

About CONST

HISTORY: CONST group is an ISO-9001:2000 certified manufacturer of precision pressure products. CONST was established in 1998 in Beijing. As a private incorporation, CONST group's object was to design and produce high accuracy, high quality, easy to use pressure instruments.

PEOPLE: The key to CONST group's strength in the marketplace is the concentration of experienced people in the field of precision pressure measurement and control. The company's founders previously worked in various capacities in the pressure and temperature metrology in Chinese National Institute of Metrology labs. These founders were involved in the design of the original....., CONST research teams have an average tenure of twenty years. That's a lot of pressure experience!

PRODUCT: CONST group's portfolio of products consists of an extensive line of precision pressure instruments, including digital pressure gauges, digital pressure calibrator, automatic pressure controllers, multifunction calibrator and temperature calibration solution. All of these products feature computer interface capability. These products are used in metrology labs, calibration labs, research facilities, engineering offices, production test stands, and in other environments where high accuracy pressure measurement and/or control is required. Many of these products include customized features to meet a customer's specific requirement. CONST products range from about US\$400 to US\$30,000.

CUSTOMERS: Typical CONST customers are coal power plant, steel factory, petrochemical industry, aerospace firms, jet engine manufacturers, electric utilities, nuclear power plants, pharmaceutical firms, calibration laboratories, government agencies and research organizations.

APPLICATIONS: In many facilities the highest accuracy pressure measuring of pressure controlling instrument is a CONST product. A typical application for these CONST instruments is the calibration of other pressure devices, such as sensor, transducers, transmitters, gauges and pressure switches. The CONST product is used as the pressure standard to verify pressure calibrations or outputs of the device being produced, checked, tested or certified



CONST can help you make calibration more easy

As an experienced provider of calibration instruments, our main concern is to manufacture and deliver high-quality instruments. Our calibration instruments are designed and manufactured in ISO9001 certified facilities.



ISO9001:2000



CE certificate

0



Explosion-proof (EX)



UL certificate (pending)

Professional Equipments



EMC test



Intelligent Automatic test



Electronic Automatic Welding



Temperature Compensation



Pressure Aging



Temperature Aging-line



Pressure Measure



Electricity Measure



Temperature Measure

Contents

Digital pressure calibrator CONST273.....	1
Digital pressure gauge CONST211.....	3
Pressure pump selectable sheet.....	5
Low-pressure pneumatic pump CONST113/ CONST 115.....	6
Mid-pressure pneumatic pump CONST116 / CONST 117.....	7
High-pressure hydraulic pump CONST131 / CONST 132.....	8
Lab-use pressure test pump CST1023/ CONST181 /CONST185.....	9
Lab-use pressure test pump CONST182/CST1005.....	10
Fittings & Adapters.....	11
On-site calibration solution.....	12



Digital Pressure Calibrator Model ConST273



The ConST273 is a microprocessor controlled, precision instrument powered by an internal Li-ion battery or external 10V special adapter. It is portable and capable of accurate pressure instruments and *sourcing* when calibrating transducers, pressure switches, etc.

Advanced silicon technology delivers 0.02%F.S accuracy over ranges to 600 bar, 0.1%F.S accuracy over ranges to 2500 bar, permits use in most environments without degradation of accuracy.

Applications:

- ✧ Burst Disc testing
- ✧ Safety relief valve resting
- ✧ Hydraulic torque wrench indication
- ✧ Pressure regulator testing
- ✧ Gauge calibration
- ✧ Pressure regulator adjustment
- ✧ Filter performance testing
- ✧ Hydraulic leak testing
- ✧ Pressure switch testing
- ✧ Wellhead monitoring

Features

- ◆ HART function: test HART transmitter easily;
- ◆ High stability: Strict manual speedup aging and stress aging test, use special temperature compensation technology;
- ◆ Self-protection: electric protection design;
- ◆ Safe battery: use Li-ion rechargeable battery;
- ◆ EMC ability: CE is approved;
- ◆ Connect with PC: via RS232 cable; the baud rate and communication address is supplied;
- ◆ Data logger: big capacity of data store and real time record;
- ◆ High-accuracy sampling data: the resolution can be switched 5 digits or 6 digits;
- ◆ Pressure peak value record function;
- ◆ Pressure leak hunting function;
- ◆ Set pressure triggering switch status;
- ◆ Real time o'clock function;
- ◆ Single-key shortcut operation
- ◆ Standard electricity terminal makes the test leads can be interchanged;
- ◆ Dual lines with 6 digits, big LCD screen with blue backlight.



