

JAPSIN INSTRUMENTATION



ISO 9001:2015 CERTIFIED ORGANISATION
COMPLETE RANGE OF FLOW, LEVEL,
TEMPERATURE & PRESSURE INSTRUMENTS



Dead Weight Pressure Gauge Tester > DW 10 Series



Models of DW 10 series are provided with one large capacity screw pump and a removable oil reservoir with isolating valve in a simple line circuit permitting effective air removal.

WORKING PRINCIPLE: The Dead Weight Pressure Gauge Testers make use of the relationship between pressure acting on the known area of a vertically free floating piston producing a force balanced by known dead weight.

MAIN COMPONENTS of the tester are :-

Screw Pump: It is used to generate pressure in the circuit of adequate capacity and is operated by a spoked handle which permits easy and accurate setting of pressure.

Free Piston Assembly: It is made of special steel, hardened, tempered, ground and lapped to accurate size and very fine surface finish provides true floating action.

Set of Weights: Each weight is directly marked in convenient values of pressure and is easily stacked on the weight carrier which is placed on to the free piston. The calibration can be provided in various units of pressure measurement namely kgf/cm², bar, lbf/in², kPa, KN/m² as per customer requirement. Weights are available in two material options : MS Phosphated black & SS 304. Storage box is provided for storing weights safely.

Gauge Connector: of 1/2" BSP (female) union for connecting the gauge to be tested. Gauges with other connecting threads may be connected using adaptors provided.

Base Plate: The instrument is mounted on a sturdy base plate provided with levelling screws. The entire circuit is covered by a sheet metal cover.

Incremental Weights: to provide smaller steps (better least count) is available for all models at extra cost.

Calibration / Traceability: Calibration is done against Master Dead Weight Pressure Gauge Tester and Master Dial Pressure Gauges using cross-float method. Our instruments are backed by test certificates traceable to National Standard to meet the requirements of ISO 9000, QS 14000 and other Inspection Agencies.

MODEL	RANGE (kgf / cm ²)			RANGE (lbf / in ²)			RANGE (bar)			RANGE (MPa)		
	Min.	Step	Max.	Min.	Step	Max.	Min.	Step	Max.	Min.	Step	Max.
DW10												
REGULAR	0.1	0.01	2.5	1	0.1	40	0.1	0.01	2.5	0.01	0.001	0.25
INC	0.1	0.001	2.5	1	0.005	40	0.1	0.001	2.5	0.01	0.0001	0.25

MODEL	RANGE (kgf / cm ²)			RANGE (lbf / in ²)			RANGE (bar)			RANGE (MPa)		
DW11	Min.	Step	Max.	Min.	Step	Max.	Min.	Step	Max.	Min.	Step	Max.
REGULAR	0.1	0.05	6	1	0.5	80	0.1	0.05	6	0.01	0.005	0.6
INC	0.1	0.001	6	1	0.02	80	0.1	0.001	6	0.01	0.0001	0.6

MODEL	RANGE (kgf / cm ²)			RANGE (lbf / in ²)			RANGE (bar)			RANGE (MPa)		
DW12	Min.	Step	Max.	Min.	Step	Max.	Min.	Step	Max.	Min.	Step	Max.
REGULAR	0.2	0.05	16	2	1	200	0.2	0.05	16	0.02	0.005	1.6
INC	0.2	0.002	16	2	0.05	200	0.2	0.002	16	0.02	0.0002	1.6

MODEL	RANGE (kgf / cm ²)			RANGE (lbf / in ²)			RANGE (bar)			RANGE (MPa)		
DW13	Min.	Step	Max.	Min.	Step	Max.	Min.	Step	Max.	Min.	Step	Max.
REGULAR	0.4	0.1	25	5	1	360	0.4	0.1	25	0.04	0.01	2.5
INC	0.4	0.005	25	5	0.05	360	0.4	0.005	25	0.04	0.0005	2.5

MODEL	RANGE (kgf / cm ²)			RANGE (lbf / in ²)			RANGE (bar)			RANGE (MPa)		
DW14	Min.	Step	Max.	Min.	Step	Max.	Min.	Step	Max.	Min.	Step	Max.
REGULAR	0.4	0.1	40	5	1	500	0.4	0.1	40	0.04	0.01	4
INC	0.4	0.005	40	5	0.05	500	0.4	0.005	40	0.04	0.0005	4

MODEL	RANGE (kgf / cm ²)			RANGE (lbf / in ²)			RANGE (bar)			RANGE (MPa)		
DW15	Min.	Step	Max.	Min.	Step	Max.	Min.	Step	Max.	Min.	Step	Max.
REGULAR	1	0.1	60	10	2	800	1	0.1	60	0.1	0.01	6
INC	1	0.01	60	10	0.1	800	1	0.01	60	0.1	0.001	6

MODEL	RANGE (kgf / cm ²)			RANGE (lbf / in ²)			RANGE (bar)			RANGE (MPa)		
DW16	Min.	Step	Max.	Min.	Step	Max.	Min.	Step	Max.	Min.	Step	Max.
REGULAR	1	0.1	100	20	5	1500	1	0.1	100	0.1	0.01	10
INC	1	0.01	100	20	0.2	1500	1	0.01	100	0.1	0.001	10