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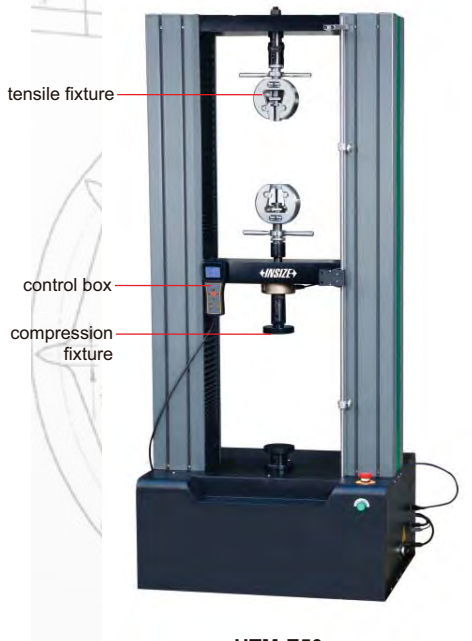


Dial Tension Gages
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Spindle Tension Meters
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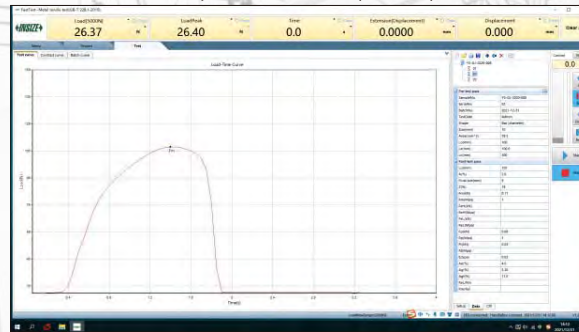
ELECTRONIC UNIVERSAL TESTING MACHINES



UTM-E50

- For tensile, compression, bend, shear, peel, tear tests of metal and non-metal materials

computer and software (included)



flat jaws (included)



V-shaped jaws (included)

STANDARD DELIVERY

Main unit	1 pc
Control box	1 pc
Computer	1 pc
Measuring software	1 pc
Printer	1 pc
Wedge tension fixture (including flat jaws and V-shaped jaws) **	1 set
Compression fixture	1 set
Extensometer (only for UTM-E100, UTM-E300)	1 pc

** UTM-E10 does not have V-shaped jaws



OPTIONAL ACCESSORY

Extensometer	page 865
Fixtures	page 862~863

SPECIFICATION

Code	UTM-E10	UTM-E50	UTM-E100	UTM-E300
Max. test force	10kN	50kN	100kN	300kN
Accuracy class	0.5 class			
Test force measurement range	0.2%~100%FS			
Test force measurement accuracy	±0.5% of indicating value			
Resolution of test force measurement	1/300000 of Max. test force (same resolution all the way)			
Deformation measurement range	0.2%~100%FS			
Deformation measurement accuracy	±0.5% of indicating value			
Deformation measurement resolution	1/200000 of Max. deformation, up to 1/300000			
Large deformation measurement range	10~800mm			
Large deformation measurement accuracy	±1% of indicating value			
Large deformation measurement resolution	8µm			
Displacement accuracy	±0.5% of indicating value			
Displacement resolution	0.01mm			
Force control speed adjustment range	0.005~5%FS/s			
Force control speed control accuracy	±2% of the set value (speed<0.05%FS/s) ±0.5% of the set value (speed≥0.05%FS/s)			
Deformation speed adjustment range	0.005~5%FS/s			
Deformation speed control accuracy	±2% of the set value (speed<0.05%FS/s) ±0.5% of the set value (speed≥0.05%FS/s)			
Beam displacement speed adjustment range	0.001~500mm/min			
Beam displacement speed control accuracy	±1% of the set value (speed<0.5mm/min) ±0.2% of the set value (speed≥0.5mm/min)			
Crosshead travel *	1030mm	970mm	1250mm	1000mm
Effective compression travel *	800mm	700mm	700mm	600mm
Horizontal test space *	400mm	440mm	600mm	550mm
Power supply	220V, 50Hz, 0.4kW~1kW		380V, 50Hz, 2kW~5kW	
Dimension	715×500×1680mm	820×620×1880mm	1070×855×2180mm	1070×920×2550mm
Weight	230kg	350kg	1000kg	1500kg

* Can be customized according to test requirements

HIGH AND LOW TEMPERATURE TEST CHAMBERS FOR ELECTRONIC UNIVERSAL TESTING MACHINES



electronic universal testing machine is optional

UTT-M63-E50

- For UTM-E□□□ electronic universal testing machines
- For tensile, compression, bend, shear tests in high and low temperature environment

SPECIFICATION

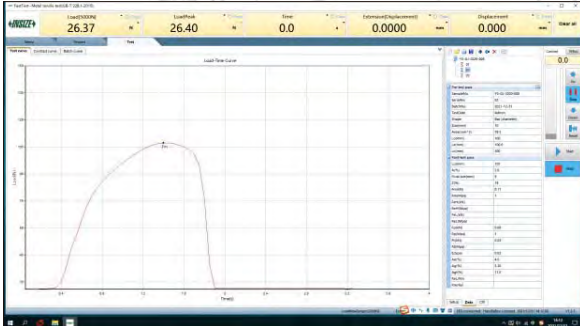
Code	for UTM-E10	UTT-M03-E10	UTT-M33-E10	UTT-M63-E10
	for UTM-E50	UTT-M03-E50	UTT-M33-E50	UTT-M63-E50
	for UTM-E100	UTT-M03-E100	UTT-M33-E100	UTT-M63-E100
Temperature range	(room temperature+10)~300°C		-30~300°C	-60~300°C
Temperature accuracy *	±1°C			
Temperature fluctuation *	±0.5°C			
Temperature uniformity *	≤2°C			
Temperature resolution	0.1°C			
Cooling system	no		compressor or liquid nitrogen	
Cooling time (room temperature@25°C)			1~2°C/min (no-load)	
Warming up time	1~3°C/min (no-load)			
Temperature control	PID automatic temperature control			
Heating system	magnesium powder heating tube			
Aperture size	Ø50mm			
Chamber dimension **	240×430×530mm (suitable for electronic universal testing machines with column spacing of 400mm and above)			
Power supply	AC 220V, 60Hz			
Total power	1.8kW		2.2kW	2.8kW

*The applicable range of temperature accuracy, uniformity and fluctuation is Ø100×200mm

** Customized according to UTM-E□□□ electronic universal testing machine and customer requirements

ELECTRONIC UNIVERSAL TESTING MACHINES

computer and software (included)



UTM-S5KA

- For tensile, peel, tear tests of metal and non-metal materials

STANDARD DELIVERY

Main unit	1 pc
Control box	1 pc
Computer	1 pc
Measuring software	1 pc
Printer	1 pc
Tensile fixture	1 set

OPTIONAL ACCESSORY

Extensometer	page 865
Fixtures	page 862~863

SPECIFICATION

Code	UTM-S200A	UTM-S500A	UTM-S1KA	UTM-S2KA	UTM-S5KA
Max. test force	200N	500N	1kN	2kN	5kN
Accuracy class	0.5 class				
Test force measurement range	0.4%~100%FS				
Test force measurement accuracy	±0.5% of indicating value				
Resolution of test force measurement	1/300000 of Max. test force (same resolution all the way)				
Deformation measurement range	0.2%~100%FS				
Deformation measurement accuracy	±0.5% of indicating value				
Deformation measurement resolution	1/200000 of Max. deformation, up to 1/300000				
Large deformation measurement range	10~800mm				
Large deformation measurement accuracy	±1% of indicating value				
Large deformation measurement resolution	8µm				
Displacement accuracy	±0.5% of indicating value				
Displacement resolution	0.01mm				
Force control speed adjustment range	0.005~5%FS/s				
Force control speed control accuracy	±2% of the set value (speed<0.05%FS/s) ±0.5% of the set value (speed≥0.05%FS/s)				
Deformation speed adjustment range	0.005~5%FS/s				
Deformation speed control accuracy	±2% of the set value (speed<0.05%FS/s) ±0.5% of the set value (speed≥0.05%FS/s)				
Beam displacement speed adjustment range	0.001~500mm/min				
Beam displacement speed control accuracy	±1% of the set value (speed<0.5mm/min) ±0.2% of the set value (speed≥0.5mm/min)				
Crosshead travel*	900mm				
Effective compression travel*	630mm				
Power supply	220V, 50Hz, 0.4kW~1kW				
Dimension	510×510×1580mm				
Weight	150kg				
















* Can be customized according to test requirements

FIXTURES FOR ELECTRONIC UNIVERSAL TESTING MACHINES

CUSTOM-MADE

















■ Used with **UTM-E** series and **UTM-S** series electronic universal testing machines

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<p>UTM-F001</p> <ul style="list-style-type: none"> ■ Wedge tensile fixture ■ For tensile testing of non-metallic materials and thin metal specimens 	<p>UTM-F002</p> <ul style="list-style-type: none"> ■ Hydraulic tensile fixture ■ For tensile testing of metallic materials, round bar specimens 	<p>UTM-F003</p> <ul style="list-style-type: none"> ■ 10kN wedge tensile fixture ■ For tensile testing of metal specimens 
<p>UTM-F004</p> <ul style="list-style-type: none"> ■ Pneumatic tensile fixture ■ For tensile testing of non-metallic material specimens 	<p>UTM-F005</p> <ul style="list-style-type: none"> ■ Insulation profile longitudinal shearing fixture ■ Longitudinal shear test for insulation type materials 	<p>UTM-F006</p> <ul style="list-style-type: none"> ■ Insulation profile transverse tensile fixture ■ For transverse tensile testing of insulation-type materials 
<p>UTM-F007</p> <ul style="list-style-type: none"> ■ Filament winding fixture ■ For tensile testing of data wires, textile fabric wires, plastic wires 	<p>UTM-F008</p> <ul style="list-style-type: none"> ■ Filament opposite fixture ■ For tensile testing of wire specimens 	<p>UTM-F009</p> <ul style="list-style-type: none"> ■ Pneumatic threadlet tensile fixture ■ For tensile testing of non-metallic wire specimens 
<p>UTM-F010</p> <ul style="list-style-type: none"> ■ Steel wire tensile fixture ■ For tensile testing of fine steel wires and iron wires 	<p>UTM-F011</p> <ul style="list-style-type: none"> ■ Threadlet winding fixture ■ For tensile testing of filamentary metal specimens 	<p>UTM-F012</p> <ul style="list-style-type: none"> ■ Fabric belt winding tensile fixture ■ For tensile testing of non-metallic material specimens 
<p>UTM-F013</p> <ul style="list-style-type: none"> ■ Film tensile fixture ■ For tensile testing of paper, film and non-metallic materials 	<p>UTM-F014</p> <ul style="list-style-type: none"> ■ Film tensile fixture ■ For tensile testing of paper, film and non-metallic materials 	<p>UTM-F015</p> <ul style="list-style-type: none"> ■ Thin film opposite fixture ■ For tensile testing of paper, film and non-metallic materials 

To be continued

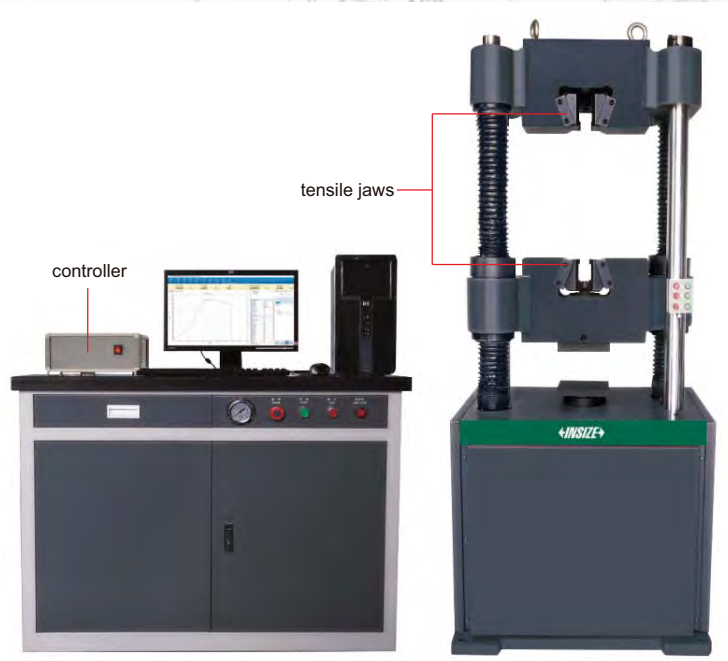
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<p>UTM-F016</p> <ul style="list-style-type: none"> Thin plate opposite fixture For tensile testing of thin plates of non-metallic materials 	<p>UTM-F017</p> <ul style="list-style-type: none"> Annule tensile fixture For tensile testing of non-metallic annular material specimens 	<p>UTM-F018</p> <ul style="list-style-type: none"> Adhesive tensile shearing fixture For tensile shear testing of different adhesive specimens 
<p>UTM-F019</p> <ul style="list-style-type: none"> Surface bonding strength fixture Tensile testing for adhesive properties 	<p>UTM-F020</p> <ul style="list-style-type: none"> Leverage tensile fixture For tensile testing of rubber, silicone and other elastomers 	<p>UTM-F021</p> <ul style="list-style-type: none"> Rubber tensile fixture Specialized for tensile testing of rubber material specimens 
<p>UTM-F022</p> <ul style="list-style-type: none"> 90° rubber peel fixture Peel test for adhesion of rubber materials 	<p>UTM-F023</p> <ul style="list-style-type: none"> PCB plate 90° peel fixture Peel-off test for adhesion of sticky materials on PCBs 	<p>UTM-F024</p> <ul style="list-style-type: none"> Plastic bending fixture Specialized for flexural testing of plastic specimens 
<p>UTM-F025</p> <ul style="list-style-type: none"> Three-point bending fixture For bending test of various material specimens 	<p>UTM-F026</p> <ul style="list-style-type: none"> Waving fixture For tensile testing of non-metallic specimens 	<p>UTM-F027</p> <ul style="list-style-type: none"> Butt fixture For tensile testing of different materials 
<p>UTM-F028</p> <ul style="list-style-type: none"> Shear fixture For shear testing of different materials 	<p>UTM-F029</p> <ul style="list-style-type: none"> Ceramic shearing fixture Specialized for shear testing of ceramic materials 	<p>UTM-F030</p> <ul style="list-style-type: none"> Compressive fixture For compression testing of different materials 
<p>UTM-F031</p> <ul style="list-style-type: none"> Puncture fixture For film puncture testing 		

