

50 years of torque tester manufacturing. New standard torque tester

# WDI series

WDI-10HR WDI-100HR WDI-250

You can manage the electric screwdriver /  
manual torque driver and wrench.

Various  
information  
Displayable



Data output  
USB and RS232C  
Both equipped



This is the new standard

- Easy-to-understand color display.
- 10HR / 100HR is capable of high-resolution measurement with 1/10 the normal resolution.
- Equipped with data output via USB / RS232C.
- Clear signals and various commands can be sent from a personal computer or PLC.
- Measurement joints can be selected according to the management method and tool characteristics.
- Manual tool measurement jig A screw cube is attached according to the measurement band.
- A storage case is available as an option.

“WDI” measurement example

**Electric screwdriver management (SJ joint)**

Coil spring screwing method. Versatile appeal with conventional measurement joints



**Electric screwdriver management (OW joint)**

Uses our unique rewind-free joint. Efficient measurement and safe design that is not easily affected by wear.



The OW joint has a structure that is not easily affected by friction, and stable torque management can be performed for a long period of time. The screw head comes with a Phillips screw as standard, but you can replace it with the screw you are using. Also, in case of "screw stupid" etc., remove it and replace it with a new one before use.

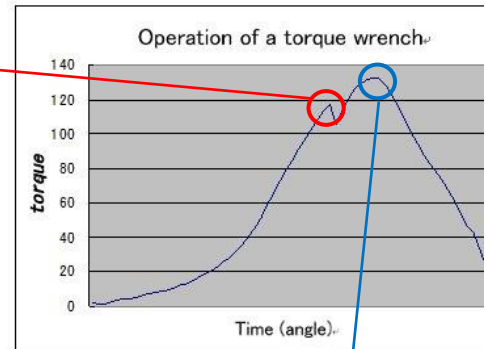
**Manual torque driver management**

Easy measurement by attaching a screw to the attached screw cube.



**Manual torque wrench management**

Click operation of torque wrench  
Measurement is PD (peak down mode)  
For tool check at the start of work



The actual torque applied is measured PP (peak mode)  
For worker experience training and tightening operation check

**Works with PCs and PLCs**

Various commands can be input from PLC or personal computer. Finer torque management is possible with external control.



**Command list**

- Clear signal:** Clears the display and saves the held numerical value as data output and memory.
- Measurement mode:** Change the measurement mode
- Measurement channel:** Change individual channels for which conditions such as pass / fail judgment are set.
- Peak hold upper limit:** Change the pass / fail judgment upper limit of the current channel
- Peak hold lower limit:** Change the pass / fail judgment lower limit of the current channel
- Peak down lower limit:** Change the peak down judgment start lower limit of the current channel
- Real-time output lower limit:** Change the output lower limit of real-time output
- Auto clear time:** Change the time to automatically clear after the measurement is completed.
- Buzzer notification:** Change the buzzer notification method

## Specification

Show the tester specification below.

Model		WDI-10HR-□□-□	WDI-100HR-□□-□	WDI-250-SJ-□																				
Range	Normal	0.020 ~ 1.000 [N-m]	0.20 ~ 10.00 [N-m]	0.20 ~ 25.00 [N-m]																				
	Hi resolution	2.0 ~ 999.9 [mN-m]	0.020 ~ 9.999 [N-m]																					
Units	Normal	kgf-cm / lbf-in / N-m / cN-m	kgf-cm / lbf-in / N-m / cN-m	kgf-cm / lbf-in / N-m / cN-m																				
	Hi resolution	kgf-cm / lbf-in / mN-m / cN-m																						
Accuracy		±0.5% (If 499 digit or less, ±3 digit.)																						
Operating temperature / humidity		15 ~ 35 degrees Celsius, 80%RH or less *Keep a constant temperature while measuring. (Storage temperature 0 ~ 45°C)																						
Sampling rate		1000 data / 1 sec																						
Data output		Wired (ASCII format)																						
Measurement mode		<table border="1"> <thead> <tr> <th colspan="2">Measurement mode</th> <th>Data output</th> <th>Contents</th> </tr> </thead> <tbody> <tr> <td>Peak hold</td> <td>PP</td> <td>○</td> <td>Measure the peak torque.</td> </tr> <tr> <td>Peak down</td> <td>PD</td> <td>○</td> <td>Measure the first peak torque</td> </tr> <tr> <td>Real time output</td> <td>C</td> <td>○</td> <td>Output the torque data every 180 data / 1 sec.</td> </tr> <tr> <td>Track</td> <td>TR</td> <td>—</td> <td>Be used to calibrate mainly.</td> </tr> </tbody> </table>			Measurement mode		Data output	Contents	Peak hold	PP	○	Measure the peak torque.	Peak down	PD	○	Measure the first peak torque	Real time output	C	○	Output the torque data every 180 data / 1 sec.	Track	TR	—	Be used to calibrate mainly.
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Track	TR	—	Be used to calibrate mainly.																					
Memory size		800 data																						
Power supply		Ni-MH rechargeable battery (Charge times is about 3 hours)																						
Auto power off		If the tester is not used for 10 minutes. (Releasable)																						
Socket size		□20 / □9.5																						
Accessories (one pieces each)		Measurement joint																						
		AC adaptor																						
		Result of calibration, Certification on calibration, Traceability system figure																						

