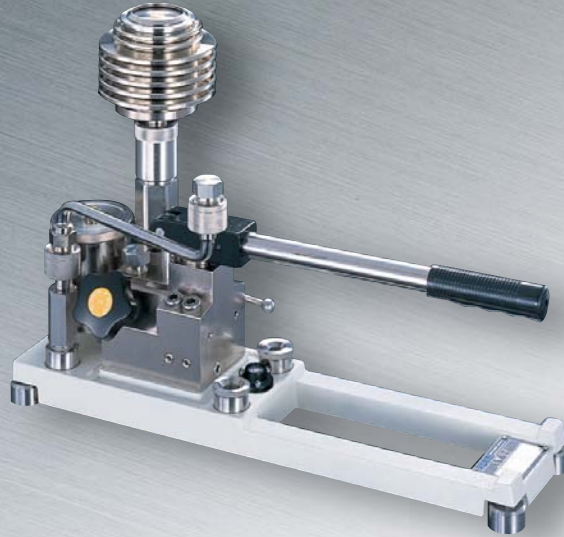


PD77

Water Type Deadweight Tester



Features

- Deadweight tester equipped two pressure valves contribute for rapid pressurizing on site at arbitrary location.
- Fine pressure adjustment available
- Carryable being filled with water
- Piston and cylinder are precisely fabricated. Operating media is water with less viscosity so that stable and high sensitive measurement are possible.
- Less piston area and weight as compared to conventional deadweight tester. (1/2 of oil type)
- There is no need to prepare "Tank siphon" even for no oil pressure gauge test.
- Standard pressure tester can be utilized for measurement.
- The pressure gauge can be easily mounted and dismantled from the mounting base with the quick fastening nut.
- NKS Inspection Certificate and Pressure standard Inspection available.

Specification

Type	Portable type
Operating fluid	Water (Purified water or pure water)**
Operation	Manual
Pressure range	1 to 20MPa
Accuracy	±0.2% of reading
	Primary pressure measurement only. Secondary pressure measurement range covers lower outside range of primary pressure measurement range (10% of maximum rated pressure). Primary pressure measurement range: Range between 10% to maximum range of rated pressure Secondary pressure measurement range: Range between minimum to 10% of rated pressure
Effective volume	Approx. 280ml
Discharged volume	Low pressure Approx. 12.5ml/stroke High pressure Approx. 12.5ml/stroke
Body color	Light beige
Body weight	Approx. 11kg

**Purified water.....Purified water by distillation, ionic exchange, super-filtration or combination of them. without pollution or bacterium (Japanese Pharmacopoeia)
Pure water.....Refined by ionic exchange, super-filtration or combination of them.

Deadweight composition

Pressure range MPa			Effective sectional area cm ²	Deadweight MPa												
Max.	Min.	Smallest graduation		Piston			Number of weights by value									Total
				0.05	0.1	0.2	0.005	0.01	0.02	0.05	0.1	0.2	0.5	1	2	
1	0.05	0.005	1/4	1	—	—	1	1	2	2	8	—	—	—	—	1.005
2		1		—	—	—	1	2	2	2	2	8	—	—	—	2
3		1		—	—	—	1	2	2	2	2	1	5	—	—	3.1
5		1		—	—	—	—	—	—	1	2	1	9	—	—	5
10	0.1	0.05	1/8	—	1	—	—	—	—	1	2	1	1	9	—	10.05
20	0.2			—	1	—	—	—	—	1	2	1	1	3	8	20.05

