

QL/QLE

Ratchet Head Type Adjustable Torque Wrench

Assembly Adjustable Ratchet Head Graduation RoHS

- Basic adjustable click style with resin grip
- Torque value easily set with external scale and knob

Direction



Accuracy ±3%

QL Optional Accessories



Carrying Case (P.38)

Part #	Applicable Model Dimension [mm]	Weight [kg]
842	50N-100N4 (H60 x W400 x D70)	0.25
843	140N-200N4 (H60 x W520 x D80)	0.36
846	140N and below (H170 x W500 x D100)	1.0
847	280N and below (H170 x W740 x D100)	0.36

S.I. Model	Torque Range [N·m]		Metric Model	Torque Range [kgf·cm/kgf·m]		American Model	Torque Range [lbf·in/lbf·ft]		Overall Length [mm]	Square Drive [mm]	Weight [g]
	Min.-Max.	Grad.		Min.-Max.	Grad.		Min.-Max.	Grad.			
QL1.5N4	0.3-1.5	0.01	15QL4	3-15	0.1	15QL4-A	3-15	0.1	160	6.35	0.16
QL3N4	0.6-3	0.02	30QL4	6-30	0.2	30QL4-A	6-30	0.2			
QL6N4	1-6	0.05	60QL4	10-60	0.5	QL50I-2A	10-50	0.5	195		0.19
QL12N4	2-12	0.1	120QL4	20-120	1	QL100I-2A	20-100	1			
QL25N	5-25	0.25	225QL3	50-250	2.5	QL200I-3A	50-200	2.5	230		0.25
QL50N	10-50	0.5	450QL3	100-500	5	QL400I-3A	100-400	5			
-	-	-	-	-	-	QL750I-3A	150-750	10	9.53		0.45
-	-	-	-	-	-	-	lbf-ft	lbf-ft			
-	-	-	-	-	-	QL75F-3A	15-75	1	335		0.69
QL100N4	20-100	1	900QL4	200-1000	10	-	-	-			
QL140N	30-140		1400QL3	300-1400		QL100F-4A	30-100	1	400	12.7	0.88
QL200N4	40-200		1800QL4	400-2000	20	QL150F-4A	30-150	2			
QL280N	40-280	2	2800QL3	4-28	kgf-m	-	-	-	695	19.05	2.0
QL420N	60-420		4200QL2	6-42	0.2	QL300F-6A	60-300	2			
QLE550N	100-550		5500QLE	10-55		QL400F-6A	100-400		1195		5.1
QLE750N	100-750	5	7500QLE	10-75	0.5	QL600F-6A	100-600	5			
QLE1000N	100-1000		10000QLE	10-100		QL700F-8A	100-700		1540		7.1
QLE1400N	200-1400	10	14000QLE	20-140	1	QL1000F-8A	150-1000	10			
QLE2100N	500-2100	20	21000QLE	50-210	2	QL1500F-8A	600-1500	20	1795	25.4	13.1
-	-	-	-	-	-	-	-	-			

Note 1. QL1.5N4-QL12N4, QL420N, QLE550N-QLE2100N have knurled handles.
2. QL25N-QL280N have resin grips.
3. For the model having 25.4mm square drive, use a through-hole socket.

Standard Accessories Adjusting tool (for QLE550N-QLE2100N)

QLE Optional Accessories



Adjusting Tool for QLE (P.38)

Part #	Applicable Model
301	QLE550N-2100N

QLLS RoHS

- QL style with Limit Switch output
- Ideal for torque verification (Pokayoke) assembly processes

S.I. Model	Metric Model
QLMS12N4	120QL4MS
QLLS25N	225QL3LS
QLLS50N	450QL3LS
QLLS100N4	900QL4LS
QLLS140N	1400QL3LS
QLLS200N4	1800QL4LS
QLLS280N	2800QL4LS
QLLS420N	4200QL2LS



POKA Patrol (Count Checker) CNA-4mk2



* Sold separately

QL-MH

Ratchet Head Type Adjustable Torque Wrench with Metal Handle

Assembly Adjustable Ratchet Head Graduation RoHS

- Knurled metal handle version of QL
- Ideal for oily working conditions

Direction



QL-MH Optional Accessories

Carrying Case (P.38)

Part #	Applicable Model Dimension [mm]	Weight [kg]
842	50N-100N4 (H60 x W400 x D70)	0.25
843	140N-200N4 (H60 x W520 x D80)	0.36
846	140N and below (H170 x W500 x D100)	1.0
847	280N and below (H170 x W740 x D100)	0.36

S.I. Model	Torque Range [N·m]		Metric Model	Torque Range [kgf·cm/kgf·m]		Overall Length [mm]	Square Drive [mm]	Weight [g]
	Min.-Max.	Grad.		Min.-Max.	Grad.			
QL25N-MH	5-25	0.25	225QL-MH	50-250	2.5	230	9.5	0.25
QL50N-MH	10-50	0.5	450QL-MH	100-500	5			
QL100N4-MH	20-100	1	900QL4-MH	200-1000	10	335	12.7	0.69
QL140N-MH	30-140		1400QL-MH	300-1400				
QL200N4-MH	40-200	2	1800QL4-MH	400-2000	20	490		1.4
QL280N-MH	40-280		2800QL-MH	4-28				

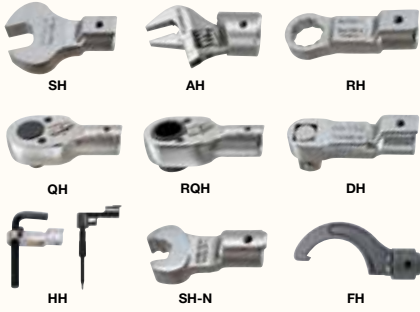
CL/CLE

Interchangeable Head Type Adjustable Torque Wrench

Direction



Interchangeable Head



CL Optional Accessories



Carrying Case (P.38)

Part #	Applicable Model Dimension [mm]	Weight [kg]
842	50N-100N (H60 x W400 x D70)	0.25
843	140N-200N (H60 x W520 x D80)	0.36
846	140N and below (H170 x W500 x D100)	1.0
847	280N and below (H170 x W740 x D100)	0.36

CLE Optional Accessories

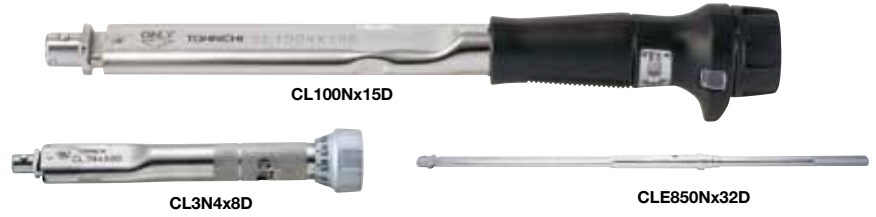


Adjusting Tool for CLE (P.38)

Part #	Applicable Model
301	CLE550N-1200N

Assembly Adjustable Interchangeable Graduation RoHS

- Heads types can be easily exchanged.
- Torque value easily set with external scale and knob



Tohnichi Head Size	S.I. Model	Torque Range [N·m]		Metric Model	Torque Range [kgf·cm/kgf·m]		American Model	Torque Range [lbf·in/lbf·ft]		Overall Length [mm]	Weight [g]
		Min.-Max.	Grad.		Min.-Max.	Grad.		Min.-Max.	Grad.		
					kgf·cm	kgf·m		lbf·in	lbf·ft		
8D	CL1.5N4x8D	0.3-1.5	0.01	15CL4	3-15	0.1	15CL4-A	3-15	0.1	140	0.13
	CL3N4x8D	0.6-3	0.02	30CL4	6-30	0.2	30CL4-A	6-30	0.2		
	CL6N4x8D	1-6	0.05	60CL4	10-60	0.5	60CL4-A	10-50	0.5	175	0.16
	CL12N4x8D	2-12	0.1	120CL4	20-120	1	120CL4-A	20-100	1		
10D	CL25Nx10D	5-25	0.25	225CL3	50-250	2.5	225CL3-A	50-200	2.5	200	0.22
12D	CL50Nx12D	10-50		450CL3	100-500		450CL3-A	100-400		230	0.37
	CL50Nx15D	10-50	0.5	500CL3	100-500	5	500CL3-A	100-450	5		
15D	CL100Nx15D	20-100		900CL3	200-1000		900CL3-A	15-75	1	310	0.52
	CL140Nx15D	30-140	1	1400CL3	300-1400	10	1400CL3-A	30-100	1		
19D	CL200Nx19D	40-200		1800CL3	400-2000	20	1800CL3-A	30-150		455	1.2
22D	CL280Nx22D	40-280		2800CL3	4-28		2800CL3-A	30-200	2	655	1.8
	CL420Nx22D	60-420	2	4200CL2	6-42	0.2	4200CL2-A	60-300			
27D	CLE550Nx27D	100-550		5500CLE	10-55		5500CLE-A	100-400		1140	4.7
	CLE750Nx27D	100-750	5	7500CLE	10-75	0.5	7500CLE-A	100-550	5		
32D	CLE850Nx32D	200-850		8500CLE	20-85		8500CLE-A	150-600		1315	6.5
	CLE1200Nx32D	300-1200	10	12000CLE	30-120	1	12000CLE-A	200-860	10		

- Note
1. Overall length does not include interchangeable head. Interchangeable heads are optional.
 2. PH (Pipe wrench head) type interchangeable head is not available for this model.
 3. CL1.5N4-CL12N4, CL420N, CLE550N-CLE1200N have knurled handles.
 4. CL25N-CL280N have resin grips.

Standard Accessories Adjusting tool (for CLE550N-CLE1200N)

CLLS RoHS

- CL style with Limit Switch output
- Ideal for torque verification (Pokayoke) assembly processes

S.I. Model	Metric Model
CLMS12N4x8D	120CL4MS
CLLS25Nx10D	225CL3LS
CLLS50Nx12D	450CL3LS
CLLS50Nx15D	500CL3LS
CLLS100Nx15D	900CL3LS
CLLS140Nx15D	1400CL3LS
CLLS200Nx19D	1800CL3LS
CLLS280Nx22D	2800CL3LS
CLLS420Nx22D	4200CL2LS

POKA Patrol (Count Checker)
CNA-4mk2



* Sold separately

CL-MH

Interchangeable Head Type Adjustable Torque Wrench with Metal Handle

Direction



CL100Nx15D-MH

CL-MH Optional Accessories

Carrying Case (P.38)

Part #	Applicable Model Dimension [mm]	Weight [kg]
842	50N-100N (H60 x W400 x D70)	0.25
843	140N-200N (H60 x W520 x D80)	0.36
846	140N and below (H170 x W500 x D100)	1.0
847	280N and below (H170 x W740 x D100)	0.36

Assembly Adjustable Interchangeable Graduation RoHS

- Knurled metal handle version of CL
- Ideal for oily working conditions

Tohnichi Head Size	S.I. Model	Torque Range [N·m]		Metric Model	Torque Range [kgf·cm/kgf·m]		Overall Length [mm]	Weight [g]
		Min.-Max.	Grad.		Min.-Max.	Grad.		
					kgf·cm	kgf·m		
10D	CL25Nx10D-MH	5-25	0.25	225CL-MH	50-250	2.5	200	0.22
12D	CL50Nx12D-MH	10-50		450CL-MH	100-500		235	0.37
	CL50Nx15D-MH	10-50	0.5	500CL-MH	100-500	5	235	
15D	CL100Nx15D-MH	20-100		900CL-MH	200-1000		310	0.52
	CL140Nx15D-MH	30-140	1	1400CL-MH	300-1400	10	370	
19D	CL200Nx19D-MH	40-200		1800CL-MH	400-2000	20	455	1.2
			2			kgf·m		
22D	CL280Nx22D-MH	40-280		2800CL-MH	4-28	0.2	655	1.6

- Note
1. Overall length does not include interchangeable head.
 2. PH (Pipe wrench head) type interchangeable head is not available for this model.
 3. Interchangeable heads are optional.

SCL

European Style Interchangeable Head Type Adjustable Torque Wrench

Direction



SCL50N-9x12

- Assembly
- Adjustable
- Interchangeable
- Graduation
- RoHS

- Specialized version of CL
- Accepts DIN interchangeable head connection

S.I. Model	Torque Range [N·m]		Head Size [mm]	Overall Length [mm]	Weight [kg]
	Min.-Max.	Grad.			
SCL25N-9x12	5-25	0.25	9x12	215	0.22
SCL50N-9x12	10-50	0.5	9x12	239	0.37
SCL100N-9x12	20-100	1	9x12	313	0.52
SCL200N-14x18	40-200	2	14x18	464	1.2

Note: 1. Overall length does not include interchangeable head.
2. Applicable to European style head only. Tohnichi's interchangeable heads are not available for this model.

DQL/DQLE

Direction



Dual Square Drives Type Adjustable Torque Wrench



DQL200N4



DQLE750N

- Assembly
- Adjustable
- Ratchet Head
- Graduation
- Bi-Directional
- RoHS

- For bi-directional tightening
- Idea for tightening large vehicle tires

DQL200N4 Optional Accessories

Carrying Case (P.38)

Part #	Applicable Model Dimension [mm]	Weight [kg]
843	DQL200N4 (H60 x W520 x D80)	0.36
847	DQL280N and below (H170 x W740 x D100)	1.0

DQLE Optional Accessories



Adjusting Tool for DQLE (P.38)

Part #	Applicable Model
301	DQLE550N-1000N

S.I. Model	Torque Range [cN·m]		Metric Model	Torque Range [kgf·cm/kgf·m]		American Model	Torque Range [lbf·ft]		Overall Length [mm]	Square Drive [mm]	Weight [g]
	Min.-Max.	Grad.		Min.-Max.	Grad.		Min.-Max.	Grad.			
DQL200N4	40-200	2	1800DQL4	400-1800	20	1800DQL4-A	30-150	2	490	12.7	1.4
DQL280N	40-280		2800DQL2	4-28	0.2	2800DQL2-A	30-200		695	2.0	
DQLE550N	100-550	5	5500DQLE	10-55	0.5	5500DQL-A	100-400	5	1195	19.0	5.1
DQLE750N	100-750		7500DQLE	10-75		7500DQL-A	100-600		1370	7.1	
DQLE1000N	100-1000		10000DQLE	10-100		10000DQL-A	100-700		1540	25.4	9.5

Note: 1. DQL200N4 and DQL280N have resin grips.
2. For the model having 25.4mm square drive, use a through-hole socket.

Standard Accessories: Adjusting tool (for DQLE550-DQLE1000N)

MTQL

Torque Wrench for Motorsports

Direction



MTQL70N

- Assembly
- Adjustable
- Ratchet Head
- Graduation
- RoHS

- Wide capacity adjustable style
- Ideal for motorcycle & motorbike maintenance

S.I. Model	Torque Range [N·m]		Metric Model	Torque Range [kgf·m]		Overall Length [mm]	Square Drive [mm]	Weight [kg]
	Min.-Max.	Grad.		Min.-Max.	Grad.			
MTQL40N	5-40	0.5	400MTQL	0.5-4	0.05	250	9.5	0.45
MTQL70N	10-70	1	700MTQL	1-7	0.1	285	12.7	0.47
MTQL140N	20-140		1400MTQL	2-14		400		0.77

Standard Accessories: Carrying case

MTQL Optional Accessories



842



846

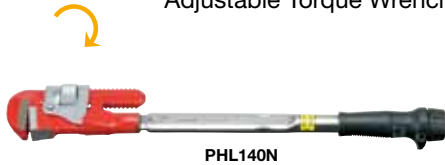
Carrying Case (P.38)

Part #	Applicable Model Dimension [mm]	Weight [kg]
842	MTQL40N, MTQL70N (H60 x W400 x D70)	0.25
843	MTQL140N (H60 x W520 x D80)	0.36
846	MTQL140N and below (H170 x W500 x D100)	1.0

PHL/PHLE

Direction

Pipe-Wrench Head Type Adjustable Torque Wrench



PHL140N

PHLE Optional Accessories



Adjusting Tool for PHLE (P.38)

Part #	Applicable Model
301	PHLE850N, 1300N

Assembly Adjustable Graduation Pipe-Wrench Head RoHS

- Ideal for use with pipes and plumbing applications

Accuracy ±5%

S.I. Model	Torque Range [N·m]		Metric Model	Torque Range [kgf·cm/kgf·m]		American Model	Torque Range [lbf·in/lbf·ft]		Grippable Pipe Dia. [mm]	Overall Length [mm]	Weight [kg]	
	Min.-Max.	Grad.		Min.-Max.	Grad.		Min.-Max.	Grad.				
PHL50N	10-50	0.5	500PHL3	100-500	5	450PHL3-A	100-400	5	13-38	335	1.46	
PHL100N	20-100	1	900PHL3	200-900	10	900PHL3-A	15-75	lbf-in		lbf-ft	410	1.61
PHL140N	30-140		1400PHL3	400-1400		1400PHL3-A	30-100	1		lbf-in	lbf-ft	470
PHL200N	40-200	2	1800PHL3	400-1800	20	1800PHL3-A	30-150	2	26-52	550	2.3	
PHL280N	40-280		2800PHL3	4-28	2800PHL3-A	30-200	2			765	2.92	
PHL420N	60-420	5	4200PHL	6-42	0.2	4200PHL-A	60-300	5	1080	4.83		
PHLE850N	200-850		8500PHLE	20-85	0.5	8500PHLE-A	150-600		5	1600	9.63	
PHLE1300N	300-1300	10	13000PHLE	30-130	1	13000PHLE-A	300-900	10	1745	11.63		

Note E Models have extension bar handle.

