



JCSS
0080

0080 is the logo for the traceability system under the Weight and Measure Act. The Ueda measuring instrument plant of NKS CO., LTD. is an approved place of business of category "Pressure" and "0080" is its qualification number.

PD13 Bench type Dead-weight testers

OUTLINE

Dead-weight testers are used as the standard pressure gauge for inspection and calibration of other pressure gauges. They can be used as on-site bench type pressure standards in the medium pressure range (1 to 5MPa).

FEATURES

- The PD13 are the smallest and lightest bench type dead-weight testers in the world. They incorporate a preliminary pump and a fine adjustment pump so you can make pressure adjustments easily.
- Pressure can also be measured by using a standard pressure gauge instead of a dead-weight.
- The pressure gauge can be easily mounted to and dismantled from the mounting base with the quick fastening joint.
- Cylinder positioning marker, level, and level adjustment bolts are standard equipment.
- Jcss Calibration Certification
- NKS Inspection Certificate and Standard Inspection

SPECIFICATION

Type:
Bench type

Fluid:
Hydraulic fluid

Operation:
Manual

Pressure range:
1→5MPa
(0.1%O.R. is not available for 1MPa and 2 MPa.)

Accuracy:
±0.1% of reading
±0.2% of reading

Color of finish:
Pearl light green (0.1%O.R.)
Mustard yellow (0.2%O.R.)

