

MECHANIC HAND TOOLS

TORQUE WRENCH

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TORQUE WRENCH

ประแจขันปอนด์



ไขควงขันปอนด์

RTD - ROTARY SLIP ADJUSTABLE TORQUE SCREWDRIVER

ASSEMBLY | AJUSTABLE | ROTARY SLIP | GRADUATION | ISO6789:2003

- Ratcheting mechanism prevents over torque.
- Torque easily set with external scale



RTD60CN



RTD120CN with Resin Grip

Accuracy ±3%

S.I. Order No.	Torque Range [cN•m]		Metric Order No.	Torque Range [kgf•cm]		American Order No.	Torque Range [ozf•in/lbf•in]		Overall Length [mm]	Weight g
	Min.-Max.	Grad.		Min.-Max.	Grad.		Min.-Max.	Grad.		
-	-	-	-	-	-	RTD20Z	6-20	0.2	100	50
-	-	-	-	-	-	RTD40Z	15-40	0.5	110	80
-	-	-	-	-	-	RTD80Z	20-80	1	130	160
-	-	-	-	-	-	RTD150Z	30-150	2	150	270
RTD15CN	2-15	0.1	1.5RTD	0.2-1.5	0.01	RTD1.3I	0.2-1.3	0.01	100	50
RTD30CN	4-30	0.2	3RTD	0.4-3	0.02	RTD2.6I	0.4-2.6	0.02	110	80
RTD60CN	10-60	0.5	6RTD	1-6	0.05	RTD5I	1-5	0.05	130	160
RTD120CN	20-120	1	12RTD	2-12	0.1	RTD10I	2-10	0.1	150	270
RTD260CN	60-260	2	26RTD	6-26	0.2	RTD22I	6-22	0.2	155	320
RTD500CN	100-500	5	50RTD	10-50	0.5	RTD40I	10-40	0.5		

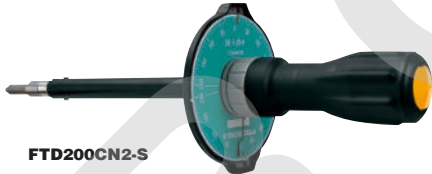
- Note.
1. Auxiliary tightening tool for RTD500CN is sold separately.
 2. Bits are sold separately.
- Standard Accessories.
1. Hook spanner for RTD260CN and RTD500CN
 2. Resin grip for RTD120CN and RTD260CN

ไขควงขันปอนด์

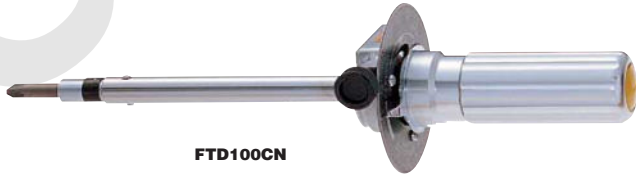
FTD - DIAL INDICATING TORQUE SCREWDRIVER WITH MEMORY POINTER

INSPECTION | DIAL INDICATING | MEMORY POINTER | DIRECT READING | ISO6789:2003

- Ideal for measuring torque.
- FTD-S with memory pointer; FTD with preset knob



FTD200CN2-S



FTD100CN

Accuracy ±3%

S.I. Order No.	Torque Range [cN•m]		Metric Order No.	Torque Range [kgf•cm]		American Order No.	Torque Range [ozf•in/lbf•in]		Overall Length [mm]	Weight g	Standard Accessory Bit	
	Min.-Max.	Grad.		Min.-Max.	Grad.		Min.-Max.	Grad.			⊕	⊖ Thickness x width
FTD-S	cN•m	cN•m		gf•cm	gf•cm		ozf•in	ozf•in				
FTD2CN-S	0.3-2	0.05	02FTD2-S	30-200	5	FTD3Z2-S	0.5-3	0.1				
FTD5CN-S	0.5-5	0.1	05FTD2-S	50-500	10	FTD7Z2-S	1-7	0.2				
FTD10CN-S	1-10	0.2	1FTD2-S	0.1-1	0.02	FTD15Z2-S	2-15	0.5	152	140		
FTD20CN-S	3-20	0.5	2FTD2-S	0.3-2	0.05	FTD30Z2-S	5-30	1			Interchangeable bit is sold separately.	
FTD50CN-S	5-50	1	5FTD2-S	0.5-5	0.1	FTD70Z2-S	10-70	2				
-	-	-	-	-	-	5FTD2-A-S	0.5-5	0.1	272	370		
FTD100CN2-S	10-100	2	10FTD2-S	1-10	0.2	10FTD2-A-S	1-10	0.2				
FTD200CN2-S	30-200	5	20FTD2-S	3-20	0.5	20FTD2-A-S	3-20	0.5				
FTD400CN2-S	50-400	10	40FTD2-S	5-40	1	40FTD2-A-S	5-40	1				
	N•m	N•m										
FTD8N2-S	1-8	0.2	80FTD2-S	10-80	2	80FTD2-A-S	10-70	2	338	900	#3	1.2 x 8
FTD16N2-S	3-16	0.5	160FTD2-S	30-160	5	160FTD2-A-S	20-140	5		930		
FTD	cN•m	cN•m										
FTD50CN	10-50	1	5FTD	1-5	0.1	5FTD-A	1-5	0.1	215	285	#1	0.7 x 7
FTD100CN	20-100	2	10FTD	2-10	0.2	10FTD-A	1-10	0.2		290		
FTD200CN	40-200	5	20FTD	4-20	0.5	20FTD-A	3-20	0.5	263	390	#2	0.9 x 7
FTD400CN	80-400	10	40FTD	8-40	1.0	40FTD-A	5-40	1		410		

- Note.
- FTD8N2-S, FTD16N2-S : Square drive type, 6.35mm
- Standard Accessories. Auxiliary tightening bar for FTD8N2-S and FTD16N2-S

TORQUE WRENCH

ประแจขันปอนด์



TORQUE WRENCH
ประแจขันปอนด์

ไขควงขันปอนด์

LTD - ADJUSTABLE LIMITING TYPE TORQUE SCREWDRIVER

ASSEMBLY | AJUSTABLE | GRADUATION | ISO6789:2003

- Clicks at set torque value
- Torque easily set with external scale



LTD60CN



LTD120CN with Resin Grip

Accuracy $\pm 3\%$

S.I. Order No.	Torque Range [cN·m]		Metric Order No.	Torque Range [kgf·cm]		American Order No.	Torque Range [ozf·in/lbf·in]		Overall Length [mm]	Weight g
	Min.-Max.	Grad.		Min.-Max.	Grad.		Min.-Max.	Grad.		
-						LTD20Z	ozf·in	ozf·in	100	50
-						LTD40Z	6-20	0.2		
-						LTD80Z	15-40	0.5		
-						LTD150Z	20-80	1		
							30-150	2	130	160
							lbf·in	lbf·in		
LTD15CN	2-15	0.1	1.5LTD	0.2-1.5	0.01	LTD1.3I	0.2-1.3	0.01	100	50
LTD30CN	4-30	0.2	3LTD	0.4-3	0.02	LTD2.6I	0.4-2.6	0.02		
LTD60CN	10-60	0.5	6LTD	1-6	0.05	LTD5I	1-5	0.05	110	80
LTD120CN	20-120	1	12LTD	2-12	0.1	LTD10I	2-10	0.1	130	160
LTD260CN	60-260	2	26LTD	6-26	0.2	LTD22I	6-22	0.2	150	270
LTD500CN	100-500	5	50LTD	10-50	0.5	LTD40I	10-40	0.5	155	320
LTD1000CN	200-1000	5	100LTD	20-100	0.5	LTD90I	20-90	0.5	185	580
LTD2000CN2	400-2000	5	LTD200M2	40-200	0.5	LTD180I2	40-180	0.5	255	1150

Note.

1. Auxiliary tightening tool for LTD500CN and LTD1000CN is available, sold separately.
2. Bits are sold separately.
3. LTD2000CN2 and the equivalent metric and American models has an 9.53mm square drive head.

Standard Accessories. 1. Hook spanner for LTD260CN-LTD2000CN2
2. LTD2000CN2 come with an auxiliary tightening tool.
2. Resin grip for LTD120CN and LTD260CN

ไขควงขันปอนด์

STC2-G - DIGITAL TORQUE SCREWDRIVER

ASSEMBLY | INSPECTION | DIGITAL | DIRECT READING | RATCHET | ISO6789:2003

- Ideal for tightening and inspection operation
- 1000 data memory storage and data output function
- Color LED indicator, White, Blue, Yellow and Red.



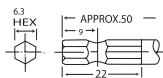
White LED light
80% of target torque



Blue LED light
Achieving target torque



Yellow & Red flashing LED light
Over torque indication



Accuracy $\pm 3\%$

Order No.	Torque Range								Overall Length	Weight
	[cN•m]		[kgf•cm]		[lbf•in]		[ozf•in]			
	Min.-Max	1 digit	Min.-Max	1 digit	Min.-Max	1 digit	Min.-Max	1 digit		
STC50CN2-G	10-50	0.05	1-5	0.05	1-4.4	0.005	15-70	0.05		
STC200CN2-G	40-200	0.2	4-20	0.02	4-17	0.02	-	-	230	325
STC400CN2-G	80-400	0.5	8-40	0.05	8-35	0.05	-	-		

Note.

1. Bits are sold separately.
2. Bits size as below.
3. Display can be turned upside down with keypad operation.
4. Data output of standard version is through USB only.
5. Contact to Tohnichi for condition of wireless equipment in each country.

Standard Accessories. USB cable/384, AC adapter/BA-7, and Battery pack/BP-7.

Tool Kits
ชุดเครื่องมือ

Pliers
คีม

Electrician Tool

เครื่องมือสำหรับ
อิเล็กทรอนิกส์
และช่างไฟ

Gear Puller

เพลาชัก

Adjustable

Wrench
ประแจเลื่อน

Wrench

ประแจ

Torque Wrench

เกจขันล็อก

Socket Wrench

ลูกบ็อก

Screwdriver

ไขควง

Bits

ไขควง

Torque

Screwdriver

ไขควงทอร์ค

For Assembly

สำหรับงานทั่วไป

For Quality

Inspection

สำหรับการตรวจสอบ

Tension Gauge

เกจวัดแรงดึง-ดัน

Torque Tester

เครื่องวัดแรงบิด

TORQUE WRENCH

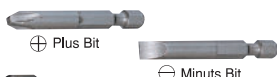
ประแจขันปอนด์



ดอกไขควง

INTERCHANGEABLE BIT

Tool Kits
ชุดเครื่องมือ



Pliers
คีม



Electrician Tool

เครื่องมือสำหรับ
อิเล็กทรอนิกส์
และช่างไฟ



Gear Puller

เหล็กดูด

Adjustable

Wrench

ประแจเลื่อน

Wrench

ประแจ

Torque Wrench

เกจบิดค

Socket Wrench

ลูกบ็อก

Screwdriver

ไขควง

Bits

ไขควง

Torque

Screwdriver

ไขควงทอร์ค

For Assembly

สำหรับงานทั่วไป

For Quality

Inspection

สำหรับการตรวจสอบ

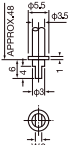
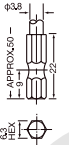
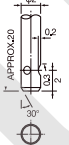
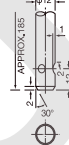
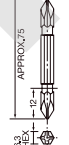
Tension Gauge

เกจวัดแรงดึง-ดัน

Torque Tester

เครื่องวัดแรงบิด

Screw Head Shape

				Root Shap				
Torque Screwdriver		-	RTD/RTDZ/LTD BMRD BMLD FTD50CN - 400CN FTD2CN-S - 400CN2-S STC2-G		FTD8N2-S - FTD16N2-S, (FTD8N - 16N)	AMRD AMLD MTD	LTD2000CN	-
Power Torque Tool		U30CN	U (except U30CN)		-	-	-	AUR5N
Root Shape Sign		A	B	C	D	F	G	H
Root Shape and Dimensions								
Screw		Tohnichi Orginal Bit	Common (Standard)		Tohnichi Original Bit	Tohnichi Original Bit	Tohnichi Original Bit	Common (Standard)
Refer to Table A		104		109		115		
Refer to Table A			85	106	84	116		
Refer to Table A			86	107	80			
Refer to Table A			87		81		35	700
Refer to Table A							36	
Refer to Table B						111		
Refer to Table B						112		
Refer to Table B						113		
Refer to Table B		105		108				
Refer to Table B			88					
Refer to Table B			89				37	
Refer to Table B							38	
Refer to Table B							39	
Refer to Table B								
Refer to Table B					82			
Refer to Table B					83			
Hex Bolt								
M3			91					
(M3.5)			95					
M4			92					
(M4.5) M5			93					
M6			94					
Cap screw	Set Screw							
	M2.5		56					
	M3		57					
	M4		58					
	M5		59					
	M6		60					
	M8		61					
	M10		62					
	M12 (M14)		63					
	M16 (M18)		64					
(1/4)			90				33	
(3/8)							34	
Socket Head	Set Screw							
	M2.5			470				
	M3			471				
	M3.5							
M2.5	M4			472				

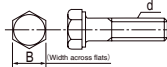


Bolt Head Shape*Reference

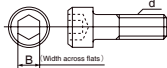


Nominal Size of Screw (d)	Hex head Bolt (B)	Small Hex Head Bolt (B)	High Strength Hex Bolt for Friction Grip Joint (b)	Hex Socket Head Cap Screw (B)	Hex Socket Set Screw (B)
M2.5	4.5	-	-	2	1.27
M3	5.5	-	-	2.5	1.5
(M3.5)	6	-	-	-	-
M4	7	-	-	3	2
(M4.5)	8	-	-	-	-
M5	8	-	-	4	2.5
M6	10	-	-	5	3
(M7)	11	-	-	-	-
M8	13	12	-	6	4
M10	16	17	14	8	5
M12	18	19	17	10	6
(M14)	21	22	19	12	
M16	24	22	27	14	8
(M18)	27	24	-		
M20	30	27	32	17	10
(M22)	32	34	30		
M24	36	32	41	19	-
(M27)	41	36	46		
M30	46	41	50	22	-
(M33)	50	46	-		
M36	55	50	-	27	-
(M39)	60	55	-		
M42	65	-	-	32	-
JIS	JIS B 1180	JIS B 1180	JIS B 1186	JIS B 1176	JIS B 1177

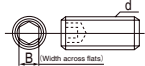
Hex Bolt



Cap Screw



Set Screw



HOW TO ORDER :

Indicate the model name and catalog No.

EX. MODEL NAME CATALOG No.
⊕ BIT A 0 104
Root Shape Sign Point Shape Sign

⊕ Size of Bits

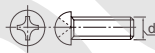


Table A

No. of Cross Nominal Size of Screw (d)	Hole No.	Remark
M1.6, M2	#0 (S-0)	Pan head screw, Flat head screw, Pan flat screw, Blind screw [(M) #1 is bind small screw only]
[M2], (M2.2), M2.5, (M3)	#1 (H-1)	
M3, (M3.5), M4, (M4.5), M5	#2 (H-2)	[(M2) #1 is not compliant with ISO]
M6	#3 (H-3)	
M8, M10	#4 (H-4)	

Flat Head Screw

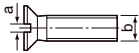


Table B

	Nominal Size (b)	M1	M1.2	(M1.4)	M1.6	M(1.7)	M2	(M2.2)	M2.3	M2.5	(M2.6)	M3	(M3.5)	M4	(M4.5)	M5	M6	M8	M10	
Groove Width (a)	ISO Screws				0.4		0.5				0.6		0.8	1	1.2		1.2	1.6	2	2.5
	Non-ISO screws	0.32			0.4		0.6					0.8	1			1.2		1.6		

Tool Kits

ชุดเครื่องมือ

Pliers

คีม

Electrician Tool

เครื่องมือสำหรับ
อิเล็กทรอนิกส์
และช่างไฟ

Gear Puller

เพลาดูด

Adjustable Wrench

ประแจเลื่อน

Wrench

ประแจ

Torque Wrench

เกจบิด

Socket Wrench

ลูกบิด

Screwdriver

ไขควง

Bits

ไขควง

Torque

Screwdriver

ไขควงทอร์ค

For Assembly

สำหรับงานทั่วไป

For Quality

Inspection

สำหรับการตรวจสอบ

Tension Gauge

เกจวัดแรงดึง-ดัน

Torque Tester

เครื่องวัดแรงบิด

TORQUE WRENCH

ประแจขันปอนด์

EGA Master
ART IN INNOVATION
BE SAFE...BE EFFICIENT

ไขควงทอร์ค

ANALOGIC TORQUE SCREWDRIVER



Tool Kits
ชุดเครื่องมือ

Pliers
คีม

Electrician Tool

เครื่องมือสำหรับ
อิเล็กทรอนิกส์
และช่างไฟ

Gear Puller
เหล็กดูด

Adjustable
Wrench
ประแจเลื่อน

Wrench
ประแจ

Torque Wrench
เกจบล็อค

Socket Wrench
ลูกบ็อก

Screwdriver
ไขควง

Bits
ไขควง

Torque
Screwdriver
ไขควงทอร์ค

For Assembly
สำหรับงานทั่วไป

For Quality
Inspection
สำหรับการตรวจสอบ

Tension Gauge
เกจวัดแรงดึง-ดัน

Torque Tester
เครื่องวัดแรงบิด

ไขควงทอร์คชุด

ANALOGIC TORQUE SCREWDRIVER SET



Order No.		Weight (g)			
66845		550			
PCS.	Description				L (mm)
1	Screwdriver	Code. 66873			180
5	Bits	3, 4, 5, 6, 8 mm			25
5	Bits	3, 4, 5.5, 6.5, 7 mm			25
4	Bits	PH0 - PH1 - PH2 - PH3			25
4	Bits	S1 - S2 - S3 - S4			25
2	Bits	PZ1 - PZ2			25
6	Bits	T10 - T15 - T20 - T25 - T30 - T40			25
1	Adapter	1/4", 60mm			60
1	Adapter	1/4", 25mm			25



ประแจปอนด์ด้ามไขควง

LTDK CLUTCH RELEASE TORQUE SCREW DRIVERS

Clutch release prevents over-tightening, reduces fatigue.

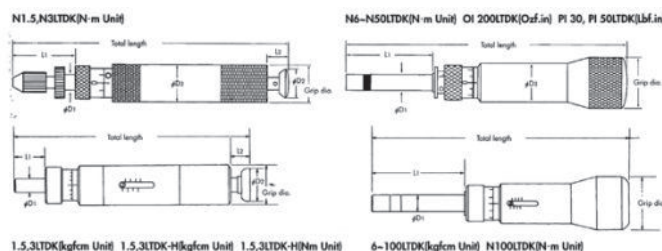


FEATURES

- Comfortable grip for extended use.
- Light weight and short overall length facilitates jobs.
- Sensitive clutch release helps the operator feel when the torque setting is reached.
- Set the required torque value and tighten, all operators tighten consistently.
- Two phillips bit are included.
- Various hex and box drive bits are available.
- Use for clockwise tightening.
- Accuracy : $\pm 3\%$ of indicated value over the full range, clockwise.
- "H" models accept standard bits instead of CB type bits.

USING AN LTDK DRIVER

- (1) Select and mount a bit to match the fastener.
- (2) Rotate the adjusting ring and set the desired torque.
- (3) Tighten the fastener clock-wise until the clutch releases and there is no more resistance.



Order No. (cN•m/N•m)	Old Model (cN•m/N•m)	Range	Increment	Order No. (ozf•in/ lbf•in)	Range	Incre- ment	Grip dia.	Total length (without bit)	Dimensions (mm)						Weight	Included Accessory		
									Body							Bits		Extension Bar
		cN•m / N•m			ozf•in/lbf•in	Ømm	mm	L1	L2	ØD1	ØD2	ØD3	g	Phillips	Bit type			
CN15LTDK	N1.5LTDK	1~15 cN•m	0.1 cN•m				16	107	22	10.5	5.5	14.5	15.5	57	No.0	KANON bits		
CN30LTDK	N3LTDK	2~30 cN•m	0.2 cN•m												No.1	CB type		
CN60LTDK	N6LTDK	5~60 cN•m	0.5 cN•m				25	110	26				20	99				
CN120LTDK	N12LTDK	20~20 cN•m	1 cN•m	OI 200LTDK	40~20 ozf•in	1	30							192	No.0	Standard bits SB Type		
CN200LTDK	N20LTDK	40~200 cN•m	1 cN•m					157	51		10		25		No.1			
CN300LTDK	N30LTDK	40~300 cN•m	1 cN•m	PI 30LTDK	4~30 lbf•in	0.1	34							214	No.1			
CN500LTDK	N50LTDK	100~500 cN•m	2.5 cN•m	PI 50LTDK	10~50 lbf•in	0.25	40	200	63				34	436	No.2			
N10LTDK	N100LTDK	4~10 N•m	0.05 N•m				45	235	100		11		35	762	No.2,No.3		Included	
CN15LTDK-H	N1.5LTDK-H	1~15 cN•m	0.1 cN•m												No.0			
CN30LTDK-H	N3LTDK-H	2~30 cN•m	0.2 cN•m				16	111	26	10.5	10	14.4	15.5	60	No.1			

Order No. (kgf·cm)	Range	Increment	Grip dia.	Total length (without bit)	Dimensions (mm)					Weight	Included Accessory		
					Body						Bits		Extension Bar
	kgf·cm / cN·m	Ømm	mm	L1	L2	ØD1	ØD2	ØD3	g	Phillips	Bit type		
1.5LTDK	0.1~1.5 kgf·cm	0.01 kgf·cm	16	99	14	10.5	5.5	14.5	15.5	50	No.0	KANON bits	
3LTDK	0.2~3 kgf·cm	0.02 kgf·cm									No.1	CB type	
6LTDK	0.5~6 kgf·cm	0.05 kgf·cm	25	110	35				20	95	No.0	Standard bits SB Type	
12LTDK	2~12 kgf·cm	0.1 kgf·cm	30						190		No.1		
20LTDK	4~20 kgf·cm	0.1 kgf·cm	34	157	57		10		25	208	No.1		
30LTDK	4~30 kgf·cm	0.1 kgf·cm									No.2		
50LTDK	10~50 kgf·cm	0.25 kgf·cm	40	200	73				34	436	No.2, No.3		
100LTDK	40~00 kgf·cm	0.5 kgf·cm	45	235	100		11		35	762	No.0		Included
1.5LTDK-H	0.1~1.5 cN·m	0.01 cN·m									No.0		
3LTDK-H	0.2~3 cN·m	0.02 cN·m	16	111	26	10.5	10	14.4	15.5	60	No.1		

Tool Kits

ชุดเครื่องมือ

Pliers

คีม

Electrician Tool

เครื่องมือสำหรับ
อิเล็กทรอนิกส์
และช่างไฟ

Gear Puller

เพลาถอด

Adjustable Wrench

ประแจเลื่อน

Wrench

ประแจ

Torque Wrench

เกจบิด

Socket Wrench

ลูกบ็อก

Screwdriver

ไขควง

Bits

ไขควง

Torque Screwdriver

ไขควงทอร์ค

For Assembly

สำหรับงานทั่วไป

For Quality Inspection

สำหรับการตรวจสอบ

Tension Gauge

เกจวัดแรงดึง-ดัน

Torque Tester

เครื่องวัดแรงบิด

TORQUE WRENCH

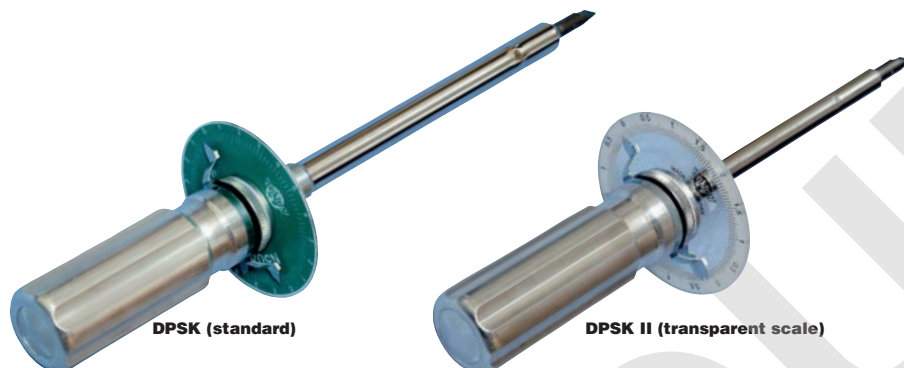
ประแจขันปอนด์



ประแจปอนด์แบบเข็มด้ามไขควง

DPSK DIAL GAUGE TORQUE DRIVERS

Suited for light torque, general tightening work, inspections. Easy to handle, easy to read scale.



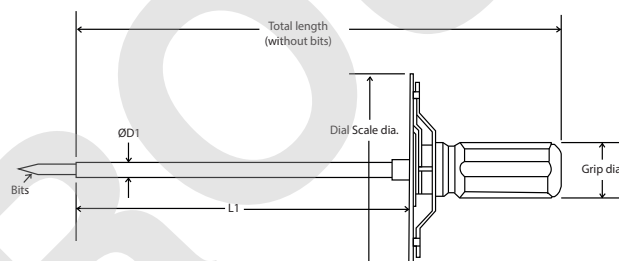
FEATURES

DPSK (standard)

- A light torque driver well suited for general tightening, inspections and break tests.
- Easy handling with a direct reading dial gauge.
- Use for both clockwise and counterclockwise tightening.
- Peak torque indicator works in both directions, too.
- Large, easily read dial gauge.

DPSK II (transparent scale)

- The transparent scale makes engaging the fastener easier.
- For both models, accuracy : $\pm 3\%$ of indicated value over the full range.



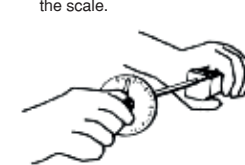
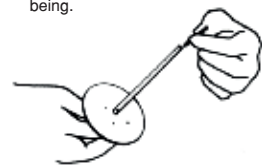
USING AN LTDK DRIVER

(1) Mount a bit matching the fastener being.

(2) Loosen the peak indicator ring.

(3) Set the peak indicator to 0.

(4) Tighten the fastener while observing the scale.



Order No. (kgf•cm)	Range	Increment	Order No. (cN•m/N•m)	Old Model (cN•m/N•m)	Range (CW/CCW)	Increment	Dial dia.	Grip dia.	Total length (without bit)	Dimensions (mm)		Weight	Included Accessory			
	kgf•cm	cN•m/N•m			0mm	0mm				mm	Driver shaft(mm)		Bits			
											L1		ØD	kg	Phillips	Bit type
1DPSK-H	0.2~1	0.025	CN 10DPSK-H	N 1DPSK	2~10 cN•m	0.25 cN•m	78			217	152	0.075	No.0	KANON		
2DPSK-H	0.5~2	0.05	CN 20DPSK-H	N 2DPSK	5~20 cN•m	0.5 cN•m				195	130				6	bits
5DPSK-H	1~5	0.2	CN 50DPSK-H	N 5DPSK	10~50 cN•m	2 cN•m				208	143					
10DPSK	2~10	0.2	CN 100DPSK	N 10DPSK	20~100 cN•m	2 cN•m				33	222			0.33		
20DPSK	5~20	0.5	CN 200DPSK	N 20DPSK	0.5~2 N•m	0.05 cN•m					242		130	12		
50DPSK	10~50	2	CN 500DPSK	N 50DPSK	1~5 N•m	0.2 cN•m	36	300	188		14	0.47	No.1	Standard bits SB type		
10DPSK(II)	2~10	0.2	CN 100DPSK-L	N 10DPSK(II)	20~100 cN•m	2 cN•m		78	33	222	130	12	0.29		No.2	
20DPSK(II)	5~20	0.5	CN 200DPSK-L	N 20DPSK(II)	0.5~2 N•m	0.05 cN•m				242		0.32				
50DPSK(II)	10~50	2	CN 500DPSK-L	N 50DPSK(II)	1~5 N•m	0.2 cN•m				36	300	188	14	0.42		

Tension Gauge	เกจวัดแรงดึง-ดัน
Torque Tester	เครื่องวัดแรงบิด



ดอกไขควงสำหรับประแจปอนด์ด้ามไขควง BITS - BITS FOR TORQUE DRIVERS

Type	CB type (KANON original)	OB type (KANON original)	SB type (Standard)
Applicable driver	CN15,CN30LTDK CN15,CN30STDK	1.5LTDK,3LTDK	CN60,120,200,300,500LTDK,N10LTDK CN15,30LTDK-H,1.5,3LTDK-H 6,12,20,30,50,100LTDK CN60,120,200,300,500STDK,N10STDK 6,12,20,30,50,100STDK CN100,200,500DPSK,CN100,200,500DPSK-L 10,20,50DPSK,10,20,50DPSK-II CN10,20,50DPSK-H,1,2,5DPSK-H
Phillips	CB+ Bit No.00 CB+ Bit No.0	OB+ Bit No.00 OB+ Bit No.0 OB+ Bit No.1 OB+ Bit No.2	SB+ Bit No.0 SB+ Bit No.1 SB+ Bit No.2 SB+ Bit No.3
Slot Drive	CB-Bit 0.4×3.5	OB-Bit 0.4×3.5	SB-Bit 0.4 ×4.0 SB-Bit 1.0 ×7.0
BOX BITS (Female type)	Width of across flat (mm) CB BOX BIT 3 CB BOX BIT 4 CB BOX BIT 5 CB BOX BIT 5.5 CB BOX BIT 6	Width of across flat (mm) OB BOX BIT 3 OB BOX BIT 4 OB BOX BIT 5 OB BOX BIT 5.5 OB BOX BIT 6	Width across flats Width of across flat (mm) Width of across flat (mm) SB BOX BIT 4 SB BOX BIT 10 SB BOX BIT 5 SB BOX BIT 12 SB BOX BIT 5.5 SB BOX BIT 13 SB BOX BIT 6 SB BOX BIT 14 SB BOX BIT 7 SB BOX BIT 8
HEX BITS (Male type)	H (mm) CB HEX BIT 1.27 CB HEX BIT 1.5 CB HEX BIT 2 CB HEX BIT 2.5 CB HEX BIT 3	H (mm) OB HEX BIT 1.27 OB HEX BIT 1.5 OB HEX BIT 2 OB HEX BIT 2.5 OB HEX BIT 3	H (mm) H (mm) SB HEX BIT 1.27 SB HEX BIT 4 SB HEX BIT 1.5 SB HEX BIT 5 SB HEX BIT 2 SB HEX BIT 6 SB HEX BIT 2.5 SB HEX BIT 8 SB HEX BIT 3

Tool Kits

ชุดเครื่องมือ

Pliers

คีม

Electrician Tool

เครื่องมือสำหรับ
อิเล็กทรอนิกส์
และช่างไฟ

Gear Puller

เพลาถอด

Adjustable Wrench

ประแจเลื่อน

Wrench

ประแจ

Torque Wrench

เกจบลีควง

Socket Wrench

ลูกบ็อก

Screwdriver

ไขควง

Bits

ไขควง

Torque Screwdriver

ไขควงทอร์ก

For Assembly

สำหรับงานทั่วไป

For Quality Inspection

สำหรับการตรวจสอบ

Tension Gauge

เกจวัดแรงดึง-ดัน

Torque Tester

เครื่องวัดแรงบิด

TORQUE WRENCH

ประแจขันปอนด์

CEDAR®

ประแจวัดแรงบิด

DIGITAL TORQUE DRIVER - NDID-150CN

For tightening and final check of screws & bolts

Idling type Digital Torque Driver

Idling type Torque Driver which enable to count Qty of Torque and tightened number by tightening with clicking noise.

