



- ◆ For pull and push measurement
- ◆ Adjusting the display direction automatically
- ◆ With overload protection
- ◆ Peak and real-time working mode
- ◆ Unit: mN, N, gf, kgf, ozf, lbf
- ◆ Memory: 1000
- ◆ Power off automatically
- ◆ Low and high limits setting with judgement
- ◆ With software, can show the force graph
- ◆ With manufacturer inspection certificate



**DF200**



Stand(Code: **FS1000**, **Optional**)



**PR100** printer (**Optional**)



flat



v-type



knife-edge



point



pull clamp



extension rod

**SPECIFICATION**

Code	DF10	DF20	DF50	DF100	DF200	DF500	DF1000
Range	10N	20N	50N	100N	200N	500N	1000N
Resolution	0.001N	0.005N	0.005N	0.005N	0.005N	0.01N	0.1N
Accuracy	±0.2% x FS (full scale)						
Power	rechargeable battery						
Dimension	153x73x34mm						
Weight	700g						

**INCLUDED ACCESSORIES**

Main unit	1pc
Charger	1pc
Software	1pc
Push/pull clamps	6pcs(flat, V type, knife-edge, point, pull clamp, extension rod)

**OPTIONAL ACCESSORIES**

Wireless printer	<b>PR100</b>
Stand	<b>FS1000</b>

## SERIES DF

## DIGITAL FORCE GAUGE



- ◆ For pull and push measurement
- ◆ Adjusting the display direction automatically
- ◆ With overload protection
- ◆ Peak and real-time working mode
- ◆ Unit: mN, N, gf, kgf, ozf, lbf
- ◆ Memory: 1000
- ◆ Power off automatically
- ◆ Low and high limits setting with judgement
- ◆ With software, can show the force graph
- ◆ With manufacturer inspection certificate



DF5K



PR100 printer (Optional)



flat clamp (Optional)



extension (Optional)



pull clamp (Optional)

### SPECIFICATION

Code	DF2K	DF5K	DF10K	DF20K
Range	2000N	5000N	10000N	20000N
Resolution	0.5N	1N	1N	1N
Accuracy	±0.2% x FS (full scale)			
Power	rechargeable battery			
Dimension	153x73x34mm			
Weight	700g			

### INCLUDED ACCESSORIES

Main unit	1pc
Sensor	1pc
Charger	1pc
Software	1pc

### OPTIONAL ACCESSORIES

M12 Flat clamp (for DF2K, DF5K and DF10K)	DF2K-FC
M12 Extension (for DF2K, DF5K and DF10K)	DF2K-ER
M12 Pull clamp (for DF2K, DF5K and DF10K)	DF2K-PC
M18 Flat clamp (for DF20K)	DF20K-FC
M18 Extension (for DF20K)	DF20K-ER
M18 Pull clamp (for DF20K)	DF20K-PC
Wireless printer	PR100



- ◆ For pull and push measurement
- ◆ Adjusting the display direction automatically
- ◆ With overload protection
- ◆ Peak and real-time mode
- ◆ Unit: N, gf, kgf, ozf, lbf
- ◆ Memory: 500
- ◆ Power off automatically
- ◆ With manufacturer inspection certificate



**DF1000E**



Stand(Code: **FS1000**, **Optional**)



**PR100** printer (**Optional**)



flat



v-type



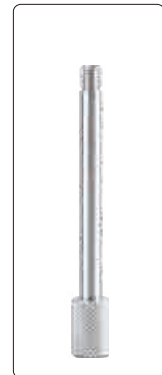
knife-edge



point



pull clamp



extension rod

**SPECIFICATION**

Code	DF10E	DF50E	DF100E	DF500E	DF1000E
Range	10N	50N	100N	500N	1000N
Resolution	0.01N	0.01N	0.1N	0.1N	1N
Accuracy	±0.3% x FS (full scale)				
Power	rechargeable battery				
Dimension	150x72x33mm				
Weight	450g				

**INCLUDED ACCESSORIES**

Main unit	1pc
Charger	1pc
Software	1pc
Push/pull clamps	6pcs(flat, V type, knife-edge, point, pull clamp, extension rod)

**OPTIONAL ACCESSORIES**

Wireless printer	<b>PR100</b>
Stand	<b>FS1000</b>

## SERIES DFXXS DIGITAL FORCE GAUGE



- ◆ Basic type
- ◆ For pull and push measurement
- ◆ Unit: N, kgf, ozf, lbf
- ◆ Low and high limits setting with judgement
- ◆ With backlight
- ◆ Power off automatically
- ◆ With manufacturer inspection certificate



DF500S



flat



v-type



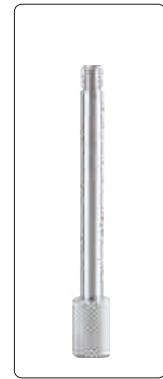
knife-edge



point



pull clamp



extension rod

### SPECIFICATION

Code	DF10S	DF20S	DF50S	DF100S	DF200S	DF500S
Range	10N	20N	50N	100N	200N	500N
Resolution	0.01N	0.01N	0.01N	0.1N	0.1N	0.1N
Accuracy	±1% x FS (full scale)					
Power	2xAAA batteries					
Dimension	124x60x31mm					
Weight	400g					

### INCLUDED ACCESSORIES

Main unit	1pc
AAA batteries	2pcs
Push/pull clamps	6pcs(flat, V type, knife-edge, point, pull clamp, extension rod)



- ◆ Push and pull test
- ◆ Peak(max.) or tracking work mode
- ◆ With manufacturer inspection certificate



Stand(Code: **FS1000**, **Optional**)



**NK-500**



flat



v-type



point



knife-edge



pull clamp

**SPECIFICATION**

Code	NK-20	NK-30	NK-50	NK-100	NK-200	NK-300	NK-500
Range(N)	20	30	50	100	200	300	500
Range(Kg)	2	3	5	10	20	30	50
Resolution(N)	0.1	0.2	0.25	0.5	1	2	2.5
Accuracy	±2% xFS (full scale)						

