

Model PK1 Pressure Calibration KIT

PK1 is a pressure calibration kit that include everything the operator needs to calibrate pressure instruments: hand pressure pump, reference gauge, hose, connection adapters, carrying case.

Ranges: from 0.9 up to 700 bar
Accuracy up to 0.05 % FS



General

To cover any requirement of mobility and effectiveness in the field, CalRef proposes a portable pressure calibration kit configurable from the customer according to its requirements.

Robust and handy, they are supplied with an industrial carrying case ready for use both on site and workshop.

Each calibrator has a Works Test Certificate against reference Standards, *traceable* to National or International Standards (EA).

Wide measuring ranges from -0.9 to 700 bar pneumatic and hydraulic versions

The KIT

- Digital or Analogue gauge: ranges from 0,9 up to 700 bar;
- Pressure generator: models

- MP-V (- 1...0 bar)
- MP-P (0...7 bar)
- MPV-600 (-1...40 bar)
- M-10 (0...700 bar),

- Set of adaptors allowing the use of the equipment with the majority of the instruments to be tested

Field of Application

- Maintenance and testing of instrumentation for industrial plants
- Calibration of pressure sensors
- Material Acceptance
- Quality Control
- Chemical & Petrochemical Industries
- Pharmaceutical
- Avionic/Airspace
- Industrial plants

Digital Gauges Model DGS

Range: see next page table
 Compensated Temperature Range: 0...50 °C
 Accuracy (10...30 °C): 0,05 % FS
 (including linearity, repeatability and hysteresis)
 Numbers of Digits: 5
 Precision: 0,05 % FS
 Precision optional (≥ 20 bar): 0,025 % FS
 Storage/Operating Temp.: -10÷60 °C / 0÷50 °C
 Pressure Connection: 1/4" BSP M
 Protection, CEI 529: IP 65
**Intrinsically safe version available,
 94/9/CE (ATEX)**



Digital Gauges Model DG

Range: see next page table
 Automatic temperature compens.: 0...50 °C
 Accuracy: 0.1 % FS (typical), 0.2 % FS max
 Overpressure: 150 % max
 Diameter: 60 mm
 Power supply: replaceable battery (CR 2430) with
 1000 hours continuous operation
 Auto-power-off time: 15 minutes
 Process connection: 1/4" G male, swivel fitting
 Protection, CEI 529: IP65
**Intrinsically safe version available,
 94/9/CE (ATEX)**



Analogue Gauges Model AG63

Range: see next page table
 Uncertainty: 0,5 % FSD
 Dial: 63 mm
 Connection: 1/4" NPT M
 Knife-edge pointer.
 Weight 0.7 kg
 Dimensions \varnothing 105x52 mm





MP-V & MP-P Pneumatic Pump

- Fluid: air
 Pressure MP-V: -0.9...0 bar
 Pressure MP-P: 0...7 bar
 Fine volume adjustment + vent valve
 Net weight: 0.6 kg (without gauge)
 Outputs:
- 1/8" NPT F for reference gauge
 - 1/8" NPT F for process
 - Flexible hose 100 cm length with the following connections:
 - 1/8" NPT M for pump side port
 - 1/4" NPT F



MVP-600 Pneumatic Pump

- Fluid: air
 Pressure: -1 ÷ 40 bar max
 Fine volume adjustment + vent valve
 Net weight: 0.9 kg (without gauge)
 Outputs:
- Upper port 1/4" NPT F with adaptor 1/4" NPT M to 1/4" BSP F (for reference gauge)
 - Side port 1/8" NPT F
 - Flexible hose 100 cm length with the following connections:
 - 1/8" NPT M for pump side port
 - 1/4" BSP F rotating connector for instrument under test



M-10 Hydraulic Pump

- Fluid: low viscosity mineral oil or demineralised water
 Pressure: 0÷700 bar
 Fine volume adjustment
 Net Weight: 1 kg (without gauge)
 Reservoir: transparent, 0.15 litres capacity
 Output connections: 2 ports 1/4" NPT F for reference gauge and instrument under test
- Flexible hose 100 cm length with the following connections:
 - 1/4" NPT M for pump side port
 - 1/4" BSP F rotating connector for instrument under test

Model CI-X-13-090313-01
P-KP1-E-0715-6



Standard supply includes

- Pressure generator as per code list
- Reference gauge as per code list
- Technical Carrying Case IP67
- Flexible hose 100 cm
- Conformity report
- Calibration work test report (for DGS only)
- Instruction manual

Options

- The kit can be supplied without the gauge
- Set of 5 process adapters as per table "Adapters kit"
- The gauge can be supplied with official calibration certificate (ACCREDIA or Equivalent)

Adapters kit

Code	Connection
4BM4NF	1/4" BSP male X 1/4" NPT female
4BM2NF	1/4" BSP male X 1/2" NPT female
4BM4NM	1/4" BSP male X 1/4" NPT male
4BM2NM	1/4" BSP male X 1/2" NPT male
4BM2BF	1/4" BSP male X 1/2" BSP female

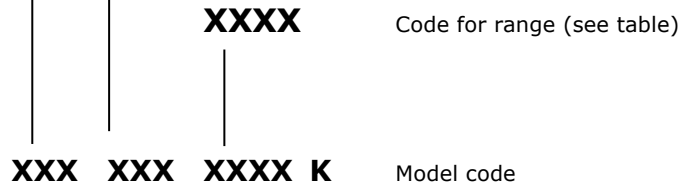
How to order

- MPV** Pneumatic pressure generator -0.9 up to 0 bar
- MPP** Pneumatic pressure generator 0 to 7 bar
- MP2** Pneumatic pressure generators MPV and MPP
- MVP** Pneumatic pressure generator -0.9 to 40 bar
- M10** Hydraulic pressure generator up to 700 bar

AGX Analogue gauge (see table)

DGX Digital gauge (see table)

DGS Digital Test Gauge High Accuracy



Model DGS

Code	Range	Resolution	Over press.
DGS-102G	-1÷2 bar	0,1 mbar	6 bar
DGS-102A	0÷2 bar	0,1 mbar	6 bar
DGS-110G	-1÷10 bar	1 mbar	20 bar
DGS-110A	0÷10 bar	1 mbar	20 bar
DGS-120G	-1÷20 bar	1 mbar	40 bar
DGS-120A	0÷20 bar	1 mbar	40 bar
DGS-140A	-1÷40 bar	1 mbar	60 bar
DGS-100A	0÷100 bar	10 mbar	200 bar
DGS-200A	0÷200 bar	10 mbar	400 bar
DGS-300A	0÷300 bar	50 mbar	500 bar
DGS-400A	0÷400 bar	50 mbar	800 bar
DGS-700A	0÷700 bar	50 mbar	800 bar
DGS-1K0A	0÷1000 bar	100 mbar	1100 bar

Model DG

Code	Range	Resolution	Over press.
DG-103G	-1÷3 bar	1 mbar	10 bar
DG-030G	-1÷30 bar	10 mbar	60 bar
DG-300G	0÷300 bar	100 mbar	400 bar
DG-700G	0÷700 bar	200 mbar	700 bar

Model AG63

Code	Range	Over press.
0610	10 bar	130% FSD
0635	35 bar	130% FSD
0670	70 bar	130% FSD
6100	100 bar	130% FSD
6140	140 bar	130% FSD
6200	200 bar	130% FSD
6400	400 bar	130% FSD

Other ranges available on request

We reserve the rights to alter at any time the technical specifications without notice.