Standard Accessories Adjusting tool (for PHLE850N, PHLE1300N)

YCL

Overtorque Prevention Interchangeable Head Type Adjustable Torque Wrench

Direction



YCL90N×15D

Assembly Adjustable Interchangeable Graduation Two Step Motion RoHS

- Two step motion prevents over-torque.
- Primary click followed by break and secondary click

Accuracy ±3%

Tohnichi Head Size	S.I. Model	Torque Range [N·m]		Metric Model	Torque Range [kgf·cm]		American Model	Torque Range [lbf·in/lbf·ft]		Overall Length [mm]	Weight [kg]
		Min.-Max.	Grad.		Min.-Max.	Grad.		Min.-Max.	Grad.		
10D	YCL12N×10D	5-12	0.1	120YCL	50-120	1	YCL100I	50-100	1	226	0.32
	YCL23N×10D	10-23	0.2	230YCL	100-230	2	YCL200I	100-200	2		
12D	YCL45N×12D	20-45	0.25	450YCL	200-450	2.5	YCL400I	200-400	2.5	275	0.50
	YCL70N×12D	30-70	0.5	700YCL	300-700	5	YCL600I	300-600	5		
	YCL90N×15D	40-90	0.25	900YCL	400-900	2.5	YCL750I	400-750	2.5		
15D	YCL140N×15D	60-140	0.5	1400YCL	600-1400	5	YCL1000I	600-1000	5	369	1.0
									lbf-in		
							YCL100F	45-100	0.5		
19D	YCL180N×19D	80-180		1800YCL	800-1800		YCL150F	80-150		570	1.70

TiQL/TiQLE

Direction

Titanium Type Adjustable Torque Wrench



TiQL180N



TIEQLE750N

Assembly Pre-Lock Ratchet Head Graduation Titanium Material RoHS

- 50% lighter than standard wrenches
- Ideal for working overhead

Accuracy ±3%

S.I. Model	Torque Range [N·m]		Metric Model	Torque Range [kgf·cm/kgf·m]		Overall Length [mm]	Square Drive [mm]	Weight [kg]
	Min.-Max.	Grad.		Min.-Max.	Grad.			
TiQL180N	40-180	2	1800TiQL	40-1800	20	494	12.7	0.9
TiQL180N			1800TiQL			594		1.0
TiEQLE360N	80-360		3600TiEQLE	8-36	0.2	987	19.0	2.4
TiEQLE750N	100-750	5	7500TiEQLE	10-75	0.5	1365		4.5
TiEQLE1400N	200-1400	10	14000TiEQLE	20-140	1	1794	25.4	7.5

Note For the model having 25.4mm square drive, use a through-hole socket.

Standard Accessories 1. Hex key and Color marking bands (for TiQL180N, TiQL180N and TiEQLE360N)
2. Adjusting tool (for TiEQLE750N, TiEQLE1400N)

TiEQLE Optional Accessories



Adjusting Tool for TiEQLE (P.38)

Part #	Applicable Model
301	TiEQLE750N, 1400N

TiQLLS RoHS

- TiQL style with Limit Switch output
- Ideal for torque verification (Pokayoke) assembly processes

S.I. Model	Metric Model
TiQLLS180N	1800TiQLLS
TiQLLS180N	1800TiQLLS
TiQLLS360N	3600TiEQLS

POKA Patrol (Count Checker)
CNA-4mk2



* Sold separately

PQL

Ratchet Head Type
Pre-Lock Torque
Wrench

Direction



Assembly Pre-Lock Ratchet Head Graduation RoHS

- External scale but requires hex key to set



PQL100N4

Accuracy ±3%

S.I. Model	Torque Range [N-m]		Metric Model	Torque Range [kgf-cm]		American Model	Torque Range [lbf-in/lbf-ft]		Overall Length [mm]	Square Drive [mm]	Weight [kg]
	Min.-Max.	Grad.		Min.-Max.	Grad.		Min.-Max.	Grad.			
PQL6N4	1-6	0.05	60PQL4	kgf-cm	kgf-cm	60PQL4-A	lbf-in	lbf-in	190	6.35	0.19
PQL12N4	2-12	0.1	120PQL4	10-60	1	120PQL4-A	10-50	0.5			
PQL25N	5-25	0.25	225PQL	50-250	2.5	225PQL-A	50-200	2.5	215	9.5	0.25
PQL50N	10-50	0.5	450PQL	100-500	5	450PQL-A	100-400	5			
PQL100N4	20-100	1	900PQL4	200-1000	10	900PQL4-A	15-75	1	320	12.7	0.65
PQL140N	30-140		1400PQL	300-1400		1400PQL-A	30-100				
PQL200N4	40-200	2	1800PQL4	400-2000	20	1800PQL4-A	30-130	2	470	19.0	1.40
PQL280N	40-280		2800PQL	4-28		0.2	-				
PQL420N	60-420		4200PQL	6-42		-	-	-	975		3.4

Standard Accessories Hex key (for torque adjustment)

PQL Optional Accessories



842

846

Carrying Case (P.38)

Part #	Applicable Model Dimension [mm]	Weight [kg]
842	50N-100N4 (H60 x W400 x D70)	0.25
843	140N-200N4 (H170 x W520 x D80)	0.36
846	140N and below (H170 x W500 x D100)	1.0
847	280N and below (H170 x W740 x D100)	0.36

PQLLS

RoHS

- PQL style with Limit Switch output
- Ideal for torque verification (Pokayoke) assembly processes

S.I. Model	Metric Model
PQLLS25N	225PQLLS
PQLLS50N	450PQLLS
PQLLS100N4	900PQL4LS
PQLLS140N	1400PQLLS
PQLLS200N4	1800PQL4LS
PQLLS280N	2800PQLLS
PQLLS420N	4200PQLLS

POKA Patrol (Count Checker)
CNA-4mk2



* Sold separately

PQLZ

Pre-Lock Adjustable
Insulated Torque
Wrench

Direction



PQLZ100N4

Assembly Pre-Lock Ratchet Head Graduation Vinyl Coating

- Insulated casing prevents electrical shocks.
- Specialized version of PQL

Accuracy ±3%

S.I. Model	Torque Range [N-m]		Metric Model	Torque Range [kgf-cm]		Overall Length [mm]	Square Drive [mm]	Weight [kg]
	Min.-Max.	Grad.		Min.-Max.	Grad.			
PQLZ25N	5-25	0.25	225PQLZ	50-225	2.5	227	9.5	0.28
PQLZ100N4	20-100	1	900PQLZ4	200-900	10	340	12.7	0.80

Standard Accessories Hex key (for torque adjustment)

QRSP

Open Ring Head
Type Preset Torque
Wrench

Direction



QRSP38Nx17

Assembly Preset Open Ratchet Head RoHS

- Ring head opens to allow fitting on tubes or pipes.

Accuracy ±3%

Model	Torque Range		Overall Length [mm]	Weight [kg]
	[N-m]	[kgf-cm]		
	Min.-Max.	Min.-Max.		
QRSP38Nx17	10-45	100-450	300	0.4
QRSP38Nx19			305	
QRSP38Nx21			310	
QRSP38Nx24			310	0.43

Note A torque wrench tester is necessary for torque setting. Please specify required set torque when you order. (Ex. QRSP38Nx17 x 25N-m)

QRSP Optional Accessories

Thrusting Tool for QRSP (P.38)

Part #	Tool #	Applicable Model
312	A-3	QRSP38N

QRSPLS

RoHS

- QRSP style with Limit Switch output
- Ideal for torque verification (Pokayoke) assembly processes

Model	Weight [kg]
QRSPLS38Nx17	0.4
QRSPLS38Nx19	
QRSPLS38Nx21	
QRSPLS38Nx24	0.43

POKA Patrol (Count Checker)
CNA-4mk2



* Sold separately

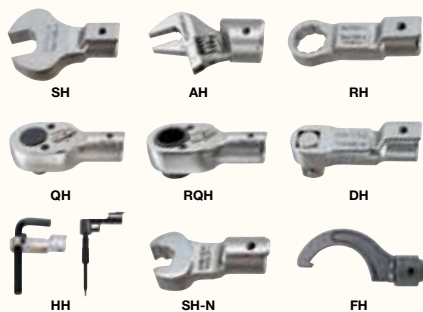
PCL

Interchangeable Head
Type Pre-Lock Torque
Wrench

Direction



Interchangeable Head



Assembly Pre-Lock Interchangeable Graduation RoHS

- Interchangeable head version of PQL
- External scale but requires hex key to set



PCL100Nx15D

Tohnichi Head Size	S.I. Model	Torque Range [N·m]		Metric Model	Torque Range [kgf·cm]		American Model	Torque Range [lbf·in/lbf·ft]		Overall Length [mm]	Weight [kg]
		Min.-Max.	Grad.		Min.-Max.	Grad.		Min.-Max.	Grad.		
8D	PCL6N4x8D	1-6	0.05	60PCL4	10-60	0.5	60PCL4-A	10-50	0.5	170	0.16
	PCL12N4x8D	2-12	0.1	120PCL4	20-120	1	120PCL4-A	20-100	1		
10D	PCL25Nx10D	5-25	0.25	225PCL	50-250	2.5	225PCL-A	50-200	2.5	195	0.22
	PCL50Nx12D	10-50	0.5	450PCL	100-500	5	450PCL-A	100-400	5		
15D	PCL50Nx15D	10-50			500PCL		100-500			500PCL-A	100-450
				1	900PCL	200-1000		900PCL4-A	15-75	lbf-ft	295
19D	PCL140Nx15D	30-140		1400PCL	300-1400	10	1400PCL-A	30-100	1	355	0.63
	PCL200Nx19D	40-200	2	1800PCL	400-2000	20	1800PCL-A	30-130	2		

Accuracy ±3%

- Note**
1. Overall length does not include interchangeable head.
 2. PH (Pipe wrench head) type interchangeable head is not available for this model.
 3. Interchangeable heads are optional.

Standard Accessories Hex key (for torque adjustment)

PCLLS

RoHS

- PCL style with Limit Switch output
- Ideal for torque verification (Pokayoke) assembly processes

S.I. Model	Metric Model
PCLLS25Nx10D	225PCLLS
PCLLS50Nx12D	450PCLLS
PCLLS50Nx15D	500PCLLS
PCLLS100Nx15D	900PCLLS
PCLLS140Nx15D	1400PCLLS
PCLLS200Nx19D	1800PCLLS

POKA Patrol (Count Checker)

CNA-4mk2



* Sold separately

MT70N

Moto Tork (Pre-Lock Adjustable Specialty Torque Wrench)

Direction



MT70N

Assembly Pre-Lock Interchangeable Graduation RoHS

- Converts basic hand tools into torque wrenches
- Ideal for motorcycle maintenance

S.I. Model	Torque Range [N·m]		Metric Model	Torque Range [kgf·m]		Overall Length [mm]	Weight [kg]
	Min.-Max.	Grad.		Min.-Max.	Grad.		
MT70N	10-70	0.2	MT-7	1.0-7.0	0.02	238	0.65

Accuracy ±5%

- Note**
1. Ring head wrench (shown in the photo) is not included.
 2. Max. clamp width for interchangeable tool is approx. 21mm.
 3. Min. interchangeable hex wrench key size is 5mm.

Standard Accessories

1. Carrying case
2. Hex key wrench (for torque adjustment)

QSP

Ratchet Head Type
Preset Torque Wrench

Direction



QSP Optional Accessories

Thrusting Tool (P.38)



Part #	Tool #	Applicable Model
③10	A-1	1.5N-6N
③11	A-2	12N, 25N
③12	A-3	50N-140N
③13	A-4	200N-280N
③14	A-5	420N

QSP3/QSP4 Optional Accessories



Adjusting Tool (P.38)

Part #	Applicable Model
⑨31	QSP25N3 QSP1.5N4-12N4 QSP50N3-280N3
⑨30	QSP100N4, 200N4

Assembly

Preset

Ratchet Head

RoHS

- No external scale, Torque value set using key & tester
- Ideal for mass production application



QSP100N4

Accuracy ±3%

Model	Torque Range			Overall Length [mm]	Square Drive [mm]	Weight [kg]
	[N-m]	[kgf-cm/kgf-m]	[lbf-in]			
	Min.-Max.	Min.-Max.	Min.-Max.			
QSP1.5N4	0.3-1.5	kgf-cm 3-15	lbf-in 3-13	165	6.35	0.16
QSP3N4	0.6-3	6-30	6-25			
QSP6N4	1-6	10-60	10-50			
QSP12N4	2-12	20-120	20-100	175	9.53	0.25
QSP25N3	5-25	50-250	50-200	215		
QSP50N3	10-50	100-500	100-400	240		
QSP100N4	20-100	200-1000		315	12.7	0.65
QSP140N3	30-140	300-1400	300-1000	380		
QSP200N4	40-200	400-2000	350-1600	465		
QSP280N3	40-280	kgf-m 4-28	350-2500	665	19.05	1.8
QSP420N	60-420	6-42	600-3600	970		

Note 1. Adjusting tools for QSP and QSP3/QSP4 are different (see Optional Accessories). Adjusting tools are sold separately.
2. A torque wrench tester is necessary for torque setting. Please specify required set torque when you order. (Ex. QSP100N4 x 80N-m)

QSPLS

QSP style with Limit Switch output
Ideal for torque verification (Pokayoke) assembly processes

RoHS

Refer to page 24.

Assembly

Preset

Ratchet Head

Slip Type

RoHS



- Cam action mechanism generates a 45 degree "slip" action.
- No torque variation by gripping point
- Conforms to the Electrostatic Discharge (ESD) standard

QSPCA

Slip Type Torque Wrench

Direction



NEW



QSPCA6N



QSPCA12N

Model	Torque Range			Overall Length [mm]	Square Drive [mm]	Weight [kg]	Accuracy [%]
	[N-m]	[kgf-cm]	[lbf-in]				
	Min.-Max.	Min.-Max.	Min.-Max.				
QSPCA6N	2-6	20-60	20-50	197	6.35	0.33	±6
QSPCA12N	4-12	40-120	40-100				
QSPCAM6N	2-6	20-60	20-50				
QSPCAM12N	4-12	40-120	40-100			0.45	±4

Note A torque wrench tester is necessary for torque adjustment. Specify required set torque when you order.

QSPCA Optional Accessories



Adjusting Tool (P.38)

Part #	Applicable Model
⑨31	QSPCA6N, 12N

QSPCAMS

QSPCA style with Limit Switch output
Ideal for torque verification (Pokayoke) assembly processes

RoHS

POKA Patrol (Count Checker)

CNA-4mk2



QSPCAMS6N



QSPCAMS12N



* Sold separately

BQSP

Bi-Directional Type
Preset Torque Wrench

Direction



Assembly

Preset

Ratchet Head

Bi-Directional

RoHS

- Clicks for both CW & CCW applications
- Specialized version of QSP



BQSP100N4

Accuracy ±3%

Model	Torque Range			Overall Length [mm]	Square Drive [mm]	Weight [kg]
	[N-m]	[kgf-cm/kgf-m]	[lbf-in]			
	Min.-Max.	Min.-Max.	Min.-Max.			
BQSP25N3	5-25	kgf-cm 50-250	lbf-in 50-200	214	9.5	0.20
BQSP50N3	10-50	100-500	100-400	242		
BQSP100N4	20-100	200-1000	100-750	314		
BQSP140N3	30-140	300-1400	300-1000	379	12.7	0.73
BQSP200N4	40-200	400-2000	350-1600	462		
BQSP280N3	40-280	kgf-m 4-28	350-2500	665	19.0	2.4
BQSP420N	60-420	6-42	600-3600	971		

Note 1. BQSP25N3-BQSP140N3 have resin grips.
2. BQSP200N4-BQSP420N have knurled handles.
3. Adjusting tools for BQSP and BQSP3/BQSP4 are different.
4. A torque wrench tester is necessary for torque setting. Please specify required set torque when you order. (Ex. BQSP50N3 x 30N-m)

BQSP Optional Accessories

Thrusting Tool (P.38)

Part #	Tool #	Applicable Model
③11	A-2	25N
③12	A-3	50-140N
③13	A-4	200N, 280N
③14	A-5	420N

BQSP3/BQSP4 Optional Accessories

Adjusting Tool (P.38)

Part #	Applicable Model
⑨31	BQSP25N3 BQSP50N3-280N3
⑨30	BQSP100N4, 200N4

CSP

Interchangeable Head
Type Preset Torque
Wrench

Direction



CSP Optional Accessories

Thrusting Tool (P.38)

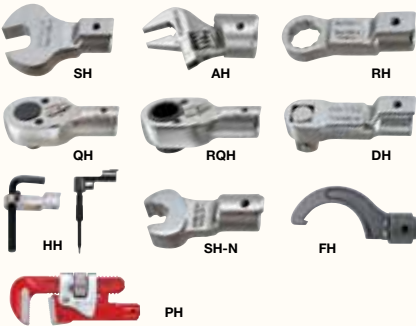
Part #	Tool #	Applicable Model
310	A-1	1.5N-6N
311	A-2	12N, 25N
312	A-3	50N-140N
313	A-4	200N-280N
314	A-5	420N

CSP3/CSP4 Optional Accessories

Adjusting Tool (P.38)

Part #	Applicable Model
931	CSP25N3
930	CSP1.5N4-12N4 CSP50N3-280N3

Interchangeable Head



Assembly Preset Interchangeable RoHS

- Interchangeable head version of QSP
- No external scale, Torque value set using key & tester



CSP100N3x15D

Accuracy ±3%

Tohnichi Head Size	Model	Torque Range			Overall Length [mm]	Weight [kg]
		[N-m] Min.-Max.	[kgf-cm/kgf-m] Min.-Max.	[lbf-in] Min.-Max.		
8D	CSP1.5N4x8D	0.3-1.5	kgf-cm 3-15	3-13	130	0.2
	CSP3N4x8D	0.6-3	6-30	6-25	165	
	CSP6N4x8D	1-6	10-60	10-50		
10D	CSP12N4x8D	2-12	20-120	20-100	195	0.3
12D	CSP25N3x10D	5-25	50-250	50-200	215	
15D	CSP50N3x12D	10-50	100-500	100-400	220	
19D	CSP100N3x15D	20-100	200-1000	100-750	290	0.45
	CSP140N3x15D	30-140	300-1400	300-1000	350	0.55
22D	CSP200N3x19D	40-200	400-2000	350-1600	430	1.0
	CSP280N3x22D	40-280	kgf-m 4-28	350-2500	625	1.4
	CSP420N3x22D	60-420	6-42	600-3600	920	2.7

- Note
1. Overall length does not include interchangeable head.
 2. Adjusting tools for CSP and CSP3/CSP4 are different. (see Optional Accessories)
 3. Interchangeable heads are optional.
 4. A torque wrench tester is necessary for torque setting. Please specify required set torque when you order. (Ex. CSP100N3x15D x 80N-m)

CSPLS

RoHS

- CSP style with Limit Switch output
- Ideal for torque verification (Pokayoke) assembly processes

Model
CSPMS12N4x8D
CSPLS25N3x10D
CSPLS50N3x12D
CSPLS50N3x15D
CSPLS100N3x15D
CSPLS140N3x15D
CSPLS200N3x19D
CSPLS280N3x22D
CSPLS420N3x22D