**Differential
pressure
calibrator**

Order information

- Add HART function (optional);
- Type (Gauge/ differential/Absolute/compound);
- Accuracy (0.02%FS, 0.05%FS, 0.1%FS, etc);
- Pressure connector (M20*1.5, NPT/BSP);
- Pressure test pump kit (optional);
- Traceable certificate from BIM (optional)



Pressure selection table

Pressure range	Type	Resolution	Accuracy (%FS)	Max. Pressure
0 ~ 0.6 mbar	D	0.1mbar	-- 1.6	0.72 mbar
0 ~ 2.5 mbar	D	0.01 mbar	-- 0.5	3 mbar
0 ~ 10 mbar	D	0.01 mbar	-- 0.1	12 mbar
0 ~ 20 mbar	D	0.001 mbar	-- 0.05	22 mbar
0 ~ 50 mbar	G D	0.001 mbar	-- 0.05	60 mbar
0 ~ 100 mbar	G,D	0.01 mbar	-- 0.05	120 mbar
0 ~ 160 mbar	G,D	0.01 mbar	-- 0.05	192 mbar
0 ~ 250 mbar	G,D	0.01 mbar	-- 0.05	300 mbar
0 ~ 400 mbar	G, A	0.01 mbar	0.02 0.05	480 mbar
0 ~ 600 mbar	G, A	0.01 mbar	0.02 0.05	720 mbar
-1 ~ 0 bar	G, A	0.0001 bar	0.02 0.05	--
0 ~ 1 bar	G, A	0.0001 bar	0.02 0.05	1.2 bar
0 ~ 1.6 bar	G, A	0.0001 bar	0.02 0.05	1.9 bar
0 ~ 2.5 bar	G, A	0.0001 bar	0.02 0.05	3 bar
0 ~ 4 bar	G, A	0.0001 bar	0.02 0.05	4.8 bar
0 ~ 6 bar	G, A	0.0001 bar	0.02 0.05	7.2 bar
0 ~ 10 bar	G, A	0.001 bar	0.02 0.05	12 bar
0 ~ 16 bar	G, A	0.001 bar	0.02 0.05	19 bar
0 ~ 25 bar	G, A	0.001 bar	0.02 0.05	30 bar
0 ~ 40 bar	G, A	0.001 bar	0.02 0.05	48 bar
0 ~ 60 bar	G, A	0.001 bar	0.02 0.05	72 bar
0 ~ 100 bar	SG, A	0.01 bar	0.02 0.05	120 bar
0 ~ 160 bar	SG, A	0.01 bar	0.02 0.05	192 bar
0 ~ 250 bar	SG, A	0.01 bar	0.02 0.05	300 bar
0 ~ 400 bar	SG, A	0.01 bar	0.02 0.05	480 bar
0 ~ 600 bar	SG, A	0.01 bar	0.02 0.05	720 bar
0 ~ 1000 bar	SG	0.1 bar	-- 0.05	1200 bar
0 ~ 1600 bar	SG	0.1 bar	-- 0.1	1920 bar
0 ~ 2500 bar	SG	0.1 bar	-- 0.1	3000 bar

Remark: D= differential pressure;

G= Vented gauge pressure;

SG=sealed gauge pressure

A= Absolute pressure (The accuracy is only up to 0.05%FS)

Compound Pressure

0 ~ ±0.6mbar; 0 ~ ±2.5mbar; 0 ~ ±10mbar; 0 ~ ±20mbar;
 0 ~ ±50mbar; 0 ~ ±100mbar; 0 ~ ±160mbar; 0 ~ ±250mbar;
 0 ~ ±400mbar; 0 ~ ±600mbar; -1000mbar ~ 600mbar;
 -1bar ~ 1bar; -1bar ~ 1.6bar,-1bar ~ 2.5bar...etc
 Other pressure ranges are available to special order.

Media Compatibility

-1~ 2.5 bar: Clean dry non-corrosive gases.
 4~ 2500 bar: media compatible with 316L SS.