## Ordering number

The ordering number decide with "capacity", "measurement joint" and "case".

WDI	—	10HR	—	SJ	—	A	case
.....		.....		.....		.....	case
.....		.....		.....		.....	measurement joint
.....		.....		.....		.....	capacity
.....		.....		.....		.....	series

case	
(space)	cardboard
A	hardcase

measurement joint	
SJ	SJ joint
OW	OW joint

capacity	
10HR	~ 1N-m
100HR	~ 10N-m
250	~ 25N-m

### Measurement joint

Show the measurement joint which is attached to the product.

Model	Measurement joint	Bit	Other	Cube
WDI-10HR	-SJ SJ-10K	6mm Hex bit (Φ4mm, Φ5mm, 3/16" hex, 1/4" hex)	M3 hex adaptor Grease	SC-1
	-OW OW-025 OW-10	—	—	SC-1
WDI-100HR	-SJ SJ-10K	6mm Hex bit (Φ4mm, Φ5mm, 3/16" hex, 1/4" hex)	M3 hex adaptor M4 hex adaptor Grease	SC-2
	-SJ SJ-50			
WDI-250	-OW OW-20 OW-60	—	—	SC-2
	-SJ SJ-50	6mm hex bit (Φ4mm, Φ5mm, 3/16" hex, 1/4" hex)	Grease	SC-3
-SJ SJ-200	17mm socket bit			

Cube with screw holes			
	SC-1	SC-2	SC-3
Screw hole	① M1	① M2.6	① M4
	② M1.2	② M3	② M5
	③ M1.4	③ M4	③ M6
	④ M2	④ M5	④ M8
	⑤ M3	⑤ M6	⑤ M10
Outline figure			

### joint

Show the SJ joint and OW joint specification below.

Joint	SJ joint -SJ			OW joint -OW			
	SJ-10K	SJ-50	SJ-200	OW-025	OW-10	OW-20	OW-60
Capacity	~ 1 N-m	~ 5 N-m	~ 20 N-m	~ 0.25 N-m	~ 1 N-m	~ 2 N-	~ 6 N-m
Recommended measurement range	~ 1 N-m	1~ 5 N-m	5~ 20 N-m	~ 0.25 N-m	0.25 ~ 1 N-m	1 ~ 2 N-m	2 ~ 6 N-m
Mechanical life	2,500 times	2,500 times	2,500 times	10,000 times	8,000 times	5,000 times	5,000 times
Bit fitting part (Use screw top)	6mm hexagonal hole on opposite side (M3 screw)		Opposite side 17mm Hexagon bolt	M2.6	M3	M4	M6
Dimensions	M8x(H)49	M8x(H)43	M10x(H)35	φ28x(H)35	φ32x(H)42.5	φ32x(H)42.5	φ38x(H)59
Pedestal shape							

### Case

The specifications of the case are shown below.

Case	(no symbol)	-A
Specifications	Cardboard	PP
Exterior / Interior		

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The contents of a catalog may change specification and a design without a preliminary announcement.