POKA Patrol (Count Checker)
CNA-4mk2



* Sold separately

BCSP

Bi-Directional
Interchangeable
Head Type Preset
Torque Wrench

Direction



BCSP Optional Accessories

Thrusting Tool (P.38)

Part #	Tool #	Applicable Model
311	A-2	25N
312	A-3	50-140N
313	A-4	200N-280N
314	A-5	420N

BCSP3 Optional Accessories

Adjusting Tool (P.38)

Part #	Applicable Model
931	BCSP25N3
930	BCSP50N3-280N3

Assembly Preset Interchangeable Bi-Directional RoHS

- Clicks for both CW & CCW applications
- Specialized version of CSP



BCSP100N3x15D

Accuracy ±3%

Tohnichi Head Size	Model	Torque Range			Overall Length [mm]	Weight [kg]
		[N-m] Min.-Max.	[kgf-cm/kgf-m] Min.-Max.	[lbf-in] Min.-Max.		
10D	BCSP25N3x10D	5-25	kgf-cm 50-250	50-200	193	0.20
12D	BCSP50N3x12D	10-50	100-500	100-400	214	0.23
15D	BCSP50N3x15D	10-50	100-500	100-400	217	
19D	BCSP100N3x15D	20-100	200-1000	100-750	290	0.57
	BCSP140N3x15D	30-140	300-1400	300-1000	349	0.62
22D	BCSP200N3x19D	40-200	400-2000	350-1600	427	1.2
22D	BCSP280N3x22D	40-280	kgf-m 4-28	350-2500	625	2.0
	BCSP420N3x22D	60-420	6-42	600-3600	918	3.7

- Note
1. Overall length does not include interchangeable head. Interchangeable heads are optional.
 2. BCSP25N3-BCSP140N3 have resin grips.
 3. BCSP200N3-BCSP420N have knurled handles.
 4. Adjusting tools for BCSP and BCSP3 are different. (see Optional Accessories)
 5. A torque wrench tester is necessary for torque setting. Please specify required set torque when you order. (Ex. BCSP100N3x15D x 80N-m)

SCSP

European Style
Interchangeable
Head Type Preset
Torque Wrench

Direction



SCSP50N-9x12

Assembly Interchangeable Preset RoHS

- Accepts DIN interchangeable head connection
- Specialized version of CSP

Model	Torque Range		Head Size [mm]	Overall Length [mm]	Weight [kg]
	[N-m] Min.-Max.	[kgf-cm] Min.-Max.			
SCSP25N-9x12	5-25	50-250	9x12	204	0.15
SCSP50N-9x12	10-50	100-500	9x12	230	0.3
SCSP100N-9x12	20-100	200-1000	9x12	302	0.45
SCSP200N-14x18	40-200	400-2000	14x18	434	1

- Note
1. Overall length does not include interchangeable head.
 2. Applicable to European style head only. Tohnichi s interchangeable heads are not available for this model.

Torque Wrench for Assembly

SP/SP-MH/RSP

Assembly

Preset

Open End Spanner

.....SP, SP-MH

Ring Head

.....RSP

Direction

Open End/Ring Head
Type Preset Torque
Wrench

RoHS

RoHS



SP38Nx10



SP38Nx10-MH

RSP38Nx14

Model (Body Size x Width)		Torque Range		Head Dimension O.W. x Thickness [mm]	Overall Length [mm]	Weight [kg]
SP	SP-MH	[N-m]	[kgf-cm]			
		Min.-Max.	Min.-Max.			
SP2Nx5.5	-					
SP2Nx7	-			23x5		
SP2Nx8	-				180	
SP2Nx10	-					
SP2Nx12	-	0.4-2	4-20			
SP2Nx13	-			25x5.5	185	
SP2Nx17	-			28x6	190	
SP2Nx19	-			29x8	195	
SP8Nx7	-					0.15
SP8Nx8	-			23x5	180	
SP8Nx9	-					
SP8Nx10	-					
SP8Nx12	-	1.5-8	15-80	25x5.5	185	
SP8Nx13	-				195	
SP8Nx19	-			29x8		
SP8Nx24	-			34x8	195	
SP8Nx27	-			40x8	200	
SP19Nx10	SP19Nx10-MH			27x6.5		
SP19Nx11	SP19Nx11-MH				210 (206)	
SP19Nx12	SP19Nx12-MH					
SP19Nx13	SP19Nx13-MH			30x6.5		
SP19Nx14	SP19Nx14-MH					
SP19Nx17	SP19Nx17-MH	3.5-19	35-190	31x8		0.2
SP19Nx19	SP19Nx19-MH			33x8	220 (216)	
SP19Nx21	SP19Nx21-MH			35x8		
SP19N-1x10	SP19N-1x10-MH			24x12		
SP19N-2x10	SP19N-2x10-MH			24x20	215 (211)	
SP19N-3x10	SP19N-3x10-MH			24x15		
SP38Nx8	SP38Nx8-MH				250 (245)	
SP38Nx9	SP38Nx9-MH			31x8	255 (250)	
SP38Nx10	SP38Nx10-MH					
SP38Nx11	SP38Nx11-MH				250 (245)	
SP38Nx12	SP38Nx12-MH					
SP38Nx13	SP38Nx13-MH			35x8		
SP38Nx14	SP38Nx14-MH				255 (250)	
SP38Nx16	SP38Nx16-MH					
SP38Nx17	SP38Nx17-MH	8-38	80-380	38x8		0.35
SP38Nx19	SP38Nx19-MH					
SP38Nx22	SP38Nx22-MH			41x8		
SP38Nx24	SP38Nx24-MH			43x8	270 (265)	
SP38Nx27	SP38Nx27-MH			45x8		
SP38N-1x10	SP38N-1x10-MH			24x12		
SP38N-2x10	SP38N-2x10-MH			25x20	250 (245)	
SP38N-3x10	SP38N-3x10-MH			24x15		
SP67Nx14	-					
SP67Nx16	-					
SP67Nx17	-				320	
SP67Nx18	-			45x10		
SP67Nx19	-					
SP67Nx21	-					
SP67Nx22	-	13-67	130-670		325	0.5
SP67Nx24	-			46x11		
SP67Nx27	-			50x11	330	
SP67Nx29	-					
SP67Nx30	-			52x11		
SP67Nx32	-			54x11	335	
SP67Nx33.3	-			57x11		
SP120Nx14	-					
SP120Nx17	-			45x11	390	
SP120Nx18	-					
SP120Nx19	-					
SP120Nx21	-	24-120	240-1200	51x11	395	0.75
SP120Nx22	-					
SP120Nx23	-					
SP120Nx24	-					
SP120Nx27	-			53x15	400	
SP120Nx30	-			56x15		
SP160Nx19	-					
SP160Nx21	-			52x13	440	
SP160Nx22	-					
SP160Nx24	-	30-160	300-1600	56x13	445	0.95
SP160Nx26	-					
SP160Nx27	-					
SP160Nx41	-			70x15	455	
SP220Nx19	-	45-220	450-2200	60x15	580	1.4
SP220Nx22	-					

Accuracy ±3%

Model (Body Size x Width)		Torque Range		Head Dimension O.W. x Thickness [mm]	Overall Length [mm]	Weight [kg]
SP	SP-MH	[N-m]	[kgf-cm]			
		Min.-Max.	Min.-Max.			
SP220Nx24	-				580	
SP220Nx27	-			65x15		
SP220Nx29	-					
SP220Nx30	-	45-220	450-2200	63x15	585	1.4
SP220Nx32	-			65x15		
SP220Nx34	-			67x15		
SP220Nx36	-			72x15	590	
SP310Nx22	-			60x16		
SP310Nx24	-			62x16	640	
SP310Nx27	-			66x16		
SP310Nx30	-	65-310	650-3100	72x16	645	1.6
SP310Nx32	-					
SP310Nx41	-			81x15	665	
SP310Nx46	-			86x15		
SP420Nx27	-					
SP420Nx30	-					
SP420Nx32	-					
SP420Nx34	-	90-420	900-4200	78x18	840	3.3
SP420Nx35	-					
SP420Nx36	-					
SP560Nx30	-			81x19		
SP560Nx32	-			83x19	995	4
SP560Nx36	-	130-560	1300-5600	87x19	1000	
SP560Nx46	-			97x19	1005	
SP560Nx55	-			104x19	1010	4.5

Accuracy ±3%

Model (Body Size x Width)	Torque Range		Head Dimension O.W. x Thickness [mm]	Overall Length [mm]	Weight [kg]
	[N-m]	[kgf-cm]			
	Min.-Max.	Min.-Max.			
RSP8Nx8	2-7.2	20-72	15x6	200	0.15
RSP8Nx10	2-9.0	20-90	17.5x7	205	
RSP19Nx8	4-14.1	40-141	15x6	230	
RSP19Nx10	4-12.2	40-122	17.5x7		0.2
RSP19Nx13	4-21	40-210	22x7	235	
RSP38Nx10	9-24.2	90-242	17.5x7		
RSP38Nx12			20.5x8		
RSP38Nx13	9-29.5	90-295	21.5x8	275	
RSP38Nx14			23.5x9		0.35
RSP38Nx16	9-42	90-420	26x9	280	
RSP38Nx17			27.5x9		
RSP67Nx14			25x10		
RSP67Nx16	14-59	140-590	27x10		
RSP67Nx17			29x12	350	0.45
RSP67Nx18	14-73	140-730	29.5x12		
RSP67Nx19			30x12		
RSP120Nx17			29.5x12		
RSP120Nx18	25-100	250-1000	30.5x12		
RSP120Nx19			32x13	420	0.8
RSP120Nx21	25-127	250-1270	35x13		
RSP120Nx22			35.5x13		
RSP160Nx19			33x13		
RSP160Nx21			35x13	470	
RSP160Nx22	32-170	320-1700	35x15.5		0.9
RSP160Nx24			39x15.5	475	
RSP220Nx22			38.5x13		
RSP220Nx24	48-230	480-2300	40x13	615	1.35
RSP220Nx27			45x13	620	
RSP310Nx24	68-255	680-2550	42x15		
RSP310Nx27			45x15	680	1.6
RSP310Nx30	68-320	680-3200	50x15	685	

Accuracy ±3%

Note 1. The value shown in () in the "Overall Length" shows the length of SP-MH models.
2. Due to a variety of SP/RSP models, please specify required inner width, model name and set torque when you order.
(Ex. RSP38Nx10 x 16N-m)

SP-(MH)/RSP Optional Accessories

Thrusting Tool (P.38)

Part #	Tool #	Applicable Model
ⓐ11	A-2	2N-19N
ⓐ12	A-3	38N, 67N
ⓐ13	A-4	120N-310N
ⓐ15	A-6	420N, 560N

Torque Wrench for Assembly

SP-H Torque Wrench for Piping Work

Direction



Assembly Preset Open End Spanner RoHS

- Made with smaller outside width to work in narrow spaces, including hydraulic piping, where current open-end type is unable to access.
- Aligned with appropriate inner widths commonly used for hydraulic piping applications.

Model (Body Size x Width)	Torque Range		Minimum Piping Pitch [mm]	Head Dimension (O.W. x Thickness) [mm]	Overall Length [mm]	Weight [kg]
	[N·m]	[kgf·cm]				
	Min.-Max.	Min.-Max.				
SP38Nx14H	8-25	80-250	26	26.3x8	248	0.35
SP38Nx19H	8-39	80-390	35	33.1x8	249	
SP67Nx27H	13-67	130-670	46	43.6x11	321	0.5
SP120Nx32H	24-120	240-1200	54	51.6x15	392	0.75

Accuracy ±3%

Note 1. Confirm the minimum piping pitch before you order.
2. A torque wrench tester is necessary for torque setting. Please specify required set torque when you order. (Ex. SP38Nx14H x 25N·m)

Thrusting Tool (P.38)

Part #	Tool #	Applicable Model
③12	A-3	38N, 67N
③13	A-4	120N

SP-N/SP-N-MH

Direction



Notched Head Type
Preset Torque Wrench

Assembly Preset Notched Head RoHS

- Notch creates speed in tightening process.
- Ideal for brake lines

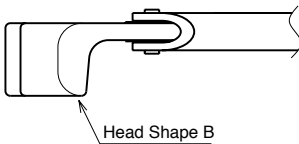
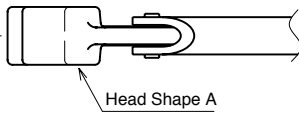
Model (Body Size x Width)		Torque Range		Head Dimension		Overall Length [mm]	Weight [kg]
SP-N	SP-N-MH	[N·m]	[kgf·cm]	O.W. x Thickness [mm]	Head Shape		
		Min.-Max.	Min.-Max.				
SP19N-1x10N	SP19N-1x10N-MH	3.5-19	35-190	24x12	A	215 (211)	0.2
SP19N-3x10N	SP19N-3x10N-MH			24x15			
SP19N-4x10N	SP19N-4x10N-MH			24x10			
SP19N-5x10N	SP19N-5x10N-MH			24x15			
SP19N-9x10N	SP19N-9x10N-MH			24.5x10			
SP38Nx14N	SP38Nx14N-MH	8-38	80-380	35x8	A	253.5 (248.5)	0.35

Accuracy ±3%

Note A torque wrench tester is necessary for torque setting. Please specify required set torque when you order. (Ex. SP19N-1x10N x 15N·m)

SPLS-N/SPLS-N-MH

- SP-N style with Limit Switch output
- Ideal for torque verification (Pokayoke) assembly processes



Model (Body Size x Width)		Torque Range		Head Dimension		Overall Length [mm]	Weight [kg]
SP-N	SP-N-MH	[N·m]	[kgf·cm]	O.W. x Thickness [mm]	Head Shape		
		Min.-Max.	Min.-Max.				
SPLS19N-1x10N	SPLS19N-1x10N-MH	3.5-19	35-190	24x12	A	215 (211)	0.2
SPLS19N-3x10N	SPLS19N-3x10N-MH			24x15			
SPLS19N-4x10N	SPLS19N-4x10N-MH			24x10			
SPLS19N-5x10N	SPLS19N-5x10N-MH			24x15			
SPLS19N-8x10N	SPLS19N-8x10N-MH			24x12			
SPLS19N-9x10N	SPLS19N-9x10N-MH			24.5x10	A		

Accuracy ±3%

Note SPLS19N-8x10N has a long cord.

NSP100CNx8

Direction



NEW

Break-Over Torque Wrench

Assembly Preset Open End Spanner Break-Over RoHS

- Ideal for SMA connector tightening
- 90 degree of "breaking" upon reaching the set torque to reduce the possibility of over-torque

Model (Body Size x Width)	Torque Range	Head Dimension [mm]	Overall Length [mm]	Weight [kg]
	[cN·m] Min.-Max.			
NSP100CNx8	50-100	16x4	128	0.33

Accuracy ±5%

Note A torque wrench tester is necessary for torque setting. Please specify required set torque when you order.

CTA2 Digital Torque and Angle Wrench

Direction



Assembly Digital Interchangeable Signal Re-Chargeable RoHS

- Snug and angle setting functions
- Buzzer/Light alerts to snug torque and angle completion
- Angle mode is automatic once snug torque is achieved.

Accuracy ±1%

S.I. Model	Torque Range [N-m]		Metric Model	Torque Range [kgf-cm/kgf-m]		American Model	Torque Range [lbf-in/lbf-ft]		Angle Measuring Range		Angle Accuracy	Overall Length [mm]	Weight [kg]
	Min.-Max.	Grad.		Min.-Max.	Grad.		Min.-Max.	Grad.	Min.-Max.	Grad.			
CTA50N2x12D	(2.5) 10-50	0.05	CTA50N2x12D-M	(25) 100-500	0.5	CTA50N2x12D-I	(25) 100-450	0.5			±2°+1digit	282	0.58
CTA100N2x15D	(5) 20-100	0.1	CTA100N2x15D-M	(50) 200-1000	1	CTA100N2x15D-I	(50) 200-900	1			(Angular velocity is 30°/s - 180°/s when the bolt turned to 90°)	384	0.63
						CTA100N2x15D-F	(3.8) 15-75	0.1	0-999°	1°		384	0.63
CTA200N2x19D	(10) 40-200	0.2	CTA200N2x19D-M	(100) 400-2000	2	CTA200N2x19D-F	(7.6) 30-150	0.2				475	0.78
CTA360N2x22D	(18) 72-360	0.4	CTA360N2x22D-M	(180) 720-3600	4	CTA360N2x22D-F	(13) 52-260	0.4				713	1.13
CTA500N2x22D	(25) 100-500	0.5	CTA500N2x22D-M	(2.5) 10-50	0.05	CTA500N2x22D-F	(18) 72-360	0.5				949	4.00
CTA850N2x32D	(43) 170-850	1	CTA850N2x32D-M	(4.3) 17-85	0.1	CTA850N2x32D-F	(31) 124-620	1				1387	5.14

Note
 1. The value shown in () shows the lowest snug torque. Accuracy cannot be guaranteed for snug torque set beyond the operative torque range.
 2. Overall length does not include interchangeable head.
 3. PH (Pipe wrench head) type interchangeable head cannot be used with this model.

Standard Accessories Battery pack (BP-5), QH interchangeable head, Quick battery charger (BP-3-100/BP-3-200), Application PC software

CTA2 Optional Accessories

Battery Pack (P.39)

Model
BP-5

Quick Battery Charger (P.39)

Model	Voltage
BC-3-100	100V
BC-3-200	200-240V

Printer (P.57)

Model
EPP16M2

Connecting Cable (P.39)

Part #	Applicable Model
379	CTA2 → EPP16M2
575	CTA2 → PC (D-SUB 9PIN FEMALE)
584	CTA2 → PC (USB A)

Note
 1. () shows pin shape of the connecting cable.
 2. Consult Tohnichi for other types of connecting cables.



