

OPERATIONAL INSTRUCTIONS OF TORQUE WRENCH

1. Set The Torque

- 1-1 Set the fixing button (A) at UNLOCK position and turn the adjusting handle(B) to set the required torque.
- 1-2 The reading of "0" on the handle(B) aligns with centerline of scale(C) "9" so as to acquire 9 Nm.

2. Instruction

- 2-1 After setting the torque, set the fixing button (A) at LOCK position. Install the appropriate socket and fixing on the work piece. Apply force on the handle of torque wrench and then stop applying force upon hearing "click" sound. Special attention should be paid when using lower torque for setting, because the "click" sound will be unclear.
- 2-2 It is at right angle while applying pressure on torque wrench (allowed $\pm 15^\circ$). Up, down, right and left sides should be within 15° .
- 2-3 After using the torque wrench, set the fixing button (A) at UNLOCK position. Twist the handle (B) to the scale torque of the lowest value and set the fixing button (A) at LOCK position.

3. Cautions

- 3-1 The first using or being left unused for longer time it is required to use once again, be sure to use higher torque to operate (80% of full-scale, press 10-15 times) so that the components within may be fully lubricated by the special-purpose lubricant oil. When it is not used, be sure to set the torque to the lowest value.
- 3-2 Torque wrench needs to be calibrated while using it for 5000 times or a year. The usual life time of usage will be 50000 times.
- 3-3 Do not keep applying pressure after reaching the preset torque or the work piece may get damaged.
- 3-4 Ratchet head (E) is consumables.
- 3-5 During the manufacturing, the torque wrench has been calibrated and tested in providing an accuracy as $\pm 4\%$. As such, it belongs to a kind of high-precision measuring instrument and only the well-trained professional can perform the service. Do not soak in any liquid to avoid affecting the lubrication inside.
- 3-6 The correct direction need to be taken while operating torque wrench. D spot of the picture shows a cursor which means the operating direction should be taken in that way so that torque wrench will be functional.
- 3-7 Except for tightening bolts, do not use in other conditions.
- 3-8 Do not use pipe to extend the shaft.
- 3-9 While applying pressure on torque wrench do not impact the instrument suddenly, not to put the weight of body and step on it; otherwise the work piece may get damaged.

扭力扳手使用說明

一、設定扭力

- 1-1 將開關(A)調整至UNLOCK方向，轉動把手(B)進行扭力調整。
- 1-2 把手(B)上刻度0對到扭力刻度(C)9的位置後，即得扭力為9Nm。

二、使用方法

- 2-1 設定完扭力後將開關(A)調整至LOCK方向。裝上適當的套筒，固定之。在手把處施力，聽到"卡達"一聲時，立刻停止施力。低扭力設定作業時，需特別注意，因為低扭力操作時聲響較不明顯。
- 2-2 施力的方向與扭力扳手成直角(允許正負15度)上下左右應在15度以內。
- 2-3 使用完畢後須將開關(A)調整至UNLOCK位置，轉動把手(B)，將扭力刻度(C)調回最低扭力，再將開關(A)調整至LOCK位置。

三、注意事項

- 3-1 第一次使用，或長期未使用之後再度使用時，先以高扭力操作(滿刻度的80%，壓10-15次)使內部特殊的潤滑劑可先潤滑內部組件。不使用時，請將扭力調至最低的扭力度。
- 3-2 扭力扳手使用5000次或一年，需進行校正。正常使用壽命為50000次。
- 3-3 達到預設扭力後又繼續施壓時會造成傷害。
- 3-4 快速頭組(E)是屬於消耗品。
- 3-5 扭力扳手在出廠之前，已經校正及測試，精確度可達 $\pm 4\%$ ，這是高精確測量儀器，因此，僅有專業人員才可做維修，切勿浸泡在任何液體中，否則會影響內部的潤滑。
- 3-6 扭力扳手有使用的方向性，圖中D處箭頭方向表示該扭力扳手沿該方向使用時才會有作用。
- 3-7 除了緊固螺帽外，不要用於其他用途。
- 3-8 請不要用管子加長手柄。
- 3-9 使用扭力扳手在施力的時候，不要對其進行突然衝擊，不要加上身體的重量，不要用腳踩。否則將會對扭力扳手造成損害。

