FD/FDD

Click Type Torque Wrench
with Wireless Data Transfer

Direction

RoHS

CSPFD25N3X12D with QH

R-CM receiver with

M-FD module

M-FD

BA-8R

FD-PCV

SB-FH2

FD/FDD Free setting
software is provided

Tightening Data Management System

- Transfer actual applied torque and wrench ID establish tightening traceability
- LED light offers simple visual judgment
- Interchangeable torque wrench type allows to use variety of standard heads
- FDD prevents double tightening counting by angle detection

Accuracy ±3%+1digit

Model		Torque Range [N·m]		Torque Range [kgf·m]		Torque Range [lbf·ft]		Overall Length [mm]	Weight [kg]	Head Size
FD	FDD	Min.-Max.	1 digit	Min.-Max.	1 digit	Min.-Max.	1 digit			
				kgf·m 0.2-1	kgf·m	lbf·ft 1.5-7.5	lbf·ft			
CSPFD25N3-10N×10D	CSPFDD25N3-10N×10D	2-10	0.1	0.2-1	0.01	1.5-7.5	0.1	193	0.32	10D
CSPFD25N3×10D	CSPFDD25N3×10D	5-25		0.5-2.5		3.6-18				
CSPFD50N3×12D	CSPFDD50N3×12D	10-50	0.2	1-5	0.02	7.5-36		214	0.46	12D
CSPFD50N3×15D	CSPFDD50N3×15D							217		15D
CSPFD100N3×15D	CSPFDD100N3×15D	20-100	0.5	2-10	0.05	15-75	0.2	290	0.65	
CSPFD140N3×15D	CSPFDD140N3×15D	30-140		3-14		25-100	0.5	349	0.77	
CSPFD200N3×19D	CSPFDD200N3×19D	40-200	1	4-20	0.1	30-150	1	429	1.2	19D
CSPFD280N3×22D	CSPFDD280N3×22D	40-280		4-28		30-200		627	1.65	22D

Note
1. Interchangeable head is sold separately.
2. The transmitter display shows 3 digit for torque value.
3. FDD comes with double tightening detection function.
4. Contact Tohnichi for status of wireless certification acquisition for each country.
5. Ask to Tohnichi or distributor for any other torque range.

Standard Accessories   Rechargeable AAA battery x 2 pcs, Protective Cover * Battery charger does not come with the set

Modular Conversion Receiver

Receiver	Specification
R-CM	Output: Relay x 4, RS232C, Input: LS-IN, Reset

Note   Power source: DC24V

Connecting Cable

Part No.	Applicable Model	Specification
387	SB-FH2, R-CM - PC	RS232C straight

Protective Cover

Model	Applicable Model	Specification
FD-PCV	FD, FDD	Material: Silicon Resin

Radio Module

Model	Specification	Standard Accessory
M-FD	2.4GHz FHSS	Diversity antenna

Setting Box

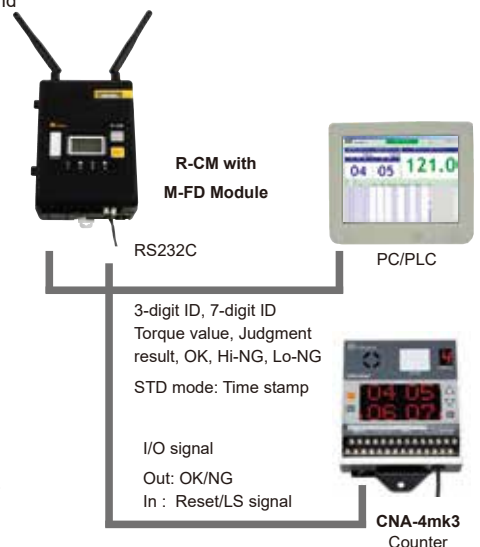| Model	Available Setting Items	Dimension [mm]
SB-FH2	Group channel, Judgment code, 3-digit/7digit ID, Communication settings	W160 × D120 × H35

Note
1. Provide PC setting software
2. RS232C straight cable needs optionally to use setting software.

FD/FDD Transmitter Specifications

Model	FD	FDD
Double Tightening Detection Angle Range		0 - 360°
LED	Blue: OK judgment for tightening torque Red: NG judgment for tightening torque Red flashing: Transmitting error	Blue: OK judgment for tightening torque and double tightening Red: NG judgment for tightening torque and double tightening Red flashing: Transmitting error
LCD Display	Tightening torque-3 digits, Torque unit, Battery level/4 levels	Tightening torque/angle convertible 3-digits, Torque unit, Battery level/4 levels
Operation Key	POWER key, TEST button, SET button	
Operating Time	24 hrs	12 hrs
Other Functions	Auto zero, Auto power off/0-99 minutes.	

FD/FDD Common Outline

Display

OK

Wrench 1

Hi/Lo NG

Wrench 2

Multiple wrench control

FHSS, Frequency Hopping Spectrum System and
10 times of retry make communication reliability.

Use 2 FD/FDD wrenches by One Receiver

Preset 2 points of Upper & Lower limit

R-CM controls up to two units of wrench and
gives OK/Hi-NG/Lo-NG judgment for applied
torque value from wrench No.1 and No.2.
Receiver conducts judgment and sends
answer back signal to the wrench with the result.

Use Multiple FD/FDD wrenches by One Receiver

Control each Upper & Lower limit by PC/PLC

An external device gives OK/Hi-NG/Lo-NG
judgment for applied torque value from each
wrench.
R-CM receives the result from PC/PLC and sends
answer back to each wrench.

R-CM with M-FD Module

RS232C

PC/PLC

3-digit ID, 7-digit ID
Torque value, Judgment
result, OK, Hi-NG, Lo-NG

STD mode: Time stamp

I/O signal

Out: OK/NG
In : Reset/LS signal

CNA-4mk3 Counter

Note:
Multiple wrenches can connect to one receiver
as long as they do not signal at the exact same time.

FDD Double Tightening Detection Function

If the same fastener is tightened twice the second tightening data will be rejected.

Completion of tightening
process with Blue signal.

LED lights Red when FDD
wrench click on tightened bolt.