Parameter Setting Display



Measured Data Display

CTA2 Common Specifications

Data Memory	999 data (Tightening torque, 1st angle value, 2nd angle value, 3rd angle value and final torque value)
Measurement Mode	Single spindle/Production mode
Data Output	RS232C compliant
Zero Adjustment	Auto zero (Angle, Torque)
Power	Ni-MH rechargeable battery
Continuous Use	Approx. 20 hours with fully charged (8 hours by 1 hour recharging)
Recharging Time	Approx. 3.5 hours
Temperature in Use	0-40 Celsius no condensation

Other Functions Snug torque, Tightening torque, Max. tightening torque, 1st, 2nd, 3rd angle, 1st, 2nd, 3rd max. angle, Number of bolts, Auto reset, Judgment, Setting through PC, Battery indicator

WQL Analog Torque and Angle Wrench

Direction



WQL100N4

Assembly Dial Indicating Ratchet Head Graduation Angle Direct Reading RoHS

- Includes built-in protractor with flexible arm
- Specialized version of QL

Accuracy ±3%

S.I. Model	Torque Range [N-m]		Metric Model	Torque Range [kgf-cm/kgf-m]		American Model	Torque Range [lbf-in/lbf-ft]		Square Drive [mm]	Overall Length [mm]	Angle Scale	
	Min.-Max.	Grad.		Min.-Max.	Grad.		Min.-Max.	Grad.			Max.	Grad.
WQL50N	(5) 10-50	0.5	450WQL3	(50) 100-500	0.5	450WQL3-A	(40) 100-400	5	9.5	260		
WQL100N4	(10) 20-100	1	900WQL4	(100) 200-1000	1	900WQL4-A	(7) 15-75	1	12.7	345	360°	2°
WQL200N4	(30) 40-200		1800WQL4	(300) 400-2000	2	1800WQL4-A	(20) 30-150	2		495		
WQL280N	(30) 40-280	2	2800WQL3	(3) 4-28		2800WQL3-A	(20) 30-200	2	19.0	695		
WQL420N	(40) 60-420		4200WQL2	(4) 6-42	0.2	4200WQL2-A	(30) 60-300	3		975		

Note
 1. The capacity value in the () are minimum setting value for snug torque, but this value is not within guaranteed accuracy range.
 2. WQL Models are supplied upon request.

CPT-G

PRO TORK
(Digital Torque
Wrench for
Tightening)

Direction



PRO TORK™

NEW



CPT50x12D-G



CPT100x15D-G

How to Order:

[Ex. 1] CPT100x15D-G-SET

* "Set" model version
(with standard accessories)

[Ex. 2] CPT200x19D-G

* "Torque Wrench Only" version
(without standard accessories)

CPT-G Optional Accessories



844

Storage Case (For "Set" model only)

Part #	Applicable Model Dimension [mm]	Weight [kg]
844	CPT20x10D-G to CPT100x15D-G (H170 x W500 x D100)	1.0
845	CPT200x19D-G, CPT280x22D-G (H170 x W740 x D100)	1.6



585



Connecting to CPT-G

Connecting Cable

Part #	Applicable Model
585	CPT-G → PC (D-Sub 9 Pin Female)

Data Processing Software

Model	Media
EXCEL RECEIVER	CD-ROM

Assembly Digital Interchangeable Signal Battery RoHS

- Highly responsive to the applied torque value with indicator display
- Equipped with bright LED lamp indicating current torque level
- 5 changeable units of measure through keypad set up
- Data memory, torque set registration and output functions

"Torque Wrench Only" Models

Accuracy ±3%

Model	Torque Range										Overall Length [mm]	Weight [kg]
	[N-m]		[kgf-cm]		[kgf-m]		[lbf-in]		[lbf-ft]			
	Min.-Max.	Grad.	Min.-Max.	Grad.	Min.-Max.	Grad.	Min.-Max.	Grad.	Min.-Max.	Grad.		
CPT20x10D-G	4-20	0.02	40-200	0.2	0.4-2	0.002	36-180	0.2	3-14.5	0.02	280.5	0.63
CPT50x12D-G	10-50	0.05	100-500	0.5	1-5	0.005	100-440	0.5	7.5-36	0.05	282.5	0.65
CPT100x15D-G	20-100	0.1	200-1000	1	2-10	0.01	200-880	1	15-73	0.1	384.5	0.85
CPT200x19D-G	40-200	0.2	400-2000	2	4-20	0.02	360-1700	0.2	30-150	0.2	475.5	1.37
CPT280x22D-G	56-280		560-2800		5.6-28		500-2400		42-200		591.5	1.76

- Note**
1. "Torque Wrench Only" version is provided in basic carton product box and does not include TQH Head, Batteries, Storage Case, or Product Box.
 2. "Overall Length" does not include the length of interchangeable head TQH.
 3. "Weight" does not include the weight of interchangeable head TQH and batteries.
 4. Approx. 230 different types of interchangeable heads are available and sold separately. Refer to Tohnichi's Torque Handbook or Product Catalog for additional information.

"Set" Models (including Accessories)

Model	Standard Accessory				
	Ratchet Head		Battery	Storage Case	Product Box
	Model	Sq. Drive [mm]			
CPT20x10D-G-SET	TQH10D	9.5	AA Alkaline	Small	Small
CPT50x12D-G-SET	TQH12D				
CPT100x15D-G-SET	TQH15D	12.7	Battery (2pcs)	Large	Large
CPT200x19D-G-SET	TQH19D				
CPT280x22D-G-SET	TQH22D	19.0			

Note Recommendation: Use 2xAA Ni-MH batteries for longer continuous use.

CPT-G Common Specifications

Accuracy	±3% of indicated value
Tightening Direction	Clockwise/Counter clockwise
Display/Character Height	14 segment LCD 6 digits/7mm 7 segment LCD 4 digits/3mm
Battery Life Indicator	4 steps
Number of Data Memory	50
Torque Setting Memory	Preset Tightening mode: 10 torque values to register Judgment Tightening mode: Up to 10 values of each Upper/Lower/Tightening direction
Basic Function	Auto power off (3 minutes) Auto memory/Reset Auto zero Over torque alarm
Power	AA battery x 2pcs
Continuous Use	Approx. 40 hours
Temperature in Use	0-40 Celsius below 85%RH (no condensation)

Several different tightening modes available to cater to a variety of applications. Quick and accurate tightening while preventing errors.

Modes include:

[Preset Tightening Mode](#), [Judgment Tightening Mode](#), [Peak/Run Modes](#)

* Retightening/loosening torque is performed in the Peak Mode.

Preset Tightening Mode: Allows user to set the target torque with specific % of torque allowable beyond target, then the red LED moves towards the right to indicate the level of the applied torque. When it reaches the target torque range, the blue LED blinks and the buzzer signals tightening completion.

Judgment Tightening Mode: Allows user to set judgment ranges for lower/upper limit in the tightening operation. Upon tightening completion a judgment is made as torque value is stored in the memory.



Display example 1:
Preset Tightening Mode
(Red LED shows the level of the applied torque)



Display example 2:
Judgment Tightening Mode
(As torque is being applied prior to completion)



Display example 3:
Judgment Tightening Mode
(The case of exceeding target torque range)

Error Proofing (Pokayoke) System

LS (Wired)

Examples) QL/QLE (P.10), CL/CLE (P.11), TiQL/TiQLE (P.13), PQL (P.14), QRSP (P.14), PCL (P.15), QSP (P.16), QSPCA (P.16), CSP (P.17), SP/SP-MH/RSP (P.18), SP-N/SP-N-MH (P.19), AUR (P.40), A/AC (P.42)



Control the number of tightening to eliminate missed tightening

CNA-4mk2 (Count Checker)

FH (Wireless)



Wireless



R-FH256 Receiver

Examples) FH transmitter (P.25) mounted on torque wrench such as QL Equipped with FH functions such as HATFH (P.40)

Marking

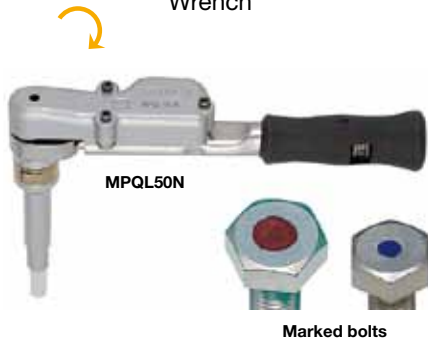


Visually check the bolt marked to recognize torque tightening completion

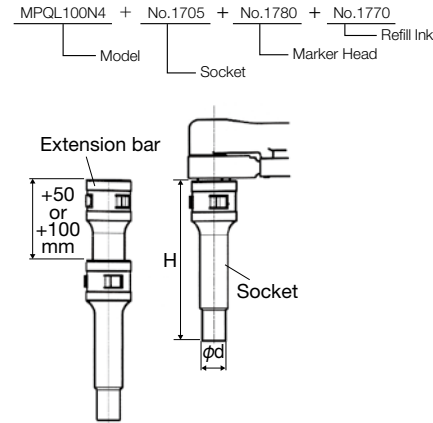
MPQL/MQL

Direction

Marking Torque Wrench



How to Order:



Replacement Tips

NEW

Model	Part #	Color
Felt tip for MK53RB	1755	Red, Blue
Felt tip for MK53WY	775	White, Yellow
Felt tip for MK93RB	1776	Red, Blue
Felt tip for MK93WY	1777	White, Yellow

Assembly Pre-Lock Ratchet Head Graduation Quick Drying Ink RoHS

- Mechanism marks bolt as torque is achieved.
- Requires special socket, marker and ink

Accuracy $\pm 3\%$

S.I. Model	Torque Range [N·m]		Metric Model	Torque Range [kgf·cm/kgf·m]		American Model	Torque Range [lbf·in/lbf·ft]		Overall Length [mm]	Weight [kg]
	Min.-Max.	Grad.		Min.-Max.	Grad.		Min.-Max.	Grad.		
MPQL50N	10-50	0.5	450MPQL	100-500	5	450MPQL-A	100-400	5	0.7	274
MPQL100N4	20-100	1	900MPQL4	200-1000	10	900MPQL4-A	15-75	1	0.95	388
MPQL140N	30-140		1400MPQL	400-1400		1400MPQL-A	30-100		1.1	443
MPQL200N4	40-200		1800MPQL4	400-2000		1800MPQL4-A	30-130		1.8	500
MQL280N	40-280	2	2800MQL3	kgf·m	kgf·m	2800MQL3-A	60-300	3	2.6	467

Note Please choose a Tohnichi's original socket with width which matches your bolt size, and order it together with the torque wrench. Standard sockets can not be used.

Standard Accessories Hex key (for torque adjustment)

Socket

NEW

Model	Part #	Width Across Flat [mm]	Outside Width ϕd [mm]	Length H [mm]	Applicable Model
Socket 4MH-10	1700	10	14.5	100	MPQL50N-200N4
Socket 4MH-12	1701	12	16.8		
Socket 4MH-13	1702	13	18		
Socket 4MH-14	1703	14	20		
Socket 4MH-16	1704	16	22		
Socket 4MH-17	1705	17	24		
Socket 4MH-18	1706	18	25	105	MQL280N
Socket 4MH-19	1707	19	26.5		
Socket 4MH-22	1709	22	29		
Socket 4MH-24	1710	24	30		
Socket 6MH-22	1720	22	32.8	110	MQL280N
Socket 6MH-24	1721	24	34.5		
Socket 6MH-27	1722	27	38.5		
Socket 6MH-30	1723	30	42		

Marker Head

NEW

Model	Part #	Color
Marker Head MK53RB	1780	Red, Blue
Marker Head MK53WY	1782	White, Yellow
Marker Head MK93RB	1783	Red, Blue
Marker Head MK93WY	1785	White, Yellow

- Note
- Use MK53 in case of using the W10-W16 sockets.
 - MK53 types have 5mm marking diameter. MK93 types have 9mm marking diameter.
 - Select a proper marking color for adapting to your bolt surface type.
 - Alkaline blackening (black finishing) → White, Yellow
 - Chromate coating, Trivalent chrome, Stainless steel → Blue, Red, White, Yellow.
 - Marker heads are not filled the ink. Select your necessary ink at the same time.

Extension Bar

NEW

Model	Part #	Applicable Model
MPQL Extension Bar 50mm	1749	MPQL50N-200N4
MPQL Extension Bar 100mm	1748	
MQL Extension Bar 50mm	1752	MQL280N

Refill Ink and Solvent

NEW

Model	Part #	Color
Refill Ink R	1770	Red
Refill Ink B	1771	Blue
Refill Ink W	776	White
Refill Ink Y	777	Yellow
Solvent	794	For White and Yellow

Note Solvent for red and blue inks is not available.

CMQSP

Direction

Marking Torque Wrench



Assembly Preset Ratchet Head Quick Drying Ink RoHS

- Preset style marking torque wrench for hex screws
- Mechanism marks side of bolt and work piece.

Accuracy $\pm 3\%$

S.I. Model	Torque Range [N·m]		Width Across Flat	Overall Length [mm]	Weight [kg]
	Min.-Max.	Min.-Max.			
CMQSP-M6	5-25		5	241	0.85
CMQSP-M8	10-50		6	241	0.85
CMQSP-M10	20-100		8	320	1.13
CMQSP-M12	30-140		10	380	1.13

Note A torque wrench tester is necessary for torque setting. Please specify required set torque when you order. (Ex. CMQSP-M10 x 50N·m)

Standard Accessories 2 x Hex wrench (including 1 spare), Marker head, Marker case, Hex wrench position adjustment tool

CMQSP Optional Accessories

Part #	Description
724	CMQSP-M6 Bit
725	CMQSP-M8 Bit
726	CMQSP-M10 Bit
727	CMQSP-M12 Bit

Marker Head

Part #	Description
792	Marker Head for CMQSP

Refill Ink and Solvent

Part #	Description
406	White Ink
772	Yellow Ink
791	Solvent

CMQSP Adjusting Adapter

Part #	Description	Applicable Tester
811	CMQSP-M6 Adapter	DOTE20N3-G, 50N3-G, 100N3-G
812	CMQSP-M8 Adapter	
813	CMQSP-M10 Adapter	
814	CMQSP-M12 Adapter	DOTE200N3-G, 500N3-G

CMQSP Adjusting Pole Holder

Part #	Applicable Model	Applicable Tester
815	CMQSP-M6, M8 Pole Holder	DOTE20N3-G, 50N3-G, 100N3-G
816	CMQSP-M10, M12 Pole Holder	DOTE200N3-G, 500N3-G

Note A torque wrench tester and Tohnichi's Adjusting Adapter and Pole Holder are necessary for CMQSP torque adjustment.

CMQSP Adjusting Tool (P.38)

Part #	Applicable Model
930	CMQSP-M6, M8, M10, M12

Torque Wrench with Limit Switch

- Various styles of torque wrenches with limit switch output
- Limit switch counts the number of "Clicks".
- Tool is connected to PLC or Tohnichi's Count Checker (CNA-4mk2)
- Can be upgraded into wireless output system (FH256MC)
- Ideal for torque verification assembly processes.



QLLS100N4

Limit switch specifications
AC30V Below 1A
DC30V Below 1A



SPLS38Nx17

QL style with LS RoHS

S.I. Model	Metric Model
QLMS12N4	120QL4MS
QLLS25N	225QL3LS
QLLS50N	450QL3LS
QLLS100N4	900QL4LS
QLLS140N	1400QL3LS
QLLS200N4	1800QL3LS
QLLS280N	2800QL3LS
QLLS420N	4200QL2LS

QSP style with LS RoHS

S.I. Model	Metric Model
QSPMS12N4	120QSP4MS
QSPS25N3	225QSP3LS
QSPS50N3	450QSP3LS
QSPS100N4	900QSP4LS
QSPS140N3	1400QSP3LS
QSPS200N4	1800QSP3LS
QSPS280N3	2800QSP3LS
QSPS420N	4200QSP2LS

PQL style with LS RoHS

S.I. Model	Metric Model
PQLS25N	225PQLS
PQLS50N	450PQLS
PQLS100N4	900PQL4LS
PQLS140N	1400PQLS
PQLS200N4	1800PQL4LS
PQLS280N	2800PQLS
PQLS420N	4200PQLS

CL style with LS RoHS

S.I. Model	Metric Model
CLMS12N4x8D	120CL4MS
CLLS25Nx10D	225CL3LS
CLLS50Nx12D	450CL3LS
CLLS50Nx15D	500CL3LS
CLLS100Nx15D	900CL3LS
CLLS140Nx15D	1400CL3LS
CLLS200Nx19D	1800CL3LS
CLLS280Nx22D	2800CL3LS
CLLS420Nx22D	4200CL2LS

CSP style with LS RoHS

S.I. Model	Metric Model
CSPMS12N4x8D	120CSP4MS
CSPLS25Nx10D	225CSP3LS
CSPLS50Nx12D	450CSP3LS
CSPLS50Nx15D	500CSP3LS
CSPLS100Nx15D	900CSP3LS
CSPLS140Nx15D	1400CSP3LS
CSPLS200Nx19D	1800CSP3LS
CSPLS280Nx22D	2800CSP3LS
CSPLS420Nx22D	4200CSP2LS

PCL style with LS RoHS

S.I. Model	Metric Model
PCLLS25Nx10D	225PCLLS
PCLLS50Nx10D	450PCLLS
PCLLS50Nx12D	500PCLLS
PCLLS100Nx15D	900PCLLS
PCLLS140Nx15D	1400PCLLS
PCLLS200Nx19D	1800PCLLS

TiQL style with LS RoHS

S.I. Model	Metric Model
TiQLS180N	1800TiQLS
TiQLS180N	1800TiQLS
TiEQLS360N	3600TiEQLS

QRSP style with LS RoHS

S.I. Model	Metric Model
QRSPLS38Nx17	3800QRSPLS
QRSPLS38Nx19	3800QRSPLS
QRSPLS38Nx21	3800QRSPLS
QRSPLS38Nx24	3800QRSPLS

SP, SP-MH style with LS RoHS

Model (Body Size x Width)	
SP	SP-MH
SPLS8Nx7	-
SPLS8Nxc	-
SPLS8Nx9	-
SPLS8Nx10	-
SPLS8Nx12	-
SPLS19Nx10	SPLS19Nx10-MH
SPLS19Nx11	SPLS19Nx11-MH
SPLS19Nx12	SPLS19Nx12-MH
SPLS19Nx13	SPLS19Nx13-MH
SPLS19Nx14	SPLS19Nx14-MH
SPLS19Nx17	SPLS19Nx17-MH
SPLS19Nx19	SPLS19Nx19-MH
SPLS19Nx21	SPLS19Nx21-MH
SPLS19N-1x10	SPLS19N-1x10-MH
SPLS19N-2x10	SPLS19N-2x10-MH
SPLS19N-3x10	SPLS19N-3x10-MH
SPLS38Nx8	SPLS38Nx8-MH
SPLS38Nx9	SPLS38Nx9-MH
SPLS38Nx10	SPLS38Nx10-MH
SPLS38Nx11	SPLS38Nx11-MH
SPLS38Nx12	SPLS38Nx12-MH
SPLS38Nx13	SPLS38Nx13-MH
SPLS38Nx14	SPLS38Nx14-MH
SPLS38Nx16	SPLS38Nx16-MH
SPLS38Nx17	SPLS38Nx17-MH
SPLS38Nx19	SPLS38Nx19-MH
SPLS38Nx22	SPLS38Nx22-MH
SPLS38Nx24	SPLS38Nx24-MH
SPLS38Nx27	SPLS38Nx27-MH
SPLS38N-1x10	SPLS38N-1x10-MH
SPLS38N-2x10	SPLS38N-2x10-MH
SPLS38N-3x10	SPLS38N-3x10-MH
SPLS67Nx14	-
SPLS67Nx16	-
SPLS67Nx17	-
SPLS67Nx18	-
SPLS67Nx19	-
SPLS67Nx21	-

