

## High - pressure comparison pumps USD - 2500, USD - 4000, USD - 7000



### *Intended use*

Verification and calibration of high pressure measuring instruments: pressure measuring transducers (sensors), reference and industrial pressure gauges.

### *Highlights*

Reference pressure generating range is from 0<sup>1</sup> to 700 MPa.

Unique high pressure system with low effort.

Modern composite and polymer materials as well as sealing equipment are used in the construction.

Transparent bowl for monitoring the level of working medium contamination. Easy servicing.

Possibility of installation of piston-cylinder assembly of deadweight gauges MP.

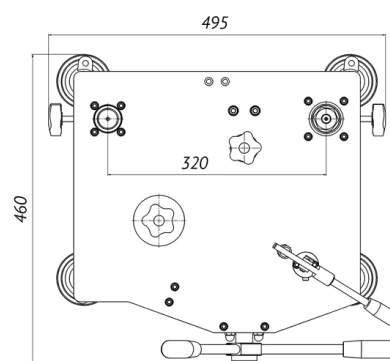
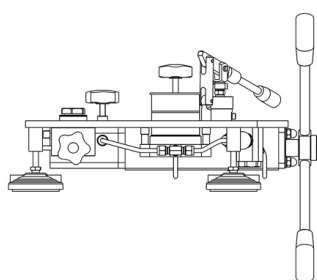
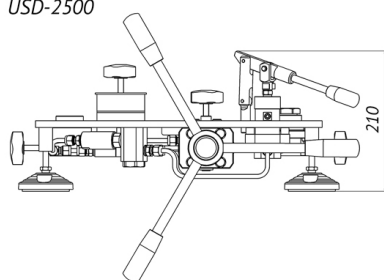
<sup>1</sup> It is not recommended to use USD with pressure measuring devices with an upper limit below 1 MPa.

## Main technical and operational characteristics

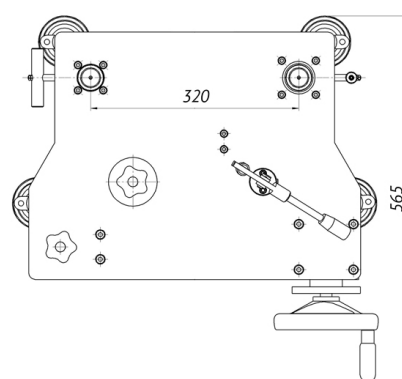
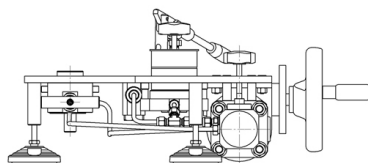
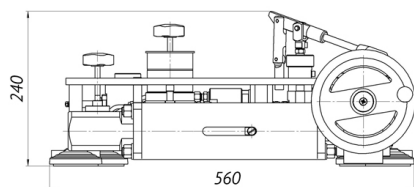
	USD-2500	USD-4000	USD-7000
Pressure generation range, MPa	0...250	0...400	0 ...700
Weight of the device, kg	35	50	50
Volume of the bowl for the working medium, ml	170	170	170
Working medium	Electric insulating oil	Mixture of glycerin (60%) and ethylene glycol (40%)	
Measuring instrument (MI) connection	Hose fitting with internal thread of M30×2 and cone seal. Additional adapters on request.		

## Overall dimensions

USD-2500



USD-4000...7000



On request high-pressure devices can be equipped with reference pressure measuring instruments.

### Digital reference pressure gauges DM5002M-A up to 250 MPa

As compared with pointer reference pressure gauges the advantage of pressure gauges DM5002M-A is:

- multi-range feature: each digital pressure gauge DM5002M-A features several switchable measurement sub-ranges with assuring the same accuracy class in each sub-range. *Due to this feature one pressure gauge DM5002M-A can replace four pointer reference pressure gauges;*
- switching between different units of measurement: MPa, kgf/cm<sup>2</sup>, one more — optional: psi, mm Hg, etc.;
- high accuracy class: 0.25; 0.15; 0.1 & 0.06.
- measurement range 0... 250 MPa; 0... 160 MPa; 0... 100 MPa; 0... 60 MPa



### Pressure calibrators CPH-6400, CPH-6000

Calibrators consist of a digital unit to which external reference sensors are connected via a connection cable. Up to 5 sensors can be connected to one calibrator. The CPH-6000 calibrator allows 24V DC power supply of MI and measurement of the electrical output signal.

#### Measuring range:

- 0...600 MPa; 0...250 MPa; 0...60 MPa
- 0...500 MPa; 0...160 MPa
- 0...400 MPa; 0...100 MPa

Accuracy class 0.025 (up to 60 MPa); 0.1 — over 60 MPa. Switchable pressure units: MPa, bar, kPa, kgf/cm<sup>2</sup>



### Digital pressure gauges CPG 1500

#### Measuring range:

- 0...700 MPa; 0...250 MPa; 0...70 MPa
- 0...600 MPa; 0...160 MPa; 0...60 MPa
- 0...400 MPa; 0...100 MPa

Accuracy class 0.1 or 0.05 (up to 100 MPa inclusive); 0.5 — over 100 MPa. Pressure units: MPa, bar, kPa, kgf/cm<sup>2</sup> mm.Hg, etc.



## Certification

Test pressure devices are not subject to mandatory certification.

## Package

### Standard package:

- device for pressure creation;
- spare tools and accessories kit;
- passport.

### Options:

- reference pressure measuring instruments;
- adapters for installation of the measuring instruments (MI) on test.