

Right Angle Series

Torque range
46 - 2,000 Nm

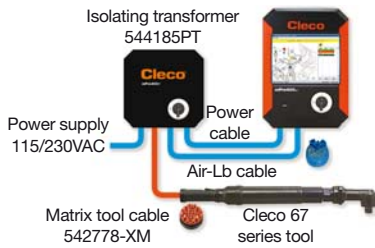
Bolt size
M18 - M36

- Brushless motor
- High-resolution resolver
- Integrated transducer
- Memory chip with all relevant tool data



67EA235AL6

All 67 Series tools require an isolating transformer (544185PT) for operation with a Cleco Global Controller.



Motor
67

Supply
E - Electrical

Locking
Pin locking

Tool Type

A - Right angle

Max. Torque (Nm)

Under 60 Nm, rounded up to next 1 Nm.
Above 60 Nm, rounded up to next 5 Nm.

Output Drive

AL6 - 3/4" sq. dr.
AM6 - 3/4" sq. dr.
ML6 - 3/4" sq. dr.
AH8 - 1" sq. dr.

Model Number	Torque Range	Speed	Weight*	Output Drive	Length	Angle Head	
						Side to Centre	Height
	Nm	rpm	kg		mm	mm	mm
67EA235AL6	46 - 230	135	5.9	3/4"	655	26	58
67EA255AL6	55 - 255	115	5.9	3/4"	655	26	58
67EA310ML6	60 - 310	100	9.2	3/4"	739	27	65
67EA340AM6	70 - 335	90	9.5	3/4"	803	35	79
67EA460AM6	95 - 460	66	9.5	3/4"	803	35	79
67EA570AM6	115 - 570	53	9.5	3/4"	803	35	79
67EA860AH8	175 - 860	33	10.3	1"	643	38	237
67EA1035AH8	210 - 1035	25	10.5	1"	668	38	237
67EA1340AH8	270 - 1340	20	10.5	1"	668	38	237
67EA1700AH8	340 - 1700	16	10.5	1"	668	38	237
67EA2010AH8	400 - 2000	13	10.5	1"	668	38	237

*Weights do not include tool cable or reaction bar.

NOTE: All 67 Series tools require an isolating transformer (544185PT) for operation with a Cleco Global Controller. Contact your regional service centre for commissioning support.

GENERAL:

All tools must be used with Apex Tool Group approved cables and controllers.

STANDARD EQUIPMENT:
Matrix connector

OPTIONAL:
Standard tool cable 542778-XX, RA rotating cable 542780-XX, straight rotating cable 544056-XX, extension cable 542779-XX. Additional accessories: See catalogue SP-1020.

Cleco Corded Inline Nutrunners with Transducer

Inline Series

Torque range
2 - 150 Nm

Bolt size
M5 - M14

XX	E	S	E	XXX	XX	X
Motor 18, 48	Supply E - Electrical	Connector E Air-LB			Locking Pin locking B - Ball locking	Output Drive Q - Quick-change chuck D2 - 1/4" sq. dr. D3 - 3/8" sq. dr. D4 - 1/2" sq. dr.
Tool Type S - Inline						
Max. Torque (Nm) Under 60 Nm, rounded up to next 1 Nm. Above 60 Nm, rounded up to next 5 Nm.						



