Calibrator

CA700 Pressure Calibrator

High Accurate and High Functional Pressure Calibrator Specially Designed for the Calibration of Differential Pressure and Pressure Transmitters.



New product

CA700

Detailed catalog: Bulletin CA700-EN

Main Specifications

Pressure Measurement

Model	CA700-E-01	CA700-E-02	CA700-E-03
Pressure type		Gauge	
Measurement range	Positive pressure 0 to 200 kPa Negative pressure -80 to 0 kPa	Positive pressure 0 to 1,000 kPa Negative pressure -80 to 0 kPa	Positive pressure 0 to 3,500 kPa Negative pressure -80 to 0 kPa
Measurement display range	Up to 240.000 kPa	Up to 1,200.00 kPa	Up to 4,200.00 kPa
Measurement accuracy (6 months after calibration)	Positive pressure 20 to 200 kPa: ±(0.01% of reading + 0.003 kPa) 0 to 20 kPa: ±0.005 kPa	Positive pressure ±(0.01% of reading + 0.04 kPa)	Positive pressure ±(0.01% of reading + 0.15 kPa)
(Tested after zero calibration)	Negative pressure ±(0.2% of reading + 0.090 kPa)	Negative pressure ±(0.2% of reading + 0.08 kPa)	Negative pressure ±(0.2% of reading + 0.08 kPa)
Measurement fluid	Gas and liquid (non-corrosive, non-flammable, non-explosive, and non-toxic fluids)		
Pressure display units	kPa and other units (Pa, hPa, MPa, mbar, bar, atm, mmHg, inHg, gt/cm², kgt/cm², mmH₂O@4°C, mmH₂O@20°C, ftH₂O@4°C, ftH₂O@20°C, inH₂O@4°C, inH₂O@20°C, Torr, psi)		
Input port	Rc 1/4 or 1/4 NPT female thread (selectable)		

Current and Voltage Measurement (common to all models)

	DC current	0 to ±20.000 mA	±(0.015% of reading + 3 μA)
		0 to ±100.00 mA	±(0.015% of reading + 30 μA)
DC volta	DC	0 to ±5.0000 V	±(0.015% of reading + 0.5 mV)
	DC voltage	0 to +50,000 V	+(0.015% of reading + 5 mV)

24 V Loop power supply

	harrer ambler?	
Supply	24 V ± 1 V	Load current 24 mA when communication resistance OFF
voltage	24 V ± 6 V	Load current 20 mA when communication resistance ON

Current and voltage source (common to all models)

DC current*	0 to 20.000 mA	±(0.015% of setting + 3 μA)
DC voltage	0 to 5.0000 V	±(0.015% of setting + 0.5 mV)

^{*} External power supply for 20 mA SIMULATE: 5 to 28 V

Features

• Basic accuracy: Pressure (measurement) 0.01% rdg
Current (source/measurement) 0.015% rdg
Voltage (source/measurement) 0.015% rdg

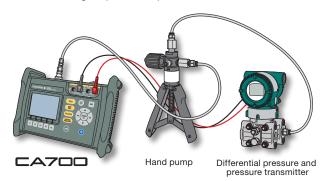
 Widest range and highest resolution in class achieved 200 kPa gauge pressure model (resolution 0.001 kPa) 1000 kPa gauge pressure model (resolution 0.01 kPa) 3500 kPa gauge model (resolution 0.01 kPa)

- DC mA signals can be measured by supplying power to the transmitter from a 24V DC power supply.
- Calibration procedures of pressure transmitters and pressure switches are embedded.
- "As Found", "As Left" data and error rate (%) can be recorded.
- IP54 dustproof and waterproof robust case enables use in harsh environments.
- Hart and Brain communication resistance is embedded.
- Dimensions: Approx. 264 (W) × 188 (H) × 96 (D) mm Weight: Approx. 2 kg (including 6 AA size batteries)

Example of field calibration of differential pressure and pressure transmitter

Calibration of pressure transmitters is required to accurately measure the input and output values and to calculate the error rate.

The CA700 ensures reliable calibration with its function to accurately measure the input and output values of pressure and current. Additionally its embedded calibration procedures enable users to perform certain calibration following the prescribed procedure.



Hand Pump Series

Three High-Performance Hand Pump Models Available

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Model 91050



Model 91055 Mo

Model 91060

Detailed catalog: Bulletin CA700-EN

Product name	Model	Description of kit (individual models)
Hand Pump Kit (Low pressure)	91050	Hand Pump (91051), Connector Set (91052), Case (93052)
Hand Pump Kit (Pneumatic)	91055	Hand Pump (91056), Connector Set (91057), Case (93053)
Hand Pump Kit (Hydraulic)	91060	Hand Pump (91061), Connector Set (91062), Case (93053)

Features

- Smooth pressurization with less internal leaking
- Strainer preventing debris from entering the pump included
- Low Pressure Hand Pump

Pressure generation range: -83 to 700 kPa

Ultra-compact hand pump

Pneumatic Hand Pump

Pressure generation range: -83 to 4,000 kPa

High-performance small hand pump with a wide range of pressure generation

•Hydraulic Hand Pump

Pressure generation range: 0 to 70 MPa

High-performance hand pump capable of generating a pressure of up to 70 MPa