

Semi-Automatic Airtork A3/AC3

High Speed and High Precision bolt Tightening
by torque wrench with integrated air motor



ACLS50N3

- Reduce man-hours compare to conventional two-step tightening process
- Upgraded ratchet drive makes it possible to use with an anti-vibration socket
- Error-proofing (Pokayoke) version available
- Nine Models cover torque range of 3 to 180N.m

RoHS



Features

● Air motor Integrated torque wrench

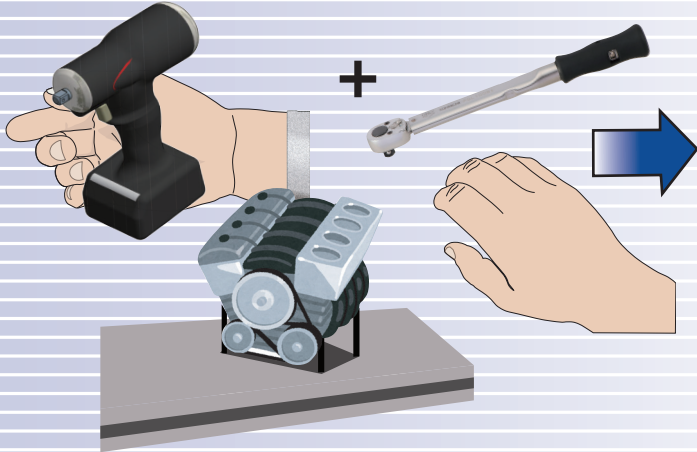
No more Two-step operation

Step 1

Provisional tightening

Step 2

Final tightening



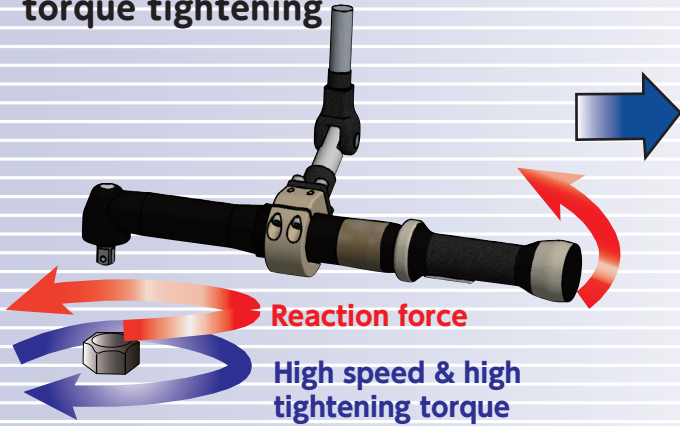
Reduce Your Tact Time with A One-step Process



● Reaction arm free design

Strong reaction force by high speed and high torque tightening

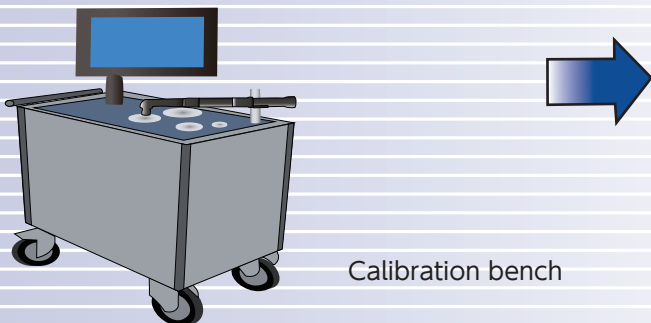
No Need for Reaction Arm



● Perform calibration on standard tester

Does Not Require Expensive Equipment with joint simulator or angle encoder for calibration