HYDRAULIC UNIVERSAL TESTING MACHINES



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UTM-H300B

- For tensile, compression, bend, shear tests of metal and non-metal materials

SPECIFICATION

Code	UTM-H300B	UTM-H600B	UTM-H1000B	UTM-H2000B	UTM-H3000B	
Max. test force	300kN	600kN	1000kN	2000kN	3000kN	
Accuracy	±1%					
Test force measurement range	2%~100%FS					
Resolution of test force measurement	1/300000 of Max. test force (same resolution all the way)					
Deformation measurement device	extensometer					
Deformation measurement range	1%~100%FS					
Deformation measurement accuracy	±1%					
Deformation measurement resolution	1/300000					
Displacement accuracy	±1%					
Displacement resolution	0.01mm					
Displacement travel	200mm					
Max tensile space (including piston stroke)	600mm	600mm	680mm	600mm	900mm	
Max compression space (including piston stroke)	500mm	500mm	560mm	500mm	800mm	
Transmission mode	chain drive					
Safety protection device	software protection and mechanical limit protection					
Control function	special software, closed-loop of stress, strain and velocity					
Clamping range of round sample	Ø10~32mm	Ø13~40mm	Ø13~60mm	Ø20~70mm	Ø25~80mm	
Clamping range of flat sample	0~15mm	0~15mm*	0~20mm**	0~40mm	0~80mm	
Upper and lower pressure plate size	Ø188mm	Ø188mm	Ø208mm	Ø208mm	Ø208mm	
Bending branch roll width	140mm					
Total power	2.5kW	3.0kW	3.0kW	3.75kW	5.5kW	
Power supply	380V, 50Hz					
Dimension (mm)	host	800×620×1900	820×650×2000	940×780×2250	1100×760×3000	1250×930×3550
	oil source	1140×600×855				
Weight	2T	2.2T	3T	7.5T	12.6T	

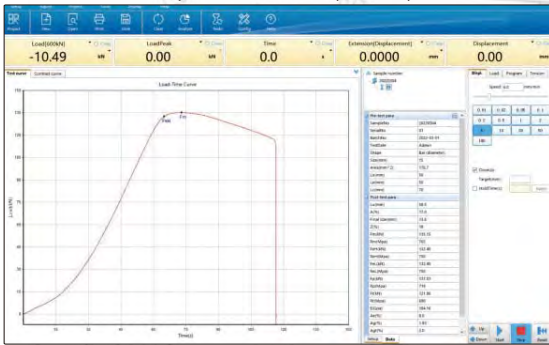
* Customizable 0~30mm

** Customizable 0~40mm

To be continued

Continued from previous page

computer and software (included)



STANDARD DELIVERY

Main unit	1 pc
Electro hydraulic servo oil source	1 pc
Electro hydraulic servo valve	1 pc
High pressure oil pump	1 pc
Oil pressure sensor	1 pc
Control box	1 pc
Extensometer	1 pc
Computer	1 pc
Measuring software	1 set
Printer	1 pc
Tensile fixture	1 set
Compression fixture	1 set



acrylic safety shield (optional)



steel wire safety shield (optional)

OPTIONAL ACCESSORY

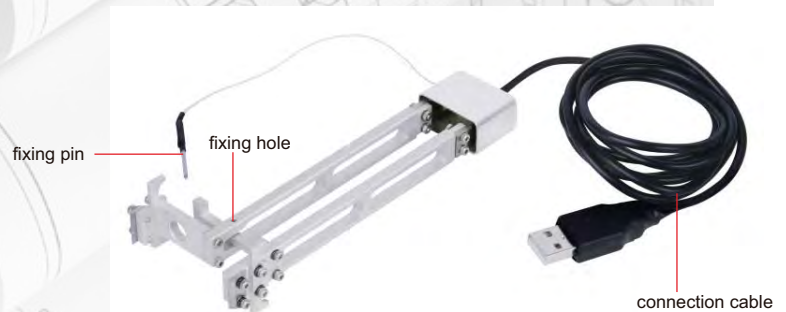
Acrylic safety shield	UTM-H-COVER1
Steel wire safety shield	UTM-H-COVER2

EXTENSOMETERS

▪ Used with universal testing machines

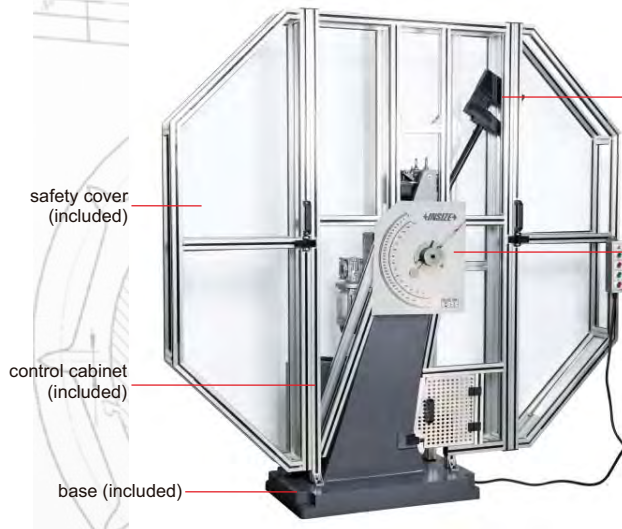
SPECIFICATION

Code	Gage length	Deformation
UTM-EX25-5	25mm	5mm
UTM-EX25-10	25mm	10mm
UTM-EX25-25	25mm	25mm
UTM-EX50-5	50mm	5mm
UTM-EX50-10	50mm	10mm
UTM-EX50-25	50mm	25mm
UTM-EX100-5	100mm	5mm
UTM-EX100-10	100mm	10mm
UTM-EX100-25	100mm	25mm
UTM-EX200-5	200mm	5mm
UTM-EX200-10	200mm	10mm
UTM-EX200-25	200mm	25mm
UTM-EX-B	large deformation, customized according to the workpieces	



UTM-EX50-10

SEMI-AUTOMATIC IMPACT TESTING MACHINES



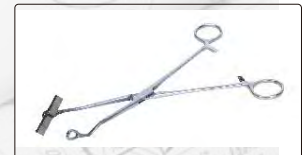
ITM-S150J



pendulum (included)



span aligner (included)



tongs (included)



dial



software (included)

- According to ISO148
- For testing the anti-impact performance of metal materials under dynamic load
- High-precision bearings, small bearing friction, the impact absorption rate of empty pendulum is less than 0.3%
- Alloy steel impact blade, hardness HRC60
- PLC controller with built-in energy loss correction program
- Supplied with safety cover
- Supplied with software for data storage, automatic processing, etc.
- Data can be stored in Excel format, output and printed

SPECIFICATION

Code	ITM-S150J	ITM-S300J	ITM-S450J	ITM-S600J	ITM-S750J
Impact energy	150J	300J	450J	600J	750J
Dial range	0~150J	0~300J	0~450J	0~600J	0~750J
Dial graduation	1J	2J	3J	4J	5J
Pendulum moment	M=80.3848N·m	M=160.7695N·m	M=241.1543N·m	M=321.5390N·m	M=401.9238N·m
Pendulum preparing angle	150°				
Distance between pendulum shaft center and specimen center	750mm				
Impact speed	5.24m/s				
Span of specimen seat	40mm				
End face radius of specimen seat	R (1.0~1.5)mm				
Radius of impact blade	R (2.0~2.5)mm				
Inclination angle of support surface of specimen seat	11°±1°				
Angle of impact blade	30°±1°				
Thickness of impact blade	16mm				
Range of measuring angle	0~360°				
Angle resolution	≤0.06°				
Specimen size	10×10×55mm				
Power supply	AC 380V, 50Hz				
Base size	800×500mm		960×650mm		
Power	400W		1.5kW		
Dimension of main body	2050×690×2015mm		2100×835×2200mm		
Weight	450kg		900kg		

To be continued

Continued from previous page

STANDARD DELIVERY

Main unit	1 pc	
Dial	1 pc	
Control cabinet	1 pc	
Pendulum	ITM-S150J	150J pendulum
	ITM-S300J	300J pendulum and 150J pendulum
	ITM-S450J	450J pendulum and 150J pendulum
	ITM-S600J	600J pendulum and 150J pendulum
	ITM-S750J	750J pendulum and 150J pendulum
Simply supported beam fixture (including jaws, anvil)	1 set	
Computer	1 set	
Printer	1 pc	
Software	1 set	
Span aligner	1 pc	
Tongs	1 pc	
Safety cover	1 set	

OPTIONAL ACCESSORY

Workbench	7911-15
150J pendulum	ITM-S-PE150J
300J pendulum	ITM-S-PE300J
450J pendulum	ITM-S-PE450J
600J pendulum	ITM-S-PE600J
750J pendulum	ITM-S-PE750J
ASTM standard impact blade	ITM-S-ASTM-IB
Sample recovery device	ITM-S-RD
Digital display screen	ITM-S-DDS



**IMPACT SPECIMEN NOTCH BROACHING MACHINE (DOUBLE BROACHES)
CODE ITM-U32**

- Conforms with ISO 148, ISO 83 and EN 10045 standards
- One-time broaching forming, hydraulic transmission, special internal lubrication device to avoid damage of the broaches
- Dual-station broach, two specimen notches can be processed at the same time



raised broaches



lowered broaches

SPECIFICATION

Broach stroke	350mm (V2, U2, U3 broaches) 400mm (U5 broach)
Specimen size (T×W×L)	10×10×55mm
Broaching speed	0.35-2.5m/min
Driving method	hydraulic
Power supply	380V, 50Hz, 0.4kW
Dimension	660×400×1200mm
Weight	200kg



ITM-U32

STANDARD DELIVERY

Main unit	1 pc
Broach	U2 and V2

OPTIONAL ACCESSORY

U3 broach	ITM-U32-U3
U5 broach	ITM-U32-U5

UNIVERSAL PUSH AND PULL TESTING MACHINES



ISF-U202

- Set force, set positioning and set deformation testing modes
- Protective functions of built-in mechanical limit, overload auto stop and emergency stop
- Dual-speed preset, high-speed approximation and low-speed acquisition
- Automatic back to start location after the test
- Can save 10 sets of test value and 3 sets of curve, test reports can be printed by built-in printer
- Display peak value, real-time value and process curve simultaneously
- Auto calibration of displacement zero
- Unit: lbf, N, kgf, ozf
- Auto power off (the time can be set)

SPECIFICATION

Code	ISF-U055	ISF-U101	ISF-U202
Max. test force	500N	1000N	2000N
Resolution of force	0.05N	0.1N	0.2N
Test force measurement range	1%~100%FS		
Test force measurement accuracy	±1%FS (test force<10%FS) ±0.5%FS (test force≥10%FS)		
Range of adjustable speed	0.5~500mm/min		
Speed accuracy	±2%FS (speed<10%FS) ±1%FS (speed≥10%FS)		
Displacement resolution	0.001mm		
Displacement travel	300mm	450mm	450mm
Displacement accuracy	±0.4mm		
Unit	lbf, N, kgf, ozf		
Pressure plate size	Ø80mm		
Power supply	AC 220V, 50/60Hz		
Dimension	420×250×700mm	365×305×915mm	365×305×915mm
Weight	29.4kg	40kg	40kg

STANDARD DELIVERY

Main unit	1 pc
Adapter	2 pcs

DIGITAL SPRING TESTERS



DATA
OUTPUT

VIDEO

- Peak hold and automatic release function
- Set upper and lower limits, red and green indicator and buzzer alarm
- Automatic conversion of three units: N, kgf, lbf
- Built in printer
- Automatic power off



ISF-S10



ISF-S500



ISF-S1000

SPECIFICATION

Code	ISF-S10	ISF-S20	ISF-S30	ISF-S50	ISF-S100	ISF-S200
Maximum load	10N	20N	30N	50N	100N	200N
Resolution	0.001N	0.002N	0.01N	0.01N	0.02N	0.05N
Range of digital scale	65mm	65mm	65mm	95mm	95mm	95mm
Resolution of digital scale	0.01mm	0.01mm	0.01mm	0.01mm	0.01mm	0.01mm
Disk diameter	Ø30mm	Ø30mm	Ø30mm	Ø49mm	Ø49mm	Ø49mm
Maximum free length of spring	65mm	65mm	65mm	95mm	95mm	95mm
Measuring range of force	5%~100% (maximum load)					
Accuracy of force	±1% (maximum load)					
Data output	RS232					
Power supply	220V, 50/60Hz					
Dimension	300×235×600mm	300×235×600mm	300×235×600mm	300×235×620mm	300×235×620mm	300×235×620mm
Weight	13.2kg	13.2kg	13.2kg	17.3kg	19.1kg	19.1kg

Code	ISF-S300	ISF-S500	ISF-S1000	ISF-S2000	ISF-S5000
Maximum load	300N	500N	1000N	2000N	5000N
Resolution	0.1N	0.1N	0.2N	0.5N	1N
Range of digital scale	95mm	95mm	150mm	150mm	150mm
Resolution of digital scale	0.01mm	0.01mm	0.01mm	0.01mm	0.01mm
Disk diameter	Ø49mm	Ø49mm	Ø108mm	Ø108mm	Ø108mm
Maximum free length of spring	95mm	95mm	200mm	200mm	200mm
Measuring range of force	5%~100% (maximum load)				
Accuracy of force	±1% (maximum load)				
Data output	RS232				
Power supply	220V, 50/60Hz				
Dimension	300×235×620mm	300×235×620mm	490×300×920mm	490×300×920mm	490×300×920mm
Weight	19.1kg	20.8kg	47.5kg	47.5kg	47.5kg

STANDARD DELIVERY

Main unit	1 pc
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DIGITAL FORCE GAGES (HIGH ACCURACY)

DATA
OUTPUT

INSPECTION
CERTIFICATE



software flash disk
(included)

printer (optional)



ISF-DF100A
type A



ISF-DF5KA
type B



ISF-DF10KC
type C

- Type A and B can be used for tension and pressure tests, type C is only used for pressure tests
- Peak (max.) and tracking mode
- Units for type A: mN, N, gf, kgf, ozf, lbf, type B: N, kgf, lbf, kN, MPa, type C: N, kgf, lbf, kN, tf, MPa
- Tolerance testing
- 1000 memories
- Automatic power off
- Metal case, touch buttons
- LCD display with backlight
- The display flips over when the bottom faces up
- Overload alarm
- Keyboard signal, can be transmitted to Excel



VIDEO

accessory for type B (included)



flat push tip

adapter

pull clamps

accessory for type A (included)



flat
push tip

V-type
push tip

knife-edge
push tip

point
push tip

pull
clamp

extension
rod

SPECIFICATION

Code	ISF-DF5A	ISF-DF10A	ISF-DF20A	ISF-DF50A	ISF-DF100A	ISF-DF200A	ISF-DF500A	ISF-DF1KA
Type	A (internal sensor)							
Load capacity (N)	5	10	20	50	100	200	500	1000
Resolution (N)	0.0005	0.001	0.005	0.005	0.01	0.05	0.05	0.1
Accuracy	±0.2% (of load capacity)							
Power supply	built-in rechargeable battery							

Code	ISF-DF1KB	ISF-DF2KA	ISF-DF5KA	ISF-DF10KA	ISF-DF20KA
Type	B (external sensor)				
Load capacity (N)	1000	2000	5000	10000	20000
Resolution (N)	0.1	0.5	0.5	1	5
Accuracy	±0.2% (of load capacity)				
Power supply	built-in rechargeable battery				

Code	ISF-DF10KC	ISF-DF20KC	ISF-DF50KC	ISF-DF100KC	ISF-DF200KC
Type	C (external sensor)				
Load capacity (kN)	10	20	50	100	200
Resolution (kN)	0.001	0.005	0.005	0.01	0.05
Accuracy	±0.2% (of load capacity)				
Power supply	built-in rechargeable battery				

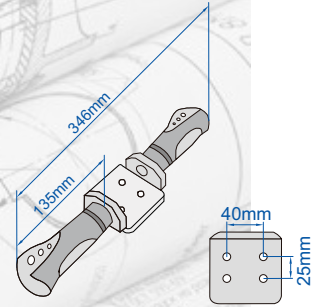
STANDARD DELIVERY

Main unit	1 pc	
AC/DC adapter	1 pc	
Software and USB cable	1 pc	
Push/pull accessory	type A	6 pcs (flat push tip, V-type push tip, knife-edge push tip, point push tip, pull clamp, extension rod)
	type B	4 pcs (flat push tip, adapter, pull clamps)

