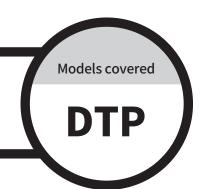


# Adjustable Torque Wrench OPERATION MANUAL



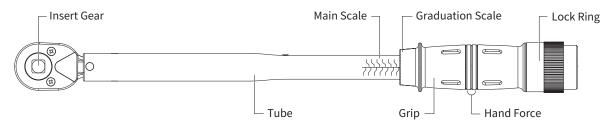












#### **BEFORE STARTING**

- 1. Study this instruction before use.
- 2. This torque wrench is calibrated and tested before leaving the factory, it is certified to meet the current standard specification and has an accuracy of C.W. ±4% / C.C.W. ±4%.
- 3. THIS TOOL IS A PRECISION MEASUREMENT AND DESIGNED FOR MANUAL TIGHTENING FASTENERS ONLY. DO NOT USE IT AS A NUT BREAKER OR FOR ANY OTHER PURPOSE.
- 4. Do not over torquing the fastener, or it will cause tool's damage and serious injury.
- 5. Do not use this tool near rotating machinery.
- 6. Disassemble this tool or make any adjustments will result in the loss of accuracy and invalidating the warranty.
- 7. Do not continuously apply force after hearing the clicking sound or feel shock.
- 8. Do not use any kind of extension on the handle of the tool. This will not only damage the tool, also affect the accuracy.
- 9. Do not immerse grease inside ratchet head. It may cause unexpected damage.
- 10. Use special care at minimum torque setting.
- 11. Please wear gloves and goggles when working.





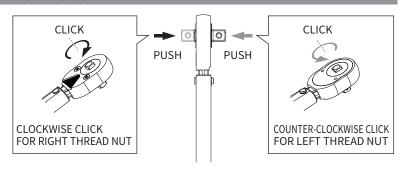




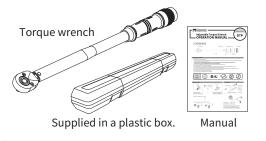




#### **HOW TO USE**



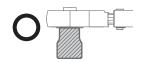
## CONTENTS

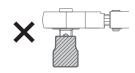


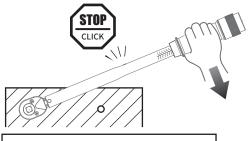
Choose a qualified socket



Insert square drive securely to the socket.



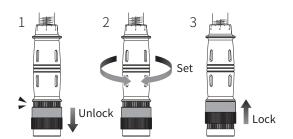




Do not continuously apply force after hearing the clicking sound or feel shock.

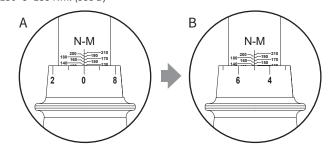
#### **HOW TO SET TORQUE VALUE**

- 1. Pull the lock ring to unlocked.
- 2. Turn the adjustable handle clockwise or counter-clockwise (Right or left) to set the desired torque.
- 3. Push the lock ring to set finished.



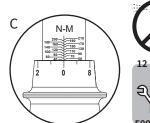
For example: ITEM NO. DTP-210N

To set torque to 135 Nm. Firstly pull the lock ring and turn the handle clockwise until the upper edge to 130 Nm (see A) and the reading "5" on the long tube must align with the center line of scale vertically so as to acquire 130+5=135 Nm. (see B)



#### **MAINTENANCE AND STORAGE**

- 1. Please return torque value to the lowest reading when not in use. (see C) Do not turn below the lowest reading.
- 2. If this tool has not been used for a period of time, it shall be preloaded several times at its maximum torque setting. This will allow internal lubricant to recoat.
- 3. Clean this tool by wiping with a clean cloth after operation and storage in a dry environment. Do not dip any type of liquid in this tool. This may damage the internal of this tool.
- 4. This tool should be recalibrated a period of 12 months, or 5,000 cycles, whichever occurs first. To contact with local vendor or an authorized repair center for supporting.