18ESE06Q



48ESE25D3

Model Number	Torque Range	Speed	Weight*	Output Drive	Length	Side to Centre
	Nm	rpm	kg		mm	mm
18ESE06Q	2 - 6	4000	1.1	1/4" QC	312	23
18ESE06D2	2 - 6	4000	1.1	1/4" sq dr.	300	23
18ESE12Q	3 - 12	1820	1.2	1/4" QC	330	23
18ESE12D3	3 - 12	1820	1.2	3/8" sq. dr.	315	23
18ESE17Q	4 - 17	1290	1.2	1/4" QC	330	23
18ESE17D3	4 - 17	1290	1.2	3/8" sq. dr.	315	23
18ESE22D3	5 - 22	985	1.2	3/8" sq. dr.	315	23
18ESE31D3	7 - 31	695	1.2	3/8" sq. dr.	315	23
48ESE12Q	3 - 12	4000	1.4	1/4" QC	343	23
48ESE12D2	3 - 12	4000	1.4	1/4" sq dr.	330	23
48ESE25D3	6 - 25	1820	1.5	3/8"	345	23
48ESE36D3	8 - 36	1290	1.5	3/8"	345	23
48ESE48D3	10 - 48	985	1.5	3/8"	351	23
48ESE65D4	13 - 65	750	2.4	1/2"	420	29
48ESE90D4	19 - 90	510	2.5	1/2"	435	29
48ESE125D4	26 - 125	360	2.5	1/2"	435	29
48ESE150D4	31 - 150	240	2.5	1/2"	435	29

*Weights do not include tool cable.

GENERAL:

All tools must be used with Apex Tool Group approved cables and controllers.

STANDARD EQUIPMENT:

Air-LB connector. Additional grip included with 18ES12Q and 18ES12D3.
Tool available with matrix connector on request.
Reaction bar included with inline tools with torque 17 - 150 Nm.

OPTIONAL:

See page 86

Mounting plates: 543231 (all except the sizes listed below in catalogue SP-1020)

543235 - 18ESE06Q/D2, 48ESE12Q/D2

49087108 - 48ESE65D4, 48ESE90D4, 48ESE125D4 & 48ESE150D4

Additional accessories: See catalogue SP-1020.

Inline Series

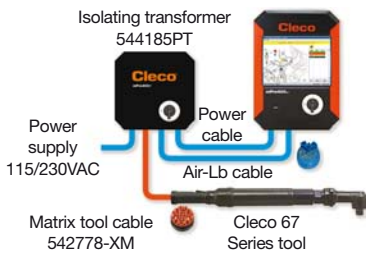
Torque range
13 - 4,050 Nm

Bolt size
M10 - M42



67ES135D4

All 67 Series tools require an isolating transformer (544185PT) for operation with a Cleco Global Controller.



XX	E	S	XXXX	XXX	X
Motor 67	Supply E - Electrical				Locking Pin locking up to 1/2" B - Ball locking
Tool Type S - Inline			Output Drive D4 - 1/2" sq. dr. D6 - 3/4" sq. dr. D8 - 1" sq. dr. D12 - 1 1/2" sq. dr.		
Max. Torque (Nm) Under 60 Nm, rounded up to next 1 Nm. Above 60 Nm, rounded up to next 5 Nm.					

Model Number	Torque Range	Speed	Weight*	Output Drive	Length	Side to Centre
	Nm	rpm	kg		mm	mm
67ES65D4	13 - 64	535	4.7	1/2"	533	33
67ES105D4	21 - 104	330	4.7	1/2"	533	33
67ES135D4	27 - 135	245	4.7	1/2"	533	33
67ES190D6	38 - 190	165	5.3	3/4"	521	33
67ES285D6	57 - 285	115	5.3	3/4"	521	33
67ES385D6	77 - 386	83	5.3	3/4"	521	33
67ES475D6	95 - 475	67	5.4	3/4"	531	33
67ES610D6	122 - 610	50	5.4	3/4"	531	33
67ES850D8	170 - 848	33	7.7	1"	605	38
67ES1050D8	210 - 1050	27	7.7	1"	605	38
67ES1670D8	334 - 1668	17	7.7	1"	605	38
67ES2060D8	412 - 2060	14	7.7	1"	605	38
67ES4050D12	810 - 4050	6	20.5	1 1/2"	622	60

*Weights do not include tool cable or reaction bar (if tool equipped with a reaction bar).
NOTE: All 67 Series tools require an isolating transformer (544185PT) for operation with a Cleco Global Controller.

GENERAL:
All tools must be used with Apex Tool Group approved cables and controllers.