When the torque is reached certain value, the clutch is automatically disengaged and idling, so there is no worry of over tightening.

- Enable to adjust Drag torque
- Manage tightening torque and Qty of tightened torque
- Record data of peak torque and torque fluctuation
- Save and transfer data to USB memory
- A smart and functional form
- Attached USB Memory



Order No.	NDID-150CN		
Range	0.20 ~ 15.30 kgf•cm 0.18 ~ 13.28 lbf•in 0.020 ~ 1.500N•m (Selectable)		
Accuracy(*)	+/- (1% + 1digit) (0.30 - 15.0 kgf•cm)		
Operation Temp	10 ~ 35 °C (Storage Temp 0 ~ 45 °C)		
Measurement mode	Mode		Contents
	Screw Counter	PPC	When the grip slip, measure the peak torque. Manage the tightened number at the “CLEAR” timing.
	Peak hold	PP	Measure the peak torque.
	Real Time Output	C	After trigger detection (direction, torque), save 500 data.
	Track	-	Display the load torque
Memory Function	Mode		Contents
	Screw Counter	PPC	USB flash memory
	Peak hold	PP	Body (MAX. 400 data)
	Real Time Output	C	USB flash memory
	Track	-	Non
Battery	Ni-MH Charge cycles : over 300 times (Time : about 3 hours)		
Auto power off	3 minutes (Releasable)		
Accessories	AC adapter Bit #1,2 Hex erwnch USB memory Certification of calibration		

(*) Don't include the accuracy of the torque which GRIP-slip rotates.

TORQUE WRENCH
ประแจขันปอนด์

Tool Kits

ชุดเครื่องมือ

Pliers

คีม

Electrician Tool

เครื่องมือสำหรับ
อิเล็กทรอนิกส์
และช่างไฟ

Gear Puller

เหล็กดูด

Adjustable Wrench

ประแจเลื่อน

Wrench

ประแจ

Torque Wrench

เกจบิด

Socket Wrench

ลูกบ็อก

Screwdriver

ไขควง

Bits

ไขควง

Torque Screwdriver

ไขควงทอร์ก

For Assembly

สำหรับงานทั่วไป

For Quality Inspection

สำหรับการตรวจสอบ

Tension Gauge

เกจวัดแรงดึง-ดัน

Torque Tester

เครื่องวัดแรงบิด

TORQUE WRENCH

ประแจขันปอนด์

CEDAR®

TORQUE WRENCH
ประแจขันปอนด์

ประแจวัดแรงบิด

DIGITAL TORQUE DRIVER - DID-4



For tightening and final check of screws & bolts

Lightweight and compact with integrated display !

Cordless type and improves operability. Enable to stably measure for long continuous use.

Screw tightening counter function is also installed as standard.

Enable to save 5 channels of pass/fail judgement criterion, and enable to change settings easily by switch channels even if the tightening term changes.

- Lightweight and compact with integrated display
- 800 items of Memory data
- USB shape of Data output
- Settable upper limit and lower limit torque
- Notify the set value with buzzer & LED lamp
- Built-in tightening counter
- Rechargeable battery drive
- Auto power off for safe operation
- Real time data output
- Cordless type



Tool Kits

ชุดเครื่องมือ

Pliers

คีม

Electrician Tool

เครื่องมือสำหรับ
อิเล็กทรอนิกส์
และช่างไฟ

Gear Puller

เพลาชักดูด

Adjustable

Wrench

ประแจเลื่อน

Wrench

ประแจ

Torque Wrench

เกจแรงบิด

Socket Wrench

ลูกบ็อก

Screwdriver

ไขควง

Bits

ไขควง

Torque

Screwdriver

ไขควงทอร์ค

For Assembly

สำหรับงานทั่วไป

For Quality

Inspection

สำหรับการตรวจสอบ

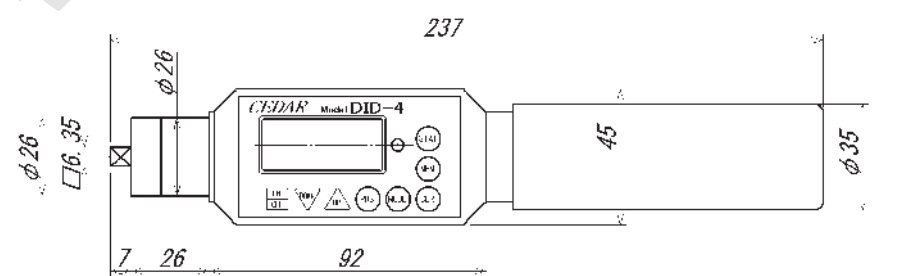
Tension Gauge

เกจวัดแรงดึง-ดัน

Torque Tester

เครื่องวัดแรงบิด

Order No.	DID-4
Measuring range	0.020 ~ 4 N·m 0.20 ~ 40 kgf·cm 0.20 ~ 35 lbf·in
Accuracy	±0.5% (499 digit or less ±3digit)
Display	The 4 figures digital display of LCD
The measurement direction	CW - CCW (right and left)
Measurement Mode	PP peak to peak The highest value of load is hold-displayed.
	TR track A display also changes with load change.
	PD peak-down Load catches and displays the moment included in descent from a rise.
	C Real-time Output Load torque value is outputted every about 1/160 second.
A success or failure judging function	High and low value are measurement within the limits, and can be set up. Five-set preservation is possible.
The Maximum, minimum, and the average value	The data number, the maximum, the minimum value, and the average value of memoty data are displayed.
Data memory counts	800 data
Data output	ASCII format (baud rate 19200)
auto clear time	If the set-up time comes, measurement value will be automatically cleared in 0.0 ~ 3.0 seconds (0.5s interval).
Setup of count	1 to 99 count (count in a clockwise direction)
Power supply	Ni-MH chargeable battery 1.2V x 4 cells 800 mAh
Charge time / use time	Charge about 3 hour / , continuation about 12-hour use
Auto-power-off	After the neglect during 10 minutes
Bit / Socket part	HEX 6.35
Weight	400g
Accessories (one piece each)	Bit #1+, #2+
	Bit holder One way bit holder
	Exclusive charger
	Result of calibration document Certification on calibration document / Traceability system figure
Option	When outputting data, the cable (USB miniB) is needed.



Outside - dimension

TORQUE WRENCH

ประแจขันปอนด์

CEDAR®

ประแจวัดแรงบิด

DIGITAL TORQUE DRIVER - DID-05

For tightening and final check of screws & bolts

Lightweight and compact with integrated display !

For checking torque of the small screw of M0.8 ~ M2.0. Checking the starting torque of the rotating body such as volume & hinge.

In order to reduce the influence of the pressing force, the weight of the main unit was minimized to about 180.

Screw tightening counter function is also standard installed.

Enable to save 5 channels of pass/fail judgement criterion, and enable to change settings easily by switch channels even if the tightening term changes.

- Lightweight and compact with integrated display
- 800 items of Memory data
- USB shape of Data output
- Settable upper limit and lower limit torque
- Notify the set value with buzzer & LED lamp
- Built-in tightening counter
- Rechargeable battery drive
- Auto power off safe operation
- Real time data output
- Cordless type
- Roller clutch has adopted and able to fast-forward in a right direction (screw tightening)



Order No.	DID-05
Measuring range	2.0 ~ 500 mN·m 0.020 ~ 5 kgf·cm 0.020 ~ 4.5 lbf·in
Accuracy	±0.5% (499 digit or less ±3digit)
Display	The 4 figures digital display of LCD
The measurement direction	CW - CCW (right and left)
Measurement Mode	PP peak to peak The highest value of load is hold-displayed.
	TR track A display also changes with load change.
	PD peak-down Load catches and displays the moment included in descent from a rise.
	C Real-time Output Load torque value is outputted every about 1/160 second.
A success or failure judging function	High and low value are measurement within the limits, and can be set up. Five-set preservation is possible.
The Maximum, minimum, and the average value	The data number, the maximum, the minimum value, and the average value of memory data are displayed.
Data memory counts	800 data
Data output	ASCII format (baud rate 19200)
auto clear time	If the set-up time comes, measurement value will be automatically cleared in 0.0 ~ 3.0 seconds (0.5s interval).
Setup of count	1 to 99 count (count in a clockwise direction)
Power supply	Ni-MH chargeable battery 650 mAh
Charge time / use time	Charge about 3 hour /, continuation about 12-hour use
Auto-power-off	After the neglect during 10 minutes
Bit / Socket part	● Ø4
Weight	180g
Accessories (one piece each)	● Ø4 Bit+ #1 (For one-way x1 For fixation x1)
	Exclusive charger
	Result of calibration document Certification on calibration document / Traceability system figure
Option	When outputting data, the cable (USB miniB) is needed.

Outside - dimension	m/m

TORQUE WRENCH

ประแจขันปอนด์



TORQUE WRENCH
ประแจขันปอนด์

ประแจขันปอนด์

QL/QL2 - RATCHET HEAD TYPE ADJUSTABLE TORQUE WRENCH

ASSEMBLY | ADJUSTABLE | RATCHET HEAD | GRADUATION | ISO6789:2003, 2017

- Basic adjustable click style with resin grip
- Torque value easily set with external scale and knob.



QL/QL-MH Optional Accessories



Tool Kits

ชุดเครื่องมือ

Pliers

คีม

Electrician Tool

เครื่องมือสำหรับ
อิเล็กทรอนิกส์
และช่างไฟ

Gear Puller

เหล็กดูด

Adjustable

Wrench

ประแจเลื่อน

Wrench

ประแจ

Torque Wrench

เกจบิด

Socket Wrench

ลูกบ็อก

Screwdriver

ไขควง

Bits

ไขควง

Torque

Screwdriver

ไขควงทอร์ค

For Assembly

สำหรับงานทั่วไป

For Quality

Inspection

สำหรับการตรวจสอบ

Tension Gauge

เกจวัดแรงดึง-ดัน

Torque Tester

เครื่องวัดแรงบิด

Accuracy ±3%

Carrying Case

Part #	Applicable Model Dimension [mm]
842	QL50N, QL50N-MH, QL100N4-MH H60xW400xD70
843	QL140N, QL140N-MH, QL200N4, QL200N4-MH H60xW520xD80
846	QL140N, QL140N-MH and below H170xW500xD100
847	QL280N, QL280N-MH and below H170xW740xD100

Color Cap



Part #	Color	Applicable Model
879	Red	QL2N, QL5N
880	Blue	QL10N, QL15N,
881	Green	QL25N5-1/4
882	Black	QL25N5

Protection Cover for Ratchet Heads



Part #	Applicable Model
870	QL2N(-MH) - 15N(-MH)
871	QL25N5, QL25N-MH
872	QL50N(-MH)
873	QL100N4(-MH)
874	QL140N(-MH)
875	QL200N4(-MH)
877	QL280N(-MH)
878	QSP420N

S.I. Order No.	Torque Range [cN·m]		Metric Order No.	Torque Range [kgf·cm/ kgf·m]		American Order No.	Torque Range [ozf·in/lbf·in]		Overall Length [mm]	Square Drive [mm]	Weight [kg]
	Min.- Max.	Grad.		Min.- Max.	Grad.		Min.- Max.	Grad.			
QL2N	0.4-2	0.02	20QL	4-20	0.2	QL15I-2A	3-15	0.1	194	6.35	0.27
QL5N	1-5	0.05	50QL	10-50	0.5	QL30I-2A	6-30	0.2	194	6.35	0.27
QL10N	2-10	0.1	100QL	20-100	1	QL50I-2A	10-50	0.5	219	6.35	0.29
QL15N	3-15	0.1	150QL	30-150	1	QL100I-2A	20-10	1	219	6.35	0.29
QL25N5-1/4	5-25	0.2	225QL5-1/4	50-250	2.5	QL200I-2A	40-200	2.5	237	6.35	0.33
QL25N5	5-25	0.2	225QL5	50-250	2.5	QL200I-3A	40-200	2.5	237	9.53	0.33
QL50N	10-50	0.5	450QL3	100-500	5	QL400I-3A	100-400	5	260	9.53	0.45
-	-	-	-	-	-	QL750I-3A	150-750	10	335	9.53	0.69
							lbf·ft	lbf·ft			
QL100N4-3/8	20-100	1	900QL4-3/8	200-100	10	QL75F-3A	15-75	1	335	9.53	0.69
QL100N4	20-100	1	900QL4	200-100	10	-	-	-	335	12.7	0.69
QL140N	30-140	1	1400QL3	300-1400	10	QL100F-4A	30-100	1	400	12.7	0.88
QL200N4	40-200	2	1800QL4	400-2000	20	QL150F-4A	30-150	2	490	12.7	1.4
				kgf·m	kgf·m						
QL280N-1/2	40-280	2	2800QL3-1/2	4-28	0.2	QL200F-4A	30-210	2	695	12.7	2.0
QL280N	40-280	2	2800QL3	4-28	0.2	-	-	-	695	19.05	2.0
QL420N	60-420	2	4200QL2	6-42	0.2	QL300F-6A	60-300	2	995	19.05	3.4
QLE2	N·m	N·m		kgf·m	kgf·m		lbf·ft	lbf·ft			
QLE550N2	100-550	5	5500QLE2	10-55	0.5	QLE400F-6A	100-400	5	1189	19.05	4.3
QLE750N2	150-750	5	7500QLE2	15-75	0.5	QLE600F-6A	150-600	5	1342	19.05	5.6
QLE1000N2	200-100	5	10000QLE2	20-100	0.5	QLE700F-8A	200-700	5	1515	25.4	7.7
QLE1400N2	300-1400	10	14000QLE2	30-140	1	QLE1000F-8A	300-1000	10	1787	25.4	11.1
QLE2100N2	500-2100	10	21000QLE2	50-210	1	QLE1500F-8A	500-1500	10	1895	25.4	14.6
QLE2800N2	800-2800	20	28000QLE2	80-280	2	QLE2000F-12A	600-2000	20	2405	38.1	23.7

- Note. 1. QL2N-QL25N5 are yellow/black resin grip. QL50N-QL280N are black resin grips.
2. QL420N and QLE550N2-QLE2800N2 are knurled handles.
3. Use a through-hole socket for square drive over 25.4mm.
4. QL2N, QL5N and the equivalent metric models, American models comes with ISO:6789-2003 cert.

QLLS

- CL style with Limit Switch output
- Wired Error-Proofing, Pokayoke, system for assembly processes

S.I. Order No.	Metric Order No.
QLMS2N-MH	20QLMS-MH
QLMS5N-MH	50QLMS-MH
QLMS10N-MH	100QLMS-MH
QLMS10N	100QLMS
QLMS15N	150QLMS
QLMS15N-MH	150QLMS-MH
QLLS25N5	225QL3LS
QLLS50N	450QL3LS
QLLS50N	500QL3LS
QLLS100N	900QL3LS
QLLS140N	1400QL3LS
QLLS200N	1800QL3LS
QLLS280N	2800QL3LS
QLLS420N	4200QL2LS



QLLS100N4

PAKA Patrol, Count Checker
CNA-4mk3

*Sold separately



TORQUE WRENCH

ประแจขันปอนด์



ประแจขันปอนด์

QL-MH - RATCHET HEAD TYPE ADJUSTABLE TORQUE WRENCH WITH METAL HANDLE

ASSEMBLY | ADJUSTABLE | RATCHET HEAD | GRADUATION | ISO6789:2003, 2017

- Knurled metal handle version of QL
- Ideal for oily working conditions



QL100N4-MH



QL5N-MH

Accuracy ±3%

S.I. Order No.	Torque Range [N·m]		Metric Order No.	Torque Range [kgf·cm/kgf·m]		American Order No.	Torque Range [lbf·in]		Overall Length [mm]	Square Drive [mm]	Weight kg
	Min.-Max.	Grad.		Min.-Max.	Grad.		Min.-Max.	Grad.			
QL2N-MH	0.4-2.0	0.02	20QL-MH	4-20	0.2	QL15I-2A-MH	3-15	0.1	160	6.35	0.16
QL5N-MH	1-5	0.05	50QL-MH	10-50	0.5	QL30I-2A-MH	6-30	0.2	160	6.35	0.16
QL10N-MH	2-10	0.1	100QL-MH	20-100	1	QL50I-2A-MH	10-50	0.5	195	6.35	0.19
QL15N-MH	3-15	0.1	150QL-MH	30-150	1	QL100I-2A-MH	20-100	1	195	6.35	0.19
QL25N-MH	5-25	0.25	225QL-MH	50-250	2.5	-	-	-	230	9.53	0.25
QL50N-MH	10-50	0.5	450QL-MH	100-500	5	-	-	-	260	9.53	0.45
QL100N4-MH	20-100	1	900QL4-MH	200-1000	10	-	-	-	335	12.7	0.69
QL140N-MH	30-140	1	1400QL-MH	300-1400	10	-	-	-	400	12.7	0.88
QL200N4-MH	40-200	2	1800QL4-MH	400-2000	20	-	-	-	490	12.7	1.4
QL280N-MH	40-280	2	2800QL-MH	4-28	0.2	-	-	-	695	19.05	1.9

Note. 1. QL2N-MH, QL5N-MH and the equivalent metric models, American models comes with ISO:6789-2003 cert.

ประแจขันปอนด์

CL/CLE2 - INTERCHANGEABLE HEAD TYPE ADJUSTABLE TORQUE WRENCH

ASSEMBLY | ADJUSTABLE | INTERCHANGEABLE | GRADUATION | RATCHET | ISO6789:2003, 2017

- Interchangeable Head can be easily exchanged.
- Torque value easily set with external scale and knob.



CL2N x 8D

CLE850N x 32D

CL100N x 15D

Accuracy ±3%

Head Size	S.I. Order No.	Torque Range [cN·m]		Metric Order No.	Torque Range [kgf·cm/ kgf·m]		American Order No.	Torque Range [ozf·in/lbf·in]		Overall Length [mm]	Weight kg
		Min.- Max.	Grad.		Min.- Max.	Grad.		Min.- Max.	Grad.		
8D	CL	N·m	N·m		kgf·cm	kgf·cm		lbf·in	lbf·in		
	CL2N x 8D	0.4-2	0.02	20CL	4-20	0.2	CL15I x 8D	3-15	0.1	174	0.24
	CL5N x 8D	1-5	0.05	50CL	10-50	0.5	CL30I x 8D	6-30	0.2		
	CL10N x 8D	2-10	0.1	100CL	20-100	1	CL50I x 8D	10-50	0.5	199	0.26
10D	CL15N x 8D	3-15	0.1	150CL	30-150	1	CL100I x 8D	20-100	1		
	CL25N5 x 10D	5-25	0.2	225CL5	50-250	2.5	CL200I x 10D	40-200	2.5	216	0.3
	CL50N x 12D	10-50	0.5	450CL3	100-500	5	450CL3-A	100-400	5	230	0.37
	CL50N x 15D			500CL3			500CL3-A	100-450		235	
15D	CL100N x 15D	20-100		900CL3	200-100		900CL3-A	200-800	10	310	0.52
			1			10		lbf·ft	lbf·ft		
	CL140N x 15D	30-140		1400CL3	300-1400		1400CL3-A	30-100	1	370	0.67
	CL200N x 19D	40-200		1800CL3	400-2000	20	1800CL3-A	30-150		455	1.2
22D					kgf·m	kgf·m					
	CL280N x 22D	40-280	2	2800CL3	4-28		2800CL3-A	30-200	2	655	1.8
	CL420N x 22D	60-420		4200CL2	6-42	0.2	4200CL2-A	60-300		940	3.1
	CLE2	N·m	N·m		kgf·m	kgf·m		lbf·ft	lbf·ft		
27D	CLE550N2 x 27D	100-550		5500CLE2	10-55		CLE400F x 27D	100-400		1148	3.9
	CLE750N2 x 27D	150-750		7500CLE2	15-75		CLE550F x 27D	150-550		1291	4.9
			5			0.5			5		
	CLE850N2 x 32D	200-850		8500CLE2	20-85		CLE600F x 32D	150-600		1297	5.1
32D	CLE1200N2 x 32D	300-1200		12000CLE2	30-120		CLE900F x 32D	200-900		1464	6.9

Note. 1. Overall length does not include interchangeable head. Interchangeable heads are optional.

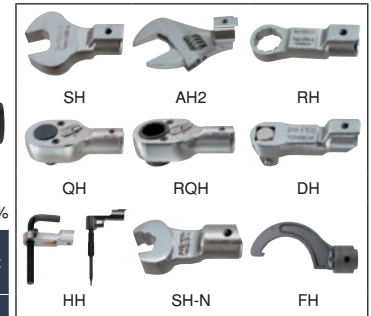
2. PH type interchangeable head/p.48 is not applicable.

3. CL2N - CL25N5 are yellow/black resin grips. CL50N - CL280N are black resin grips.

4. CL420N and CLE550N2-CLE1200N2 are knurled handles.

5. CL2N x 8D, CL5N x 8D and the equivalent metric models, American models comes with ISO:6789-2003 cert.

Interchangeable Head



CL/CL-MH Optional Accessories



Carrying Case

Part #	Applicable Model Dimension [mm]
842	CL50N x 12D / 15D, CL50N x 12D / 15D-MH, CL100N x 15D-MH, H60xW400xD70
843	CL140N x 15D / -MH, CL200N x 19D / -MH, H60xW520xD80
846	CL200N x 19D, CL200N x 19D and below, H170xW500xD100
847	CL280N x 22D, CL280N x 22D-MH and below, H170xW740xD100

TORQUE WRENCH

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TORQUE WRENCH
ประแจขันปอนด์

CLLS

- CL style with Limit Switch output
- Wired Error-Proofing, Pokayoke, system for assembly processes

S.I Order No.	Metric Order No.
CLMS2Nx8D-MH	20CLMS-MH
CLMS5Nx8D-MH	50CLMS-MH
CLMS10Nx8D-MH	100CLMS-MH
CLMS10Nx8D	100CLMS
CLMS15Nx8D	150CLMS
CLMS15Nx8D-MH	150CLMS-MH
CLLS25Nx10D	225CL5LS
CLLS50Nx12D	450CL3LS
CLLS50Nx15D	500CL3LS
CLLS100Nx15D	900CL3LS
CLLS140Nx15D	1400CL3LS
CLLS200Nx19D	1800CL3LS
CLLS280Nx22D	2800CL3LS
CLLS420Nx22D	4200CL2LS

Color Cap



Part #	Color	Applicable Model
842	Red	CL2Nx8D, CL5Nx8D
843	Blue	CL10Nx8D, CL15Nx8D
846	Green	CL25Nx10D
847	Black	

PAKA Patrol, Count Checker
CNA-4mk3

*Sold sepearately



Tool Kits

ชุดเครื่องมือ

Pliers

คีม

Electrician Tool

เครื่องมือสำหรับ
อิเล็กทรอนิกส์
และช่างไฟ

Gear Puller

เพลาชัก

Adjustable

Wrench

ประแจเลื่อน

Wrench

ประแจ

Torque Wrench

เกจบิด

Socket Wrench

ลูกบ็อก

Screwdriver

ไขควง

Bits

ไขควง

Torque

Screwdriver

ไขควงทอร์ค

For Assembly

สำหรับงานทั่วไป

For Quality

Inspection

สำหรับการตรวจสอบ

Tension Gauge

เกจวัดแรงดึง-ดัน

Torque Tester

เครื่องวัดแรงบิด

ประแจขันปอนด์

CL-MH

INTERCHANGEABLE HEAD TYPE ADJUSTABLE TORQUE WRENCH WITH METAL HANDLE

ASSEMBLY | ADJUSTABLE | INTERCHANGEABLE | GRADUATION | RATCHET | ISO6789:2003, 2017

- Knurled metal handle version of CL
- Ideal for oily working conditions



CL5Nx8D-MH



CL100Nx15D-MH

Accuracy ±3%

Head Size	S.I. Order No.	Torque Range [N·m]		Metric Order No.	Torque Range [kgf·cm/kgf·m]		American Order No.	Torque Range [lbf·in]		Overall Length [mm]	Weight [kg]
		Min.-Max.	Grad.		Min.-Max.	Grad.		Min.-Max.	Grad.		
8D	CL2Nx8D-MH	0.4-2	0.02	20CL-MH	4-20	0.2	CL15Ix8D-MH	3-15	0.1	140	0.13
	CL5Nx8D-MH	1-5	0.05	50CL-MH	10-50	0.5	CL30Ix8D-MH	6-30	0.2		
	CL10Nx8D-MH	2-10	0.1	100CL-MH	20-100	1	CL50Ix8D-MH	10-50	0.5	175	0.16
	CL15Nx8D-MH	3-15		150CL-MH	30-150		CL100Ix8D-MH	20-100	1		
10D	CL25Nx10D-MH	5-25	0.25	225CL-MH	50-250	2.5	-	-	-	200	0.22
12D	CL50Nx12D-MH	10-50	0.5	450CL-MH	100-500		-	-	-	230	
	CL50Nx15D-MH	10-50		500CL-MH	100-500	5	-	-	-	235	0.37
15D	CL100Nx15D-MH	20-100	1	900CL-MH	200-1000		-	-	-	310	0.52
	CL140Nx15D-MH	30-1400		1400CL-MH	300-1400	10	-	-	-	370	0.67
19D	CL200Nx19D-MH	40-200		1800CL-MH	400-2000	20	-	-	-	455	1.2
			2		kgf·m	kgf·m					
22D	CL280Nx22D-MH	40-280		2800CL-MH	4-28	0.2	-	-	-	655	1.6

- Note. 1. Overall length does not include interchangeable head.
2. PH type interchangeable head/p.48 is not applicable.
3. Interchangeable heads are option.
4. CL2Nx8D, CL5Nx8D and the equivalent metric models, American models comes with ISO:6789-2003 cret.

ประแจขันปอนด์

QSP-MH - RATCHET HEAD TYPE PRESET TORQUE WRENCH WITH METAL HANDLE

ASSEMBLY | PRESET | RATCHET HEAD | ISO6789:2003

- Knurled metal handle version of QSP
- Ideal for oily working conditions



QSP100N4-MH

Order No.	Torque Range			Overall Length [mm]	Square Drive [mm]	Accuracy ±3% Weight
	[N·m] Min.-Max.	[kgf·cm/kgf·m] Min.-Max.	[lbf·in] Min.-Max.			
QSP25N3-MH	5-25	50-250	45-221	215	9.5	0.25
QSP50N3-MH	10-50	100-500	89-442	240	9.5	0.4
QSP100N4-MH	20-100	200-1000	177-885	315	12.7	0.65
QSP140N3-MH	30-140	300-1400	266-1238	380	12.7	0.7

- Note. 1. A torque wrench tester is necessary for torque setting. Specify required set when you order. EX. QSP100N4-MH x 80N·m
2. Adjusting tools for QSP-MH are sold separately.
3. Sockets are sold separately.

Designed by JSR GROUP

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ห้ามนำไปเผยแพร่ก่อนได้รับอนุญาตจากทางบริษัท

TORQUE WRENCH

ประแจขันปอนด์



ประแจขันปอนด์

QSP - RATCHET HEAD TYPE PRESET TORQUE WRENCH

ASSEMBLY | PRESET | RATCHET HEAD | ISO6789.2003, 2017

- No external scale, torque set by a torque wrench tester
- Ideal for mass production application



QSP100N4

Order No.	Torque Range			Overall Length [mm]	Square Drive [mm]	Weight
	[N•m]	[kgf•cm/kgf•m]	[lbf•in]			
	Min.-Max.	Min.-Max.	Min.-Max.			kg
QSP1.5N4	0.3-1.5	3-15	2.7-13.2	165	6.35	0.16
QSP3N4	0.6-3	6-30	5.3-26.5	165	6.35	0.16
QSP6N4	1-6	10-60	8.9-53.0	165	6.35	0.19
QSP12N4	2-12	20-120	17.7-106	175	6.35	0.25
QSP25N3-1/4	5-25	50-250	45-221	215	6.35	0.25
QSP25N3	5-25	50-250	45-221	215	9.53	0.25
QSP50N3	10-50	100-500	89-442	240	9.53	0.4
QSP100N4-3/8	20-100	200-1000	177-885	315	9.53	0.65
QSP100N4	20-100	200-1000	177-885	315	12.7	0.65
QSP140N3	30-140	300-1400	266-1238	380	12.7	0.7
QSP200N4	40-200	400-2000	354-1769	465	12.7	1.2
		kgf•m				
QSP280N3-1/2	40-280	4-28	354-2477	665	12.7	1.8
QSP280N3	40-280	4-28	354-2477	665	19.05	1.8
QSP420N	60-420	6-42	531-3716	970	19.05	3.1

Note. 1. Adjusting tools are sold separately.
2. A torque wrench tester is necessary for torque setting. Specify required set when you order. EX. QSP100N4 x 80N•m
3. QSP200N4-QSP420N have knurled handles.
4. QSP1.5N4 and QSP3N4 are issued ISO:6789-2003 certificate when request initial torque setting.

