C2, D2 & E2 Digital Pressure Gauges

The SIKA digital pressure gauges is suitable for both stationary and mobile measurement and display of pressure. This can be used as a reference to explain the checking, adjustment and calibration of other pressure measurement devices directly on-site.

Digital Pressure Gauge

The SIKA digital pressure gauge's high accuracy in a signal acquisition is achieved by using high-performance measuring cells with electronic linearisation of the characteristic curve. Suitable instruments are available for a wide variety of measurement tasks. Ease of use is assured by innovative design and advanced technology. All essential functions for everyday use can be selected conveniently at the press of a button. Excellent protection against dust and moisture is provided by a membrane keypad or rubber buttons. Integrated supplementary functions make our digital pressure gauges true all-rounders.

Features

- Suitable for short-term analysis and test purposes as well as for continuous measurement
- 12 pressure ranges, 3 accuracy classes
- 6 switchable pressure units: bar / mbar, kPa / MPa, PSI, kg/cm², mH2O, inH2O
- Measuring rate 10 ms (Detection of smallest pressure peaks)
- Use of 2 x 1,5 V AA batteries (Battery operation 1500 h)
- Backlit digital display, digit height of actual value 15 mm, bar graph with maximum pointer function, display can be rotated 270° axially (Easy reading from a large distance)
- Oil- and dirt-resistant surface
- Degree of protection IP67
- Vibration resistance (5g up to 500 Hz)
- Shock resistance (25g for 11 ms)

Technical data			
Type	E2	D2	C2
Pressure ranges	Between -1...1000 bar		
Accuracy (± of full scale value)	0.5 %	0.1 %	0.05 % (0.1 % in vacuum)
Pressure units	bar / mbar, kPa / MPa, PSI, kg/cm², mH2O, inH2O		
Display type	Multifunctional LCD, 4 ½ digit, with background lighting		
Display functions	Bar graph, pressure unit, display filter, MIN/MAX value, Overpressure indicaton 110 % of full scale pressure value (FS)		
Measuring system			
Pressure measuring cell	≤ 10 bar piezo resistive ≥ 20 bar thin film strain gauge		
Temperature compensation	0...50 °C		
Temperature error	0.005 % of full scale pressure value (FS) / K		
Measuring rate actual value	10 ms		
10 ms Measuring rate bar graph	50 ms		
Process connection			
Thread ISO 1179-2	G¼ with NBR gasket, AF27		
Material	Stainless steel 1.4404		
Medium temperature	-20...80 °C		
Housing connection	270° axially rotatable		
Housing			
Degree of protection DIN EN 60529	IP67		
Dimensions	Ø 90 mm, D=45 mm H=120 mm with protection cap		
Materials	Cast zinc with protection cap made of TPE		
Ambient conditions	0...50 °C with air humidity ≤85 % r.h.		
Weight	540 g		
Vibration resistance IEC 60068-2-6	5g up to 500 Hz		
Shock resistance IEC 60068-2-29	25g for 11 ms		
Power supply			
Auto-off function	Selectable switch-off time 5 minutes		
Battery type	2x 1.5 V AA		
Battery operation	1500 h		

Data Logger

Datalogging can log and store up to ten data files. Each data file contains the measurement time and the minimum, maximum and actual values, and can record up to 48 hours. Logging can be commenced and halted by pressing the Start/ Stop button. When logging data, a 'Rec' symbol is indicated on the display. This feature supports dynamic compression of data and can provide logged readings in a CSV file. This feature has an expansive memory, which means it functions as a USB stick. It can be connected to a computer via a USB cable enabling data transfer; whilst a Windows driver is not required, and the user can view data using Windows software and can be downloaded in CSV files. Furthermore, its internal software can be updated via the USB connection. It can also support a power supply via the USB port.

Data logger (optional)	
Max. data sets	27000 per recording series
Record series	1...10
Storage rate	0.1…6.4 s - automatically per recording duration
Max. recording duration	48 h
Data set information	time / actual pressure / MIN/MAX value
Digital data transmission	serial USB 2.0
Interface	Mini USB port
PC software	Detection as USB data storage device, spreadsheet program
File format	.csv

Good reasons for a correct and reliable measurement

- Maintaining high and continuous product quality
- Compliance with industrial requirements
- Quality assurance regulations
- Process optimization
- Increase in productivity
- Avoiding unexpected production stops
- Safety for employees and customers
- Environmental requirements / ecological aspects
- Profit optimization / economic aspects

E2 / D2 / C2

Mini-USB connection

E2 / D2 / C2
with data logger

Control buttons

1 Bar graph display with maximum pointer function, 33 segments
2 Actual pressure display, digit height 15 mm
3 Unit display / recording series display
4 Data logger display, flashes during recording
5 Battery status display, 5 segments
6 Additional display MIN/MAX value, full scale pressure value, digit height 8 mm
7 Control buttons

Control buttons

ON/OFF	Switch device on or off
LIGHT	Backlighting (20 seconds)
MIN/MAX	Show min /max value or full scale pressure value
CLOCK	Set date and time
ZERO	Zero point correction up to 5% of full scall pressure value
MENU	Open device settings
SET	Delete min /max value or confirm input
REC	Start or stop data logger

Possible areas of application

Whether on site, in the workshop, in the measuring and testing room or laboratory, digital pressure gauges are used everywhere. A wide range of industries with the most diverse areas of application is covered.
• Assembly, commissioning
• Manufacturing, production
• Maintenance, service
• Quality assurance, test equipment monitoring
• Repair

Looking for other instruments & specifications?

