

PD27

Water Type Deadweight Tester



Features

- This is the small and lightweight deadweight tester designed with piston pressurization.
- Two pressure connections are available for conducting simultaneous two tests. (Single test available by operating valve)
- Clear tank enables to see tank remaining level and the dirt of 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 for "Tank siphon" even when use no oil pressure gauge should be tested.
- Standard pressure tester can be utilized for measurement.
- The pressure gauge can be easily mounted and dismounted from the mounting base with the quick fastening nut.
- NKS Inspection Certificate and Pressure standard Inspection available.

Deadweight composition

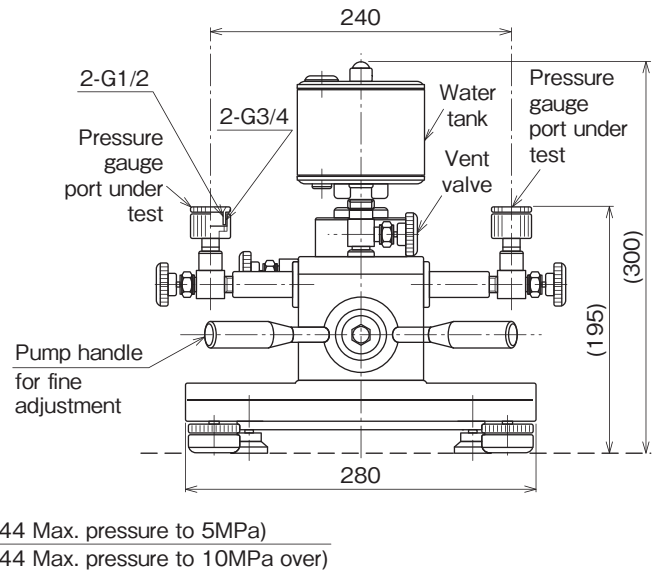
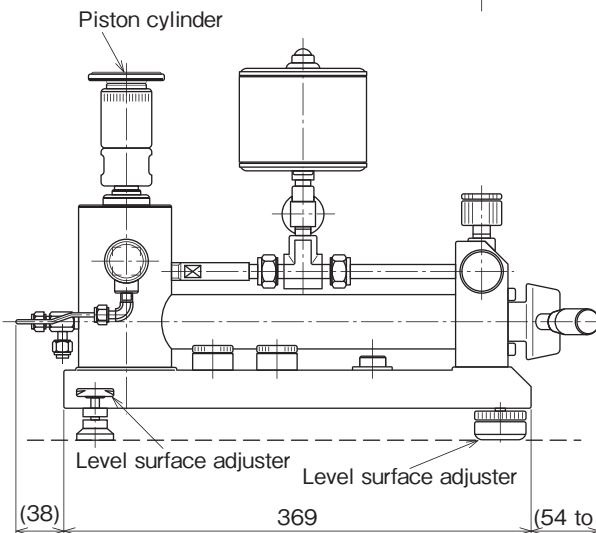
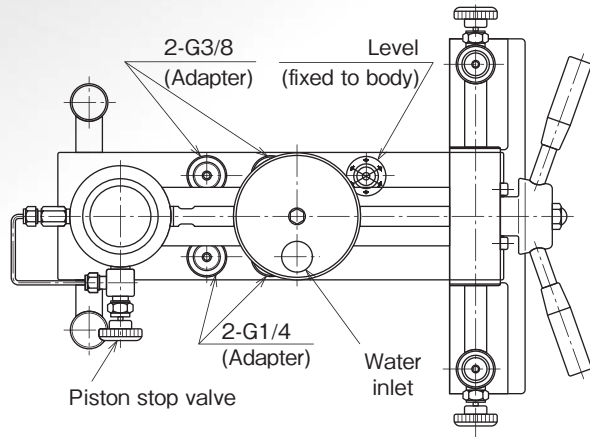
Pressure range MPa			Effective sectional area cm ²	Deadweight MPa													
Max.	Min.	Smallest graduation		Piston			Number of weights by value										Total
				0.05	0.1	0.2	0.005	0.01	0.02	0.05	0.1	0.2	0.5	1	2		
1	0.05	0.005	1/4	1	—	—	1	1	2	2	8	—	—	—	—	1.005	
2		1		—	—	—	1	2	2	2	8	—	—	—	2		
3		1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

Specification

Type	Bench type
Operating fluid	Water (Purified water or pure water)*
Operation	Manual
Pressure range	1→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. 350ml
Body color	Light beige
Body weight	Approx. 11kg

- ※1 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.

Dimensions



ACCESSORIES & OPTIONS

Model	Mounting base		Spare parts, tools, accessories								
	Connection	Connecting method	Adapter				O-ring and gasket	Piston Gasket	Wrench and other tools	Case (option)	
			G1/4	G3/8	G1/2	G3/4				Carrying case	Weight box
PD27	Adapter	Quick fastening nut	2	2	—	—	P7-10	—	—	1	—

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Model number configuration

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

Model number		Product specifications															Additional specifications (Optional)						
Model		P	D	2	7	—	M	0	1	—			1					X	X	X	X	X	
Deadweight type pressure standard		①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩	⑪	⑫	⑬	⑭	⑮							
① Units		M	MPa																				
② Accuracy		0	±0.2%O.R.																				
④ Pressure range (MPa) <small>(Please specify pressure range and unit of measure along with corresponding ordering code.)</small>		1	1																				
		2	2																				
		3	3																				
		4	5																				
		5	10																				
		6	20																				
⑤ Deadweight finish		3	Ni plating+Carrying case																				
		4	Ni plating+Carrying case+Weight box																				
⑥ Carrying case		1	With carrying case (Standard)																				
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																				
		6	With case for 20MPa																				
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 specs 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