OPTIONAL ACCESSORY

Printer	ISF-DF-PRINTER
Test stand	ISF-MT1K

**FORCE GAGE HANDLES
CODE ISF-DFAT1**



- For digital force gages (code **ISF-DF**□□□)
- Push and pull test
- Maximum range 1000N

STANDARD DELIVERY

Handle	2 pcs
Base	1 pc

push test with single handle



pull test with two handles



SOFT PROBES FOR HUMAN BODY



ISF-DFAT2-C1



ISF-DFAT2-C2



ISF-DFAT2-C3



ISF-DFAT2-C4

- To measure muscle force
- For press test with digital force gages (code **ISF-DF**□□□) and force gage handles (code **ISF-DFAT1**)
- Maximum range 1000N

application



Code	Specification
ISF-DFAT2-C1	rectangle, 90×25mm, M6
ISF-DFAT2-C2	square, 25×25mm, M6
ISF-DFAT2-C3	arc-shaped, 90×25mm, R80mm, M6
ISF-DFAT2-C4	M6

DIGITAL FORCE GAGES

DATA
OUTPUT

INSPECTION
CERTIFICATE



software flash disk
(included)



ISF-1DF100

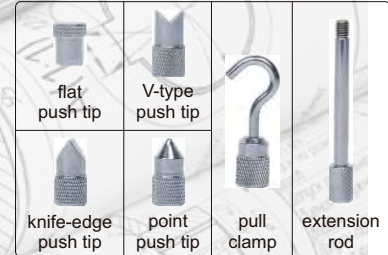


VIDEO

printer (optional)



accessory (included)



- Push and pull test
- Units: N, gf, kgf, ozf, lbf
- 500 memories
- Automatic power off
- Metal case
- LCD display with backlight
- The display flips over when the bottom faces up
- Overload alarm

SPECIFICATION

Code	ISF-1DF10	ISF-1DF50	ISF-1DF100	ISF-1DF500	ISF-1DF1000
Load capacity (N)	10	50	100	500	1000
Resolution (N)	0.01	0.01	0.1	0.1	1
Accuracy	±0.3% (of load capacity)				
Measuring mode	tracking, peak (max.), tolerance testing				
Power supply	built-in rechargeable battery				
Dimension	150×73×33mm				
Weight	450g				

STANDARD DELIVERY

Main unit	1 pc
AC/DC adapter	1 pc
Software and USB cable	1 pc
Push/pull accessory	6 pcs (flat push tip, V-type push tip, knife-edge push tip, point push tip, pull clamp, extension rod)

OPTIONAL ACCESSORY

Printer	ISF-DF-PRINTER
Test stand	ISF-MT1K

TEST STAND FOR DIGITAL FORCE GAGES CODE ISF-MT1K

- For digital force gages (code ISF-1DF□□□ and ISF-DF□□□)
- To be used in vertical and horizontal orientation

SPECIFICATION

Load capacity	1000N
Travel	200mm (3mm vertical movement per revolution of handwheel)
Dimension	196×250×446mm
Weight	13kg

OPTIONAL ACCESSORY

Digital scale (range: 200mm, resolution: 0.01mm/0.0005")	ISF-MT1K-SCALE
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force gage
is optional



VIDEO



digital scale (optional)



horizontal orientation test

FORCE GAGES



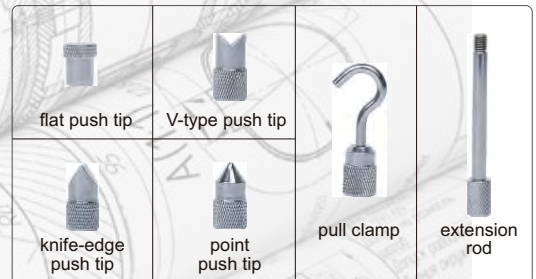
VIDEO



ISF-F500

- Push and pull test
- Peak (max.) or tracking mode

accessory (included)



SPECIFICATION

Code		ISF-F10	ISF-F20	ISF-F30	ISF-F50	ISF-F100	ISF-F200	ISF-F300	ISF-F500
Capacity	N	10	20	30	50	100	200	300	500
	kgf	1	2	3	5	10	20	30	50
Graduation	N	0.05	0.1	0.2	0.25	0.5	1	2	2.5
Accuracy		±1% (of load capacity)							

STANDARD DELIVERY

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

OPTIONAL ACCESSORY

Test stand	ISF-MT500
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VIDEO

TEST STAND FOR FORCE GAGE
CODE ISF-MT500

- For force gages (code ISF-F□□□)
- To be used in vertical and horizontal orientation

force gage is optional



horizontal orientation test

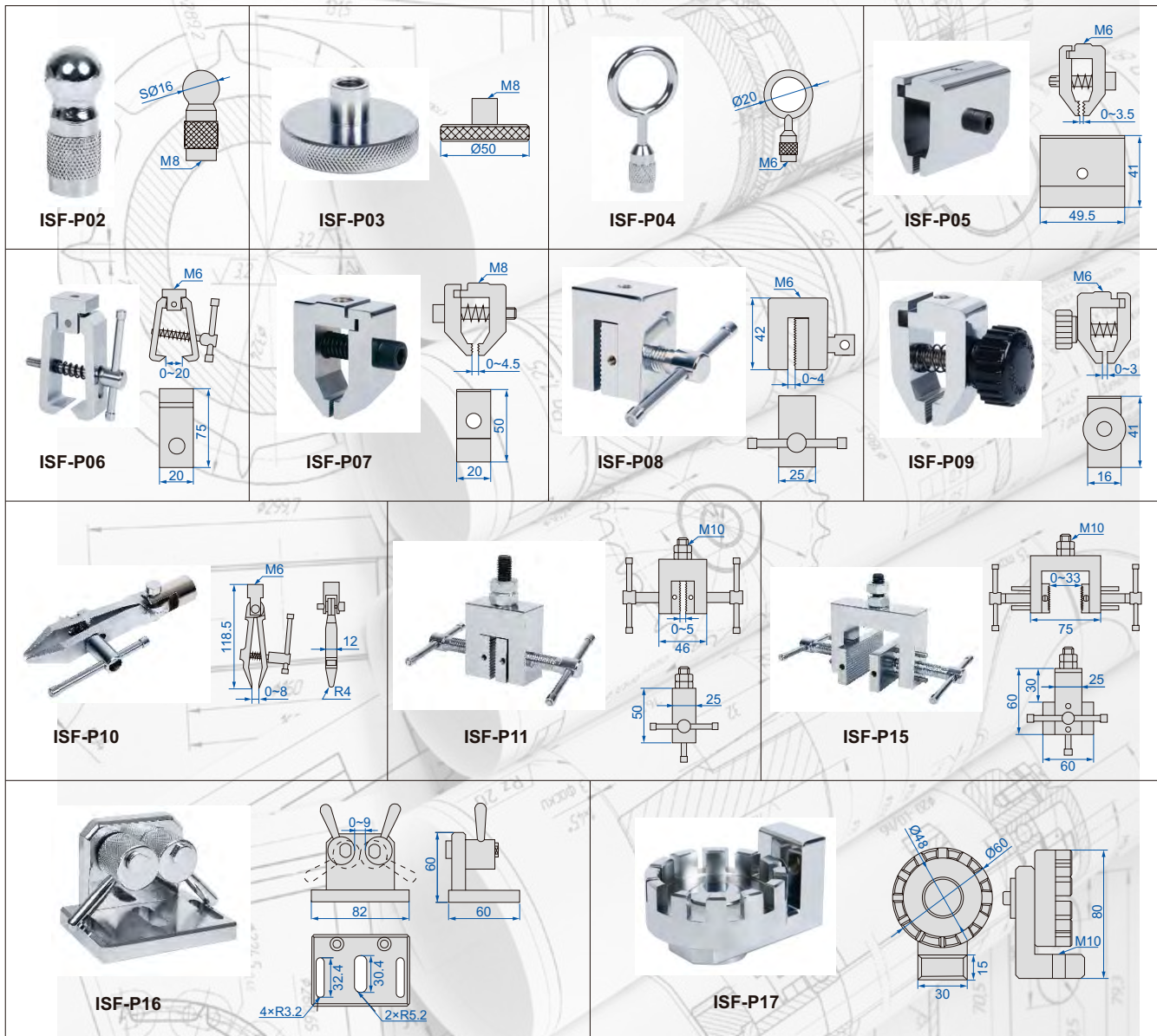
SPECIFICATION

Load capacity	500N
Travel	150mm (3mm vertical movement per revolution of handwheel)
Dimension	160×240×460mm
Weight	12kg

PUSH TIPS AND PULL CLAMPS FOR FORCE GAGES

■ For force gages (code ISF-DF□□□, ISF-1DF□□□ and ISF-F□□□)

Unit: mm



Push tips

Code	Max. load	Diameter	Weight
ISF-P02	5000N	16mm	33g
ISF-P03	3000N	50mm	17g

Pull ring

Code	Max. load	Diameter	Weight
ISF-P04	500N	16mm	158g

Special pull clamps

Code	Max. load	Opening size	Application	Weight
ISF-P16	2400N	0~9mm	for wire pull test	803g
ISF-P17	5000N	1.8~8.4mm	for wire terminal pull test	620g

Pull clamps

Code	Max. load	Jaw opening	Jaw width	Weight
ISF-P05	1100N	0~3.5mm	49.5mm	241g
ISF-P06	1000N	0~20mm	20mm	217g
ISF-P07	500N	0~4.5mm	20mm	190g
ISF-P08	500N	0~4mm	25mm	274g
ISF-P09	140N	0~3mm	16mm	87g
ISF-P10	230N	0~8mm	4mm	173g
ISF-P11	1500N	0~5mm	25mm	484g
ISF-P15	2000N	0~33mm	60mm	742g



MOTORIZED VERTICAL TEST STAND CODE ISF-RV61

- For digital force gages (code **ISF-1DF** and **ISF-DF**)
- Push and pull test
- Automatic and manual test
- Programmable automatic operation (automatic cycle)
- Four operation modes: displacement cycle (D cycle), force cycle (F cycle), demo (teaching & playback) mode and positioning mode
- Alarm indications: stroke overrange alarm, force overrange alarm, motor block alarm

digital force gage
is optional



SPECIFICATION

Load capacity	650N (250lbf, 65kg)
Max. travel	220mm
Resolution of displacement	0.01mm
Accuracy of displacement	±0.3mm
Range of adjustable speed	30~720mm/min
Resolution of speed	1mm/min
Accuracy of speed	±2%
Data output	USB, RS232
Work temperature and relative humidity	10~40°C, 10%~80%RH
Power supply	100~230V
Dimension	340×180×630mm
Weight	15.5kg

STANDARD DELIVERY

Test stand	1 pc
AC/DC adapter	1 pc
MD8 cable (for force gages)	1 pc
Software and USB cable	1 pc



MOTORIZED HORIZONTAL TEST STAND CODE ISF-RH62

- For digital force gages (code **ISF-1DF** and **ISF-DF**)
- Push and pull test
- Automatic and manual test
- Programmable automatic operation (automatic cycle)
- Four operation modes: displacement cycle (D cycle), force cycle (F cycle), demo (teaching & playback) mode and positioning mode
- Alarm indications: stroke overrange alarm, force overrange alarm, motor block alarm

digital force gage
is optional



SPECIFICATION

Load capacity	650N (250lbf, 65kg)
Max. travel	220mm
Resolution of displacement	0.01mm
Accuracy of displacement	±0.3mm
Range of adjustable speed	30~720mm/min
Resolution of speed	1mm/min
Accuracy of speed	±2%
Data output	USB, RS232
Work temperature and relative humidity	10~40°C, 10%~80%RH
Power supply	100~230V
Dimension	671×120×278mm
Weight	13kg

STANDARD DELIVERY

Test stand	1 pc
AC/DC adapter	1 pc
MD8 cable (for force gages)	1 pc
Software and USB cable	1 pc

MANUAL VERTICAL TEST STANDS FOR FORCE GAGES

ATTENTION:
ONLY FOR PRESS TEST

- For press test with force gages



VIDEO

force gage
is optional



ISF-V10A

SPECIFICATION

Code	ISF-V10A	ISF-V10D
Apply to	dial force gages (code ISF-F□□□)	digital force gages (code ISF-1DF□□□ and ISF-DF□□□)
Load capacity	500N	
Maximum workpiece height	280mm	
Travel	70mm	
Dimension	152×235×425mm	
Weight	10.7kg	

MANUAL HORIZONTAL TEST STANDS FOR FORCE GAGES

ATTENTION:
ONLY FOR PULL TEST

- For pull test with force gages



VIDEO

force gage
is optional



ISF-H20A

SPECIFICATION

Code	ISF-H20A	ISF-H20D
Apply to	dial force gages (code ISF-F□□□)	digital force gages (code ISF-1DF□□□ and ISF-DF□□□)
Load capacity	500N	
Travel	60mm	
Dimension	450×185×170mm	
Weight	9kg	

MANUAL HORIZONTAL TEST STAND FOR FORCE GAGES CODE ISF-MH2

- For force gages (code ISF-F□□□, ISF-DF□□□ and ISF-1DF□□□)
- Push and pull test



VIDEO

force gage
is optional



SPECIFICATION

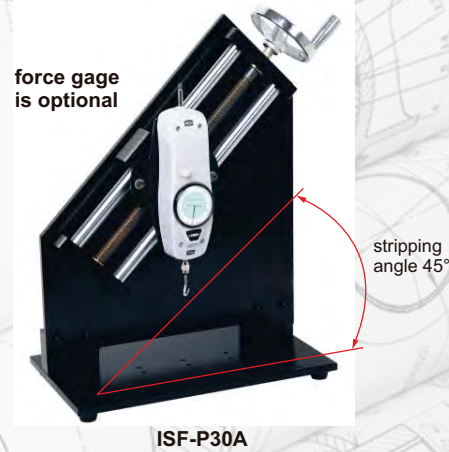
Load capacity	1000N
Travel	250mm (1.5mm horizontal movement per revolution of handwheel)
Dimension	542×189×278mm
Weight	21.5kg

MANUAL STRIPPING FORCE TEST STANDS



VIDEO

- For stripping force test with force gages



ISF-P30A

SPECIFICATION

Code	ISF-P30A	ISF-P30D
Apply to	dial force gages (code ISF-F□□□)	digital force gages (code ISF-1DF□□□ and ISF-DF□□□)
Load capacity	500N	
Horizontal travel	170mm	
Dimension	420×215×480mm	
Weight	22kg	



VIDEO

- Clockwise and counter-clockwise use
- For electronic and precision mechanical industry, such as test the contact pressure of relay, adjust the tension or compression of spring



ISF-TG3

DIAL TENSION GAGES

SPECIFICATION (Unit: N)

Code	ISF-TGD1	ISF-TGD3	ISF-TGD5	ISF-TG1	ISF-TG1D5	ISF-TG3	ISF-TG5
Range (N)	0.01~0.1	0.03~0.3	0.05~0.5	0.1~1	0.15~1.5	0.3~3	0.5~5
Graduation (N)	0.002	0.005	0.01	0.02	0.025	0.05	0.1
Accuracy	±2% (full scale)						
Dimension (L×W×H)	90×47×19mm						
Weight	60g						