**INCLUDED ACCESSORIES**

Main unit	1pc
Push tip	4pcs (flat, V type, knife-edge, point)
Pull clamp	1pc
Extension rod	1pc

**OPTIONAL ACCESSORIES**

Stand	FS1000
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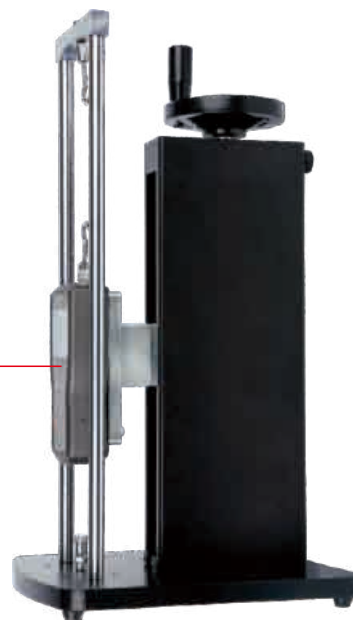
## SERIES FS

## TEST STAND FOR FORCE GAUGE

- ◆ For force gauges
- ◆ To be used in vertical and horizontal orientation



Force gauge is not included



FS1000

### SPECIFICATION

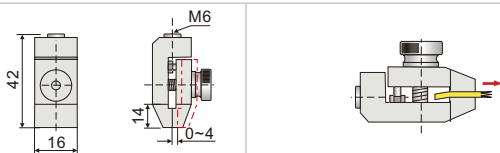
Code	FS1000S	FS1000
Scale	with	without
Load capacity	1000N	
Travel	200mm (3mm vertical movement per revolution of handwheel)	
Dimension	96x250x446mm	
Weight	13kg	

## SERIES DF

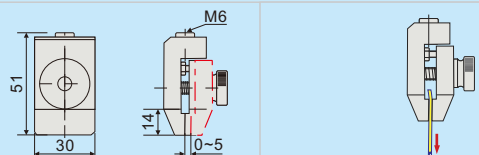
## CLAMPS FOR FORCE GAUGE

unit:mm

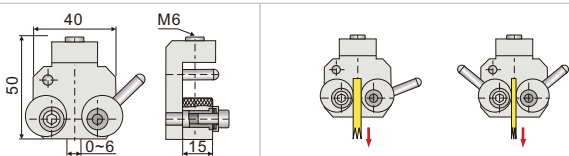
### FLAT CHUCK (Code: DF-FC1)



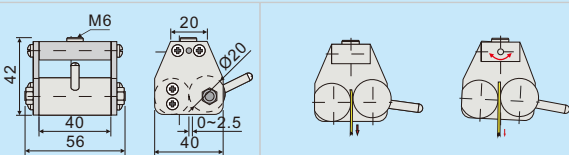
### FLAT CHUCK (Code: DF-FC2)



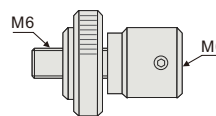
### CAM GRIP (Code: DF-CG1)



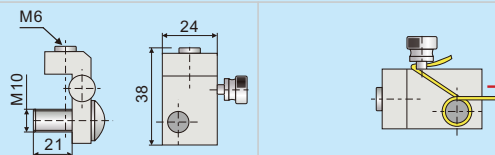
### CAM GRIP (Code: DF-CG2)



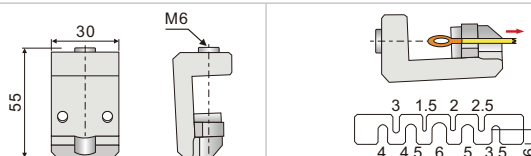
### LOCK THREAD ADAPTER (Code: DF-TA)



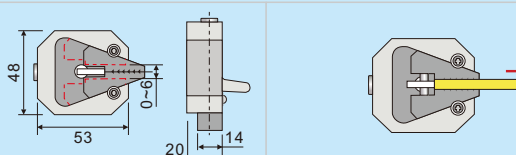
### WIRE GRIP (Code: DF-WG1)



### WIRE TERMINAL GRIP (Code: DF-TWG1)



### WEDGE GRIP (Code: DF-WT1)





**DFS500**

**MOTORIZED VERTICAL TEST STAND**

- ◆ Used to measure the force of pull or push with series DF force gauge
- ◆ Programmable, can do automatic testing cycle
- ◆ Can set three working modes: displacement cycle, force cycle, user-defined cycle
- ◆ With alarm: position, force and motor block

**SPECIFICATION**

<b>Max. capacity</b>	650N
<b>Max. travel</b>	220mm
<b>Moving speed</b>	30-720mm/min(adjustable)
<b>Resolution of speed</b>	1mm/min
<b>Moving speed accuracy</b>	2%
<b>Displacement resolution</b>	0.01mm
<b>Displacement accuracy</b>	±0.3mm
<b>Output</b>	USB, RS232
<b>Working temperature</b>	10-40°C
<b>Power supply</b>	AC100-240V
<b>Dimension</b>	340×180×630 mm
<b>Weight</b>	15kg



**INCLUDED ACCESSORIES**

<b>Main unit</b>	1pc
<b>Software and USB cable</b>	1pc
<b>Power cable</b>	1pc

**DFS500H**

**MOTORIZED HORIZONTAL TEST STAND**

- ◆ Used to measure the force of pull or push with series DF force gauge
- ◆ Programmable, can do automatic testing cycle
- ◆ Can set three working modes: displacement cycle, force cycle, user-defined cycle
- ◆ With alarm: position, force and motor block

**SPECIFICATION**

<b>Max. capacity</b>	650N
<b>Max. travel</b>	220mm
<b>Moving speed</b>	30-720mm/min(adjustable)
<b>Resolution of speed</b>	1mm/min
<b>Moving speed accuracy</b>	2%
<b>Displacement resolution</b>	0.01mm
<b>Displacement accuracy</b>	±0.3mm
<b>Output</b>	USB, RS232
<b>Working temperature</b>	10-40°C
<b>Power supply</b>	AC100-240V
<b>Dimension</b>	671×120×278 mm
<b>Weight</b>	13kg