Over pressure warning: 120%

Pressure units: Pa, KPa, Kg/cm², inH₂O, mmH₂O, PSI, mbar, bar, MPa (In order to avoid the readings to overflow or too low to read, only some of pressure units are selected)

I/V/T/Switch/24V measure

Current	±30.0000mA; ± (0.02%RD+0.003%FS)
Voltage	±30. 0000V; ± (0.02%RD+0.003%FS)
Temperature	(-20-70)°C (it is just inner temperature)
Switch	Status OPEN/CLOSED, (1 to 12v)
DC24V	DC24V±0.5V max:50mA Protect: 120mA

Remark: Current resolution is 0.001mA or 0.0001mA.

Voltage resolution is 0.001V or 0.0001V

This temperature is the inner, just for reference.

If switch has detective voltage, the range is 1~12V

Ambient Environment

Operating Temperature: -10°C to 50°C
 Storage Temperature: -20°C to 70°C
 Temperature effects: are includes in accuracy
 Relative humidity: < 95%
 Atmospheric pressure: 0.86~1.06 bar
 Re-calibration period: One year (recommend)

Display

Description: Monochrome LCD with LED Backlight
 Resolution: Dual lines, six digits per line.
 Clock Format: 【Y/M/D H:M】 , 24 hours

Measure speed: 3.5 readings per second

RS232 parameter (environmentally sealed)

Baud rate: 1200,2400,4800,9600
 Data length: 8 bits
 Stop bit: 2 bits
 Address: from 1 to 112

Data logger

Storage capacity: 30 files, 40 records per file
 Mode: manual and automatic
 Hour-record: record the data in every one hour
 Interval- record: time is set by users

Connections

Pressure: M20x1.5 male thread (or customized)
 FESTO hose (for differential pressure)
 Electrical: standard Φ4mm terminal
 Communication: RS232 (DB9/F)

Power Supply

Inside Power: Rechargeable Li-ion polymer battery
 Outside power: 10V AC adapter
 Li-Battery life: 40 hours
 Rechargeable time: 4 hours.

Accessories:

Adapter: 10V A/C,
 Test lead: 2pieces (1.5meters)
 FSTO φ4 hose: 2pieces (for differential pressure)

Dimension:

Calibrator head only: φ120mm×46mm,
 Total height: 184mm

Weight:

Net weight: 0.7kg (differential type: 0.8kg)
 Gross weight: 1kg



Digital Pressure Gauge Model ConST211



The all new ConST211 is a high-accuracy, high-resolution digital pressure gauge. Because of their robust design, these gauges meet stringent demands and can be used in critical industrial applications where particular importance is attached to measuring accuracy, reproducibility, long term stability and protection against dust penetration.

The ConST211 has an accuracy of 0.05% of the calibrated span which is fully temperature compensated across the range of -10°C to 50°C.

Applications

- ◆ Field gauge calibration
- ◆ Permanent outdoor installation
- ◆ Burst disc testing
- ◆ Pressure safety valve (PSV) testing
- ◆ Hydraulic torque wrench indication
- ◆ Torque data logging
- ◆ Pressure regulator testing
- ◆ Pipeline static pressure testing
- ◆ Pressure regulator testing
- ◆ Pressure switch testing
- ◆ Wellhead monitoring
- ◆ Filter performance testing
- ◆ Hydrostatic leak testing

Features

- ◆ Pressure up to 600bar (9000PSI)
- ◆ Use advanced micro power consumption. Battery supply power to 2,000 hours of continuous operation
- ◆ Measure the pressure 3 times per second
- ◆ Strict speedup aging test, stress aging test and unique temperature compensation insures the long stability.
- ◆ Strict electric protection frame enhances the self-protection capability.
- ◆ CE compliance proves perfect EMC ability.
- ◆ Large, easy-to-read display with 5 digit resolution
- ◆ % pressure indication and additional bar graph for quick visual reference
- ◆ Stainless steel or Inconel pressure cavity for aggressive media
- ◆ It is to be used in potentially explosive environments specified to EX ia IIC T4, the intrinsically safe option must be ordered for optimum safety.

Calibration Application in lab



Order information

Please stage the following (where applicable)

1. Accuracy(0.2%FS, 0.1%FS, 0.05%FS)
2. Pressure range, type(G,A or SG),
3. Pressure connector (M20*1.5, NPT/BSP).
4. Intrinsically safe (optional)
5. Calibration certificate from BIM (optional)
6. Any other information if possible.

Accuracy

0.05% FS including non-linearity, hysteresis, repeatability and temperature effects from -10°C to 50 °C.