QSP3/QSP-MH Optional Accessories



931
930



314

Adjusting Tool

Part #	Applicable Model Dimension [mm]
931	QSP1.5N4-12N4, QSP25N3/-MH
930	QSP50N3/-MH ~ 280N3/-MH QSP100N4/-MH, 200N4/-MH
314	QSP420N

Protection Cover for Ratchet Heads



Part #	Applicable Model
870	QSP1.5N4 - 12N4
871	QSP25N3(-MH)
872	QSP50N3(-MH)
873	QSP100N4(-MH)
874	QSP140N3(-MH)
875	QSP200N4
877	QSP280N3
878	QSP420N

ประแจขันปอนด์

BQSP - BI-DIRECTIONAL TYPE PRESET TORQUE WRENCH

ASSEMBLY | PRESET | RATCHET HEAD | BI-DIRECTIONAL | ISO6789:2017

- Click for both CW & CCW applications
- Same function of QSP



QSP100N4-MH

Accuracy ±3%

Order No.	Torque Range			Overall Length [mm]	Square Drive [mm]	Weight [kg]	Adjusting Tool Part #
	[N•m]	[kgf•cm/kgf•m]	[lbf•in]				
	Min.-Max.	Min.-Max.	Min.-Max.				
BQSP10N	5-10	50-100	44.3-88.5	213.5	6.35	0.2	931
BQSP20N	10-20	100-200	88.5-177	213.5	9.53	0.2	931
BQSP40N	20-40	200-400	177-354	240	9.53	0.4	930
BQSP70N	35-70	350-700	310-619	314	9.53	0.63	930
BQSP120N	60-120	600-1200	531-1061	380	12.7	0.73	930
BQSP220N	110-220	1100-2200	974-1946	462	12.7	1.3	930
		kgf•m					
BQSP300N	150-300	15-30	1328-2654	665	19.05	2.4	930
BQSP400N	200-420	20-42	1770-3716	970.5	19.05	3.7	314

Note. 1. BQSP10N-300N have resin grips.
2. BQSP400N has a knurled handle.
3. Adjusting tool is sold separately.
4. Sockets are sold separately.

QSP3/QSP-MH Optional Accessories



931
930



314

Adjusting Tool

Part #	Applicable Model Dimension [mm]
931	BQSP10N-20N
930	BQSP40-300N
314	BQSP400N

TORQUE WRENCH

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TORQUE WRENCH
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ประแจขันปอนด์

SP-SP2/-MH, RSP2/-MH - OPEN END / RING HEAD PRESET TORQUE WRENCH

ASSEMBLY | PRESET | OPEN END SPANNER | RATCHET HEAD | ISO6789:2017

- Various sizes of open end or ring heads fixed on wrench
- Ideal for specific bolt size application



SP38N2x10-MH



RSP38N2x14

Accuracy ±3%

Accuracy ±3%

Order No. (Body Size x Width)		Torque Range		Head Dimension O.W. x Thick- ness [mm]	Overall Length [mm]	Weight [kg]
SP2	SP2-MH	Min.-Max.	Min.-Max.			
SP2N2x5.5	-			17 x 5	168	
SP2N2x7	-			18 x 5	169	
SP2N2x8	-			19 x 5	171	
SP2N2x10	-			21 x 5	173	
SP2N2x12	-			23 x 5	175	
SP2N2x13	-			24 x 5	176	
SP2N2x17	-			27 x 5	180	
SP2N2x19	-			28 x 8	180	
SP8N2x7	-			18 x 5	169	
SP8N2x8	-			19 x 5	171	
SP8N2x9	-			20 x 5	172	
SP8N2x10	-			21 x 5	173	
SP8N2x12	-			23 x 5	175	
SP8N2x13	-			24 x 5	176	
SP8N2x19	-			28 x 8	180	
SP8N2x24	-			33 x 8	186	
SP8N2x27	-			36 x 8	189	
SP19N2x10	SP19N2x10-MH			27 x 6.5	202(202)	
SP19N2x11	SP19N2x11-MH			27 x 6.5	202(202)	
SP19N2x12	SP19N2x12-MH			30 x 6.5	203(204)	
SP19N2x13	SP19N2x13-MH			30 x 6.5	204(204)	
SP19N2x14	SP19N2x14-MH			30 x 6.5	204(205)	
SP19N2x17	SP19N2x17-MH			31 x 8	208(208)	
SP19N2x19	SP19N2x19-MH			33 x 8	209(210)	
SP19N2x21	SP19N2x21-MH			35 x 8	211(212)	
SP19N2-1x10	SP19N2-1x10-MH			24 x 12	205(205)	
SP19N2-2x10	SP19N2-2x10-MH			24 x 20	204(204)	
SP19N2-3x10	SP19N2-3x10-MH			24 x 15	205(205)	
SP38N2x8	SP38N2x8-MH			31 x 8	220(220)	
SP38N2x9	SP38N2x9-MH			31 x 8	222(221)	
SP38N2x10	SP38N2x10-MH			31 x 8	222(222)	
SP38N2x11	SP38N2x11-MH			35 x 8	222(223)	
SP38N2x12	SP38N2x12-MH			35 x 8	225(225)	
SP38N2x13	SP38N2x13-MH			35 x 8	225(225)	
SP38N2x14	SP38N2x14-MH			35 x 8	226(226)	
SP38N2x16	SP38N2x16-MH			38 x 8	230(230)	
SP38N2x17	SP38N2x17-MH			38 x 8	230(230)	
SP38N2x19	SP38N2x19-MH			38 x 8	231(231)	
SP38N2x22	SP38N2x22-MH			41 x 8	234(234)	
SP38N2x24	SP38N2x24-MH			43 x 8	236(236)	
SP38N2x27	SP38N2x27-MH			45 x 8	240(239)	
SP38N2-1x10	SP38N2-1x10-MH			24 x 12	221(221)	
SP38N2-2x10	SP38N2-2x10-MH			25 x 20	223(223)	
SP38N2-3x10	SP38N2-3x10-MH			24 x 15	221(221)	
SP67N2x14	SP67N2x14-MH			35 x 10	285(284)	
SP67N2x16	SP67N2x16-MH			37 x 10	287(286)	
SP67N2x17	SP67N2x17-MH			38 x 10	288(287)	
SP67N2x18	SP67N2x18-MH			39 x 10	289(287)	
SP67N2x19	SP67N2x19-MH			40 x 10	290(289)	
SP67N2x21	SP67N2x21-MH			42 x 10	292(291)	
SP67N2x22	SP67N2x22-MH			43 x 10	293(292)	
SP67N2x24	SP67N2x24-MH			44 x 11	299(298)	
SP67N2x27	SP67N2x27-MH			47 x 11	303(301)	
SP67N2x29	SP67N2x29-MH			49 x 11	304(303)	
SP67N2x30	SP67N2x30-MH			50 x 11	305(304)	
SP67N2x32	SP67N2x32-MH			52 x 11	307(306)	
SP67N2x33.3	SP67N2x33.3-MH			54 x 11	308(307)	
SP120N2x14	SP120N2x14-MH			42 x 10	360(359)	
SP120N2x17	SP120N2x17-MH			45 x 10	362(361)	
SP120N2x18	SP120N2x18-MH			46 x 10	364(364)	
SP120N2x19	SP120N2x19-MH			47 x 10	365(364)	
SP120N2x21	SP120N2x21-MH			50 x 10	368(367)	
SP120N2x22	SP120N2x22-MH			50 x 10	368(367)	

Order No. (Body Size x Width)		Torque Range		Head Dimension O.W. x Thick- ness [mm]	Overall Length [mm]	Weight [kg]
SP2	SP2-MH	Min.-Max.	Min.-Max.			
SP120N2x23	SP120N2x23-MH			51 x 11	369(368)	
SP120N2x24	SP120N2x24-MH			51 x 11	369(368)	
SP120N2x27	SP120N2x27-MH			53 x 12	370(369)	
SP120N2x30	SP120N2x30-MH			55 x 14	373(373)	
SP160N2x19	SP160N2x19-MH			50 x 10	368(367)	
SP160N2x21	SP160N2x21-MH			51 x 12	368(367)	
SP160N2x22	SP160N2x22-MH			52 x 12	368(367)	
SP160N2x24	SP160N2x24-MH			53 x 12	369(369)	
SP160N2x26	SP160N2x26-MH			55 x 12	373(373)	
SP160N2x27	SP160N2x27-MH			55 x 12	373(373)	
SP160N2x41	SP160N2x41-MH			70 x 14	386(386)	
SP220N2x19	SP220N2x19-MH			53 x 13	488(447)	
SP220N2x22	SP220N2x22-MH			56 x 13	451(450)	
SP220N2x24	SP220N2x24-MH			58 x 13	453(452)	
SP220N2x27	SP220N2x27-MH			61 x 13	456(455)	
SP220N2x29	SP220N2x29-MH			63 x 13	458(458)	
SP220N2x30	SP220N2x30-MH			63 x 13	460(460)	
SP220N2x32	SP220N2x32-MH			65 x 13	464(464)	
SP220N2x34	SP220N2x34-MH			67 x 15	463(463)	
SP220N2x36	SP220N2x36-MH			72 x 15	468(467)	
SP310N2x22	SP310N2x22-MH			60 x 14	647(646)	
SP310N2x24	SP310N2x24-MH			62 x 14	648(647)	
SP310N2x27	SP310N2x27-MH			65 x 14	651(650)	
SP310N2x30	SP310N2x30-MH			68 x 14	654(653)	
SP310N2x32	SP310N2x32-MH			70 x 14	655(654)	
SP310N2x41	SP310N2x41-MH			80 x 15	670(670)	
SP310N2x46	SP310N2x46-MH			85 x 15	671(671)	
SP420N2x27	-			78 x 18	840	
SP420N2x30	-			78 x 18	840	
SP420N2x32	-			78 x 18	840	
SP420N2x34	-			78 x 18	840	
SP420N2x35	-			78 x 18	840	
SP420N2x36	-			78 x 18	840	
SP560N2x30	-			81 x 19	995	
SP560N2x32	-			83 x 19	995	
SP560N2x36	-			87 x 19	100	
SP560N2x46	-			97 x 19	105	
SP560N2x55	-			104 x 19	1010	

Tool Kits
ชุดเครื่องมือ

Pliers
คีม

Electrician Tool

เครื่องมือสำหรับ
อิเล็กทรอนิกส์
และช่างไฟ

Gear Puller

เพลาชัก

Adjustable

Wrench
ประแจเลื่อน

Wrench

ประแจ

Torque Wrench

เกจบิด

Socket Wrench

ลูกบิด

Screwdriver

ไขควง

Bits

ไขควง

Torque

Screwdriver

ไขควงทอร์ค

For Assembly

สำหรับงานทั่วไป

For Quality

Inspection

สำหรับการตรวจสอบ

Tension Gauge

เกจวัดแรงดึง-ดัน

Torque Tester

เครื่องวัดแรงบิด

TORQUE WRENCH

ประแจขันปอนด์



Order No. (Body Size x Width)		Torque Range		Head Dimension O.W. x Thick- ness [mm]	Overall Length [mm]	Weight [kg]
		[N·m]	[kgf·cm]			
RSP2	RSP2-MH	Min.-Max.	Min.-Max.			
RSP8N2x8	-	2-9	20-90	15x6	200	0.15
RSP8N2x10	-	2-9	20-90	17.5x7	205	0.15
RSP19N2x8	RSP19N2x8-MH	4-14.1	40-141	15x6	220(220)	0.2
RSP19N2x10	RSP19N2x10-MH	4-21	40-210	17.5x7	221(221)	0.2
RSP19N2x13	RSP19N2x13-MH	4-21	40-210	22x7	223(223)	0.2
RSP38N2x10	RSP38N2x10-MH	9-24.2	90-242	17.5x7	244(244)	0.35
RSP38N2x12	RSP38N2x12-MH	9-29.5	90-295	20.5x8	247(247)	0.35
RSP38N2x13	RSP38N2x13-MH	9-29.5	90-295	21.5x8	246(246)	0.35
RSP38N2x14	RSP38N2x14-MH	9-42	90-420	23.5x9	247(247)	0.35
RSP38N2x16	RSP38N2x16-MH	9-42	90-420	26x9	248(248)	0.35
RSP38N2x17	RSP38N2x17-MH	9-42	90-420	27.5x9	248(248)	0.35
RSP67N2x14	RSP67N2x14-MH	14-59	140-590	25x10	312(311)	0.45
RSP67N2x16	RSP67N2x16-MH	14-59	140-590	27x10	313(312)	0.45
RSP67N2x17	RSP67N2x17-MH	14-73	140-730	29x12	314(313)	0.45
RSP67N2x18	RSP67N2x18-MH	14-73	140-730	29.5x12	314(313)	0.45
RSP67N2x19	RSP67N2x19-MH	14-73	140-730	30x12	315(314)	0.45

Note. 1. The value show in () in the "Overall Length" shows the length of SP2-MH models.
2. Due to a variety of SP2/RSP2 models, specify required inner width, model namw and set torque when you order. EX. RSP38N2x10 x16N·m
3. SP2-MH, RSP2-MH models are made to order products.
4. SP2N2 models are issued ISO:6789-2003 certificate when request torque setting.

Order No. (Body Size x Width)		Torque Range		Head Dimension O.W. x Thick- ness [mm]	Overall Length [mm]	Weight [kg]
		[N·m]	[kgf·cm]			
RSP2	RSP2-MH	Min.-Max.	Min.-Max.			
RSP120N2x17	RSP120N2x17-MH	24-100	250-1000	29.4x12	393(393)	0.8
RSP120N2x18	RSP120N2x18-MH	24-100	250-1000	30.6x12	394(393)	0.8
RSP120N2x19	RSP120N2x19-MH	24-120	250-1270	31.8x13	394(394)	0.8
RSP120N2x21	RSP120N2x21-MH	24-120	250-1270	34x13	396(396)	0.8
RSP120N2x22	RSP120N2x22-MH	24-120	250-1270	35x13	396(396)	0.8
RSP160N2x19	RSP160N2x19-MH	30-160	320-1700	32.8x13	395(394)	0.9
RSP160N2x21	RSP160N2x21-MH	30-160	320-1700	34x13	396(395)	0.9
RSP160N2x22	RSP160N2x22-MH	30-160	320-1700	35x13	396(396)	0.9
RSP160N2x24	RSP160N2x24-MH	30-160	320-1700	38x15	398(397)	0.9
RSP220N2x22	RSP220N2x22-MH	45-220	480-2300	38.4x13	480(479)	1.5
RSP220N2x24	RSP220N2x24-MH	45-220	480-2300	40x13	481(480)	1.5
RSP220N2x27	RSP220N2x27-MH	45-220	480-2300	45x13	483(482)	1.5
RSP310N2x24	RSP310N2x24-MH	65-255	680-2550	41.8x15	678(678)	2
RSP310N2x27	RSP310N2x27-MH	65-310	680-3200	45x15	680(680)	2
RSP310N2x30	RSP310N2x30-MH	65-310	680-3200	50x15	682(681)	2

ประแจขันปอนด์ดิจิทัล

CPT-G - PRO TORK / DIGITAL TORQUE WRENCH FOR TIGHTENING

ASSEMBLY | DIGITAL | INTERCHANGEABLE | SIGNAL | BATTERY | ISO6789:2017

- Highly responsive to the applied torque value with indicator display
- Equipped with bright LED lamp indicating current torque level
- 5 changeable units of measure through keypad set up
- Data memory, torque set registration and output functions



Order No.	Torque Range										Overall Length [mm]	Weight [kg]
	[N·m]		[kgf·cm]		[kgf·m]		[lbf·in]		[lbf·ft]			
	Min.-Max.	1 digit	Min.-Max.	1 digit	Min.-Max.	1 digit	Min.-Max.	1 digit	Min.-Max.	1 digit		
CPT20x10D-G-SET	4-20	0.02	40-200	0.2	0.4-2	0.002	36-180	0.2	3-14.5	0.02	280.5	0.63
CPT50x12D-G-SET	10-50	0.05	100-500	0.5	1-5	0.005	100-440	0.5	7.5-36	0.05	282.5	0.65
CPT100x15D-G-SET	20-100	0.1	200-1000	1	2-10	0.01	200-880	1	15-73	0.1	384.5	0.85
CPT200x19D-G-SET	40-200	0.2	400-2000	2	4-20	0.02	360-1700	2	30-150	0.2	475.5	1.37
CPT280x22D-G-SET	56-280	0.2	560-2800	2	5.6-28	0.02	500-2400	2	42-200	0.2	591.5	1.76

Note. 1. "Torque Wrench Only" version is provided in basic carton product box and does include TQH Head, Batteries, Storage case.
2. "Overall Length" does not include the length of interchangeable head TQH.
3. "Weight" does not include the weight of interchangeable head TQH and batteries.
4. Interchangeable heads are sold separately.

"Set" Models including Accessories

Order No.	Standard Accessory			
	Ratchet Head		Battery	Storage Case
	Model	Sq. Drive [mm]		
CPT20x10D-G-SET	TQH10D	9.5	AA Alkaline Battery (2 pcs)	Small
CPT50x12D-G-SET	TQH12D	9.5		
CPT100x15D-G-SET	TQH15D	12.7	Large	
CPT200x19D-G-SET	TQH19D	12.7		
CPT280x22D-G-SET	TQH22D	19.0		

Note. Recommendation : Use 2xAA Ni-MH batteries for longer continuous use.

CPT-G Optional Accessories



Carrying case for "SET" model only

Part #	Applicable Model Dimension [mm]	Weight [kg]
844	CPT20x10D-G - CPT100x15D-G H170xW500xD100	1.0
845	CPT200x19D-G, XPT280x22D-G H170xW740xD100	1.6



Connecting Cable

Part #	Applicable Model
858	CPT-G - PC (D-Sub 9 pin Female)

Data Processing Software

Model
EXCEL RECEIVER

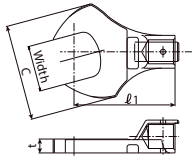


หัวต่อประแจขันปอนด์

INTERCHANGEABLE HEAD

SH - Open Spanner Head

The SH type spanner heads suit for the place where sockets can not be used, for flare nuts in piping and for work in narrow places.



Order No. (Body size x Width)	Tohnichi Head Size	Allowable Torque		Outside Width C [mm]	Thickness t [mm]
		[N·m]	[kgf·cm]		
SH8Dx5.5	8D	1.5	15	13	3
SH8Dx6		2.5	25	15	3.5
SH8Dx7		3.5	35	17	4
SH8Dx8		7	70	20	4.5
SH8Dx10		14	140	25	5.5
SH8Dx11				27	5.5
SH8Dx12				29	5.5
SH8Dx13				29	5.5
SH8Dx14				29	6.5
SH8Dx16		15	150	31	6.5
SH8Dx17				32	6.5
SH8Dx19				35	6.5
SH8Dx21				36	6.5
SH8Dx22				37	6.5
SH8Dx24				38	6.5
SH10Dx7	10D				
SH10Dx8					
SH10Dx10		20	200	28	
SH10Dx11					
SH10Dx12					
SH10Dx13				32	
SH10Dx14					6.5
SH10Dx16					
SH10Dx17		25	250		
SH10Dx18				39	
SH10Dx19					
SH10Dx21					
SH10Dx22					
SH10Dx22				43	
SH12Dx8	12D	7	70	20	5
SH12Dx10		12	120	24	5
SH12Dx11		20.5	205	28	5.5
SH12Dx12		29.5	295	31	6.5
SH12Dx13		29.5	295	32	6.5
SH12Dx14		59	590	38	8
SH12Dx16		59	590	40	10
SH12Dx17				40	10
SH12Dx18				41	11
SH12Dx19				41	11
SH12Dx21		70	700	43	13
SH12Dx22				43	13
SH12Dx24				48	13
SH12Dx27				52	13
SH15Dx12	15D				
SH15Dx13		59	590	38	8
SH15Dx14					
SH15Dx16					
SH15Dx17					
SH15Dx18					
SH15Dx19		140	1400	51	13
SH15Dx21					
SH15Dx22					

Order No. (Body size x Width)	Tohnichi Head Size	Allowable Torque		Outside Width C [mm]	Thickness t [mm]
		[N·m]	[kgf·cm]		
SH15Dx24	15D				
SH15Dx26					
SH15Dx27		140	1400	60	12
SH15Dx30					
SH15Dx32					
SH15Dx36				68	
SH19Dx17	19D				
SH19Dx18		200	2000		
SH19Dx19				54	13
SH19Dx21		180	1800		
SH19Dx22					
SH19Dx24		200	2000	60	15
SH19Dx27		180	1800		
SH19Dx30					
SH19Dx32					
SH19Dx34		200	2000	76	11
SH19Dx36		180	1800		
SH19Dx41					
SH22Dx19	22D	280	2800	63	
SH22Dx22		500	5000		
SH22Dx24					
SH22Dx27				78	
SH22Dx30		420	4200		
SH22Dx32					15
SH22Dx34		500	5000		
SH22Dx36		420	4200	85	
SH22Dx41		280	2800		
SH22Dx46					
SH22Dx50		500	5000	103	
SH22Dx55				108	
SH27Dx22	27D	255	2550	65	14
SH27Dx24		350	3500	72	15
SH27Dx27		490	4900	82	16
SH27Dx30		670	6700	88	19
SH27Dx32		750	7500	92	20
SH27Dx34		670	6700	90	20
SH27Dx36				94	21
SH27Dx41		750	7500	98	22
SH27Dx46				100	24
SH27Dx50				103	26
SH32Dx27	32D				
SH32Dx30		850	8500	105	18
SH32Dx32					
SH32Dx34					
SH32Dx6					
SH32Dx41				110	24
SH32Dx46		1200	12000		
SH32Dx50					
SH32Dx55				120	29
SH32Dx60					

Tool Kits

ชุดเครื่องมือ

Pliers

คีม

Electrician Tool

เครื่องมือสำหรับ
อิเล็กทรอนิกส์
และช่างไฟ

Gear Puller

เหล็กดูด

Adjustable Wrench

ประแจเลื่อน

Wrench

ประแจ

Torque Wrench

เกจบิด

Socket Wrench

ลูกบ็อก

Screwdriver

ไขควง

Bits

ไขควง

Torque Screwdriver

ไขควงทอร์ก

For Assembly

สำหรับงานทั่วไป

For Quality Inspection

สำหรับการตรวจสอบ

Tension Gauge

เกจวัดแรงดึง-ดัน

Torque Tester

เครื่องวัดแรงบิด

TORQUE WRENCH

ประแจขันปอนด์



Inch Size Models

Commonly used in the airline industry and for specific American product installation and maintenance.

Order No. (Body size x Inner Width [in])	Tohnichi Head Size	Inner Width [mm]	Allowable Torque	Outside Width C mm [in]	Thickness t mm [in]
			N•m [lb•ft/in]		
SH8Dx1/4	8D	6.35	2.5 [22]	15 [0.59]	3.5 [0.14]
SH8Dx5/16		7.94	7 [61]	20 [0.79]	4.5 [0.18]
SH8Dx3/8		9.53	14 [123]	25 [0.98]	5.5 [0.22]
SH8Dx7/16		11.11	15 [132]	27 [1.06]	
SH8Dx1/2		12.7		29 [1.14]	
SH8Dx9/16		14.29			6.5 [0.26]
SH10Dx1/4	10D	6.35	20 [177]	28 [1.10]	6.5 [0.26]
SH10Dx5/16		7.94			
SH10Dx3/8		9.53			
SH10Dx7/16		11.11	25 [221]	32 [1.26]	
SH10Dx1/2		12.7			
SH10Dx9/16		14.29		39 [1.54]	
SH12Dx3/8	12D	9.53	12 [106]	24 [0.94]	5 [0.20]
SH12Dx7/16		11.11	20.5 [181]	31 [1.22]	6.5 [0.26]
SH12Dx1/2		12.7	29.5 [261]	32 [1.26]	
SH12Dx9/16		14.29	59 [522]	40 [1.57]	10 [0.39]
SH12Dx5/8		15.88			
SH12Dx11/16		17.46	70 [620]	41 [1.61]	11 [0.43]
SH15Dx1/2	15D	12.7	59 [522]	38 [1.50]	8 [0.31]
SH15Dx9/16		14.29		51 [2.01]	13 [0.51]
SH15Dx5/8		15.88			
SH15Dx11/16		17.46	140 [1239]		
SH15Dx3/4		19.05			
SH15Dx13/16	15D	20.64	140 [1239]	60 [2.36]	12 [0.47]
SH15Dx7/8		22.23			
SH15Dx15/16		23.81			
SH15Dx1		25.40	200 [1947]	72 [2.83]	11 [0.43]
SH15Dx1-1/16		26.99			
SH15Dx1-1/8	19D	28.58	200 [1947]	76 [2.99]	
SH15Dx1-3/16		30.16			
SH15Dx1-1/4		31.75			
SH15Dx1-5/16		33.34	200 [1947]		
SH15Dx1-3/8		34.93			
SH15Dx1-7/16	19D	36.51	200 [1947]		
SH15Dx1-1/2		38.10			
SH19Dx15/16		23.81	200 [1947]		
SH19Dx1	19D	25.4			
SH19Dx1-1/16		26.99			
SH19Dx1-1/8		28.58			
SH19Dx1-3/16		30.16			
SH19Dx1-1/4		31.75	200 [1947]		
SH19Dx1-5/16		33.34			
SH19Dx1-3/8		34.93			
SH19Dx1-7/16	19D	36.51	200 [1947]		
SH19Dx1-1/2		38.1			

TORQUE WRENCH

ประแจขันปอนด์

Tool Kits
ชุดเครื่องมือ

Pliers
คีม

Electrician Tool
เครื่องมือสำหรับ
อิเล็กทรอนิกส์
และช่างไฟ

Gear Puller
เหล็กดูด

Adjustable
Wrench
ประแจเลื่อน

Wrench
ประแจ

Torque Wrench
เกจบล็อก

Socket Wrench
ลูกบ็อก

Screwdriver
ไขควง

Bits
ไขควง

Torque
Screwdriver
ไขควงทอร์ก

For Assembly
สำหรับงานทั่วไป

For Quality
Inspection
สำหรับการตรวจสอบ

Tension Gauge
เกจวัดแรงดึง-ดัน

Torque Tester
เครื่องวัดแรงบิด

TORQUE WRENCH

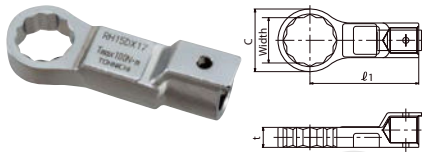
ประแจขันปอนด์



TORQUE WRENCH
ประแจขันปอนด์

RH - Ring Interchangeable Head

The RH type ring heads guarantee the safe work as the axes of bolt and RH ring head are always aligned and prevent the heads will drop.



Order No. (Body size x Width)	Tohnichi Head Size	Allowable Torque		Outside Width C [mm]	Thickness t [mm]
		[N·m]	[kgf·cm]		
RH8Dx5.5	8D	1.5	15	10.5	5
RH8Dx6		2.4	24	11	
RH8Dx7		3.6	36	12	
RH8Dx8		7.2	72	13.5	6
RH8Dx10		12.2	122	15.5	
RH8Dx11				17	
RH8Dx12		15	140	18	7
RH8Dx13	10D			19	
RH10Dx8		7.2	72	12.5	6
RH10Dx10		12.2	122	15.5	7
RH10Dx11		20	200	17	
RH10Dx12				18	
RH10Dx13				19	
RH10Dx14				20	
RH10Dx16		25	250	22	8
RH10Dx17				24	
RH10Dx18				25	
RH10Dx19				26	
RH10Dx21				28	
RH10Dx22				29	
RH12Dx8	12D	7.2	72	15	5
RH12Dx10		12.2	122	16	
RH12Dx11		20	200	18	5.5
RH12Dx12		29.5	295	20	6.5
RH12Dx13				21	
RH12Dx14				20	10
RH12Dx16				24	
RH12Dx17				25	
RH12Dx8		70	700	26	12
RH12Dx19				29	
RH12Dx21				30	13
RH15Dx12	15D	29.5	295	19	7
RH15Dx13		59	590	22	8
RH15Dx14				25	
RH15Dx16				26	10
RH15Dx17		100	1000	28	
RH15Dx18				31	
RH15Dx19				34	13
RH15Dx21		140	1400	37	
RH15Dx22				41	
RH15Dx24					

Order No. (Body size x Width)	Tohnichi Head Size	Allowable Torque		Outside Width C [mm]	Thickness t [mm]
		[N·m]	[kgf·cm]		
RH19Dx14	19D	59	590	22.5	8
RH19Dx17		100	1000	27	10
RH19Dx18				28	11
RH19Dx19				29	
RH19Dx21		166	1660	32	13
RH19Dx22				35	
RH19Dx24				39	
RH19Dx27		200	2000	41	
RH19Dx30				44	15
RH19Dx32				47	
RH19Dx34				49	
RH19Dx36	22D			55	
RH22Dx19		166	1660	30	14
RH22Dx22		255	2550	34	
RH22Dx24				37	15
RH22Dx27				41	
RH22Dx30		490	4900	44	17
RH22Dx32				45	
RH22Dx34				49	
RH22Dx36		500	5000	51	
RH22Dx41				57	17
RH22Dx46				62	
RH27Dx22	27D	255	2550	38	14
RH27Dx24		350	3500	42	15
RH27Dx27		490	4900	46	16
RH27Dx30		670	6700	48	19
RH27Dx32				51	20
RH27Dx34				52	21
RH27Dx36		750	7500	58	22
RH27Dx41				64	24
RH27Dx46				69	26
RH32Dx27	32D	490	4900	43	16
RH32Dx30		670	6700	46.5	
RH32Dx32				49	18
RH32Dx34				52	
RH32Dx36		860	8600	53	
RH32Dx41				59	24
RH32Dx46				65	
RH32Dx50		1200	12000	69	27
RH32Dx55				75	29
RH32Dx60				80	

Tool Kits

ชุดเครื่องมือ

Pliers

คีม

Electrician Tool

เครื่องมือสำหรับ
อิเล็กทรอนิกส์
และช่างไฟ

Gear Puller

เพลาชัก

Adjustable

Wrench

ประแจเลื่อน

Wrench

ประแจ

Torque Wrench

เกจบิด

Socket Wrench

ลูกบ็อก

Screwdriver

ไขควง

Bits

ไขควง

Torque

Screwdriver

ไขควงทอร์ค

For Assembly

สำหรับงานทั่วไป

For Quality

Inspection

สำหรับการตรวจสอบ

Tension Gauge

เกจวัดแรงดึง-ดัน

Torque Tester

เครื่องวัดแรงบิด

TORQUE WRENCH

ประแจขันปอนด์



Inch Size Models

Commonly used in the airline industry and for specific American product installation and maintenance.