**INCLUDED ACCESSORIES**

<b>Main unit</b>	1pc
<b>Software and USB cable</b>	1set
<b>Power cable</b>	1pc

- ◆ For spring force testing
- ◆ Peak and real-time working mode
- ◆ Unit: N, kgf, lbf
- ◆ Power off automatically
- ◆ Low and high limits setting with judgement
- ◆ With digital scale, resolution:0.01mm



DST50

**SPECIFICATION**

Code	DST10	DST20	DST30	DST50	DST100	DST200	DST300	DST500
Capacity	10N	20N	30N	50N	100N	200N	300N	500N
Resolution	0.001N	0.002N	0.01N	0.01N	0.02N	0.05N	0.1N	0.1N
Test range	5%-100% capacity							
Accuracy	±1% x FS (full scale)							
Max. spring length(free status)	65mm			95mm				
Range of digital scale	65mm			95mm				
Disk diameter	Ø30mm			Ø49mm				
Power	220V/110V							
Dimension	300x235x600mm			300x235x620mm				
Weight	13.2kg	13.2kg	13.2kg	17.3kg	19.1kg	19.1kg	19.1kg	20.8kg

**INCLUDED ACCESSORIES**

Main unit	1pc
Power cable	1pc
Foot screw	4pcs



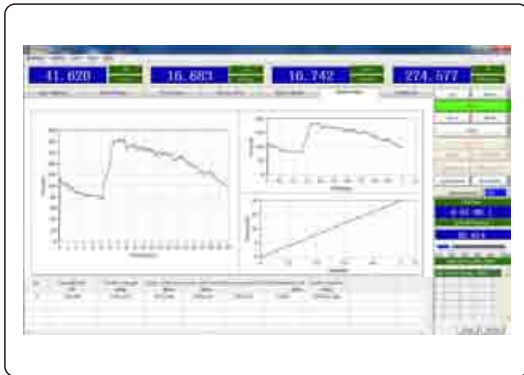


**SERIES UTT**

**ELECTRONIC UNIVERSAL TENSILE TESTING MACHINE**

- ◆ For tensile, tear testing of different kinds of materials
- ◆ With testing analysis software
- ◆ Unit: N, kN, Kg, Lbf, Mpa, Lbf/in<sup>2</sup>, Kg/mm<sup>2</sup>

Software



UTT100



UTT1000

**SPECIFICATION**

Code	UTT50	UTT100	UTT200	UTT500	UTT1000	UTT2000	UTT10000	UTT20000
Type	single column				double column			
Max.capacity	50kg	100kg	200kg	500kg	1000kg	2000kg	10000kg	20000kg
Accuracy	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Resolution	1/1000000xFS (Max. capacity)				1/500000xFS (Max. capacity)			
Max. travel	600mm				800mm			
Width	180mm				450mm			
Test speed	0.1-500mm/min							
Moving speed accuracy	±0.3%							
Movement controller	servo motor							
Power supply	100-240AC							
Dimension	500×420×1250mm				750×500×1850mm		1100×760×2100mm	
Weight	50kg				260kg		750kg	

**INCLUDED ACCESSORIES**

Main unit	1pc
Computer	1pc
USB dongle	1pc
Fixture	1set

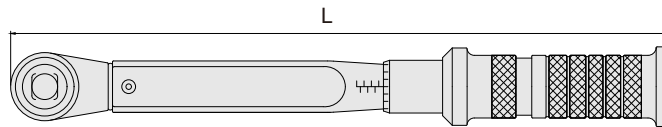
**SERIES TWM TORQUE WRENCH**



- ◆ Easy to set the torque value
- ◆ Accuracy:  $\pm 4\%$  \*
- ◆ According to ISO6789, ASMEB107. 14
- ◆ With manufacturer inspection certificate



TWM25



**SPECIFICATION**

Code	TWM25	TWM50	TWM100	TWM200	TWM340
Range	5~25N.m	10~50N.m	20~100N.m	40~200N.m	70~340N.m
Size of square drive	3/8"	3/8"	3/8"	1/2"	1/2"
Length(L)	275mm	275mm	380mm	505mm	695mm
Weight	420g	420g	580g	1.3kg	1.9kg

\* Accuracy is available upon request

**SERIES TWM-B TORQUE WRENCH**



- ◆ Economic type
- ◆ Easy to set the torque value
- ◆ Accuracy:  $\pm 4\%$  (clockwise)
- ◆ According to ISO6789, ASMEB107. 14
- ◆ With manufacturer inspection certificate



TWM25B

**SPECIFICATION**

Code	TWM25B	TWM60B	TWM60D	TWM110B	TWM110C	TWM210B	TWM330B
Range(N.m)	5~25	12~60	12~60	22~110	22~110	42~210	66~330
Size of square drive	1/4"	3/8"	1/2"	3/8"	1/2"	1/2"	1/2"
Length	250mm	415mm	425mm	460mm	470mm	490mm	565mm
Weight	350g	920g	980g	1.06kg	1.17kg	1.26kg	1.34kg

Code	TWM550B	TWM800B	TWM1000B	TWM1500B	TWM2000B	TWM3000B
Range(N.m)	110~550	160~800	200~1000	300~1500	400~2000	600~3000
Size of square drive	3/4"	3/4"	3/4"	1"	1"	1"
Length	900mm	1200mm	1200mm	1260mm	1260mm	1260mm
Weight	4.3kg	5.6kg	5.6kg	9.2kg	9.2kg	10.5kg

## SERIES STWM

## TORQUE WRENCH WITH BIT SET



- ◆ Accuracy:  $\pm 4\%$ (clockwise)



STWM25



STWM110

### SPECIFICATION

Code	STWM25	STWM110	STWM210
Torque wrench code	TWM25B	TWM110C	TWM210B
Range	5~25N.m	22~110N.m	42~210N.m
Size of square drive	1/4"	1/2"	1/2"
Bit size	Hexagon type: H2-H2.5-H3-H4-H5-H6-H8 Torx type: T10-T15-T20-T25-T27-T30 Extension rod: 100mm	Hexagon type: 17-19-21-22-23mm Extension rod: 125mm	
Main application	bicycle industry	automotive industry	
Torque wrench length	250mm	460mm	490mm
Weight	790g	2200g	2300g