Pressure Selection table

Pressure Range	Type	Resolution	Accuracy (%FS)			Max (bar)
			0.2	0.1	0.05	
-1bar ~ 0	G, A	0.0001 bar	√	√	√	----
0 ~ 400 mbar	G, A	0.01 mbar	√	√	√	0.48
0 ~ 600 mbar	G, A	0.01 mbar	√	√	√	0.72
0 ~ 1 bar	G, A	0.0001 bar	√	√	√	1.2
0 ~ 1.6 bar	G, A	0.0001 bar	√	√	√	1.92
0 ~ 2.5 bar	G, A	0.0001 bar	√	√	√	3
0 ~ 4 bar	G, A	0.0001 bar	√	√	√	4.8
0 ~ 6 bar	G, A	0.0001 bar	√	√	√	7.2
0 ~ 10 bar	G, A	0.001 bar	√	√	√	12
0 ~ 16 bar	G, A	0.001 bar	√	√	√	19.2
0 ~ 25 bar	G, A	0.001 bar	√	√	√	30
0 ~ 40 bar	G, A	0.001 bar	√	√	√	48
0 ~ 60 bar	G, A	0.001 bar	√	√	√	72
0 ~ 100 bar	SG, A	0.01 bar	√	√	√	120
0 ~ 160 bar	SG, A	0.01 bar	√	√	√	192
0 ~ 250 bar	SG, A	0.01 bar	√	√	√	300
0 ~ 400 bar	SG, A	0.01 bar	√	√	√	480
0 ~ 600 bar	SG, A	0.01 bar	√	√	√	720

Remark: G= gauge pressure; A= Absolute pressure;

SG= sealed gauge pressure;

Burst pressure:

-1~0bar, ..., 0~60bar burst pressure is 3 x, <100bar

0~100bar, ..., 0~600bar burst pressure is 3 x, <1000bar

Resolution

Maximum five digits

Measure speed

Three times per second

Display

5 digits with 12.7mm character height

Compound pressure

Range	Type	Accuracy (%FS)			Media
		0.2%	0.1%	0.05%	
± 0.4 bar	G	√	√	√	gas
± 0.6 bar	G	√	√	√	gas
± 1 bar	G	√	√	√	gas
(-1~1.6) bar	G	√	√	√	gas
(-1 ~ 2.5) bar	G	√	√	√	gas

Pressure units

Pa, kPa, Kg/cm², inH₂O, mmH₂O, PSI, mbar, bar, MPa
(In order to avoid the readings to overflow or too low to read, only some of pressure units are selected.)

Pressure Bar Graph

In addition to the numeric pressure indication, the ConST211 LCD display contains a circular fifty-one segment bar graph to provide the user with a quick visual estimation of pressure from 0 to 100% full scale output.

Minimum/Maximum Values

The minimum and maximum pressure values can be displayed on the ConST211. This function can be enabled or disabled, and reset by the user.

Alarm Output

The alarm output consists an open drain field effect transistor.

Analogue Dial

Includes pressure swing, % indication, low/high alarm

RS232 Interface

Available

Battery

The ConST211 is supplied with a 3.6V alkaline battery. Battery life is approximately 2000 hours at three readings per seconds.

European Compliance

CE marked (No.: AE 5015 6196 0001)

Pressure Port

M20x1.5 male thread (or customized)

Storage Temperature

-20°C - 70°C

Dimensions

112mm diameter x 35mm, total 178mm height

Weight

580 gram approximate



Picture	Product	Pressure	Resolution	Media	Connector	Weight	Use
 Page 6	ConST113 Low pressure hand pump	-40% to 0.4bar	0.0001 mbar	Air	2pcs	1kg	On-Site & Lab
 Page 6	ConST115 Portable pneumatic pump	-95% to 4bar	0.0001 mbar	Air	2pcs	3.8kg	On-Site & Lab
★hot  Page 7	ConST116 Pneumatic hand pump	-95% to 25bar	0.1 mbar	Air	2pcs	1.5kg	On-Site
 Page 7	ConST117 Portable pneumatic pump	-95% to 40bar	0.1 mbar	Air	2pcs	3kg	On-Site & Lab
★hot  Page 8	ConST131 Hydraulic hand pump	-90% to 600bar	1 mbar	Oil & water	2pcs	1.5kg	On-Site
 Page 8	ConST132 Portable hydraulic pump	-90% to 600bar	1 mbar	Oil & water	2pcs	3kg	On-Site & Lab
★hot  Page 9	CST1023 Desktop pneumatic pump	-95% to 60bar	0.1 mbar	Air	3pcs	9.0kg	lab
★hot  Page 9	ConST181 Hydraulic pump	-90% to 700bar	/	Oil	3pcs	15kg	lab
 Page 9	ConST185 Hydraulic pump	-90% to 700bar	/	Oil	5pcs	20kg	lab
★hot  Page 10	ConST182 Hydraulic pump(Water)	-90% to 700bar	/	Water	3pcs	15kg	lab
 Page 10	CST1005 High pressure pump	10 to 2500bar	/	Oil	3pcs	9.5kg	Lab

