

FD/FDD

Click type torque wrench with wireless data transfer function



CSPFD25N3X12D
CSPFDD25N3X12D



R-FHD256

R-FHD256 bottom



RS232C I/O



FD-PCV



SB-FH256



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%+1 digit

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				
CSPFD25N3-10N×10D	CSPFDD25N3-10N×10D	2-10	0.1	kgf·m 0.2-1	kgf·m 0.01	lbf·ft 1.5-7.5	lbf·ft 3.6-18	0.1	193	0.32	10D
CSPFD25N3×10D	CSPFDD25N3×10D	5-25	0.1	0.5-2.5	0.01	3.6-18	3.6-18		214	0.46	12D
CSPFD50N3×12D	CSPFDD50N3×12D	10-50	0.2	1-5	0.02	7.5-36	7.5-36	0.2	217	0.65	15D
CSPFD50N3×15D	CSPFDD50N3×15D								290		
CSPFD100N3×15D	CSPFDD100N3×15D	20-100	0.5	2-10	0.05	15-75	0.5	0.2	290	0.65	15D
CSPFD140N3×15D	CSPFDD140N3×15D	30-140	1	3-14	0.1	25-100	0.5	0.5	349	0.77	19D
CSPFD200N3×19D	CSPFDD200N3×19D	40-200	1	4-20	0.1	30-150	1	1	429	1.2	19D
CSPFD260N3×22D	CSPFDD260N3×22D	40-260	1	4-28	0.1	30-200	1	1	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 conditions 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, Charger, Protective Cover

Receiver

Model	Description	Dimension [mm]
R-FHD256	Receiver for FD/FDD	W110 × D48 × H150

Note Power cable is 1.4m.

Standard Accessories Dipole Antenna, RS232C cable

Protective Cover

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

Setting Box

Model	Description	Dimension [mm]
SB-FH256	Setting of 3-digit ID, Group, Judgment code	W160 × D120 × H35

- Note**
1. It is applicable to existing products.
 2. There are several versions in wireless communication. Contact Tohnichi as regards the versions.
 3. With using PC setting software provided from Tohnichi allows to set 7-digit ID.

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 switch, TEST switch, SET switch	
Operating Time	24 hrs	12 hrs
Other Functions	Auto zero, Auto power off/0-99 mins.	

FD/FDD Common Outline



Display

OK



CSPFD/CSPFDD

Hi/Lo NG



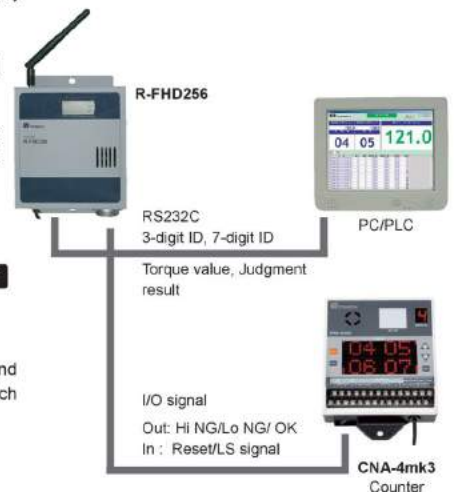
FHSS, Frequency Hopping Spectrum System and 10 times of retry make communication reliability.

Connects 1 torque wrench to 1 receiver

Preset 1 point of Upper & Lower limit
Set the upper and lower limit one point to receiver. The receiver judges applied torque and sends the judgment result to the transmitter.

Manages several torque wrenches with 1 receiver

Control each Upper & Lower limit by PC/PLC
External device is required.
It controls each tightening portion of upper and lower limit. Send back the judgment result to each torque wrench through the receiver.



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.

CSPLD CSPLDC

Click type torque wrench with wired data transfer function

Coming soon



CSPLD100N3X15D
with QH head and fixed cable



CD5

* CD5 Display is calibrated to one wrench.
(Purchase of CD5 is required.)



