

CMM Precision Pressure Gauge

FEATURES

- $\pm 0.1\%$ of span accuracy (ASME B 40.100 Grade 4A)
- Ranges to 10,000 psi, gauge, absolute and compound pressure
- Mirror band dial and knife edge pointer to eliminate parallax error
- Solid front protective case

SPECIFICATIONS

Accuracy:	$\pm 0.1\%$ of span (ASME B40.100 Grade 4A) (includes NIST Traceable Calibration Certification)
Hysteresis:	$< 0.1\%$ of span
Case Size:	6", 8½", 12"
Enclosure Rating:	Case is not sealed, recommended for weather protected environment only
Process Connection Size:	¼ NPT Female bottom ½ NPT Male or female – back or bottom ¼ NPT Male or female – back or bottom ⅝"-18 UNF-2B Female for ¼" HP tubing 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
Standard Inlet Fittings:	<ul style="list-style-type: none"> • ¼ NPT Female back connection for ranges up to and including 10,000 psi • Ranges greater than 10,000 psi, ⅝"-18 UNF female compatible with AND10050-4, Aminco 45-11310 and Autoclave F-250-C
Process Connection Location:	Back, bottom
Case Style:	Solid front, blow out rear cover, with integral panel mounting flange
Mounting Options:	Integral panel mount or wall mount bracket
Pointer Travel:	660 Degrees with scale indicator
Options:	Thermal compensation from $-25\text{ }^{\circ}\text{F}$ to $+125\text{ }^{\circ}\text{F}$

WETTED COMPONENTS

Model	Inlet Fitting	Bourdon Tube
CMM	303 Stainless steel	Beryllium copper: 0/15 psi through 0/40 psi 403 SS: 0/50 psi through 0/100,000 psi

NON-WETTED COMPONENTS

Model	Case Material	Enclosure Rating
CMM	Cast aluminum	Case is not sealed, recommended for weather protected environment only



CMM
6", 8½", 12" dial sizes

OPTIONS

Thermal Compensation: Bimetallic compensator corrects effects of ambient temperature on bourdon tube to maintain accuracy between $-25\text{ }^{\circ}\text{F}$ and $+125\text{ }^{\circ}\text{F}$

Slotted Link: Protects gauge movement from damage caused by sudden release of pressure, such as burst testing applications

Custom Scales: Special units of measure can be customized to meet customer requirements.

Hand Carry Case: Sturdy lightly padded case for storage and hand carry of gauge. Not suitable for use as stand alone shipping container.

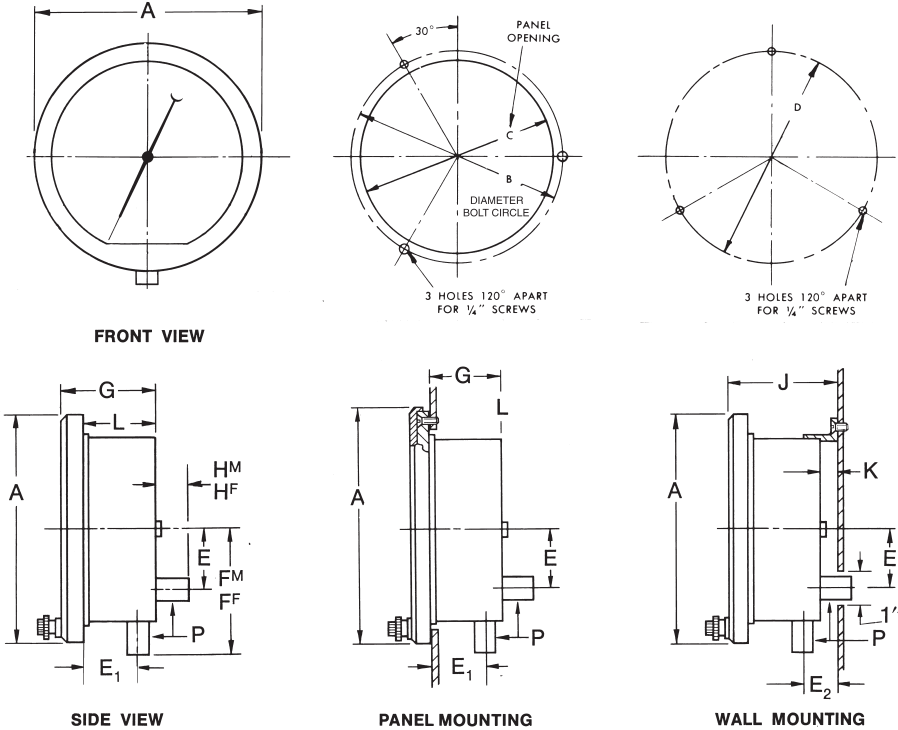
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ORDERING CODE	Example:	CMMJ	L	G	V	10000	C
Model Code/Dial Size							
CMMJ - 6" dial		CMMJ					
CMMK - 8½" dial							
CMML - 12" dial							
Process Connection Size							
A - ½ NPT Male back							
B - ¼ NPT Male back							
C - ½ NPT Female back							
D - ¼ NPT Female back							
E - ⅜-18 Female Thread back							
F - MS-33656-4 Male back							
G - MS-33649-4 Female back							
J - ⅜-18 UNF3A Male back							
K - ½ NPT Male bottom							
L - ¼ NPT Male bottom			L				
M - ⅜ NPT Female bottom							
N - ¼ NPT Female bottom							
P - ⅜-18 Female Thread bottom							
R - MS-33656-4 Male bottom							
S - MS-33649-4 Female bottom							
U - ⅜-18 UNF3A Male bottom							
X - MS-16142 ⅜-18 Female bottom							
Z - MS-16142 ⅜-18 Female back							
Pressure Type							
G - Gauge				G			
A - Absolute (Note: absolute ranges require manual barometric pressure compensation)							
C - Compound							
Tube Material							
J - Berillium copper (up to 40 psi)							
V - 403 Stainless steel (50 psi and greater)					V		
Pressure Range in psi (Consult factory for more ranges and units)							
30							
40							
50							
60							
75							
100							
150							
200							
250							
300							
400							
500							
600							
750							
1000							
1500							
2000							
2500							
3000							
4000							
5000							
6000							
7500							
10000						10000	
Optional Features							
C - Slotted link							C
D - Temperature compensated							
E - Special calibration							
F - Special scale							
H - Special cleaning for oxygen service							
M - 6" Wall mount							
N - 8½", 12" Wall mount							
W - Special cleaning, oxygen clean, do not apply warning labels							