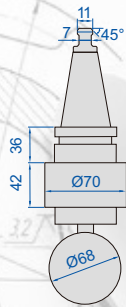
SPECIFICATION (Unit: gf)

Code	ISF-TG10	ISF-TG30	ISF-TG50	ISF-TG100	ISF-TG150	ISF-TG300	ISF-TG500
Range (gf)	1~10	3~30	5~50	10~100	15~150	30~300	50~500
Graduation (gf)	0.2	0.5	1	2	2.5	5	10
Accuracy	±2% (full scale)						
Dimension (L×W×H)	90×47×19mm						
Weight	60g						

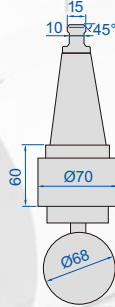
SPINDLE TENSION METERS



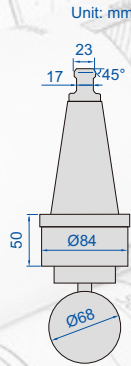
RFS-BT40



RFS-BT30



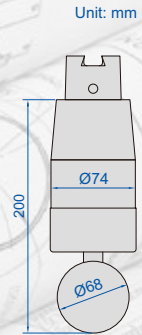
RFS-BT40



RFS-BT50



RFS-HSK63A



RFS-HSK63A

RFS-BT $\square\square$ SPECIFICATION

- Hydraulic mechanical structure, high stability
- To detect the tension of locking device

Code	Dial range*	Accuracy	Applicable tension of spindle	Rivet angle**
RFS-BT30	0~60kg/cm ²	±0.96kg/cm ²	200~500kgf	45°
RFS-BT40	0~150kg/cm ²	±2.4kg/cm ²	500~1100kgf	
RFS-BT50	0~250kg/cm ²	±4kg/cm ²	1500~2200kgf	

RFS-HSK $\square\square\square$ SPECIFICATION

Code	Dial range*	Accuracy	Applicable tension of spindle
RFS-HSK20A	0~120kg/cm ²	±1.92kg/cm ²	50~100kgf
RFS-HSK20C			
RFS-HSK20E			
RFS-HSK25A	0~150kg/cm ²	±2.4kg/cm ²	250~500kgf
RFS-HSK25C			
RFS-HSK25E			
RFS-HSK32A	0~500kg/cm ²	±8kg/cm ²	350~600kgf
RFS-HSK32B			
RFS-HSK32C			
RFS-HSK32D			
RFS-HSK32E			
RFS-HSK32F			
RFS-HSK40A	0~680kg/cm ²	±10.9kg/cm ²	750~1500kgf
RFS-HSK40B			
RFS-HSK40C			
RFS-HSK40D			
RFS-HSK40E			
RFS-HSK40F			
RFS-HSK50A	0~1100kg/cm ²	±17.6kg/cm ²	1000~2000kgf
RFS-HSK50B			
RFS-HSK50C			
RFS-HSK50D			
RFS-HSK50E			
RFS-HSK50F			

Code	Dial range*	Accuracy	Applicable tension of spindle
RFS-HSK63A	0~1800kg/cm ²	±28.8kg/cm ²	1500~3000kgf
RFS-HSK63B			
RFS-HSK63C			
RFS-HSK63D			
RFS-HSK63E			
RFS-HSK63F			
RFS-HSK80A	0~2800kg/cm ²	±44.8kg/cm ²	2000~4000kgf
RFS-HSK80B			
RFS-HSK80C			
RFS-HSK80D			
RFS-HSK80E			
RFS-HSK80F			
RFS-HSK100A	0~7000kg/cm ²	±112kg/cm ²	6000~9000kgf
RFS-HSK100B			
RFS-HSK100C			
RFS-HSK100D			
RFS-HSK100E			
RFS-HSK100F			
RFS-HSK160A	0~11500kg/cm ²	±184kg/cm ²	10000~16000kgf
RFS-HSK160B			
RFS-HSK160C			
RFS-HSK160D			
RFS-HSK160E			
RFS-HSK160F			

* The actual tension of spindle (kgf) is 10X of dial reading

** Can be customized for 60° and 90°



Digital Torque Testers
Page 880



Bottle Cap Torque Testers
Page 880



Digital Torque Testers
Page 881-882



Torque Wrench Test Stands
Page 883



Torque Screwdrivers
Page 883-885



Intelligent Electric Screwdrivers
Page 885-886



Torque Wrenches
Page 887-899



Torque Adapters
Page 900



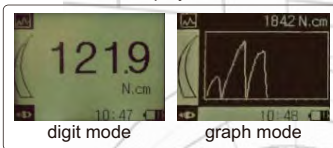
Torque Multipliers
Page 901-903

DIGITAL TORQUE TESTERS

DATA
OUTPUT



two display modes



software flash disk
(included)

- External sensor
- Metal case, touch buttons
- Clockwise and counter-clockwise operation
- Test mode: track, peak, first peak, preset tolerance
- Unit: N.m, N.cm, kgf.cm, lbf.in, lbf.ft
- Set tolerance with judgement
- 1000 memories
- LCD display with backlight, can automatically turn 180°
- Overload alarm
- Automatic power off



IST-DTT5

external
sensor

SPECIFICATION

Code	IST-DTT1	IST-DTT5	IST-DTT10
Load capacity	0.05~1N.m	0.25~5N.m	0.5~10N.m
Resolution	0.0001N.m	0.0005N.m	0.001N.m
Max. clamping diameter	Ø10mm	Ø10mm	Ø13mm
Sampling frequency	2000 times per second		
Accuracy	±0.3% (of load capacity)		
Output	USB, RS232, alarm signal		
Power supply	built-in rechargeable battery		
Dimension	145x73x34mm		
Weight	1.4kg		

STANDARD DELIVERY

Main unit	1 pc
External sensor	1 pc
AC/DC adapter	1 pc
Software and USB cable	1 pc

OPTIONAL ACCESSORY

Printer	ISF-DF-PRINTER
RS232 cable	IST-DTT-CABLE



printer (optional)

DIGITAL BOTTLE CAP TORQUE TESTERS

DATA
OUTPUT



- Measure the opening and tightening torque of bottle caps
- Unit: N.m, N.cm, kgf.cm, lbf.in, lbf.ft
- 1500 memories
- Wireless connection to printer
- Automatic power off
- LCD display with backlight
- Overload alarm
- With calibration function



IST-DCT20

two display modes



software flash disk
(included)



printer (optional)

SPECIFICATION

Code	IST-DCT2	IST-DCT5	IST-DCT10	IST-DCT20
Load capacity	2N.m	5N.m	10N.m	20N.m
Resolution	0.0002N.m	0.0005N.m	0.001N.m	0.002N.m
Clamping range	Ø19.5~190mm			
Accuracy	±0.5% (of load capacity)			
Measuring mode	tracking, peak (max.), first peak, double peak, tolerance testing			
Output	wireless and USB			
Power supply	built-in rechargeable battery			
Dimension	200×197×142mm			
Weight	2.5kg			

STANDARD DELIVERY

Main unit	1 pc
AC/DC adapter	1 pc
Software and USB cable	1 pc

OPTIONAL ACCESSORY

Printer	ISH-DS-PRINTER
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ATTENTION: NOT SUITABLE FOR ELECTRIC WRENCHES, IMPACT WRENCHES OR PNEUMATIC WRENCHES

DIGITAL TORQUE TESTERS

35



**IST-04TT350
type A**



**IST-04TT815
type B**

- Test torque wrenches, torque screwdrivers and other torque tools
- Clockwise operation
- Peak, track and first peak working modes
- Tolerance testing
- LED indicator for target torque alarm:
 - Green LED light on when the value is within tolerance;
 - Red LED light on when the value is above the high tolerance
- Power off automatically in 2 minutes without any operations



adaptor
(type A included)

SPECIFICATION

Code	IST-04TT5	IST-04TT28	IST-04TT68	IST-04TT350	IST-04TT815	IST-04TT1000	IST-04TT2000
Type	A				B		
Range	0.5~5N.m	2.8~28N.m	6.8~68N.m	35~350N.m	81.5~815N.m	100~1000N.m	200~2000N.m
Accuracy	±1% (clockwise)						
Resolution	0.001N.m	0.01N.m	0.01N.m	0.1N.m	0.1N.m	1N.m	1N.m
Unit	N.m, in.lb, ft.lb, kg.cm					N.m, ft.lb	
Square socket/hex driver	1/4"	3/8"	3/8"	1/2"	27mm	27mm	27mm
Adaptor	no	3/8" to 1/4"	3/8" to 1/4"	1/2" to 3/8" 3/8" to 1/4"	no		
Power supply	DC						
Weight	0.75kg	0.75kg	1.1kg	1.1kg	5.1kg	5.1kg	5.1kg

STANDARD DELIVERY

Main unit	1 pc
AC/DC adapter	1 pc
Adaptor	refer to details

DIGITAL TORQUE TESTERS

ATTENTION: NOT SUITABLE FOR ELECTRIC WRENCHES, IMPACT WRENCHES OR PNEUMATIC WRENCHES



35



IST-TT550

- With external sensor, to test torque wrenches, torque screwdrivers and other torque tools
- Clockwise and counter-clockwise operation
- Peak, track and first peak working modes
- Unit: N.m, in.lb, ft.lb, kg.cm
- Tolerance testing
- LED indicator for target torque alarm:
 - Yellow LED light on when the value is below the low tolerance;
 - green LED light on when the value is within tolerance;
 - red LED light on when the value is above the high tolerance
 - The buzzer alarms when the maximum torque value is captured in the first peak mode
- Automatic power off



extension cable (included)



adaptor (included)



with 3 mounting holes on the bottom

SPECIFICATION

Code	IST-TT05	IST-TT5	IST-TT30	IST-TT50	IST-TT220	IST-TT550	IST-TT1000	IST-TT2200
Range	0.1~0.5N.m	0.5~5N.m	3~30N.m	5~50N.m	22~220N.m	55~550N.m	100~1000N.m	220~2200N.m
Accuracy	±1% (clockwise and counter-clockwise)							
Resolution	0.0001N.m	0.0001N.m	0.001N.m	0.001N.m	0.01N.m	0.01N.m	0.1N.m	0.1N.m
Square socket (L)	1/4"	1/4"	3/8"	3/8"	1/2"	3/4"	1"	1"
Power supply	DC							
Adaptor	no	no	3/8" to 1/4"	3/8" to 1/4"	1/2" to 3/8" 3/8" to 1/4"	3/4" to 1/2" 1/2" to 3/8"	1" to 3/4" 3/4" to 1/2" 1/2" to 3/8"	1" to 3/4" 3/4" to 1/2"
Transducer dimension	63×63 ×65mm	63×63 ×65mm	89×89 ×75mm	89×89 ×75mm	109×109 ×83mm	140×140 ×107mm	160×160 ×126mm	160×160 ×126mm
Weight	0.75kg	0.75kg	1.1kg	1.1kg	1.4kg	2.9kg	5.0kg	5.1kg

STANDARD DELIVERY

Main unit	1 pc
Transducer with 1.5m cable	1 pc
Extension cable (1.2m)	1 pc
AC/DC adapter	1 pc
Adaptor	refer to details

TORQUE WRENCH TEST STANDS

35

application example



adaptor



IST-06TS350



VIDEO

- Rotate the wheel to apply force. Rotary speed is adjustable
- Easy operation due to the gear box
- Used with digital torque testers (IST-TT series)

SPECIFICATION

Code	IST-06TS350	IST-06TS1100	IST-06TS2000
Max. torque value	350N.m	1100N.m	2000N.m
Arm length	197~686mm	380~1350mm	420~1690mm
Dimension	860×290×590mm	1760×350×590mm	2090×350×590mm
Weight	32.5kg	76kg	80kg

Can be customized according to test requirements



digital torque tester (optional)

OPTIONAL ACCESSORY

Digital torque tester	IST-TT series
Adaptor	IST-06TS-BLOCK1 (necessary for IST-TT05, IST-TT5, IST-TT30, IST-TT50 and IST-TT220)
	IST-06TS-BLOCK2 (necessary for IST-TT550, IST-TT1000 and IST-TT2200)

INSPECTION CERTIFICATE



phillips screwdriver bits (included)



hex screwdriver bits (included)

- Clockwise and counter-clockwise operation
- Unit: cN.m, in.lb, kg.cm
- Peak and track working modes
- Target torque value can be set, with audible and visible alarm:
 - Green LED light on and buzzer sounds when target torque value is 90%~100% of target torque
 - Red LED light on and buzzer sounds when target torque value is reached
- Power off automatically in 5 minutes without any operations

SPECIFICATION

Code	IST-SD50	IST-SD200	IST-SD400
Range	10~50cN.m	40~200cN.m	80~400cN.m
Accuracy	clockwise	±3%	±2.5%
	counter-clockwise	±4%	±3.5%
Resolution	0.1cN.m	0.1cN.m	0.1cN.m
Size of hex socket (L)	1/4"	1/4"	1/4"
Power supply	1×AAA battery		
Length	193mm	203mm	203mm
Weight	190g	200g	200g

DIGITAL TORQUE SCREWDRIVERS



IST-SD200



VIDEO

STANDARD DELIVERY

Torque screwdriver	1 pc
Phillips screwdriver bits	1 pc
Hex screwdriver bits	1 pc

OPTIONAL ACCESSORY

Calibration cable	IST-SD-CABLE
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BLUETOOTH DIGITAL TORQUE SCREWDRIVERS (KEYBOARD SIGNAL)



BUILT-IN
BLUETOOTH

INSPECTION
CERTIFICATE

35



IST-3SD50



IST-3SD200
IST-3SD400

Torque screwdrivers:

- Clockwise and counter-clockwise operation
- Unit: N.m, in.lb, ft.lb, kg.cm
- Peak and track working modes
- Target torque value can be set, with audible and visible alarm:
 - LED lights up in sequence and the buzzer sounds when target torque value is 80%~99.5% of target torque
 - Both green and red LED light on and buzzer sounds when target torque value is reached
- Power off in 2 minutes automatically

Data transmission:

- Built-in Bluetooth module, which can be connected with computers (with Bluetooth function), mobile phones, tablets and other devices
- Keyboard signal, can be transmitted to Excel
- Transmission distance is 10 meters (no obstacles, no electromagnetic interference)
- Bluetooth connection and disconnection are respectively shown by indicator lights

SPECIFICATION

Code	IST-3SD50	IST-3SD200	IST-3SD400
Range	0.1~0.5N.m	0.4~2N.m	0.8~4N.m
Accuracy	clockwise	±3%	±2.5%
	counter-clockwise	±4%	±3.5%
Resolution	0.001N.m	0.001N.m	0.001N.m
Size of hex socket (L)	1/4"	1/4"	1/4"
Power supply	2×AAA batteries		
Length	193mm	193mm	193mm
Weight	304g	304g	383g



hex screwdriver bits (included)



phillips screwdriver bits (included)

STANDARD DELIVERY

Torque screwdriver	1 pc
Phillips screwdriver bits	1 pc
Hex screwdriver bits	1 pc
Wrench (only for IST-3SD200, IST-3SD400)	1 pc

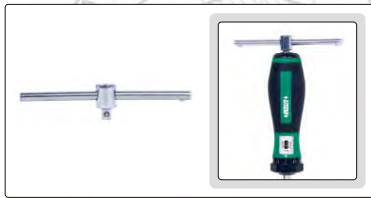
OPTIONAL ACCESSORY

Calibration cable	IST-SD-CABLE
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ATTENTION: CLOCKWISE OPERATION ONLY