Torque Wrench

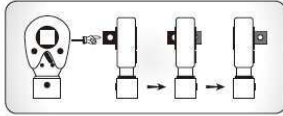
扭力扳手



MODEL 型號	Driver 規格	Capacity 扭力範圍	Length 長度	Net Weight 重量
	inch	Nm	mm	kg
OP-60BK2	1/4	5-25	280	0.56
OP-60BK3	3/8	5-25	280	0.56
OP-80	3/8	19-110	366	0.83
OP-150	1/2	42-210	470	1.35
OP-250	1/2	70-350	633	2.38
OP-300	3/4	65-450	850	3.68
OP-500	3/4	140-700	1063	5.7
OP-700BK6	3/4	140-980	1213	6.0
OP-700BK8	1	140-980	1213	6.0

Torque Wrench

扭力扳手



Equipped with left-right torque adjuster
扭力扳手功能右牙、左牙可調動扭力



MODEL 型號	Driver 規格	Capacity 扭力範圍		Length 長度	Net Weight 重量		
	inch	Nm	ft-lb	mm	kg		
OP-1313K2	1/4	6-30	40-250inch-lb	305	0.74	×	
OP-1313K3	3/8	6-30	40-250inch-lb	305	0.74	×	
OP-1314K	3/8	20-110	15-80	383	0.96	○	
OP-1315K	1/2	40-210	30-150	535	1.7	○	
OP-1316K	1/2	70-350	50-250	645	2.54	○	
OP-1317K	3/4	100-500	50-300	865	3.66	○	
OP-1318K	3/4	140-700	100-600	1092	5.94	○	
OP-1319K6	3/4	140-980	100-700	1230	6.46	×	
OP-1319K8	1	140-980	100-700	1230	6.46	×	

Torque Wrench

扭力扳手



MODEL 型號	Driver 規格	Capacity 扭力範圍		Length 長度	Net Weight 重量
		Nm	ft-lb		
OP-TA30N2	1/4	6-30		257	0.44
OP-TA110N3	3/8	20-110		436	1.12
OP-TA210N4	1/2	40-210		495	1.47
OP-TA350N4	1/2	70-350		560	1.62
OP-TA450N6	3/4	75-450		815	3.3
OP-TA800N6	3/4	100-800		1000	7.08
OP-TA1500N6	3/4	300-1500		1740	11.8
OP-TA1500N8	1	300-1500		1740	11.8
OP-TA250i2	1/4		40-200inch-lb	257	0.44
OP-TA80F3	3/8		10-100	436	1.12
OP-TA150F4	1/2		30-150	495	1.47
OP-TA250F4	1/2		30-250	560	1.62
OP-TA300F6	3/4		50-300	815	3.3
OP-TA600F6	3/4		100-600	1000	7.08
OP-TA1000F6	3/4		200-1000	1740	11.8
OP-TA1000F8	1		200-1000	1740	11.8

Interchangeable Torque Handle Wrench

可換式扭力扳手



OP-210N11K

TORQUE HANDLE SET

可換式扭力扳手組

9 PCS Spanner head 13, 14, 15, 17, 19, 22, 24, 27, 30mm

1 PC 1/2" Dr[®] ratchet head

1 PC Interchangeable torque wrench 40~210Nm

1 PC Blow case

□14x18



OP-80N8K

TORQUE HANDLE SET

可換式扭力扳手組

6 PCS Spanner head 17, 22, 24, 26, 27, 29mm

1 PC 1/2" Dr[®] ratchet head

1 PC Interchangeable torque wrench 15~80Nm

1 PC Blow case

□14x18

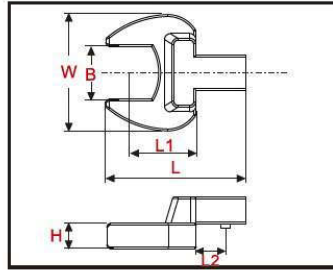


MODEL 型號	Driver 規格	Capacity 扭力範圍		Length 長度	Net Weight 重量
	mm	Nm	ft-lb	mm	kg
OP-1708AK	9x12	6-30	50-250inch-lb	290	0.58
OP-1709AKA	9x12	12-60	9-45	370	0.8
OP-1709AKB	14x18	12-60	9-45	375	0.81
OP-1710AKA	9x12	20-100	15-75	400	1.14
OP-1710AKB	14x18	20-100	15-75	405	1.15
OP-1718AK	14x18	40-200	30-150	500	1.38
OP-1720AK	14x18	60-300		575	1.5
OP-1721AK	14x18		60-220	575	1.5

Changeable Head

替換接頭

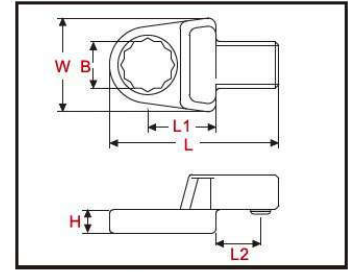
- Open Spanner Type
- 開口扳手型



單位：(mm)

