 – Male Only – Back or Bottom
- MS-16142 – Female Only – Back or Bottom
- Mil-G-18997D – Male Only – Back or Bottom

⁽¹⁾ Hysteresis may exceed $\pm 0.1\%$ of span for ranges equal to or greater than 75,000 psi. ($\pm 0.3\%$ typical not to exceed $\pm 0.4\%$ of span).

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MATERIAL AND RANGE

Standard Ranges

psi

- Beryllium copper: 0-15 through 0-40 psi
- 403 SS: 0-50 through 0-100,000 psi

Inches Mercury

- Beryllium copper: 0-30 through 0-75 psi
- 403 SS: 0-100 through 0-1000 psi

Vacuum

- Beryllium copper: -30-0

Compound

- Beryllium copper:
 - 15" Hg-15" Hg through 30" Hg-60 Hg"
- 403 SS:
 - 30" Hg-100" Hg through 30" Hg-150 Hg"
- Beryllium copper:
 - 30" Hg-15 psi through 30" Hg-30 psi
- 403 SS:
 - 30" Hg-60 psi through 30" Hg-300 psi

Inches Water

- Beryllium copper: 0-450 through 0-1000

METRIC

Millimeters Mercury

- Beryllium copper: 0-750 through 0-2000
- 403 SS: 0-2500 through 0-5000

bar – kg/cm² – kp/cm²

- Beryllium copper: 0-1 through 0-2.5
- 403 SS: 0-3 through 0-7000

kPa

- Beryllium copper: 0-100 through 0-250
- 403 SS: 0.300 through 0-10,000

mPa

- 403 SS: 0-1 through 0-700

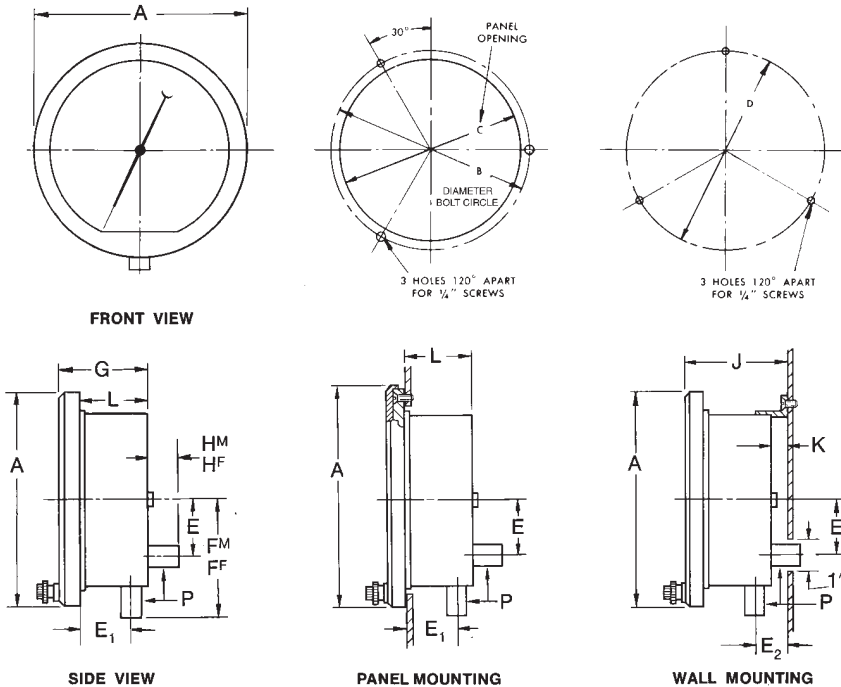
Vacuum

bar – kg/cm² – kp/cm²

- Beryllium copper: -1 to 0

kPa

- Beryllium copper: -100 to 0



Model "CM" Dimensions

Size	Dim. Units	A	B	C	D	E	E ₁	E ₂	F _M	F _F	G	H _M	H _F	J	K	L
6"	in.	7 ⁷ / ₈	7	6 ¹ / ₂	7	2	1 ⁷ / ₈	1 ¹ / ₄	4 ⁹ / ₁₆	4 ¹ / ₄	3 ¹ / ₄	1 ³ / ₈	1 ¹ / ₁₆	3 ²⁷ / ₃₂	5 ⁵ / ₈	2 ¹⁵ / ₃₂
	mm	200	177.8	165.1	177.8	50.8	47.6	31.8	115.8	107.9	82.3	34.9	27	97.6	15.9	62.7
8 ¹ / ₂ "	in.	10 ⁵ / ₁₆	9 ⁹ / ₁₆	8 ¹⁵ / ₁₆	9 ¹ / ₂	2	1 ⁷ / ₈	1 ¹ / ₄	5 ⁴⁹ / ₆₄	5 ²³ / ₆₄	3 ¹ / ₄	1 ³ / ₈	1 ¹ / ₁₆	4 ¹ / ₃₂	5 ⁵ / ₈	2 ²¹ / ₃₂
	mm	261.9	238.1	228.6	241.3	50.8	47.6	31.8	144	136.1	82.3	34.9	27	102.4	15.9	67.4
12"	in.	13 ²¹ / ₃₂	12 ³ / ₄	12 ³ / ₈	9 ¹ / ₂	2	1 ⁷ / ₈	1 ¹ / ₄	5 ⁴⁹ / ₆₄	5 ²³ / ₆₄	3 ¹ / ₄	1 ³ / ₈	1 ¹ / ₁₆	4 ¹ / ₃₂	5 ⁵ / ₈	2 ²¹ / ₃₂
	mm	346.9	329.9	314.3	241.3	50.8	47.6	31.8	144	136.1	82.3	34.9	27	102.4	15.9	67.4
16"	in.	17 ²³ / ₃₂	16 ³ / ₄	16 ³ / ₈	9 ¹ / ₂	3 ¹ / ₄	1 ⁷ / ₈	1 ⁶ / ₁₆	5 ⁹ / ₁₆	5 ¹ / ₄	3 ²⁵ / ₆₄	1 ³ / ₈	1 ¹ / ₁₆	4 ¹ / ₁₆	4 ¹ / ₆₄	2 ²¹ / ₃₂
	mm	450.1	425.2	415.9	241.3	82.6	33.3	50.4	141.3	133.4	86.1	35.0	27.0	103.1	16.3	67.4

Inlet Pressure Connection*	P	Pressure connection is illustrated in both back and bottom configurations. See page 4 for available fitting types.			
		Dial Size	6"	8 ¹ / ₂ "	12"
Approximate Weight	Net Weight	4 ¹ / ₂ lbs.	7 ³ / ₄ lbs.	10 ³ / ₄ lbs.	14 ¹ / ₄ lbs.
	Shipping Weight	7 lbs.	10 lbs.	15 lbs.	21 lbs.

*Standard Inlet Fittings: 1/4 NPT Female Back Connection for ranges up to and including 10,000 psi. AMINCO 45-11310 or AUTOCLAVE F-250-C for ranges over 10,000 psi.