

Calibratore di Pressione con pompa Integrata



MAXiCAL

Process Multifunction Calibrators

- Modello :
PPC673-40 Pneumatico fino 40 Bar
PPC673-60 Pneumatico fino 60 Bar
PPC673-700 Idraulico fino 700 Bar
PPC673-1000 Idraulico fino 1000 Bar
campi relativi o assoluti
Sensore barometrico integrato
Classe 0,02%
- Pompa e Calibratore sezionabili :
Manutenzione più semplice
manda solo il calibratore in taratura
- V, mA, Switch, Hz
Precisione 0,015%
- Alimentazione Loop 24V
- Comunicatore HART integrato
- Datalogging
- Ampio display retroilluminato
- Pacco Batteria ricaricabile LiION
Bluetooth USB
- Certificato di calibrazione 17025



La calibrazione può essere semplicemente descritta come un'attività dove lo strumento da provare viene comparato con uno di riferimento. Nel livello più semplice, calibrazione è la comparazione tra due misure, una di livello conosciuto ed una in maniera simile con un altro dispositivo. Il dispositivo con livello conosciuto viene chiamato standard. Il secondo dispositivo è l'unità in prova. La calibrazione è spesso richiesta su uno strumento nuovo o quando un intervallo di tempo è trascorso. Inoltre la calibrazione è di solito effettuata quando uno strumento è stato soggetto a un shock inaspettato che lo può aver portato fuori specifica. Per questo sono necessari dei calibratori semplici da utilizzare ed alla portata di tutti.

La serie PPC è un calibratore compatto e potente, che utilizza tecnologie di ultima generazione e con una facilità di utilizzo che permette di lavorare con efficienza e sicurezza.





Additel 673

Advanced Digital Pressure Calibrators

- Pressure ranges up to 60,000 psi (4,200 bar)
- 0.02%, 0.05% FS or 0.1% RD Accuracy
- Color Touchscreen Display
- Every model measures Gauge or Absolute Pressure
- Built-in Barometer
- Intuitive Smartphone Like Interface
- Bluetooth and USB Communication
- Wi-Fi (optional)
- Measure mA or V, and with 24V loop power
- Full HART Field Communicator (Optional)
- Data logging
- Communicates with Additel's Link Mobile App



Additel 673

OVERVIEW

Additel's 673 Advanced Digital Pressure Calibrators will redefine the way you want to measure and calibrate pressure readings and devices! With wireless remote connectivity, microprocessor technology, state of-the-art silicon pressure sensors and onboard storage capacity, these attractive and fully temperature compensated calibrators will provide the performance, durability and reliability you've come to expect from genuine Additel products. The all new modern menu structure and control interface brings a new and refreshing experience to pressure calibration work. This completely new way of interfacing with our pressure calibrators makes the ADT673 a real pleasure to use. The handy Additel Link app gives users the ability to remotely monitor these calibrators from the convenience of a personal device or cell phone. With an abundance of options to choose from, you can configure these pressure calibrators to precisely fit your specific pressure calibration and measurement needs. With an IP67 rating, you will find that these amazing pressure calibrators can be used in the field or laboratory to meet the most demanding pressure calibration needs.

A Modern User Experience:

Additel has gone above and beyond to provide our customers with the best possible experience when using this new and revolutionary calibrator. The 3.4 inch color touchscreen display comes with a protective replaceable tempered glass screen and is a refreshing update to the traditional push button or blister pad interface. With an easy to navigate menu structure and fast touchscreen response, you will find these ADT673 calibrators simple yet powerful to use. The easy to read display isn't just fun to use, but it's built rugged to handle the demands of a busy technician in the field or the laboratory.



HART Field Communicator :

With full support for HART communication protocols, the ADT673 Advanced Digital Pressure Calibrators provide a pressure calibration solution for transmitters over a wide pressure range. The ADT673 is a very portable device and can measure pressure precisely with a built-in pressure sensor, as well as read the current or mV produced by a transducer. It can even supply an excitation voltage (loop power) to power sensors or transmitters during calibration.