Low-pressure pneumatic pump



ConST113 Low-pressure hand pump

Description

The ConST113 is a hand operated pressure pump designed to generate either vacuum to -0.4bar or pressure to 0.4bar. The ConST113 includes a pressure/vacuum selector, a volume control for fine adjustable pressure relief valve to prevent damage to sensitive instruments.

Application

The ConST113 is primarily intended for low pressure application. It features a fine adjust vernier with 0.01Pa resolution at low pressure. It is a perfect pressure source on the site.

Specification

Pressure

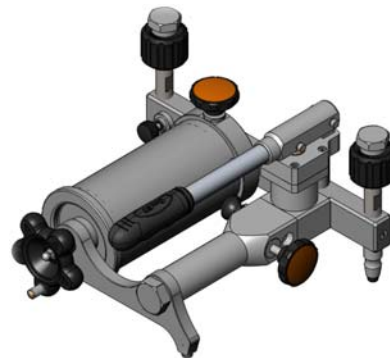
Pressure range.....-40% vacuum to 0.4bar
 Pressure resolution.....0.0001mbar

Material

Ram/Adapters.....316SS
 Body.....Stainless Steel/ Aluminum
 Seals.....Buna N (nitrile)
 Media.....Air

Dimensions

Length (of base).....230mm (9.06")
 Width (of base)..... 130mm (5.12")
 Height (overall).....125mm (4.92")
 Weight.....1.0kg (2.21lbs)



ConST115 Portable low-pressure pump

Description

ConST115 is an extension from the ConST113. Besides the other components, it adds a pressure lever to generate the pre-pressure.

Application

The ConST115 is a perfect pressure source in the range of (-95% to 4bar), It can use both in-home and on-site.

Specification

Pressure

Pressure range.....-95% vacuum to 4bar
 Pressure resolution.....0.0001mbar

Material

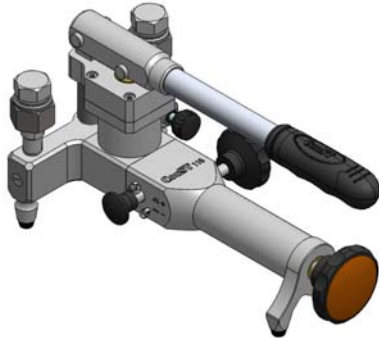
Ram/Adapters.....316SS
 Body.....Stainless Steel/ Aluminum
 Seals.....Buna N (nitrile)
 Media.....Air

Dimensions

Length (of base).....285mm (11.22")
 Width (of base)..... 220mm (8.66")
 Height (overall).....120mm (4.72")
 Weight.....3.8kg (8.38lbs)



Mid-pressure pneumatic pump



ConST116 Pneumatic Hand pump

Description

This novelty is a new air pressure source with own patent right. ConST116 is attached inner gas-liquid isolator and shut-off valve (for releasing dirt), not only it is totally free from humidity and dirt, but also it can save labor and leakage is the lowest. Due to it well avoided lots shortcomings caused by the non-return valve, its airtight performance and efficiency is much better than other pliers type hand pumps. (Patent#: ZL 2008 2 0123201.0)

Application

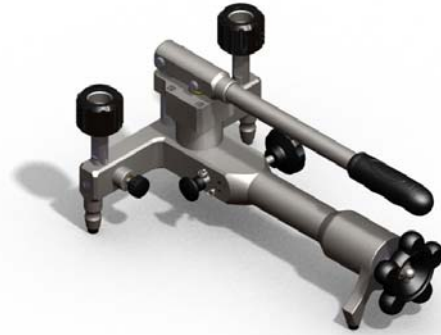
It is a perfect pressure source of calibration on-site.