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DIMENSIONS

For reference only, consult Ashcroft for specific dimensional drawings



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 ⁴ / ₁₆	4 ¹ / ₄	3 ³ / ₄	1 ³ / ₈	1 ¹ / ₁₆	3 ²⁷ / ₃₂	5 ⁵ / ₈	2 ¹⁹ / 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	3 ³ / ₄	1 ¹ / ₁₆	1 ⁶³ / ₆₄	5 ⁵ / ₁₆	5 ¹ / ₄	3 ²⁵ / ₆₄	1 ³ / ₈	1 ¹ / ₁₆	4 ¹ / ₃₂	4 ¹ / ₆₄	2 ²¹ / ₃₂
	mm	261.9	238.1	228.6	241.3	82.6	33.3	50.4	141.3	133.4	86.1	35.0	27.0	102.3	16.3	67.4
12"	in.	13 ²¹ / ₃₂	12 ³ / ₄	12 ³ / ₈	9 ¹ / ₂	3 ³ / ₄	1 ¹ / ₁₆	1 ⁶³ / ₆₄	5 ⁵ / ₁₆	5 ¹ / ₄	3 ²⁵ / ₆₄	1 ³ / ₈	1 ¹ / ₁₆	4 ¹ / ₃₂	4 ¹ / ₆₄	2 ²¹ / ₃₂
	mm	346.9	329.9	314.3	241.3	82.6	33.3	50.4	141.3	133.4	86.1	35.0	27.0	103.3	16.3	67.4

Inlet Pressure Connection* P	Pressure connection is illustrated in both back and bottom configurations.			
Approximate Weight	Dial Size	8 ¹ / ₂ "	12"	16"
	Net Weight	7 ³ / ₄ lbs	10 ³ / ₄ lbs	14 ¹ / ₄ lbs
	Shipping Weight	10 lbs	15 lbs	21 lbs

*Standard Inlet Fittings: 1/4 NPT Female Back Connection for ranges up to and including 10,000 psi.