Low Cost Maintenance



Calibration bench



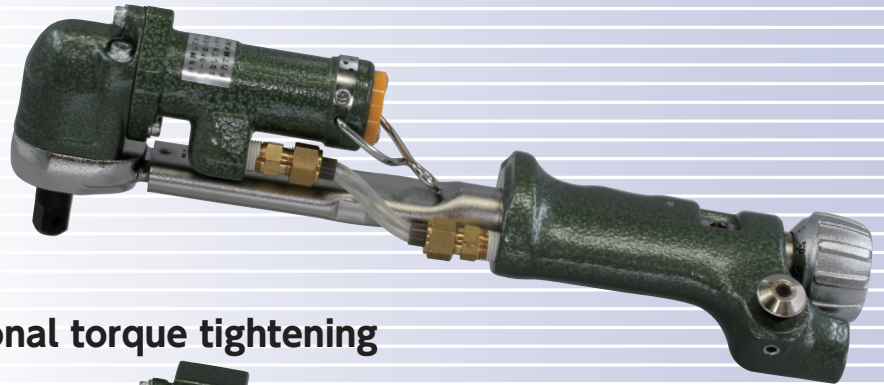
Torque wrench tester
DOTE100N4-G

- **Select from High or Low Provisional Tightening Torque Styles**

- **A Series**

- A3/A3LS for Low Provisional torque tightening**

- Light weight and small air motor is ideal for use in limited space.



- **AC Series**

- AC3/AC3LS for High Provisional torque tightening**

- Reduction gear integrated air motor generates high speed and high power provisional tightening torque for general applications.



- **New square drive head accommodates anti-vibration sockets**



Standard extension socket



Anti-vibration socket

- **Various tightening verification systems are available**



Output OK/NG judgment result through I/O.

CNA-4mk3 Counter

wired



Standard completion signal type
Model: A3LS/AC3LS



Output torque value and Judgment result through RS232C
OK/Hi NG/ Lo NG result from I/O.

CD5 Display

wired



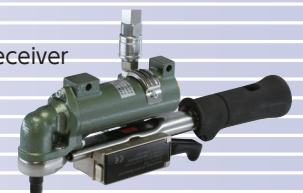
Special wired data transfer type
Model: ACQSPLD3/ACQSPLDC3



Output torque value, ID, and Judgment result through RS232C
OK/Hi NG/ Lo NG result from I/O.

R-FHD256 Receiver

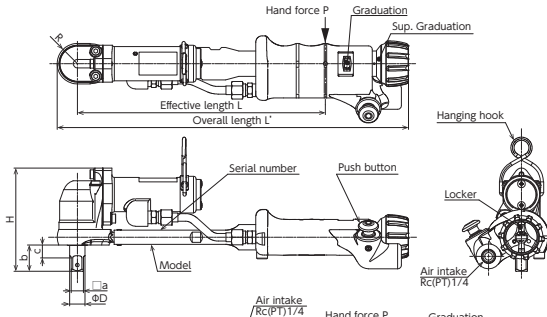
wireless



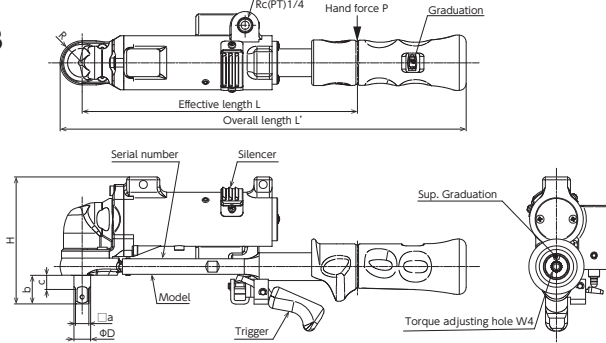
Special wireless data transfer type
Model: ACQSPFD3

Dimensions and Specifications

■ A3

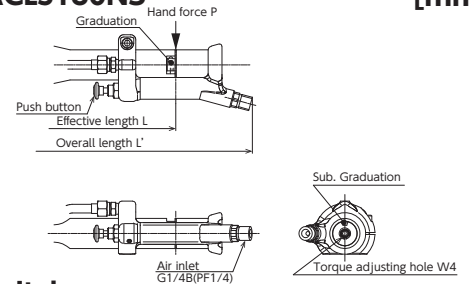


■ AC3

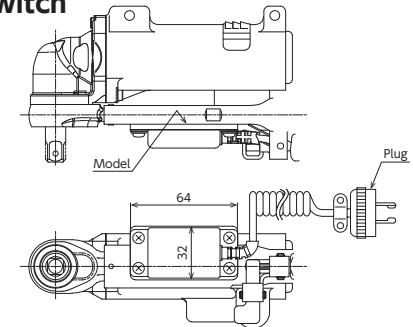


■ A/AC180N3 A/ACLS180N3

[mm]