Specification

Pressure.....z-95% vacuum to 25bar
Pressure resolution..... 0.1 mbar
Material.....316SS/Aluminum
Media.....Air
Sizes (L*W*H).....240*120*130mm
Weight.....1.5kg

Accessories

Flexible hose..... 1 pc
Sealing ring.....20pcs
Adapter3pcs
Plug2pcs
Spanner.....1pc



ConST117 Portable Pneumatic Pump

Description

ConST117 is an extension from the ConST116. It is to calibrate the big size gauges under test, pressure range is -95% vacuum up to 40bar by pneumatic, and the adjusting resolution is 0.1mbar. It is much better than pliers-type hand pumps.

Application

The ConST117 is a very good pressure source. It can use in-home or in-field.

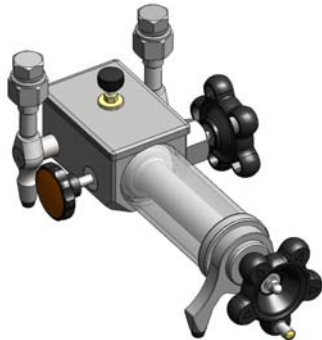
Specification

Pressure.....-95% vacuum to 40bar
Pressure resolution.....0.1 mbar
Material.....316SS/Aluminum
Media.....Air
Sizes (L*W*H).....315*198*140mm
Weight.....3.0kg

Accessories

Sealing ring.....20pcs
Plug2pcs

High-pressure hydraulic pump



ConST131 Hydraulic Hand pump

Description

This novelty is a new hydraulic pressure source with patent right. By using helicoidal pump, it is very easy to pressurize or adjustment. Its durability and airtightness is much better than most pliers type hand pump, this is because pliers hand-pump's check valve is always weaken the airtight effect. However, the ConST131 resolved such problems very well. (Patent#: ZL 2008 2 0123141.2)

Application

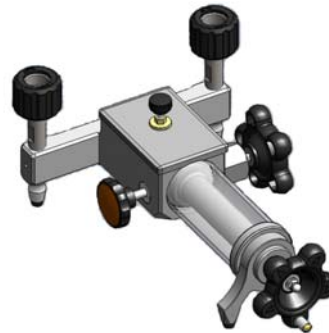
It is a perfect pressure source for the range from -90% to 600bar. If it use with pressure calibrator ConST273 together, this combination is really suitable to calibrate pressure gauge, pressure transmitter, pressure switch and other pressure instruments on site.

Specification

Pressure range.....-90% vacuum to 600bar
Pressure resolution.....1 mbar
Material.....316SS/Aluminum
Media.....Oil or distilled water
Sizes (L*W*H).....250*140*120mm
Weight.....1.5kg

Accessories

Flexible hose..... 1 pc
Sealing ring.....20pcs
Adapter3pcs
Plug2pcs
Spanner.....1pc



ConST132 Portable Hydraulic Pump

Description

ConST132 is an extension item from ConST131. It is to calibrate the big size gauges under test, the pressure range is -90% vacuum up to 700bar by hydraulic. The adjusting resolution is 1mbar. It is much better than pliers-type hand pumps.

Application

The ConST132 can use in-home or in-field, it is a very good pressure source.

Specification

Pressure range.....-90% vacuum to 700bar
Pressure resolution.....1 mbar
Material.....316SS/Aluminum
Media.....Oil or distilled water
Sizes (L*W*H).....290*198*135mm
Weight.....3.0kg

Accessories

Sealing ring.....20pcs
Plug2pcs



Lab-use pressure test pump



CST1023 Pneumatic pressure pump

Description

This is a manually operated pressure generator that provides a quick and cost effective means.

Features

Special impurity filter and liquid-gas separator;
It can save more labor than pliers hand pump;
User can calibrate two gauges on the three quick connection ports at the same time.

Application

The CST1023 is much practical than most of handheld hand pumps. This is because its' shut-off valve makes the best seal performance, and the operator can only use his single hand to finish the pressurizing job, it is very convenient for calibration use in laboratory.

Specification

Pressure range: -95% vacuum to 60 bar
Pressure resolution: 0.1mbar
Media: Air
Size (L*W*H): 375mm* 315mm*130mm
Weight: 9.0Kg



ConST181 Hydraulic pressure pump

Description

The ConST181 is a self contained, precision hydraulic pressure pump intended for the calibration in laboratory.