STANDARD EQUIPMENT:
Matrix connector, reaction bar, additional reaction bar for 67ES4050D12.

OPTIONAL:
See page 86
Additional accessories: See catalogue SP-1020.

Cleco Corded Pistol Grip Nutrunners with Transducer

Pistol Grip Series

Torque range
2 - 1000 Nm

Bolt size
M5 - M22

XX	E	P	E	XXX	XX	X
Motor 18, 48	Supply E - Electrical	Connector E Air-LB			Locking Pin locking up to 1/2"	Output Drive
Tool Type P - Pistol				Output Drive Q - Quick-change chuck D2 - 1/4" sq. dr. D3 - 3/8" sq. dr. D4 - 1/2" sq. dr. D6 - 3/4" sq. dr. D8 - 1" sq. dr.		
Max. Torque (Nm) Under 60 Nm, rounded up to next 1 Nm. Above 60 Nm, rounded up to next 5 Nm.						



Model Number	Torque Range	Speed	Weight*	Output Drive	Length	Side to Centre
	Nm	rpm	kg		mm	mm
18EPE06Q	2 - 6	4000	1.0	1/4" QC	178	21
18EPE06D2	2 - 6	4000	1.0	1/4"	165	21
18EPE12Q	3 - 12	1820	1.1	1/4" QC	196	21
18EPE12D3	3 - 12	1820	1.1	3/8"	183	21
18EPE17Q	4 - 17	1290	1.1	1/4" QC	196	21
18EPE17D3	4 - 17	1290	1.1	3/8"	183	21
18EPE22D3	5 - 22	985	1.1	3/8"	183	21
18EPE31D3	7 - 31	695	1.1	3/8"	183	21
48EPE12Q	3 - 12	4000	1.2	1/4" QC	208	21
48EPE12D2	3 - 12	4000	1.2	1/4"	196	21
48EPE25D3	5 - 25	1820	1.3	3/8"	213	21
48EPE36D3	8 - 36	1290	1.3	3/8"	213	21
48EPE48D3	10 - 48	985	1.4	3/8"	218	21
48EPE65D4	13 - 65	750	2.3	1/2"	290	28
48EPE90D4	19 - 90	510	2.4	1/2"	305	28
48EPE125D4	26 - 125	360	2.4	1/2"	305	28
48EPE150D4	31 - 150	240	2.4	1/2"	305	23
48EPE200D6	125 - 195	180	4.3	3/4"	410	29
48EPE500D6	300 - 500	53	4.5	3/4"	410	29
48EPE1000D8	500 - 1000	33	7.3	1"	486	38

*Weights do not include tool cable or swivel bail.

GENERAL:

All tools must be used with Apex Tool Group approved cables and controllers.

STANDARD EQUIPMENT:

Air-LB connector.

Additional grip included with 18EPE12Q and 18EPE12D3.

Reaction bar included with pistol grip tools with torque 17 - 1000 Nm. Ball locking optional tool available with matrix connector on request.

OPTIONAL:

See page 86

Additional accessories: See catalogue SP-1020.



18EPE06QP

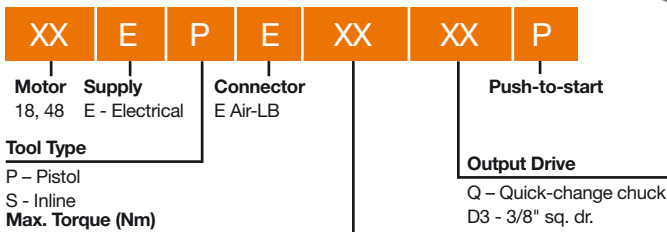


18ESE06QP

Push-to-Start Series

Torque range
2 - 12 Nm

Bolt size
M5 - M6



Under 60 Nm, rounded up to next 1 Nm.