Order No. (Body size x Inner Width [in])	Tohnichi Head Size	Inner Width [mm]	Allowable Torque	Outside Width C mm [in]	Thickness t mm [in]
			N·m [lb·ft·in]		
RH8Dx1/4	8D	6.35	3.6 [31]	11 [0.43]	5 [0.20]
RH8Dx5/16		7.94	7.2 [63]	13.5 [0.53]	6 [0.24]
RH8Dx3/8		9.53	12.2 [108]	15 [0.59]	7 [0.28]
RH8Dx7/16		11.11	15 [132]	17 [0.67]	
RH10Dx1/4	10D	6.35	7.2 [64]	11 [0.43]	6 [0.24]
RH10Dx5/16		7.94		12.5 [0.49]	
RH10Dx3/8		9.53	12.2 [108]	15.5 [0.61]	7 [0.28]
RH10Dx7/16		11.11	25 [221]	17 [0.67]	
RH10Dx1/2		12.7		19 [0.75]	
RH10Dx9/16		14.29		20 [0.79]	8 [0.31]

Order No. (Body size x Inner Width [in])	Tohnichi Head Size	Inner Width [mm]	Allowable Torque	Outside Width C mm [in]	Thickness t mm [in]
			N·m [lb·ft·in]		
RH12Dx3/8	12D	9.53	12.2 [108]	16 [0.63]	5 [0.20]
RH12Dx7/16		11.11	20 [177]	18 [0.71]	5.5 [0.22]
RH12Dx1/2		12.74	29.5 [261]	21 [0.83]	6.5 [0.26]
RH12Dx9/16		14.29	59 [522]	20 [0.79]	10 [0.39]
RH12Dx5/8		15.88		24 [0.94]	
RH15Dx1/2	15D	12.7	29.5 [261]	19 [0.81]	7 [0.28]
RH15Dx9/16		14.29	59 [522]	22 [0.87]	8 [0.31]
RH15Dx5/8		15.88		25 [0.98]	
RH15Dx11/16		17.46		26 [1.06]	
RH15Dx3/4		19.05	140 [1239]	28 [1.10]	13 [0.51]

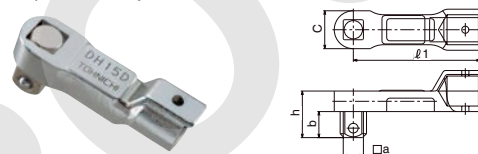
QH - Ratchet Head

As the QH type ratchet heads need only small swing for tightening, they suit for operations in narrow spaces.



DH - Square Drive Head

The DH Square drive heads are the standard interchangeable head. They are useful when tightening a large number of matching screws with a common torque wrench. It is recommended to keep one set. They are used with sockets.



Order No.	Head Size	Dimensions			
		Sq. Drive a [mm]	Outside Width c [mm]	h [mm]	b [mm]
QH8D	8D	6.35	23	17.5	7.5
QH10D-1/4	10D		26	18.5	
QH10D				22	
QH12D	12D	9.53	32	25.6	11
QH15D-3/8	15D		37.5	30.5	14
QH15D				33.5	
QH19D	19D	12.7	40	38.4	15.4
QH22D-1/2	22D		51	41.5	15.5
QH22D				46.5	20.5
QH27D	27D	19.05	70	49.7	21.5
QH32D	32D	25.4	74	55.7	26.5

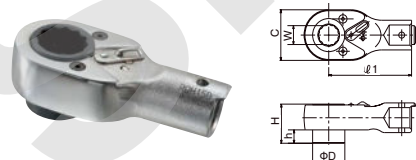
Note : 1. For the model having 25.4mm square drive, use a through-hole socket.
QH15D-3/8 Tmax 100N·m
QH22D-1/2 Tmax 280N·m
2. Ratchet protective cover is available.

Order No.	Head Size	Dimensions			
		Sq. Drive a [mm]	Outside Width c [mm]	h [mm]	b [mm]
DH10D	10D	9.53	18	22.5	13
DH12D	12D			23	
DH15D	15D		22	29.5	16.5
DH19D	19D	12.7	24	38.4	23.5
DH22D	22D		34	43.3	
DH27D	27D		42	44.5	
DH32D	32D	25.4	50	58.5	30.25

Note : 1. DH32D is a through hole type

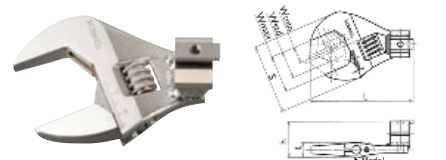
RQH - Female Ratchet Head

As the RQH type ratchet heads need only small swing for tightening, they suit for operations in narrow and low ceiling spaces.



AH/AH2 - Adjustable Open End Head

AH is easy and convenient to use for applications that require different size bolt heads. Available currently only for the 15mm diameter root shaped Tohnichi torque wrenches.



Order No.	Head Size	Dimensions			
		Sq. Drive a [mm]	Outside Width c [mm]	h [mm]	b [mm]
RQH12Dx12	12D	20.5	32	24.1	
RQH12Dx14					
RQH15Dx14	15D	24.5	37.5	29	
RQH15Dx17					
RQH19Dx17	19D	31	45	28	10
RQH19Dx19					
RQH19Dx22					
RQH22Dx22					
RQH22Dx24	22D	35.2	51	35	

Order No. (Body size x Width)	Head Size	Allowable Torque		Inner Width Min.-Standard- Max. [mm]	Dimensions			
		[N·m]	[kgf·cm]		S [mm]	L [mm]	t [mm]	h [mm]
AH10Dx13	10D	25	250	3-8-13	36	57	9	23
AH10Dx26				7-17-26	49	62	11	25
AH12Dx13	12D	30	300	3-8-13	36	66	9	23
AH12Dx26				7-17-26	49	71	11	26
AH12Dx36	15D	50	500	8-22-36	65	78	13	27
AH15Dx26				10-18-26	50	77	11	31
AH15Dx30		100	1000	13-22-30	60	84	12	32
AH15Dx36		140	1400	13-24-36	65	87	13	33

Note : Use with a click type torque wrench.

TORQUE WRENCH

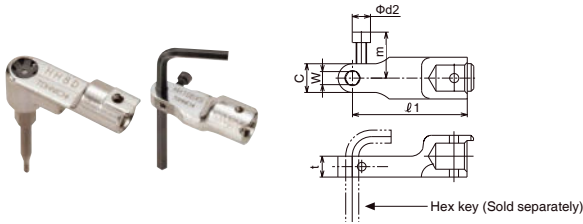
ประแจขันปอนด์



TORQUE WRENCH
ประแจขันปอนด์

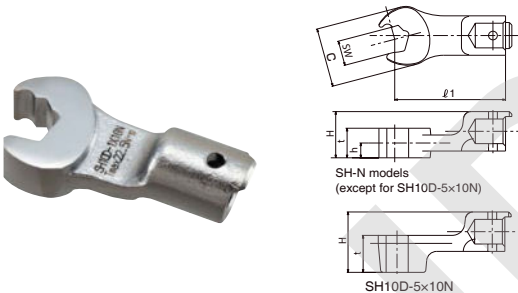
HH - Hex Head

The HH hex-head is for hex. socket head cap screws.



SH-N - A Open End Head with Notch

The notch creates speed in the tightening process by grasping the side of the fastener without removing the wrench. Ideal for brake line assembly.



Order No. (Body size x width)	Head Size	Dimensions			
		Outside width C [mm]	t [mm]	m [mm]	Ød2 [mm]
HH8D	8D	12	14.5	-	-
HH10Dx5		11			
HH10Dx6	10D	12	8		
HH10Dx8		15			
HH12Dx5		11		19	7
HH12Dx6		14			
HH12Dx8	12D	15	10		
HH12Dx10		17			
HH15Dx8		14			
HH15Dx10		17			
HH15Dx12	15D	20		21	
HH15Dx14		21.5			
HH19Dx10		17	13		8.5
HH19Dx12		21.5			
HH19Dx14	19D	23		23	
HH19Dx17		27			
HH19Dx19		29			
HH22Dx12		19.5			
HH22Dx14		27			
HH22Dx17	22D	30	17	26	10
HH22Dx19		32			
HH22Dx22		35			

Note : 1. To be used with hex. key inserted.
2. HH8D is not used with hex. key but interchangeable bit.
3. Insertion of HH10Dx5 and HH10Dx6 are hexagon. Others are double hexagon.

Order No. (Body size x Width)	Head Size	Allowable Torque		Dimensions			
				Outside Width S [mm]	Thickness		
SH10D-1x10N					18.75	12	6
SH10D-3x10N		22.5	225		20.25		7.5
SH10D-5x10N		19	190		24.5	15	-
SH10D-4x10N	10D			24	17.75	10	5
SH10D-9x10N		22.5	225		18.75		6
SH10Dx11N					18.8	12	
SH10Dx12N		25	250	32	16	6.5	3.25
SH12Dx11N				30	19	7.5	-
SH12D-1x12N					21	12	6
SH12D-3x12N		30	300		22.5	15	7.5
SH12D-5x12N				32	26		-
SH12D-4x12N					20	10	5
SH12D-1x14N					21	12	6
SH12D-3x14N	12D	40	400	35	22.5	15	7.5
SH12D-5x14N					26		-
SH12D-4x14N					20	10	5
SH12D-1x17N					21	12	6
SH12D-3x17N		50	500		22.5	15	7.5
SH12D-5x17N					26		-
SH12D-4x17N					20	10	5

Tool Kits

ชุดเครื่องมือ

Pliers

คีม

Electrician Tool

เครื่องมือสำหรับ
อิเล็กทรอนิกส์
และช่างไฟ

Gear Puller

เหล็กดูด

Adjustable Wrench

ประแจเลื่อน

Wrench

ประแจ

Torque Wrench

เกจบิด

Socket Wrench

ลูกบ็อก

Screwdriver

ไขควง

Bits

ไขควง

Torque

Screwdriver

ไขควงทอร์ค

For Assembly

สำหรับงานทั่วไป

For Quality

Inspection

สำหรับการตรวจสอบ

Tension Gauge

เกจวัดแรงดึง-ดัน

Torque Tester

เครื่องวัดแรงบิด

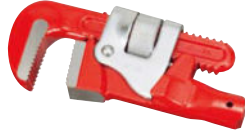
TORQUE WRENCH

ประแจขันปอนด์



PH - Pipe Wrench Head

The PH heads suit for use with pipes and plumbing applications.

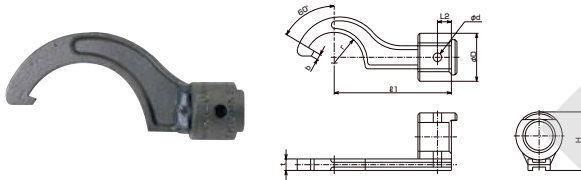


Order No.	Head Size	Pipe Wrench Head Max. Length [mm]	Applicable Pipe Diameter [mm]	Standard Pipe Diameter [mm]	Recommendable Torque Wrench
PH15Dx350	15D				CSP
PH19Dx350	19D	350	13-38	25.5	
PH22Dx350					
PH22Dx450	22D	450	26-52	39	

Note : 1. PH can be used with CSP model only.
2. When ordering with csp, please specify PH model name and required set torque.
3. In case of using graduated torque wrench, order PHL models.

FH - Hook Head

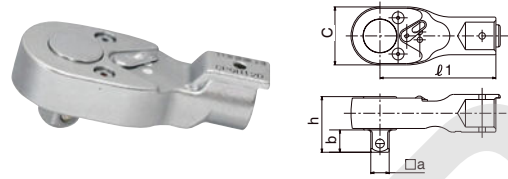
The FH hook heads are ideal for use with bearing locknut applications.



Order No.	Head Size	Applicable Size of Nut Outside Diameter [mm]	Nominal Size of Screw	Dimensions							
(Body size x Width)				r [mm]	Θ' [mm]	b [mm]	t [mm]	H [mm]	D [mm]	L2 [mm]	d [mm]
FH15Dx30		30-38	M20	16							
FH15Dx38		38-45	M25	20		3	6	30			
FH15Dx45	15D	45-52	M30	24					25	7.5	4.5
FH15Dx52		52-58	M35	27	60	3.5	7	30.5			
FH15Dx58		58-65	M40	31		4.5		31			
FH19Dx65	19D	65-75	M45, M50	35.5			8	35.5	29	9.5	
FH22Dx75	22D	75-85	M60, M65	39				38.5			
FH22Dx85		85-98	M70, M75	45.5	45	5	10	40	32	11	5.5

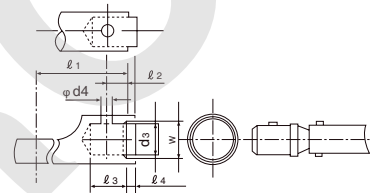
CPQH - Corrosion-Resistant Ratchet Head

QH type ratchet head with anticorrosion coating is ideal for wet conditions and features ratcheting action for narrow spaces.



Order No.	Head Size	Sq. Drive a [mm]	Outside Width c [mm]	h [mm]	b [mm]
CPQH10D	10D	9.53	26	22	11
CPQH12D	12D		32	25.6	
CPQH15D	15D	12.7	37.5	33.5	14
CPQH19D	19D		40	38.4	

Common Dimensions for Interchangeable Head



Order No.	Dimensions						
(Body size x Width)	ℓ1	ℓ2	ℓ3	ℓ4	d3	d4	W
SH8D, RH, QH, HH	35	4	10	2	8	3.0	9
SH10D, RH, QH, HH, DH, SH-N	44	5	12	2.5	10	3.5	12
SH12D, RH, QH, HH, DH, RQH	53	6	14	3	12	3.5	14
SH15D, RH, QH, HH, DH, RQH, FH	63	7.5	17	3	15	4.5	17
SH19D, RH, QH, HH, DH, RQH, FH	80	9.5	21	3	19	4.5	21
SH22D, RH, QH, HH, DH, RQH, FH	100	11	24	3.5	22	5.5	24
SH27D, RH, QH, DH	125	13.5	29	5	27	6.5	30
SH32D, RH, QH, DH	160	16	34	7	32	6.5	35

Note : When requesting a special head that is used with types of torque wrench, it is strictly required to follow the "ℓ1" dimension to keep torque accuracy. Any deviation from the "ℓ1" dimension affects torque accuracy.

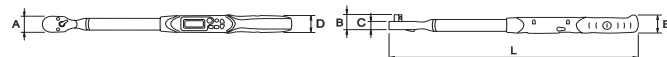
TORQUE WRENCH

ประแจขันปอนด์



TORQUE WRENCH
ประแจขันปอนด์

ประแจปอนด์แบบฟรีซ้าย-ขวา DIGITAL TORQUE WRENCH



Order No.	AF inch	N.m	Lb.ft	Lb.in	Kg.cm	L (mm)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	Weight (Kg)
62955	1/4	1.5-30	1-22	13-265	15-306	390	23	19	11	39	44	1.4
62956	3/8	6.8-135	5-100	60-1195	69-1378	415	30	27	15	39	44	1.5
62957	1/2	10-200	7-148	88-1770	102-2041	530	41	35	19	39	44	2.1
62958	1/2	17-340	12-251	150-3009	173-3469	650	41	35	19	39	44	2.3
62959	1/4	1.5-30	1-22	13-265	15-306	390	23	19	11	39	44	1.7
62960	3/8	6.8-135	5-100	60-1195	69-1378	415	30	27	15	39	44	1.9
62961	1/2	10-200	7-148	88-1770	102-2041	530	41	35	19	39	44	2.5
62962	1/2	17-340	12-251	150-3009	173-3469	650	41	35	19	39	44	2.7

Order No.	Accuracy CW (clockwise)	Accuracy CCW (counter clockwise)	Resolution	Data memory	Data communication to the computer	Cable for data communication
62955	±2%	±3%	0.01Nm / 0.01 Lb.ft / 0.1 Lb.in / 0.1 Kg-cm	50	-	-
62956	±2%	±3%	0.1Nm / 0.1 Lb.ft / 1 Lb.in / 1 Kg-cm	50	-	-
62957	±2%	±3%	0.1Nm / 0.1 Lb.ft / 1 Lb.in / 1 Kg-cm	50	-	-
62958	±2%	±3%	0.1Nm / 0.1 Lb.ft / 1 Lb.in / 1 Kg-cm	50	-	-
62959	±1%	±2%	0.01Nm / 0.01 Lb.ft / 0.1 Lb.in / 0.1 Kg-cm	250	•	•
62960	±1%	±2%	0.1Nm / 0.1 Lb.ft / 1 Lb.in / 1 Kg-cm	250	•	•
62961	±1%	±2%	0.1Nm / 0.1 Lb.ft / 1 Lb.in / 1 Kg-cm	250	•	•
62962	±1%	±2%	0.1Nm / 0.1 Lb.ft / 1 Lb.in / 1 Kg-cm	250	•	•

Tool Kits
ชุดเครื่องมือ

Pliers
คีม

Electrician Tool
เครื่องมือสำหรับ
อิเล็กทรอนิกส์
และช่างไฟ

Gear Puller
เพลา์ดูด

Adjustable Wrench
ประแจเลื่อน

Wrench
ประแจ

Torque Wrench
เกจขึงตื้อ

Socket Wrench
ลูกบ็อก

Screwdriver
ไขควง

Bits
ไขควง

Torque Screwdriver
ไขควงทอร์ค

For Assembly
สำหรับงานทั่วไป

For Quality Inspection
สำหรับการตรวจสอบ

Tension Gauge
เกจวัดแรงดึง-ดัน

Torque Tester
เครื่องวัดแรงบิด

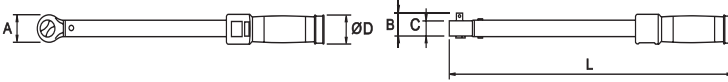
TORQUE WRENCH

ประแจขันปอนด์



ประแจปอนด์แบบฟรีซ้าย-ขวา

ANALOGIC REVERSIBLE TORQUE WRENCH



Tool Kits

ชุดเครื่องมือ

Pliers

คีม

Electrician Tool

เครื่องมือสำหรับ
อิเล็กทรอนิกส์
และช่างไฟ

Gear Puller

เหล็กดูด

Adjustable

Wrench

ประแจเลื่อน

Wrench

ประแจ

Torque Wrench

เกจบล็อก

Socket Wrench

ลูกบ็อก

Screwdriver

ไขควง

Bits

ไขควง

Torque

Screwdriver

ไขควงทอร์ค

For Assembly

สำหรับงานทั่วไป

For Quality

Inspection

สำหรับการตรวจสอบ

Tension Gauge

เกจวัดแรงดึง-ดัน

Torque Tester

เครื่องวัดแรงบิด

Order No.	AF inch	N.m	Lb.ft	Lb.in	L (mm)	A (mm)	B (mm)	C (mm)	D (mm)	Weight (Kg)
62951	1/4	2.5-12	-	20-105	290	28	30	19	38	0.8
62952	1/4	4-20	-	30-180	290	28	30	19	38	0.8
65871	1/4	-	-	35-180	230	28	30	19	38	0.8
62965	3/8	6-30	-	50-250	320	37	40	25	38	0.9
65872	3/8	-	-	120-450	380	40	44	25	38	1.3
62953	3/8	25-125	20-90	-	440	38	40	25	38	1.3
57686	1/2	10-70	-	100-600	440	38	41	25	38	0.9
62954	1/2	25-125	20-90	-	440	38	44	25	38	1.3
65873	1/2	-	-	350-1800	440	40	44	25	38	1.4
62963	1/2	40-200	30-150	-	460	40	44	25	38	1.4
62968	1/2	65-335	50-250	-	520	40	44	25	38	1.5
65918	1/2	-	-	1000-3000	520	40	44	25	38	1.5
62983	1/2	80-400	60-300	-	743	40	44	20	38	2.25
62969	3/4	160-800	120-600	-	1040	60	66	39	38	8.6
65919	3/4	-	-	1000-7200	1040	60	66	39	38	8.6
62976	1	200-1000	150-750	-	1040	72	82	39	38	8.6
62977	1	300-1500	200-1100	-	1250	72	82	40	38	12
62978	1	400-2000	300-1500	-	1250	72	82	40	38	12.2
62979	1	600-3000	400-2200	-	1250	72	82	40	38	13.2

Technical specifications

Accuracy	3%
Calibration certificate	•
Reversible	•
Teeth	45
Individual case	62951-62979

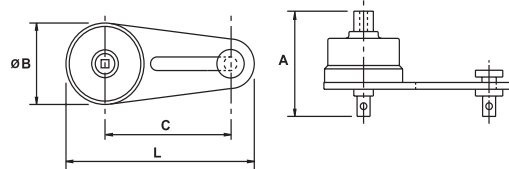
TORQUE WRENCH

ประแจขันปอนด์



TORQUE WRENCH
ประแจขันปอนด์

ตัวเพิ่มแรงบิด PRECISION TORQUE MULTIPLIERS



Order No.	OUT (max.) N.m	OUT (max.) Lb.ft	IN (max.) N.m	IN (max.) Lb.ft	IN (inch)	OUT (inch)	L (mm)	A (mm)	Ø B (mm)	C (mm)	Weight (Kg)	
63850	1700	1250	378	279	1/2	3/4	310	85	115	165	4.5	62954, 62957, 62958, 62961, 62962, 62963, 62968
63851	1700	1250	378	279	3/4	1	310	90	115	165	5.0	62969
63852	1700	1250	75	55	1/2	1	310	120	115	165	7.0	62954, 62957, 62958, 62961, 62962, 62963, 62968
63853	2700	2000	60	442	3/4	1	365	135	135	260	8.0	62969
63854	2700	2000	120	88	1/2	1	365	165	135	260	11	62954, 62957, 62958, 62961, 62962, 62963, 62968
63855	3400	2500	750	553	3/4	1 1/2	365	150	135	260	8.5	62969
63856	3400	2500	150	110	1/2	1 1/2	365	175	135	260	11.5	62954, 62957, 62958, 62961, 62962, 62963, 62968
63857	6000	4500	1352	977	3/4	1 1/2	450	175	170	310	15	62969
63858	6000	4500	264	194	1/2	1 1/2	450	255	170	310	28	62954, 62957, 62958, 62961, 62962, 62963, 62968
63859	9500	7000	420	309	3/4	2 1/2	500	255	195	350	32	62969

Example:
To obtain an output torque of 1800Nm, user should apply an input torque of:
Input torque = output torque x net ratio multiplication factor
1800 x 1/4.5 = 400Nm

Order No.	Torque multiplication ratio	Net ratio	Accuracy (%)	Accuracy	Non-return system
63850	5:1	4.5:1	90	±4	-
63851	5:1	4.5:1	90	±4	-
63852	25:1	22.5:1	90	±4	•
63853	5:1	4.5:1	90	±4	-
63854	25:1	22.5:1	90	±4	•
63855	5:1	4.5:1	90	±4	•
63856	25:1	22.5:1	90	±4	•
63857	5:1	4.5:1	90	±4	•
63858	25:1	22.5:1	90	±4	•
63859	25:1	22.5:1	90	±4	•

NON-RETURN SYSTEM:
Torque multipliers with a 22.5:1 relation gearbox, include a non-return system to avoid the reaction induced in the grip. This system locks up the nut, not allowing the torque multiplier to rewind, due to the high ratio level supported. These guarantees the user a safe, easy and comfortable use. All models have a special case in order to be well protected and easy to transport.

- Tool Kits
ชุดเครื่องมือ
- Pliers
คีม
- Electrician Tool
เครื่องมือสำหรับ
อิเล็กทรอนิกส์
และช่างไฟ
- Gear Puller
เพลาถอด
- Adjustable
Wrench
ประแจเลื่อน
- Wrench
ประแจ
- Torque Wrench
เกจบิด
- Socket Wrench
ลูกบ็อก
- Screwdriver
ไขควง
- Bits
ไขควง
- Torque
Screwdriver
ไขควงทอร์ค
- For Assembly
สำหรับงานทั่วไป
- For Quality
Inspection
สำหรับการตรวจสอบ
- Tension Gauge
เกจวัดแรงดึง-ดัน
- Torque Tester
เครื่องวัดแรงบิด

TORQUE WRENCH

ประแจขันปอนด์

EGA Master
ART IN INNOVATION
BE SAFE...BE EFFICIENT

ตัววัดองศา
ANGLE METER



Order No.		Weight (Kg)
66873	1/4	215
Technical specifications		
Accuracy	+/-2%	
Preset Torque values	9	
Warning system	Audible and light alarm	
Batteries	AAA x2	
Battery operation time	24 h	
Battery life (standby)	1 year	
Individual case	•	
Resolution	0.1	
Memory	50	
Unit selection	Grade°	
Valid for any kind of tightening wrench	Magnetic	

TORQUE WRENCH
ประแจขันปอนด์

Tool Kits
ชุดเครื่องมือ

Pliers
คีม

Electrician Tool
เครื่องมือสำหรับ
อิเล็กทรอนิกส์
และช่างไฟ

Gear Puller
เหล็กดูด

Adjustable
Wrench
ประแจเลื่อน

Wrench
ประแจ

Torque Wrench
เกจบล็อค

Socket Wrench
ลูกบ็อก

Screwdriver
ไขควง

Bits
ไขควง

Torque
Screwdriver
ไขควงทอร์ค

For Assembly
สำหรับงานทั่วไป

For Quality
Inspection
สำหรับการตรวจสอบ

Tension Gauge
เกจวัดแรงดึง-ดัน

Torque Tester
เครื่องวัดแรงบิด



ประแจปอนด์หน้าปัดดิจิตอล

DTC-REV DATA OUTPUT DIGITAL TORQUE WRENCHS

Multi Function data out put digital torque wrench with OLED display



FEATURES

- Accuracy : $\pm 1\%$ of indicated value +1 increment, over full range
- Display : OLED
- Measuring mode : ① Peak hold ② Peak to Peak ③ Tracking
- Measuring direction : CW / CCW changeover, provided with CW / CCW status display
- Power supply : Lithium-ion rechargeable battery 18650
- Battery Life : Approx. 20 hours with fully charged battery. (continuous operation)
- Auto power-off : Approx. 30 minutes
- Tolerance setting : 1 to 10%. Automatic judgment for pre-set target torque
- Data input : 1000 data can be stored

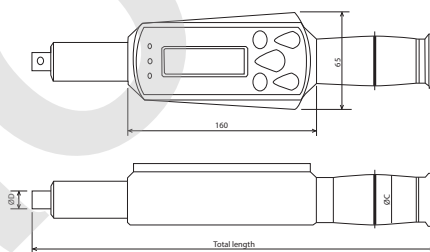
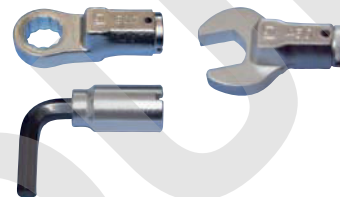
It can be measured tightening torque (CW) and loosening torque (CCW) with digital display. When the pre-set target torque is achieved, it can be confirmed with change of sounds. The preset values and tolerance can be set and the pass/fail judgment appears on LED. Data include the date (year, month, date) and time (hour, min, second) in DTC-REV. Since the OLED is high visibility, the display is easy to read even in the dark.