SPECIFICATIONS

Accuracy	ADT673-02: 0.02% of full span
	ADT673-05: 0.05% of full span
	673-RD: 0% to 20% of Range: 0.02% of full span
	20% to 110% of Range: 0.1% of reading
	Vacuum: 0.25% of full span[1][2]
Barometric Accuracy (built-in barometer)	50Pa
Gauge Types	Gauge pressure, compound pressure, absolute pressure, differential pressure
Display	Color Touchscreen (capacitive)
	Screen protector: tempered glass film (replaceable)
	Display rate: 3 readings per second (Default setting). Adjustable from 10 readings per second to 1 reading every 20 seconds
	Resolution: 4,5 or 6 digits (user selectable)
Pressure Units	Pa, kPa, MPa, psi, bar, mbar, kgf/cm ² , inH ₂ O@4°C mmH ₂ O@4°C, inHg@0°C, mmHg@0°C and 5 customizable units
Environmental	Compensated Temperature: 14°F to 122°F (-10°C to 50°C)
	Operating Temperature: 14°F to 122°F (-10°C to 50°C)
	Storage Temperature: -4°F to 158°F (-20°C to 70°C)
	Humidity: 0 - 95%, Non-condensing
Pressure Port	≤ 15,000 psi: 1/4NPT male, 1/2NPT male, 1/4BSP male, 1/2BSP male, M20×1.5 male
	> 15,000 psi: 1/4HP female or 1/4HP male
	*1/4HP female: Autoclave F-250-C, 9/16" - 18 UNF-2B
	*1/4HP male: Autoclave M-250-C, 9/16" - 18 UNF-2A
	Differential Pressure: Barb fitting
	Other connections available per request
Over Pressure Warning	120%
Power	Battery: Rechargeable Li-ion battery
	Li-Battery life: 16 hours typical
	Recharge time: 4 hours typical
	External power: 110V/220V power adapter (5 VDC)
Enclosure	Case material: 304 SS
	Wetted parts: 316 SS ^[3]
	Dimensions: 4.65" (118mm) width X 1.77" (42mm) depth 6.89" (175mm) height
	Weight: 1.58 lbs. (0.715 kg)
	Protection Level: IP67
Electrical Measurement Accuracy (23 ± 15°C)	Voltage DC: ±30.0000 V, ± (0.01%RD + 1.5 mV)
	Current DC: ±30.0000 mA, ± (0.01%RD + 1.5 µA)
	DC 24 V: 24 V ± 1%, MAX:30 mA
	Switch ^[4] : Status OPEN/CLOSED, support for mechanical switches and NPN/PNP digital switches
Data Logging	Data storage: 8GB (100M+ records)
	Mode: manual and automatic
	Interval-record: user selectable from 0.1 to 9999.9 second intervals
Compliance	Protection Level: IP67
	Vibration: 5 g (10-500 Hz)
	Shock Resistance: 8 g/11 ms
	CE
Communication	USB Type-C and Bluetooth included, RS232 or Wi-Fi (optional)
Warranty	1 year

[1] FS = -14.5 psi

[2] Applicable ADT673-RD-CPX

[3] Wetted parts material types may vary by pressure range.

Please refer to manual or contact to Additel for more information.

[4] Trigger voltage 2.7V

PRESSURE RANGE

Metrology Made Simple

Gauge Pressure ^[1]						
P/N	Pressure Range		Media ^[2]	Accuracy		Burst Pressure
	(psi)	(bar)		%FS	%RD	
V15	-15	-1.0	G	0.02 (0.05)	N/A	3x
GP2	2	0.16	G, L	0.05	N/A	3x
GP5	5	0.35	G, L	0.05	0.1	3x
GP10	10	0.7	G, L ^[3]	0.02 (0.05)	0.1	3x
GP15	15	1.0	G, L ^[3]	0.02 (0.05)	0.1	3x
GP30	30	2.0	G, L ^[3]	0.02 (0.05)	0.1	3x
GP50	50	3.5	G, L	0.02 (0.05)	0.1	3x
GP100	100	7.0	G, L	0.02 (0.05)	0.1	3x
GP150	150	10	G, L	0.02 (0.05)	0.1	3x
GP300	300	20	G, L	0.02 (0.05)	0.1	3x
GP500	500	35	G, L	0.02 (0.05)	0.1	3x
GP600	600	40	G, L	0.02 (0.05)	0.1	3x
GP1K	1,000	70	G, L	0.02 (0.05)	0.1	3x
GP1.5K	1,500	100	G, L	0.02 (0.05)	0.1	3x
GP2K	2,000	140	G, L	0.02 (0.05)	0.1	3x
GP3K	3,000	200	G, L	0.02 (0.05)	0.1	3x
GP5K	5,000	350	G, L	0.02 (0.05)	0.1	3x
GP10K	10,000	700	G, L	0.02 (0.05)	0.1	1.5x
GP15K	15,000	1,000	G, L	0.05 (0.1)	0.1	1.5x
GP20K	20,000	1,400	G, L	0.05 (0.1)	N/A	1.5x
GP25K	25,000	1,600	G, L	0.05 (0.1)	N/A	1.5x
GP30K	30,000	2,000	G, L	0.05 (0.1)	N/A	1.5x
GP36K	36,000	2,500	G, L	0.05 (0.1)	N/A	1.5x
GP40K	40,000	2,800	G, L	0.05 (0.1)	N/A	1.35x
GP50K	50,000	3,500	G, L	0.1 (0.2)	N/A	1.2x
GP60K	60,000	4,200	G, L	0.1 (0.2)	N/A	1.1x

