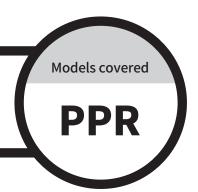


# Adjustable Torque Wrench **OPERATION MANUAL**





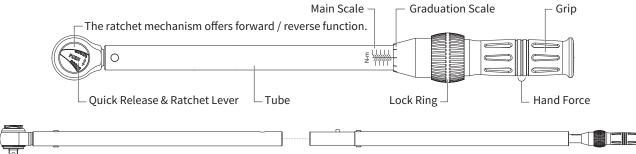










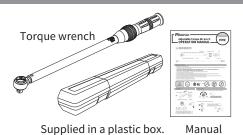


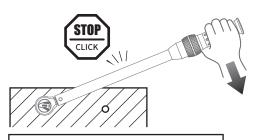
## **BEFORE STARTING**

- 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. ±6%.
- 3. THIS TOOL IS A PRECISION MEASUREMENT AND DESIGNED FOR MANUAL TIGHTENING FASTERNERS 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.



# **CONTENTS**

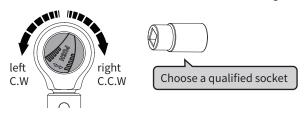




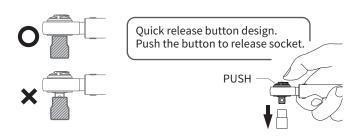
Do not continuously apply force after hearing the clicking sound or feel shock.

# **HOW TO USE**

Position of ratchet lever for clockwise/counter clockwise tightening.

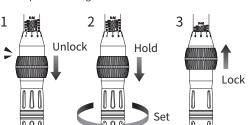


Insert square drive securely to the socket.



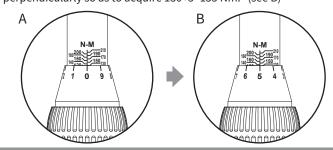
#### **HOW TO SET TORQUE VALUE**

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



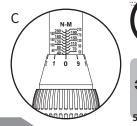
For example: ITEM NO. PPR-210N

To set torque to 135 Nm. Firstly push down and hold 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 link of scale perpendicularly so as to acquire 130+5=135 Nm. (see B)



## **MAINTENCE AND STORAGE**

- 1. Please return torque value to just below lowest reading when not in use. Do not turn below lowest reading. (see C)
- 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.







### **TOROUE CONVERSION FACTORS**

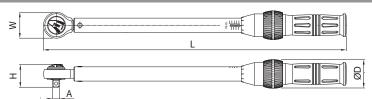
Units to be converted	Corresponding unit								
	=mN·m	=cN-m	=N·m	=ozf·in	=lbf·in	=lbf-ft	=gf·cm	=kgf·cm (kp·cm)	=kgf·m (kp·m)
1 mN·m	1	0.1	0.001	0.142	0.009	0.0007	10.2	0.01	0.0001
1 cN·m	10	1	0.01	1.416	0.088	0.007	102	0.102	0.001
1 N·m	1000	100	1	141.6	8.851	0.738	10197	10.2	0.102
1 ozf-in	7.062	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 :  $5 \times 135.6 = 678$  cN·m

#### **SPECIFICATION**



Accuracy : C.W.  $\pm$  4% / C.C.W.  $\pm$  6%

Metric # Matt finish

Metric	# Matt IIII311							
ITEM NO.	04	Range	لسلسا	w	н	П	ØD	KG
PPR-5N	1/4"	1-5 Nm	0.05 Nm	24.0	29.0	200	38.0	0.28
PPR-30N	1/4"	6-30 Nm	0.2 Nm	24.0	29.0	225	38.0	0.30
PPR-110N	3/8"	20-110 Nm	0.5 Nm	29.0	37.0	440	43.0	0.86
PPR-210N	1/2"	40-210 Nm	1 Nm	43.0	47.3	480	43.0	1.20
PPR-350N	1/2"	70-350 Nm	1 Nm	43.0	47.3	538	43.0	1.40
PPR-450N	3/4"	75-450 Nm	2.5 Nm	70.0	70.0	810	43.0	3.14
PPR-800N	3/4"	100-800 Nm	5 Nm	70.0	70.0	985	43.0	6.60
PPR-1500N	3/4"	300-1500 Nm	10 Nm	67.4	68.6	1710	43.0	11.6
PPR-1500NS	1″	300-1500 Nm	10 Nm	67.4	68.6	1763	43.0	11.6
PPR-2000N	1"	400-2000 Nm	10 Nm	68.0	76.0	2300	43.0	13.0

**SAE** # Shinny finish

ITEM NO.	O <sub>A</sub>	Range	لسلسا	w	н	L	ØD	KG
PPR-50i	1/4"	10-50 in.lb	0.5 in.lb	24.0	29.0	200	38.0	0.28
PPR-200i	1/4"	40-200 in.lb	1 in.lb	24.0	29.0	225	38.0	0.30
PPR-100F	3/8"	10-100 ft.lb	0.5 ft.lb	29.0	37.0	440	43.0	0.86
PPR-150F	1/2"	30-150 ft.lb	1 ft.lb	43.0	47.3	480	43.0	1.20
PPR-250F	1/2"	30-250 ft.lb	1 ft.lb	43.0	47.3	538	43.0	1.40
PPR-300F	3/4"	50-300 ft.lb	2.5 ft.lb	70.0	70.0	810	43.0	3.14
PPR-600F	3/4"	100-600 ft.lb	2.5 ft.lb	70.0	70.0	985	43.0	6.60
PPR-1000F	3/4"	200-1000 ft.lb	5 ft.lb	67.4	68.6	1710	43.0	11.6
PPR-1000FS	1"	200-1000 ft.lb	5 ft.lb	67.4	68.6	1763	43.0	11.6
PPR-1500F	1"	300-1500 ft.lb	5 ft.lb	68.0	76.0	2300	43.0	13.0

Version

03

Unit:mm

Jan. 2023

Manufacturer



No. 63, Ln. 493, Sec. 3, Zhongshan Rd., Tanzi Dist., Taichung City 42754, Taiwan TEL: 886-4-2533 5893



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