# **TORQUE CONVERSION FACTORS**

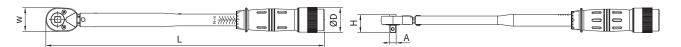
Units to be converted	Corresponding unit								
	=mN·m	=cN-m	=N·m	=ozf-in	=lbf-in	=lbf-ft	=gf·cm	=kgf·cm (kp·cm)	=kgf·m (kp·m)
1 mN·m	1	0.1	0.001	0.142	0.009	0.0007	10.2	0.01	0.0001
1 cN·m	10	1	0.01	1.416	0.088	0.007	102	0.102	0.001
1 N·m	1000	100	1	141.6	8.851	0.738	10197	10.2	0.102
1 ozf-in	7.062	0.706	0.007	1	0.0625	0.005	72	0.072	0.0007
1 lbf-in	113	11.3	0.113	16	1	0.083	1152.1	1.152	0.0115
1 lbf-ft	1356	135.6	1.356	192	12	1	13826	13.83	0.138
1 gf-cm	0.098	0.01	0.0001	0.014	0.0009	0.00007	1	0.001	0.00001
1 kgf·cm(kp·cm)	98.07	9.807	0.098	13.89	0.868	0.072	1000	1	0.01
1 kgf·m(kp·m)	9807	980.7	9.807	1389	86.8	7.233	100000	100	1

Conversion-formula:

Units to be converted × Factor = Corresponding unit

Example: Convert 5 lbf-ft into cN·m Solution:  $5 \times 135.6 = 678 \text{ cN} \cdot \text{m}$ 

#### **SPECIFICATION**



### Metric

								0
ITEM NO.	A	Range	لسلسا	W	Н	L	ØD	KG
DTP-80N	3/8"	10-80 Nm	0.5 Nm	36.4	29.8	380	35.0	0.74
DTP-110N	3/8"	20-110 Nm	0.5 Nm	36.4	29.8	380	35.0	0.96
DTP-210N	1/2"	40-210 Nm	1 Nm	46.7	40.0	535	40.0	1.70
DTP-350N	1/2"	70-350 Nm	2.5 Nm	46.7	40.0	650	47.0	2.54
DTP-500N	3/4"	100-500 Nm	2.5 Nm	72.0	56.2	860	47.0	3.66
DTP-700N	3/4"	140-700 Nm	2.5 Nm	72.0	56.2	1090	47.0	5.94
DTP-980N	3/4"	140-980 Nm	7 Nm	72.0	56.2	1230	47.0	6.46
	1"	140-900 NIII			67.7			

SAE

ITEM NO.	O <sub>A</sub>	Range	لسلسا	w	н	L	ØD	KG
DTP-60F	3/8"	10-60 ft.lb	0.5 ft.lb	36.4	29.8	380	35.0	0.74
DTP-80F	3/8"	15-80 ft.lb	0.5 ft.lb	36.4	29.8	380	35.0	0.96
DTP-150F	1/2"	30-150 ft.lb	1 ft.lb	46.7	40.0	535	40.0	1.70
DTP-250F	1/2"	50-250 ft.lb	2.5 ft.lb	46.7	40.0	650	47.0	2.54
DTP-300F	3/4"	50-300 ft.lb	2.5 ft.lb	72.0	56.2	860	47.0	3.66
DTP-600F	3/4"	100-600 ft.lb	2.5 ft.lb	72.2	56.2	1090	47.0	5.94
DTP-700F	3/4"	100-700 ft.lb	5 ft.lb	72.0	56.2	1230	47.0	6.46
	1"	100-700 11.15			67.7			

Unit: mm

Version

03

Jun. 2023

Accuracy : C.W.  $\pm 4\%$  / C.C.W  $\pm 4\%$ 



Manufacturer

MATATAKITOYO TOOL CO., LTD.

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Made in Taiwan