REPLACEABLE HEADS

- Included Accessory



- Options



Tool Kits

ชุดเครื่องมือ

Pliers

คีม

Electrician Tool

เครื่องมือสำหรับ
อิเล็กทรอนิกส์
และช่างไฟ

Gear Puller

เพลาชัก

Adjustable

Wrench

ประแจเลื่อน

Wrench

ประแจ

Torque Wrench

เกจบิด

Socket Wrench

ลูกบ็อก

Screwdriver

ไขควง

Bits

ไขควง

Torque

Screwdriver

ไขควงทอร์ค

For Assembly

สำหรับงานทั่วไป

For Quality

Inspection

สำหรับการตรวจสอบ

Tension Gauge

เกจวัดแรงดึง-ดัน

Torque Tester

เครื่องวัดแรงบิด

Order No.	Range(Unit)	Increment	Total length (mm)	φD.	φC	Weight (Kg)	Accessory
DTC-N10REV	1 ~ 10N·m	0.01N·m	314	10	35	0.8	12 QCK
DTC-N50REV	5 ~ 50N·m	0.01N·m	342	12	35	0.9	50 QCK
DTC-N100REV	10 ~ 100N·m	0.1N·m	386	15	35	1.1	100 QCK
DTC-N200REV	20 ~ 200N·m	0.1N·m	404	18	35	1.25	200 QCK
DTC-N300REV	30 ~ 300N·m	0.1N·m	535	22	35	1.8	280 QCK-A
DTC-N500REV	50 ~ 500N·m	0.1N·m	10693	30	34	4.2	700 QCK
DTC-N1000REV	100 ~ 1000N·m	1N·m	1417	34	34	7.6	1000 QCK
DTC-100REV	10 ~ 100kgf·cm	0.1kgf·cm	314	10	35	0.8	12 QCK
DTC-500REV	50 ~ 500kgf·cm	0.1kgf·cm	342	12	35	0.9	50 QCK
DTC-1000REV	100 ~ 1000kgf·cm	1kgf·cm	386	15	35	1.1	100 QCK
DTC-2000REV	200 ~ 2000kgf·cm	1kgf·cm	404	18	35	1.25	200 QCK
DTC-3000REV	3 ~ 30kgf·m	0.01kg·m	535	22	35	1.8	280 QCK-A
DTC-5000REV	5 ~ 50kgf·m	0.01kgf·m	1063	30	34	4.2	700 QCK
DTC-10000REV	10 ~ 100kgf·m	0.1kgf·m	1417	34	34	7.6	1000 QCK
DTC-PI80REV	8 ~ 80lbf·in	0.01lbf·in	314	10	35	0.8	12 QCK
DTC-PI400REV	40 ~ 400lbf·in	0.1lbf·in	342	12	35	0.9	50 QCK
DTC-PI800REV	80 ~ 800lbf·in	0.1lbf·in	386	15	35	1.1	100 QCK
DTC-PF100REV	10 ~ 100lbf·ft	0.1lbf·ft	404	18	35	1.25	200 QCK
DTC-PF200REV	20 ~ 200lbf·ft	0.1lbf·ft	535	22	35	1.8	280 QCK-A
DTC-PF400REV	40 ~ 400lbf·ft	0.1lbf·ft	1063	30	34	4.2	700 QCK
DTC-PF800REV	80 ~ 800lbf·ft	1lbf·ft	1417	34	34	7.6	1000 QCK

TORQUE WRENCH

ประแจขันปอนด์



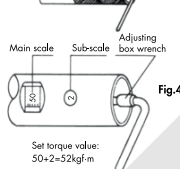
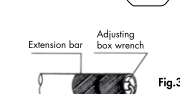
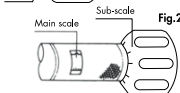
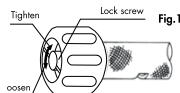
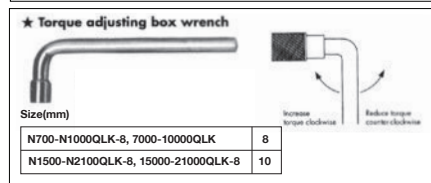
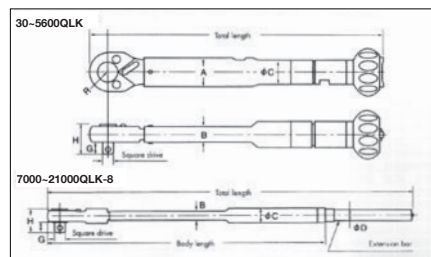
ประแจปอนด์แบบปรับตั้งแรงขัน หัวฟรีซ้าย-ขวา

QLK ADJUSTABLE, RATCHET TORQUE WRENCHS

Freely set torque values within the capacity range. Replaceable socket, ratchet wrenches.



30-4200QLK



FEATURES

- The ratchet improves efficiency. These wrenches are well suited for repetitive work.
- By replacing the sockets, various sizes of fasteners can be tightened within the tool's capacity range.
- By reversing the ratchet, the wrench can be used to loosen fasteners counter-clockwise.
- Tightening to a torque setting can only be done clockwise.
- Accuracy : $\pm 3\%$ of indicated value over the full range.

ADJUSTABLE THE TORQUE SETTING

◆ 30QLK-5600QLK

- (1) Loosen the lock screw. (See Fig.1)
- (2) Turn the sub-scale and adjust to a torque value (the main scale plus the sub-scale) (See Fig.2)
- (3) Tighten the lock screw.
(If the lock screw hits the pin before completely tightening, then change the position of the pin)

◆ 7000QLK-21000QLK-8

- (1) When applicable, mount the extension bar snugly all the way onto the body of the wrench.
- (2) With the extension bar mounted (See Fig.3), insert the hexagonal side of the adjusting box wrench.
- Without the extension bar (See Fig.4), insert the hexagonal side of the adjusting box wrench into the body.
- (3) Turn the adjusting box wrench to set the torque value. (the main scale plus the sub-scale)

Order No. (kgf • cm / kgf • m)	Range	Increment	Old Model (cN•m / N•m)	Order No. (cN•m / N•m)	Range	Increment	Order No. (lb•ft/in)	Range	Increment	Square drive	Total length	Dimensions (mm)								Weight	Standard Accessory
												Head			Body						
	kgf • cm/ kgf • m	kgf•cm/ kgf • m			cN•m / N•m	cN•m / N•m		lb•ft/in	lb•ft/in	mm	mm	S	G	R	A	B	C	D	Body length	kg	
30QLK	10-30kgf•cm	0.5kgf•cm	N30QLK	CN300QLK	100-300cN•m	5 cN•m				6.35											
60QLK	20-60 //	1 //	N60QLK	N6QLK	2-6 N•m	0.1 N•m				(1/4")	187	18.8	7.5	12	18.2	9.6	15			0.19	
120QLK	40-120 //	2 //	N120QLK	N12QLK	4-12 //	0.2 //	PI 120QLK	40-120	2												
250QLK	50-250 //	2 //	N250QLK	N25QLK	5-25 //	0.2 //	PI 230QLK	70-230	2	9.53	232			15.5						0.28	
500QLK	100-500 //	5 //	N500QLK	N50QLK	10-50 //	0.5 //	PI 450QLK	100-450	5	(3/8")	257	25	11	16	25	11.4	20			0.47	
900QLK	200-900 //	10 //	N900QLK	N90QLK	20-90 //	1 //					359									0.81	
1000QLK	200-1000 //	10 //	N1000QLK	N100QLK	20-100 //	1 //	PI 1000QLK	200-1000	10		399	31	14	19.7	27.5	12.4	21.7			0.86	
1400QLK	400-1400 //	10 //	N1400QLK	N140QLK	40-140 //	1 //				(1/2")											
1800QLK	400-1800 //	20 //	N1800QLK	N180QLK	40-180 //	2 //					491	33	15.4	23	34					1.5	
2000QLK	400-2000 //	20 //	N2000QLK	N200QLK	40-200 //	2 //	PI 2000QLK	400-2000	20							15.4	27.2				
2800QLK	400-2800 //	20 //	N2800QLK	N280QLK	40-280 //	2 //					691	42		23.5	35					1.95	
3600QLK	800-3600 //	20 //	N3600QLK	N360QLK	80-360 //	2 //														2.1	
4200QLK	6-42 kgf•m	0.2 kgf•m	N4200QLK	N420QLK	60-420 //	2 //				19.05	965	42.7	20	27.5	38	16	30			3.3	
5600QLK	8-56 //	0.3 //	N5600QLK	N560QLK	80-560 //	3 //				(3/4")	1,195	49.5		34	43.5	18	34			5	
7000QLK	10-70 //	0.5 //	N7000QLK	N700QLK	100-700 //	5 //					1,314			46	19.2	35.4	27.2	990	6.2	Torque adjusting box wrench	
8500QLK	10-85 //	0.5 //	N8500QLK	N850QLK	100-850 //	5 //					1,388										8.5
10000QLK	10-100 //	0.5 //	N10000QLK	N1000QLK-8	100-1000 //	5 //				25.4	1,538	58	27	38	54	23	42.7	31.8	1,105		8.8
15000QLK	20-150 //	1 //	N15000QLK	N1500QLK	200-1500 //	10 //				(1")	1,844			61	43.5	66	26	51	40		1,144
21000QLK-8	70-210 //	1 //	N21000QLK	N2100QLK-8	700-2100 //	10 //					2,064								1,704	19.5	

TORQUE WRENCH

ประแจขันปอนด์

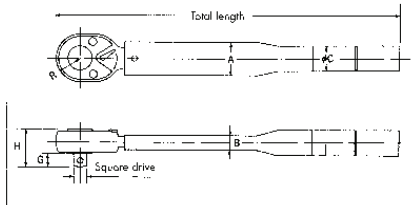


TORQUE WRENCH
ประแจขันปอนด์

ประแจปอนด์แบบปรับตั้งแรงขันตายตัว หัวฟรีซ้าย-ขวา

QSPK PRE-SET, RATCHET TORQUE WRENCHES, METAL HANDLE

Pre-set torque value. Improved work efficiency with ratchet square drive.



QSPK (Metal Handle)

FEATURES

- The ratchet drive enables quickly tightening fasteners to the preset torque. Suitable for repetitive jobs.
- The wrench's inner mechanism automatically resets itself for the next job after disengaging from a tightened joint.
- Accuracy : $\pm 3\%$ of pre-set value.

EXAMPLE OF ORDER

Model Pre-set Value
N100QSPK x 72N·m

Order No. (kgf·cm)	Range	Old Model (N·m)	Order No. (N·m)	Range	Order No. (lbf·in/ lbf·ft)	Range	Spanner sizes (W)	Total length	Dimensions (mm)						Weight			
	kgf·cm			N·m		lbf·in / lbf·ft			mm	mm	Head			Body			kg	
											H	G	R	A		B		C
60QSPK	20 ~60	N60QSPK	N6QSPK	2 ~6	PI 60QSPK	20 ~60 lbf·in	6.35	174	19.5	7.5	12.5	18.2	9.6	15	0.17			
120QSPK	40 ~120	N120QSPK	N12QSPK	4 ~12	PI 120QSPK	40 ~120 lbf·in	(1/4")											
250QSPK	50 ~250	N250QSPK	N25QSPK	5 ~25	PI 230QSPK	70 ~230 lbf·in	9.53	220	25	12	16	25	11.4	20	0.25			
500QSPK	100 ~500	N500QSPK	N50QSPK	10 ~50	PI 450QSPK	100 ~450 lbf·in	(3/8")	240										
1000QSPK	200 ~1000	N1000QSPK	N100QSPK	20 ~100	PI 900QSPK	200 ~900 lbf·in	12.7 (1/2")	340	31	14	19.7	27.5	12.4	21.7	0.64			
1400QSPK	400 ~1400	N1400QSPK	N140QSPK	40 ~140	PI 1400QSPK	400 ~140 lbf·in		380										
2000QSPK	400 ~2000	N2000QSPK	N200QSPK	40 ~200	PI 1800QSPK	400 ~1800 lbf·in	19.05 (3/4")	463.5	33	20	23	34	15.4	27.2	1.35			
2800QSPK	600 ~2800	N2800QSPK	N280QSPK	60 ~280	PI 2800QSPK	600 ~2800 lbf·in		664	42									
4200QSPK	600 ~4200	N4200QSPK	N420QSPK	60 ~420	PF 300QSPK	50 ~30 lbf·ft		935	42									

Tool Kits

ชุดเครื่องมือ

Pliers

คีม

Electrician Tool

เครื่องมือสำหรับ
อิเล็กทรอนิกส์
และช่างไฟ

Gear Puller

เพลาถอด

Adjustable

Wrench

ประแจเลื่อน

Wrench

ประแจ

Torque Wrench

เกจบิด

Socket Wrench

ลูกบิด

Screwdriver

ไขควง

Bits

ไขควง

Torque

Screwdriver

ไขควงทอร์ค

For Assembly

สำหรับงานทั่วไป

For Quality

Inspection

สำหรับการตรวจสอบ

Tension Gauge

เกจวัดแรงดึง-ดัน

Torque Tester

เครื่องวัดแรงบิด

ประแจปอนด์แบบปรับตั้งแรงขันตายตัว หัวฟรีซ้าย-ขวา

QSPKH, QSPKA PRE-SET, RATCHET TORQUE WRENCHES WITH RUBBER GRIP

Pre-set torque value. Improved work efficiency with ratchet square drive.

FEATURES

- The ratchet drive enables quickly tightening fasteners to the preset torque. Suitable for repetitive jobs.
- The wrench's inner mechanism automatically resets itself for the next job after disengaging from a tightened joint.
- Accuracy : $\pm 3\%$ of pre-set value.



60 ~ 1400QSPKH, QSPKA (with Rubber Grip)
N6 ~ N140QSPKH, QSPKA (with Rubber Grip)

■ H-type : The end cap is removed with a slotted screwdriver to adjust torque.

Order No. (kgf·cm)	Range	Old Model (N·m)	Order No. (N·m)	Range	Spanner sizes (W)	Total length	Dimensions (mm)						Weight
							Head			Body			
	kgf·cm			N·m	mm	mm	H	G	R	A	B	C	kg
60QSPKH	20~60	N60QSPKH	N6QSPKH	2~6	6.35 (1/4")	174	19.5	7.5	12.5				0.19
120QSPKH	40~20	N120QSPKH	N12QSPKH	4~12									
250QSPKH	50~50	N250QSPKH	N25QSPKH	5~25	9.53 (3/8")	220	25	12	16				0.27
500QSPKH	100~500	N500QSPKH	N50QSPKH	10~50		240				25	11.4	32.7	
1000QSPKH	200~1000	N1000QSPKH	N100QSPKH	20~100	12.7 (1/2")	340	31	14	19.7	27.5	12.4	37	0.69
1400QSPKH	400~1400	N1400QSPKH	N140QSPKH	40~140		380							

■ A-type : Adjusted setting torque value by hex wrench.

Order No. (kgf·cm)	Range	Old Model (N·m)	Order No. (N·m)	Range	Spanner sizes (W)	Total length	Dimensions (mm)						Weight
							Head			Body			
	kgf·cm			H	G	R	A	B	C	kg			
60QSPKA	20~60	N60QSPK-A	N6QSPKA	2~6	6.35 (1/4")	174	19.5	7.5	12.5				0.19
120QSPKA	40~20	N120QSPK-A	N12QSPKA	4~12						18.2	9.6	26.5	
250QSPKA	50~50	N250QSPK-A	N25QSPKA	5~25	9.53 (3/8")	220	25	12	16				0.27
500QSPKA	100~500	N500QSPK-A	N50QSPKA	10~50		240					25	11.4	
1000QSPKA	200~1000	N1000QSPK-A	N100QSPKA	20~100	12.7 (1/2")	340	31	14	19.7	27.5	12.4	37	0.69
1400QSPKA	400~1400	N1400QSPK-A	N140QSPKA	40~140		380							

Note : Use a KANON torque wrench analyzer when adjusting torque. Without the analyzer, torque cannot be adjusted.

Designed by JSR GROUP

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ห้ามนำไปเผยแพร่ก่อนได้รับอนุญาตจากทางบริษัท

TORQUE WRENCH

ประแจขันปอนด์



ประแจปอนด์หัวปากตายแบบตั้งแรงขันตายตัว

SPK PRE-SET TORQUE WRENCHES

Audible and tangible "CLICK" when the set torque is reached, assuring a securely tightened joint. This series is well-suited for production line use.



SPK (Metal Handle)



80 ~ 670SPKH (with Rubber Grip)

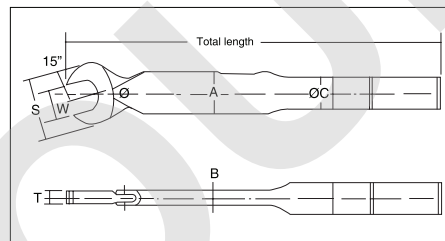
N8 ~ N67SPKH (with Rubber Grip)

EXAMPLE OF ORDER

Model Size(W) Pre-set Value
N19SPK 10 x 14N·m

FEATURES

- A single function wrench, used for a single setting combination of fastener size and torque setting.
- Most suited for tightening multiple same-size fasteners at the same torque in a production line.
- Setting confirmation unnecessary.
- Can be used effectively in confined spaces.
- Tightening to set torque only in the direction of the arrow indicator, but can be used for general tightening in the other direction as well.
- Accuracy : $\pm 3\%$ of pre-set value



Order No. (kgf•cm)	Range	Old Model (N•m)	Order No. (N•m)	Range	Spanner sizes (W)						Total length	Dimensions (mm)					Weight	
	kgf•cm			N•m								mm						S
30SPK	5 ~ 30	N30SPK	N3SPK	0.5 ~ 3	5.5	6					152	24	5	19.5	7.5	15	0.1	
					7	8	9	10										
80SPK	15 ~ 80	N80SPK	N8SPK	1.5 ~ 8	5.5	6	7				175	24	5	19.5	7.5	15	0.11	
					8	9	10	11	12	13								
190SPK	35 ~ 190	N190SPK	N19SPK	3.5 ~ 19	10	11					203	27					0.15	
					12	13	14				205	30	7	19.5	7.5	15		
					17	19					213	35						
					10	11	12	13	14		248	35						
380SPK	80 ~ 380	N380SPK	N38SPK	8 ~ 38	17	19					252	39	8	26.6	8.2	20	0.29	
					21	22	23	24			256	45						
					26	27	29	30	32		264	52	9					
					14	17	19	21			319	45	10					0.45
670SPK	130 ~ 670	N670SPK	N67SPK	13 ~ 67	22	24	26				325	50		25.8	9.7	20	0.46	
					27	30	32				330	56	11					0.47
					36	41					342	65						0.49
					17	19	22				390	52						0.75
1200SPK	240 ~ 1,200	N1200SPK	N120SPK	24 ~ 120	24	26	27				397	57	12				0.77	
					29	30	32				403	62						0.79
					36	41					404	64	14	32.8	11.3	25		0.81
					19	22					432	52	12					0.94
1600SPK	300 ~ 1,600	N1600SPK	N160SPK	30 ~ 160	24	26					442	57					0.97	
					27	30	32				449	64						0.99
					36								14					1.1
					41						457	73						1.1
2200SPK	450 ~ 2,200	N2200SPK	N220SPK	45 ~ 220	19	22					585	72	15	35.6	12.5	27.2	1.2	
					24	27												
					30	32	36					597	90					1.4
					41							597	90					1.5
3100SPK	650 ~ 3,100	N3100SPK	N310SPK	65 ~ 310	22						650	65					1.3	
					24							67						
					27						654	70	16	38.0	16	30		1.32
					30	32					662	72						1.4
4200SPK	900 ~ 4,200	N4200SPK	N420SPK	90 ~ 420	36	41					662	82					1.46	
					24						833	72						1.45
					27						833	74	19	43.3	17.8	34		1.47
					30						838	76						1.5
4200SPK	900 ~ 4,200	N4200SPK	N420SPK	90 ~ 420	32						843	78					1.52	
					36						847	88						1.47
					41						847	88						1.5
					46						860	94	18					1.52



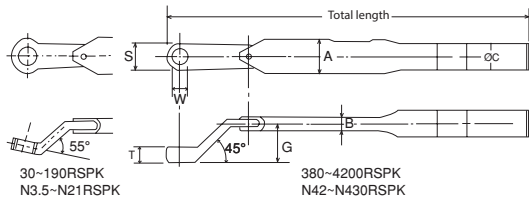
ประแจปอนด์หัวประแจแหวนแบบตั้งแรงขันตายตัว

RSPK PRE-SET, RING TORQUE WRENCHES

Can be used for accurate torque application even on joints inaccessible other wrenches.

FEATURES

- The ring head of RSPK wrenches is offset at a 45° angle making certain joints particularly accessible.
- A single function wrench, used for a single setting combination of fastener size and torque setting.
- Most suited for tightening multiple same-size fasteners at the same torque on a production line.
- Setting confirmation unnecessary.
- Accuracy : ±3% of pre-set value



EXAMPLE OF ORDER

Model Size(W) Pre-set Value
N21RSPK 10 x 14N·m



RSPK (Metal Handle)



80 ~ 670RSPKH (with Rubber Grip)
N9 ~ N73RSPKH (with Rubber Grip)

★1	Order No.	Ring head size (w) mm	Dimensions Head			★2	Order No.	Ring head size (w) mm	Dimensions Head			★3	Order No.	Ring head size (w) mm	Dimensions Head		
			S	T					S	T					S	T	
		5.5		4				5.5		4				10	16	7	
		6	10	5				6	10	5				11	18		
		7						7						12	19	8	
	30RSPK	8	13	6			80RSPK	8	13	6			190RSPK	13	20	8.5	
	N3.5RSPK	9	14				N9RSPK	9	14				N21RSPK	14	22	9	
		10	16	7				10	16	7				17	26	10	
								11	18					19	29	10.5	
								12	19	8				22	33	12	

Order No. (kgf•cm)	Range	Old Model (N•m)	Order No. (N•m)	Range	Spanner sizes (W)				Total length	Dimensions (mm)							Weight	
	kgf•cm			N•m	mm					mm	Head		Body					kg
					S	T	G	A			B	C						
30RSPK	5 ~ 35	N30RSPK	N3.5RSPK	0.5 ~ 3.5	5.5	6			175	★1		19.5	7.5	15	0.12			
80RSPK	20 ~ 90	N80RSPK	N9RSPK	2 ~ 9	5.5	6	7		197	★2		19.5	7.5	15	0.13			
					8	9	10											
					11	12												
190RSPK	40 ~ 210	N190RSPK	N21RSPK	4 ~ 21	10				222	★3		19.5	7.5	15	0.21			
					11	12	13	14	225						0.21			
					17	19	22		228						0.23			
380RSPK	90 ~ 420	N380RSPK	N42RSPK	9 ~ 42	11	12	13	14	268	22	10	25	26.6	8.2	20	0.31		
17	19	22		273	32	0.39												
670RSPK	140 ~ 730	N670RSPK	N73RSPK	14 ~ 73	14	17			343	26		27	25.8	9.7	20	0.46		
					19	22	24		348	34						0.48		
					27	30	32		353	40	12					0.5		
14				413	30	0.7												
1200RSPK	250 ~ 1,270	N1200RSPK	N127RSPK	25 ~ 127	17					32		29	32.8	11.3	25	0.8		
					19	22			415	34.5						0.85		
					24					38.5	15	31	32.8	11.3	25	0.9		
					27	30	32		428	44						1.0		
1600RSPK	320 ~ 1,700	N1600RSPK	N170RSPK	32 ~ 170	19	22	24		470	37	16.5	33	35.6	12.5	27.2	1.2		
27	30	32		474	44	1.25												
19				605	37			1.3										
22	24	27		608	41			1.35										
2200RSPK	480 ~ 2,300	N2200RSPK	N230RSPK	48 ~ 320	30	32			610	46	18	35	38	16	30	1.4		
36					50			1.45										
41					612	54		1.5										
3100RSPK	680 ~ 3,200	N3100RSPK	N320RSPK	68 ~ 320	22				682	40		37	43.3	17.8	34	1.35		
					24	27	30		685	46						1.4		
					32	36				52						1.45		
					41				688	56						1.5		
4200RSPK	900 ~ 4,300	N4200RSPK	N430RSPK	95 ~ 430	27	30	32		880	52						1.55		
					36				885	55						1.6		
					41				890	60						1.65		
					46				895	65						1.7		

Tool Kits

ชุดเครื่องมือ

Pliers

คีม

Electrician Tool

เครื่องมือสำหรับ
อิเล็กทรอนิกส์
และช่างไฟ

Gear Puller

เพลาถอด

Adjustable

Wrench

ประแจเลื่อน

Wrench

ประแจ

Torque Wrench

เกจบิด

Socket Wrench

ลูกบ็อก

Screwdriver

ไขควง

Bits

ไขควง

Torque

Screwdriver

ไขควงทอร์ค

For Assembly

สำหรับงานทั่วไป

For Quality

Inspection

สำหรับการตรวจสอบ

Tension Gauge

เกจวัดแรงดึง-ดัน

Torque Tester

เครื่องวัดแรงบิด

TORQUE WRENCH

ประแจขันปอนด์



ประแจปอนด์แบบปรับตั้งแรงขันตายตัว เปลี่ยนหัวขันได้

LCK ADJUSTABLE, REPLACEABLE HEAD TORQUE WRENCH

Freely replace heads according to work applications. The combination of replaceable heads and torque adjustability make this series extremely versatile.

Tool Kits
ชุดเครื่องมือ

Pliers
คีม

Electrician Tool

เครื่องมือสำหรับ
อิเล็กทรอนิกส์
และช่างไฟ

Gear Puller
เหล็กดูด

Adjustable
Wrench
ประแจเลื่อน

Torque Wrench
เกจบล็อก

Socket Wrench
ลูกบ็อก

Screwdriver
ไขควง

Bits
ไขควง

Torque
Screwdriver
ไขควงทอร์ก

For Assembly
สำหรับงานทั่วไป

For Quality
Inspection

สำหรับการตรวจสอบ

Tension Gauge
เกจวัดแรงดึง-ดัน

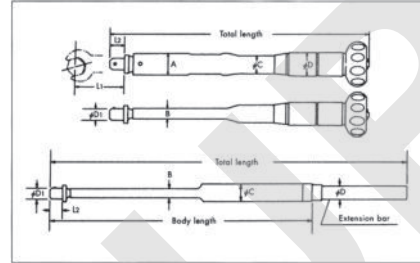
Torque Tester
เครื่องวัดแรงบิด



LCK

FEATURES

- Ring, ratchet, open and hex drive heads are available.
- The torque can be set to any value within the capacity range.
- Models are available ranging from 20 kgf•cm to 15,000 kgf•cm.
- Accuracy : ±3% of indicated value over the full range.