■ A/ACLS3 Limit switch



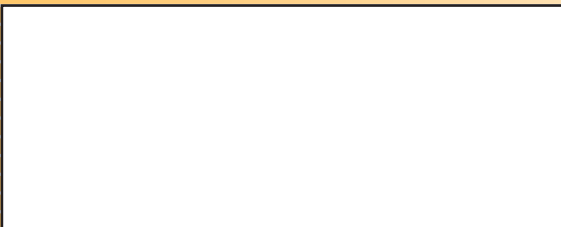
Accuracy +/- 3%

Standard, S.I.	A10N3	A25N3	A50N3	-	A100N3	A180N3	AC25N3	AC50N3	-	AC100N3	AC180N3	
w/ Limit Switch	ALS10N3	ALS25N3	ALS50N3	-	-	-	ACLS25N3	ACLS50N3	-	ACLS100N3	ACLS180N3	
N.m	Range	3-10	5-25	10-50	-	20-100	40-180	5-25	10-50	-	20-100	40-180
	Grad.	0.1	0.25	0.5	-	1	2	0.25	0.5	-	1	2
Standard, Metric	A100M3	A250M3	A500M3	-	A1000M3	A1800M3	AC250M3	AC500M3	-	AC100M3	AC1800M3	
w/ Limit Switch	ALS100M3	ALS250M3	ALS500M3	-	-	-	ACLS250M3	ACLS500M3	-	ACLS100M3	ACLS1800M3	
kgf.cm	Range	30-100	50-250	100-500	-	200-1000	400-1800	50-250	100-500	-	200-1000	400-1800
	Grad.	1	2.5	5	-	10	20	2.5	5	-	10	20
Standard, English	A90I3-3/8	A200I3-3/8	A400I3-3/8	A800I3-3/8 A75F3-3/8	-	A130F3-1/2	AC200I3-3/8	AC400I3-3/8	AC800I3-3/8 AC75F3-3/8	-	AC130F3-1/2	
w/ Limit Switch	ALS90I3-3/8	ALS200I3-3/8	ALS400I3-3/8	-	-	-	ACLS200I3-3/8	ACLS400I3-3/8	ACLS800I3-3/8 ACLS75F3-3/8	-	ACLS130F3-1/2	
lbf.in/ lbf.ft	Range	30-90	50-200	100-400	(lbf.in) 200-800 (lbf.ft) 15-75	-	30-130	50-200	100-400	(lbf.in) 200-800 (lbf.ft) 15-75	-	30-130
	Grad.	1	2.5	5	(lbf.in) 10 (lbf.ft) 1	-	2	2.5	5	(lbf.in) 10 (lbf.ft) 1	-	2
Provisional Tightening [Nm]	1.8		2.5		5		11		17.5		19	
Free Rotation [r.p.m]	750		800		1000		900		800			
Air Pressure [MPa]	0.6											
Air Mass Flow [m³/min]	0.2		0.29		0.31		0.2		0.29		0.31	
L	196		252		400		198.5		238		400	
L'	277		338		487		293		333.5		487.5	
H	82.8		95.2		114		92.8		107.7		124.5	
R	16		17		20		16		17		20.5	
□ a	9.53			12.7			9.53			12.7		
b	20.9		24.9		26.4		20.9		24.9		26.4	
c	11			12.2			11			12.2		
φ D	12			16			12			16		
φ d	3.1			4.1			3.1			4.1		
Weight [kg]	1.0 (1.2)		1.4 (1.7)		2.6 (3.5)		1.5 (1.7)		2.0 (2.2)		3.3 (3.5)	

- Note**
1. The required hose diameter of A10N3 - 180N3, AC25N-50N are φ5, AC100N3, 180N3 are φ6.
 2. ISO VGA32 (turbin oil #90) is required as the rubrication.
 3. Rated voltage of the limit switch is AC/DC 30V, below 1A.
 4. The provisional tightening torque is not guaranteed.



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