

Portable electric pressure calibrator Model SPP70

WIKA data sheet ST 24.01

Applications

- Calibration service companies and service industry
- Measurement and control laboratories
- Quality assurance

Special features

- Measurement and electrical pressure generation at the touch of a button with integrated pump, from -0.9 ... +70 bar [-13 ... 1,015 psi]
- Accuracy: 0.02 % FS (incl. calibration certificate)
- Measurement of 4 ... 20 mA, and DC 24 V voltage supply to power transmitters
- Robust case design



Portable electric pressure calibrator, model SPP70

Description

General information

The portable electric pressure calibrator model SPP70 is a compact, portable pressure calibrator, which has been designed for mobile use as well as for stationary workshop and laboratory testing. An integrated electrical pump enables you to generate pressures from -0.9 vacuum up to 70 bar [1,015 psi] and an integrated electrical module also enables you to supply transmitters or sensors with a current of max. 30 mA (voltage (idling) = DC 24 V), in addition to the traditional measurement of current and voltage signals.

Accuracy

Leveraging on latest Mensor's technological advantage, the reference sensor offers an accuracy of 0.02 % of full scale. The temperature compensation of the built-in sensor safeguards the accuracy for applications in the field. Readings can be displayed in one of 13 standard units.

Features

With the portable electric pressure calibrator, not only are accurate pressure measurements possible, but also exact current and voltage measurements, as well as a DC 24 V voltage supply for test items are enabled. Pressure values and electrical measured values are simultaneously shown in the display. The calibrator is integrated into a robust, as well as dust and splash-proof transport case. Thus the mobile pressure calibrator is particularly suited to use in harsh industrial environments. The external universal power supply is designed for an operating voltage of AC 100 ... 240 V.

Certified accuracy

For the SPP70, the accuracy is certified by a standard SAC-SINGLAS calibration certificate which accompanies the instrument.

Specifications

Model SPP70

Sensor technology	
Measuring range	-0.9 ... 70 bar
System Overpressure safety	1.4 times
Accuracy	0.02% FS
Resolution	Up to 6-digit
Temperature compensation range	15 ... 35 °C [59 ... 95 °F]
Warm up time	15 mins
Control stability	0.01% of range
Engineering units	psi, kPa, bar, Mpa, kg/cm, mmH2O@20C, mmH2O@4C, inH2O@20C, inH2O@4C, cmH2O@20C, Torr, inHg.mH2O@4C, mH2O@20C, ftH2O@4C, ftH2O@20C, mmHg@0C, inHg@0C, inSW.mSW, cmHg@0C, HPa, ftSW
Measuring input, current	
Measuring range	0 ... 24 mA
Accuracy	0.015% of full scale (load resistance not exceeding 750 ohms) With or without internal 24 Vdc loop power (Short circuit protected)
Resolution	Up to 6 digits
Measuring input, voltage	
Measuring range	DC 0 ... 30 V
Accuracy	0.05% of full scale
Resolution	Up to 6 digits
Switch input	N.C or N.O, non-voltage input