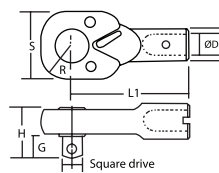


Order No. (kgf • cm / kgf • m)	Range	Increment	Old Model (cN•m / N•m)	Order No. (cN•m / N•m)	Range	Increment	Total length	Dimensions (mm)								Weight	Replaceable heads
								Head			Body						
	kgf • cm/ kgf • m	kgf•cm/ kgf • m			N•m	N•m	mm	ØD1	L1	L2	A	B	C	D	Body length	kg	
60LCK	20~60kgf•cm	1 kgf•cm	N60LCK	N6LCK	2~6	0.1	174								0.18	12QCK,	
120LCK	40~120 //	2 //	N120LCK	N12LCK	4~12	0.2		10	45	13	18.2	9.6	15			25 (QCK, SCK, RCK, HCK)	
250LCK	50~250 //	2 //	N230LCK	N25LCK	5~25	0.2	208								0.21	25 (QCK, SCK, RCK, HCK)	
500LCK	100~500 //	5 //	N450LCK	N50LCK	10~50	0.5	238	12	55	16	25	11.4	20		0.38	50 (QCK, SCK, RCK, HCK)	
1000LCK	200~1000 //	10 //	N900LCK	N100LCK	20~100	1	331	15	65	18	27.5	12.4	21.7		0.6	100 (QCK, SCK, RCK, HCK, NCK)	
2000LCK	400~2000 //	20 //	N1800LCK	N200LCK	40~200	2	455	18	80	22	34	15.4	27.2		1.35	200 (QCK, SCK, RCK, HCK, NCK)	
2800LCK	400~2800 //	20 //	N2800LCK	N280LCK	40~280	2	653				35				1.81	280 (QCK, SCK, RCK, HCK)	
4400LCK	6~44 kgf•m	0.2 kgf•m	N4400LCK	N440LCK	60~440	2	908	22	100	27	39	16	30		2.8	440 (QCK, SCK, RCK)	
5600LCK	8~56 //	0.3 //	N5600LCK	N560LCK	80~560	3	1086	30	125	45	43.5	18	34		4.1	700 (QCK, SCK, RCK)	
7000LCK	10~70 //	0.5 //	N7000LCK	N700LCK	100~700	5	1206				46	19.2	35.4	27.2	876	5.1	
8500LCK	10~85 //	0.5 //	N8500LCK	N850LCK	100~850	5	1267	34	130	47	54	23	42.7	31.8	984	7.2	
10000LCK	10~100 //	0.5 //	N10000LCK	N1000LCK	100~1,000	5	1417								7.5	1000 (QCK, SCK, RCK)	
15000LCK	20~150 //	1 //	N14000LCK	N1500LCK	200~1,500	10	1700	38	160	60	66	26	51	40	1003	13.5	2100QCK, 1500 (SCK, RCK)

หัวประแจต่อตามประแจปอนด์

HEAD OPTIONAL REPLACEABLE HEADS

QCK (Ratchet head)

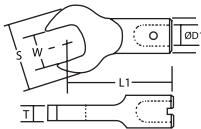


Order No.	Old Model	Sq. drive	S	H	G	R	L1	ØD1	ØD2	Applicable torque wrench
12QCK	120QCK	6.35 (1/4")	24	19	7.5	12	45	10	16	60-250LCK, N6-N25LCK, 60-250SPCK, N6-N25SPCK, 250GCK, N25GCK, DTC-20REV, DTC-50REV,
25QCK	230QCK	9.53 (3/8")	31	25	11	15.5				DTC-100REV, DTC-CN200REV, DTC-CN500REV, DTC-N10REV, DTC-PI-40REV, DTC-PI-80REV
50QCK	450QCK		32			16	55	12	18	500LCK, N50LCK, 500SPCK, N50SPCK, 500GCK, N50GCK, DTC-500REV, DTC-N50REV, DTC-PI-400REV, DLT-N50UC
100QCK	900QCK	12.7 (1/2")	39	31	14	19.7	65	15	24	1000LCK, N100LCK, 1000SPCK, N100SPCK, 1000, 1400GCK, 1000BCK, 1400BCK, N100BCK, N140BCK, N100, N140GCK, DTC-1000REV, DTC-N100REV, DTC-PI-800REV, DLT-N100-UC
200QCK	1800QCK		46	33		23	80	18	26	2000LCK, N200LCK, 2000SPCK, N200SPCK, 2000GCK, N200GCK, DTC-2000REV, DTC-N200REV, DTC-PF100REV, DLT-N200-UC
280QCK-A	2800QCK-A									2800LCK, N280LCK, 2800SPCK, N280SPCK, DTC-3000REV, DTC-N300REV, DTC-PF200REV
440QCK	4400QCK	19.05 (3/4")	54	42.5	20	27	100	22	30	4400LCK, N440LCK, 4400SPCK, N440SPCK
700QCK	7000QCK		68	50		34	125	30	41	5600, 7000LCK, N560, N700LCK, DTC-5000REV, DTC-N500REV, DTC-PF400REV
1000QCK	10000QCK	25.4 (1")	76	58	27	38	130	34	45	8500, 10000LCK, N850, N1000LCK, DTC-10000REV, DTC-N1000REV, DTC-PF800REV
2100QCK	21000QCK		87	61	28.5	43.5	160	38	52	15000LCK, N1500LCK



หัวประแจต่อตามประแจปอนด์
HEAD OPTIONAL REPLACEABLE HEADS

SCK (Open End head)



Unit : mm

Order No.	Old Model	Size (W)					S	T	L1	ØD1	ØD2	Applicable torque wrench
25SCK	230SCK	7	8	9	10	11	29	7	45	10	16	60-250LCK, N6-N25LCK, 60-250SPCK, N6-N25SPCK, 250GCK, N25GCK,DTC-20REV, DTC-50REV, DTC-100REV, DTC-CN200REV, DTC-CN500REV, DTC-N10REV, DTC-PI-40REV, DTC-PI80REV
		12	13	14	15	16	32					
		17	19	21	22		39	8				
		24	27				45					
50SCK	450SCK	8	9	10	11		32	8	55	12	20	500LCK, N50LCK, 500SPCK, N50SPCK,500GCK, N50GCK, DTC-500REV, DTC-N50REV, DTC-PI400REV,DLT-N50UC
		12	13	14	15	16	36					
		17	19	21	22		44	10				
		24	27				50					
100SCK	900SCK	12	13	14	15		40	10	65	15	24	1000LCK, N100LCK, 1000SPCK, N100SPCK,1000, 1400GCK, 1000BCK, 1400BCK, N100BCK, N140BCK, N100, N140GCK,DTC-1000REV DTC-N100REV, DTC-PI800REV, DLT-N100-UC
		16	17	19	21	22	48	12				
		24	27	30	32		57					
		17	19	21	22		56					
200SCK	1800SCK	24	27	30			64	14	80	18	28	2000LCK, N200LCK, 2000SPCK, N200SPCK,2000GCK, N200GCK, DTC-2000REV, DTC-N200REV, DTC-PF100REV, DLT-N200-UC
		32	36	41			75					
		19					59					
		21	22				61	16				
280SCK	2800SCK	24					63		100	22	30	2800LCK, N280LCK, 2800SPCK, N280SPCK, DTC-3000REV, DTC-N300REV, DTC-PF200REV
		27					67					
		30					69	16.5				
		32					71					
440SCK	4400SCK	36					75	18	100	22	30	4400LCK, N440LCK, 4400SPCK, N440SPCK
		41					80	20				
		46					85					
		19	22	24			70	20				
700SCK	7000SCK	27	30	32			78		125	30	41	5600, 7000LCK, N560, N700LCK, DTC-5000REV, DTC-N500REV, DTC-PF400REV
		36	41				84	22				
		46	50				94					
		55	60				100	25				
1000SCK	10000SCK	22	24				80		130	34	45	8500, 10000LCK, N850, N1000LCK, DTC-10000REV, DTC-N1000REV
		27					83					
		30					86	25				
		32					88					
1500SCK	14000SCK	36					91		160	38	50	15000LCK, N1500LCK
		41					95	28				
		46					98					
		50					102					
		55					105					
		60					110					
		27					84					
		30	32				90	30				
		36					95					
		41					100					
		46					106					
		50					110					
		55					115					
		60					120					
		41					110	32				
		46					115					
		50					120					
		55					122	35				
		60					127					
		65					130	38				

Tool Kits

ชุดเครื่องมือ

Pliers

คีม

Electrician Tool

เครื่องมือสำหรับ
อิเล็กทรอนิกส์
และช่างไฟ

Gear Puller

เพลาชัก

Adjustable Wrench

ประแจเลื่อน

Wrench

ประแจ

Torque Wrench

เกจบิด

Socket Wrench

ลูกบิด

Screwdriver

ไขควง

Bits

ไขควง

Torque Screwdriver

ไขควงทอร์ค

For Assembly

สำหรับงานทั่วไป

For Quality Inspection

สำหรับการตรวจสอบ

Tension Gauge

เกจวัดแรงดึง-ดัน

Torque Tester

เครื่องวัดแรงบิด

TORQUE WRENCH

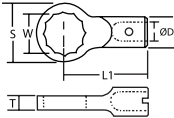
ประแจขันปอนด์

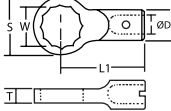


หัวประแจต่อตามประแจปอนด์

HEAD OPTIONAL REPLACEABLE HEADS

RCK (Ring head)

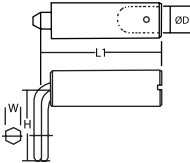


Tool Kits												
ชุดเครื่องมือ												
Pliers												
คีม												
Order No.	Old Model	Size (W)				S	T	L1	ØD1	ØD2	Applicable torque wrench	
Electrician Tool เครื่องมือสำหรับ อิเล็กทรอนิกส์ และช่างไฟ	25RCK 230RCK	7	8	9	10	18					60-250LCK, N6-N25LCK, 60-250SPCK, N6-N25SPCK,250GCK, N25GCK, DTC-20REV, DTC-50REV, DTC-100REV,DTC-CN200REV, DTC-CN500REV, DTC-N10REV, DTC-PI-40REV, DTC-PI80REV	
		11										
		12	13	14		21	8	45	10	16		
		17	19	22		31						
Gear Puller เหล็กดูด	50RCK 450RCK	24				32					500LCK, N50LCK, 500SPCK, N50SPCK,500GCK, N50GCK, DTC-500REV, DTC-N50REV, DTC-PI400REV,DLT-N50UC	
		8	10			19						
Adjustable Wrench ประแจเลื่อน	100RCK 900RCK	11	12	13	14	22	10	55	12	20	1000LCK, N100LCK, 1000SPCK, N100SPCK, 1000, 1400GCK, N100, 1000BCK, 1400BCK, N100BCK, N140BCK, N140GCK,DTC-1000REV, DTC-N100REV, DTC-PI800REV, DLT-N100-UC	
		17	19	22		32						
		12	13	14		25						
Wrench ประแจ	200RCK 1800RCK	17	19	21	22	34	13	65	15	23	2000LCK, N200LCK,2000SPCK, N200SPCK,2000GCK, N200GCK,DTC-2000REV, DTC-N200REV, DTC-PF100REV, DLT-N200-UC	
		24	27	30		42						
		17	19	22		35						
		24	27	30		45	15	80	18	27		
Torque Wrench เกจบิด	280RCK 2800RCK	32	36	41		58					2800LCK, N280LCK, 2800SPCK, N280SPCK, DTC-3000REV, DTC-N300REV, DTC-PF200REV	
		19	22	24		40						
		27	30	32		47	17	100	22	30		
		36	41			63						
Socket Wrench ลูกบ็อก	440RCK 4400RCK	46					20				4400LCK, N440LCK, 4400SPCK, N440SPCK	
		19	22	24		44						
Screwdriver ไขควง	700RCK 7000RCK	27	30	32		50					5600, 7000LCK, N560, N700LCK, DTC-5000REV, DTC-N500REV, DTC-PF400REV	
		36				58	20	100	22	30		
		46	50			66						
		55	60			80						
Torque Screwdriver ไขควงทอร์ค	1000RCK 10000RCK	22	24			52					8500, 10000LCK, N850, N1000LCK, DTC-10000REV, DTC-N1000REV	
		27	30	32		57	20					
		36				62						
		41				70	25	125	30	41		
For Assembly สำหรับงานทั่วไป	1500RCK 14000RCK	46	50			70	30				15000LCK, N1500LCK	
		55				80						
		60				80	30					
		27	30	32		60	25					
For Quality Inspection สำหรับการตรวจสอบ		36				65						
		41				72	28	130	34	45		
		50				80	30					
		55				80	33					
Tension Gauge เกจวัดแรงดึง-ดัน		60				80	30					
		41				75	27					
		46				80	30					
		50				80	32	160	38	50		
Torque Tester เครื่องวัดแรงบิด		55				90	35					
		60										



หัวประแจต่อด้ามประแจปอนด์
HEAD OPTIONAL REPLACEABLE HEADS

HCK (Hex drive head)



Order No.	Old Model	Size (W)	L1	ØD1	ØD2	Size (H)	Applicable torque wrench
25HCK	230HCK	2.5	45	10	16	19	60-250LCK, N6-N25LCK, 60-250SPCK, N6-N25SPCK, 250GCK, N25GCK, DTC-20REV, DTC-50REV, DTC-100REV, DTC-CN200REV, DTC-CN500REV, DTC-N10REV, DTC-PI-40REV, DTC-PI80REV
		3				22	
		4				25	
		5				30	
		6				35	
50HCK	450HCK	8	55	12	20	40	500LCK, N50LCK, 500SPCK, N50SPCK, 500GCK, N50GCK, DTC-500REV, DTC-N50REV, DTC-PI400REV, DLT-N50UC
		4				27	
		5				30	
		6				35	
		8				40	
100HCK	900HCK	10	65	15	23	45	1000LCK, N100LCK, 1000SPCK, N100SPCK, 1000, 1400GCK, N100, N140GCK, 1000BCK, 1400BCK, N100BCK, N140BCK, DTC-1000REV, DTC-N100REV, DTC-PI800REV, DLT-N100-UC
		6				35	
		8				40	
		10				45	
		12				51	
200HCK	1800HCK	14	80	18	28	63	2000LCK, N200LCK, 2000SPCK, N200SPCK, 2000GCK, N200GCK, DTC-2000REV, DTC-N200REV, DTC-PF100REV, DLT-N200-UC
		8				40	
		10				45	
		12				51	
		14				63	
280HCK	2800HCK	17	100	22	30	72	2800LCK, N280LCK, 2800SPCK, N280SPCK, DTC-3000REV, DTC-N300REV, DTC-PF200REV
		12				51	
		14				63	
		17				71	
		19				80	

Tool Kits

ชุดเครื่องมือ

Pliers

คีม

Electrician Tool

เครื่องมือสำหรับ
อิเล็กทรอนิกส์
และช่างไฟ

Gear Puller

เพลาชัก

Adjustable

Wrench

ประแจเลื่อน

Wrench

ประแจ

Torque Wrench

เกจบลีด

Socket Wrench

ลูกบ็อก

Screwdriver

ไขควง

Bits

ไขควง

Torque

Screwdriver

ไขควงทอร์ค

For Assembly

สำหรับงานทั่วไป

For Quality

Inspection

สำหรับการตรวจสอบ

Tension Gauge

เกจวัดแรงดึง-ดัน

Torque Tester

เครื่องวัดแรงบิด

TORQUE WRENCH

ประแจขันปอนด์



ประแจปอนด์แบบปรับตั้งแรงขัน หัวประแจเลื่อน

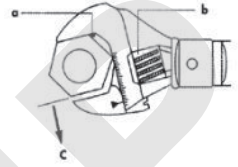
HYK ADJUSTABLE WRENCH HEADS, ADJUSTABLE TORQUE WRENCHS

Built-in "no play" worm screw



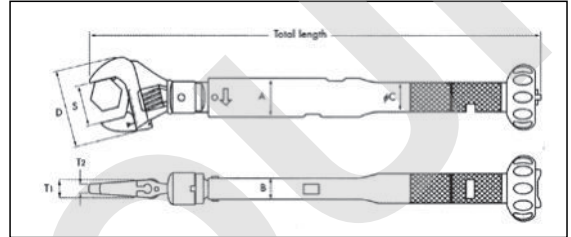
USING AN HYK

- (1) Slider the jaws onto the fastener until it contacts the spring pin. (a)
- (2) Tighten the adjusting worm screw so the jaws grip the fastener. (b)
- (3) Loosen the adjusting worm screw just enough to allow removing the wrench from the fastener. (c)



FEATURES

- Since the head can be taken off and reversed, the wrench can be used in confined spaces (in as small as a 30 degree turn) previously inaccessible to even other adjustable wrenches. (Tightening to a torque setting can only be done in the direction of the arrow.)
- There is hardly any play in the worm screw adjuster in the wrench head, which will improve your working efficiency. Without excess play, the torque wrench will not damage the corners of fasteners like ordinary wrenches will.
- Accuracy : $\pm 4\%$ of indicated value over the full range.



Order No. (kgf·m)	Range	Increment	Order No. (N·m)	Range	Increment	Total length mm	Opening Size(mm)	Dimensions (mm)						Weight kg
										Head		Body		
	kgf·cm			N·m			S	D	T1	T2	A	B	ØC	
500HYK	100 ~500	5	N50HYK	10 ~50	0.5	288	10~26	49	10	5.5	25	11.4	20	0.48
1000HYK	200 ~1000	10	N100HYK	20 ~100	1	393	10~30	59	12	6	27.5	12.4	21.7	0.76
2000HYK	400 ~200	20	N200HYK	40 ~200	2	531	17~38	67	12.5	6.5	34	15.4	27.2	1.47

ประแจปอนด์แบบปรับตั้งแรงขัน

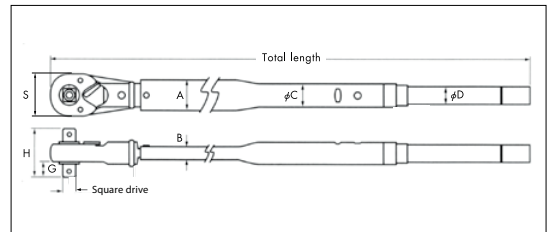
QLK-LR LARGE HUB NUT TORQUE WRENCHES

Ideal for tightening hub nuts on large trucks and buses



FEATURES

- Dual square drives for both clockwise and counterclockwise tightening.
- By replacing the sockets, various sizes of fasteners can be tightened within the tool's capacity range.
- Tightening to a torque setting, can only be done in the direction of the arrow.
- Accuracy : $\pm 3\%$ of indicated value over the full range.



Order No. (kgf•m)	Range	Increment	Order No. (N•m)	Old Model (N•m)	Range	Increment	Square drive	Total length	Dimensions (mm)								Weight	Standard Ac- cessory
									Head			Body						
	kgf•cm					N•m			mm	mm	S	G	H	A	B	ØC	ØD	
7000QLK-LR	10~70	0.5	N700QLK-LR	N7000QLK-LR	100~700	5	19.05 (3/4")	1,314	63	20	70	49	20	35.4	27.2	7.0	Torque adjusting box wrench	
8500QLK-LR	10~85	0.5	N850QLK-LR	N8500QLK-LR	100~850	5	25.4 (1")	1,388	76	27	85	54	23	42.7	31.8	8.5		
10000QLK-LR	10~100	0.5	N1000QLK-LR	N10000QLK-LR	100~1000	5		1,538								8.8		

TORQUE WRENCH

ประแจขันปอนด์



TORQUE WRENCH
ประแจขันปอนด์

ประแจปอนด์แบบหน้าปัทม์ 2เข็ม

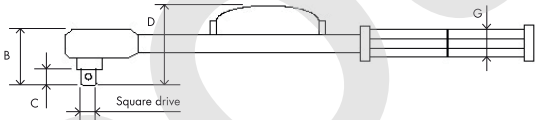
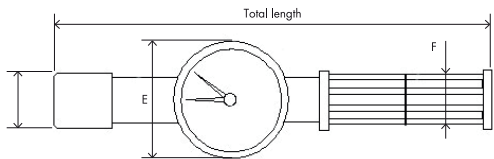
TOK-G DIAL INDICATOR TORQUE WRENCHES

Easy to read dial indicator. Well suited for inspection and general maintenance service.



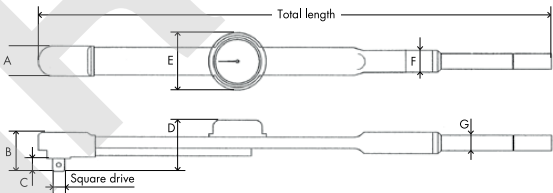
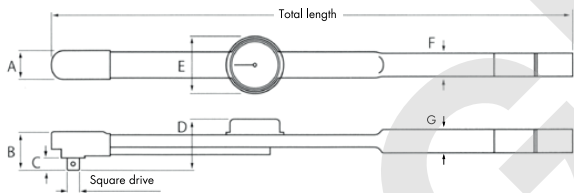
TOK-G (with peak indicator)

60~2000TOK-G



3000~4200TOK-G

5500TOK-G



FEATURES

- Oval design with comfort rubber grip reduces strain.
- Easily readable for inspections.
- Useful for general tightening work.
- Accuracy : $\pm 3\%$ of indicated value over the full range.

USING A TOK WRENCH

- (1) Turn the dial cap and set the indicator to 0.
 - (2) Mount a socket on the square drive.
 - (3) Tighten until the indicator points to the desired torque.
- * When using a peak indicator wrench, set it to 0 before tightening.

Order No. (kgf·cm / kgf·m)	Range (CW/CCW)	Increment	Order No. (N·m)	Range (CW/ CCW)	Increment	Square drive	Total length	Dimensions (mm)							Weight
								Head			Body				
	kgf·cm / kgf·m			N·m	mm	S	A	B	C	D	E	F	G	kg	
60TOK-G	6~60 kgf·cm	1 kgf·cm	N 6TOK-G	0.6~6	0.1	6.35	260	35	38.5	7.5	58	90	37	21.5	0.5
120TOK-G	10~120 kgf·cm	2 kgf·cm	N 12TOK-G	1~12	0.2	(1/4")									
300TOK-G	50~300 kgf·cm	5 kgf·cm	N 30TOK-G	5~30	0.5	9.53									
500TOK-G	50~500 kgf·cm	5 kgf·cm	N 50TOK-G	5~50	0.5	(3/8")	323	35	43	11	60	90	37	21.5	0.61
700TOK-G	100~700 kgf·cm	10 kgf·cm	N 70TOK-G	10~70	1										
1400TOK-G	200~1,400 kgf·cm	20 kgf·cm	N 140TOK-G	20~140	2	12.7	463	39	49	14	65	90	41	22.5	0.87
2000TOK-G	200~2,000 kgf·cm	20 kgf·cm	N 200TOK-G	20~200	2	(1/2")									
3000TOK-G	3~30 kgf·m	0.5 kgf·m	N 300TOK-G	30~300	5	19.05	682	41	55		77		Ø30	Ø30	1.6
4200TOK-G	4~42 kgf·m	1 kgf·m	N 420TOK-G	40~420	10	(3/4")	955	48		20		90	Ø34	Ø34	2.5
5500TOK-G	5~55 kgf·m	1 kgf·m	N 550TOK-G	50~550	10		1,110	50		60	80		Ø38	Ø30	3.8

Tool Kits

ชุดเครื่องมือ

Pliers

คีม

Electrician Tool

เครื่องมือสำหรับ
อิเล็กทรอนิกส์
และช่างไฟ

Gear Puller

เหล็กดูด

Adjustable

Wrench

ประแจเลื่อน

Wrench

ประแจ

Torque Wrench

เกจบลีด

Socket Wrench

ลูกบ็อก

Screwdriver

ไขควง

Bits

ไขควง

Torque

Screwdriver

ไขควงทอร์ค

For Assembly

สำหรับงานทั่วไป

For Quality

Inspection

สำหรับการตรวจสอบ

Tension Gauge

เกจวัดแรงดึง-ดัน

Torque Tester

เครื่องวัดแรงบิด

TORQUE WRENCH

ประแจขันปอนด์

CEDAR®

ประแจวัดแรงบิด

Digital torque wrench - DIW series (120/75/20/15)

For tightening and final check of screws & bolts

The wrench head part can rotate about 300 degrees! The eyes and the display board can be always parallel and improves operability.

Lightweight and compact with integrated display !

Cordless type and improves operability. Enable to stably measure for long continuous use. Screw tightening counter function is also installed as standard.

Enable to save 5 channels of pass/fail judgement criterion, and enable to change settings easily by switch channels even if the tightening term changes.

- The wrench head part can rotate about 300 degrees
- Lightweight and compact with integrated display
- 800 items of Memory data
- USB shape of Data output
- Settable upper limit and lower limit torque
- Notify the set value with buzzer & LED lamp
- Built-in tightening counter
- Rechargeable battery drive
- Auto power off safe operation
- Real time data output



Order No.		DIW-15	DIW-20	DIW-75	DIW-120
Accuracy guarantee range	N/m	0.20 ~ 15	0.20 ~ 20	0.20 ~ 75	2.0 ~ 120
	kgf/cm	2.0 ~ 150	2.0 ~ 200	2.0 ~ 750	20 ~ 1200
	lbf/in	2.0 ~ 130	2.0 ~ 174	2.0 ~ 651	20 ~ 1040
Accuracy		Reading ±0.5% (199 or less digit ±1digit)		Reading ±0.5% (499 or less digit ±3digit)	
Display		The 4 figures digital display of LCD			
Measurement direction		CW-CCW (right and left)			
Measurement Mode	PP	peak to peak The highest value of load is hold-displayed.			
	TR	track A display also changes with load change.			
	PD	peak-down Load catches and displays the moment included in descent from a rise.			
	C	Real-time Output Load torque value is outputted every about 1/160 second.			
A success or failure judging function		High and low value are measurement within the limits, and can be set up. Five-set preservation is possible.			
The Maximum, the minimum, and the average value		Displays, and output the data number, the maximum, the minimum, and the average value of the measured value.			
Data memory counts		800 data			
Data output		ASCII format (baud rate 19200)			
Auto clear time		If the set-up time comes, measurement value will be automatically cleared in 0.0 ~ 3.0 seconds (0.5s interval).			
Setup of count		1 to 99 count (count in a clockwise direction)			
Power supply		Ni-MH chargeable battery 1.2Vx4cells 800mAh			
Charge time / use time		Charge about 5 hour / Continuation about 12-hour use			
Auto-power-off		After the neglect during 10 minutes			
Bit / Socket part		☐ 6.35	☐ 9.5	☐ 12.7	
Weight (about)		430g	470g	620g	830g
Accessories (one piece each)		One-way socket			
		Exclusive charger			
Option		Result of calibration document			
		Certification on calibration document / Traceability system figure			
		When outputting data, the USB cable (mini B) is needed.			

ประแจขันปอนด์ดิจิทัล

CEM3-G - DATA TORK / DIGITAL TORQUE WRENCH

INSPECTION | DIGITAL | INTERCHANGEABLE | DIRECT READING | RE-CHARGEABLE | ISO6789:2003

- Dual LED & LCD displays for optimal viewing
- 999 memory storage capacity
- For inspection and tightening



CEM20N3x10D-G



CEM100N3x15D-G



CEM850N3x32D-G

Order No.	Torque Range										Head Force [N]	Overall Length [mm]	Weight [kg]
	[N•m]		[kgf•cm]		[kgf•m]		[lbf•in]		[lbf•ft]				
	Min.-Max.	1 digit	Min.-Max.	1 digit	Min.-Max.	1 digit	Min.-Max.	1 digit	Min.-Max.	1 digit			
CEM10N3x8D-G	2-10	0.01	20-100	0.1	0.200-1.000	0.001	20.0-90.0	0.1	1.50-7.30	0.01	48.1	212	0.46
CEM20N3x10D-G	4-20	0.02	40-200	0.2	0.400-2.000	0.002	36.0-180.0	0.2	3.00-14.50	0.02	92.2	214	0.47
CEM50N3x12D-G	10-50	0.05	100-500	0.5	1.000-5.000	0.005	100.0-440.0	0.5	7.50-36.00	0.05	196.9	282	0.58
CEM100N3x15D-G	20-100	0.1	200-1000	1	2.00-10.00	0.01	200-880	1	15.0-73.0	0.1	275.5	384	0.63
CEM200N3x19D-G	40-200	0.2	400-2000	2	4.00-20.00	0.02	360-1700	2	30.0-150.0	0.2	428.3	475	0.78
CEM360N3x22D-G	72-360	0.4	720-3600	4	7.2-36.00	0.04	650-3100	4	52.0-260.0	0.4	498.6	713	1.13
CEM500N3x22D-G	100-500	0.5	1000-5000	5	10.00-50.00	0.05	890-4400	5	73.0-360.0	0.5	549.5	949	4.00
CEM850N3x32D-G	170-850	1	-	-	17.0-85.0	0.1	-	-	124-620	1	608	1387	5.14

Note.

1. Overall length does not include interchangeable head.
2. For interchangeable head.
3. For infrared data transfer, use with R-DT999.
4. PH Pipe wrench head type interchangeable head is not available for this model.
5. CEM500N3x22D-G and CEM850N3x32D-G have knurled handles.
6. For USB data transfer, use optional connecting cable, No.584.

Standard Accessories

1. Battery pack/BP-5
2. QH interchangeable head.
3. Quick battery charger/BC-3-G (100-240V).

Tool Kits

ชุดเครื่องมือ

Pliers

คีม

Electrician Tool

เครื่องมือสำหรับ
อิเล็กทรอนิกส์
และช่างไฟ

Gear Puller

เพลาชัก

Adjustable

Wrench

ประแจเลื่อน

Wrench

ประแจ

Torque Wrench

เกจบิด

Socket Wrench

ลูกบิด

Screwdriver

ไขควง

Bits

ไขควง

Torque

Screwdriver

ไขควงทอร์ก

For Assembly

สำหรับงานทั่วไป

For Quality

Inspection

สำหรับการตรวจสอบ

Tension Gauge

เกจวัดแรงดึง-ดัน

Torque Tester

เครื่องวัดแรงบิด

ประแจขันปอนด์

SF/F/FR - BEAM TYPE TORQUE WRENCH

INSPECTION | BEAM | DIRECT READING | ISO6789:20003

- Direct reading torque wrench with scale plate
- For measuring and tightening applications



SF6N



F92N

Accuracy ±3%

S.I. Order No.	Torque Range [N•m]		Metric Order No.	Torque Range [kgf•cm/kgf•m]		American Order No.	Torque Range [lbf•in/lbf•ft]		Overall Length [mm]	Square Drive [mm]	Weight kg
	Min.-Max.	Grad.		Min.-Max.	Grad.		Min.-Max.	Grad.			
	cN•m	cN•m		kgf•cm	kgf•m		lbf•in	lbf•ft			
SF40CN	2-40	2	4SF	0.8-4	0.2	4SF-A	0-3.4	0.2	115	6.35	0.04
SF70CN	10-70	2	7SF	1-7	0.2	7SF-A	0-6	0.2	135	6.35	0.05
	N•m	N•m									
SF1.5N	0.2-1.5	0.05	15SF	2-15	0.5	15SF-A	0-13	0.5	145	6.35	0.07
SF3N	0.5-3	0.1	30SF	5-30	1	30SF-A	0-26	1	175	6.35	0.09
SF6N	0.6-6	0.2	60SF	6-60	2	60SF-A	0-50	2	205	6.35	0.2
SF12N	2-12	0.5	120SF	20-120	5	120SF-A	0-100	5	235	6.35	0.25
F23N	3-23	0.5	230F	30-230	5	230F-A	0-200	5	295	9.5	0.4
F46N	5-46	1	460F	50-460	10	460F-A	0-400	10	355	9.5	0.6
							lbf•ft	lbf•ft			
F92N	10-92	2	920F	100-920	20	920F-A	10-66	2	400	12.7	0.95
F130N	20-130	2	1300F	200-1300	20	1300F-A	10-95	2	445	12.7	1.2
F190N	30-190	5	1900F	300-1900	50	1900F-A	25-135	5	490	12.7	1.5
				kgf•m	kgf•m						
F280N	50-280	5	2800F	5-28	0.5	2800F-A	30-200	5	565	19.0	2.2
F420N	70-420	10	4200F	7-42	1	4200F-A	30-300	5	825	19.0	3.5
F560N	100-560	10	5600F	10-56	1	5600F-A	50-400	10	945	19.0	4.0
F700N	100-700	10	7000F	10-70	1	7000F-A	50-500	10	1175	19.0	6.0
F850N	100-850	20	8500F	10-85	2	8500F-A	60-600	20	1410	25.4	7.8
F1000N	100-1000	20	10000F	10-100	2	10000F-A	70-700	20	1640	25.4	8.8
FR1050N	100-1050	20	10500FR	10-105	2	10500FR-A	100-7500	20	835	25.4	8
FR1400N	200-1400	20	14000FR	20-+140	2	14000FR-A	100-1000	20	981	25.4	11.5
FR2100N	300-2100	50	21000FR	30-210	5	21000FR-A	200-1500	50	1148	25.4	14.5
FR2800N	300-2800	50	28000FR	30-280	5	28000FR-A	200-2000	50	1292	38.1	20
FR4200N	400-4200	100	42000FR	40-420	10	42000FR-A	300-3000	50	1460	38.1	28
FR6000N	600-6000	100	60000FR	60-600	10	60000FR-A	400-4300	50	1624	38.1	30

- Note.
1. FR models are supplied upon request.
 2. FR models require winch or mechanical loading device.
 3. For models having over 25.4mm square drive, use with a through-hole socket.
 4. Accuracy of American models is warranted from 20% of max. torque.

