

G-TRAN Series Ceramic Capacitance Manometer [CCMT-D]

The CCMT-D series is a capacitance manometer, which detects static electric capacitance occurring when a barrier membrane made of ceramic (alumina) is deformed by changes in gas pressure.



CCMT-D

Features

- ▶ **Adoption of Ceramic Sensor**
Corrosion resistant ceramic sensor
Fast stability after power on
Excellent long term signal stability
- ▶ **Absolute Pressure Measurement**
Whole pressure measurement that does not depend on the gas types is possible
- ▶ **Shorten the Warm-up Time**
Fast stability after power on
- ▶ **Temperature Compensation**
Temperature compensated
- ▶ **Protection Function**
Sensor protection against contamination
- ▶ **Easy Zero Point Adjustment**
Zero point adjustment by push button

- ▶ **Measured Value Output Signal**
Accurate linear output (DC 0 to 10V)
- ▶ **Power Input**
Wide range voltage power supply (DC14 to 30V)
- ▶ **Small Size and Lightweight Sensor**
Compact in size with 320g weight (pipe end type)

Applications

- ▶ Pressure monitoring in vacuum melting or vacuum heat treatment
- ▶ Pressure monitoring during processes of thin films deposition system
- ▶ Pressure monitoring for vacuum system such as pressure reduction furnaces
- ▶ Pressure monitoring in gas exchange or gas sealing etc.
- ▶ Pressure monitoring of manufacturing equipment (e.g.PV, FPD etc.)

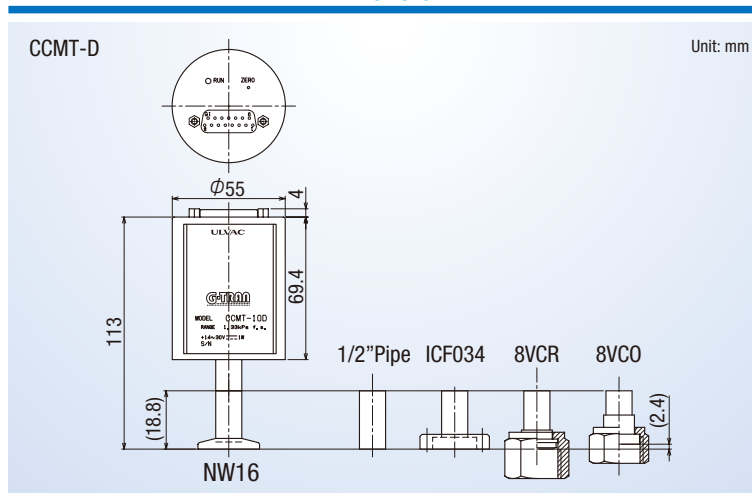
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Specifications

Model	CCMT-1000D	CCMT-100D	CCMT-10D	CCMT-1D
Range full scale	133kPa F.S.	13.3kPa F.S.	1.33kPa F.S.	133Pa F.S.
Lowest reading	13Pa	1.3Pa	0.13Pa	1.3×10 ⁻² Pa
Lowest suggested reading	66.6Pa	6.7Pa	0.67Pa	6.7×10 ⁻² Pa
Resolution	0.003% of full scale			
Accuracy *1	±0.2% ±temperature coefficient relative to display value			
Temperature coefficient	Zero voltage	0.005%F.S./°C		0.015%F.S./°C
	Span voltage	0.01%R/°C		
Applicable temperature range	10 to 50°C			
Storage temperature	-40 to 65°C			
Max temperature at flange *2	110°C			
Maximum applicable pressure	4×10 ⁵ Pa	2.6×10 ⁵ Pa		
Response rate	30ms or less			
Material of gas contacting sections	Al ₂ O ₃ , Vacon70 *3, SUS316 *4			
Applicable standard	CE			
IP rating	IP30			
Input power	DC14 to 30V, 1W			
Output	DC 0 to 10V F.S.			
Temperature compensation	Internal temperature compensation circuit			
Electrical connector	D-sub 15-pin male (No.4-40, DNC screw)			

- *1 Non-linearity, hysteresis, repeatability at 25°C ambient operating temperature without temperature effects after 2 hours operation
- *2 Non operation
- *3 18% Cr, 10% Ni, 3% Mo, 69% Fe
- *4 28% Ni, 23% Co, 49% Fe

Dimension



Flange Type & Ordering Number

Flange type		1/2 inch Pipe	NW16	ICF034	8VCR	8VCO
Weight		329g	344g	365g	386g	366g
Internal volume		5.8cm ³	6cm ³	6cm ³	8.15cm ³	8.15cm ³
Model & Ordering number	CCMT-1000D	CCMT-1000D-1/2	CCMT-1000D-NW16	CCMT-1000D-034	CCMT-1000D-VCR	CCMT-1000D-VCO
		210006397900	210006398100	210006398000	210006398200	210006398300
	CCMT-100D	CCMT-100D-1/2	CCMT-100D-NW16	CCMT-100D-034	CCMT-100D-VCR	CCMT-100D-VCO
		210006398400	210006398600	210006398500	210006398700	210006398800
	CCMT-10D	CCMT-10D-1/2	CCMT-10D-NW16	CCMT-10D-034	CCMT-10D-VCR	CCMT-10D-VCO
		210006398900	210006399100	210006399000	210006399200	210006399300
	CCMT-1D	CCMT-1D-1/2	CCMT-1D-NW16	CCMT-1D-034	CCMT-1D-VCR	CCMT-1D-VCO
		210006399400	210006399600	210006399500	210006399700	210006399800

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