Model Number	Torque Range	Speed	Weight*	Output Drive	Length	Side to Centre
	Nm	rpm	kg		mm	mm
18EPE06QP	2 - 6	4000	1.19	1/4" QC	238	21
18EPE06D3P	2 - 6	4000	1.19	3/8"	224	21
18EPE12QP	3 - 12	1820	1.27	1/4" QC	196	21
18EPE12D3P	3 - 12	1820	1.27	3/8"	224	21
18ESE06QP	2 - 6	4000	1.31	1/4" QC	375	23
18ESE06D3P	2 - 6	4000	1.31	3/8"	360	23
18ESE12QP	3 - 12	1820	1.40	1/4" QC	375	23
18ESE12D3P	3 - 12	1820	1.40	3/8"	360	23

*Weights do not include tool cable or swivel bail.

GENERAL:
All tools must be used with Apex Tool Group approved cables and controllers.

STANDARD EQUIPMENT:
Air-LB connector. Additional grip (301857) included with 18EPE12Q and 18EPE12D3.
Tool available with matrix connector on request.

OPTIONAL:
See page 86
Additional accessories: See catalogue SP-1020.

Cleco Corded Inline Floating Spindle Nutrunners with Transducer

Inline Floating Spindle Series

Torque range
2 - 248 Nm

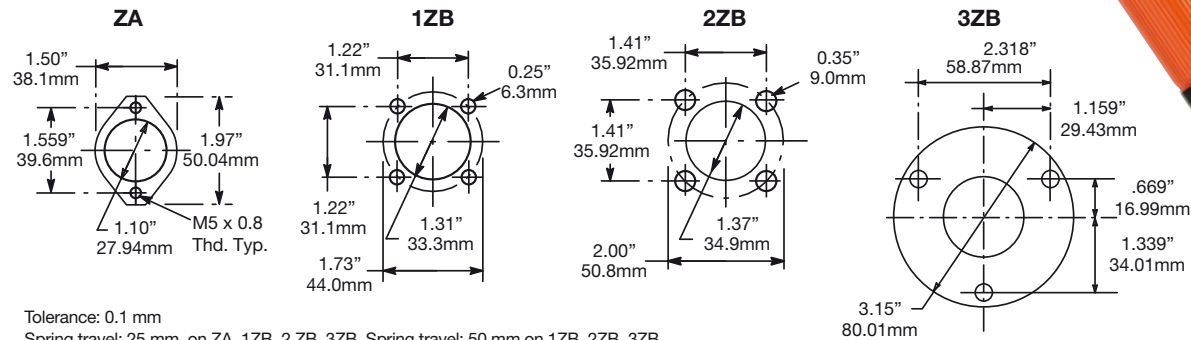
Bolt size
M5 - M16

XX	E	S	E	XXX	XXX
Motor 18, 48	Supply E - Electrical	Connector E Air-LB		Output Drive ZA - 1/4" sq. dr. 1ZB - 3/8" sq. dr. 2ZB - 1/2" sq. dr. 3ZB - 3/4" sq. dr.	
Tool Type S - Inline					
Max. Torque (Nm) Under 60 Nm, rounded up to next 1 Nm. Above 60 Nm, rounded up to next 5 Nm.					

48ESE12ZA



Hole pitch dimensions



Tolerance: 0.1 mm

Spring travel: 25 mm on ZA, 1ZB, 2ZB, 3ZB Spring travel: 50 mm on 1ZB, 2ZB, 3ZB

Model Number	Torque Range	Speed	Weight*	Output Drive	Length	Side to Centre
	Nm	rpm	kg		mm	mm
18ESE06ZA	2 - 6	4000	1.4	1/4"	394	23
18ESE12ZA	3 - 12	1820	1.5	1/4"	406	23
18ESE17ZA	4 - 17	1290	1.5	1/4"	406	23
48ESE12ZA	3 - 12	4000	1.5	1/4"	425	23
48ESE271ZB	8 - 27	1820	2.6	3/8"	559	23
48ESE361ZB	7 - 36	1290	2.6	3/8"	559	23
48ESE602ZB	11 - 57	855	3.8	1/2"	620	28
48ESE702ZB	14 - 68	570	3.8	1/2"	620	28
48ESE802ZB	17 - 82	450	4.4	1/2"	678	31
48ESE1152ZB	25 - 115	320	4.4	1/2"	678	31
48ESE1502ZB	31 - 150	245	4.4	1/2"	678	31
48ESE1653ZB	33 - 165	220	6.6	3/4"	726	40
48ESE2503ZB	50 - 248	145	6.6	3/4"	726	40

*Weights do not include tool cable or reaction bar (if tool equipped with a reaction bar).