Designed by JSR GROUP

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ห้ามนำไปเผยแพร่ก่อนได้รับอนุญาตจากทางบริษัท

TORQUE WRENCH

ประแจขันปอนด์



ประแจขันปอนด์

DB/DBE/DBR - DIAL INDICATING TORQUE WRENCH

INSPECTION | DIAL INDICATING | DIRECT READING | ISO6789:2003,2017

- Memory pointer for easy torque reading
- Ideal for torque measuring and quality check applications

Tool Kits

ชุดเครื่องมือ

Pliers

คีม

DB12N4

DB100N

DBE700N



Memory pointer, Red color point

DB Optional Accessories



Carrying case

Part #	Applicable Model Dimension [mm]	Weight [kg]
846	DB100N-S, CDB100Nx15D-S or less H170xW500xD100	1.0
847	DB280N-S, CDB280Nx22D-S or less H170xW740xD100	1.6

S.I. Order No.	Torque Range [N·m/kN·m]		Metric Order No.	Torque Range [kgf·cm/ kgf·m]		American Order No.	Torque Range [lbf·in/lbf·in]		Overall Length [mm]	Square Drive [mm]	Weight kg
	Min.- Max.	Grad.		Min.- Max.	Grad.		Min.- Max.	Grad.			
	N·m	N·m		kgf·cm	kgf·cm		lbf·in	lbf·in			
DB1.5N4-S	0.2-1.5	0.02	15DB4-S	2-15	0.2	DB13I-2AS	0-13	0.2	205	6.35	0.4
DB3N4-S	0.3-3	0.05	30DB4-S	3-30	0.5	DB26I-2AS	0-26	0.5	205	6.35	0.4
DB6N5-S	0.7-6	0.1	DB60M5-S	7-60	1	DB40I-2AS	0-40	0.5	205	6.35	0.4
DB12N5-S	1.4-12	0.2	DB120M5-S	14-120	2	DB75I-2AS	0-75	1	205	6.35	0.4
DB25N-1/4-S	3.5-25	0.5	DB250M5-1/4-S	35-250	5	DB150I-2AS	0-150	2	245	6.35	0.6
DB25N5-S	3.5-25	0.5	DB250M5-S	35-250	5	DB150I-3AS	0-150	2	245	9.5	0.6
-	-	-	-	-	-	DB300I-3AS	0-300	5	320	9.5	0.6
DB50N-S	5-50	0.5	DB500M-S	50-500	-	-	-	-	320	9.5	0.6
						DB25F-3AS	0-25	0.5	320	9.5	0.6
							lbf·in	lbf·in			
						DB600I-3AS	0-600	10	400	9.5	0.7
DB100N-3/8-S	10-100	1	DB1000M-3/8-S	100-1000	10				400	9.5	0.7
							lbf·ft	lbf·ft			
						DB50F-3AS	0-50	0.5	400	9.5	0.7
							lbf·in	lbf·in			
						DB600I-4AS	0-600	10	400	12.7	0.7
DB100N-S	10-100	1	DB1000M-S	100-1000	10				400	12.7	0.7
							lbf·ft	lbf·ft			
						DB50F-4AS	0-50	0.5	400	12.7	0.7
DB200N-S	20-200	2	DB2000M-S	200-2000	20	DB100F-4AS	0-100	1	500	12.7	1.0
				kgf·m	kgf·m						
-	-	-	-	-	-	DB175F-4AS	0-175	2	580	12.7	1.0
DB280N5-1/2-S	35-280	5	DB2800M5-1/2-S	3.5-28	0.5	-	-	-	690	12.7	1.65
DB280N5-S	35-280	5	DB28000M5-S	3.5-28	0.5	DB250F-6AS	0-250	5	690	19.0	1.65
DB420N-S	40-420	5	DB4200M-S	4-42	0.5	DB350F-6AS	0-350	5	890	19.0	2.5
DBE560N-S	50-560	5	DBE5600M-S	5-56	0.5	-	-	-	1100	19.0	4.0
DBE700N-S	70-700	10	DBE7000M-S	7-70	1	DB500F-6AS	0-500	10	1260	19.0	5.5
DBE850N-S	100-850	10	DBE8500M-S	10-85	1	-	-	-	1360	25.4	6.1
DBE1000N-S	100-1000	10	DBE10000M-S	10-100	1	DB800F-8AS	0-800	10	1490	25.4	6.4
DBE1400N-S	200-1400	20	DBE14000M-S	20-140	2	DB1000F-8AS	0-1000	10	1740	25.4	8.6
DBE2100N-S	200-2100	20	DBE21000M-S	20-210	2	DB1500F-8AS	0-1500	20	2140	25.4	12.8
DBE2800N5-S	350-2800	50	DBE28000M5-S	35-280	5	DB2000F-12AS	0-2000	20	2380	38.1	16.8
	kN·m	kN·m									
DBR4500N-S	0.5-4.5	0.05	45000DBR-S	50-450	5	DB3000F-12AS	0-3000	50	1285	38.1	26.5
DBR6000N-S	0.6-6	0.1	60000DBR-S	60-600	5	-	-	-	1585	44.5	27.5

Note. 1. "Without memory pointer" models are available. Remove "-S" from the model name when ordering. EX. DB100N
2. DBR models require winch or mechanical loading device.
3. DBR Models are supplied upon request.
4. For models having over 25.4mm square drive, use with a through-hole socket.
5. Accuracy of American models is warranted from 20% of max. torque.
6. DB1.5N4, DB3N4 and the equivalent metric models, American unit models come with ISO6789-2003 certificate.

Torque Tester

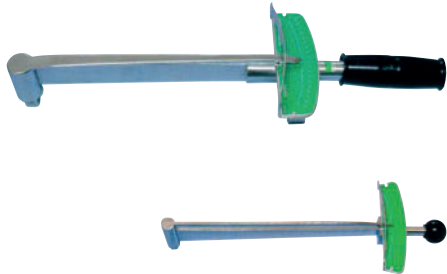
เครื่องวัดแรงบิด



ประแจปอนด์แบบเข็ม

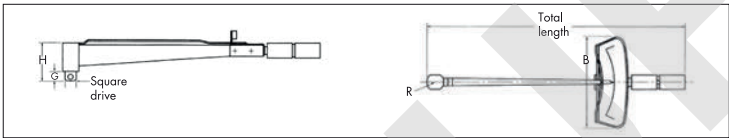
FK INDICATOR PLATE TORQUE WRENCHES

Quite suitable for general tightening and for checking torque on previously tightened joints. A popular sertie with fan-shaped indicator plate scales.



FEATURES

- The simple structure and small friction area give the series of tools a long life.
- Strong and easy to handle.
- Tightening to a torque setting, can only be done in the direction of the arrow.
- Accuracy : $\pm 3\%$ of indicated value over the full range.



Order No. (N·m)	Old Model (N·m)	Range (CW / CCW)	Increment	Sq.drive	Total length	Dimensions (mm)				Weight
						Head		Body		
		cN·m / N·m		mm	mm	H	G	R	B	kg
CN70FK	N7FK	10~70 cN·m	2 cN·m	6.35 (1/4")	132	26	7.5	5	75	0.05
CN150FK	N15FK	50~150 cN·m	5 cN·m		140					0.08
N3FK	N30FK	1~3 N·m	0.1 N·m		170					0.1
N6FK	N60FK	1~6 N·m	0.2 N·m		190	0.22				
N12FK	N120FK	2~12 N·m	0.5 N·m		237	0.25				
N23FK	N230FK	3~23 N·m	0.5 N·m	9.53	290	43.5	11	6	85	0.3
N45FK	N450FK	5~45 N·m	1 N·m	(3/8")	320					0.34
N90FK	N900FK	10~90 N·m	2 N·m	12.7 (1/2")	388					12.5
N130FK	N1300FK	20~30 N·m	2 N·m		441	14	114	1.2		
N180FK	N1800FK	30~80 N·m	5 N·m		487	13.5		1.3		
N280FK	N2800FK	50~80 N·m	5 N·m	19.05	587	82	20	15	124	2.6
N420FK	N4200FK	70~20 N·m	10 N·m	(3/4")	853	48		28	186	3.5

Tool Kits

ชุดเครื่องมือ

Pliers

คีม

Electrician Tool

เครื่องมือสำหรับ
อิเล็กทรอนิกส์
และช่างไฟ

Gear Puller

เพลาถอด

Adjustable

Wrench

ประแจเลื่อน

Wrench

ประแจ

Torque Wrench

เกจบิด

Socket Wrench

ลูกบ็อก

Screwdriver

ไขควง

Bits

ไขควง

Torque

Screwdriver

ไขควงทอร์ค

For Assembly

สำหรับงานทั่วไป

For Quality

Inspection

สำหรับการตรวจสอบ

Tension Gauge

เกจวัดแรงดึง-ดัน

Torque Tester

เครื่องวัดแรงบิด

TORQUE WRENCH

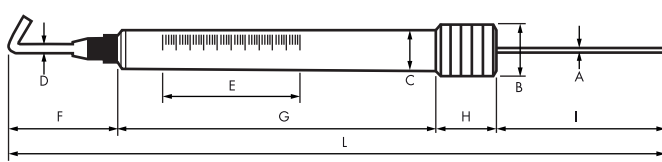
ประแจขันปอนด์



เกจวัดแรงดึง-ดัน2เข็ม

TK TENSION GAUGES

Demonstrating KANON's measuring versatility. Great performance whether measuring vertically or horizontally.



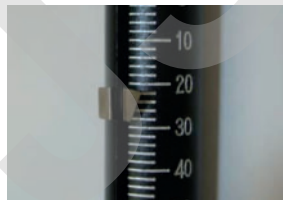
FEATURES

- Measures pushing, pulling force and spring tension. Out tension gauges are designed to indicate precise increments of force.
- Use the gauges for taking horizontal measurements. Just add the correcting value to the indicated value (see table below). A peak indicator is available for TK500 to TK30000 and TK500CN to TK30000CN.
- Accuracy : $\pm 1\%$ indicated.

Order No.	Range (g)	Incr. (g)	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	L mm	Weight (g)	Correcting value for horizontal measurements (g)
TK10	0~10	0.5	1.5	16	13	1.5	40	19	98	15	48	181	30	3
TK30	0~30	1	1.5	16	13	1.5	60	19	113	15	66	214	30	3
TK50	0~50	1	1.5	16	13	1.5	60	19	113	15	66	214	30	3
TK110	0~110	2	2	16	13	2	60	27.5	113	15	65.5	221	35	10
TK200	0~200	5	2	16	13	2	60	27.5	113	15	65.5	221	35	10
TK300	0~300	5	2	16	13	2	60	27.5	113	15	65.5	221	35	10
TK500	0~500	10	3	20	16	2.6	56	43	131	25	69	270	78	30
TK600	0~600	20	3	20	16	2.6	56	43	131	25	69	270	78	30
TK1000	0~1000	25	3	20	16	2.6	56	43	131	25	69	270	78	30
TK1500	0~1500	50	3	20	16	2.6	56	43	131	25	69	270	78	30
TK2000	0~2000	50	3	20	16	2.6	56	43	131	25	69	270	78	30
TK2500	0~2500	50	3	20	16	2.6	62	43	143	25	74	288	85	50
TK3000	0~3000	50	3	20	16	2.6	62	43	143	25	74	288	85	50
TK4000	0~4000	50	4	25	22	3.5	68	43	178	35	82	340	200	100
TK5000	0~5000	100	4	25	22	3.5	68	43	178	35	82	340	200	100
TK7000	0~7000	200	4	25	22	3.5	68	43	178	35	82	340	205	100
TK10000	0~10000	200	4	25	22	3.5	68	43	178	35	82	340	205	100
TK15000	0~15000	200	8	35	32	7	95	83	230	35	145	462	600	250
TK20000	0~20000	200	8	35	32	7	118	83	280	35	140	540	680	250
TK30000	0~30000	500	8	40	38	7	130	83	305	35	172	598	830	350

Order No.	Range (g)	Incr. (g)	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	L mm	Weight (g)	Correcting value for horizontal measurements (g)
TK10CN	0~10	0.5	1.5	16	13	1.5	40	19	98	15	48	181	30	3
TK30CN	0~30	1	1.5	16	13	1.5	60	19	113	15	66	214	30	3
TK50CN	0~50	1	1.5	16	13	1.5	60	19	113	15	66	214	30	3
TK110CN	0~110	2	2	16	13	2	60	27.5	113	15	65.5	221	35	10
TK200CN	0~200	5	2	16	13	2	60	27.5	113	15	65.5	221	35	10
TK300CN	0~300	5	2	16	13	2	60	27.5	113	15	65.5	221	35	10
TK500CN	0~500	10	3	20	16	2.6	56	43	131	25	69	270	78	30
TK600CN	0~600	20	3	20	16	2.6	56	43	131	25	69	270	78	30
TK1000CN	0~1000	25	3	20	16	2.6	56	43	131	25	69	270	78	30
TK1500CN	0~1500	50	3	20	16	2.6	56	43	131	25	69	270	78	30
TK2000CN	0~2000	50	3	20	16	2.6	56	43	131	25	69	270	78	30
TK2500CN	0~2500	50	3	20	16	2.6	62	43	143	25	74	288	85	50
TK3000CN	0~3000	50	3	20	16	2.6	62	43	143	25	74	288	85	50
TK4000CN	0~4000	50	4	25	22	3.5	68	43	178	35	82	340	200	100
TK5000CN	0~5000	100	4	25	22	3.5	68	43	178	35	82	340	200	100
TK7000CN	0~7000	200	4	25	22	3.5	68	43	178	35	82	340	205	100
TK10000CN	0~10000	200	4	25	22	3.5	68	43	178	35	82	340	205	100
TK15000CN	0~15000	200	8	35	32	7	95	83	230	35	145	462	600	250
TK20000CN	0~20000	200	8	35	32	7	118	83	280	35	140	540	680	250
TK30000CN	0~30000	500	8	40	38	7	130	83	305	35	172	598	830	350

- If you take a measurement horizontally, add the correcting value to the indicated measurement value per the table.



*Peak indicator is optional

- If you would like your TK gauge with a peak indicator, please specify "TK-G" on your purchase order. EX. TK500CN-G

Tool Kits
ชุดเครื่องมือ

Pliers
คีม

Electrician Tool
เครื่องมือสำหรับ
อิเล็กทรอนิกส์
และช่างไฟ

Gear Puller
เหล็กดูด

Adjustable
Wrench
ประแจเลื่อน

Wrench
ประแจ

Torque Wrench
เกจบล็อก

Socket Wrench
ลูกบ็อก

Screwdriver
ไขควง

Bits
ไขควง

Torque
Screwdriver
ไขควงทอร์ก

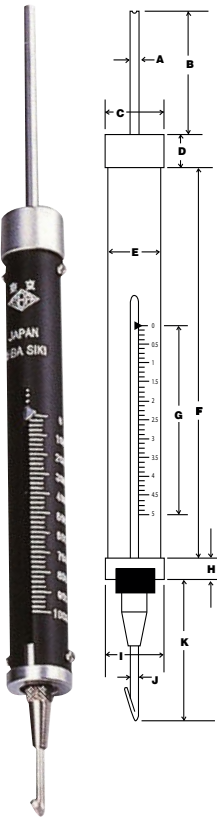
For Quality
Inspection
สำหรับการตรวจสอบ

Tension Gauge
เกจวัดแรงดึง-ดัน

Torque Tester
เครื่องวัดแรงบิด



เกจวัดแรงดึง-ดัน2เข็ม
TENSION GAUGE



Order No.	Graduation (g)	Deflection (g)	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	J mm	K mm	Weight (g)
10G	0.5	4	1.4	50	15	13	13	94	40	3	15	1.4	20	40
30G	1	4	1.6	70	15	13	13	109	60	3	15	1.6	20	45
50G	1	10	1.6	70	15	13	13	109	60	3	15	1.6	20	45
110G	2	10	2	79	15	13	13	109	60	3	15	2	35	50
200G	5	10	2	79	15	13	13	109	60	3	15	2	35	50
300G	5	10	2	79	15	13	13	109	60	3	15	2	35	50
500G	10	35	4	68	18	13	16	120	56	4	18	3	33	100
600G	20	35	4	68	18	13	16	120	56	4	18	3	33	100
1,000G	25	35	4	68	18	13	16	120	56	4	18	3	33	100
1,500G	50	35	4	68	18	13	16	120	56	4	18	3	33	100
2,000G	50	35	4	68	18	13	16	120	56	4	18	3	33	100
2,500G	50	50	4	78	18	13	16	145	62	4	18	3	33	150
3,000G	50	50	4	78	18	13	16	145	62	4	18	3	33	150
4,000G	50	100	6	83	24	15	22	170	68	5	24	4	36	250
5,000G	100	100	6	83	24	15	22	170	68	5	24	4	36	250
7,000G	200	100	6	83	24	15	22	170	68	5	24	4	36	250
10,000G	200	100	6	83	24	15	22	170	68	5	24	4	36	250
15,000G	200	250	8	120	34	20	32	220	96	6	34	8	65	500
20,000G	200	250	8	135	34	20	32	270	118	6	34	8	65	650
30,000G	250	350	8	183	40	20	38	294	130	6	40	8	65	950
50,000G	500	350	8	183	40	20	38	294	130	6	40	8	65	950
100,000G	1,000	350	8	170	40	20	38	340	130	6	40	8	65	1,200

Order No.	Graduation (N)	Deflection (N)	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	J mm	K mm	Weight (N)
0.1N	0.005	0.04	60	15	15	13	13	112	40	3	15	1.6	38	0.5
0.3N	0.01	0.04	75	15	15	13	13	112	60	3	15	1.6	38	0.5
0.5N	0.01	0.1	66	15	15	13	13	116	60	3	15	1.6	38	0.5
1N	0.025	0.1	71	15	15	13	13	112	60	3	15	1.6	38	0.5
2N	0.05	0.1	71	15	15	13	13	112	60	3	15	1.6	38	0.5
3N	0.075	0.1	71	15	15	13	13	112	60	3	15	1.6	38	0.5
5N	0.125	0.35	68	18	18	13	16	120	56	4	18	2.5	37	1
6N	0.2	0.35	68	18	18	13	16	120	56	4	18	2.5	37	1
10N	0.25	0.35	68	18	18	13	16	120	56	4	18	2.5	37	1
15N	0.5	0.35	68	18	18	13	16	120	56	4	18	2.5	37	1
20N	0.5	0.35	68	18	18	13	16	120	56	4	18	2.5	37	1
25N	0.5	0.5	78	18	18	13	16	145	62	4	18	2.5	37	2
30N	0.75	0.5	78	18	18	13	16	145	62	4	18	2.5	37	2
40N	1	1	80	24	24	15	22	171	68	5	24	3.5	48	3
50N	1	1	80	24	24	15	22	171	68	5	24	3.5	48	3
70N	2	1	80	24	24	15	22	171	68	5	24	3.5	48	3
100N	2	1	80	24	24	15	22	171	68	5	24	3.5	48	3
150N	2	8	137	34	34	20	32	225	95	6	34	7	68	5
200N	2	8	137	34	34	20	32	271	118	6	34	7	68	6
300N	3	8	182	40	40	20	38	295	130	6	40	7	68	10
500N	5	8	182	40	40	20	38	295	130	6	40	7	68	10
1,000N	10	8	182	40	40	20	38	342	130	6	40	7	68	15

Tool Kits

ชุดเครื่องมือ

Pliers

คีม

Electrician Tool

เครื่องมือสำหรับ
อิเล็กทรอนิกส์
และช่างไฟ

Gear Puller

เพลา์ดูด

Adjustable

Wrench

ประแจเลื่อน

Wrench

ประแจ

Torque Wrench

เกจบิด

Socket Wrench

ลูกบ็อก

Screwdriver

ไขควง

Bits

ไขควง

Torque

Screwdriver

ไขควงทอร์ค

For Assembly

สำหรับงานทั่วไป

For Quality

Inspection

สำหรับการตรวจสอบ

Tension Gauge

เกจวัดแรงดึง-ดัน

Torque Tester

เครื่องวัดแรงบิด

TORQUE WRENCH

ประแจขันปอนด์



ประแจขันปอนด์

ATG/BTG - ANALOG TORQUE GAUGE

DIRECT READING | 3-JAW CHUCK | DIRECT READING

- Compact portable handheld design
- Top and side scales for easy reading
- Three fingered keyless chuck



■ ATG Optional Accessories

Part #	Description
322	Plastic case and chuck

Accuracy ±2%

S.I. Order No.	Torque Range [cN·m]		Metric Order No.	Torque Range [gf·cm/kgf·m]		American Order No.	Torque Range [ozf·in/lbf·in]		Chuck Grip [mm]	Dimension [mm]		Weight kg
	Min.-Max.	Grad.		Min.-Max.	Grad.		Min.-Max.	Grad.		Overall Length	Outside Diameter	
ATG045CN	0.05-0.45	0.01	45ATG	5-45	1	ATG06Z	0.06-0.6	0.01				
ATG09CN-S	0.1-0.9	0.02	90ATG-S	10-90	2	ATG1.5Z-S	0.2-1.5	0.02				
ATG1.5CN-S	0.2-1.5	0.02	150ATG-S	20-150	2	ATG2.4Z-S	0.3-2.4	0.05	Ø1-Ø6.5	89	43.5	0.18
ATG3CN-S	0.3-3	0.05	300ATG-S	30-300	5	ATG4.5Z-S	0.5-4.5	0.1				
ATG6CN-S	0.6-6	0.1	600ATG-S	60-600	10	ATG9Z-S	1-9	0.2				
ATG12CN-S	1-12	0.2	1200ATG-S	100-1200	20	ATG18Z-S	2-18	0.5				
ATG24CN-S	3-24	0.5	2400ATG-S	300-2400	50	ATG36Z-S	4-36	0.5				
-	-	-	-	-	-	BTG60Z-S	6-60	1				
-	-	-	-	-	-	BTG120Z-S	10-120	2				
BTG15CN-S	2-15	0.2	1.5BTG-S	0.2-1.5	0.02	1.5BTG-A-S	0.1-1.5	0.02				
BTG24CN-S	3-24	0.5	2.4BTG-S	0.3-2.4	0.05	2.4BTG-A-S	0.3-2.4	0.02	Ø1-Ø8.5	119	64.2	0.52
BTG36CN-S	4-36	0.5	3.6BTG-S	0.4-3.6	0.05	3.6BTG-A-S	0.4-3.6	0.05				
BTG60CN-S	6-60	1	6BTG-S	0.6-6	0.1	6BTG-A-S	0.6-6	0.1				
BTG90CN-S	10-90	1	9BTG-S	1-9	0.1	9BTG-A-S	1-9	0.1				
BTG150CN-S	20-150	2	15BTG-S	2-15	0.2	15BTG-A-S	2-15	0.2				

Note. 1. ATG045CN, 45ATG and ATG06Z are provided without side or top memory pointer.
2. "Without memory pointer" models are available. Remove "-S" from the model name when ordering. EX. ATG09CN, BTG15CN
3. Aluminum case and steel chuck are standard for ATG models. Plastic case and chuck can be ordered separately.
4. Continuously repeating a back and forth CW and CCW movement may cause damage to the internal spring.

ประแจขันปอนด์

ATGE-G - DIGITAL TORQUE GAUGE

DIGITAL | 3-JAW CHUCK | DIRECT READING | BATTERY

- Digital torque gauge with pull out display
- For measurement, inspection and tightening of low torque range
- 3 way configuration; hand-held, table top or as a torque meter with testing fixture



■ Calibration Kit for ATG/BTG/ATGE-G/BTGE-G



*Sold separately.

Accuracy ±2%+1 digit

Order No.	Torque Range								Chuck Grip [mm]	Dimension [mm]		Weight kg
	[cN•m]		[mN•m]		[gf•cm]		[ozf•in]			Overall Length	Outside Diameter	
	Min.-Max.	1 digit	Min.-Max.	1 digit	Min.-Max.	1 digit	Min.-Max.	1 digit				
ATGE05CN-G	0.1-0.5	0.001	1-5	0.01	10-50	0.1	0.15-0.7	0.001	Ø1-6.5	120	67	0.305
ATGE1CN-G	0.2-1	0.001	2-10	0.01	20-100	0.1	0.3-1.4	0.001				
ATGE2CN-G	0.4-2	0.002	4-20	0.02	40-200	0.2	0.6-2.8	0.002				
ATGE5CN-G	1-5	0.005	10-50	0.05	100-500	0.5	1.5-7	0.005				
ATGE10CN-G	2-10	0.01	20-100	0.1	200-1000	1	3-14	0.01				
ATGE20CN-G	4-20	0.02	40-200	0.2	400-200	2	6-28	0.02				

Note. Aluminum case and steel chuck are standard for ATGE-G models. Plastic case and chuck/322 is sold separately.
Standard Accessories : Carrying case

ประแจขันปอนด์

BTGE-G - DIGITAL TORQUE GAUGE



DIGITAL | 3-JAW CHUCK | DIRECT READING | BATTERY

- Multiple units of measure through keypad setup
- For measurement, inspection and tightening of low torque range
- Flip-up display can be adjusted for optimal reading

BTGE-G Optional Accessories

Connecting Cable

Part #	Applicable Model
384	BTGE-G (USB mini B) - PC (USB A)

Measurement Board

Model
809

Accuracy $\pm 2\% + 1$ digit

Order No.	Torque Range								Chuck Grip [mm]	Dimension [mm]		Weight kg
	[cN•m]		[mN•m]		[gf•cm]		[ozf•in]			Overall Length	Outside Diameter	
	Min.-Max.	1 digit	Min.-Max.	1 digit	Min.-Max.	1 digit	Min.-Max.	1 digit				
BTGE10CN-G	4-10	0.01	0.2-1	0.001	3-14	0.01	0.2-0.88	0.001	Ø1-Ø8.5	130	75	0.65
BTGE20CN-G	4-20	0.02	0.4-2	0.002	6-28	0.02	0.4-1.7	0.002				
BTGE50CN-G	10-50	0.05	1-5	0.005	15-70	0.05	1-4.4	0.005				
BTGE100CN-G	20-100	0.1	2-10	0.01	30-140	0.1	2-8.8	0.01				
BTGE200CN-G	40-200	0.2	4-20	0.02	60-280	0.2	4-17	0.02				

Note. 1. Can be used for checking accuracy of torque screwdriver.
2. Max 999 readings can be saved with statistical function max/min/mean values.

ATG / BTG / ATGE-G / BTGE-G Optional Accessories



ATGE-G / BTGE-G Measurement stand

To firmly fix ATGE-G/BTGE-G to use as table tip configuration

Part #	Applicable Model
808	ATGE-G
809	BTGE-G



Table attachment

4 poles are designed to clamp objects of any shape (Chucking diameter Ø10- Ø58)

Part #	Applicable Model
800	ATGE-G / BTGE-G



Calibration adapter for ATGE-G/BTGE-G

Adapter for calibration devices, ATGTCL/BTGTCL, to mount on ATGE-G/BTGE-G

Part #	Applicable Model
806	ATGE-G
807	BTGE-G



Adapter for USB connector

External power supply adapter for ATGE-G/BTGE-G with using USB connecting cable.

Part #	Applicable Model
BA-7	ATGE-G / BTGE-G



USB connecting cable

Cable for external USB data output or connecting BA-5

Part #	Applicable Model
384	ATGE-G / BTGE-G



Plastic chuck

Plastic chuck for fragile objects

Part #	Applicable Model
322	ATGE-G / BTGE-G

Tool Kits
ชุดเครื่องมือ

Pliers
คีม

Electrician Tool

เครื่องมือสำหรับ
อิเล็กทรอนิกส์
และช่างไฟ

Gear Puller

เพลาชัก

Adjustable

Wrench

ประแจเลื่อน

Wrench

ประแจ

Torque Wrench

เกจบิด

Socket Wrench

ลูกบ็อก

Screwdriver

ไขควง

Bits

ไขควง

Torque

Screwdriver

ไขควงทอร์ค

For Assembly

สำหรับงานทั่วไป

For Quality

Inspection

สำหรับการตรวจสอบ

Tension Gauge

เกจวัดแรงดึง-ดัน

Torque Tester

เครื่องวัดแรงบิด

TORQUE WRENCH

ประแจขันปอนด์



ประแจปอนด์

SGK TORQUE GAUGES

Capable of accurately measuring very low torque values.

Tool Kits

ชุดเครื่องมือ

Pliers

คีม

Electrician Tool

เครื่องมือสำหรับ
อิเล็กทรอนิกส์
และช่างไฟ

Gear Puller

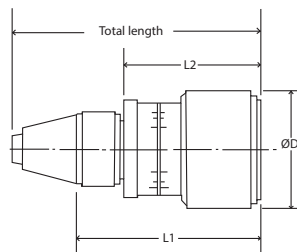
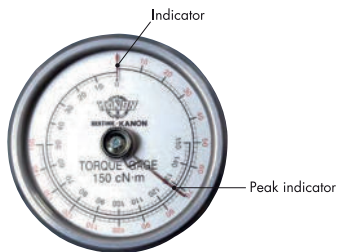
เหล็กดูด

Adjustable Wrench

ประแจเลื่อน

Wrench

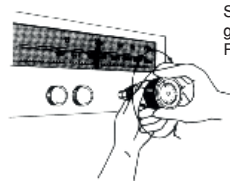
ประแจ



FEATURES

- Due to their miniature design and light weight, these gauges are convenient and easy to carry.
- A three part chuck with knurled surface enables firmly gripping even odd shapes.
- The inset scale face helps avoid incidental damage.
- The gauges measure clockwise and counter clockwise.
- With scales on the sides and the face, torque readings can be obtained either way.
- Accuracy : $\pm 6\%$ of indicated value over the full range.

USING AN LTDC DRIVER



Starting torque can be measured with the chuck gripping a knob or shaft of an electronic device. Rotate clockwise or counterclockwise.