TORQUE SCREWDRIVERS

1/4" square socket, for T-bar wrench (for IST-MG250, IST-MG360, IST-MG600)



T-bar wrench (for IST-MG250, IST-MG360, IST-MG600)



hex socket

lock ring for torque setting



1/4"



IST-MG100

SPECIFICATION

Code	IST-MG100	IST-MG250	IST-MG360	IST-MG600
Range (clockwise)	20~100cN.m	50~250cN.m	60~360cN.m	1.0~6.0N.m
Graduation	2cN.m	5cN.m	5cN.m	0.1N.m
Head	1/4" hex socket			
Accuracy	±6%			
Length	172mm			
Weight	0.26kg			

STANDARD DELIVERY

Torque screwdriver	1 pc
T-bar wrench (for IST-MG250, IST-MG360, IST-MG600)	1 pc



VIDEO

INTELLIGENT ELECTRIC SCREWDRIVERS

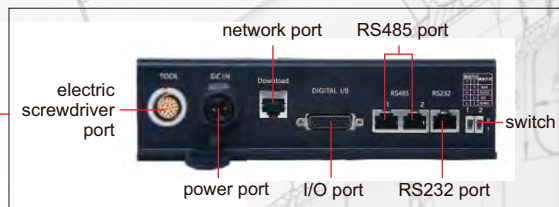


control box

connection cable

electric screwdriver

bits



network port

RS485 port

electric screwdriver port

power port

I/O port

RS232 port

switch

- Unit: kgf.cm, N.m, mN.m, 0.01kgf.cm, lbf.in
- Up to 8 preset values can form a task link
- Clockwise and counter-clockwise operation
- Non-slip grip handle
- Built-in overload protection function

HES-H022

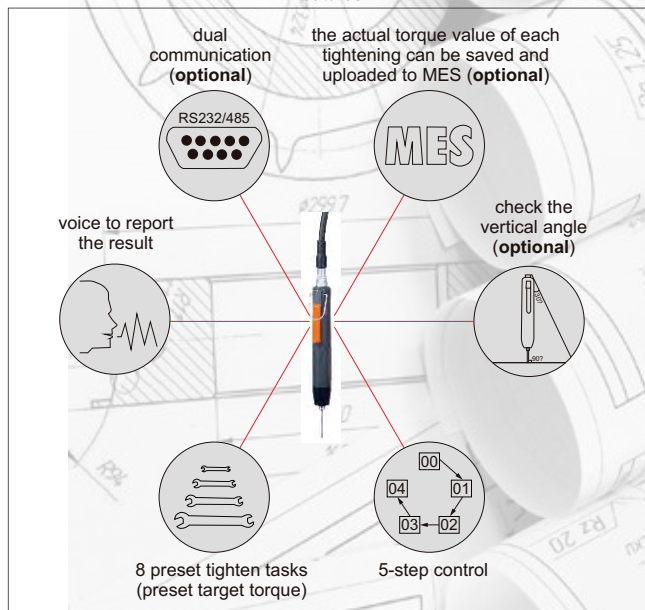
To be continued

Continued from previous page

SPECIFICATION

Code		HES-H022	HES-H055	HES-H107
Range		0.2~1.5kgf.cm	0.5~5kgf.cm	1~7kgf.cm
		0.02~0.15N.m	0.05~0.5N.m	0.1~0.7N.m
Accuracy		±5%		
Speed		30~2000rpm		30~1000rpm
Bits model		tail deficient type		
Dimension	electric screwdriver	30×42×204mm		
	control box	147×60×201mm		
Weight	electric screwdriver	250g		
	control box	1280g		
Power		AC 220V		

features



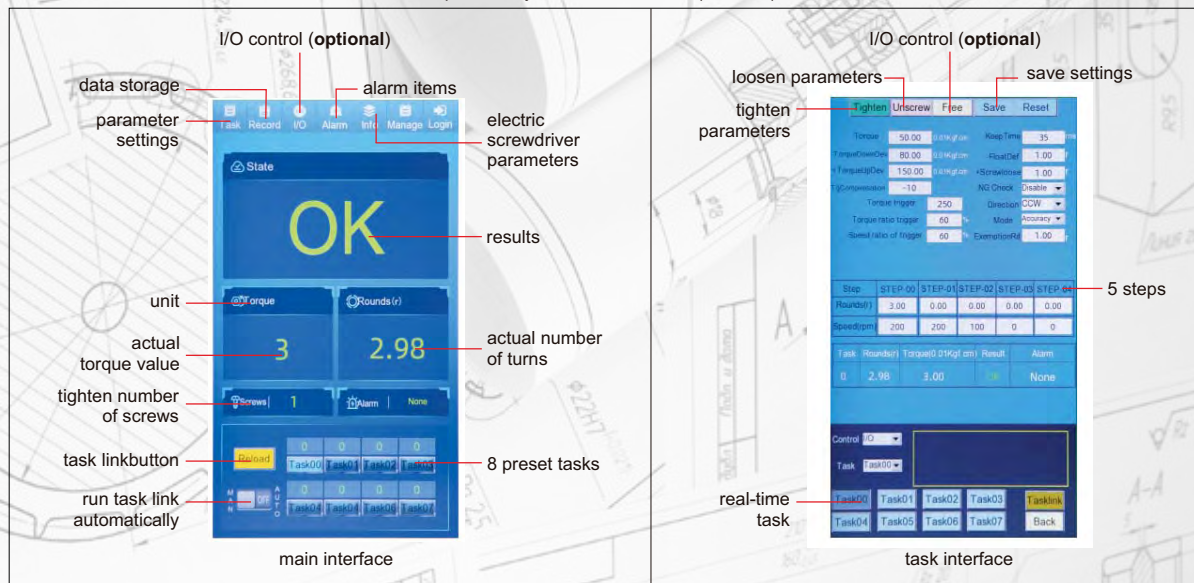
STANDARD DELIVERY

Electric screwdriver (with bits and connection cable)	1 pc
Control box	1 pc
AC adapter	1 pc
Software and USB disk	1 pc
RS232 connection cable	1 pc

OPTIONAL ACCESSORY

RS232 connection cable	HES-H-CABLE-232
RS485 connection cable	HES-H-CABLE-485
Bits	HES-H-BITS
I/O control function	HES-H-SOFT-T
Network transmission function	HES-H-SOFT-T
Upload to MES	HES-H-SOFT-M
Vertical angle detection function	HES-H-SOFT-C
QR code scanner	HES-H-S
Mechanical arm	HES-H-X

operation system on control box (included)

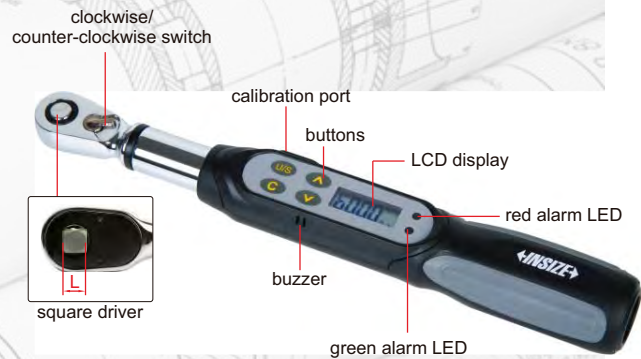




**INSPECTION
CERTIFICATE**

SMALL RANGE DIGITAL TORQUE WRENCH

- Clockwise and counter-clockwise operation
- Unit: N.m, in.lb, ft.lb, kg.cm
- Peak and track working modes
- Target torque value can be set, with audible and visible alarm:
 - Green LED light on and buzzer sounds when target torque value is 90%~100% of target torque
 - Red LED light on and buzzer sounds when target torque value is reached
- Power off automatically in 5 minutes without any operations
- Non-slip grip handle
- With overload record (once the torque reaches 110% of the maximum range)



IST-WP6

SPECIFICATION

Code	IST-WP6	
Range	1.2~6N.m	
Accuracy	clockwise	±3%
	counter-clockwise	±4%
Resolution	0.001N.m	
Square driver (L)	1/4"	
Power supply	1×AAA battery	
Length	260mm	
Weight	430g	

OPTIONAL ACCESSORY

Calibration cable	IST-SD-CABLE
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**INSPECTION
CERTIFICATE**

SHORT HANDLE DIGITAL TORQUE WRENCHES

- Clockwise and counter-clockwise operation
- Unit: N.m, in.lb, ft.lb, kg.cm
- Peak and track working modes
- Target torque value can be set, with audible and visible alarm:
 - Green LED light on and buzzer sounds when torque value is 90%~100% of target torque
 - Both green and red LED light on and buzzer sounds when target torque value is reached
- Power off in 5 minutes automatically
- Non-slip grip handle
- With damp record
- With overload record (once the torque reaches 110% of the maximum range)



IST-WS60

SPECIFICATION

Code	IST-WS12	IST-WS20	IST-WS30	IST-WS30A	IST-WS60	IST-WS85
Range	2.4~12N.m	4~20N.m	6~30N.m	6~30N.m	12~60N.m	17~85N.m
Accuracy	clockwise	±3%				
	counter-clockwise	±4%				
Resolution	0.01N.m	0.01N.m	0.01N.m	0.01N.m	0.01N.m	0.1N.m
Square driver (L)	1/4"	1/4"	1/4"	3/8"	3/8"	3/8"
Power supply	2×AAA batteries					
Length	215mm	215mm	215mm	215mm	225mm	271mm
Weight	750g	750g	750g	830g	917g	1000g

OPTIONAL ACCESSORY

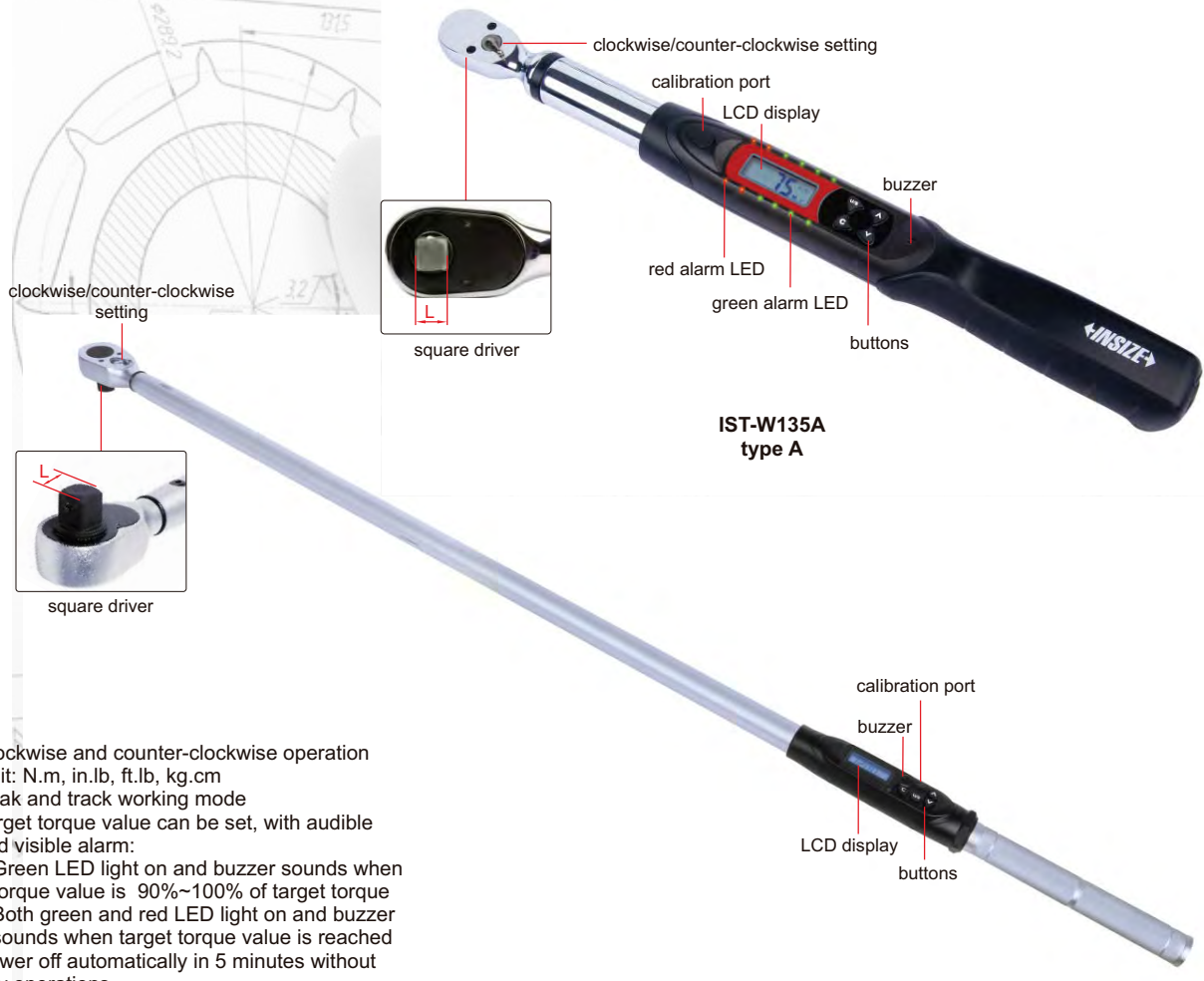
Calibration cable	IST-SD-CABLE
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DIGITAL TORQUE WRENCHES



OPTIONAL ACCURACY:
CLOCKWISE: ±1%
COUNTER-CLOCKWISE: ±2%
ONLY FOR RANGE 6~850N.m

35



- Clockwise and counter-clockwise operation
- Unit: N.m, in.lb, ft.lb, kg.cm
- Peak and track working mode
- Target torque value can be set, with audible and visible alarm:
 - Green LED light on and buzzer sounds when torque value is 90%~100% of target torque
 - Both green and red LED light on and buzzer sounds when target torque value is reached
- Power off automatically in 5 minutes without any operations
- Non-slip grip handle
- With damp record
- With overload record (once the torque reaches 110% of the maximum range)

SPECIFICATION

Code	Type	Range	Accuracy	Resolution	Square driver (L)	Power supply	Length	Weight
IST-W30A	A	6~30N.m	clockwise: ±2% counter-clock wise: ±3%	0.01N.m	1/4"	2×AA batteries, for 110 hours working	390mm	830g
IST-W135A		27~135N.m		0.1N.m	3/8"		415mm	950g
IST-W200A		40~200N.m		0.1N.m	1/2"		530mm	1.4kg
IST-W340A		68~340N.m		0.1N.m	1/2"		650mm	1.6kg
IST-W500A*	B	100~500N.m	clockwise: ±2.5% counter-clock wise: ±3.5%	0.1N.m	3/4"		1285mm	7kg
IST-W850A		170~850N.m		0.1N.m	3/4"		1295mm	6kg
IST-W1200A		240~1200N.m		1N.m	1"		1920mm	13kg
IST-W1500A		300~1500N.m		1N.m	1"		1920mm	13kg
IST-W2000A		400~2000N.m		1N.m	1"		1920mm	14kg

OPTIONAL ACCESSORY

Calibration cable	IST-W-CABLE
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* The accuracy of this code is not optional

OPTIONAL ACCURACY:
CLOCKWISE: $\pm 1\%$
COUNTER-CLOCKWISE: $\pm 2\%$

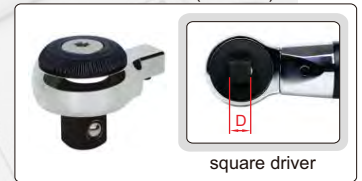
INTERCHANGEABLE HEAD DIGITAL TORQUE WRENCHES