[1] Sealed gauge pressure for above 1,000 psi

[2] G=Gas, L=Liquid

[3] 0.02% FS for gas media only

Compound Pressure						
P/N	Pressure Range		Media	Accuracy		Burst Pressure
	(psi)	(bar)		%FS ^[1]	%RD	
CP2	±2	±0.16	G	0.05	N/A	3x
CP5	±5	±0.35	G	0.02 (0.05)	0.1	3x
CP10	±10	±0.7	G	0.02 (0.05)	0.1	3x
CP15	±15	±1	G	0.02 (0.05)	0.1	3x
CP30	-15 to 30	-1 to 2	G	0.02 (0.05)	0.1	3x
CP100	-15 to 100	-1 to 7	G, L	0.02 (0.05)	0.1	3x
CP300	-15 to 300	-1 to 20	G, L	0.02 (0.05)	0.1	3x
CP500	-15 to 500	-1 to 35	G, L	0.02 (0.05)	0.1	3x
CP600	-15 to 600	-1 to 40	G, L	0.02 (0.05)	0.1	3x
CP1K	-15 to 1000	-1 to 70	G, L	0.02 (0.05)	0.1	3x

[1] FS specification applies to the span of the range



Absolute Pressure					
P/N	Pressure Range		Media	Accuracy(%FS)	Burst Pressure
	(psi)	(bar)			
AP5	5	0.35	G, L	0.1	3x
AP10	10	0.7	G, L	0.1	3x
AP15	15	1.0	G, L	0.1	3x
AP30	30	2.0	G, L	0.1	3x
AP50	50	3.5	G, L	0.1	3x
AP100	100	7.0	G, L	0.05 (0.1)	3x
AP300	300	20	G, L	0.05 (0.1)	3x
AP500	500	35	G, L	0.05 (0.1)	3x
AP1K	1,000	70	G, L	0.05 (0.1)	3x
AP3K	3,000	200	G, L	0.05 (0.1)	3x
AP5K	5,000	350	G, L	0.05 (0.1)	3x

Differential Pressure						
P/N	Pressure Range		Media	Accuracy (%FS) ^[1]	Burst Pressure	Static Pressure Range
	(inH ₂ O)	(mbar)				
DP1	±1	±2.5	G	0.05 ^[2]	100x	±10 psi
DP2	±2	±5.0	G	0.05 ^[2]	100x	±10 psi
DP5	±5	±10	G	0.05 ^[2]	50x	±10 psi
DP10	±10	±25	G	0.05 ^[2]	20x	±10 psi
DP20	±20	±50	G	0.05	20x	±10 psi
DP30	±30	±75	G	0.05	20x	±10 psi
DP50	±50	±125	G	0.05	3x	±10 psi
DP100	±100	±250	G	0.02	3x	±15 psi
DP150	±150	±350	G	0.02	3x	50 psi
DP300	±300	±700	G	0.02	3x	50 psi

[1] FS specification applies to the span of the range. Accuracy includes one year stability.

[2] 0.05%FS accuracy (incl 6 months stability). One year accuracy is 0.05%FS calibration accuracy combined with 0.05%FS one year stability.

Barometric Pressure					
P/N	Pressure Range		Media	Accuracy	Burst Pressure
	Low	High			
BP	60 kPa	110 kPa	G	40 Pa	3x

ORDERING INFORMATION

Model Number

ADT673 - 02 - GP300 - PSI - N •• WIFI •• HART

Range type:

PSI-range by psi
BAR-range by bar
H₂O-range by inH₂O

Accuracy:

02-0.02% of full span
05-0.05% of full span
10-0.1% of full span
20-0.2% of full span
RD-0.1% of reading

Pressure range P/N:

See pressure range table

Pressure port type:

N- 1/4NPT male
N2- 1/2NPT male
B-1/4BSP male
B2-1/2BSP male
M-M20X1.5 male
AF-Autoclave F-250-C female
AM-Autoclave M-250-C male

Comm port (optional):

WIFI = Wi-Fi
232 = RS-232

HART Communicator (Optional)

Accessories Included

Rubber boot
Test leads (1) set
Rechargeable Lion battery (1 pc)
USB cable (type-C)
Power adapter
Hanging strap
Silicone tube - 1 meter each (2 pcs for DP models only)
Manual
ISO 17025 accredited calibration certificate

Optional Accessories

Model number	Description
9903	Carrying case for (1) digital pressure gauge
9502	Additel/Log II real time data logging and graphical software
9530-BASIC	Additel/Acal Automated calibration software with asset management, basic version
9530-NET	Additel/Acal Automated calibration software with asset management, network version, Includes server installation and 1 user license
9050-EXT	RS 232 (DB9/M) extension cable, 9 feet

Note: For oil-free applications contact Additel.