## SERIES TW

## DIGITAL TORQUE WRENCH

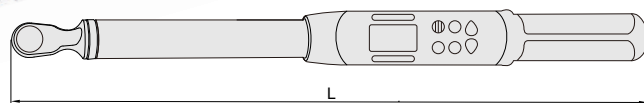


- ◆ Clockwise or anti-clockwise operation
- ◆ Unit: N.m, in.lb, ft.lb, kg.cm
- ◆ Peak or real-time working mode
- ◆ Automatic power off
- ◆ With calibration certificate



TW200

unit: mm



### SPECIFICATION

Code	TW12	TW20	TW30	TW135	TW200	TW340	TW550	TW850	TW1500	TW2000
Range(N.m)	2.4~12	4~20	6~30	27~135	40~200	68~340	110~550	170~850	300~1500	400~2000
Resolution	0.01N.m	0.01N.m	0.1N.m	0.1N.m	1N.m	1N.m	1N.m	1N.m	1N.m	1N.m
Accuracy	Clockwise	$\pm 3\%$	$\pm 3\%$	$\pm 2\%$	$\pm 2\%$	$\pm 2\%$	$\pm 2.5\%$	$\pm 2.5\%$	$\pm 2.5\%$	$\pm 2.5\%$
	Anti-clockwise	$\pm 4\%$	$\pm 4\%$	$\pm 3\%$	$\pm 3\%$	$\pm 3\%$	$\pm 3.5\%$	$\pm 3.5\%$	$\pm 3.5\%$	$\pm 3.5\%$
Size of square drive	1/4"	1/4"	1/4"	3/8"	1/2"	1/2"	3/4"	3/4"	1"	1"
Length(L)	390mm	390mm	390mm	415mm	530mm	650mm	950mm	1220mm	1800mm	1800mm
Weight	900g	900g	900g	950g	1400g	1800g	3400g	4400g	13kg	14kg
Power	2xAA batteries									

**SERIES TWD**

**DIAL TORQUE WRENCH**



- ◆ Clockwise and counter-clockwise operation
- ◆ Comforms to DIN ISO 6789, ASME B107.300
- ◆ With manufacturer inspection certificate



TWD70

**SPECIFICATION**

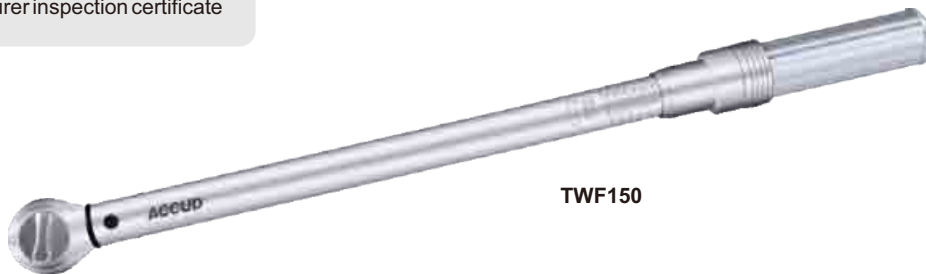
Code	TWD3	TWD9	TWD18	TWD35	TWD70	TWD140	TWD240	TWD350
<b>Range</b>	0.7~3.5N.m 6~30in.lb	1.8~9N.m 15~75in.lb	3.6~18N.m 30~150in.lb	7~35N.m 60~300in.lb	14~70N.m 120~600in.lb	28~140N.m 20~100ft.lb	48~240N.m 35~175ft.lb	70~350N.m 50~250ft.lb
<b>Accuracy</b>	±3%	±3%	±3%	±3%	±3%	±3%	±3%	±3%
<b>Graduation</b>	0.05N.m 0.5in.lb	0.1N.m 1in.lb	0.2N.m 2in.lb	0.5N.m 5in.lb	1N.m 10in.lb	2N.m 1ft.lb	3N.m 2.5ft.lb	2.5N.m 2.5ft.lb
<b>Square drive</b>	1/4"	1/4"	3/8"	3/8"	3/8"	1/2"	1/2"	1/2"
<b>Length</b>	254mm	254mm	254mm	254mm	378mm	546mm	546mm	546mm
<b>Weight</b>	480g	480g	480g	480g	820g	1300g	1300g	1300g

**SERIES TWI/TWF**

**TORQUE WRENCH**



- ◆ Easy to set the torque value
- ◆ According to ISO6789, ASME B107.300
- ◆ Metal construction
- ◆ With manufacturer inspection certificate



TWF150

**SPECIFICATION**

Code	TWI200	TWI250	TWF100	TWF150	TWF250	TWF600
<b>Range</b>	40~200lb.in	50~250lb.in	20~100lb.ft	30~150lb.ft	50~250lb.ft	100~600lb.ft
<b>Graduation</b>	1lb.in	1lb.in	0.5lb.ft	0.5lb.ft	1lb.ft	2.5lb.ft
<b>Accuracy</b>	±3%	±3%	±3%	±3%	±3%	±4%
<b>Size of square drive</b>	1/4"	3/8"	3/8"	1/2"	1/2"	3/4"
<b>Length</b>	11"	12.4"	16.7"	20"	26.7"	41.5"
<b>Weight</b>	1.5lb	1.8lb	2.3lb	2.6lb	2.9lb	13lb

## SERIES TWS

## WINDOWS TORQUE WRENCH



- ◆ Accuracy:  $\pm 4\%$ (clockwise)
- ◆ According to ISO6789
- ◆ Unit: N.m; Lbf.ft
- ◆ With manufacturer inspection certificate



