Achieved Market-Leading Performance
With Newly Developed MEMS Chips!

Capacitance Gauge M-342DG Series

■Summary

The capacitance gauge M-342DG is a diaphragm gauge that enables accurate, stable pressure measurement with minimum zero adjustment.
This is achieved using a newly developed small silicon MEMS chip as the pressure sensor unit to minimize the influence from the outside environment such as changes in temperature, vibrations, and atmospheric pressure.

■Features

1. High precision, stable pressure measurement
   - Excellent zero point stability.
   - Low dependency to temperature providing excellent stability without a temperature control mechanism.
   - Excellent anti-vibration noise performance.
2. Compact and low power consumption
   - 200g, W46mm × H49mm × L70mm compact, lightweight.*1
   - Power consumption 0.5W.

*1: Size and weight of the coupling NW16 specifications

■Applications

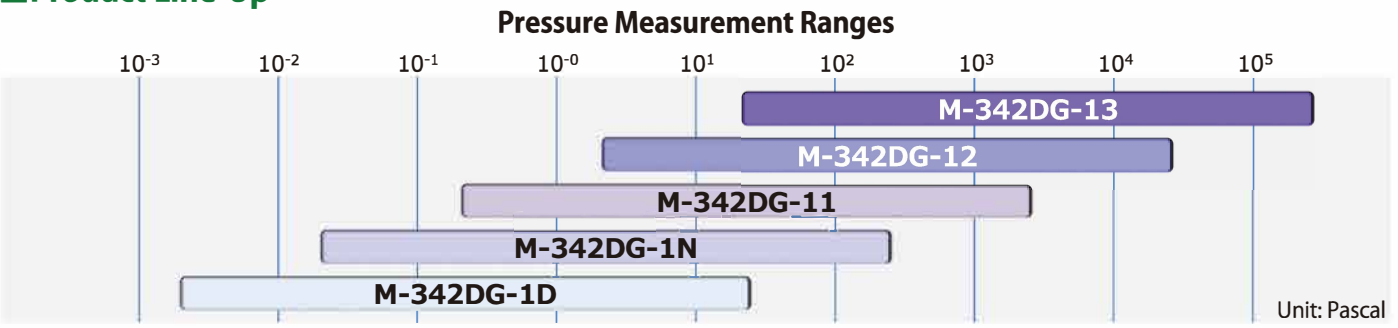
Supports a wide range of general industry applications
medical, food, semiconductor manufacturing equipment, panel display manufacturing equipment, and other vacuum equipment.*2

*2: Not suitable for applications where corrosive gas is used. Please consult us for details.

