

Dead weight tester

Model: P912, P913, P914 series

Spec. sheet no. PD09-02

Service intended

These series are designed to be used for gauge calibration. Operating range of these series is available up to 100 MPa. It is designed to perform the tasks such as setting, testing, and repairing pressure measurement.



Dimensions

Base 400 mm (W) x 178 mm (H) x 280 mm (D)
excluding hand wheel

Color

Black

Reservoir

These series have a centrally isolated mounting valve and a transparent cover which can be sealed in order that tester can be moved without oil leakage.

Screw pump

The use of a large diameter ram eliminates the need for a priming pump.

Accuracy

0.04%

Piston cylinder unit

The tester is fitted with an oil reservoir, this is linked to the piston cylinder unit. A stop valve is provided to prevent excessive pressure driving the piston out of the cylinder.

Standard specification

Dead weight tester

Model number		P912	P913	P914	
Range	Maximum	30 MPa	50 MPa	100 MPa	
Range	Mimimum	0.2 MPa	0.2 MPa	1 MPa	
Minimum unit pressure					
Area of ram		⅛ cm²	⅛ cm²	⅙ cm²	
Diameter of ram		3.989 mm	3.9894 mm	2.8209 mm	
Dead-weight corresponds to (MPa)	Ram	0.2 MPa	1 pcs	1 pcs	
		1 MPa		1 pcs	
	Dead weight	0.1 MPa	1 pcs	1 pcs	
		0.2 MPa	2 pcs	2 pcs	
		0.3 MPa	1 pcs	1 pcs	
		0.5 MPa	1 pcs	1 pcs	1 pcs
		1 MPa	1 pcs	1 pcs	1 pcs
		2 MPa	2 pcs	2 pcs	1 pcs
		4 MPa			2 pcs
		5 MPa	5 pcs	9 pcs	
10 MPa			9 pcs		
Total		31.5	51.5	102.5	
Tester	Weight	18 kg	18 kg	18 kg	
	Box weight	9.5 kg	9.5 kg	9.5 kg	
Ram	Weight	40 kg	66 kg	64 kg	
	Box weight	4.5 kg	5.5 kg	5.5 kg	

Spare parts and tool

Standard accessories	Quantity (pcs)
Union $\frac{1}{2}$ "	2
Union $\frac{3}{8}$ "	1
Union $\frac{1}{4}$ "	1
300 mm wrench	1
250 mm wrench	1
L type union $\frac{1}{2}$ "	1
Packing for union	10
Packing for piston	1
Hammer	1
Pointer remover	1
Oil drum	1

Main order

1. Base model

P912 Dead weight tester (Calibration range : 30 MPa)

P913 Dead weight tester (Calibration range : 50 MPa)

P914 Dead weight tester (Calibration range : 100 MPa)

2.

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Ordering information

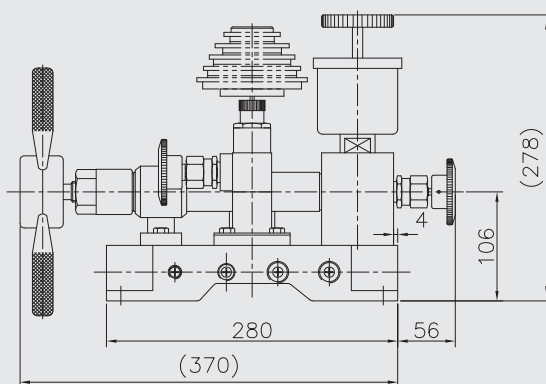
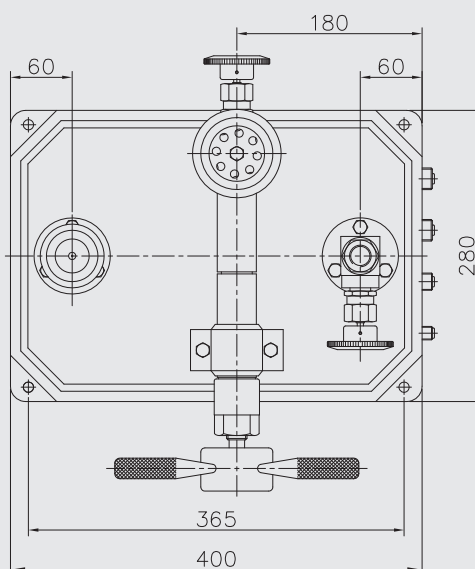
1	2
P912	00000000000

Sample
ordering code

WISE[®]

P912, P913 and P914 : Type of mounting

Code P912,P913 & P914



Dimensions (mm)

Available code	Range	Increment (MPa)	Piston area (cm ²)
	(MPa)		
P912	0.2 ~ 30	0.2	1/8
P913	0.2 ~ 50	0.2	1/8
P914	1 ~ 100	1	1/16

Conversion table

Pressure conversion chart

psi	atm	kgf/cm²	inH₂O	mmHg	inHg	kPa	bar	mmH₂O
1	0.068046	0.070307	27.7276	51.715	2.03602	6.835	0.06895	704.28104
14.696	1	1.0332	407.484	760	29.921	101.325	1.01325	10350.0936
14.2233	0.96784	1	394.38	735.559	28.959	98.096	0.98067	10,000
0.036092	0.002454	0.00253	1	1.8651	0.07343	0.249	0.00249	25.4
0.019336	0.001315	0.001359	0.53616	1	0.03937	0.1333	0.001333	13.618464
0.491154	0.0033421	0.03453	13.6185	25.4	1	3.3864	0.033864	345.9099
0.145	0.00987	0.010197	4.0186	7.5006	0.2953	1	0.01	102.07244
14.5038	0.98692	1.01972	402.156	750.062	29.53	100	1	10214.7624
0.00142	0.000097	0.0001	0.03937	0.0734	0.0029	0.0098	0.000098	1

Memo