TWS60



### SPECIFICATION

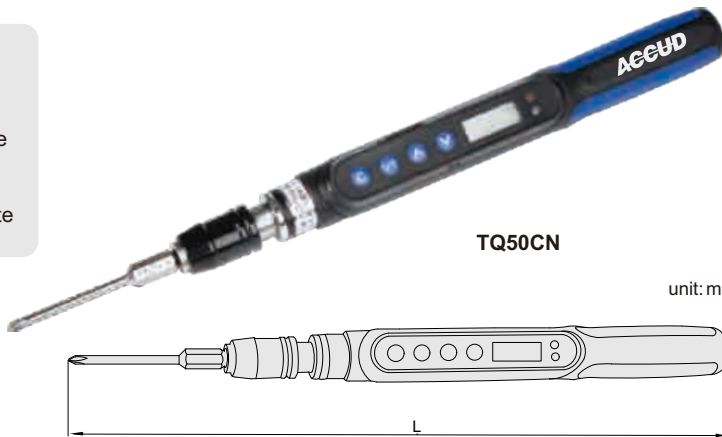
Code	Range (N.m)	Size of square drive	Length	Weight	Code	Range (N.m)	Size of square drive	Length	Weight
TWS12	2.4~12	1/4"	300mm	0.58kg	TWS330	66~330	1/2"	555mm	1.28kg
TWS20	4~20	1/4"	300mm	0.58kg	TWS400	80~400	1/2"	725mm	1.90kg
TWS20B	4~20	3/8"	300mm	0.60kg	TWS400B	80~400	3/4"	825mm	3.05kg
TWS30	6~30	3/8"	315mm	0.68kg	TWS550	110~550	3/4"	825mm	3.93kg
TWS60	12~60	3/8"	400mm	0.86kg	TWS1000	200~1000	3/4"	1115mm	5.28kg
TWS60B	12~60	1/2"	415mm	0.90kg	TWS1500	300~1500	1"	1250mm	8.20kg
TWS100B	20~100	1/2"	470mm	1.12kg	TWS2000	400~2000	1"	1250mm	8.20kg
TWS200	40~200	1/2"	495mm	1.18kg	TWS3000	600~3000	1"	1250mm	9.50kg

## SERIES TQ

## DIGITAL TORQUE SCREWDRIVER



- ◆ Clockwise or anti-clockwise operation
- ◆ Peak and track working mode
- ◆ With audible and visible alarm when the value is closed to setting target
- ◆ With manufacturer inspection certificate



TQ50CN

unit: mm

### SPECIFICATION

Code	TQ50CN	TQ200CN	TQ400CN
Range	10~50cN.m	40~200cN.m	80~400cN.m
Clockwise operation accuracy	$\pm 3\%$	$\pm 2.5\%$	$\pm 2.5\%$
Anti-clockwise operation accuracy	$\pm 4\%$	$\pm 3.5\%$	$\pm 3.5\%$
Resolution	0.1cN.m	0.1cN.m	0.1cN.m
Size of shank	1/4"	1/4"	1/4"
Length (L)	258mm	268mm	268mm
Weight	200g	200g	200g
Power	1xAAA battery		

## SERIES DT

## DIGITAL TORQUE INDICATOR



- ◆ Peak, preset and real-time working mode
- ◆ Unit: N.m, N.cm, kgf.cm, lbf.ft, lbf.in
- ◆ Memory: 999
- ◆ Power off automatically
- ◆ With backlight
- ◆ With manufacturer inspection certificate



DT135

### SPECIFICATION

Code	DT30	DT135	DT200
Range	5-30N.m	13.5-135N.m	20-200N.m
Drive size	1/2"	1/2"	1/2"
Resolution	0.01N.m	0.1N.m	0.1N.m
Accuracy	±2%(clockwise)/±2.5%(anti-clockwise)		
Memory	999		
Power	2xAAA batteries		
Weight	200g		

### INCLUDED ACCESSORIES

Main unit	1pc
AAA battery	2pcs
Wrench	1pc

### Application



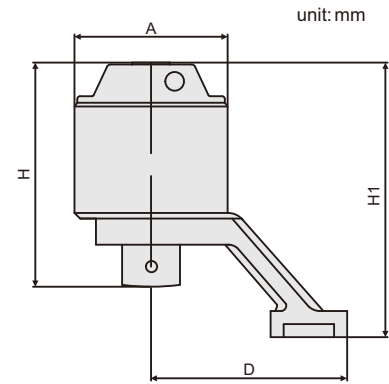
## SERIES TWQ

## TORQUE MULTIPLIERS

- ◆ Accuracy: ±5%



TWQ-5500



### Application



### SPECIFICATION

Code	TWQ-1000	TWQ-2000	TWQ-3500	TWQ-5500	TWQ-7500	TWQ-10000
Capacity	1000N.m	2000N.m	3500N.m	5500N.m	7500N.m	10000N.m
Torque ratio	1:4.5	1:12	1:15	1:18.5	1:20	1:26.5
Square socket	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"
Square driver	1"	1"	1"	1 1/2"	1 1/2"	1 1/2"
For bolt	M20-30	M22-35	M30-45	M38-52	M42-60	M52-72
For nut	S30-46	S32-55	S46-70	S55-80	S65-90	S80-105
Dimension(AxHxDxH1)	82x98.5x97x122.4	82x120x105x147	98x131x120x163	115x163.5x137x199	127x173x146x215	141x170x164x238
Weight	2.1kg	3.15kg	4.9kg	8.1kg	10.6kg	14kg



**SERIES TQM**

**TORQUE SCREWDRIVER**

- ◆ Clockwise operation
- ◆ When achieving the setting target, there is "chatter"



TQM300

**SPECIFICATION**

Code	TQM60	TQM120	TQM300	TQM600
Range	0.12~0.6N.m	0.24~1.2N.m	0.6~3N.m	1.2~6N.m
Clockwise operation accuracy	±6%	±6%	±6%	±6%
Graduation	0.01N.m	0.02N.m	0.05N.m	0.1N.m
Size of shank	1/4"	1/4"	1/4"	1/4"
Length (L)	161mm	161mm	186mm	186mm
Weight	300g	300g	400g	400g