MODEL 型號	B mm	□ mm	W mm	H mm	L mm	L1 mm	L2 mm	Net Weight (g)
OP-T7	7		23.5	5	37	17.5	11.5	38
OP-T8	8		23.5	5	36	17.5	11.5	38
OP-T9	9		24	5.5	38	17.5	11.5	39
OP-T10	10		30	5.5	38	17.5	11.5	42
OP-T11	11		30	6	40	17.5	11.5	43
OP-T12	12		30	6	40	17.5	11.5	48
OP-T13	13	9x12	30	7	41	20	11.5	52
OP-T14	14		38	8	42	20	11.5	59
OP-T15	15		34	8	42	20	11.5	59
OP-T16	16		37.5	8.5	43	20	11.5	67
OP-T17	17		38	8.5	43	20	11.5	67
OP-T18	18		42	9	46	22	11.5	75
OP-T19	19		42	9	47	22	11.5	75

- Ring Spanner Head
- 梅花扳手型



單位：(mm)

MODEL 型號	B mm	□ mm	W mm	H mm	L mm	L1 mm	L2 mm	Net Weight (g)
OP-T7A	7		22.0	5.0	40.4	17.5	11.5	42
OP-T8A	8		22.0	5.0	40.4	17.5	11.5	42
OP-T9A	9		24.0	5.5	41.9	17.5	11.5	42
OP-T10A	10		24.0	5.5	41.9	17.5	11.5	52
OP-T11A	11		24.0	6.0	43.3	17.5	11.5	50
OP-T12A	12		24.0	6.0	43.3	17.5	11.5	48
OP-T13A	13	9x12	24.0	7.0	46.7	17.5	11.5	60
OP-T14A	14		24.0	7.0	46.7	17.5	11.5	64
OP-T15A	15		25.0	7.9	47.8	20	11.5	64
OP-T16A	16		25.0	7.9	47.8	20	11.5	62
OP-T17A	17		26.5	9.0	51.2	20	11.5	74
OP-T18A	18		26.5	9.0	51.2	20	11.5	74
OP-T19A	19		27.0	9.2	51.4	20	11.5	68

MODEL 型號	B mm	□ mm	W mm	H mm	L mm	L1 mm	L2 mm	Net Weight (g)
OP-K13	13		35	7	62	32	15	148
OP-K14	14		35	8	63	32	15	154
OP-K15	15		35	8	63	32	15	154
OP-K16	16		38	9	64	32	15	173
OP-K17	17		38	9	64	32	15	173
OP-K18	18		42	10	65	32	15	192
OP-K19	19		42	10	65	32	15	193
OP-K21	21	14x18	53	10	66	32	15	217
OP-K22	22		53	11	66	32	15	222
OP-K24	24		53	11	67	32	15	225
OP-K25	25		59	12	71	32	15	267
OP-K26	26		60	13	70	32	15	273
OP-K27	27		60	13	70	34	15	281
OP-K28	28		60	13	70	34	15	260
OP-K29	29		60	14	73	34	15	312
OP-K30	30		66	14	75	36	16	312
OP-K32	32		65	15	75	37.5	15	322
OP-K33	33		65	14	76	37.5	15	305
OP-K34	34		74	15	82	37.5	15	360
OP-K36	36		74	15	82	42	15	360
OP-K38	38		74	15	82	42	15	360
OP-K40	40		83	15	82	42	15	380
OP-K41	41		83	15	83	42	15	380
OP-K42	42		83	16	83	42	15	380
OP-K44	44		91	16	86	42	15	440
OP-K46	46		91	16	86	43	15	440

MODEL 型號	B mm	□ mm	W mm	H mm	L mm	L1 mm	L2 mm	Net Weight (g)
OP-K13A	13		35.0	11.5	70.0	32	15	200
OP-K14A	14		35.0	11.5	70.0	32	15	200
OP-K15A	15		35.0	11.5	70.0	32	15	194
OP-K16A	16		35.8	12.0	70.0	32	15	204
OP-K17A	17		36.0	12.0	70.3	32	15	198
OP-K18A	18		40.0	13.5	71.9	32	15	234
OP-K19A	19		44.0	13.5	71.9	32	15	230
OP-K21A	21	14x18	40.2	14.5	73.1	32	15	236
OP-K22A	22		41.0	16.0	74.0	32	15	250
OP-K24A	24		41.3	16.0	75.5	32	15	254
OP-K26A	26		41.3	16.0	75.5	32	15	240
OP-K27A	27		41.8	17.0	79.0	34	15	280
OP-K29A	29		42.0	19.0	82.0	36	15	306
OP-K30A	30		42.0	19.0	82.0	36	15	328
OP-K32A	32		44.5	19.0	83.5	36	15	312
OP-K34A	34		47.0	19.0	86.5	38	15	324
OP-K36A	36		49.5	19.0	87.7	38	15	316
OP-K38A	38		52.0	19.0	91.0	40	15	342
OP-K40A	40		54.5	19.0	92.2	40	15	392
OP-K41A	41		57.0	20.0	95.5	42	15	392
OP-K42A	42		57.0	20.0	95.5	42	15	373
OP-K44A	44		59.5	20.0	98.7	44	15	393
OP-K46A	46		62.0	20.0	100.0	44	15	396