SP, SP-MH style with LS RoHS

Model (Body Size x Width)	
SP	
SPLS67Nx22	6700SPLS
SPLS67Nx24	6700SPLS
SPLS67Nx27	6700SPLS
SPLS67Nx29	6700SPLS
SPLS67Nx30	6700SPLS
SPLS67Nx32	6700SPLS
SPLS67Nx33.3	6700SPLS
SPLS120Nx14	1200SPLS
SPLS120Nx17	1200SPLS
SPLS120Nx18	1200SPLS
SPLS120Nx19	1200SPLS
SPLS120Nx21	1200SPLS
SPLS120Nx22	1200SPLS
SPLS120Nx23	1200SPLS
SPLS120Nx24	1200SPLS
SPLS160Nx19	1600SPLS
SPLS160Nx21	1600SPLS
SPLS160Nx22	1600SPLS
SPLS160Nx24	1600SPLS
SPLS160Nx26	1600SPLS
SPLS160Nx27	1600SPLS
SPLS220Nx19	2200SPLS
SPLS220Nx22	2200SPLS
SPLS220Nx24	2200SPLS
SPLS220Nx27	2200SPLS
SPLS220Nx29	2200SPLS
SPLS220Nx30	2200SPLS
SPLS220Nx32	2200SPLS
SPLS220Nx34	2200SPLS
SPLS220Nx36	2200SPLS
SPLS310Nx22	3100SPLS
SPLS310Nx24	3100SPLS
SPLS310Nx27	3100SPLS
SPLS310Nx30	3100SPLS
SPLS310Nx32	3100SPLS
SPLS310Nx41	3100SPLS
SPLS310Nx46	3100SPLS

RSP style with LS RoHS

Model (Body Size x Width)	
RSP	
RSPLS8Nx8	800RSPLS
RSPLS8Nx10	800RSPLS
RSPLS19Nx8	1900RSPLS
RSPLS19Nx10	1900RSPLS
RSPLS19Nx13	1900RSPLS
RSPLS38Nx10	3800RSPLS
RSPLS38Nx12	3800RSPLS
RSPLS38Nx13	3800RSPLS
RSPLS38Nx14	3800RSPLS
RSPLS38Nx17	3800RSPLS
RSPLS67Nx14	6700RSPLS
RSPLS67Nx17	6700RSPLS
RSPLS67Nx19	6700RSPLS
RSPLS120Nx17	1200RSPLS
RSPLS120Nx19	1200RSPLS
RSPLS120Nx22	1200RSPLS
RSPLS160Nx19	1600RSPLS
RSPLS160Nx22	1600RSPLS
RSPLS160Nx24	1600RSPLS
RSPLS220Nx22	2200RSPLS
RSPLS220Nx24	2200RSPLS
RSPLS220Nx27	2200RSPLS
RSPLS310Nx24	3100RSPLS
RSPLS310Nx27	3100RSPLS
RSPLS310Nx30	3100RSPLS

SP-N, SP-N-MH style with LS RoHS

Model (Body Size x Width)	
SPLS-N	SPLS-N-MH
SPLS19N-1x10N	SPLS19N-1x10N-MH
SPLS19N-3x10N	SPLS19N-3x10N-MH
SPLS19N-4x10N	SPLS19N-4x10N-MH
SPLS19N-5x10N	SPLS19N-5x10N-MH
SPLS19N-8x10N	SPLS19N-8x10N-MH
SPLS19N-9x10N	SPLS19N-9x10N-MH

Note

1. Refer to base model series for torque ranges and wrench specs.
2. Female connector for LS cable is sold separately, Part# WA5219K.
3. Standard curl cord can be extended to about 2m in full extension.
4. The curl cord length of SPLS19N-8x10N is about 5m in full extension.

FH256MC

Radio Frequency Torque Wrench System



RoHS



QLFH100N4



T-FH256MC



R-FH256



SB-FH256



I/O-FH256



FH-COD



FH-MHD



FH-PCV

- Wireless error-proofing (Pokayoke) torque system
- FHSS technology with universal 2.4GHz frequency band
- Wrench ID transfer functions to establish bolt tightening traceability
- Easily change frequency with wireless setting box (optional)

FH Torque Wrench Examples

QLFH FH transmitter mounted on QL

S.I. Model
QLFH25N
QLFH50N
QLFH100N4
QLFH140N
QLFH200N4

SPFH FH transmitter mounted on SP

Model
SPFH38Nx14
SPFH38Nx27

Transmitter RoHS

All kinds of frequency groups (256 kinds) can be set in one transmitter.

Model	Description
T-FH256MC	Transmitter for FH256MC
T-FH256MC-LS	Transmitter for LS type wrench

Note T-FH256MC-LS is a wireless transmitter module to install on LS version torque wrenches.

Receiver RoHS

All kinds of frequency groups (256 kinds) can be set in one receiver.

Model	Specification
R-FH256	Output: No-Voltage contact output (1a), RS232C Size: W150 x D210 x H51 (mm), Weight 1.7kg Power: AC100V-240V, 47-63Hz

Standard Accessories Dipole antenna

Setting Box RoHS

Wireless setting device for FH transmitter and receiver

Model	Specification
SB-FH256	Input: RS232C, Power: DC9V

Standard Accessories Dipole antenna

Multi I/O Box RoHS

Manage 4 tightening signals from receiver and output to external device

Model	Applicable Model	Specification
I/O-FH256	R-FH256	Output: No-Voltage contact output (1a) x 4, Power: AC100-240V

Antenna Extension Cord

Extends antenna from R-FH256 receiver to improve communication conditions

Model	Applicable Model	Specification
FH-COD	R-FH256	Cable Length: Approx. 9.5m

Magnetic Antenna Holder

Use this to fix the position of extended antenna

Model	Applicable Model	Specification
FH-MHD	R-FH256	Cable Length: Approx. 1.5m

Protective Cover

Put it on the transmitter (T-FH256MC) to protect from physical damage

Model	Applicable Model	Specification
FH-PCV	T-FH256MC/T-FH256MC-LS	Material: Silicon resin

- Note**
1. Transmission distance 10-20 meters
 2. Refer to base model series for torque ranges and wrench specs.

CNA-4mk2

POKA Patrol
(Count Checker)



RoHS



CNA-4mk2

- Torque tightening verification counter
- Manages signals from LS or FH torque wrenches
- Up to 4 wrenches can be controlled at one time (in succession)

Model	
CNA-4mk2	
Count Display	2digits, 7segments, LED
Judgment Function	Domed shaped Lamp (OK/NG)
Count Input	Cable terminals x 4
Maximum Preset Counter	99
Work Setting Availability	4 sets max. OK: Green Lamp NG: Red Lamp + buzzer (4 patterns) OK/NG relay output (Relay output: DC30V 1A, AC125V 0.3A)
Judgment Output	Normal mode Multiple mode (maximum 4 torque wrenches can be connected)
Mode Exchange Setting	
Electric Power Supply	AC100-240V 50/60Hz
Size and Weight	W150mm x D210mm x H51mm, 1.5kg

Ideal for managing tightening data in cell-production or sub-assembly lines

Merit

Missed tightening can be verified and prevented by managing the tightening data. Ideal for tracing product claims, this system can be used to track and identify the torque wrench and the actual applied torque value used in the assembly process. Improve quality assurance and working efficiency by reducing tightening errors and potential costs associated with additional checks and reworks.

Outline

Basic CEM3-BTS provides wireless transfer of data from the wrench to PC as it is being applied or collected. "CEM3-BTD + Management software" adds additional duplex functionality by sending set torque value, fastener quantity, and judgments to the wrench for various tightening applications. One digital wrench can replace several manual preset click torque wrenches with the additional benefit of storing the actual applied torque. Managers can control the tightening information for cost effective and reliable implementation of tightening applications.

System

Instantly send tightened torque data back to PC

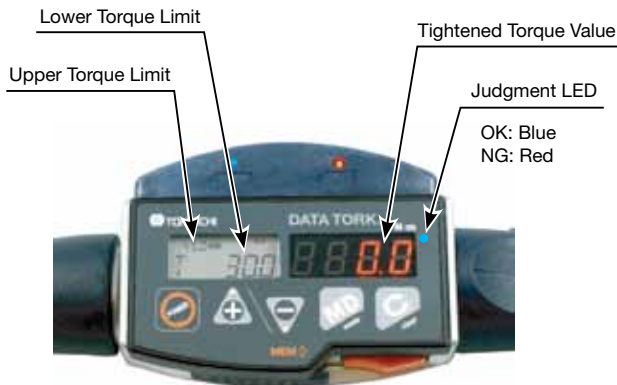


Wireless Digital Torque Wrench
CEM3-BT

Upper/Lower limit can be set wirelessly from PC to torque wrench.



Duplex communication



RoHS

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

Tohnichi Head Size	Model		Torque Range [N·m]		Overall Length [mm]	Weight [kg]
	Simplex Communication	Duplex communication	Min.-Max.	Grad.		
8D	CEM10N3x8D-BTS	CEM10N3x8D-BTD	2-10	0.01	212	0.54
10D	CEM20N3x10D-BTS	CEM20N3x10D-BTD	4-20	0.02	214	0.55
12D	CEM50N3x12D-BTS	CEM50N3x12D-BTD	10-50	0.05	282	0.66
15D	CEM100N3x15D-BTS	CEM100N3x15D-BTD	20-100	0.1	384	0.71
19D	CEM200N3x19D-BTS	CEM200N3x19D-BTD	40-200	0.2	475	0.86
22D	CEM360N3x22D-BTS	CEM360N3x22D-BTD	72-360	0.4	713	1.21
	CEM500N3x22D-BTS	CEM500N3x22D-BTD	100-500	0.5	949	4.08
32D	CEM850N3x32D-BTS	CEM850N3x32D-BTD	170-850	1	1387	5.22

Accuracy ±1%

Note

- Overall length does not include interchangeable head.
- Refer to pages 34-37 for details with interchangeable heads.
- PH (Pipe wrench head) is not applicable due to difference of effective length.
- Bluetooth adapter (optional) is necessary if your PC is not compatible.
- Consult Tohnichi for management software (optional) for data setting and processing.
- CEM3-BT models have two types.
Simplex communication (BTS): CEM3-BT → Transfer measurement data to PC
Duplex communication (BTD): Set torque and upper/lower limits in PC → CEM3-BT → Transfer measurement data to PC
- Standard CEM3 is unable to modify into CEM3-BT.

Standard Accessories

Battery pack, Quick charger, QH interchangeable head

Handy Terminal

HT-S5



Compact data collection device for CEM3-BT

- Upload & download torque measuring information
- Guides user through torque assembly & quality inspection processes
- Statistics and charting capabilities

Tightening Data Management System

Wireless Data Transfer Torque Wrench
Model: FHD, FHDS

Wireless Semi-Automatic Airtork
Model: ACFHDS

Wireless transfer of actual applied torque for complete verification of "click" wrench tightening

Outline

FHD system features highly reliable FHSS transmitter mounted on a click torque wrench that captures actual applied torque data. R-FHD256 receiver accepts signal and confirms back to wrench with "Answerback" system. Connection to PLC and PC software allows for management of fastener count, serial number, torque id, and judgment parameters.

System

Model: CSPFHHD
Wireless Data Transfer Torque Wrench

LCD transmitter display shows data for convenient user confirmation

Model: CSPFHDS
Wireless Data Transfer Torque Wrench

Simplified small case version with extended battery life



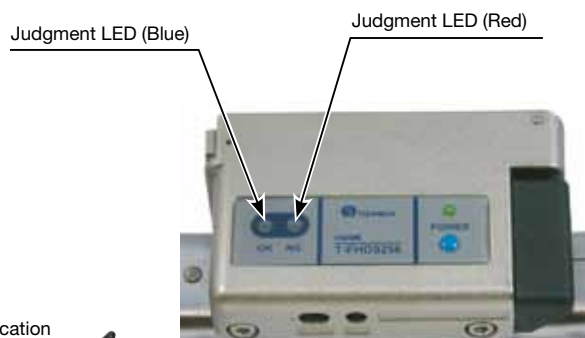
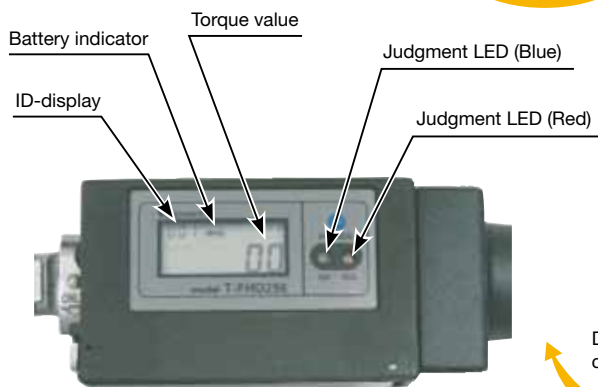
CSPFHHD

WITH Torque Display



CSPFHDS

WITHOUT Torque Display

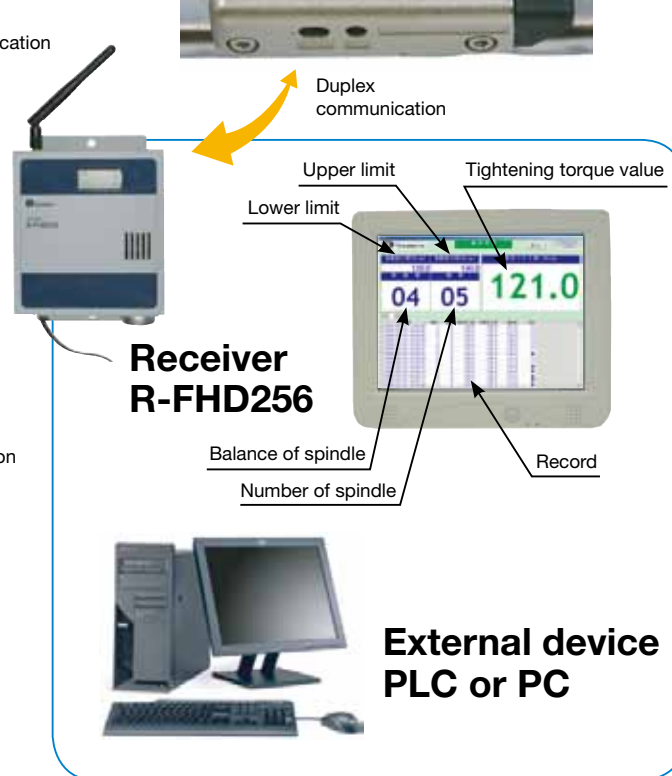


Wireless Semi-Automatic Airtork
Model: ACFHDS

Semi-Automatic Pneumatic version for quick rundown and final click torque confirmation with torque data transfer



ACFHDS



DB/DBE/DBR

Inspection

Dial Indicating

Direct Reading

RoHS

Direction

Dial Indicating Torque Wrench



DB12N4



DB100N



DBE700N



Memory Pointer (Red needle)

- Memory pointer for easy torque reading
- Ideal for torque measuring and quality check applications

Accuracy ±3%

S.I. Model	Torque Range [N·m]		Metric Model	Torque Range [kgf·cm/kgf·m]		American Model	Torque Range [lbf·in/lbf·ft]		Overall Length [mm]	Square Drive [mm]	Weight [kg]
	Min.-Max.	Grad.		Min.-Max.	Grad.		Min.-Max.	Grad.			
DB1.5N4-S	0.2-1.5	0.02	15DB4-S	2-15	0.2	DB131-2AS	0-13	0.2			
DB3N4-S	0.3-3	0.05	30DB4-S	3-30	0.5	DB261-2AS	0-26	0.5	205	6.35	0.4
DB6N4-S	0.6-6	0.1	60DB4-S	6-60	1	DB401-2AS	0-40				
DB12N4-S	1-12	0.2	120DB4-S	10-120	2	DB751-2AS	0-75	1			
DB25N-S	3-25	0.5	230DB3-S	30-250	5	DB1501-3AS	0-150	2	245		
DB50N-S	5-50		450DB3-S	50-500		DB3001-3AS	0-300	5	320	9.5	0.6
-	-	-	-	-	-	DB6001-3AS	0-600	10	400		
DB100N-S	10-100	1	900DB3-S	100-1000	10	DB6001-4AS	0-600			12.7	0.7
-	-	-	-	-	-	-	lbf-ft	lbf-ft			
-	-	-	-	-	-	DB25F-3AS	0-25		320	9.5	0.6
-	-	-	-	-	-	DB50F-3AS		0.5	400		0.7
-	-	-	-	-	-	DB50F-4AS	0-50			12.7	
DB200N-S	20-200	2	1800DB3-S	200-2000	20	DB100F-4AS	0-100	1	500		1.0
-	-	-	-	kgf-m	kgf-m	-	-	-	-	-	-
-	-	-	-	-	-	DB175F-4AS	0-175	2	540	12.7	1.0
DB280N-S	30-280		2800DB3-S	3-28		DB250F-6AS	0-250	5	690		1.65
DB420N-S	40-420	5	4200DB2-S	4-42	0.5	DB350F-6AS	0-350		890	19.0	2.5
DBE560N-S	50-560		5600DBE2-S	5-56		-	-	-	1100		4.0
DBE700N-S	70-700		7000DBE2-S	7-70		DB500F-6AS	0-500	10	1260		5.5
DBE850N-S	100-850	10	8500DBE2-S	10-85	1	-	-	-	1360		6.1
DBE1000N-S	100-1000		10000DBE2-S	10-100		DB800F-8AS	0-800	10	1490	25.4	6.4
DBE1400N-S	200-1400	20	14000DBE2-S	20-140	2	DB1000F-8AS	0-1000		1740		8.6
DBE2100N-S	200-2100		21000DBE2-S	20-210		DB1500F-8AS	0-1500		2140		12.8
DBE2800N-S	300-2800		28000DBE2-S	30-280		DB2000F-12AS	0-2000		2380	38.1	16.8
DBR4500N-S	500-4500	50	45000DBR-S	50-450	5	DB3000F-12AS	0-3000	50	1285		24.5
DBR6000N-S	600-6000		60000DBR-S	60-600		-	-	-	1585	44.5	25.5

Note

1. "Without memory pointer" models are available. Remove "-S" from the model name when ordering. (Ex. DB100N)
2. DBR models require winch or mechanical loading device.
3. DBR Models are supplied upon request.
4. For models having over 25.4mm square drive, use with a through-hole socket.