Body weight:
9.5 kg

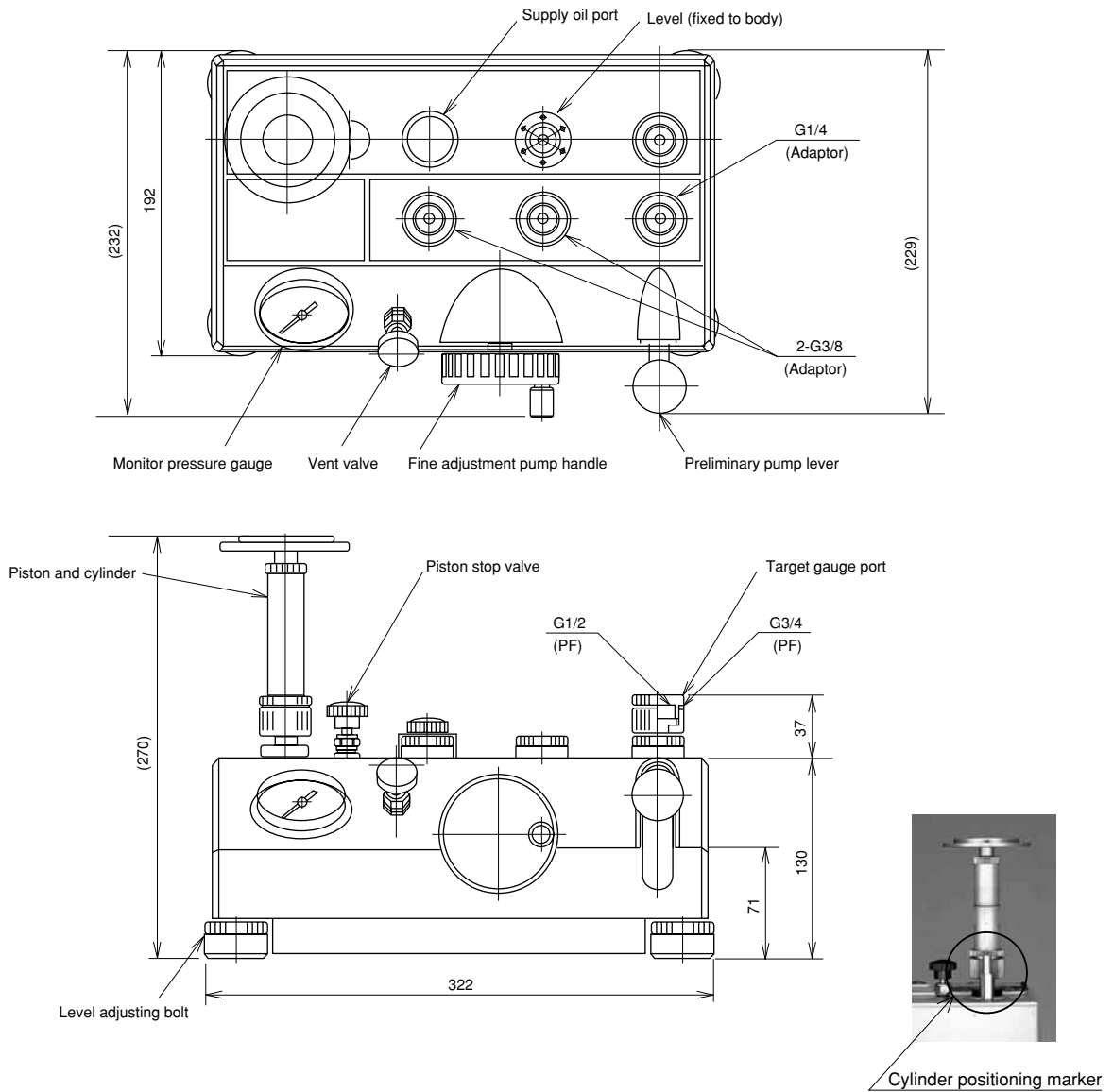
Dead-weight composition

Measurement range MPa			Effective sectional area cm ²	Dead-weight correspondence MPa								Net weight of entire dead-weight Approx. kg	
Max.	Min.	Smallest graduation		Piston	Dead-weight						Total		
				0.05	0.005	0.01	0.02	0.05	0.1	0.2	0.5		
1 *	0.05	0.005	1/2	1	1	1	2	2	8			1.005	5
2 *		0.01		1		1	2	2	2	8		2	10
3		0.05		1		1	2	2	2	1	5	3.1	16
5		0.05		1				1	2	1	9	5	26

* 0.1%O.R. is not available.

PD13 bench type dead-weight testers

DIMENSIONS



ACCESSORIES & OPTIONS

Model	Gauge mount		Spare parts, tools, accessories									Case (option)	
	Adjusting bolt	Connection system	Intermediate joint				O-ring and packing	Piston Packing	Wrenches and other tools	Pointer remover	Pointer hammer	Body	Dead-weight
			G1/4	G3/8	G1/2	G3/4							
PD13	Intermediate joint use	Quick fastening joint	1	2	2	—	P7-10	—	—	1	1	1	1~3MPa 1 ----- 5MPa 2

OPERATING INSTRUCTIONS

- Avoid installation in places exposed to such conditions as excessive vibration, dirt and dust, corrosive atmosphere, and direct sunlight.
- Always install the dead-weight meter horizontally. If not installed horizontally, the correct pressure will not be indicated.
- Do not increase or decrease the pressure suddenly because it is dangerous. (Open and close the valves slowly.)
- Applying a pressure over the maximum pressure indicated on the PD13 is not only dangerous, but may also damage the tester.
- The dead-weights are precision manufactured. Do not file them with sandpaper and do not drop them.
- Use a tank siphon to calibrate "No oil" pressure gauges and be sure that oil does not enter the pressure gauge.
- Use clean hydraulic oil. Refer to the following table and select the oil according to the maximum pressure of the equipment used.

Max. pressure Oil
 1~5MPa : Machine oil (VG8)

Model number configuration

For ordering, please specify the model number, each specs and range.

P D 1 3	—			M	1	—				2			×	×	×	×	×			
Dead-weight type pressure standard	①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩	⑪	⑫	⑬	⑭	⑮					
Model	Selective spec.						Additional spec. (Option)													
① Units	M	MPa																		
② Accuracy (%O.R.)	0	0.2																		
	1	0.1 (Except 1MPa and 2MPa)																		
(When ordering, please specify the range and units separately.)	④ Pressure range (MPa)	1	1																	
		2	2																	
		3	3																	
		4	5																	
⑤ Dead-weight finish	2	Ni plating (Standard)																		
⑥ Case	0	Nil																		
	1	With case																		
⑦ Dead-weight case	0	Nil																		
	1	With case for 1MPa																		
	2	With case for 2MPa																		
	3	With case for 3MPa																		
⑧ Standard inspection/certification	1	Standard inspection (accuracy: 0.2%)																		
	3	Jcss calibration certificate																		
	4	Inspection certificate																		
	⑨ Other additional specifications	0	Nil																	
	1	Required (Please specify the desired documents separately.) Units specification (bar)																		
⑮ Documents	0	Nil																		
	1	Required (Please specify the desired documents separately.) Submission drawings, instruction manual, inspection procedure, attended inspection																		

Specify "X" if there is no specification item.



NAGANO KEIKI CO., LTD.

OVERSEAS SALES DEPT

: 1-30-4, HIGASHIMAGOME OHTA-KU, TOKYO, JAPAN

Phone : +81-3-3776-5328

F a x : +81-3-3776-5447

E-mail : overseas_sales_dept@naganokeiki.co.jp

URL : <http://www.naganokeiki.co.jp/>

GERMANY

- ADZ NAGANO GmbH
Bergener Ring 43
01458 Ottendorf-Okrilla
Phone : +49-35205-596930
F a x : +49-35205-596959
- Nagano Keiki Solutions Support Center
Bergener Ring 43
01458 Ottendorf-Okrilla
Phone : +49-35205-75701
F a x : +49-35205-75702

CHINA

- NAGANO FUKUDA (Tianjin)
Instruments CO., LTD.
10 Muning 1st Avenue TEDA Tianjin China
Phone : +86-22-5981-0966
+86-22-6620-4348
F a x : +86-22-5981-0967
+86-22-6620-4349

KOREA

- KOREA NAGANO CO., LTD.
#296-2 Osan-ri,
Dongtan-myun, Hwaseong-shi,
Kyonggi-do, Korea
Phone: +82-31-379-3934
F a x : +82-31-379-3936

JAPAN

- OVERSEAS
SALES DEPT.

U.S.A.

- DRESSER-NAGANO, INC.



- OVERSEAS PLANT
- OVERSEAS SALES NETWORK

Gets ISO 9001, ISO 14001, ISO/TS 16949 Certification

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