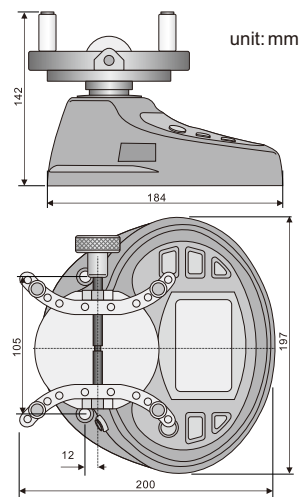
**SERIES TTM**

**DIGITAL BOTTLE CAP TORQUE METER**

- ◆ Test the open and tighten torque of bottle cap
- Peak, preset and real-time working mode
- ◆ Unit: N.m, N.cm, kgf.cm, lbf.cm, lbf.in
- ◆ Memory: 1000
- ◆ Power off automatically
- ◆ With software, can show the torque graph
- ◆ With manufacturer inspection certificate



TTM10



**SPECIFICATION**

Code	TTM2	TTM5	TTM10	TTM20
Range	0.1-2N.m	0.25-5N.m	0.5-10N.m	1-20N.m
Accuracy	±0.5%			
Resolution	0.0002N.m	0.0005N.m	0.001N.m	0.002N.m
Open size	Ø19.5-190mm			
Output	USB and RS232			
Power	rechargeable battery			
Weight	2.5kg			

**INCLUDED ACCESSORIES**

Main unit	1pc
Charger	1pc
Software with cable	1pc

**OPTIONAL ACCESSORIES**

Wireless printer	PR100
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## SERIES TTB

## DIGITAL TORQUE METER

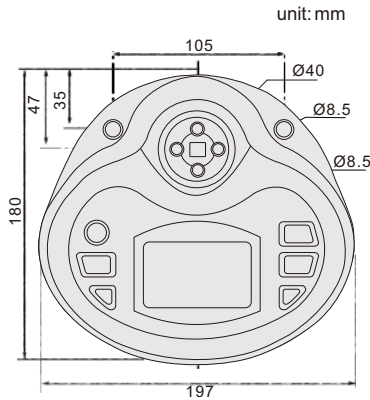


- ◆ For torque wrench and torque screwdriver calibration
- ◆ Peak, preset and real-time working mode
- ◆ Unit: N.m, N.cm, kgf.cm, lbf.cm, lbf.in
- ◆ Memory: 1000
- ◆ Power off automatically
- ◆ With software, can show the torque graph
- ◆ With manufacturer inspection certificate



TTB10

run down adapter for torque meter (optional)



TTB50

Stand (optional)



### SPECIFICATION

Code	TTB5	TTB10	TTB50	TTB100	TTB500	TTB1000
Range	0.25-5N.m	0.5-10N.m	2.5-50N.m	5-100N.m	25-500N.m	100-1000N.m
Accuracy	±0.3%					
Resolution	0.0005N.m	0.001N.m	0.005N.m	0.01N.m	0.05N.m	0.1N.m
Size of square drive	1/2"				3/4"	1"
Output	USB and RS232					
Power	rechargeable battery					
Weight	1.5kg				3kg	

### INCLUDED ACCESSORIES

Main unit	1pc
Charger	1pc
Software with cable	1pc
Convertor (TTB500 and TTB1000 doesn't include)	1pc

### OPTIONAL ACCESSORIES

Wireless printer	PR100	RUN DOWN ADAPTER FOR TORQUE METER(2N.m)	TTB-RDF2
Stand(Arm length:150-600mm)	TTB-ST1	RUN DOWN ADAPTER FOR TORQUE METER(6N.m)	TTB-RDF6
Stand(Arm length:150-1000mm)	TTB-ST2	RUN DOWN ADAPTER FOR TORQUE METER(40N.m)	TTB-RDF40
Stand(Arm length:150-1500mm)	TTB-ST4	RUN DOWN ADAPTER FOR TORQUE METER(100N.m)	TTB-RDF100





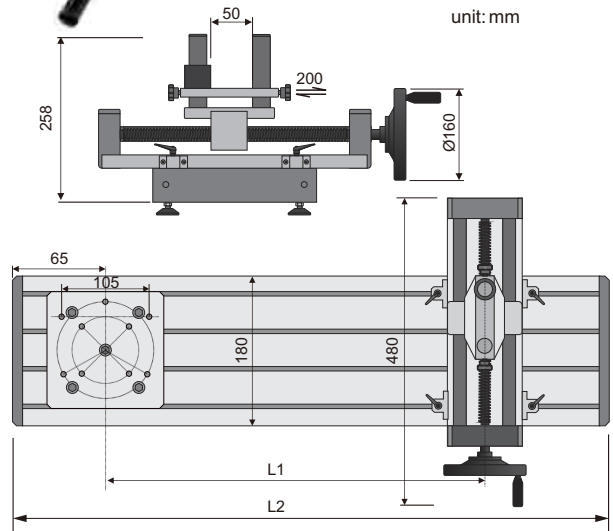
**TTB-ST1/ST2/ST4**

**STAND FOR TORQUE WRENCH TESTING**

- ◆ For calibrating torque wrench with TTB series torque meter



(Torque meter is not included)



**SPECIFICATION**

Code	TTB-ST1	TTB-ST2	TTB-ST4
Arm length(L1)	150-600mm	150-1000mm	150-1500mm
Max. travel	200mm		
Max. force	1000N		2000N
Length(L2)	770mm	1270mm	1800mm
Weight	12kg	16kg	30kg

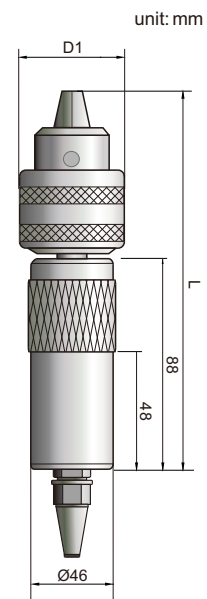
**SERIES TTS**

**DIGITAL TORQUE METER**

- ◆ Adjustable open size for fixing
- ◆ Peak, preset and real-time working mode
- ◆ Unit: N.m, N.cm, kgf.cm, lbf.cm, lbf.in
- ◆ Memory: 1000
- ◆ Power off automatically
- ◆ With software, can show the torque graph
- ◆ With manufacturer inspection certificate