- If you would like SGK with a peak indicator, please specify "SGK-G" on your purchase order. ex. CN150SGK-G

Three part chuck

Order No. (gf*cm / kgf*cm)	Range	Increment	Order No. (mN*m / cN*m)	Old Model (mN*m / cN*m)	Range (CW / CCW)	Increment	Chucking dia.	Total length (without bit)	Dimensions (mm)			Weight
									Grip dia.	Total length (without chuck)		
	gf*cm / kgf*cm				mN*m / cN*m		Ømm	mm	ØD	L1	L2	kg
90(I)SGK	10~90 gf*cm	2 gf*cm	MN9SGK	N90(I)SGK	1~9 mN*m	0.2 mN*m						
150(I)SGK	20~150 gf*cm	2 gf*cm	MN15SGK	N150(I)SGK	2~15 mN*m	0.2 mN*m						
300(I)SGK	40~300 gf*cm	5 gf*cm	MN30SGK	N300(I)SGK	4~30 mN*m	0.5 mN*m	1~6.5	106	43	81	57.5	0.29
600(I)SGK	50~600 gf*cm	10 gf*cm	MN60SGK	N600(I)SGK	5~60 mN*m	1 mN*m						
1200(I)SGK	100~1,200 gf*cm	20 gf*cm	MN120SGK	N1200(I)SGK	10~120 mN*m	2 mN*m						
2400(I)SGK	200~2,000 gf*cm	50 gf*cm	MN240SGK	N2400(I)SGK	20~240 mN*m	5 mN*m						
1.5(II)SGK	0.1~1.5 kgf*cm	0.02 kgf*cm	CN15SGK	N1.5(II)SGK	1~15 cN*m	0.2 cN*m						
2.4(II)SGK	0.2~2.4 kgf*cm	0.02 kgf*cm	CN24SGK	N2.4(II)SGK	2~24 cN*m	0.2 cN*m						
3.6(II)SGK	0.4~3.6 kgf*cm	0.05 kgf*cm	CN36SGK	N3.6(II)SGK	4~36 cN*m	0.5 cN*m	1~8.5	134	63	100	73	0.6
6(II)SGK	0.5~6 kgf*cm	0.1 kgf*cm	CN60SGK	N6(II)SGK	5~60 cN*m	1 cN*m						
9(II)SGK	1~9 kgf*cm	0.2 kgf*cm	CN90SGK	N9(II)SGK	10~90 cN*m	2 cN*m						
15(II)SGK	1~15 kgf*cm	0.2 kgf*cm	CN150SGK	N15(II)SGK	10~150 cN*m	2 cN*m						

For Quality Inspection

สำหรับการตรวจสอบ

Tension Gauge

เกจวัดแรงดึง-ดัน

Torque Tester

เครื่องวัดแรงบิด

เครื่องวัดแรงบิด

TORQUE TESTER - CD-100M/10M



Suitable for daily inspection of electric screw driver Using conventional joint (SJ joint (PAT))

Enable to save 5 channels of pass/fail judgement criterion, and enable to change settings by switch channels even if the tightening term changes.
High durability against high torque loaded unexpectedly. (triple the durability of conventional model).
Also, the attached adapter does not disassemble the joint due to excessive rewinding. It can be used and managed in a conventional way.

- Show "Measurement mode", "Measurement unit", "maximum, minimum, average"
- Switchable measurement unit
- Enable to save 5 sets of settings such as upper limit and lower limit
- 800 items of memory data
- Real-time output About every 1/180 seconds
- Data acquisition software can be downloaded for free



Order No.	CD-100M	CD-10M
Measuring range	0.10~10.00 N·m 1.0~100.0 kgf·cm 1.0~90 lbf·in	0.010~1.000 N·m 0.10~10.00 kgf·cm 0.10~9.000 lbf·in
Accuracy	±0.5% (199 digit or less ±1 digit)	
Display	The 3.5 figures digital display of LCD	
The measurement direction	CW-CCW (right and left)	
Zero return by one touch	Return to zero by pressing clear button.	
Measurement Mode	Track , P-P(peak to peak) , P-D(Peak-Down) , C(Real-time Output)	
High and low limits judging function	High and low value are measurement within the limits, and can be set up.	
Real-time Output	Load torque value is outputted every about 1/ 180 second.	
The Maximum, the minimum, and the average value display	The maximum, the minimum, average value,	
Data Output	ASCII format (baud rate 19200)	
Auto power save	10 minutes no use, automatically switch off	
Power supply	Ni-Cd chargeable battery 1.2V x 5cells 700mAh	
Charging time	About 3hours	
Continuous working time	About 12hours	
Clearance	It is a display clearance in set-up time. (0.1 - 3.0 sec)	
Socket size	□ 20mm/ □9.5mm	
Dimension / Weight	W:160xD:125xH:55 / About 1kg	
Recommend buffer accessories	Measuring joint SJ-50, SJ-10K	Measuring joint SJ-10
	AC/DC adaptor	
	Exclusive receipt case	
	An inspection report, a proofreading certificate, a traceability system figure	

* Do not use for measurement of impact tool. Do not apply more than the specified torque.

Tool Kits

ชุดเครื่องมือ

Pliers

คีม

Electrician Tool

เครื่องมือสำหรับ
อิเล็กทรอนิกส์
และช่างไฟ

Gear Puller

เพลาชัก

Adjustable

Wrench

ประแจเลื่อน

Wrench

ประแจ

Torque Wrench

เกจแรงบิด

Socket Wrench

ลูกบ็อก

Screwdriver

ไขควง

Bits

ไขควง

Torque

Screwdriver

ไขควงทอร์ค

For Assembly

สำหรับงานทั่วไป

For Quality

Inspection

สำหรับการตรวจสอบ

Tension Gauge

เกจวัดแรงดึง-ดัน

Torque Tester

เครื่องวัดแรงบิด

TORQUE WRENCH

ประแจขันปอนด์

CEDAR®

เครื่องวัดแรงบิด

TORQUE TESTER - DI-9M-8/08

**Suitable for daily inspection of electric screw driver
Using "OW joint" (joint which is unnecessary to rewind)**

Enable to save 5 channels of pass/fail judgement criterion, and enable to change settings by switch channels even if the tightening term changes.

Due to "OW Joint", able to measure effectively without rewinding.

Tool Kits

ชุดเครื่องมือ

- Show "Measurement mode", "Measurement unit", and "maximum, minimum, average"
- Switchable measurement unit
- 800 items of Memory data
- Real-time output About every 1/180 seconds
- Data acquisition software can be downloaded for free
- Include "Screw Cube"-measuring jig for manual tools

Pliers

คีม

Electrician Tool

เครื่องมือสำหรับ
อิเล็กทรอนิกส์
และช่างไฟ

Gear Puller

เหล็กดูด

Adjustable Wrench

ประแจเลื่อน

Wrench

ประแจ

Torque Wrench

เกจบิด

Socket Wrench

ลูกบ็อก

Screwdriver

ไขควง

Bits

ไขควง

Torque Screwdriver

ไขควงทอร์ค

For Assembly

สำหรับงานทั่วไป

For Quality Inspection

สำหรับการตรวจสอบ

Tension Gauge

เกจวัดแรงดึง-คัน

Torque Tester

เครื่องวัดแรงบิด



Order No.	DI-9M-8	DI-9M-08
Measuring range	0.020~8.000 N•m	2.0~800.0 mN•m
	0.20~80.00 kgf•cm	0.020~8.000 kgf•cm
	0.20~70 lbf•in	0.020~7.000 lbf•in
Accuracy	±0.5% (499 digit or less ±3digit)	
Display	The 4 figures digital display of LCD	
The measurement direction	CW-CCW (right and left)	
Zero return by one touch	Return to zero by pressing clear button.	
Measurement Mode	Track , P-P(peak to peak) , P-D(Peak-Down) , C(Real-time Output)	
High and low limits judging function	High and low value are measurement within the limits, and can be set up.	
Real-time Output	Load torque value is outputted every about 1/ 180 second.	
The Maximum, the minimum, and the average value display	The maximum, the minimum value, and average value of the saved data	
Data Output	ASCII format (baud rate 19200)	
Auto power save	10 minutes no use, automatically switch off.	
Power supply	Ni-Cd chargeable battery 1.2V x 5cells 700mAh	
Charging time	About 3hours	
Continuous working time	About 12hours	
Clearance	It is a display clearance in set-up time. (0.1 - 3.0 sec)	
Socket size	□ 20mm/ □ 9.5mm	
Dimension / Weight	W:160xD:125xH:55 / About 1kg	
Recommend buffer accessories	Measuring joint OW-20/OW-60	Measuring joint OW-025/OW-10
	Cube (with 5 sides screw hole) 20x20x20 (M2.6/M3/M4/M5/M6 Tap processing)	
	AC/DC adaptor	
	Exclusive receipt case	
	An inspection report, a proofreading certificate, a traceability system figure	

※ Do not use for measurement of impact tool. Do not apply more than the specified torque.

เครื่องวัดแรงบิด

TORQUE TESTER - NDI-800CN/80CN

**Suitable for daily inspection of electric screw driver
Progress of Visibility, Usability and Connectability**

Visible display due to colorization & tilt function Easier operation with dedicated software enables more sophisticated management.

Due to "OW Joint", able to measure effectively without rewinding.

- Easy set-up of tester on PC
- Easy search of memory data
- Enable to be powered directly by AC adaptor
- Enable to check pass/fail threshold value during measurement
- Color display depending on measurement value
- Software can be downloaded for free
- Include "Screw Cube"-measuring jig for manual tools



Order No.	NDI-80CN		NDI-800CN	
Range	0.020~8.160 kgf·cm		0.20~81.60 N·m	
	0.018~7.080 lbf·in		0.18~70.80 lbf·in	
	2.0~800.0 mN·m		0.020~8.000 N·m	
Unit	kgf · cm / lbf · in / mN ·m		kgf · cm / lbf · in / N ·m	
Accuracy	±0.5% (If the value is 499 digit or less, the accuracy ±3 digit.)		±0.5% (If the value is 499 digit or less, the accuracy ±3 digit.)	
Sampling rate	1000 data / 1 second			
Measurement mode	Sybol		Contents	
	Peak hold	PP	Hold the inputted maximum value.	
	Peak down	PD	Hold the inputted first peak value.	
	Real time output	C	Use at the measurement of torque wave. Sampling rate is 250 data / 1 second.	
	Track	TR	Use at the calibration mainly. Display the load torque value.	
	400 Data			
Memory capacity	Store the measurement date.			
Clock	AC adaptor (12V) / AA battery			
Power	□ 20 / □ 9.5			
Socket size	(measurement joint) OW-025 / OW10		(measurement joint) OW-20 / OW-60	
Accessories (one pieces each)	Cube with screw holes of M2.6, M3, M4, M5 and M6 (size 20x20x20mm)			
	AC adaptor (input : AC100~240V (50/60Hz), output : DC12V)			
	USB cable (mini B type)			
	AA Size Cell x4			
	Result of calibration, Certification on calibration, Traceability system figure			

Tool Kits

ชุดเครื่องมือ

Pliers

คีม

Electrician Tool

เครื่องมือสำหรับ
อิเล็กทรอนิกส์
และช่างไฟ

Gear Puller

เพลาชัก

Adjustable

ประแจเลื่อน

Wrench

ประแจ

Torque Wrench

เกจบิด

Socket Wrench

ลูกบ็อก

Screwdriver

ไขควง

Bits

ไขควง

Torque

Screwdriver

ไขควงทอร์ค

For Assembly

สำหรับงานทั่วไป

For Quality

Inspection

สำหรับการตรวจสอบ

Tension Gauge

เกจวัดแรงดึง-ดัน

Torque Tester

เครื่องวัดแรงบิด

TORQUE WRENCH

ประแจขันปอนด์

CEDAR®

เครื่องวัดแรงบิด

TORQUE TESTER - DI-11

Suitable for daily inspection of electric screw driver

Correspond to high torque electric driver

Enable to save 5 channels of pass/fail judgement criterion, and enable to change settings easily by switch channels even if the tightening term changes.

Include High torque correspondence joint (SJ - 100)

- Show "Measurement mode" "Measurement unit" Indication of "maximum, minimum, average"
- Switchable measurement unit
- Enable to save 5 sets of settings such as upper limit and lower limit
- 800 items of memory data
- Real-time output About every 1/180 seconds
- Data acquisition software can be downloaded for free



Order No.	DI-11
Measuring range (at the time of Track)	0.10 ~ 20 N•m 1.0 ~ 200 kgf•cm 1.0 ~ 174 lbf•in
Accuracy	±0.5% (499 digit or less ±3digit)
Display	The 4 figures digital display of LED
The measurement direction	CW-CCW (right and left)
Measurement Mode	Track, P-P(peak to peak), P-D(Peak-Down), C(Real-time output)
High and low limits judging function	High and low value are measurement within the limits, and can be set up. Five-set preservation is possible.
Real-time Output	Load torque value is outputted every about 1/180 second.
The Maximum, the minimum, and the average value display	The maximum, the minimum, average value.
Data Output	ASCII format (baud rate 19200)
Auto power save	10 minutes no use, automatically switch off.
Power supply	Ni-Cd chargeable battery 1.2V x 5cells 700mAh
Charging time	From empty - less than 6 hours
Continuous working time	12 hours
Weight	About 1.5kg
Outside dimension	130(W) x 180(D) x 34(H)
Attachment	Measurement joint SJ-50 / SJ-100
Accessories (one piece each)	AC/DC adaptor (Please choose AC adaptor out of 120V, and 230V) Exclusive receipt case
	An inspection report, a proofreading certificate, traceability system figure

Tool Kits

ชุดเครื่องมือ

Pliers

คีม

Electrician Tool

เครื่องมือสำหรับ
อิเล็กทรอนิกส์
และช่างไฟ

Gear Puller

เหล็กดูด

Adjustable

Wrench

ประแจเลื่อน

Wrench

ประแจ

Torque Wrench

เกจบิด

Socket Wrench

ลูกบ็อก

Screwdriver

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เครื่องวัดแรงบิด

TORQUE WRENCH

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CEDAR®

TORQUE WRENCH
ประแจขันปอนด์

เครื่องวัดแรงบิด

TORQUE TESTER - DIS-IP series (-IP05/5/50/200/500)



Suitable for managing various manual torque wrench & torque drivers

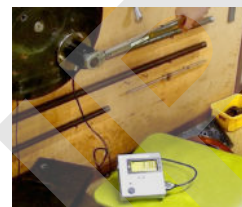
Standard model for static torque measurement

Bigger characters size and enhance user convenience.

Enable to be installed in a small space due to a separate type.

Enable to save 5 channels of pass/fail judgement criterion, and enable to change settings easily by switch channels even if the tightening term changes.

- Show "Measurement mode" "Measurement unit" Indication of "maximum, minimum, average"
- Switchable measurement unit
- Enable to save 5 sets of settings such as upper limit and lower limit
- 800 items of memory data
- Real-time output About every 1/180 seconds
- Data acquisition software can be downloaded for free



Order No.	DIS-IP05		DIS-IP5	DIS-IP50	DIS-IP200	DIS-IP500
Measurement range	2.0 ~ 500m N•m 0.020 ~ 5 kgf•cm 0.020 ~ 45 lbf•in		0.020 ~ 5 N•m 0.20 ~ 50 kgf•cm 0.20 ~ 45 lbf•in	0.20 ~ 50 N•m 2.0 ~ 500 kgf•cm 2.0 ~450 lbf•in	2.0 ~ 200N•m 20 ~ 2000 kgf•cm 20 ~ 1740 lbf•in	2.0 ~ 500 N•m 20 ~ 5000 kgf•cm 20 ~4500 lbf•in
Accuracy	±0.5% (499 digit or less ±1digit)					
Display	The 4 figures digital display of LCD					
The measurement direction	CW-CCW (right and left)					
Mode	P-P	The highest value of load is hold-displayed				
	T-R	A display also changes with load change.				
	P-D	Load catches and displays the moment included in descent from a rise.				
	C	Load torque value is outputted every about 1/180 second				
Clearance	It is a display clearance in set-up time (0.1-3.0sec)					
A success or failure judging function	High and low value are measurement within the limits, and can be set up. Five-set preservation is possible.					
The Maximum, the minimum, and the average value	Displays, and output the data number, the maximum, the minimum, and the average value of the measured value.					
Data memory counts	800 data					
Auto-Power-off	After the neglect during 10 minutes					
Data output	ASCII format (baud rate 19200)					
Power supply	Ni-Cd chargeable battery 1.2Vx5cells 700mAh					
Charge time / use time	Charge about 3 hour / Continuation about 12-hour use					
indicator size / weight	100(W) x 105(D) x 33(H) (it does not contain by the projection thing) / 357g					
Code length	Standard 1m (there are automatic machines no less than 4m as an option)					
Accessories	AC/DC adaptor					
	An inspection report, a proofreading certificate, a traceability system figure					

Detection machine size figure

Form	IP05	IP5	IP50	IP200	IP500	Detection machine outside figure
A	Ø 40		Ø60	Ø60	Ø60	
B	41.2		63	79	99	
C	5		10	15	15.5	
D	Ø60		Ø90	Ø110	Ø140	
E	Ø60		Ø74	Ø90	Ø116	
F (Three division)	Ø4.5		Ø6.5	Ø8.3	Ø10.5	
G (Socket intuition affinity)	6.35sq		9.5sq	12.7sq	19sq	
Weight	189g		632g	1.8kg	3.5kg	

Tool Kits

ชุดเครื่องมือ

Pliers

คีม

Electrician Tool

เครื่องมือสำหรับ
อิเล็กทรอนิกส์
และช่างไฟ

Gear Puller

เพลาถอด

Adjustable

Wrench

ประแจเลื่อน

Wrench

ประแจ

Torque Wrench

เกจบิด

Socket Wrench

ลูกบ็อก

Screwdriver

ไขควง

Bits

ไขควง

Torque

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ไขควงทอร์ค

For Assembly

สำหรับงานทั่วไป

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Inspection

สำหรับการตรวจสอบ

Tension Gauge

เกจวัดแรงดึง-ดัน

Torque Tester

เครื่องวัดแรงบิด

TORQUE WRENCH

ประแจขันปอนด์

CEDAR®

TORQUE WRENCH
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เครื่องวัดแรงบิด

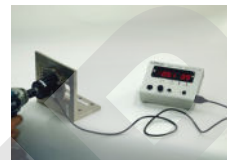
TORQUE TESTER - DI-1M-IP series (50/200/500)



Suitable for Impact-based tool management

High accuracy, and portable. It is installed on the work line and is effective for periodic inspection of the tool. The blow counter displays number of blows and value of torque, and LED display which is brighter and easier to read. Besides, it can be used for the management of the torque wrench angle nut runner.

- Blow counter shows number of blows and value of torque
- Enable to inspect operating torque of manual preset type torque wrench etc. in peak down mode
- Auto power-off function Autoclear function are installed
- Data acquisition software can be downloaded for free



Order No.		DI-1M-IP50	DI-1M-IP200	DI-1M-IP500
Measurement range (at the time of Track)		0.30 ~ 50 N•m	3.0 ~ 200 N•m	3.0 ~ 500 N•m
		3.0 ~ 500 kgf•cm	30 ~ 2000 kgf•cm	30 ~ 5000 kgf•cm
		3.0 ~ 450 lbf•in	30 ~ 1800 lbf•in	30 ~ 4500 lbf•in
Operating range of Pd Mode		0.7N•m ~ , 7.0kgf•cm / lbf• ~	7.0N•m ~ , 7.0kgf•cm / lbf• ~	7.0N•m ~ , 7.0kgf•cm / lbf• ~
Accuracy		±0.5% (499 digit or less ±3digit)		
Display		The 4 figures digital display of LCD		
Mode		Track, Peak (from 30 or more digits to a display), Peak-Down (from 30 or more digits to a display, Operation is 70 or more)		
Blow	Counts	Zero to 99 blow		
	Measurement time	0.1-9.9 seconds		
	Display	LED display		
Data output		ASCII format (baud rate 19200)		
Auto clear time		In 0.5-3.0 seconds (0.5-second interval), an indication is automatically given zero.) It is manual zero clearance by 0.0-second setup		
Power supply		nickel-cadmium battery 1.2v 5cells (700mAh) Auto power OFF (after [OFF] the neglect during 5 minutes)		
Charge time / use time		At the time of charge about 3 hour/, and the maximum charge Continuation about 8-hour use		
Meter part	Outside size	146(W) x 155(D) x 48(H) (It does not contain by the projection part).		
Meter part	Weight	about 600g		
Detection part	Weight	about 600g	about 1.7kg	about 3.1kg
Code length		Standard 1m (there are automatic machines no less than 4m as an option)		
Accessories		Attach case	-	-
		AC/DC adapter		
		An inspection report, a proofreading certificate, a traceability system figure		
(Note) When you measure shock tools, such as an impact tool, please use it by 60% or less of rated torque.				

(Note) When you measure shock tools, such as an impact tool, please use it by 60% or less of rated torque.

Detection machine size figure

Form	IP50	IP200	IP500	Detection machine outside figure
A	Ø50	Ø60	Ø80	
B	63	78	98.5	
C	10	15.1	16	
D	Ø90	Ø108	Ø140	
E	Ø74	Ø90	Ø116	
F (Three division)	Ø6.3	Ø8.3	Ø10.5	
G (Socket intuition af-finity)	9.5sq	12.7sq	19sq	
Weight	632g	1.8kg	3.5kg	

Tool Kits

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Pliers

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เครื่องมือสำหรับ
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Gear Puller

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Adjustable

Wrench

ประแจเลื่อน

Wrench

ประแจ

Torque Wrench

เกจบลีค

Socket Wrench

ลูกบ็อก

Screwdriver

ไขควง

Bits

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Torque

Screwdriver

ไขควงทอร์ค

For Assembly

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Tension Gauge

เกจวัดแรงดึง-ดัน

Torque Tester

เครื่องวัดแรงบิด

TORQUE WRENCH

ประแจขันปอนด์

CEDAR®

เครื่องวัดแรงบิด

TORQUE TESTER - DI-4B-25

Suitable for daily inspection of small-size impact tools

Since display is equipped as with LED, you can clearly read the value even in a dark place.
Enable to measure anywhere because it is integrated type and compact.

- Measurable up to 25 N·m
- Equipped with blow counter for impact tool
- Enable to measure with socket attached
- Attached Soft joint (for tightening elastic material) and hard joint (for tightening rigid material)
- Data acquisition software can be downloaded for free



Order No.	DI-4B-25	Appearance figure
Measurement range (at the time of Track)	0.30 ~ 25 N·m 3.0 ~ 250 kgf·cm 3.0 ~ 220 lbf·in	
Accuracy	±0.5% (or less 499 ±3digit)	
The Display method	4 figures LED display	
The measurement direction	CW - CCW (right and left) It is selection measurement by the change switch	
Mode	Track, Peak, Peak-Down (operation is 70digit or more)	
Auto clear time	In 0.5 - 3.0 seconds (0.5-second interval, an indication is automatically given zero.) It is a manual zero clearance by 0.0-second setup	
Blow measurement range	Zero to 99 blow	
Blow measurement time	0.1-9.9 seconds	
Data output	ASCII format (baud rate 19200)	
Appearance	Dimension: 150(W) x 220(D) x 74(H) Weight: About 2.1kg	
Power supply	nickel-cadmium battery 1.2v 5cells (700mAh) Auto power OFF (after [OFF] the neglect during 5 minutes)	
Charge time / use time	At the time of charge 6 hour /, and the maximum charge Continuation about 8-hour use	
The contents of a set (one piece each)	Hard joint (M10) / Soft joint (M10) / 9.5sq. drive Socket (Hexagon head socket 17) 6.35 Hex bit (Hexagon head socket 17) Receipt case AC/SC adaptor (Please choose from 120V and 230V.) Inspection-report / proofreading certificate / Traceability system figure	About the method of application of an attachment Soft joint 17mm of hexagon-head-boit opposite neighborhoods Rotate about three times by the time a nut or a bolt arrives at a bearing surface and reaches all torque For elastic body.. Hard joint 17mm of hexagon-head-boit opposite neighborhoods Rotate about 1-/10 by the time a nut or a bolt arrives at a bearing surface and reaches all torque. For rigid object..

เครื่องวัดแรงบิด

TORQUE TESTER - DIS-RL series (005/05/2/6)



For tightening and final check of screws & bolts

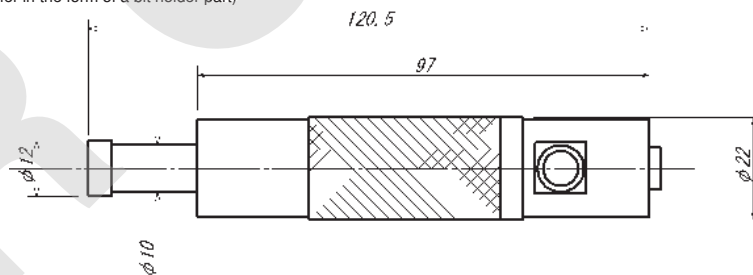
Separate type digital torque driver wrench. The detection part is very compact and suitable for measuring lower torque & torque in a narrow place.

Enable to save 5 channels of pass/fail judgement criterion, and enable to change settings easily by switch channels even if the tightening term changes.

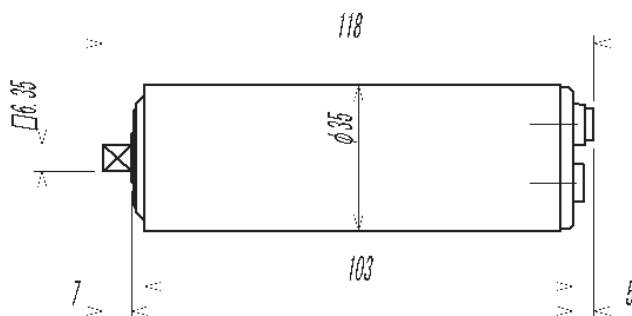
- Show "Measurement mode" "Measurement unit" Indication of "maximum, minimum, average"
- Switchable measurement unit
- Enable to save 5 sets of settings such as upper limit and lower limit
- 800 items of memory data
- Real-time output About every 1/180 seconds
- Data acquisition software can be downloaded for free



Order No.	DIS-RL005	DIS-RL05	DIS-RL2	DIS-RL6
Measurement range	0.20 ~ 50m N•m 2.0 ~ 500 gf•cm	2.0 ~ 500 mN•m 0.020 ~ 5 kgf•cm 0.020 ~ 4.5 lbf•in	0.010 ~ 2 N•m 0.10 ~ 20 kgf•cm 0.10 ~ 17.4 lbf•in	0.10 ~ 6 N•m 1.0 ~ 60 kgf•cm 1.0 ~ 54 lbf•in
Accuracy	±0.5% (499 digit or less ±3digit)		±0.5% (199 digit or less ±1digit)	
Display	The 4 figures digital display of LCD			
Measurement direction	CW-CCW (right and left)			
Mode	Track, P-P(peak to peak), P-D(peak-Down), C(Real-time Output)			
Clearance	It is a display clearance in set-up time (0.1-3.0sec)			
A success or failure judging function	High and low value are measurement within the limits, and can be set up. Five-set preservation is possible.			
The Maximum, the minimum, and the average value	Displays, and output the data number, the maximum, the minimum, and the average value of the measured value.			
Real-time output	Load torque value is outputted every about 1/180 second			
Data memory counts	800 data			
Data output	ASCII format (baud rate 19200)			
Power supply	Ni-Cd chargeable battery 1.2Vx5cells 700mAh			
Charge time / use time	Charge about 3 hour / Continuation about 12-hour use			
indicator size / weight	100(W) x 105(D) x 33(H) (it does not contain by the projection thing) / 530g			
Accessories	bit Ø4 Dcut (+) #00/ #0	bit Ø4(+) #0 / #1	bit 6.35HEX (+) #1 / #2	
				Bit holder / One way bit holder
	An exclusive case			
	AC/DC adaptor			
	Result of calibration, Certification on calibration, Traceability system figure			



RL2 / RL6



Tool Kits

ชุดเครื่องมือ

Pliers

คีม

Electrician Tool

เครื่องมือสำหรับ
อิเล็กทรอนิกส์
และช่างไฟ

Gear Puller

เหล็กดูด

Adjustable Wrench

ประแจเลื่อน

Wrench

ประแจ

Torque Wrench

เกจบิด

Socket Wrench

ลูกบิด

Screwdriver

ไขควง

Bits

ไขควง

Torque

ไขควงทอร์ค

For Assembly

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Tension Gauge

เกจวัดแรงดึง-ดัน

Torque Tester

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TORQUE WRENCH

ประแจขันปอนด์

CEDAR®

จอยส์

One Way Joint - OW series (025/10/20/60)



Measuring joint of electric screwdriver

Special structure that does not require rewinding

Improve workability by unique structure, and complete measurement by only operation in the tightening direction.

Enable to be performed long-time stable Torque manage due to the structure which is not necessary to consider the influence of friction.

- Enable to measure with bit set
- Efficient torque check in tightening direction
- Reaction force absorbing structure
- Enable to measure Low-range torque



Tool Kits
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เกจวัดแรงดึง-ดัน

Torque Tester

เครื่องวัดแรงบิด

จอยส์

Measuring Joint - SJ series (50/10/100)



Measuring joint of electric screwdriver

Conventional type coil spring compression method

No decomposition of joint due to excessive return with unique structure!

The SJ Joint is a conventional coil spring compression method and can be used same as conventional management method.

- Enable to mount bits can be installed according to the driver's model
- By installing hexagonal stat, enable to measure as the bit is attached

※For details of the attached bit shape, please contact us.



Order No.		SJ-10	SJ-10K	SJ-50
Measurement range / N·m		1		5
External dimensions	Bit fitting part	Hexagon opposite side 5 mm		Hexagon opposite side 6 mm
	Outer diameter / height	Ø17/45 (uncompressed)		Ø20/50 (uncompressed)
	Mounting part	20 corners x 5(t)		Ø20/42 (uncompressed)
Attached tester		CD-10M		CD-100M