GENERAL:

All tools must be used with Apex Tool Group approved cables and controllers.

STANDARD EQUIPMENT:

Air-LB connector.
Tool available with matrix connector on request.

OPTIONAL:

See page 86
Additional accessories: See catalogue SP-1020.



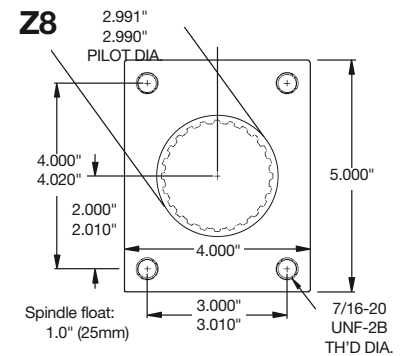
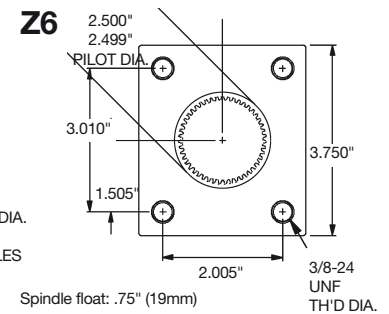
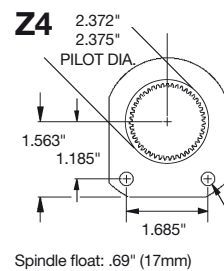
67ES2060Z8

Inline Floating Spindle Series

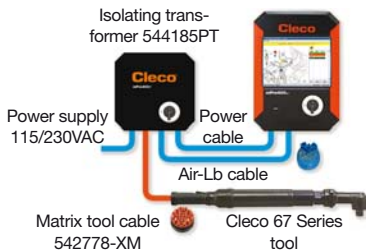
Torque range
13 - 2,060 Nm

Bolt size
M6 - M36

Mounting plates, dimensions



All 67 Series tools require an isolating transformer (544185PT) for operation with a Cleco Global Controller.



67 **E** **S** **XXXX** **XX**

Motor Electric
67

Tool Type
S - Inline

Max. Torque (Nm)

Under 60 Nm, rounded up to next 1 Nm.
Above 60 Nm, rounded up to next 5 Nm.

Output Drive
Z4 - 1/2" sq. dr.
Z6 - 3/4" sq. dr.
Z8 - 1" sq. dr.

Model Number	Torque Range	Speed	Weight*	Output Drive	Length	Side to Centre
	Nm	rpm	kg		mm	mm
67ES65BZ4	13 - 64	535	4.9	1/2"	533	33
67ES105BZ4	21 - 104	330	4.9	1/2"	533	33
67ES135BZ4	27 - 135	245	4.9	1/2"	533	33
67ES190Z6	38 - 190	165	7.1	3/4"	559	33
67ES285Z6	57 - 285	115	7.1	3/4"	559	33
67ES385Z6	77 - 386	83	7.1	3/4"	559	33
67ES475Z6	95 - 475	67	7.3	3/4"	569	33
67ES610Z6	122 - 610	50	7.3	3/4"	569	33
67ES850Z8	170 - 848	33	9.1	1"	605	38
67ES1050Z8	210 - 1050	27	9.1	1"	605	38
67ES1670Z8	334 - 1668	17	9.1	1"	605	38
67ES2060Z8	412 - 2060	14	9.1	1"	605	38

*Weights do not include tool cable or reaction bar (if tool equipped with a reaction bar).
NOTE: All 67 series tools require an isolating transformer (544185PT) for operation with a Cleco Global Controller.