CSPLDC25N3X10D
with quick connect cable

Tightening Data Management System

- Transfer actual applied torque by cable connection with CD5 display
- CD5 display gives judgment for Hi/Lo set torque value
- Interchangeable torque wrench type allows to use variety of standard heads
- CD5 and wrench are calibrated together to one torque setting

Accuracy ±3%

Model		Torque Range [N·m]		Torque Range [kgf·cm/kgf·m]		Torque Range [lbf·in/lbf·ft]	
Fixed Cable	Quick Connect Cable	Min.-Max.	Min.-Max.	Min.-Max.	Min.-Max.	Min.-Max.	Min.-Max.
CSPLD	CSPLDC			kgf·cm	kgf·m	lbf·in	lbf·ft
CSPLD25N3-10N×10D	CSPLDC25N3-10N×10D	2-10	20-100	0.2-1	2-10	20-85	1.5-7.5
CSPLD25N3×10D	CSPLDC25N3×10D	5-25	50-250	0.5-2.5	44.3-221.2	3.69-18.45	
CSPLD50N3×12D	CSPLDC50N3×12D	10-50	100-500	1-5	88.5-442.5	7.38-36.9	
CSPLD50N3×15D	CSPLDC50N3×15D						
CSPLD100N3×15D	CSPLDC100N3×15D	20-100	200-1000	2-10	177.0-885.0	14.76-73.8	
CSPLD140N3×15D	CSPLDC140N3×15D	30-140	300-1400	3-14	265.5-1239.1	22.14-103.32	
CSPLD200N3×19D	CSPLDC200N3×19D	40-200	400-2000	4-20	354.0-1770.1	29.52-147.6	
CSPLD280N3×22D	CSPLDC280N3×22D	40-280	400-2800	4-28	354.0-2478.2	29.52-206.64	
CSPLD420N×22D	CSPLDC420N×22D	60-420	600-4200	6-42	531.1-3717.3	44.28-309.9	

- Note
- 1 CSPLD/CSPLDC wrench and CD5 display are calibrated together. At time of order, provide torque set value and confirm cable types and length.
 - 2 Wrench only are supplied as back ups or for replacement.
Calibration procedure required when connecting new wrench to CD5 Display. Contact Tohnichi for assistance.
 - 3 Interchangeable head is sold separately. Refer to page 41 to 44.
 - 4 If connecting CSPLD/CSPLDC to your existing CD5 display and use the OK/NG judgment LED light on the wrench, it requires a power supply AC adapter sold separately, contact to Tohnichi for details.

Display (Required)

Model	Dimension [mm]
CD5	W150 × D190 × H94

Note Refer to page 63 for more information.

CD5 Output Cable (Optional)

Model	Description	Plug
383	CD5 - PC	D-SUB Pin Female

CSPLD/CSPLDC Outline

Wired system features highly reliable transmitter mounted on a click torque wrench that captures actual applied torque data. CD5 display shows actual tightening torque and judgment is made whether or not the torque is within the programmed Hi/Lo parameters. Connect to PLC and PC software to store and control data for increased tightening reliability. Select from two different cable styles, CSPLD for fixed cable type and CSPLDC for quick connect type.

System Example



CSPLD

Specify cable specification when ordering.
Refer to diagram belows.

OK/NG judgment
Red: NG Blue: OK

Lighting in blue or red for the next use wrench by command input from PC/PLC



Wired transfer of actual tightening torque

Model AQSPDL2/AQSPDLC2/
ACQSPDL2/ACQSPDLC2,
AirTork versions are also available



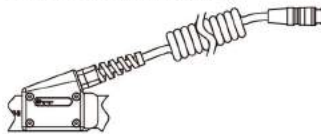
PC connecting cable/383
Refer to P.46.



PC/PLC

CSPLD/CSPLDC Cable Figure

Cable 1: 300mm Curled cable



LD : Fixed cable type

Cable 2: 300mm Curled cable



LDC : Quick connect type

Cable 3



Connected to an indicator CD5

LS lead cable

LS lead cable with Y terminal

Cable 4



Cable 5 *Upon request



7 Pin Connector male



7 Pin Connector female

Note

- 1 Cable 1 : Fixed 300mm
- 2 Cable 3 : The length is selectable from 4 to 10m
- 3 Cable 4, Cable 5 : Available from 1 to 10m
- 4 Cable 5 is for connecting LD/LDC to the previous CSPD/ACQSPD cable from CD5.
Select the connector shape depending on your CSPLD.
- Standard "CSPD", Fixed Cable type : 7 Pin male
- "CSPD-KN", Quick Connector Type : 7 Pin female
- 5 For further details, contact Tohnichi.