**Ranges greater than 10,000 psi 3/16 - 18 UNF Female compatible with AND10050-4, Aminco 45-11310 and Autoclave F-250-C.

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GRADUATION TABLES

Scale for All Units of Measure	6" CMM				8½" CMM				12" CMM				Scale for All Units of Measure
	Total Number of Divisions	Value per Division	Division Pattern	Numeral Value	Total Number of Divisions	Value per Division	Division Pattern	Numeral Value	Total Number of Divisions	Value per Division	Division Pattern	Numeral Value	
0-1	1000	.001	1/5	.05	1000	.001	1/5	.05	1000	.001	1/5	.05	0-1
0-1.6	800	.002	1/5	.1	800	.002	1/5	.1	1600	.001	1/5	.05	0-1.6
0-2	1000	.002	1/5	.1	1000	.002	1/5	.1	1000	.002	1/5	.1	0-2
0-2.5	1000	.0025	1/4	.1	1250	.002	1/5	.1	1250	.002	1/5	.1	0-2.5
0-3	600	.005	1/2	.2	1500	.002	1/5	.1	1500	.002	1/5	.1	0-3
0-4	800	.005	1/2	.2	800	.005	1/2	.2	1600	.0025	1/4	.1	0-4
0-5	1000	.005	1/2	.2	1000	.005	1/2	.2	1000	.005	1/2	.2	0-5
0-6	600	.01	1/5	.2	1200	.005	1/2	.2	1200	.005	1/2	.2	0-6
0-7.5	750	.01	1/5	.5	1500	.005	1/2	.5	1500	.005	1/2	.5	0-7.5
0-10	1000	.01	1/5	.5	1000	.01	1/5	.5	1000	.01	1/5	.5	0-10
0-15	750	.02	1/5	1	1500	.01	1/5	.5	1500	.01	1/5	.5	0-15
0-16	800	.02	1/5	1	800	.02	1/5	1	1600	.01	1/5	.5	0-16
0-20	1000	.02	1/5	1	1000	.02	1/5	1	1000	.02	1/5	1	0-20
0-25	1000	.025	1/4	1	1250	.02	1/5	1	1250	.02	1/5	1	0-25
0-30	600	.05	1/2	2	1500	.02	1/5	1	1500	.02	1/5	1	0-30
0-40	800	.05	1/2	2	800	.05	1/2	2	1600	.025	1/4	1	0-40
0-50	1000	.05	1/2	2	1000	.05	1/2	2	1000	.05	1/2	2	0-50
0-60	600	.1	1/5	2	1200	.05	1/2	2	1200	.05	1/2	2	0-60
0-75	750	.1	1/5	5	1500	.05	1/2	5	1500	.05	1/2	5	0-75
0-100	1000	.1	1/5	5	1000	.1	1/5	5	1000	.1	1/5	5	0-100
0-150	750	.2	1/5	10	1500	.1	1/5	5	1500	.1	1/5	5	0-150
0-160	800	.2	1/5	10	800	.2	1/5	10	1600	.1	1/5	5	0-160
0-200	1000	.2	1/5	10	1000	.2	1/5	10	1000	.2	1/5	10	0-200
0-250	1000	.25	1/4	10	1250	.2	1/5	10	1250	.2	1/5	10	0-250
0-300	600	.5	1/2	20	1500	.2	1/5	10	1500	.2	1/5	10	0-300
0-400	800	.5	1/2	20	800	.5	1/2	20	1600	.25	1/4	10	0-400
0-500	1000	.5	1/2	20	1000	.5	1/2	20	1000	.5	1/2	20	0-500
0-600	600	1	1/5	25	1200	.5	1/2	20	1200	.5	1/2	20	0-600
0-750	750	1	1/5	50	1500	.5	1/2	50	1500	.5	1/2	50	0-750
0-760	760	1	1/5	40	1520	.5	1/2	40	1520	.5	1/2	20	0-760
0-1000	1000	1	1/5	50	1000	1	1/5	50	1000	1	1/5	50	0-1000
0-1500	750	2	1/5	100	1500	1	1/5	50	1500	1	1/5	50	0-1500
0-1600	800	2	1/5	100	800	2	1/5	100	1600	1	1/5	50	0-1600
0-2000	1000	2	1/5	100	1000	2	1/5	100	1000	2	1/5	100	0-2000
0-2500	1000	2.5	1/4	100	1250	2	1/5	100	1250	2	1/5	100	0-2500
0-3000	600	5	1/2	200	1500	2	1/5	100	1500	2	1/5	100	0-3000
0-4000	800	5	1/2	200	800	5	1/2	200	1600	2.5	1/4	100	0-4000
0-5000	1000	5	1/2	200	1000	5	1/2	200	1000	5	1/2	200	0-5000
0-6000	600	10	1/5	250	1200	5	1/2	200	1200	5	1/2	200	0-6000
0-7500	750	10	1/5	500	1500	5	1/2	500	1500	5	1/2	500	0-7500
0-10000	1000	10	1/5	500	1000	10	1/5	500	1000	10	1/5	500	0-10000
0-15000	750	20	1/5	1000	1500	10	1/5	500	1500	10	1/5	500	0-15000
0-20000	1000	20	1/5	1000	1000	20	1/5	1000	1000	20	1/5	1000	0-20000
0-25000	1000	25	1/4	1000	1250	20	1/5	1000	1250	20	1/5	1000	0-25000
0-30000	600	50	1/2	2000	1500	20	1/5	1000	1500	20	1/5	1000	0-30000
0-40000	800	50	1/2	2000	800	50	1/2	2000	1600	25	1/4	1000	0-40000
0-50000	1000	50	1/2	2000	1000	50	1/2	2000	1000	50	1/2	2000	0-50000
0-60000	600	100	1/5	2500	1200	50	1/2	2000	1200	50	1/2	2000	0-60000
0-75000	750	100	1/5	5000	1500	50	1/2	5000	1500	50	1/2	5000	0-75000
0-100000	1000	100	1/5	5000	1000	100	1/5	5000	1000	100	1/5	5000	0-100000

Division Pattern