PGS-700/PGS-1000



PGS-40/60

The Eigroupp PGS pump series are a remarkable new range of hand pumps for generating vacuum, gas and hydraulic pressure from a few mbar up to 1000 bar. The pumps are the ideal tool for applying test pressures to sensors, gauges, pressure switches and any pressure device. They are a low cost solution for field and workshop use and can be supplied with the wide range of Eigroupp digital pressure indicators or for OEM applications.

- calibrate pressure device
- 4 separate models
- range from Vacuum to 1000 bar
- extended kit solutions to suits different needs

The pneumatic pumps allow pressures in excess of 600 psi to be generated with just a few strokes of the pump. By changing the push-in switching valve to vacuum, the pump will generate vacuum down to nearly 96%.

The PGS 700 and PGS 1000 hydraulic test pumps work with a variety of different fluids, including water and oil to easily generate pressures up to 1000 bar (14500 psi). The pump uses an unique "switch" which allows for fast priming or filling of the test system and then switching as needed to a smaller stroke for easier generation at high pressure.

The desired pressure point can be easy tuned by using the vernier control and a precision needle vent valve allows for controlled venting.

All 4 pumps can be supplied as a bare pump or in kit form with a hard transit case, set of adaptors, seals and hose.

SELECTION GUIDE

Features	PGS-60	PGS-40	PGS-700	PGS-1000
Pneumatic pressure capability	•	•		
Vacuum capability	•	•		
Hydraulic capability			•	•
Integral fine control for accurate set point	•	•	•	•
adjustable stroke for over pressure safety	•	•		
Controlled pressure relief valve	•	•	•	•
Priming operation			•	•
Fluid compatible (not distilled water)			•	•
Scissor action pump	•	•	•	•

TECHNICAL SPECIFICATION

Parameter	PGS-60-OEM	PGS-40-OEM	PGS-700-OEM	PGS-1000-OEM
Operating pressure range	-960mbar to 60bar	-960 mbar to 40 bar	0 to 700 bar	0 to 1000 bar
Pressure media	air	air	liquid	liquid
Fine adjustment resolution	1 mbar	1 mbar	10 to 100 mbar	10 to 100 mbar
Ref port pressure connection	3/8" BSP (F)	3/8" BSP (F)	3/8" BSP (F)	3/8" BSP (F)
Ref port standard adaptor	1/2 BSP (F)	1/2 BSP (F)	3/8" BSP (F)	1/2" BSP (F)
Test point pressure connection	1/4 BSP (F)	1/4 BSP (F)	1/4 BSP (F)	1/4 BSP (F)
Hose extension	1 x 1 meter	1 x 1 meter	option	option
Weight	510 g	510 g	1.6 Kg	1.6 Kg

Specification are based on minimum volume

G10 series

Reference pressure gauge

A range of analogue reference gauges for the PGS pump series. All gauges are dual scale reading bar/psi and fit on the top of the PGS40/700/1000 pump by using the supplied swivel adaptor, hand tight no adaptor or spanner required.



TECHNICAL SPECIFICATION

Over pressure: 30% FS

Connection: 1/2" BSP (M)

Fine graduation

Knife pointer

G10-0060 through G10-1000 -Wetted part: AISI 316 and AISI 316L,

-Case: AISI 304, glass tempered

G10-0000 through G10-0040 -Wetted part: brass, chrome plated

-Case: AISI 304, glass normal

PRESSURE RANGES

Model	Range	Accuracy	Diameter
G10-0000	-1 to 0 bar/-30 to 0 inHG	1% FS	63 mm
G10-0002	0 to 2 bar/0 to 30 psi	1% FS	63 mm
G10-0011	0 to 11 bar/0 to 160 psi	1% FS	63 mm
G10-0025	0 to 25 bar/0 to 365 psi	1% FS	63 mm
G10-0040	0 to 40 bar/0 to 600 psi	1% FS	63 mm
G10-0060	0 to 60 bar/0 to 800 psi	0.6% FS	100 mm
G10-0100	0 to 100 bar/0 to 1400 psi	0.6% FS	100 mm
G10-0160	0 to 160 bar/0 to 2000 psi	0.6% FS	100 mm
G10-0250	0 to 250 bar/0 to 3000 psi	0.6% FS	100 mm
G10-0400	0 to 400 bar/0 to 5000 psi	0.6% FS	100 mm
G10-0600	0 to 600 bar/0 to 8000 psi	1% FS	100 mm
G10-1000	0 to 1000 bar/0 to 15000 psi	1% FS	100 mm