Dimensions

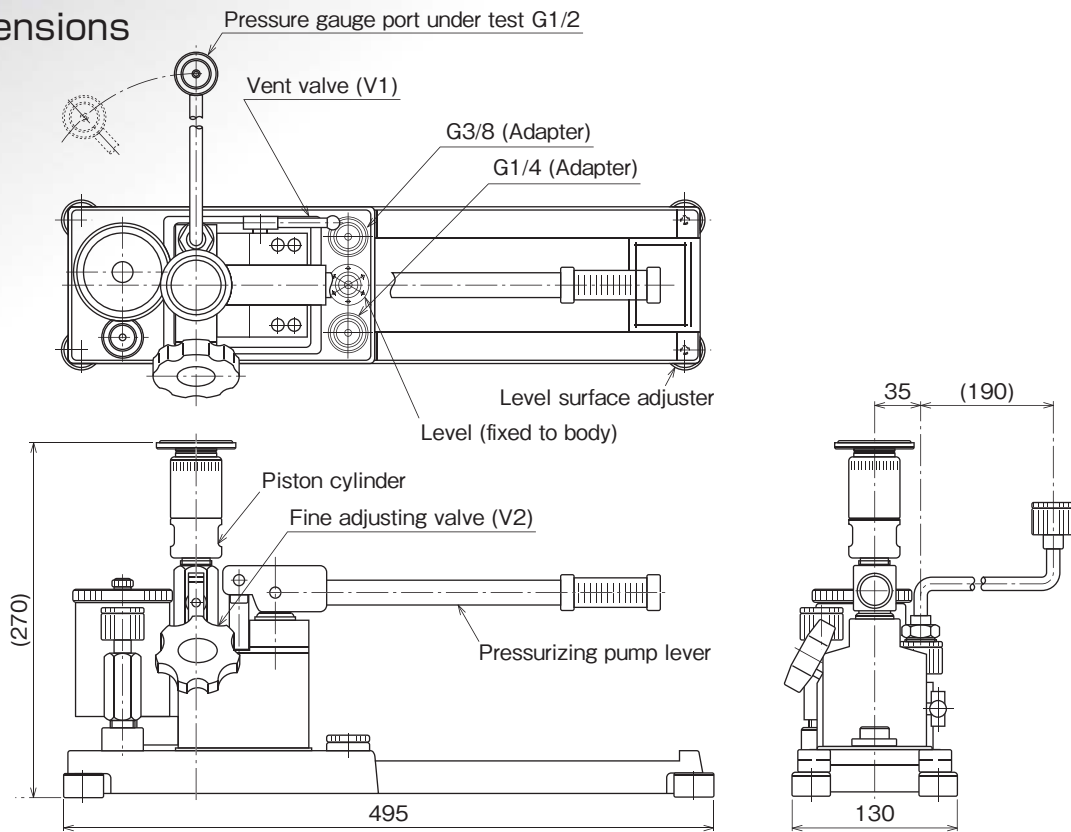
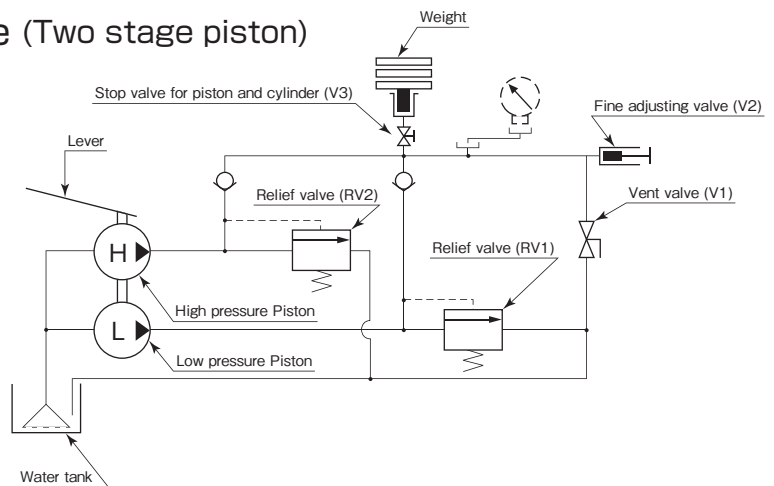


Diagram of internal structure (Two stage piston)

By moving the pressurizing pump lever up and down, both low and high pressure side piston function at the same time for rapid pressurization. From the point where low pressure side piston is released, pressure can be increased at arbitrary point with high pressure side piston.



ACCESSORIES & OPTIONS

Model	Mounting base		Spare parts, tools, accessories										
	Connection	Connecting method	Adapter				Adapter for test gauge	L adapter for instrument under test	O-ring and gasket	Piston Gasket	Wrench and other tools	Case (option)	
			G1/4	G3/8	G1/2	G3/4						Carrying case	Weight box
PD77	Adapter	Quick fastening nut	1	1	—	—	1	1	P7-10	—	—	1	—

PD77

Water Type Deadweight Tester

Model number configuration

Please specify the model number, each specs and the range for ordering.

Model

P D 7 7 — **M 0 1** — **1** × × × × ×

Deadweight type pressure standard ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫ ⑬ ⑭ ⑮

Model number		Product specifications		Additional specifications (Optional)	
① Units	M	MPa			
② Accuracy	0	±0.2%O.R.			
(Please specify pressure range and unit of measure along with corresponding ordering code.)	④ Pressure range (MPa)	1	1		
		2	2		
		3	3		
		4	5		
		5	10		
		6	20		
⑤ Deadweight finish	3	Ni plating+Carrying case		⑦ Weight box	0
	4	Ni plating+Carrying case+Weight box			1 to 6
⑥ Carrying case	1	Required			
⑦ Weight box	0	Not required			
	1	With case for 1MPa			
	2	With case for 2MPa			
	3	With case for 3MPa			
	4	With case for 5MPa			
	5	With case for 10MPa			
⑧ Pressure standard inspection / certification	1	Pressure standard inspection (Accuracy: ±0.2%O.R.)			
	4	Inspection certificate, Traceability certificate (NCSS)			
⑨ Other additional spec.	0	Not required			
	1	Required (Specify required additional spec. below.) Other units than "SI" (Export purpose only)			
⑮ Documents	0	Not required			
	1	Required (Documents available upon request) Datasheet (Drawing / Specifications) Instruction manual Inspection procedure Attending inspection			

* Specify code "X" to refer N/A

Documents

Specify "Document name" when required

Document name	Applicable document	Explanation
Additionally available traceability certificate	Certificate of calibration and inspection for pressure standard used for inspection (Copy)	Copy of certificate that pressure gauge or pressure standard used for the inspection is traceable to National Secondary Standard owned by qualified company.
	JCSS certificate of calibration (Copy)	Copy of certificate of working standard that the working standard is traceable to National Secondary Standard owned by qualified company.
	jcass test report (Copy)	Copy of certificate of National Secondary Standard that the National Secondary Standard owned by qualified company is traceable to National Standard.

Traceability Chart of Measurement Standard