**INSPECTION
CERTIFICATE**



IST-2W135A

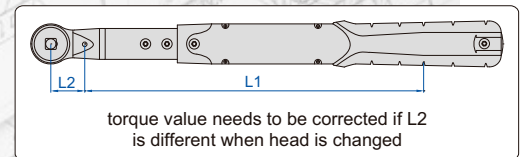
ratchet head (included)



square driver

- Clockwise and counter-clockwise operation
- Unit: N.m, in.lb, ft.lb, kg.cm, degree
- Peak and track working modes
- Target torque value can be set, with audible and visible alarm:
 - Green LED light on and buzzer sounds when torque value is 90%~100% of target torque
 - Both green and red LED light on and buzzer sounds when target torque value is reached
- Power off in 5 minutes automatically without any operations
- Non-slip grip handle
- With damp record
- With overload record (once the torque reaches 110% of the maximum range)

torque correction



SPECIFICATION

Code	IST-2W30A	IST-2W135A	IST-2W200A	IST-2W340A	IST-2W410A
Range	6~30N.m	27~135N.m	40~200N.m	68~340N.m	82~410N.m
Accuracy	clockwise	$\pm 2\%$			
	counter-clockwise	$\pm 3\%$			
Resolution	0.01N.m	0.1N.m	0.1N.m	0.1N.m	0.1N.m
Socket size (A×B)	12×9mm	12×9mm	18×14mm	18×14mm	18×14mm
Arm length (L1)	272.7mm	287.7mm	381.2mm	501.2mm	501.2mm
Power supply	2xAA batteries, for 110 hours working				
Weight	1400g	1570g	2170g	2320g	2320g

STANDARD DELIVERY

Torque wrench	1 pc
Ratchet head	1 pc

OPTIONAL ACCESSORY

Calibration cable	IST-W-CABLE
Interchangeable head	refer to details

To be continued

Continued from previous page

RATCHET HEAD (INCLUDED) SPECIFICATION

Code of torque wrench	IST-2W30A	IST-2W135A	IST-2W200A	IST-2W340A	IST-2W410A
Square driver (D)	1/4"	3/8"	1/2"	1/2"	3/4"
Length (L2)	29mm	29mm	40mm	40mm	40mm



RATCHET HEAD (optional)

Code	Square driver (D)	Applicable wrenches
IST-2W-R1	1/4"	IST-2W30A
IST-2W-R2	3/8"	IST-2W135A
IST-2W-R3	1/2"	IST-2W135A
IST-2W-R4	1/2"	IST-2W200A IST-2W340A IST-2W410A

ADJUSTABLE SPANNER HEAD (optional)

Code	Open size	Applicable wrenches
IST-2W-A1	5~27mm	IST-2W30A IST-2W135A
IST-2W-A2	5-30mm	IST-2W200A IST-2W410A
IST-2W-A3	10-41mm	IST-2W340A IST-2W410A



OPEN END HEAD (optional)

Code	Open size	Applicable wrenches
IST-2W-K7	7mm	IST-2W30A IST-2W135A
IST-2W-K8	8mm	
IST-2W-K9	9mm	
IST-2W-K10	10mm	
IST-2W-K11	11mm	
IST-2W-K12	12mm	
IST-2W-K13	13mm	
IST-2W-K14	14mm	
IST-2W-K15	15mm	
IST-2W-K16	16mm	
IST-2W-K17	17mm	
IST-2W-K18	18mm	
IST-2W-K19	19mm	
IST-2W-K13A	13mm	
IST-2W-K14A	14mm	
IST-2W-K15A	15mm	
IST-2W-K16A	16mm	
IST-2W-K17A	17mm	
IST-2W-K18A	18mm	
IST-2W-K19A	19mm	
IST-2W-K21A	21mm	
IST-2W-K22A	22mm	
IST-2W-K24A	24mm	
IST-2W-K27A	27mm	

BOX END HEAD (optional)

Code	Open size	Applicable wrenches
IST-2W-M7	7mm	IST-2W30A IST-2W135A
IST-2W-M8	8mm	
IST-2W-M10	10mm	
IST-2W-M11	11mm	
IST-2W-M12	12mm	
IST-2W-M13	13mm	
IST-2W-M14	14mm	
IST-2W-M15	15mm	
IST-2W-M16	16mm	
IST-2W-M17	17mm	
IST-2W-M18	18mm	
IST-2W-M19	19mm	
IST-2W-M21	21mm	
IST-2W-M22	22mm	
IST-2W-M13A	13mm	IST-2W200A IST-2W340A
IST-2W-M14A	14mm	
IST-2W-M15A	15mm	
IST-2W-M16A	16mm	
IST-2W-M17A	17mm	
IST-2W-M18A	18mm	
IST-2W-M19A	19mm	
IST-2W-M21A	21mm	

OPTIONAL ACCURACY:
 CLOCKWISE: $\pm 1\%$
 COUNTER-CLOCKWISE: $\pm 2\%$
 ONLY FOR RANGE 6~340N.m

**MEASURE THE TORQUE
 OF TIGHTENED BOLTS**

QUALITY INSPECTION TORQUE WRENCHES

**INSPECTION
 CERTIFICATE**



**IST-4W135A
 type A**



**IST-4W1200A
 type B**

- Retighten the tightened bolts to measure the torque, read the torque value when the looseness is detected
- Two measuring modes:
 - M1: automatic detecting mode, for normal bolts. Retighten the tightened bolts, the torque value is displayed on screen when the wrench automatically detects the looseness, both green and red LED light on and buzzer sounds
 - M2: manual detecting mode, for long bolts. Retighten the tightened bolts, read the torque value when the looseness is detected by hand
- Unit: N.m, in.lb, ft.lb, kg.cm
- Peak and track working mode (only for M2 measuring mode)
- Clockwise and count-clockwise operation
- Memory of 50 results
- Power off in 15 minutes automatically
- Non-slip grip handle
- With overload record (once the torque reaches 110% of the maximum range)

SPECIFICATION

Code	Type	Range	Accuracy	Resolution	Square driver (L)	Power supply	Length	Weight
IST-4W30A	A	6~30N.m	clockwise: $\pm 2\%$ counter-clockwise: $\pm 3\%$	0.01N.m	1/4"	2xAA batteries, for 110 hours working	390mm	760g
IST-4W135A		27~135N.m		0.1N.m	3/8"		415mm	940g
IST-4W200A		40~200N.m		0.1N.m	1/2"		530mm	1340g
IST-4W340A		68~340N.m		0.1N.m	1/2"		650mm	1540g
IST-4W850A	B	170~850N.m	clockwise: $\pm 2.5\%$ counter-clockwise: $\pm 3.5\%$	0.1N.m	3/4"		1220mm	6000g
IST-4W1200A		240~1200N.m		1N.m	1"		1800mm	9100g
IST-4W1500A		300~1500N.m		1N.m	1"		1800mm	9100g
IST-4W2000A		400~2000N.m		1N.m	1"		1800mm	10500g

OPTIONAL ACCESSORY

Calibration cable **IST-W-CABLE**

TWO-WAY WIRELESS DIGITAL TORQUE WRENCHES



IST-13W135A

OPTIONAL ACCURACY:
CLOCKWISE: $\pm 1\%$
COUNTER-CLOCKWISE: $\pm 2\%$

TRANSMISSION DISTANCE
IS 300 METERS

INSPECTION
CERTIFICATE



two-way receiver

35

Torque wrench:

- The test results can be transmitted wirelessly to the computer and PLC
- Unit: N.m, in.lb, ft.lb, kg.cm
- Clockwise and counter-clockwise operation
- Peak and track working mode
- Can set tolerance with judgement in peak working mode
- 9 target torque values can be set, with audible and visible alarm:
 - Green LED light on and buzzer sounds when torque value is 80%~99.5% of target torque
 - Both green and red LED light on and buzzer sounds when torque value is over 99.5% of target torque
- Power off in 2 minutes automatically
- Non-slip grip handle
- With damp record
- With overload record (once the torque reaches 110% of the maximum range)

Two-way receiver:

- A two-way receiver can be connected with up to 10 wrenches at the same time, and the maximum transmission distance is 300 meters

Software:

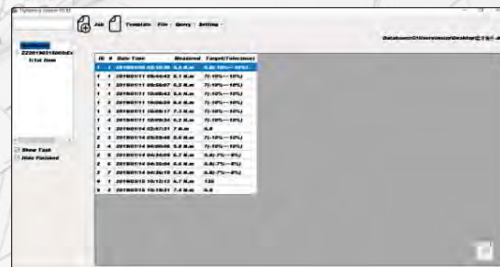
- In Windows10 system version 1709 or above
- Two operation mode:
 - Data transmission mode: wrench transmits actual torque value to software after operation
 - Program guidance mode: firstly set process on software (set sequence of tightening, select wrench and set torque values and tolerances). Then software shows which wrench the operator should use (indicator light of the selected wrench is on) and shows the target torque value, and serial number of the screw to be tightened (shows on the wrench); After the operation is finished, the actual torque value is sent to software.
- Can select whether the wrench only sends qualified data after operation (in accordance with the tolerance)
- Two data transmission modes: automatic or press button to send
- When the wrench is disconnected, data is stored in the wrench and automatically sent to computer after wireless connection
- The data in software can be printed or sent to Excel

TWO-WAY RECEIVER SPECIFICATION

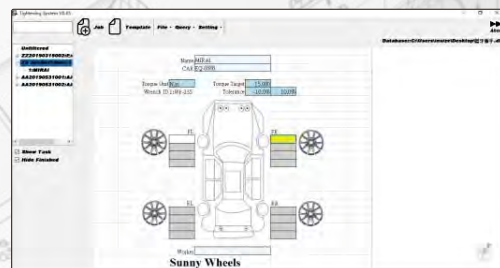
Code	IST-13WREC	IST-13WREC-PLC
Signal output to	computer	PLC
Working frequency	ISM433MHz (432.0~433.8MHz, adjustable)	
Power supply	power adapter, 24V, 0.5A	
Dimension	200×108×31mm	
Weight	500g	

OPTIONAL ACCESSORY

Calibration cable	IST-SD-CABLE
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data transmission mode



program guidance mode

SPECIFICATION

Code	Range	Accuracy	Unit	Resolution	Square driver (L)	Working frequency	Power supply	Length	Weight
IST-13W30A	6~30N.m	clockwise: $\pm 2\%$ counter-clockwise: $\pm 3\%$	N-m/ft-lb/ in-lb/kg-cm	0.01N.m	1/4"	ISM433MHz (432.0~433.8MHz, adjustable)	2×AA batteries	390mm	760g
IST-13W60A	12~60N.m			0.01N.m	3/8"			390mm	940g
IST-13W135A	27~135N.m			0.1N.m	3/8"			415mm	940g
IST-13W200A	40~200N.m			0.1N.m	1/2"			530mm	1340g
IST-13W340A	68~340N.m			0.1N.m	1/2"			650mm	1540g
IST-13W1200A	240~1200N.m	clockwise: $\pm 2.5\%$ counter-clockwise: $\pm 3.5\%$	N-m/ft-lb	1N.m	1"			1800mm	9000g
IST-13W1500A	300~1500N.m			1N.m	1"			1800mm	9000g
IST-13W2000A	400~2000N.m			1N.m	1"			1800mm	10500g
				1N.m	1"			1800mm	10500g

TYPE B OPTIONAL ACCURACY:
CLOCKWISE: $\pm 1\%$
COUNTER-CLOCKWISE: $\pm 2\%$

BLUETOOTH DIGITAL TORQUE WRENCHES (KEYBOARD SIGNAL)

BUILT-IN BLUETOOTH

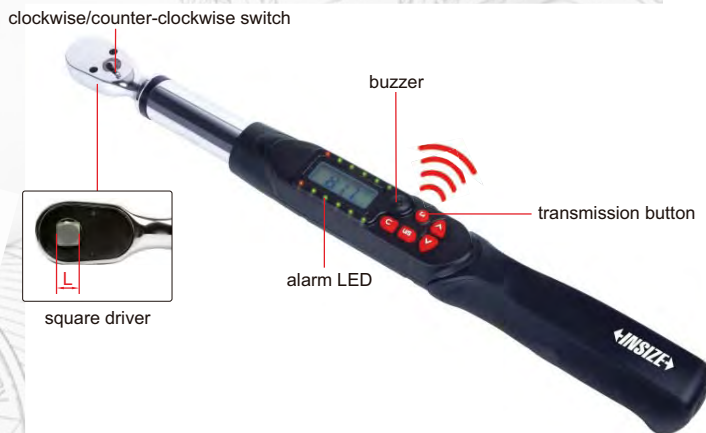
**INSPECTION
CERTIFICATE**



35



**IST-15W12A
type A**



**IST-15W135A
type B**

Torque wrenches:

- Unit: in.lb, ft.lb, N.m, kg.cm
- Clockwise and counter-clockwise operation
- Peak and track working mode
- Can set tolerance with judgement in peak working mode
- 9 target torque values can be set, with audible and visible alarm: LED lights up in sequence, and the buzzer gets louder and louder when torque value is 80%~99.5% of target torque
- Power off in 2 minutes automatically
- Non-slip grip handle
- With overload record (once the torque reaches 110% of the maximum range)

Data transmission:

- Built-in Bluetooth 4.0 module, which can be connected with computers (with Bluetooth function), mobile phones, tablets and other devices
- Keyboard signal, can be transmitted to Excel, Word, TXT
- Transmission distance is 10 meters (no obstacles, no electromagnetic interference)
- Bluetooth connection and disconnection are respectively shown by indicator lights



transmission distance is 10 meters
(no obstacles, no electromagnetic interference)

SPECIFICATION

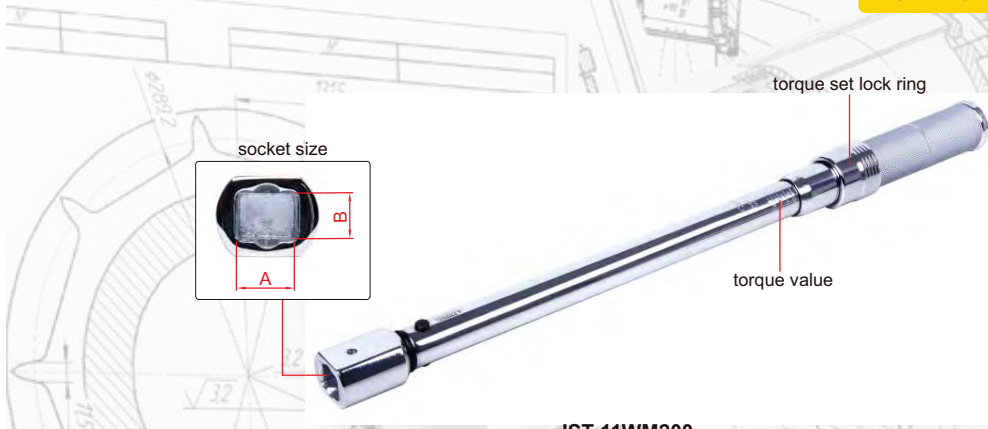
Code	IST-15W06A	IST-15W12A	IST-15W20A	IST-15W30A	IST-15W135A	IST-15W200A	IST-15W340A
Type	A (short handle)			B (long handle)			
Range	1.2~6N.m	2.4~12N.m	4~20N.m	6~30N.m	27~135N.m	40~200N.m	68~340N.m
Accuracy	clockwise	$\pm 2\%$					
	counter-clockwise	$\pm 3\%$					
Tolerance setting range	-20%~+20% (target torque value)						
Resolution	0.001N.m	0.01N.m	0.01N.m	0.01N.m	0.1N.m	0.1N.m	0.1N.m
Square driver (L)	1/4"	1/4"	1/4"	1/4"	3/8"	1/2"	1/2"
Power supply	2xAAA batteries			2xAA batteries			
Length	215mm	215mm	215mm	390mm	415mm	530mm	650mm
Weight	750g	750g	750g	760g	940g	1340g	1540g