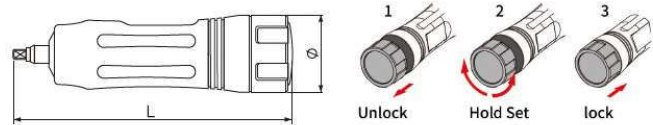
Torque Screwdriver

工業級扭力起子



1 PC 1/4DR. Torque Screwdriver
 10 PCS 25L Bit Set (Ph0x2, PH1x2, PH2x2, PH3x2, \ominus 4, \ominus 6)
 10 PCS 25L Tamper Bit Set (TX: 10, 15, 20, 25, 30, 40)
 (Hex: 3, 4, 5, 6)

誤差值(Accuracy): $\pm 6\%$



MODEL 型號	Φ外徑 / 徑長 L	Max torque 扭力範圍	Graduation 刻度	Driver 規格	Net Weight 重量
	mm				
OP-1405NT	Φ43/154	1-5	0.5	1/4"	0.33
OP-1408NT	Φ43/154	1-8	0.5	1/4"	0.33
OP-1405NTL	Φ43/235	1-5	0.5	1/4"	0.43
OP-1408NTL	Φ43/235	1-8	0.5	1/4"	0.43

MODEL 型號	Φ外徑 / 徑長 L	Max torque 扭力範圍	Graduation 刻度	Driver 規格	Net Weight 重量
	mm				
OP-1405iT	Φ43/154	10-50	5	1/4"	0.33
OP-1408iT	Φ43/154	10-80	5	1/4"	0.33
OP-1405iTL	Φ43/235	10-50	5	1/4"	0.43
OP-1408iTL	Φ43/235	10-80	5	1/4"	0.43

Digital Torque Wrench

數位扭力扳手



- Accuracy: $\pm 1\%$
- Memory: 100 Readings
- Unit Selection: Nm, ft.lb, in.lb, kg-m
- Operating Temperature: $-10^{\circ}\text{C} \sim 55^{\circ}\text{C}$
- Battery: 1.5V AA Batteries x 3
- USB Data Out



- 誤差值: $\pm 1\%$
- 記憶數: 100組
- 單位選擇: Nm, ft.lb, in.lb, kg-m
- 使用環境溫度: $-10^{\circ}\text{C} \sim 55^{\circ}\text{C}$
- 電池: 1.5V AA 3顆
- 傳輸方式: USB



MODEL 型號	Driver 規格	Capacity 扭力範圍	Length 長度	Net Weight 重量
	inch			
OP-TB100N3	3/8	10-100	440	0.95
OP-TB100N4	1/2	10-100	440	1.06
OP-TB200N4	1/2	20-200	524	1.35
OP-TB350N4	1/2	35-350	640	1.9

MODEL 型號	Driver 規格	Capacity 扭力範圍	Length 長度	Net Weight 重量
	mm			
OP-TC100N	14 x 18	10-100	420	0.84
OP-TC200N	14 x 18	20-200	490	1.15
OP-TC350N	14 x 18	35-350	630	1.7

Digital Torque Screwdriver

數位扭力起子



- Accuracy: $\pm 1\%$
- Memory: 10 Readings
- Unit Selection: Nm, ft.lb, in.lb, kg-m
- Operating Temperature: $-10^{\circ}\text{C} \sim 55^{\circ}\text{C}$
- Battery: 1.5V AA Batteries x 3

- 誤差值: $\pm 1\%$
- 記憶數: 10組
- 單位選擇: Nm, ft.lb, in.lb, kg-m
- 使用環境溫度: $-10^{\circ}\text{C} \sim 55^{\circ}\text{C}$
- 電池: 1.5V AAA 3顆

MODEL 型號	Driver 規格	Capacity 扭力範圍	Length 長度	Net Weight 重量
	inch			
OP-DTS10N	1/4	1-10	122	0.31