(Patent #: ZL200720148839.5, ZL200730107812.7)

Feature

- ◆ It have three quick connectors with own isolating valve.
- ◆ The non-cycle filter system avoids the dirt pollution.
- ◆ It can calibrate the different range's gauges at one time
- ◆ It can test the gauge's airtightness performance.

Application

A good pressure source for calibration in lab

Specification

Pressure range is -90% vacuum to 700 bar
Media: Oil
Size (L*W*H): 475mm* 300mm*150mm
Weight: 15.0Kg

Extension product

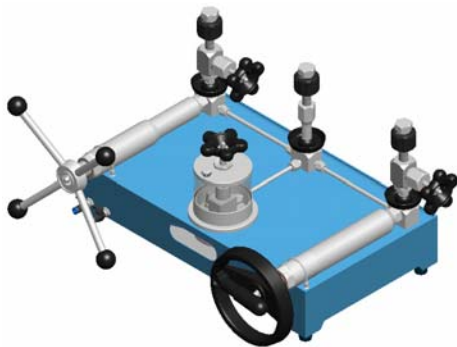
ConST185 Hydraulic pressure pump

Patent #: ZL 200720148839.5

Pressure range is -90% vacuum to 700 bar
Feature: 5 quick connectors with isolating valve
Media: Oil
Size (L*W*H): 880mm* 300mm*150mm
Weight: 20.0Kg



Lab-use pressure test pump



ConST182 Hydraulic pressure pump

Description

The ConST182 high pressure water media pump is a manually operated piston screw pump. It is designed for any application where the water media is to be compressed within a small volume to generate pressure. In order to avoid the dirt or impurity blocked the pipes, this pump use the non-recycle structure.

(Patent #: ZL200720148839.5, ZL200730107812.7)

Application

The apparatus is mainly used to calibrate non-oil gauges in the aviation, astronautics, the medicine, food Industry and so on.

Features

- ◆ Every components have been cleaned by the ultrasonic wave, and the oil thoroughly been eliminated.
- ◆ Stable to increase or decrease pressure
- ◆ It avoids the errors caused by the height or liquid-gas separator's isolating membrane.
- ◆ The non-cycle can avoid the explosion hidden trouble
- ◆ To test the sealing performance of the gauge under test

Specification

Pressure range.....-90% vacuum to 700bar
Media.....Oil or distilled water or alcohol
Sizes (L*W*H).....475 mm *300 mm *150mm
Weight.....15kg



CST1005 Hydraulic pressure pump

Description

The CST1005 Hydraulic pump is a hand operated pressure generator that provides a quick and cost effective means of comparing reading between, for example, a reference gauge and the gauge under test or pressure switch.

It is made up of a hydraulic pump, adjuster of screw compressor, valves and pipes. Three (3) pressure ports are provided. The CST1005 is much, much faster to use than a deadweight tester, and its' also faster than most auto-mated pressure controllers, but it costs much less than either. (Patent #: ZL200520141873.0)

Application

It's so quick and easy to use, it's ideal to calibrate those low cost gauges that are often overlooked for ISO9000 compliance. The features and performance for even you most demanding gauge calibration requirements.

Specification

Pressure range.....10 to 2500bar
Media.....Oil
Sizes (L*W*H).....400 mm *375 mm *200mm
Weight.....9.5kg



Fittings and adapters



CST1000-1 Accessories

(45pcs connectors and 60pcs seals) It can cover the 99% pressure instruments. M20x1.5 standard stainless steel male threads to adapt following threads:

- ◆ M10*1.0 Female (Male) thread: 1pc each
- ◆ M12*1.0 Female (Male) thread: 1pc each
- ◆ M12*1.25 Female (Male) thread: 1pc each
- ◆ M14*1.5 Female (Male) thread: 1pc each
- ◆ M16*1.5 Female (Male) thread: 1pc each
- ◆ M20*1.5 Female (Male) thread: 1pc each
- ◆ 1/8 NPT Female (Male) thread: 1pc each
- ◆ 1/4 NPT Female (Male) thread: 1pc each
- ◆ 1/2 NPT Female (Male) thread: 1pc each
- ◆ 3/8 NPT Female (Male) thread: 1pc each
- ◆ G1/8 Female (Male) thread: 1pc each
- ◆ G1/4 Female (Male) thread: 1pc each
- ◆ G1/2 Female (Male) thread: 1pc each
- ◆ G3/8 Female (Male) thread: 1pc each
- ◆ ZG1/8 Female (Male) thread: 1pc each
- ◆ ZG1/4 Female (Male) thread: 1pc each
- ◆ ZG1/2 Female (Male) thread: 1pc each
- ◆ ZG3/8 Female (Male) thread: 1pc each
- ◆ Right-angle connector: 1 pc (for rear port pressure gauges)
- ◆ M20*1.5 Female (Male) PnP connector: 1 pc each, total 2pcs
- ◆ Crow's-feet connector (barb) $\phi 6$, $\phi 8$: 1 pc each, total 2pcs
- ◆ Rubber Pad: 20pcs
- ◆ PTFE Pad: 20pcs
- ◆ Tri-direction Connector: 4pcs
- ◆ O-rings: 20pcs



CST1000-3 Accessories

(48pcs connectors and 60pcs seals) It can cover the 99.9% pressure instruments. M20x1.5 standard stainless steel male threads to adapt following threads:

- ◆ M10*1.0 Female (Male) thread: 1pc/each
- ◆ M12*1.0 Female (Male) thread: 1pc/each
- ◆ M12*1.25 Female (Male) thread: 1pc/each
- ◆ M14*1.5 Female (Male) thread: 1pc/each
- ◆ M16*1.5 Female (Male) thread: 1pc/each
- ◆ M20*1.5 Female (Male) thread: 1pc/each
- ◆ 1/8 NPT Female (Male) thread: 1pc/each
- ◆ 1/4 NPT Female (Male) thread: 1pc/each
- ◆ 1/2 NPT Female (Male) thread: 1pc/each
- ◆ 3/8 NPT Female (Male) thread: 1pc/each
- ◆ G1/8 Female (Male) thread: 1pc/each
- ◆ G1/4 Female (Male) thread: 1pc/each
- ◆ G1/2 Female (Male) thread: 1pc/each
- ◆ G3/8 Female (Male) thread: 1pc/each
- ◆ ZG1/8 Female (Male) thread: 1pc/each
- ◆ ZG1/4 Female (Male) thread: 1pc/each
- ◆ ZG1/2 Female (Male) thread: 1pc/each
- ◆ ZG3/8 Female (Male) thread: 1pc/each
- ◆ Right-angle connector: 1 pc (for rear port pressure gauges)
- ◆ M20*1.5 Female (M) PnP connector: 1 pc each, total 2pcs
- ◆ Crow's-feet connector (barb) $\phi 6$, $\phi 8$: 1 pc each, total 2pcs
- ◆ Rubber pad: 20pcs
- ◆ PTFE Pad: 2pcs
- ◆ Tri-direction Connector: 12pcs
- ◆ O-rings: 20pcs
- ◆ Flexible hose: total 3pcs
- ◆ Spanner: 1 pc
- ◆ Multi-functional Hand remove tool: 1 pc
- ◆ SAE tap & Die (for thread repair): 10pcs
- ◆ Liquid Filter (Suitable for dirt gauge): 1 pc
- ◆ Gas Filter (Suitable for dirt gauge): 1 pc

On-site Pressure Calibration Solutions



Solution	Reference Picture	Pressure Pump	Pump Pressure	Recommend Master Gauge ConST273
Low-pressure solution		ConST113	-40% to 0.4 bar	0 to ±20 mbar 0 to ±100 mbar 0 to ±400 mbar
		ConST115	-90% to 4 bar	0 to ±1 bar 0 to 1.6 bar 0 to 4 bar
Mid-pressure solution		ConST116	-95% to 25 bar	0 to ±1 bar 0 to 1.6 bar 0 to 4 bar 0 to 10 bar 0 to 25 bar
		ConST117	-95% to 40 bar	0 to ±1 bar 0 to 2.5 bar 0 to 6 bar 0 to 16 bar 0 to 25 bar 0 to 40 bar
High-pressure solution		ConST131	-90% to 600 bar	0 to 16 bar 0 to 40 bar 0 to 100 bar 0 to 250 bar 0 to 600 bar
		ConST132	-90% to 700 bar	0 to 16 bar 0 to 25 bar 0 to 60 bar 0 to 160 bar 0 to 250 bar 0 to 600 bar

Remark: Above solutions are only for reference

The end-users had better to select the most suitable solution according to the local conditions.

