

CEM3-G-BTS CEM3-G-BTD

Wireless data transfer digital torque wrench

Direction



CEM100N3×15D-G-BTS
CEM100N3×15D-G-BTD



Tightening Data Management System

- Transfer collected data wirelessly by built in Bluetooth® module
- -BTS saves the data and transfers to an external device.
- -BTD receives tightening torque instructions from external device then transfers collected data back out.

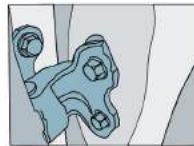
Accuracy ±1%

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

Note For the specification, standard accessories and note of the basic CEM3-G model, refer to page 35. To use various functions, special software is required separately.

CEM3-G-BTS

CEM3G-BTS Display



Save the data

Process Order	Portion	Spindle	Hi/Lo	Value	Judgment
1	Hinge R	1	25/35	26	OK
1	Hinge R	2	25/35	24	NG
2	Hinge L	1	25/35	28	
2	Hinge L	2	25/35		

- Suitable for bolt inspection.
- Transfer the realtime inspection record to PC/Tablet.

CEM3-G-BTD

CEM3G-BTD Display



Process Order	Portion	Spindle	Target Torque	Upper Limit	Value	Judgment
1	Wheel	1	105	135	106	OK
1	Wheel	2	105	135	138	NG
1	Wheel	3	105	135	107	OK
1	Wheel	4	105	135	106	OK
2	W/Center	1	180	210	185	

- Suitable for bolt tightening operation.
- Change the preset target and upper limit torque by Bluetooth command input
- Preliminary alert at 80 % of the target torque
- Transfer realtime tightening data to PC/Tablet (Data will not be saved in the wrench memory)

Handy Terminal

Compact data collection device for CEM3-G-BT

- Upload & download torque measuring information
- Guides user through torque assembly & quality inspection processes
- Statistics and charting capabilities
- Contact Tohnichi for lithium battery shipping specifications.



Bluetooth® Specification	
Communication Method	Bluetooth®
Radio Frequency Range	2.4GHz
Communication Distance	10m
Continuous Use	8 hours

TDMS

Tightening Data Management Software

Available Bluetooth® product

M-Mode : Measurement operation

- CEM3-G-BTS
- CTB2-G-BT
- STC2-G-BT

T-Mode: Tightening operation

- CEM3-G-BTD
- STC2-G-BT



Model	Description	Language
TDMS	Software only	Japanese
TDMS-E		English
TDMS-C		Chinese



Model	Description	Dimension [mm]
TDMSHT	Software + Handy Terminal device	Japanese
TDMSHT-E		English
TDMSHT-C		Chinese

System Requirements	
Operating System	Windows® XP, 7, 8, 8.1, 10

- Note
1. Software installation is allowed on a single PC at one time.
 2. Applicable with CEM3-G-BTS/BTD, STC2-G-BT and other Tohnichi products equipped with Bluetooth® module.
 3. Connectable with up to 7 Bluetooth® devices when using.
 4. Excel® and Windows® is a trademark registration of Microsoft Co., Ltd.
 5. Bluetooth® is a trademark registration of Bluetooth SIG, Inc.

Standard Accessories
USB flash drive for portion master file management

Example : TDMS with CEM3-G-BTS for BOLT INSPECTION

Create a quality inspection torque route task list

TDMS instructs inspection sequence, portion name, spindle number and judgment result.

No.	Structure	Spindle No.	Number of Spindle	Ti Low	Ti High	Measured Torque	Judgment
1	RH Mount BKTXLH E/G Mount Insulator	1	1	15.0	20.0	17.3	OK
2	RH Mount BKTXRH E/G Mount Insulator	1	1	10.0	15.0	0.0	
3	Fr Hubnuts LH	1	2	12.0	17.0	0.0	
3	Fr Hubnuts LH	2	2	12.0	17.0	0.0	
4	Fr Hubnuts RH	1	2	12.0	17.0	0.0	
4	Fr Hubnuts RH	2	2	12.0	17.0	0.0	

No. 2	Portion	RH Mount BKTXRH E/G Mount Insulator	Number of Spindle	Ti Low	Ti High	Measured Torque	Judgment	Date	Time
1	1	10.0	15.0	0.0					

Move to the next portion

No.	Portion Name	Spindle No.	Number of Spindle	Ti Low	Ti High	Measured Torque	Judgment	Date	Time
1	RH Mount BKTXLH E/G Mount Insulator	1	1	15.0	20.0	17.3	OK		
2	RH Mount BKTXRH E/G Mount Insulator	1	1	10.0	15.0	21.6	NG(H)	16/Oct/2012	17:21:30
3	Fr Hubnuts LH	1	2	12.0	17.0	0.0			
3	Fr Hubnuts LH	2	2	12.0	17.0	0.0			
4	Fr Hubnuts RH	1	2	12.0	17.0	0.0			
4	Fr Hubnuts RH	2	2	12.0	17.0	0.0			

Inspection result OK

Inspection result NG



Save the data in wrench memory

Data Transfer

Connect to the next torque wrench automatically



Save the data in wrench memory

Data Transfer

Move to the next spindle

Example : TDMS with CEM3-G-BTD for ASSEMBLING

Integrates several torque wrenches and establishes process instruction for different applications

TDMS instructs tightening sequence, portion name, spindle number. Both TDMS and CEM3-G-BTD indicate Judgment result.

No.	Structure Name	Spindle No.	Number of Spindle	Ti Low	Ti High	Measured Torque	Judgment
1	RH Mount BKTXLH E/G Mount Insulator	1	1	15.0	20.0	0.0	
2	RH Mount BKTXRH E/G Mount Insulator	1	1	10.0	15.0	0.0	
3	Fr Hubnuts LH	1	2	12.0	17.0	0.0	
3	Fr Hubnuts LH	2	2	12.0	17.0	0.0	
4	Fr Hubnuts RH	1	2	12.0	17.0	0.0	
4	Fr Hubnuts RH	2	2	12.0	17.0	0.0	

No. 1	Portion	RH Mount BKTXLH E/G Mount Insulator	Number of Spindle	Ti Low	Ti High	Measured Torque	Judgment	Date	Time
1	1	15.0	20.0	0.0					

Move to the next portion

No.	Portion Name	Spindle No.	Number of Spindle	Ti Low	Ti High	Measured Torque	Judgment	Date	Time
1	RH Mount BKTXLH E/G Mount Insulator	1	1	15.0	20.0	17.3	OK		
2	RH Mount BKTXRH E/G Mount Insulator	1	1	10.0	15.0	0.0			
3	Fr Hubnuts LH	1	2	12.0	17.0	0.0			
3	Fr Hubnuts LH	2	2	12.0	17.0	0.0			
4	Fr Hubnuts RH	1	2	12.0	17.0	0.0			
4	Fr Hubnuts RH	2	2	12.0	17.0	0.0			

Start the operation and send Target/Upper limit

Tightening result OK

Target/Upper Limit Torque Setting

Target/Upper Limit Torque Setting

Transfer actual applied torque

Transfer actual applied torque



Show judgment result on CEM3-BTD and TDMS. Save the data in TDMS.

Connect to the next torque wrench automatically



Move to the next spindle