CEM3-G-BTA

Wireless Data Transfer Digital Torque Wrench with Angle

Direction

RoHS

CEM100N3×15D-G-BTA

* *Bluetooth is a registered trademark of Bluetooth SIG, Inc.*

Tightening Data Management System

- Transfer collected data wirelessly by built in Bluetooth® module
- Angle monitoring at the peak tightening torque or measured torque value
- Wireless duplex communication sends the Hi/Lo limit torque and angle settings to the wrench then sends the collected data back out to PC

Accuracy ±1%

Head Size	Model	Torque Range N·m Min.-Max.	N·m 1digit	kgf·m Min.-Max.	kgf·m 1digit	lbf·ft Min.-Max.	lbf·ft 1digit	Overall Length [mm]	Angle Range Min.-Max.	Angle Range 1digit	Angle Accuracy	Weight [kg]
8D	CEM10N3×8D-G-BTA	2-10	0.01	0.200-1.000	0.001	1.50-7.30	0.01	212				0.54
10D	CEM20N3×10D-G-BTA	4-20	0.02	0.400-2.000	0.002	3.00-14.50	0.02	214				0.55
12D	CEM50N3×12D-G-BTA	10-50	0.05	1.000-5.000	0.005	7.50-36.00	0.05	282				0.66
15D	CEM100N3×15D-G-BTA	20-100	0.1	2.00-10.00	0.01	15.0-73.0	0.1	384	0-999°	1°	±2°+1digit (Angular velocity is 30°/ X~180°/s when the bolt turned to 90°)	0.71
19D	CEM200N3×19D-G-BTA	40-200	0.2	4.00-20.00	0.02	30.0-150.0	0.2	475				0.86
22D	CEM360N3×22D-G-BTA	72-360	0.4	7.2-36.00	0.04	52.0-260.0	0.4	713				1.21
	CEM500N3×22D-G-BTA	100-500	0.5	10.00-50.00	0.05	73.0-360.0	0.5	949				4.08
32D	CEM850N3×32D-G-BTA	170-850	1	17.0-85.0	0.1	124-620	1	1387				5.22

Note

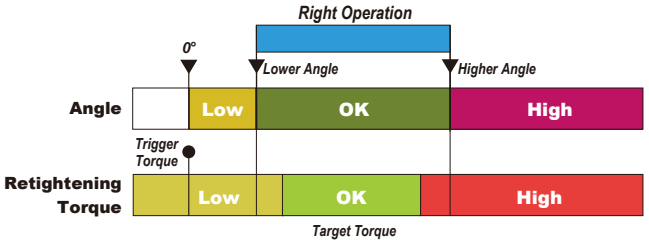
1. For the specification, standard accessories and note of the basic CEM3-G model, refer to page 39.
2. Trigger torque can be set from the 5% of the maximum torque to the maximum.
3. Trigger torque set below the minimum torque range of the body is not guaranteed.

By monitoring the final torque and the final angle, reliability for tightening and inspection data can be confirmed

For Inspection

Monitoring excessive or extremely small angle rotation during the re-tightening inspection will provide evidence for correct data verification.

M-Mode: Inspection



Possible causes of angle monitoring results

Angle Low

- *Possibility of the operation errors*
- *Stopped loading before the bolt moving*

Angle High

- *Possibility of the operation errors*
- *Rotated too much on the retightening inspection process*

Right Operation

Torque OK, Angle OK
Torque NG, Angle OK

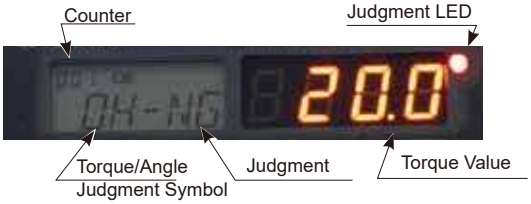
Error Operation

Torque OK / NG
Angle NG

For Tightening

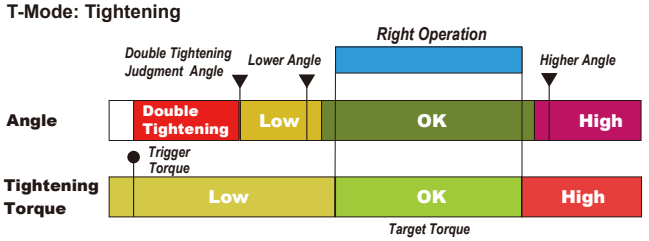
By detecting final angle at the completion of the tightening operation, it is possible to eliminate tightening errors caused by provisional tightening, the tightening application or double tightening.

Judgment Result Display

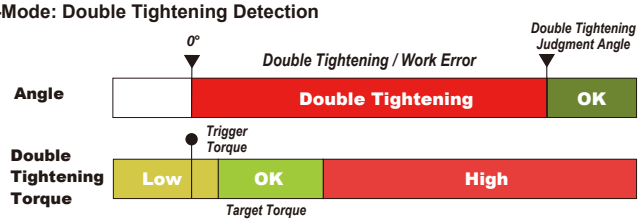


L :Less than the lower limit (Low-NG)
O :OK
H :Beyond the upper limit (High-NG)
D :Double tightening (NG tightening)

T-Mode: Tightening



T-Mode: Double Tightening Detection



Possible causes of angle monitoring results

Angle Low

- *Double Tightening*
- *Cross Threaded Screw*
- *Defect fo work/Bolt*
- *Contamination*

Angle High

- *Defect of Work/Bolt*
- *Lack of O-Ring/Gasket*
- *Over torque of the provisional tightening*

Right Operation

Torque OK
Angle OK

Error Operation

Torque OK / NG
Angle NG