MAXiCAL

Process Multifunction Calibrators

PGS-40/60 Pneumatic Test Kits

Combined vacuum/pneumatic kit for pressure testing includes:

- PGS-40/60-OEM pump
- Set of BSP or NPT adaptors (to be specified)
- Set of seals
- Pressure hose with 1/4" BSP F adaptor (1 meter)
- Robust ABS transit case with customised foam and cells



SPECIFICATION

Model	Description
PGS-4/60-P-BSP	Pressure test kit, BSP adaptor 1/4" BSP male to 1/8", 3/8" (F) and 1/2" BSP (M)
PGS-4/60-P-NPT	Pressure test kit, NPT adaptor 1/4" BSP male to 1/8", 3/8", 1/2" and 1/4" NPT (F)

PGS-700/1000 Hydraulic Test Kit

Hydraulic test kit for high pressure testing includes:

- PGS-700-OEM or PGS-1000-OEM pump
- Set of BSP or NPT adaptors
- HTH-1000-1 high pressure hose, 1 meter
- PGS700-A-G14 adaptor for HTH-1000 hose
- Set of seals
- PGS700-TC Robust ABS transit case with customised foam and cells



SPECIFICATION

Model	Description
PGS-700-H-BSP	Pressure test kit, BSP adaptor 1/4" BSP male to 1/8", 3/8" (F) and 1/2" BSP (M)
PGS-700-H-NPT	Pressure test kit, NPT adaptor 1/4" BSP male to 1/8", 3/8", 1/2" and 1/4" NPT (F)
PGS-1000-H-BSP	Pressure test kit, BSP adaptor 1/4" BSP male to 1/8", 3/8" (F) and 1/2" BSP (M)
PGS-1000-H-NPT	Pressure test kit, BSP adaptor 1/4" BSP male to 1/8", 3/8", 1/2" and 1/4" NPT (F)

Ordering Informations

Pump Model

PGS-60-OEM:	Medium pressure pump, -960 mbar to 60 bar
PGS-40-OEM:	Medium pressure pump, -960 mbar to 40 bar
PGS-700-OEM:	High pressure pump, 0 to 700 bar
PGS-1000-OEM:	High pressure pump, 0 to 1000 bar

Pump Kits

PGS-60-P-BSP:	Low pressure pump kit, BSP adaptors
PGS-60-P-NPT:	Low pressure pump kit, NPT adaptors
PGS-40-P-BSP:	Medium pressure pump kit, BSP adaptors
PGS-40-P-NPT:	Medium pressure pump kit, NPT adaptors
PGS-700-H-BSP:	Hydraulic test kit, BSP adaptors
PGS-700-H-NPT:	Hydraulic test kit, NPT adaptors
PGS-1000-H-BSP:	Hydraulic test kit, BSP adaptors
PGS-1000-H-NPT:	Hydraulic test kit, NPT adaptors

Pressure Gauges See table for part number

Adaptors

PGS-BSP adaptor set:	1/4" BSP (M) to 1/8", 3/8" (F) and 1/2" BSP (M)
PGS-NPT adaptor set:	1/4" BSP (M) to 1/8", 3/8", 1/2" and 1/4" NPT (F)
PGS-A-N14I-G38A:	3/8" BSP (M) to 1/4" NPT (F) adaptor for ref port
PGS-A-G14I-G38A:	3/8" BSP (M) to 1/4" BSP (F) swivel connector for Ref port

Carrying cases

PGS60-TC:	Robust transit case with customised cells and foam
PGS40-TC:	Robust transit case with customised cells and foam
PGS700-TC:	Robust transit case with customised cells and foam

High Pressure hose (PGS 700/PGS 1000 only)

HTH-1000-1:	High pressure hose 1 meter, 1500 bar, 1/4" BSP (F)
HTH-1000-2:	High pressure hose 2 meters, 1500 bar, 1/4" BSP (F)
HTH-1000-3:	High pressure hose 3 meters, 1500 bar, 1/4" BSP (F)