

Deadweight tester // hydraulic // 0.25...1400 bar



Type ODWT15



Masses

Your advantages

Series ODWT

- Highest precision with an accuracy of 0.015 %
- Including adaptation to the local normal case acceleration
- Interchangeable piston: Extended calibration range with only one mass set

Technical data

Type	ODWT15
Pressure ranges	0.25...1400 bar depending on piston and mass set
Accuracy	0.015 % of reading
Pressure units	Bar
Pressure medium	Oil DWT Miglyol 812N Sasol
Temperature range	18...22 °C
Pressure connection	G ³ / ₈ LH male with adapters G ¹ / ₈ , G ¹ / ₄ , G ³ / ₈ , G ¹ / ₂ female
Version	
Dimension	
→ without weights	Approx. 340 x 225 x 220 mm (H x B x T)
→ with weights	Maximum height 450 mm
Weight	Approx. 12.6 kg (without masses)
+ Mass set	up to 56 kg

Options

For type	On request
ODWT15	Other pressure units: PSI, kPa, MPa und kg/cm ²

Materials	
Housing	Stainless steel for all welded parts
Piston cylinder assembly	Tungsten carbide
Mass sets	non magnetic stainless steel plates
O-ring seals	NBR

Piston number and measuring ranges					Equivalent of mass [bar]								Total weight mass set		
<div style="display: flex; align-items: center;"> <div style="border: 1px solid black; padding: 5px; margin-right: 10px;">1</div> <div style="border: 1px solid black; padding: 5px; margin-right: 10px; width: 80%;">2</div> <div style="border: 1px solid black; padding: 5px; margin-right: 10px; width: 60%;">3</div> <div style="border: 1px solid black; padding: 5px; margin-right: 10px; width: 40%;">4</div> <div style="border: 1px solid black; padding: 5px; width: 20%;">5</div> </div>					0.25	0.025	0.05	0.25	0.5	2.5	5				
					0,5	0.05	0.1	0,5	1	5	10				
					1	0.1	0.2	1	2	10	20				
					5	0.25	0.5	2,5	5	25	50				
					10	0.5	1	5	10	50	100				
Pressure range [bar]					Carrier	Number of masses						[kg]			
0,25...25	0,5...50	1...100	5...250	10...500	1	1	4	1	4	1	4	20			
0,25...30	0,5...60	1...120	5...300	10...600	1	1	4	1	4	1	5	24			
0,25...35	0,5...70	1...140	5...350	10...700	1	1	4	1	4	1	6	28			
0,25...40	0,5...80	1...160	5...400	10...800	1	1	4	1	4	1	7	32			
0,25...45	0,5...90	1...180	5...450	10...900	1	1	4	1	4	1	8	36			
0,25...50	0,5...100	1...200	5...500	10...1.000	1	1	4	1	4	1	9	40			
0,25...55	0,5...110	1...220	5...550	10...1.100	1	1	4	1	4	1	10	44			
0,25...60	0,5...120	1...240	5...600	10...1.200	1	1	4	1	4	1	11	48			
0,25...65	0,5...130	1...260	5...650	10...1.300	1	1	4	1	4	1	12	52			
0,25...70	0,5...140	1...280	5...700	10...1.400	1	1	4	1	4	1	13	56			

Example: Select piston number 3 for a pressure range of 1...180 bar.
 This piston system contains 1 carrier as well as 19 weights in total (1+1/4/1/4/1/8) with a total weight of 36 kg.
 You can read how much bar / psi each weight generates under "Equivalent of mass".

Piston number and measuring ranges					Equivalent of mass [psi]								Total weight mass set		
<div style="display: flex; align-items: center;"> <div style="border: 1px solid black; padding: 5px; margin-right: 10px;">1</div> <div style="border: 1px solid black; padding: 5px; margin-right: 10px; width: 80%;">2</div> <div style="border: 1px solid black; padding: 5px; margin-right: 10px; width: 60%;">3</div> <div style="border: 1px solid black; padding: 5px; margin-right: 10px; width: 40%;">4</div> <div style="border: 1px solid black; padding: 5px; width: 20%;">5</div> </div>					5	0.5	1	5	10	50	100				
					10	1	2	10	20	100	200				
					20	2	4	20	40	200	400				
					100	5	10	50	100	500	1000				
					200	10	20	100	200	1000	2000				
Pressure range [psi]					Carrier	Number of masses						[lbs.]			
5...400	10...800	20...1600	100...4000	200...8000	1	1	4	1	4	1	3	49			
5...500	10...1000	20...2000	100...5000	200...10000	1	1	4	1	4	1	4	62			
5...600	10...1200	20...2400	100...6000	200...12000	1	1	4	1	4	1	5	73			
5...700	10...1400	20...2800	100...7000	200...14000	1	1	4	1	4	1	6	86			
5...800	10...1600	20...3200	100...8000	200...16000	1	1	4	1	4	1	7	97			
5...900	10...1800	20...3600	100...9000	200...18000	1	1	4	1	4	1	8	110			
5...1000	10...2000	20...4000	100...10000	200...20000	1	1	4	1	4	1	9	121			

Order code					
Version					
Bar			ODWT15B		
PSI			ODWT15P		
Piston set					
Set 1				1	
Set 2				2	
Set 3				3	
Set 4				4	
Set 5				5	
Total weight mass set		kg	PSI		
Carrier + Weights	20			20	
		22		22	
	24			24	
	28	28		28	
	32			32	
		33		33	
	36			36	
		39		39	
	40			40	
	44	44		44	
	48			48	
		50		50	
	52			52	
	55		55		
56			56		
Example order number			ODWT15B	1	20

Order code				
Accessoires				
Second piston set			ODWT2PISTON	
Sealings (Spare part)			ODWTSEAL	
Small mass set			ODWTSMS	
Recalibration				
ODWT15 with one piston			ODWTREKAL1	
Extra piston			ODWTREKALZUS	