OPTIONAL ACCESSORY

Calibration cable	IST-SD-CABLE
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INTERCHANGEABLE HEAD TORQUE WRENCHES

ATTENTION: CLOCKWISE OPERATION ONLY



IST-11WM200

- According to DIN ISO 6789, ASME B107.300
- All-metal construction, sturdy and durable

SPECIFICATION

Code	Range (clockwise)	Accuracy	Graduation	Socket size (A×B)	Length	Weight
IST-11WM12	2.5~12N.m	±6% (<10N.m) ±4% (≥10N.m)	0.05N.m	12×9mm	284mm	580g
IST-11WM30	6.0~30N.m	±6% (<10N.m) ±4% (≥10N.m)	0.1N.m	12×9mm	303mm	720g
IST-11WM60	10~60N.m	±4%	0.5N.m	12×9mm	372mm	860g
IST-11WM125	25~125N.m	±4%	0.5N.m	12×9mm	427mm	940g
IST-11WM200	40~200N.m	±4%	1N.m	18×14mm	460mm	1060g
IST-11WM335	65~335N.m	±4%	1N.m	18×14mm	520mm	1200g
IST-11WM500	100~500N.m	±4%	2.5N.m	32×24mm	855mm	5000g
IST-11WM800	160~800N.m	±4%	4N.m	32×24mm	1055mm	5900g
IST-11WM1000	200~1000N.m	±4%	5N.m	32×24mm	1055mm	5900g
IST-11WM1500	300~1500N.m	±4%	5N.m	36×27mm	1249mm	9000g
IST-11WM2000	400~2000N.m	±4%	10N.m	36×27mm	1249mm	9000g
IST-11WM3000	600~3000N.m	±4%	15N.m	36×27mm	1249mm	10300g

RATCHET HEAD (optional)



Code	Square driver	Applicable wrenches
IST-11WM-R1	1/4"	IST-11WM12 IST-11WM30
IST-11WM-R2	3/8"	IST-11WM12 IST-11WM30 IST-11WM60 IST-11WM125
IST-11WM-R3	1/2"	IST-11WM200 IST-11WM335
IST-11WM-R4*	3/4"	IST-11WM200 IST-11WM335
IST-11WM-R5	3/4"	IST-11WM500 IST-11WM800 IST-11WM1000
IST-11WM-R6	1"	IST-11WM1500 IST-11WM2000 IST-11WM3000



HOOK HEAD (optional)

Hook head customized according to customer requirements

To be continued

Continued from previous page



OPEN END HEAD (optional)

Code	Open size	Applicable wrenches
IST-11WM-K8	8mm	IST-11WM12 IST-11WM30 IST-11WM60 IST-11WM125
IST-11WM-K10	10mm	
IST-11WM-K13	13mm	
IST-11WM-K14	14mm	
IST-11WM-K15	15mm	
IST-11WM-K17	17mm	
IST-11WM-K19*	19mm	
IST-11WM-K13A	13mm	IST-11WM200 IST-11WM335
IST-11WM-K14A	14mm	
IST-11WM-K15A	15mm	
IST-11WM-K17A	17mm	
IST-11WM-K19A	19mm	
IST-11WM-K22A	22mm	
IST-11WM-K24A	24mm	
IST-11WM-K27A*	27mm	
IST-11WM-K30A*	30mm	
IST-11WM-K32A*	32mm	
IST-11WM-K22B	22mm	IST-11WM500 IST-11WM800 IST-11WM1000
IST-11WM-K24B	24mm	
IST-11WM-K27B	27mm	
IST-11WM-K28B	28mm	
IST-11WM-K30B	30mm	
IST-11WM-K32B	32mm	
IST-11WM-K33B*	33mm	
IST-11WM-K36B*	36mm	
IST-11WM-K38B*	38mm	
IST-11WM-K40B*	40mm	
IST-11WM-K30C	30mm	IST-11WM1500 IST-11WM2000 IST-11WM3000
IST-11WM-K32C	32mm	
IST-11WM-K34C	34mm	
IST-11WM-K36C	36mm	
IST-11WM-K38C	38mm	
IST-11WM-K41C	41mm	
IST-11WM-K45C	45mm	
IST-11WM-K50C*	50mm	
IST-11WM-K55C*	55mm	
IST-11WM-K60C*	60mm	

BOX END HEAD (optional)

Code	Open size	Applicable wrenches
IST-11WM-M8	8mm	IST-11WM12 IST-11WM30 IST-11WM60 IST-11WM125
IST-11WM-M10	10mm	
IST-11WM-M13	13mm	
IST-11WM-M14	14mm	
IST-11WM-M15	15mm	
IST-11WM-M17	17mm	
IST-11WM-M19	19mm	
IST-11WM-M13A	13mm	IST-11WM200 IST-11WM335
IST-11WM-M14A	14mm	
IST-11WM-M15A	15mm	
IST-11WM-M17A	17mm	
IST-11WM-M19A	19mm	
IST-11WM-M22A	22mm	
IST-11WM-M24A	24mm	
IST-11WM-M27A	27mm	
IST-11WM-M30A	30mm	
IST-11WM-M32A	32mm	
IST-11WM-M22B	22mm	IST-11WM500 IST-11WM800 IST-11WM1000
IST-11WM-M24B	24mm	
IST-11WM-M27B	27mm	
IST-11WM-M28B	28mm	
IST-11WM-M30B	30mm	
IST-11WM-M32B	32mm	
IST-11WM-M33B	33mm	
IST-11WM-M36B*	36mm	
IST-11WM-M38B*	38mm	
IST-11WM-M40B	40mm	
IST-11WM-M30C	30mm	IST-11WM1500 IST-11WM2000 IST-11WM3000
IST-11WM-M32C	32mm	
IST-11WM-M34C	34mm	
IST-11WM-M36C	36mm	
IST-11WM-M38C	38mm	
IST-11WM-M41C	41mm	
IST-11WM-M45C	45mm	
IST-11WM-M50C	50mm	
IST-11WM-M55C*	55mm	
IST-11WM-M60C*	60mm	

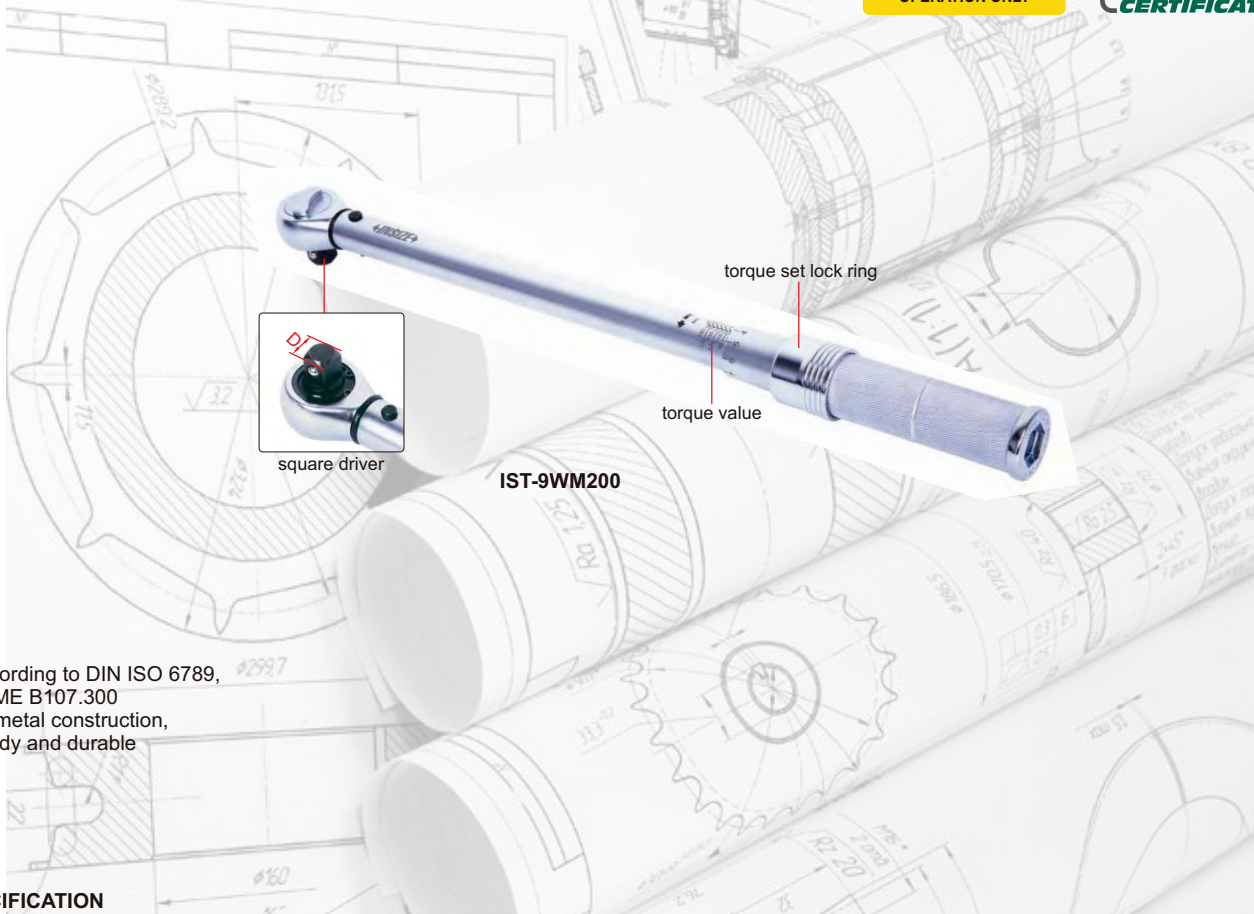
*Torque value needs to be corrected for these heads

TORQUE WRENCHES

ATTENTION: CLOCKWISE
OPERATION ONLY



35



- According to DIN ISO 6789, ASME B107.300
- All-metal construction, sturdy and durable

SPECIFICATION

Code	IST-9WM12	IST-9WM20	IST-9WM30	IST-9WM60	IST-9WM100
Range (clockwise)	2.5~12N.m	4~20N.m	6~30N.m	10~60N.m	20~100N.m
Accuracy	±6% (<10N.m) ±4% (≥10N.m)	±6% (<10N.m) ±4% (≥10N.m)	±6% (<10N.m) ±4% (≥10N.m)	±4%	±4%
Graduation	0.1N.m	0.1N.m	0.2N.m	0.5N.m	0.5N.m
Square driver (D)	1/4"	1/4"	3/8"	3/8"	1/2"
Length	290mm	290mm	318mm	388mm	443mm
Weight	680g	680g	820g	960g	1040g

Code	IST-9WM125	IST-9WM200	IST-9WM335	IST-9WM500	IST-9WM800
Range (clockwise)	25~125N.m	40~200N.m	65~335N.m	100~500N.m	160~800N.m
Accuracy	±4%	±4%	±4%	±4%	±4%
Graduation	0.5N.m	1N.m	1N.m	2.5N.m	4N.m
Square driver (D)	1/2"	1/2"	1/2"	3/4"	3/4"
Length	443mm	468mm	528mm	855mm	1055mm
Weight	1040g	1160g	1300g	5000g	5900g

Code	IST-9WM1000	IST-9WM1500	IST-9WM2000	IST-9WM3000
Range (clockwise)	200~1000N.m	300~1500N.m	400~2000N.m	600~3000N.m
Accuracy	±4%	±4%	±4%	±4%
Graduation	5N.m	5N.m	10N.m	15N.m
Square driver (D)	3/4"	1"	1"	1"
Length	1055mm	1260mm	1260mm	1260mm
Weight	5900g	9200g	9200g	10500g

ATTENTION: DISPLAY PRE-SET TORQUE VALUE (NOT REAL TIME TORQUE)

INTERCHANGEABLE HEAD MECHANICAL TORQUE WRENCHES (DIGITAL SETTING)

ATTENTION: CLOCKWISE OPERATION ONLY



INSPECTION CERTIFICATE



- Unit: N.m, in.lb, ft.lb, kg.cm
- Mechanical "click" torque wrench, the pre-set torque value is shown on the display

SPECIFICATION

Code	IST-25WM60	IST-25WM100	IST-25WM140	IST-25WM200	IST-25WM300
Range (clockwise)	12~60N.m	20~100N.m	28~140N.m	40~200N.m	60~300N.m
Accuracy	±3%	±3%	±3%	±3%	±3%
Resolution	0.1N.m	0.1N.m	0.1N.m	0.1N.m	0.1N.m
Socket size (A×B)	12×9mm	12×9mm	18×14mm	18×14mm	18×14mm
Length	408mm	431mm	492mm	510mm	568mm
Weight	1.3kg	1.4kg	1.45kg	1.5kg	1.7kg



RATCHET HEAD (optional)

Code	Square driver	Applicable wrenches
IST-11WM-R1	1/4"	IST-25WM60 IST-25WM100
IST-11WM-R2	3/8"	IST-25WM60 IST-25WM100
IST-11WM-R3	1/2"	IST-25WM140 IST-25WM200 IST-25WM300
IST-11WM-R4*	3/4"	IST-25WM140 IST-25WM200 IST-25WM300

BOX END HEAD (optional)

Code	Open size	Applicable wrenches
IST-11WM-M8	8mm	IST-25WM60 IST-25WM100
IST-11WM-M10	10mm	
IST-11WM-M13	13mm	
IST-11WM-M14	14mm	
IST-11WM-M15	15mm	
IST-11WM-M17	17mm	IST-25WM140 IST-25WM200
IST-11WM-M19	19mm	
IST-11WM-M13A	13mm	
IST-11WM-M14A	14mm	
IST-11WM-M15A	15mm	
IST-11WM-M17A	17mm	
IST-11WM-M19A	19mm	
IST-11WM-M22A	22mm	
IST-11WM-M24A	24mm	
IST-11WM-M27A	27mm	
IST-11WM-M30A	30mm	
IST-11WM-M32A	32mm	



HOOK HEAD (optional)

Hook head

customized according to customer requirements

To be continued

Continued from previous page



OPEN END HEAD (optional)

Code	Open size	Applicable wrenches	
IST-11WM-K6	6mm	IST-25WM60 IST-25WM100	
IST-11WM-K7	7mm		
IST-11WM-K8	8mm		
IST-11WM-K9	9mm		
IST-11WM-K10	10mm		
IST-11WM-K11	11mm		
IST-11WM-K12	12mm		
IST-11WM-K13	13mm		
IST-11WM-K14	14mm		
IST-11WM-K15	15mm		
IST-11WM-K16	16mm		
IST-11WM-K17	17mm		
IST-11WM-K18*	18mm		
IST-11WM-K19*	19mm		
IST-11WM-K13A	13mm		IST-25WM140 IST-25WM200 IST-25WM300
IST-11WM-K14A	14mm		
IST-11WM-K15A	15mm		
IST-11WM-K16A	16mm		
IST-11WM-K17A	17mm		
IST-11WM-K18A	18mm		
IST-11WM-K19A	19mm		
IST-11WM-K20A	20mm		
IST-11WM-K21A	21mm		
IST-11WM-K22A	22mm		
IST-11WM-K23A	23mm		
IST-11WM-K24A	24mm		
IST-11WM-K27A*	27mm		
IST-11WM-K30A*	30mm		
IST-11WM-K32A*	32mm		