GENERAL:
All tools must be used with Apex Tool Group approved cables and controllers.

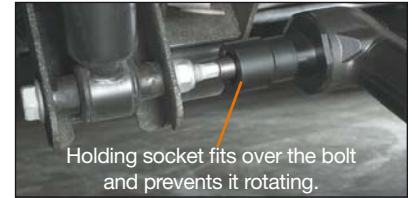
STANDARD EQUIPMENT:
Matrix connector, 67 series mounting plate.

OPTIONAL:
Standard tool cable 542778-XX, RA rotating cable 542780-XX, straight rotating cable 544056-XX, extension cable 542779-XX.
Additional accessories: See catalogue SP-1020.

Cleco Corded Hold & Drive Nutrunners with Transducer

Hold & Drive Series

Torque range
11 - 227 Nm



"Hold & Drive" bolts are used with these tools for automotive and truck chassis applications. They reduce the assembly operation to one person who works from one side of the workpiece. The bolt is held by the tool while the nut is tightened from the same side.

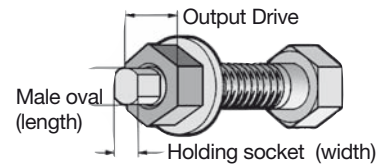
Hold & Drive nomenclature

Angle head nomenclature

48	E	A	E	XXX	H	H	X	XX	X	XX	X
Motor 48	Electric	Tool Type A - Right angle Max. Torque	Connector E Air-LB		Head Type H - Hold & Drive	Hold & Drive			Holder Shape F - Female sq. dr. M - Male sq. dr. T - Torx O - Female oval	Oval Dim. (length) If socket type = 0 (female oval)	Holder Size EA - 1/4EC - 3/8 M5 - 5 mm15 - T15 M6 - 6 mm20 - T20 MA - 7 mm25 - T25 MB - 8 mm (5/16") 30 - T30 MC - 9 mm40 - T40 MD - 10 mm45 - T45 ME - 11 mm (7/16") MF - 12 mm
					Retainer Shaft 3 - 3 1/2" 4 - 4" 5 - 5 3/8" 6 - 5 7/8" 9 - 9 1/2"						

Socket

EH - 11/16"	MG - 13 mm	MM - 19 mm (3/4")	MS - 25 mm
EJ - 13/16"	MH - 14 mm	MN - 20 mm	MT - 26 mm
EK - 7/8"	MI - 15 mm	MO - 21 mm	MU - 27 mm (1 1/16")
EM - 1"	MJ - 16 mm (5/8")	MP - 22 mm	MX - 30 mm (1 3/16")
EO - 1 1/8"	MK - 17 mm	MQ - 23 mm	MZ - 32 mm (1 1/4")
	ML - 18 mm	MR - 24 mm (15/16")	



Model Number	Torque Range	Speed	Length	Weight*	Head Height	Side to Centre
	Nm	rpm	mm	kg	mm	mm
48EAE53H	11 - 53	850	512	3.60	61	27
48EAE75H	15 - 74	600	512	4.03	61	27
48EAE110H	23 - 112	400	512	4.03	61	27
48EAE135H	28 - 134	270	522	4.03	61	27
48EAE230H	47 - 227	150	563	4.79	61	27

*Weights do not include tool cable or reaction bar.

NOTE: To order a tool, use socket and tool nomenclatures. Only order the socket nomenclature for complete head assembly. Consult the parts list for individual socket part numbers.