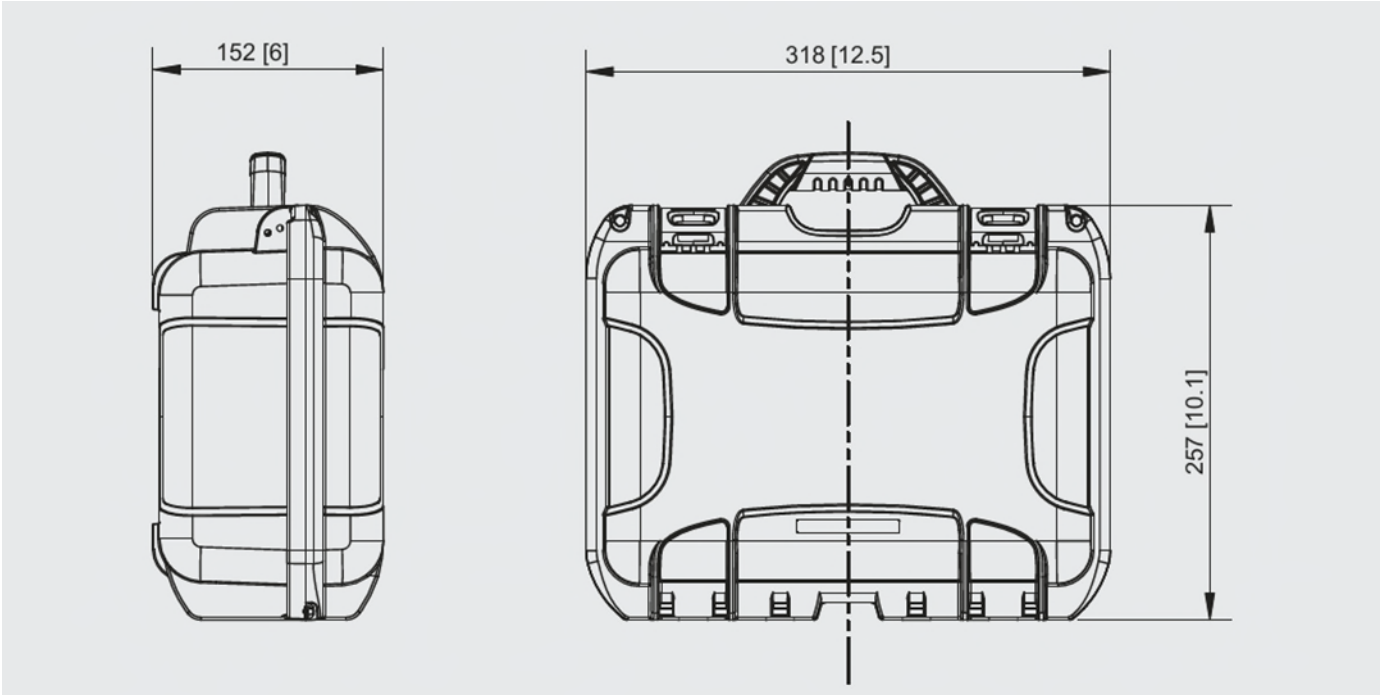
Base instrument	
Pressure supply	-0.9 ... 70 bar [-13 ... 1,015 psi], via integrated electric pump
Pressure connection	1/8" FNPT Female
Permissible media	For dry, clean and non-aggressive gases
Communication	Mini USB
Display	4.3" TFT Color Touch Screen
Power supply	Lithium-ion Battery
Case	
Material	NK-7 High Impact Polypropylene / Nylon 66 / 304 Stainless Steel / EPDM
Front panel	Aluminium, laminated silk-screen
Dimensions	L318 x W257 x H152 mm
Weight	5.5 kg

Charger	
Input voltage	AC 100 ... 240 V, 50 ... 60 Hz
Output voltage	14.8 Vdc @ 10 Amp




Certificates

Certificate	
Calibration	SAC-SINGLAS calibration certificate (ISO17025)
Recommended recalibration interval	1 year (dependent on conditions of use)

Dimensions in mm [in]



Accessories

Special features		Order code
	Test cable set ■ 1 x black ■ 1 x red	-A-
	Adaptor set "standard" Consisting of 1/2 NPT female to G 1/2 male, 1/4 NPT female to G 1/2 male, and G 1/4 female to G 1/2 male	-B-
	Sealing set Consisting of: ■ 2 x G 1/2 USIT seals ■ 2 x G 1/4 USIT seals	-C-

Scope of delivery

- Portable electric pressure calibrator model SPP70
- Operating instruction
- 1 x charging/ power supply adaptor
- 2 set of red and black test leads
- 1 set of of ½ NPT female to G ½ male, ¼ NPT female to G ½ male, and G ¼ female to G ½ male
- SAC-SINGLAS calibration certificate