TTS5



**SPECIFICATION**

Code	TTS1	TTS5	TTS10
Range	0.05-1N.m	0.25-5N.m	0.5-10N.m
Open size	Ø10mm	Ø10mm	Ø13mm
Resolution	0.0001N.m	0.0005N.m	0.001N.m
Accuracy	±0.3%		
Memory	1000		
Output	USB and RS232		
Power	rechargeable battery		
Weight	0.7kg		

**INCLUDED ACCESSORIES**

Main unit	1pc
Charger	1pc
Software with cable	1pc
Wrench	1pc

**OPTIONAL ACCESSORIES**

Wireless printer	PR100
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Code	L	D1
TTS1	156mm	Ø43
TTS5	156mm	Ø43
TTS10	178mm	Ø53

## SERIES TWT

## TORQUE WRENCH TESTER

- ◆ Used to test or calibrate torque wrench
- ◆ Contains two torque sensors, with same touch screen LCD



TWT200

### SPECIFICATION

Code		TWT200	TWT500
Range	Sensor 1	1-20N.m	2.5-50N.m
	Sensor 2	10-200N.m	25-500N.m
Resolution	Sensor 1	0.002N.m	0.005N.m
	Sensor 2	0.02N.m	0.05N.m
Accuracy		0.3%	
Max. wrench length		830mm	
Driver size		1/2", 3/8", 1/4"	3/4", 1/2", 3/8"
Memory		1000	
Data output		USB	
Dimension		780×688×433 mm	
Weight		45kg	

### OPTIONAL ACCESSORIES

Main unit	1set
Charger	1pc
Driver adapter	2pcs
USB cable and software	1set

## SERIES TWT

## MOTORIZED TORQUE WRENCH TESTER

- ◆ Used to test or calibrate torque wrench
- ◆ Loading force: motorized
- ◆ Contains two torque sensors, with same touch screen LCD



TWT200M

### SPECIFICATION

Code		TWT200M	TWT500M	TWT1000M
Range	Sensor 1	1-20N.m	2.5-50N.m	10-100N.m
	Sensor 2	10-200N.m	25-500N.m	100-1000N.m
Resolution	Sensor 1	0.002N.m	0.005N.m	0.01N.m
	Sensor 2	0.02N.m	0.05N.m	0.1N.m
Accuracy		0.3%		
Max. wrench length		830mm		
Driver size		1/2", 3/8", 1/4"	3/4", 1/2", 3/8"	1", 3/4", 1/2", 3/8"
Memory		1000		
Data output		USB		
Dimension		780×635×443 mm		
Weight		55kg		

### OPTIONAL ACCESSORIES

Main unit	1set
Driver adapter	1set
Software and USB cable	1set
Power cable	1pc

**PS075**

**PORTABLE SCALE**



- ◆ Pocket size, easy to carry
- ◆ It can also measure the dimension
- ◆ With back light
- ◆ Power off automatically
- ◆ Can show temperature



**SPECIFICATION**

<b>Range</b>	0-75kg
<b>Resolution</b>	0.01kg
<b>Accuracy</b>	0.05kg (Weight≤50kg),0.2kg (Weight>50kg)
<b>Unit</b>	kg, lb, JIN, oz
<b>Power supply</b>	2xAAA battery
<b>Dimension</b>	70x135x30mm
<b>Weight</b>	185g

**STANDARD DELIVERY**

<b>Main unit</b>	1pc
<b>AAA battery</b>	2pcs

**WSC300G**

**ELECTRONIC WEIGHING SCALE FOR KITCHEN**



- ◆ LCD display, with backlight
- ◆ Automatic "Zero"
- ◆ Automatic power off



**SPECIFICATION**

<b>Max. capacity</b>	3kg
<b>Min. capacity</b>	0.5g
<b>Division</b>	0.1g
<b>Verification interval</b>	1g
<b>Unit</b>	g, ct, oz, tl, dwn, gn
<b>Automatic "zero" range</b>	0-60g
<b>Power supply</b>	9V AD/DC adapter or 6xAA battery
<b>Dimension of pan</b>	15x15cm
<b>Dimension</b>	23x15x4cm

## SERIES WSJ

## HIGH PRECISION ELECTRONIC BALANCE



- ◆ High accuracy, mainly used to measure weight of golden and jewellery
- ◆ LCD display, with backlight
- ◆ Overload and limits alarm
- ◆ RS232 output
- ◆ Automatic power off



WSJ2000G

### SPECIFICATION

Code	WSJ100G	WSJ200G	WSJ300G	WSJ600G	WSJ1000G	WSJ2000G
Max. capacity	100g	200g	300g	600g	1000g	2000g
Min. capacity	0.005g	0.005g	0.005g	0.05g	0.05g	0.05g
Division	0.001g	0.001g	0.001g	0.01g	0.01g	0.01g
Verification interval	0.01g	0.01g	0.01g	0.1g	0.1g	0.1g
Unit	g, ct, lb, oz, dr, gn, ozt, dwt					
Power supply	re-chargeable battery					
Dimension of pan	Ø9CM			Ø14CM		
Dimension	32x21x31cm					

## SERIES WS

## ELECTRONIC WEIGHING SCALE

- ◆ LCD display, with backlight
- ◆ Overload and limits alarm
- ◆ RS232 output
- ◆ Automatic power off



WS15K

### SPECIFICATION

Code	WS06K	WS15K	WS30K
Max. capacity	6kg	15kg	30kg
Min. capacity	1g	5g	10g
Division	0.1g	0.5g	1g
Verification interval	1g	5g	10g
Unit	kg, g, lb		
Power supply	9VAD/DC adapter		
Dimension of pan	32x23cm		
Dimension	32x36x11cm		