GENERAL:

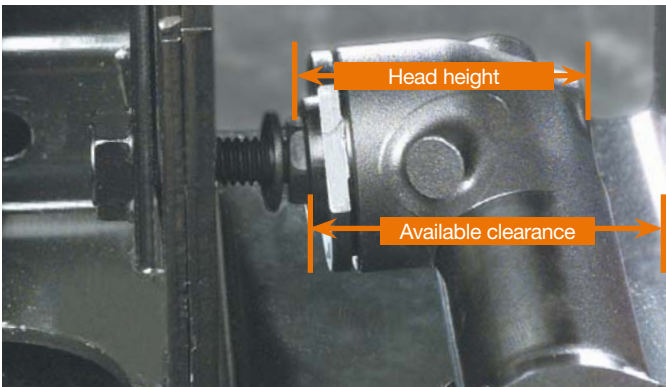
All tools must be used with Apex Tool Group approved cables and controllers.

STANDARD EQUIPMENT:

Air-LB connector. Spring travel 25.4 mm standard for holding bits. Tool available with matrix connector on request.

OPTIONAL:

Additional accessories: See catalogue SP-1020.



Flush socket tools have plenty of clearance for applications with little space. Electric flush socket tools fasten with much greater precision than tools with a crowfoot attachment.

Flush Socket Series

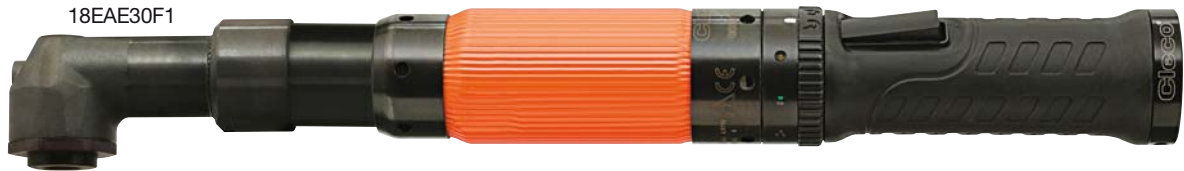
Torque range
4.9 - 230 Nm

Bolt size
M8 - M21

- Motor resolver
- High-resolution resolver
- Integrated transducer
- Memory chip with all relevant tool data

X dimension for flush socket

Head	in.	mm	Socket Size Range
F1	1.54	39	8 - 15 mm
F2	1.69	43	10 - 15 mm
F3	2.32	59	13 - 21 mm
F4	2.4	61	17 - 21 mm



Flush socket tool nomenclature

XX	E	A	E	XXX	FX
Motor 18 48	Electric	Connector E Air-LB	Tool Type A - Right angle	Max. Torque F1 - 16, 23, 30 Nm F2 - 37, 52 Nm F3 - 53, 75, 110 Nm F4 - 135, 230 Nm Under 60 Nm, rounded up to next 1 Nm. Above 60 Nm, rounded up to next 5 Nm.	Head Type F1 head: 8 - 15 mm socket capacity F2 head: 10 - 15 mm socket capacity F3 head: 13 - 21 mm socket capacity F4 head: 13 - 21 mm socket capacity

Socket nomenclature

FX	XX	X	X
Flush Socket 1 F1 2 F2 3 F3 4 F4	Output Drive 0 - Standard 1 - Fast lead 2 - Magnetic	Extension 0 - Flush 4 - 1/2" 8 - 1" 2 - 1/4" 6 - 3/4"	Socket Size EC - 3/8" MB - 8 mm (5/16") MJ - 16 mm (5/8") EE - 1/2" MD - 10 mm MK - 17 mm EF - 9/16" ME - 11 mm (7/16") ML - 18 mm EH - 11/16" MF - 12 mm MM - 19 mm (3/4") EJ - 13/16" MG - 13 mm MN - 20 mm MH - 14 mm MO - 21 mm MI - 15 mm