CDB-S

Interchangeable Head Type Dial Indicating Torque Wrench

Direction



CDB14N4x8D-S



CDB100N15D-S

Inspection

Dial Indicating

Interchangeable

Direct Reading

Memory Pointer

RoHS

- Interchangeable head version of DB
- Ideal for torque measuring and quality inspections

Accuracy ±3%

S.I. Model	Torque Range [N·m]		Metric Model	Torque Range [kgf·cm/kgf·m]		American Model	Torque Range [lbf·in/lbf·ft]		Overall Length [mm]	Weight [kg]	Tohnichi Head Size
	Min.-Max.	Grad.		Min.-Max.	Grad.		Min.-Max.	Grad.			
CDB70N4x8D-S	0.7-7	0.1	70CDB4-S	7-70	1	70CDB4-A-S	6-60	1			
CDB14N4x8D-S	2-14	0.2	140CDB4-S	20-140	2	140CDB4-A-S	20-120	2	215	0.45	8D
CDB25N10D-S	3-25	0.5	250CDB-S	30-250	5	250CDB-A-S	30-220	5	255	0.48	10D
CDB50N12D-S	5-50		500CDB-S	50-500		500CDB-A-S	40-430		330	0.53	12D
CDB100N15D-S	10-100	1	1000CDB-S	100-1000	10	1000CDB-A-S	7-70	1	415	0.76	15D
CDB200N19D-S	20-200	2	2000CDB-S	200-2000	20	2000CDB-A-S	14-140	2	525	1.0	19D
CDB300N22D-S	30-300	5	3000CDB-S	3-30	0.5	3000CDB-A-S	20-220	5	720	1.65	22D
CDB420N22D-S	40-420		4200CDB-S	4-42		4200CDB-A-S	30-300		920	2.7	

Note

1. Overall length does not include interchangeable head.
2. PH (Pipe wrench head) type interchangeable head is not available for this model.
3. Interchangeable heads are optional.

SCDB-S

European Style
Interchangeable
Head Type
Dial Indicating
Torque Wrench

Direction



SCDB50N-S

Inspection

Dial Indicating

Interchangeable

Direct Reading

Memory Pointer

RoHS

- Specialized version of DB
- Accepts DIN interchangeable head connection

Accuracy ±3%

S.I. Model	Torque Range [N·m]		Head Size [mm]	Overall Length [mm]	Weight [kg]
	Min.-Max.	Grad.			
SCDB25N-9x12-S	3-25	0.5	9x12	271	0.48
SCDB50N-9x12-S	5-50		9x12	342	0.53
SCDB100N-9x12-S	10-100	1	9x12	422	0.76
SCDB200N-14x18-S	20-200	2	14x18	535	1

Note

1. Overall length does not include interchangeable head.
2. Applicable to European style head. Tohnichi's interchangeable heads are not available for this model.

T-S

T-Handle Dial Indicating
Torque Wrench

Direction



T90N-S

Inspection

Dial Indicating

Direct Reading

Memory Pointer

RoHS

- Dual handle for increased stability
- Memory pointer for easy reading

Accuracy ±3%

S.I. Model	Torque Range [N·m]		Metric Model	Torque Range [kgf·cm/kgf·m]		American Model	Torque Range [lbf·in/lbf·ft]		Overall Length [mm]	Neck Length [mm]	Square Drive [mm]	Weight [kg]
	Min.-Max.	Grad.		Min.-Max.	Grad.		Min.-Max.	Grad.				
T23N-S	3-23	0.5	230T-S	kgf·cm	kgf·cm	T200I-3AS	lbf·in	lbf·in	205	71	9.5	0.41
T45N-S	5-45		450T-S	30-230	5	T2400I-3AS	20-200	2	261	82		0.53
T90N-S	10-90	1	900T-S	100-900	10	T65F-4AS	lbf·ft	lbf·ft	376	102.5	12.7	0.8
T180N-S	20-180	2	1800T-S	200-1800	20	T130F-4AS	10-65	1	656	118.5		1.2
T700N-S	70-700	10	7000T-S	kgf·m	kgf·m	7000T-A-S	50-500	5	1300	19.0	25.4	4
T1000N-S	100-1000		10000T-S	7-70	1	10000T-A-S	50-700	5	1630			4.8
T1400N-S	200-1400	20	14000T-S	20-140	2	14000T-A-S	100-1000	10	1880	38.1	38.1	6.2
T2100N-S	200-2100		21000T-S	20-210		21000T-A-S	200-1500	20	2500			10
T2800N-S	300-2800	50	28000T-S	30-280	5	28000T-A-S	200-2000	20	2960	38.1	38.1	15.5
T4200N-S	400-4200		42000T-S	40-420		42000T-A-S	400-3000	50	3660			21.5

Note

1. T700N-S to T4200N-S models are supplied upon request.
2. For models having over 25.4mm square drive, use with a through-hole socket.

SF/F/FR

Beam Type Torque Wrench

Direction



SF6N

F92N

Inspection Beam Direct Reading RoHS

- Direct reading torque wrench with scale plate
- For measuring and tightening applications

Accuracy ±3%

S.I. Model	Torque Range [N-m/N-m]		Metric Model	Torque Range [kgf-cm/kgf-m]		American Model	Torque Range [lbf-in/lbf-ft]		Overall Length [mm]	Square Drive [mm]	Weight [kg]
	Min.-Max.	Grad.		Min.-Max.	Grad.		Min.-Max.	Grad.			
SF40CN	8-40		4SF	kgf-cm	0.8-4	4SF-A	lbf-in	0-3.4	115		0.04
SF70CN	10-70	2	7SF	kgf-cm	1-7	7SF-A	lbf-in	0-6	135		0.05
SF1.5N	N-m	N-m	15SF	kgf-cm	2-15	15SF-A	lbf-in	0-13	145	6.35	0.07
SF3N	0.5-3	0.1	30SF	kgf-cm	5-30	30SF-A	lbf-in	0-26	1	175	0.09
SF6N	0.6-6	0.2	60SF	kgf-cm	6-60	60SF-A	lbf-in	0-50	2	205	0.2
SF12N	2-12	0.5	120SF	kgf-cm	20-120	120SF-A	lbf-in	0-100	5	235	0.25
F23N	3-23		230F	kgf-cm	30-230	230F-A	lbf-in	0-200	5	295	0.4
F46N	5-46	1	460F	kgf-cm	50-460	460F-A	lbf-in	0-400	10	355	0.6
F92N	10-92	2	920F	kgf-cm	100-920	920F-A	lbf-in	10-66	2	400	0.95
F130N	20-130		1300F	kgf-cm	200-1300	1300F-A	lbf-in	10-95	2	445	1.2
F190N	30-190		1900F	kgf-cm	300-1900	1900F-A	lbf-in	25-135		490	1.5
F280N	50-280	5	2800F	kgf-cm	5-28	2800F-A	lbf-in	30-200	5	565	2.2
F420N	70-420		4200F	kgf-cm	7-42	4200F-A	lbf-in	30-300		825	3.5
F560N	100-560	10	5600F	kgf-cm	1000-5600	5600F-A	lbf-in	50-400	10	945	4.0
F700N	100-700		7000F	kgf-cm	1000-7000	7000F-A	lbf-in	50-500		1175	6.0
F850N	100-850		8500F	kgf-cm	10-85	8500F-A	lbf-in	60-600		1410	7.8
F1000N	100-1000	20	10000F	kgf-cm	10-100	10000F-A	lbf-in	70-700	20	1640	8.8
FR1050N	100-1050		10500FR	kgf-cm	10-105	10500FR-A	lbf-in	100-750		835	8
FR1400N	200-1400		14000FR	kgf-cm	20-140	14000FR-A	lbf-in	100-1000		981	11.5
FR2100N	300-2100	50	21000FR	kgf-cm	30-210	21000FR-A	lbf-in	200-1500	50	1148	14.5
FR2800N	300-2800		28000FR	kgf-cm	30-280	28000FR-A	lbf-in	200-2000		1292	20
FR4200N	400-4200	100	42000FR	kgf-cm	40-420	42000FR-A	lbf-in	300-3000	50	1460	28
FR6000N	600-6000		60000FR	kgf-cm	60-600	60000FR-A	lbf-in	400-4300		1624	30

Note

1. FR models are supplied upon request.
2. FR models require winch or mechanical loading device.
3. For models having over 25.4mm square drive, use with a through-hole socket.

CSF/CF

Interchangeable Head Type Beam Type Torque Wrench

Direction



CSF7NxB8

CF25Nx10D

Inspection Beam Interchangeable Direct Reading RoHS

- Interchangeable head version of SF/F
- For measuring and tightening applications

Accuracy ±3%

S.I. Model	Torque Range [N-m]		Metric Model	Torque Range [kgf-cm/kgf-m]		American Model	Torque Range [lbf-in/lbf-ft]		Overall Length [mm]	Tohnichi Head Size	Weight [kg]	
	Min.-Max.	Grad.		Min.-Max.	Grad.		Min.-Max.	Grad.				
CSF7Nx8D	1-7	0.2	70CSF	kgf-cm	10-70	70CSF-A	lbf-in	2	220	8D	0.2	
CSF14Nx8D	2-14	0.5	140CSF	kgf-cm	20-140	140CSF-A	lbf-in	5	250		0.25	
CF25Nx10D	5-25	1	250CF	kgf-cm	50-250	250CF-A	lbf-in	10	320	10D	0.4	
CF50Nx12D	10-50		500CF	kgf-cm	100-500	500CF-A	lbf-in	20	380	12D	0.6	
CF100Nx15D	10-100	2	1000CF	kgf-cm	100-1000	1000CF-A	lbf-in	6-70	2	435	15D	1.0
CF150Nx19D	20-150		1500CF	kgf-cm	200-1500	1500CF-A	lbf-in	15-110		480	19D	1.3
CF230Nx22D	30-230	5	2300CF	kgf-cm	3-23	2300CF-A	lbf-in	20-160	5	530	22D	1.6
CF420Nx22D	70-420	10	4200CF	kgf-cm	7-42	4200CF-A	lbf-in	30-300		725		3.1
CF850Nx32D	100-850	20	8500CF	kgf-cm	42-85	8500CF-A	lbf-in	60-600	20	1260	32D	7.1

Note

1. Overall length does not include interchangeable head.
2. Interchangeable heads are optional.

QF/QFR

Ratchet Head Beam Type Torque Wrench

Direction



QF120N

Inspection Beam Ratchet Head Direct Reading RoHS

- Fixed ratchet head flat beam style
- Ideal for working in narrow spaces

Accuracy ±3%

S.I. Model	Torque Range [N-m]		Metric Model	Torque Range [kgf-cm/kgf-m]		American Model	Torque Range [lbf-in/lbf-ft]		Overall Length [mm]	Square Drive [mm]	Weight [kg]
	Min.-Max.	Grad.		Min.-Max.	Grad.		Min.-Max.	Grad.			
QF60N	6-60	1	600QF	kgf-cm	60-600	600QF-A	lbf-in	10	455	9.5	0.8
QF120N	10-120	2	1200QF	kgf-cm	100-1200	1200QF-A	lbf-in	6-86	2	515	1.2
QF220N	30-220	5	2200QF	kgf-cm	300-2200	2200QF-A	lbf-in	25-160		580	1.8
QF320N	40-320		3200QF	kgf-cm	6-32	3200QF-A	lbf-in	40-230	5	655	2.6
QF420N	70-420		4200QF	kgf-cm	7-42	4200QF-A	lbf-in	30-300		825	3.4
QF560N	100-560	10	5600QF	kgf-cm	10-56	5600QF-A	lbf-in	50-400	10	950	4.3
QF700N	100-700		7000QF	kgf-cm	10-70	7000QF-A	lbf-in	50-500		1170	6.5
QF850N	100-850		8500QF	kgf-cm	10-85	8500QF-A	lbf-in	60-600		1400	8.5
QFR1050N	100-1050	20	10500QFR	kgf-cm	10-105	10500QFR-A	lbf-in	100-750	20	845	8.5
QFR1400N	200-1400		14000QFR	kgf-cm	20-140	14000QFR-A	lbf-in	100-1000		992	12.5
QFR2100N	300-2100	50	21000QFR	kgf-cm	30-210	21000QFR-A	lbf-in	200-1500	50	1158	15.5
QFR2800N	300-2800		28000QFR	kgf-cm	30-280	28000QFR-A	lbf-in	200-2000		1305	21
QFR4200N	400-4200	100	42000QFR	kgf-cm	40-420	42000QFR-A	lbf-in	300-3000	50	1473	30
QFR6000N	600-6000		60000QFR	kgf-cm	60-600	60000QFR-A	lbf-in	400-4300		1624	32

Note

1. QFR models are supplied upon request.
2. QFR models require winch or mechanical loading device.
3. For models having over 25.4mm square drive, use with a through-hole socket.

CEM3-G

DATA TORK
(Digital Torque
Wrench)

Direction



CEM100N3x15D-G



NEW

Inspection Digital Interchangeable Direct Reading Re-Chargeable RoHS

- Dual LED & LCD displays for optimal viewing
- 999 memory storage capacity
- For inspection and tightening

Accuracy ±1%

Model	Torque Range										Hand Force [N]	Overall Length [mm]	Weight [kg]
	N-m		kgf-cm		kgf-m		lbf-in		lbf-ft				
	Min.-Max.	1digit	Min.-Max.	1digit	Min.-Max.	1digit	Min.-Max.	1digit	Min.-Max.	1digit			
CEM10N3x8D-G	2-10	0.01	20-100	0.1	0.200-1.000	0.001	20.0-90.0	0.1	1.50-7.30	0.01	48.1	212	0.46
CEM20N3x10D-G	4-20	0.02	40-200	0.2	0.400-2.000	0.002	36.0-180.0	0.2	3.00-14.50	0.02	92.2	214	0.47
CEM50N3x12D-G	10-50	0.05	100-500	0.5	1.000-5.000	0.005	100.0-440.0	0.5	7.50-36.00	0.05	196.9	282	0.58
CEM100N3x15D-G	20-100	0.1	200-1000	1	2.00-10.00	0.01	200-880	1	15.0-73.0	0.1	275.5	384	0.63
CEM200N3x19D-G	40-200	0.2	400-2000	2	4.00-20.00	0.02	360-1700	2	30.0-150.0	0.2	428.3	475	0.78
CEM360N3x22D-G	72-360	0.4	720-3600	4	7.2-36.00	0.04	650-3100	4	52.0-260.0	0.4	498.6	713	1.13
CEM500N3x22D-G	100-500	0.5	1000-5000	5	10.00-50.00	0.05	890-4400	5	73.0-360.0	0.5	549.5	949	4.00
CEM850N3x32D-G	170-850	1	-	-	17.0-85.0	0.1	-	-	124-620	1	608	1387	5.14

Standard Accessories Battery Pack (BP-5), QH interchangeable head, Quick battery charger BC-3-G (100-240V)

Common Specifications

Display	7 segments LED 4 lines 10mm (Torque value) 14 segments LCD 3 lines 7mm (Counter) 7 segments LCD 4 lines 3mm (Clock) Battery life indicator (4 steps) Judgment LED RED/BLUE
Number of Data Memory	999 (M-2 mode: 99 data)
Communication Functions	RS232C (2400-19200bps) Serial output corresponding to a USB connector
Power Supply	Ni-MH rechargeable battery
Continuous Use	Approx. 20 hrs with fully charged (8 hours by 1 hour recharging)
Recharging Time	Approx. 3.5 hours
Operation Temperature	0-40 Celsius no condensation
Basic Functions	Peak Hold, Auto memory & resetting, Tightening completion buzzer, Judgment of measured data, Auto zero setting, Auto off (3 minutes), Clock

- Note
1. Overall length does not include interchangeable head.
 2. For interchangeable heads, refer to pages 32-35.
 3. For infrared data transfer, use with R-DT999. (Refer to page 56)
 4. For USB data transfer, use with No. 584 connecting cable (Optional).
 5. PH (Pipe wrench head) type interchangeable head is not available for this model.

Standard Accessories

1. Battery pack (BP-5)
2. QH interchangeable head (Refer to page 34)
3. Quick battery charger BC-3-G (100-240V)

Handy Terminal

HT-S5

Compact data collection device for CEM3-G

- Upload & download torque measuring information
- Guides user through torque assembly & quality inspection processes
- Statistics and charting capabilities



CEM3-P

RoHS

- Programmable version of CEM3 with data management software that links work name with test results

Torque Accuracy	±1%
Portion Registration Memory	Max. 100 parts (Part name, number of screws, tightening direction, high/low torque, measuring order)
Measurement Data Storage	Up to 3,000 screw data (vary depending on parts registered), measurement part name, measured value, pass/fail judgment, measurement time and date)

Model	Model	Model
CEM10N3x8D-P	CEM100N3x15D-P	CEM500N3x22D-P
CEM20N3x10D-P	CEM200N3x19D-P	CEM850N3x32D-P
CEM50N3x12D-P	CEM360N3x22D-P	

Battery Pack (P.39)

Model
BP-5

Quick Battery Charger (P.39)

Model	Description
BC-3-G	100V-240V

Printer (P.57)

Model
EPP16M2

Connecting Cable (P.39)

Part #	Applicable Model
③79	CEM2, CEM3, R-DT999 → EPP16M2
⑤75	CEM2, CEM3, R-DT999 → PC (D-sub 9 Pin Female)
⑤84	CEM3, R-DT999 → PC (USB A type)

Data Filing System (P.56)

Model	Media
DFS	CD-ROM

CTB2-G

Digital Retightening
Torque Wrench

Direction



CTB100N2x15D-G

NEW



CTB850N2x32D-G

Inspection Digital Interchangeable Signal Re-Chargeable RoHS

- Detects movement of fastener for more accurate testing
- Software converts measured torque to initial tightening torque value.