*Torque value needs to be corrected for these heads

MECHANICAL TORQUE WRENCHES (DIGITAL SETTING)

ATTENTION: DISPLAY PRE-SET TORQUE VALUE (NOT REAL TIME TORQUE)

ATTENTION: CLOCKWISE OPERATION ONLY



- Unit: N.m, in.lb, ft.lb, kg.cm
- Mechanical "click" torque wrench, the pre-set torque value is shown on the display

SPECIFICATION

Code	IST-19WM60	IST-19WM100	IST-19WM140	IST-19WM200	IST-19WM300
Range (clockwise)	12~60N.m	20~100N.m	28~140N.m	40~200N.m	60~300N.m
Accuracy	±3%	±3%	±3%	±3%	±3%
Resolution	0.1N.m	0.1N.m	0.1N.m	0.1N.m	0.1N.m
Square driver (D)	3/8"	3/8"	1/2"	1/2"	1/2"
Length	382mm	450mm	481mm	520mm	585mm
Weight	1.3kg	1.4kg	1.45kg	1.6kg	1.8kg

ATTENTION: CLOCKWISE OPERATION ONLY

PRESET TORQUE WRENCHES

- Torque is preset, to prevent adjustment by mistake during use
- The torque is set at the factory before delivery. Customers can also set the torque with torque adjustment tool (IST-PW-TOOL, optional) and digital torque testers (IST-TT□□□, optional)
- Clockwise operation only



SPECIFICATION

Code	IST-PW12	IST-PW20	IST-PW30	IST-PW60	IST-PW125	IST-PW200
Adjustable range *	2.5~12N.m 22~105in.lb	4~20N.m 36~175in.lb	6~30N.m 55~265in.lb	10~60N.m 8~44ft.lb	25~125N.m 20~90ft.lb	40~200N.m 30~145ft.lb
Accuracy	±3%	±3%	±3%	±3%	±3%	±3%
Square driver (D)	1/4"	1/4"	3/8"	3/8"	3/8"	1/2"
Length	184mm	184mm	214mm	255mm	366mm	457mm
Weight	450g	450g	500g	560g	790g	1200g

Code	IST-PW340	IST-PW500	IST-PW650	IST-PW800	IST-PW1000A	IST-PW1000B
Adjustable range *	65~340N.m 50~250ft.lb	100~500N.m 75~365ft.lb	150~650N.m 110~475ft.lb	160~800N.m 120~585ft.lb	200~1000N.m 150~735ft.lb	200~1000N.m 150~735ft.lb
Accuracy	±3%	±3%	±4%	±4%	±4%	±4%
Square driver (D)	1/2"	3/4"	3/4"	3/4"	3/4"	1"
Length	691mm	910mm	910mm	1037mm	1265mm	1265mm
Weight	1960g	2800g	2800g	5000g	6000g	6000g

OPTIONAL ACCESSORY

Torque adjustment tool IST-PW-TOOL

* Adjust to a fixed torque value according to customer requirements before delivery

DIAL TORQUE WRENCHES



INSPECTION CERTIFICATE

- Clockwise and counter-clockwise operation
- According to DIN ISO 6789, ASME B107.300

SPECIFICATION

Code	IST-DW1D8	IST-DW3D5	IST-DW9	IST-DW18	IST-DW35	IST-DW70	IST-DW140	IST-DW240	IST-DW350	IST-DW480
Range	0.36~1.8N.m 3~16in.lb	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	96~480N.m 70~350ft.lb
Accuracy	±3%	±3%	±3%	±3%	±3%	±3%	±3%	±3%	±3%	±3%
Graduation	0.02N.m 0.2in.lb	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	6N.m 5ft.lb
Square driver (D)	1/4"	1/4"	1/4"	3/8"	3/8"	3/8"	1/2"	1/2"	1/2"	3/4"
Length	254mm	254mm	254mm	254mm	254mm	378mm	546mm	546mm	546mm	708mm
Weight	480g	480g	480g	480g	480g	820g	1300g	1300g	1300g	4030g

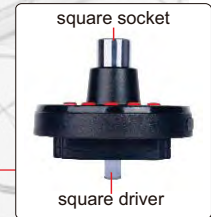
DIGITAL TORQUE ADAPTERS (WITH ANGLE DETECTION)



working with mechanical wrenches



35



- Clockwise and counter-clockwise operation
- After reaching the desired torque, turn the wrench at a angle to apply extra torque
- Unit: N.m, in.lb, ft.lb, kg.cm, degree
- Peak and track working modes
- Target torque or angle value can be set, with audible and visible alarm:
 - Green LED light on and buzzer sounds when torque or angle value is 80%~100% of target torque or angle
 - Both green and red LED light on and buzzer sounds when target torque or angle value is reached
- Power off in 2 minutes automatically
- Memory 50 measurement values for browsing
- With overload record (once the torque reaches 110% of the maximum range)

IST-5W135A



SPECIFICATION

Code		IST-5W30A	IST-5W135A	IST-5W200A	IST-5W340A
Range	torque	6~30N.m	27~135N.m	40~200N.m	68~340N.m
	angle	0~999°			
Accuracy	clockwise	±3%			
	counter-clockwise	±4%			
	angle	±2° (rotate at 90°)			
Resolution	torque	0.01N.m	0.1N.m	0.1N.m	0.1N.m
	angle	1°			
Square driver (L)		1/4"	3/8"	1/2"	1/2"
Power supply		2xAAA batteries			
Dimension		Ø85×60mm	Ø85×75mm	Ø85×80mm	Ø85×80mm
Weight		150g	220g	240g	240g

OPTIONAL ACCESSORY

Calibration cable	IST-SD-CABLE
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DIGITAL ANGLE METER CODE 2177-121

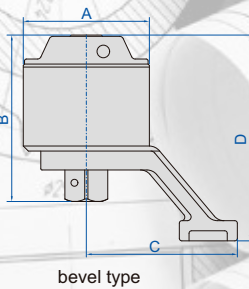
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FOR DETAILS



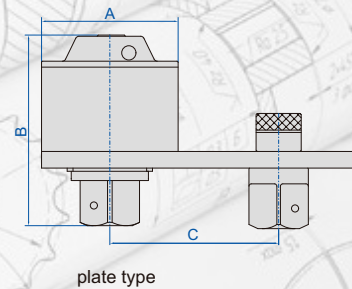
TORQUE MULTIPLIERS



IST-TM2000

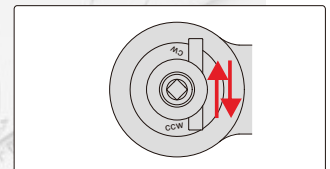


IST-TM3500P



■ Input to output accuracy: $\pm 5\%$

application



after tightening, toggle the anti-bounce reversing dowel, turn the wrench in the anticlockwise direction, then remove the wrench from torque multiplier

Z TYPE (BEVEL TYPE) TORQUE MULTIPLIER

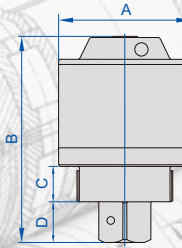
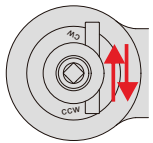
Code	Capacity	Torque ratio	Square socket	Square driver	Dimension (A×B×C×D)	For bolt	For nut	Weight
IST-TM1000	1000N.m	1:4	1/2"	1"	82×98.5×97×122.4mm	M20~30	S30~46	2.1kg
IST-TM2000	2000N.m	1:13	1/2"	1"	82×120×105×147mm	M22~35	S32~55	3.15kg
IST-TM3500	3500N.m	1:16	1/2"	1"	98×131×120×163mm	M30~45	S46~70	4.9kg
IST-TM5500	5500N.m	1:20.5	1/2"	1 1/2"	115×163.5×137×199mm	M38~52	S55~80	8.1kg
IST-TM7500	7500N.m	1:23	1/2"	1 1/2"	127×173×146×215mm	M42~60	S65~90	10.6kg
IST-TM10000	10000N.m	1:28	1/2"	1 1/2"	141×170×164×238mm	M52~72	S80~105	14kg

L TYPE (PLATE TYPE) TORQUE MULTIPLIER

Code	Capacity	Torque ratio	Square socket	Square driver	Dimension (A×B×C)	For bolt	For nut	Weight
IST-TM1000P	1000N.m	1:4	1/2"	1"	82×91×(76.7~127.3)mm	M20~30	S30~46	2.4kg
IST-TM2000P	2000N.m	1:13	1/2"	1"	82×120×(92.7~129.3)mm	M22~35	S32~55	3.5kg
IST-TM3500P	3500N.m	1:16	1/2"	1"	98×128×(102.7~145.3)mm	M30~45	S46~70	5.0kg
IST-TM5500P	5500N.m	1:20.5	1/2"	1 1/2"	115×157×(134.05~165.95)mm	M38~52	S55~80	8.7kg
IST-TM7500P	7500N.m	1:23	1/2"	1 1/2"	127×168×(139.05~190.95)mm	M42~60	S65~90	11.7kg
IST-TM10000P	10000N.m	1:28	1/2"	1 1/2"	141×186×(144.05~215.95)mm	M52~72	S80~105	15.2kg
IST-TM15000P	15000N.m	1:50	3/4"	2 1/2"	156×246×(155.25~244.75)mm	M60~85	S80~120	24.1kg
IST-TM20000P	20000N.m	1:76	3/4"	2 1/2"	170×264×(163.75~276.25)mm	M72~100	S105~145	27.8kg

SPLINE-TYPE TORQUE MULTIPLIERS

after tightening, toggle the anti-bounce reversing dowel, turn the wrench in the anticlockwise direction, then remove the wrench from torque multiplier



IST-ST2000

application



- High efficiency gear set with small input torque and large output torque
- Can be installed directly on the workpieces or through different options to form different installation types

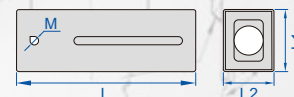
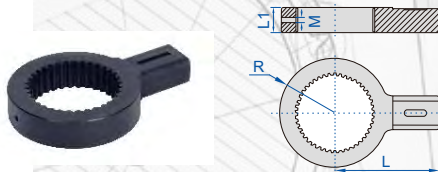
plate type

bevel type



SPECIFICATION

Code	Type	Capacity	Accuracy	Torque ratio	Square socket	Square driver	Dimension (A×B×C×D)	For bolt	For nut	Weight				
IST-ST2000	plate	2000N.m	±5%	1:13.3	1/2"	1"	82×135×18×26mm	M22~35	S32~55	3.2kg				
	bevel			1:12										
IST-ST3500	plate	3500N.m		1:16	1/2"	1"								
	bevel			1:15										
IST-ST5500	plate	5500N.m		1:21.5	1/2"	1 1/2"					115×180×29×39mm	M38~52	S55~80	7.8kg
	bevel			1:18.5										
IST-ST7500	plate	7500N.m	1:24	1/2"	1 1/2"	127×198×34×39mm	M42~60	S65~90	10.8kg					
	bevel		1:20											



CONNECTION SPLINE (optional)

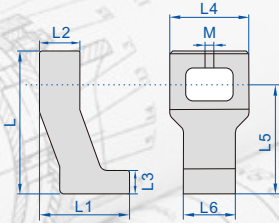
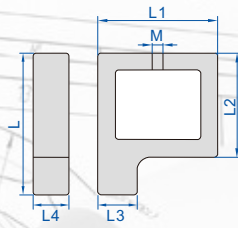
Code	Dimension (mm)			
	R	L	L1	M
IST-ST2000-C1	41	78	18	5
IST-ST3500-C2	49	95	23	5
IST-ST5500-C3	58	112	28.5	6
IST-ST7500-C4	63.5	123.5	29	6

PLATE REACTION ARM (optional)

Code	Dimension (mm)			
	L	L1	L2	M
IST-ST2000-P1	120	38	25.5	4
IST-ST3500-P2	145	42	32	5
IST-ST5500-P3	150	53	45	6
IST-ST7500-P4	175	60	49	8

To be continued

Continued from previous page



REACTION BLOCK (optional)

Code	Dimension (mm)					
	L	L1	L2	L3	L4	M
IST-ST2000-R1	53.5	52	39.5	15	18	4
IST-ST3500-R2	66	58	48	18	20	5
IST-ST5500-R3	94.5	73	65	22	25	6
IST-ST7500-R4	98	83	72	28	25	8

BEVEL REACTION ARM (optional)

Code	Dimension (mm)								
	L	L1	L2	L3	L4	L5	L6	M	
IST-ST2000-B1	85	51	18	14	44	60	25	4	
IST-ST3500-B2	87.5	52	20	15	50	67	30	5	
IST-ST5500-B3	110	70	30	16	59	86	35	6	
IST-ST7500-B4	123	78	35	20	68	94	45	6	

TWO-USE TORQUE MULTIPLIERS



IST-DT2000

- High efficiency gear set with small input torque and large output torque
- The reaction arm can adjust the position of the applied force according to the operation conditions
- Plate reaction arm and bevel reaction arm are included

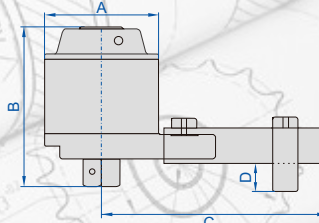
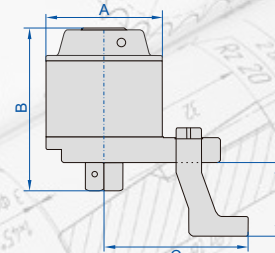
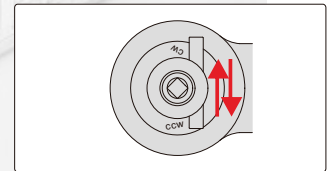


plate type



bevel type

after tightening, toggle the anti-bounce reversing dowel, turn the wrench in the anticlockwise direction, then remove the wrench from torque multiplier



application



torque wrench

plate type

bevel type



before installation

after installation

plate reaction arm (included)



before installation

after installation

bevel reaction arm (included)

SPECIFICATION

Code	Type	Capacity	Accuracy	Torque ratio	Square socket	Square driver	Dimension (A×B×C×D)	For bolt	For nut	Weight
IST-DT2000	plate	2000N.m	±5%	1:13.3	1/2"	1"	82×120×160×21mm	M22~35	S32~55	4.1kg
	bevel			1:12			82×120×93×52mm			
IST-DT3500	plate	3500N.m		1:16	1/2"	1"	98×133×152×26mm	M30~45	S46~70	6.4kg
	bevel			1:15			98×133×117×56mm			
IST-DT5500	plate	5500N.m		1:21.5	1/2"	1 1/2"	115×165×210×39.5mm	M38~52	S55~80	11.4kg
	bevel			1:18.5			115×165×134×72mm			
IST-DT7500	plate	7500N.m		1:24	1/2"	1 1/2"	127×174×243×38mm	M42~60	S65~90	16kg
	bevel			1:20			127×174×146×80mm			