■Specifications

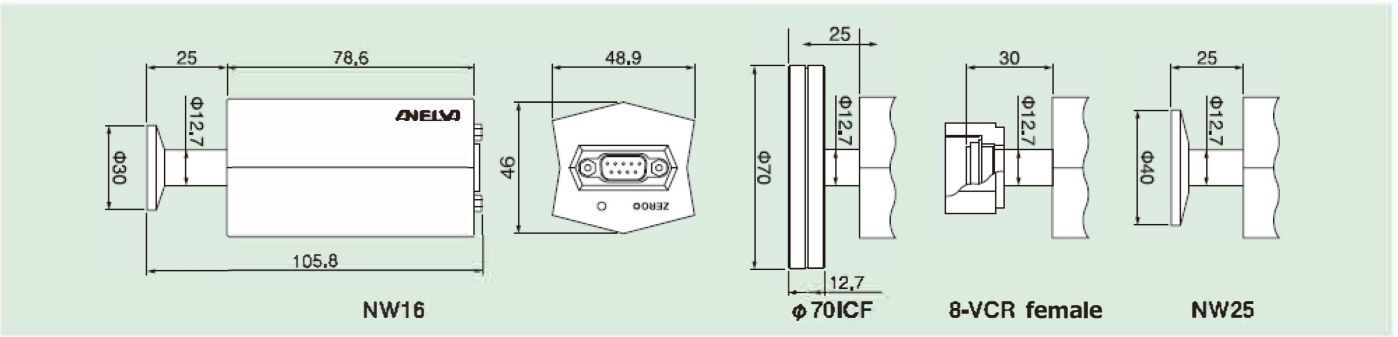
Type		M-342DG-1D	M-342DG-1N	M-342DG-11	M-342DG-12	M-342DG-13
Full Scale Pressure	(Pa)	13.33 (0.1Torr)	133.3 (1Torr)	1.333k (10Torr)	13.33k (100Torr)	133.3k (1,000Torr)
Accuracy	(% of reading)	0.20(at 23℃)				
Zero Temperature Coefficient	(% of full-scale / ℃)	0.01	0.005	0.002		
Span Temperature Coefficient	(% of reading / ℃)	0.01		0.005		
Resolution	(% of full-scale)	0.01	0.005			
Lowest Reading	(% of full-scale)	0.01				
Lowest Suggested Pressure for Reading	(% of full-scale)	0.05				
Lowest Suggested Pressure for Control	(% of full-scale)	0.5				
Response Time	(Millisecond)	100	30			
Pressure Limit	(Pa)	200 kPa abs, *130 kPa (absolute pressure) for M-342DG-1D *Positive pressure should not be applied to NW16 / NW25 flanges types.				
Input Voltage	(VDC)	+13.5 to 26.4				
Power Consumption	(Watt)	0.5 or less				
Signal Output	(VDC)	0 to 10				
Operating Temperature / Storage Temperature	(℃)	0 to 50 / -20 to 70 (not operating)				
Maximum Cable Length	(meter)	100 (0.3mm2)				
Zero Adjustment Methods		Push Switch / Remote				
Connector Type		Male D - sub 9 pins				
Materials Exposed to Vacuum		SUS304, SUS316, Si, Glass, Fluorine Rubber				
Fitting Type		NW16, NW25, 8-VCR, Φ70ICF				
Standards		CE & RoHS				
Degree of Protection		IP40				
Security Export Control Regulation		Not Applicable				
Compatible Displays		M-601GC (1ch), M-603GC (3ch)				

Product Line-Up



*Lowest Reading: 0.01% of full-scale

Dimensions diagram



Ordering information

Parts Number	Model	Description	Remarks	Code
0160-12049	M-341DG-1D-N16	Capacitance Gauge (13.3Pa)	Coupling: NW16	22735
0160-12057	M-341DG-1D-N25		Coupling: NW25	22736
0160-12065	M-341DG-1D-C70		Coupling: Φ70ICF	22737
0160-12073	M-341DG-1D-VCR		Coupling: 8-VCR female	22738
0160-11645	M-341DG-1N-N16	Capacitance Gauge (133Pa)	Coupling: NW16	22710
0160-11653	M-341DG-1N-N25		Coupling: NW25	22711
0160-11661	M-341DG-1N-C70		Coupling: Φ70ICF	22712
0160-11679	M-341DG-1N-VCR		Coupling: 8-VCR female	22713
0160-11459	M-342DG-11-N16	Capacitance Gauge (1.33kPa)	Coupling: NW16	22715
0160-11467	M-342DG-11-N25		Coupling: NW25	22716
0160-11475	M-342DG-11-C70		Coupling: Φ70ICF	22717
0160-11483	M-342DG-11-VC8		Coupling: 8-VCR female	22718
0160-11140	M-342DG-12-N16	Capacitance Gauge (13.3kPa)	Coupling: NW16	22720
0160-11158	M-342DG-12-N25		Coupling: NW25	22721
0160-11077	M-342DG-12-C70		Coupling: Φ70ICF	22722
0160-11166	M-342DG-12-VC8		Coupling: 8-VCR female	22723
0160-11093	M-342DG-13-N16	Capacitance Gauge (133kPa)	Coupling: NW16	22725
0160-11108	M-342DG-13-N25		Coupling: NW25	22726
0160-11116	M-342DG-13-C70		Coupling: Φ70ICF	22727
0160-11124	M-342DG-13-VC8		Coupling: 8-VCR female	22728

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Canon ANELVA Corporation is constantly improving its products, hence specifications are subject to change without notice.

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