As the leader in pressure and temperature instruments in Australia, we envision ourselves not only as a supplier of top notch measurement devices, but also dependable partner that can create individually designed solutions together with you. On the basis of your specific applications, in close cooperation with you, we are ready to develop products that are applicable for you. Enquire today to discuss your customized gauge requirements with one of our friendly Customer Care team members.
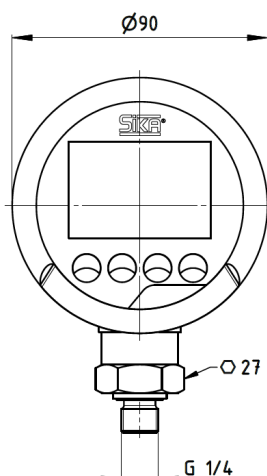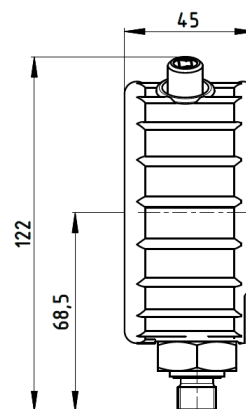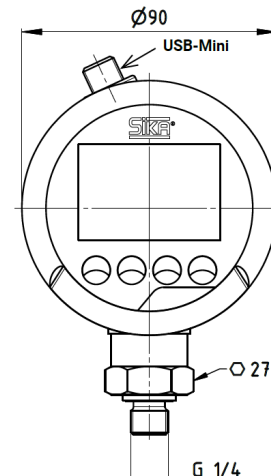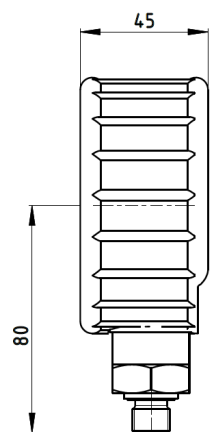
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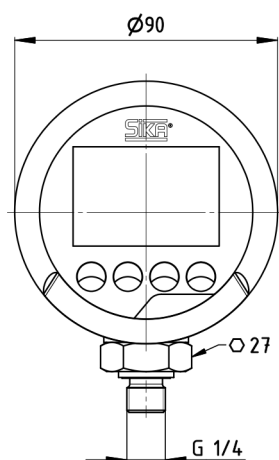
Without data logger, measuring cell strain gauge
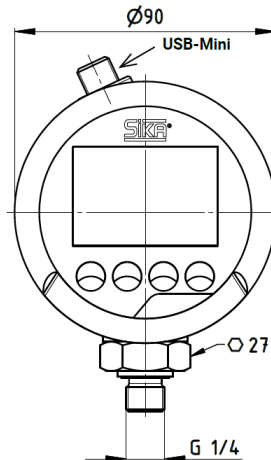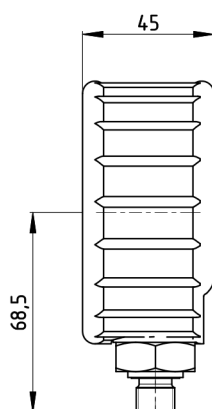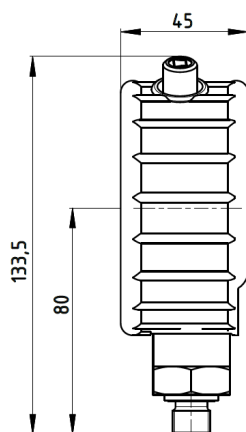

With data logger, measuring cell strain gauge

Without data logger, measuring cell PIEZO

With data logger, measuring cell PIEZO

Related Item: Hand Test Pumps

Air, water and oil are used as pressure media. Especially in application areas in which wetting of the test sample is not allowed or the use of aggressive or ionising substances must be avoided, air is the ideal test medium. SIKA's pneumatic test pump fulfils requirements that in many cases can only be covered by several pumps from other suppliers.

• Manual pressure generation in the medium pressure range up to 60 bar using a handle is unique – no other pump can do this.

• Integrated negative pressure capability enables operating with vacuum down to -950 mbar. A changeover valve enables switching from positive pressure to negative pressure with no need for special tools.

• A large-volume pressure regulator with ultrafine thread pitch is used for precise pressure adjustment in the low mbar range, enabling accurate settings in the low pressure region. The easily operated hydraulic test pumps are specifically designed for the medium to high pressure range. They have a built-in reservoir for the hydraulic fluid. Pressures up to 700 bar or 1000 bar can be generated, depending on the model.