# SERIES WT/WTS

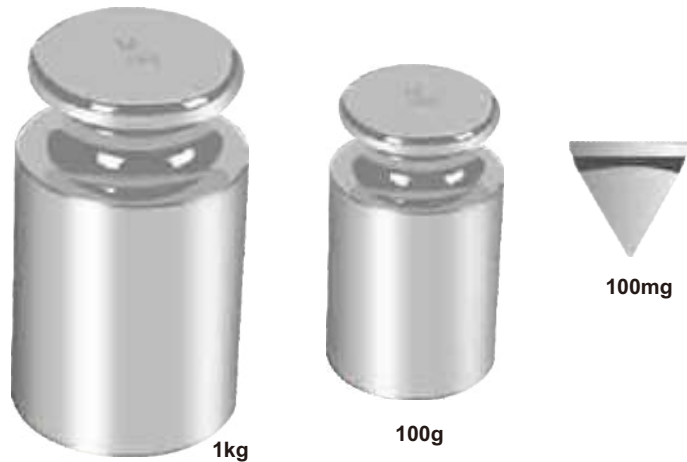
# WEIGHT



◆ With manufacturer inspection certificate

### TOLERANCE

Weight	M1	F2	F1	E2
1mg	0.2mg	0.06mg	0.02mg	0.006mg
2mg	0.2mg	0.06mg	0.02mg	0.006mg
5mg	0.2mg	0.06mg	0.02mg	0.006mg
10mg	0.25mg	0.08mg	0.025mg	0.008mg
20mg	0.3mg	0.1mg	0.03mg	0.01mg
50mg	0.4mg	0.12mg	0.04mg	0.012mg
100mg	0.5mg	0.16mg	0.05mg	0.016mg
200mg	0.6mg	0.2mg	0.06mg	0.02mg
500mg	0.8mg	0.25mg	0.08mg	0.025mg
1g	1mg	0.3mg	0.1mg	0.03mg
2g	1.2mg	0.4mg	0.12mg	0.04mg
5g	1.6mg	0.5mg	0.16mg	0.05mg
10g	2mg	0.6mg	0.2mg	0.06mg
20g	2.5mg	0.8mg	0.25mg	0.08mg
50g	3mg	1mg	0.3mg	0.1mg
100g	5mg	1.6mg	0.5mg	0.16mg
200g	10mg	3mg	1mg	0.3mg
500g	25mg	8mg	2.5mg	0.8mg
1kg	50mg	16mg	5mg	1.6mg
2kg	100mg	30mg	10mg	3mg
5kg	250mg	80mg	25mg	8mg
10kg	500mg	160mg	50mg	16mg
20kg	1000mg	300mg	100mg	30mg



### GRADE SELECTION

Weighing instrument resolution	Grade selection
0.001mg	E1
0.01mg	E2
0.1mg	E2 or F1
1mg	F2
0.01g/0.1g	M1

### INDIVIDUAL WEIGHT

Code	Grade and stainless steel type					Sharp
	M1(304)	F2(304)	F1(304)	F1(non-magnetic)	E2(non-magnetic)	
1mg	WT-M001M1	WT-M001F2	WT-M001F1	WT-M001F1B	WT-M001E2	sheet
2mg	WT-M002M1	WT-M002F2	WT-M002F1	WT-M002F1B	WT-M002E2	
5mg	WT-M005M1	WT-M005F2	WT-M005F1	WT-M005F1B	WT-M005E2	
10mg	WT-M010M1	WT-M010F2	WT-M010F1	WT-M010F1B	WT-M010E2	
20mg	WT-M020M1	WT-M020F2	WT-M020F1	WT-M020F1B	WT-M020E2	
50mg	WT-M050M1	WT-M050F2	WT-M050F1	WT-M050F1B	WT-M050E2	
100mg	WT-M100M1	WT-M100F2	WT-M100F1	WT-M100F1B	WT-M100E2	
200mg	WT-M200M1	WT-M200F2	WT-M200F1	WT-M200F1B	WT-M200E2	
500mg	WT-M500M1	WT-M500F2	WT-M500F1	WT-M500F1B	WT-M500E2	
1g	WT-001M1	WT-001F2	WT-001F1	WT-001F1B	WT-001E2	
2g	WT-002M1	WT-002F2	WT-002F1	WT-002F1B	WT-002E2	
5g	WT-005M1	WT-005F2	WT-005F1	WT-005F1B	WT-005E2	
10g	WT-010M1	WT-010F2	WT-010F1	WT-010F1B	WT-010E2	
20g	WT-020M1	WT-020F2	WT-020F1	WT-020F1B	WT-020E2	
50g	WT-050M1	WT-050F2	WT-050F1	WT-050F1B	WT-050E2	
100g	WT-100M1	WT-100F2	WT-100F1	WT-100F1B	WT-100E2	
200g	WT-200M1	WT-200F2	WT-200F1	WT-200F1B	WT-200E2	
500g	WT-500M1	WT-500F2	WT-500F1	WT-500F1B	WT-500E2	
1kg	WT-1000M1	WT-1000F2	WT-1000F1	WT-1000F1B	WT-1000E2	
2kg	WT-2000M1	WT-2000F2	WT-2000F1	WT-2000F1B	WT-2000E2	
5kg	WT-5000M1	WT-5000F2	WT-5000F1	WT-5000F1B	WT-5000E2	
10kg	WT-10000M1	WT-10000F2	WT-10000F1	WT-10000F1B	WT-10000E2	
20kg	WT-20000M1	WT-20000F2	WT-20000F1	WT-20000F1B	WT-20000E2	

### WEIGHT SET

Code	Grade and stainless steel type					Quantity
	M1(304)	F2(304)	F1(304)	F1(non-magnetic)	E2(non-magnetic)	
1mg-200g	WTS-200M1	WTS-200F2	WTS-200F1	WTS-200F1B	WTS-200E2	23pcs
1mg-500g	WTS-500M1	WTS-500F2	WTS-500F1	WTS-500F1B	WTS-500E2	24pcs

Each set includes two pieces 2mg/20mg/200mg/2g/20g/200g and one piece each other sizes