Accuracy ±1%

Model	Torque Range										Hand Force [N]	Overall Length [mm]	Weight [kg]
	N-m		kgf-cm		kgf-m		lbf-in		lbf-ft				
	Min.-Max.	1digit	Min.-Max.	1digit	Min.-Max.	1digit	Min.-Max.	1digit	Min.-Max.	1digit			
CTB10N2x8D-G	2-10	0.01	20-100	0.1	0.2-1	0.001	20-90	0.1	1.5-7.3	0.01	48.1	212	0.46
CTB20N2x10D-G	4-20	0.02	40-200	0.2	0.4-2	0.002	36-180	0.2	3-14.5	0.02	92.2	214	0.47
CTB50N2x12D-G	10-50	0.05	100-500	0.5	1-5	0.005	100-440	0.5	7.5-36	0.05	196.9	282	0.58
CTB100N2x15D-G	20-100	0.1	200-1000	1	2-10	0.01	200-880	1	15-73	0.1	275.5	384	0.63
CTB200N2x19D-G	40-200	0.2	400-2000	2	4-20	0.02	360-1700	2	30-150	0.2	428.3	475	0.78
CTB360N2x22D-G	72-360	0.4	720-3600	4	7.2-36	0.04	650-3100	4	52-260	0.4	498.6	713	1.13
CTB500N2x22D-G	100-500	0.5	1000-5000	5	10-50	0.05	890-4400	5	73-360	0.5	549.5	949	4.00
CTB850N2x32D-G	170-850	1	-	-	17-85	0.1	-	-	124-620	1	608	1387	5.14

- Note
1. Overall length does not include interchangeable head.
 2. For interchangeable heads, refer to pages 32-35.
 3. For infrared data transfer, use with R-DT999. (Refer to page 56)
 4. PH (Pipe wrench head) type interchangeable head is not available for this model.

- Standard Accessories
1. Battery Pack (BP-5)
 2. QH interchangeable head (Refer to page 34)
 3. Quick battery charger BC-3-G (100-240V)

Battery Pack (P.39)

Model
BP-5

Quick Battery Charger (P.39)

Model	Description
BC-3-100	100V
BC-3-200	200V-240V

Printer (P.57)

Model
EPP16M2

Connecting Cable (P.39)

Part #	Applicable Model
③79	CTB2-G → EPP16M2
⑤75	CTB2-G → PC (D-SUB 9 Pin Female)
⑤84	CTB2-G → PC (USB A type)

Data Filing System (P.56)

Model	Media
DFS	CD-ROM

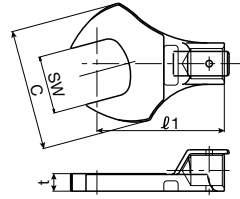
Interchangeable Head

SH

Open Spanner Head

RoHS

The SH type spanner heads suit for the place where sockets can not be used, for flare nuts in piping and for work in narrow places.



SH15Dx19

Tohnichi Head Size	Model (Body Size x Width)	Allowable Torque		Outside Width C [mm]	Thickness t [mm]
		[N-m]	[kgf-cm]		
8D	SH8Dx5.5	1.5	15	13	3
	SH8Dx6	2.5	25	15	3.5
	SH8Dx7	3.5	35	17	4
	SH8Dx8	7	70	20	4.5
	SH8Dx10			25	
	SH8Dx11			27	5.5
	SH8Dx12				
	SH8Dx13			29	
	SH8Dx14				
	SH8Dx16	14	140	31	
	SH8Dx17			32	
	SH8Dx19			35	6.5
	SH8Dx21			36	
	SH8Dx22			37	
SH8Dx24			38		
10D	SH10Dx7				
	SH10Dx8				
	SH10Dx10	20	200	28	
	SH10Dx11				
	SH10Dx12				
	SH10Dx13			32	
	SH10Dx14				6.5
	SH10Dx16				
	SH10Dx17				
	SH10Dx18	25	250	39	
12D	SH10Dx19				
	SH10Dx21				
	SH10Dx22				
	SH10Dx24			43	
	SH12Dx8	7	70	20	5
	SH12Dx10	12	120	24	
	SH12Dx11	20.5	205	28	5.5
	SH12Dx12			31	6.5
	SH12Dx13	29.5	295	32	
	SH12Dx14			38	8
15D	SH12Dx16	59	590	40	10
	SH12Dx17			41	11
	SH12Dx18				
	SH12Dx19	70	700		
	SH12Dx21			43	
	SH12Dx22				
	SH12Dx24			48	13
	SH12Dx27			52	
	SH15Dx12				
	SH15Dx13	59	590	38	8
SH15Dx14					
SH15Dx16					
15D	SH15Dx17				
	SH15Dx18	140	1400	51	13
	SH15Dx19				
	SH15Dx21				
	SH15Dx22				

Tohnichi Head Size	Model (Body Size x Width)	Allowable Torque		Outside Width C [mm]	Thickness t [mm]
		[N-m]	[kgf-cm]		
15D	SH15Dx24				
	SH15Dx26				
	SH15Dx27				
	SH15Dx30	140	1400	60	12
	SH15Dx32				
	SH15Dx36			68	
19D	SH19Dx17				
	SH19Dx18	200	2000		
	SH19Dx19			54	13
	SH19Dx21	180	1800		
	SH19Dx22				
	SH19Dx24	200	2000	60	15
22D	SH19Dx27	200	2000		
	SH19Dx30	180	1800		
	SH19Dx32				
	SH19Dx34	200	2000	76	11
	SH19Dx36				
	SH19Dx41	180	1800		
	SH22Dx19	280	2800	63	
	SH22Dx22				
	SH22Dx24	500	5000		
	SH22Dx27				
27D	SH22Dx30	420	4200	78	
	SH22Dx32				
	SH22Dx34	500	5000		15
	SH22Dx36	420	4200		
	SH22Dx41	280	2800	85	
	SH22Dx46				
	SH22Dx50			103	
	SH22Dx55	500	5000	108	
	SH27Dx22	255	2550	65	14
	SH27Dx24	350	3500	72	15
32D	SH27Dx27	490	4900	82	16
	SH27Dx30	670	6700	88	19
	SH27Dx32	750	7500	92	
	SH27Dx34	670	6700	90	20
	SH27Dx36			94	21
	SH27Dx41	750	7500	98	22
	SH27Dx46			100	24
	SH27Dx50			103	26
	SH32Dx27				
	SH32Dx30	850	8500	105	18
SH32Dx32					
SH32Dx34					
32D	SH32Dx36				
	SH32Dx41			110	24
	SH32Dx46				
	SH32Dx50	1200	12000		
	SH32Dx55			120	29
	SH32Dx60				

Inch Size Models

Commonly used in the airline industry and for specific American product installation and maintenance.

Tohnichi Head Size	Model (Body Size x Inner Width [in])	Inner Width [mm]	Allowable Torque		Outside Width C		Thickness t	
			[N-m]	[lbf-in]	[mm]	[in]	[mm]	[in]
10D	SH10Dx1/4	6.35						
	SH10Dx5/16	7.94	20	177	28	1.10		
	SH10Dx3/8	9.53					6.5	0.26
	SH10Dx7/16	11.11						
	SH10Dx1/2	12.7	25	221	32	1.26		
	SH10Dx9/16	14.29			39	1.54		
12D	SH12Dx3/8	9.53	12	106	24	0.94	5	0.20
	SH12Dx7/16	11.11	20.5	181	31	1.22	6.5	0.26
	SH12Dx1/2	12.7	29.5	261	32	1.26		
	SH12Dx9/16	14.29						
	SH12Dx5/8	15.88	59	522	40	1.57	10	0.39
	SH12Dx11/16	17.46	70	620	41	1.61	11	0.43
15D	SH15Dx1/2	12.7	59	522	38	1.50	8	0.31
	SH15Dx9/16	14.29						
	SH15Dx5/8	15.88						
	SH15Dx11/16	17.46						
	SH15Dx3/4	19.05	140	1239	51	2.01	13	0.51
	SH15Dx13/16	20.64						

The Relationship between Interchangeable Heads and Torque Wrenches

Tohnichi's interchangeable head wrenches have specific diameter round ends that fit into corresponding head base openings. Head and wrench model names include the diameter sizes so heads can be matched to wrenches that will accept those heads.

For example: SH15Dx17 will fit on CL100Nx15D

A variety of different head types (SH, RH, QH, RQH, FH, DH, AH and SP-N) can be used on one wrench or different types of wrenches such as CL (for tightening) and CEM3 (for inspection) can use the same head that has the corresponding diameter size.



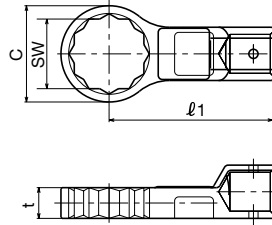
RH

Ring Head

RoHS

The RH type ring heads guarantee the safe work as the axes of bolt and RH ring head are always aligned and prevent the heads will drop.

Note: RH8Dx5.5 to RH8Dx7 are hex shape.



RH15Dx17

Tohnichi Head Size	Model (Body Size x Width)	Allowable Torque		Outside Width C [mm]	Thickness t [mm]		
		[N-m]	[kgf-cm]				
8D	RH8Dx5.5	1.5	15	10.5	5		
	RH8Dx6	2.4	24	11			
	RH8Dx7	3.6	36	12			
	8D	RH8Dx8	7.2	72	13.5	6	
		RH8Dx10	12.2	122	15.5		
		RH8Dx11			17		
		RH8Dx12	14	140	18		
	8D	RH8Dx13			19	7	
		RH10Dx8	7.2	72	12.5		6
		RH10Dx10	12.2	122	15.5		7
10D	RH10Dx11	20	200	17	8		
	RH10Dx12			18			
	RH10Dx13			19			
	RH10Dx14			20			
	RH10Dx16			22			
	RH10Dx17	25	250	24			
	RH10Dx18			25			
	RH10Dx19			26			
	RH10Dx21			28			
	RH10Dx22			29			
12D	RH12Dx8	7.2	72	15	5.5		
	RH12Dx10	12.2	122	16			
	RH12Dx11	20	200	18			
	RH12Dx12			20			
	RH12Dx13	29.5	295	21			
	RH12Dx14	59	590	20			
	RH12Dx16			24			
	RH12Dx17			25			
	RH12Dx18			26			
	RH12Dx19	70	700	26			
RH12Dx21			29				
RH12Dx22			30				
15D	RH15Dx12			19	13		
	RH15Dx13	29.5	295	20.5			
	RH15Dx14			22			
	RH15Dx16	59	590	25			
	RH15Dx17			26			
	RH15Dx18	100	1000	27			
	RH15Dx19			28			
	RH15Dx21			31			
	RH15Dx22	140	1400	34			
	RH15Dx24			37			
RH15Dx27			41				
RH15Dx30			41				

Tohnichi Head Size	Model (Body Size x Width)	Allowable Torque		Outside Width C [mm]	Thickness t [mm]
		[N-m]	[kgf-cm]		
19D	RH19Dx14	59	590	22.5	8
	RH19Dx17			27	10
	RH19Dx18	100	1000	28	11
	RH19Dx19			29	
	RH19Dx21	166	1660	32	13
	RH19Dx22				
	RH19Dx24			35	
	RH19Dx27			39	
	RH19Dx30			41	
	RH19Dx32	200	2000	44	15
22D	RH19Dx34			47	
	RH19Dx36			49	
	RH19Dx41			55	
	RH22Dx19	166	1660	30	14
	RH22Dx22	255	2550	34	
	RH22Dx24			37	15
	RH22Dx27	490	4900	41	
	RH22Dx30			44	
	RH22Dx32			45	
	RH22Dx34	500	5000	49	17
27D	RH22Dx36			51	
	RH22Dx41			57	
	RH22Dx46			62	
	RH27Dx22	255	2550	38	14
	RH27Dx24	350	3500	38	15
	RH27Dx27	490	4900	42	16
	RH27Dx30	670	6700	46	19
	RH27Dx32	750	7500	48	
	RH27Dx34	670	6700	51	20
	RH27Dx36			52	21
32D	RH27Dx41			58	22
	RH27Dx46	750	7500	64	24
	RH27Dx50			69	26
	RH32Dx27	490	4900	43	16
	RH32Dx30	670	6700	46.5	
	RH32Dx32	860	8600	49	18
	RH32Dx34			52	
	RH32Dx36			53	
	RH32Dx41			59	24
	RH32Dx46	1200	12000	65	
RH32Dx50			69	27	
RH32Dx55			75		
RH32Dx60			80	29	

Inch Size Models

Commonly used in the airline industry and for specific American product installation and maintenance.

Tohnichi Head Size	Model (Body Size x Inner Width [in])	Allowable Torque		Outside Width C		Thickness t	
		[N-m]	[lbf-in]	[mm]	[in]	[mm]	[in]
10D	RH10Dx1/4			11	0.43		
	RH10Dx5/16	7.2	64	12.5	0.49	6	0.24
	RH10Dx3/8	12.2	108	15.5	0.61	7	0.28
	RH10Dx7/16			17	0.67		
	RH10Dx1/2	25	221	19	0.75	8	0.31
12D	RH10Dx9/16			20	0.79		
	RH12Dx3/8	12.2	108	16	0.63	5	0.20
	RH12Dx7/16	20	177	18	0.71	5.5	0.22
	RH12Dx1/2	29.5	261	21	0.83	6.5	0.26
	RH12Dx9/16			20	0.79		
15D	RH12Dx5/8	59	522	24	0.94	10	0.39
	RH15Dx1/2	29.5	261	20.5	0.81	7	0.28
	RH15Dx9/16			22	0.87		
	RH15Dx5/8	59	522	25	0.98	8	0.31
	RH15Dx11/16	100	885	27	1.06	10	0.39
RH15Dx3/4	140	1239	28	1.10	13	0.51	

Accessories

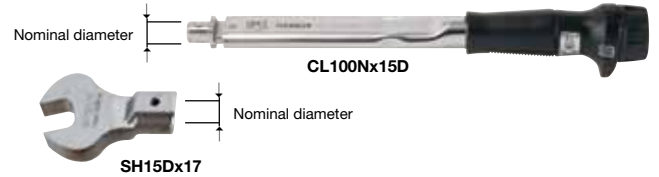


The Relationship between Interchangeable Heads and Torque Wrenches

Tohnichi's interchangeable head wrenches have specific diameter round ends that fit into corresponding head base openings. Head and wrench model names include the diameter sizes so heads can be matched to wrenches that will accept those heads.

For example: SH15Dx17 will fit on CL100Nx15D

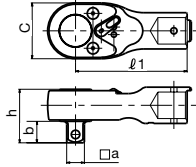
A variety of different head types (SH, RH, QH, RQH, FH, DH, AH and SP-N) can be used on one wrench or different types of wrenches such as CL (for tightening) and CEM3 (for inspection) can use the same head that has the corresponding diameter size.



QH

Ratchet Head

RoHS



QH15D

As the QH type ratchet heads need only small swing for tightening, they suit for operations in narrow spaces.

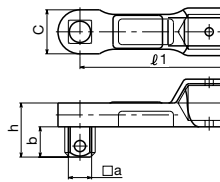
Tohnichi Head Size	Model	Dimensions			
		Sq. Drive a [mm]	Outside Width c [mm]	h [mm]	b [mm]
8D	QH8D	6.35	23	17.5	7.5
10D	QH10D	9.53	26	22	11
12D	QH12D		32	25.6	
15D	QH15D	12.7	37.5	33.5	14
19D	QH19D		40	38.4	
22D	QH22D	19.05	51	46.5	21.5
27D	QH27D		70	49.7	
32D	QH32D	25.4	74	55.7	26.5

Note For the model having 25.4mm square drive, use a through-hole socket.

DH

Square Drive Head

RoHS



DH15D

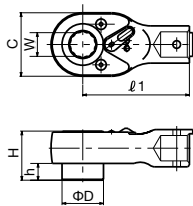
The DH square drive heads are the standard interchangeable head. They are useful when tightening a large number of matching screws with a common torque wrench. It is recommended to keep one set. They are used with sockets.

Tohnichi Head Size	Model	Dimensions			
		Sq. Drive a [mm]	Outside Width c [mm]	h [mm]	b [mm]
10D	DH10D	9.53	18	22.5	13
12D	DH12D			23	
15D	DH15D	12.7	22	29.5	16.5
19D	DH19D				
22D	DH22D	19.05	34	43.3	23.5
27D	DH27D				
32D	DH32D	25.4	50	58.5	30.25

RQH

Female Ratchet Head

RoHS



RQH15Dx17

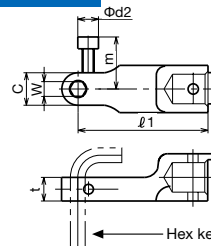
As the RQH type ratchet heads need only small swing for tightening, they suit for operations in narrow and low ceiling spaces.

Tohnichi Head Size	Model (Body Size x Width)	Dimensions			
		D [mm]	Outside Width C [mm]	H [mm]	h [mm]
12D	RQH12Dx12	20.5	32	24.1	
	RQH12Dx14				
15D	RQH15Dx14	24.5	37.5	29	10
	RQH15Dx17				
19D	RQH19Dx17	31	45	28	
	RQH19Dx19				
22D	RQH19Dx22	35.2	51	35	
	RQH22Dx22				
	RQH22Dx24				

HH

Hex Head

RoHS



HH10Dx6

HH hex-head is for hexagon socket head bolts. A hex key can be inserted.

The HH hex-head is for hex. socket head cap screws.

Tohnichi Head Size	Model (Body Size x Width)	Dimensions			
		Outside Width C [mm]	t [mm]	m [mm]	phi d2 b [mm]
8D	HH8D	12	14.5	-	-
	HH10Dx5	11			
10D	HH10Dx6	12	8		
	HH10Dx8	15			
12D	HH12Dx5	11		19	7
	HH12Dx6	14	10		
	HH12Dx8	15			
	HH12Dx10	17			
15D	HH15Dx8	14			
	HH15Dx10	17		21	
	HH15Dx12	20			
	HH15Dx14	21.5			
19D	HH19Dx10	17	13		8.5
	HH19Dx12	21.5			
	HH19Dx14	23		23	
	HH19Dx17	27			
22D	HH19Dx19	29			
	HH22Dx12	19.5			
	HH22Dx14	27			
	HH22Dx17	30	17	26	10
	HH22Dx19	32			
	HH22Dx22	35			

Note

1. To be used with hex. key inserted.
2. HH8D is not used with hex. key but interchangeable bit.



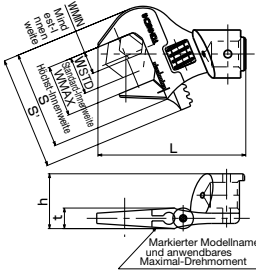
HH8D

Bits are sold separately. Refer to page 36.

AH

Adjustable Open End Head

RoHS



AH15Dx24

AH is easy and convenient to use for applications that require different size bolt heads. Available currently only for the 15mm diameter root shaped Tohnichi torque wrenches.

Tohnichi Head Size	Model (Body Size x Width)	Allowable Torque		Inner Width [mm]	Dimensions				
		[N-m]	[kgf-cm]		S [mm]	S' [mm]	L [mm]	t [mm]	h [mm]
15D	AH15Dx24	50	500	10-14-24	46	54	80.2	10	30.5
	AH15Dx30	100	1000	13-22-30	57	66	86.3	12	32
	AH15Dx36	140	1400	13-24-36	67	78	88.4	13.5	33.75

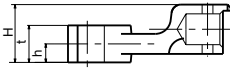
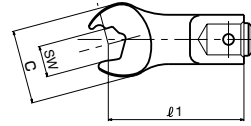
Note Use with a click type torque wrench (for tightening).

Model	Recommendable Torque Wrench
AH15Dx24	CL50Nx15D
AH15Dx30	CL100Nx15D
AH15Dx36	CL140Nx15D

SH-N

Open End Head with Notch

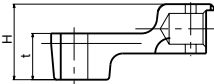
RoHS



SH-N models (except for SH10D-5x10N)



SH10D-1x10N



SH10D-5x10N

The notch creates speed in the tightening process by grasping the side of the fastener without removing the wrench. Ideal for brake line assembly.

Tohnichi Head Size	Model (Body Size x Width)	Allowable Torque		Dimensions			
		[N-m]	[kgf-cm]	Outside Width C [mm]	H [mm]	t [mm]	h [mm]
10D	SH10D-1x10N	22.5	225	24	18.75	12	6
	SH10D-3x10N				20.25	15	7.5
	SH10D-5x10N				24.5	15	-
NEW	SH10D-4x10N	22.5	225	32	17.75	10	5
	SH10D-9x10N				18.75	12	6
	SH10Dx11N				18.8	12	-
	SH10Dx12N	25	250	32	16	6.5	3.25

PH

Pipe Wrench Head

RoHS



PH15Dx350

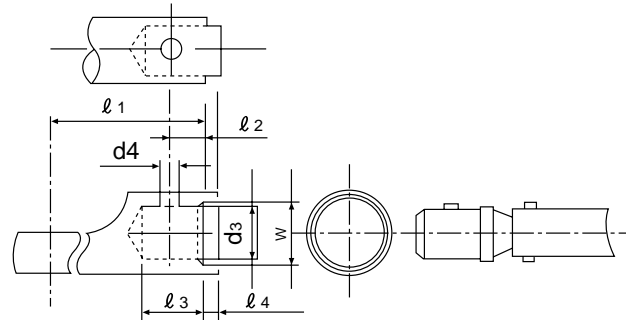
The PH heads suit for use with pipes and plumbing applications.

Tohnichi Head Size	Model (Body Size x Width)	Pipe Wrench Head Max. Length [mm]	Applicable Pipe Diameter [mm]	Standard Pipe Diameter [mm]	Recommendable Torque Wrench
15D	PH15Dx350	350	13-38	25.5	CSP
19D	PH19Dx350				
22D	PH22Dx350				
32D	PH22Dx450	450	26-52	39	
	PH32Dx450				

Note 1. When ordering with CSP, please specify PH model name and required set torque.
2. In case of using graduated torque wrench, order PHL models.

Common Dimensions for Interchangeable Head

Model	Dimensions [mm]						
	l1	l2	l3	l4	d3	d4	W
SH8D, RH, QH, HH	35	4	10	2	8	3.0	9
SH10D, RH, QH, HH, DH, SH-N	44	5	12	2.5	10	3.5	12
SH12D, RH, QH, HH, DH, RQH	53	6	14	3	12	3.5	14
SH15D, RH, QH, HH, DH, RQH, FH	63	7.5	17	3	15	4.5	17
SH19D, RH, QH, HH, DH, RQH, FH	80	9.5	21	3	19	4.5	21
SH22D, RH, QH, HH, DH, RQH, FH	100	11	24	3.5	22	5.5	24
SH27D, RH, QH, DH	125	13.5	29	5	27	6.5	30
SH32D, RH, QH, DH	160	16	34	7	32	6.5	35

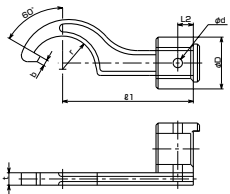


Note When requesting special heads that will be used with torque wrenches that have an external scale or digital display, you must strictly follow the "L1" dimension in order to keep torque values accurate. Any deviation from the "L1" dimension will affect the torque.

FH

Hook Head

RoHS



FH

The FH hook heads are ideal for use with bearing locknut applications.

Tohnichi Head Size	Model (Body Size x Width)	Applicable Size of Nut Outside Diameter [mm]	Nominal Size of Screw	Dimensions								
				r [mm]	θ' [mm]	b [mm]	t [mm]	H [mm]	D [mm]	L2 [mm]	d [mm]	
15D	FH15Dx30	30-38	M20	16								
	FH15Dx38	38-45	M25	20		3	6	30				
	FH15Dx45	45-52	M30	24								
	FH15Dx52	52-58	M35	27	60	3.5	7	30.5	25	7.5	4.5	
	FH15Dx58	58-65	M40	31								
19D	FH19Dx65	65-75	M45, M50	35.5			8	35.5	29	9.5		
	FH22Dx75	75-85	M60, M65	39				38.5				
22D	FH22Dx85	85-98	M70, M75	45.5	45	5	10	40	32	11	5.5	



Interchangeable Socket

RoHS

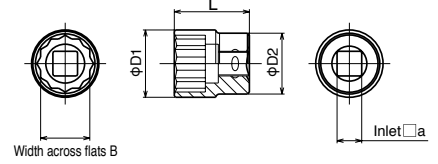
SOCKET FOR HAND TOOL

From Bolt	Inlet Drive (Female)	From Torque Tool			
		6.35	9.5	12.7	19.0
	Width Across Flats (B)	2H	3H	4H	6H
	8	(201)			
	10	(202)	(210)		
	12	(203)	(211)		
	13	(204)	(212)		
	14		(213)	(220)	
	16		(216)	(227)	
	17		(214)	(221)	
	18		(217)	(228)	
	19		(215)	(222)	
	21			(229)	(237)
	22			(223)	(230)
	24			(224)	(231)
	27			(225)	(232)
	30			(226)	(233)
	32				(234)
	34				(236)
	36				(235)
	41				
	46				
	50				
	55				



SOCKET

SOCKET FOR HAND TOOL



Width across flats B

How to Order (Hand Tools) SOCKET

Indicate model name and Part #

[Ex.] SOCKET 2H-10 (202)

Socket Inlet sign | Part #
Purpose sign | Width across flats

ADAPTER

Indicate model name and Part #

[Ex.] ADAPTER 2H-3 (270)

Inlet Sign (Female) | Part #
Purpose sign | Inlet sign (Male)

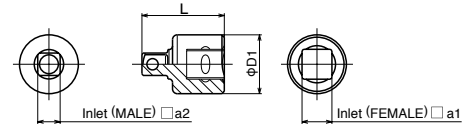
ADAPTER FOR HAND TOOL

To Socket	Inlet Drive (Female)	From Torque Tool			
		6.35	9.5	12.7	19.0
	Square Size (Male)	2H	3H	4H	6H
	6.3 (2)		(271)		
	9.5 (3)	(270)		(273)	
	12.7 (4)		(272)	(275)	
	19 (6)			(274)	
	25.4 (8)			(276)	



ADAPTER

ADAPTER FOR HAND TOOL



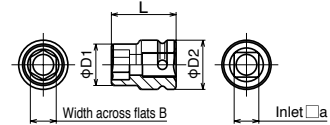
SOCKET FOR PNEUMATIC TOOL

From Bolt	Inlet Drive (Female)	From Torque Tool		
		9.5	12.7	25.4
	Width Across Flats (B)	3P	4P	8P
	10	(250)		
	12	(251)		
	13	(252)		
	14	(253)	(260)	
	16	(255)	(264)	
	17	(254)	(261)	
	18		(265)	
	19		(262)	
	21		(266)	
	22		(263)	
	32			(303)
	34			(304)
	36			(305)
	41			(306)
	46			(307)
	50			(308)
	55			(309)



SOCKET

SOCKET FOR PNEUMATIC TOOL



How to Order (Air Tools) SOCKET

Indicate model name and Part #

[Ex.] SOCKET 3P-10 (250)

Socket Inlet sign | Part #
Purpose sign | Width across flats

ADAPTER

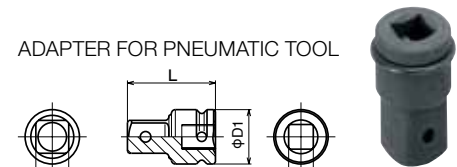
Indicate model name and Part #

[Ex.] ADAPTER 3P-4 (290)

Inlet Sign (Female) | Part #
Purpose sign | Inlet sign (Male)

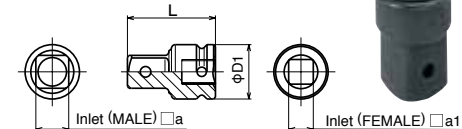
ADAPTER FOR PNEUMATIC TOOL

From Bolt	Inlet Drive (Female)	From Torque Tool			
		9.5	12.7	19.0	25.4
	Square Drive (Male)	3P	4P	6P	8P
	9.5 (3)		(291)		
	12.7 (4)	(290)		(293)	
	19 (6)		(292)		(295)
	25.4 (8)			(294)	



ADAPTER

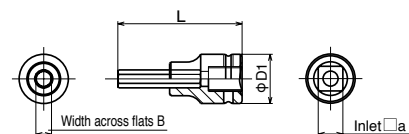
ADAPTER FOR PNEUMATIC TOOL



SOCKET FOR POWER AND HAND TOOL

From Bolt	Inlet Drive (Female)	From Torque Tool			
		6.35	9.5	12.7	19.0
	Width Across Flats (B)	2C	3C	4C	6C
	2.5	(430)			
	3	(431)	(440)		
	4	(432)	(441)		
	5		(442)		
	6		(443)	(450)	
	8			(451)	
	10			(452)	
	12			(453)	
	14			(454)	(460)
	17				(461)
	19				(462)

SOCKET FOR HEX HEAD CAP SCREWS



Note O-ring and pin are not included.



Auxiliary Equipment

To facilitate effective and convenient use of Tohnichi products, a number of auxiliary parts and special tools are available (Some torque tools are provided with the necessary auxiliary parts). We are ready to manufacture custom-made parts and tools to meet your requirements.

Special Tools for Torque Wrench

QLE ADJUSTING TOOL FOR QLE

This tool is used to set the torque of the large QLE adjustable wrenches.

Part #	Applicable Model
301	QLE550N-QLE2100N
	DQLE550N-DQLE1000N
	CLE550N-CLE1200N
	TIEQLE750N-TIEQLE1400N
	PHLE850N, PHLE1300N

SP THRUSTRING TOOL FOR SP

This tool is used to set the torque of preset types SP, RSP, QSP and CSP torque wrenches.

Part #	Tool #	Applicable Model
310	A-1	QSP/CSP1.5N-QSP/CSP6N
311	A-2	SP2N-SP19N, QSP/CSP12N,
		QSP/CSP25N, BQSP/BCSP25N
312	A-3	SP38N, SP67N, QSP/CSP50N-
		QSP/CSP140N, BQSP/BCSP50N-
313	A-4	BQSP/BCSP140N
		SP120N-SP310N, QSP200N-QSP280N
314	A-5	BQSP200N, BQSP/BCSP280N
		QSP/CSP420N, BQSP/BCSP420N
315	A-6	SP420N, SP560N

QSP3 ADJUSTING TOOLS FOR QSP3

Part #	Dimensions [mm]	Applicable Model
931	2.5 x 1.5 x 6	QSP/CSP25N3, QSP1.5N4-12N4
		BQSP/BCSP25N3, CSP1.5N4-CSP12N4
930	4 x 2.5 x 8	QSP/CSP50N3-QSP/CSP280N3
		BQSP100N4, BQSP200N4
		QSP100N4, QSP200N4
		BQSP/BCSP50N3-BQSP/BCSP280N3

DB TOOL SET FOR DB

This set of pliers is used to adjust the torque for dial type torque wrenches and torque checkers.

Part #	Applicable Model
316	DB, DBE, CDB-S, T-S, DOT

CARRYING CASE



Part #	Dimensions [mm]	Weight [kg]
842	QL50N, QL50N-MH, MTQL40N, MTQL70N, QL100N4-MH CL50N (x12D/15D), CL50N (x12D/15D)-MH, CL100Nx15D-MH (H60 x W400 x D70)	0.25
843	QL140N, QL140N-MH, MTQL140N, QL200N4, QL200N4-MH CL140Nx15D, CL140Nx15D-MH, CL200Nx19D, CL200Nx19D-MH (H60 x W520 x D80)	0.36
846	QL140N and below, QL140N-MH and below, MTQL140N and below, CL200Nx19D, CL200Nx19D-MH and below (H170 x W500 x D100)	1.0
847	QL280N, QL280N-MH and below CL280Nx22D, CL280Nx22D-MH and below (H170 x W740 x D100)	1.6

Special Tools for Torque Screwdriver

LTD, RTD ADJUSTING TOOL FOR LTD/RTD

This tool is used to adjust the torque of LTD and RTD torque screwdrivers.

Part #	Applicable Model
51	LTD/RTD15CN, LTD/RTD30CN
46	LTD/RTD60CN
47	LTD/RTD260CN
48	LTD/RTD500CN
49	LTD/RTD1000CN
1046	LTD/RTD120CN

LTD TIGHTENING TOOL FOR LTD

This tool makes tightening with large LTD much easier.

Part #	Applicable Model
31	LTD/RTD/NTD/RNTD500CN FTD400CN
32	LTD/NTD1000CN FTD8N, FTD16N
40	LTD2000CN

LTD, RTD PRESET HOOK SPANNER FOR LTD/RTD

This tool makes it easier to set the torque for mid. to large capacity LTD and RTD screwdrivers.

Part #	Applicable Model
52	LTD/RTD260CN
53	LTD/RTD500CN
54	LTD1000CN
55	LTD2000CN

NTD, RNTD ADJUSTING BAR FOR NTD/RNTD

This tool is used to set the torque of preset types NTD and RNTD screwdrivers.

Part #	Applicable Model
42	NTD/RNTD15CN-NTD/RNTD120CN
43	NTD/RNTD260CN
44	NTD/RNTD500CN-NTD/RNTD1000CN

TORQUE SCREWDRIVER ADAPTER

This accessory is used with TME2 and TM torque meters to test UNITORK and torque screwdrivers.

Part #	Applicable Model
30	LTD/RTD/NTD/RNTD FTD50CN-FTD400CN

Lubricant for repairing torque products EVERTORQUE

Model	Part #
EVERTORQUE	830









Applicable Models and Parts

	Applicable Model	Applicable Part
Click Type Torque Wrench	QL, QLE, CL, CLE, PQL, PCL, YCL etc.	Thrusting; Steel Ball Scale Piece, Adjusting Screw; Thread
	WQL	Thrusting; Steel Ball Scale Piece, Adjusting Screw; Thread Screw Knob, Protector; Joint
Click Type Torque Screwdriver	MPQL	Thrusting; Steel Ball Scale Piece, Adjusting Screw; Thread Ratchet, Marker Pipe; Joint
	RTD, RNTD	Main Shaft, Toggle Sheet; Serration
	RTD, LTD, BMLD	Case, Adjusting Piece; Thread











Connecting Cable

* The cable length is 2m.

■ EPP16M2 Printer Connecting Cable



Part #	Applicable Model	Figure	
379	CEM3-G/CEM3-P (P.31), CTA2 (P.20), R-DT999 (P.56), CTB2-G (P.31)		
380	TCC (P.47), CD42 (P.56)		
382	DOT3-G (P.46), LC2-G (P.48), TDT2-G (P.49), TME2 (P.50)		

■ PC Connecting Cable



Part #	Applicable Model	Figure		Plug
561	TCC (P.47), CD42 (P.56)			D-SUB 9 Pin Female
575	CEM3-G/CEM3-P (P.31), CTA2 (P.20), R-DT999 (P.56), CTB2-G (P.31)			D-SUB 9 Pin Female
584	CEM3-G/CEM3-P (P.31), CTA2 (P.20), R-DT999 (P.56), CTB2-G (P.31)			USB A type
383	DOT3-G (P.46), LC2-G (P.48), TDT2-G (P.49), TME2 (P.50)			D-SUB 9 Pin Female
384	ST2 (P.48), BTGE-G (P.49)			USB A type

Quick Charger, Battery Pack, AC Adapter


■ Quick Charger

Model	Applicable Model	Figure
RoHS BC-3-G	CEM3-G/CEM3-P (P.31), CTA2 (P.20) (100-120V) CTB2-G (P.31) CEM3-G/CEM3-P (P.31), CTA2 (P.20) (200-240V) CTB2-G (P.31)	
RoHS BC-4-2	ST2 (P.48)	

■ Battery Pack

Model	Applicable Model	Figure
BP-5	CEM3-G/CEM3-P (P.31) CTA2 (P.20), CTB2-G (P.31)	
NEW BP-100-3 RoHS	DOT3-G (P.46), LC2-G (P.48), TDT2-G (P.49), TME2 (P.50), CD42 (P.56)	

■ AC Adapter

Model	Applicable Model	Figure
RoHS BA-3	DOT3-G (P.46), LC2-G (P.48), TDT2-G (P.49)	

Model	Applicable Model	Figure
RoHS BA-4	TME2 (P.50)	