Model Number	Head Type	Torque Range	Speed	Weight*	Length	Angle Head	
						Side to Centre	Height
						mm	mm
18EAE16F1	F1	4.9 - 16	1225	2.00	406	14	39
18EAE23F1	F1	4.6 - 23	860	2.00	406	14	39
18EAE30F1	F1	6.0 - 30	655	2.00	406	14	39
48EAE37F2	F2	8.0 - 37	1225	2.43	474	17	43
48EAE52F2	F2	11 - 52	860	2.43	474	17	43
48EAE53F3	F3	11 - 53	850	2.74	509	22	59
48EAE75F3	F3	15 - 75	600	2.74	509	22	59
48EAE110F3	F3	23 - 110	400	3.38	521	22	59
48EAE135F4	F4	27 - 135	270	4.03	522	27	61
48EAE230F4	F4	47 - 230	150	4.79	563	27	61

*Weights do not include tool cable or reaction bar (if tool equipped with a reaction bar).
NOTE: To order a tool, use socket and tool nomenclatures. Only order the socket nomenclature for complete head assembly. Consult the parts list for individual socket part numbers.

GENERAL:
All tools must be used with Apex Tool Group approved cables and controllers.

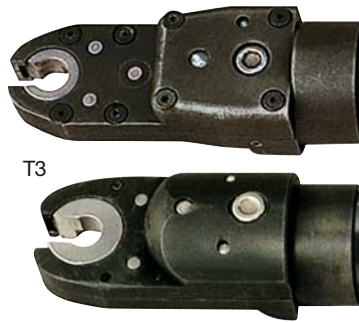
STANDARD EQUIPMENT:
Air-LB connector. Tool available with matrix connector on request.

OPTIONAL:
Additional accessories: See catalogue SP-1020.

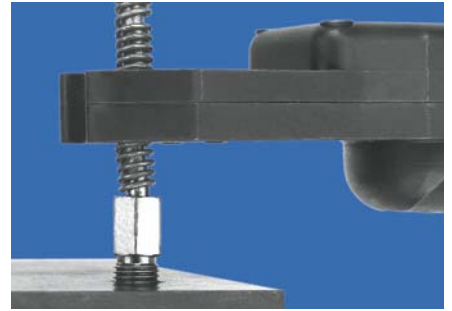
Cleco Corded Tube Nutrunners with Transducer

Tube Nut Series

Torque range
10 - 40 Nm



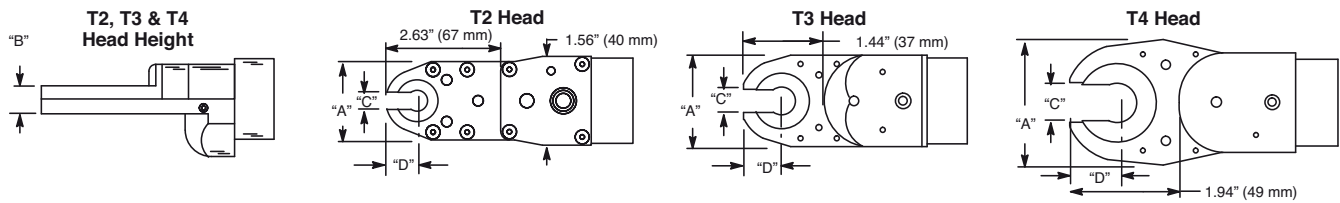
T3



The 48ET tube nut wrench changes direction each time the lever is actuated. If the direction of rotation is counter clockwise, the socket stops in the open position.



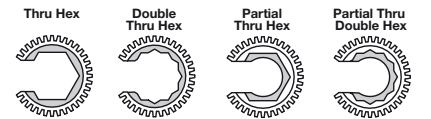
T4



Tube nut tool nomenclature

Socket nomenclature

XX	E	T	E	XX	XX	KSX	XX	XX	X
Motor 48	Electric	Connector E Air-LB				Head Type KS2 - T2 KS3 - T3 KS4 - T4			Output Drive 0 - Partial thru hex 1 - Thru hex
Tool Type T - Tube nut						Extension 0 - Flush 4 - 1/2" 8 - 1" 2 - 1/4" 6 - 3/4"			
Max. Torque (Nm) Under 60 Nm, rounded up to next 1 Nm.						Socket Sizes			
Head Type T2 - 20 Nm T3 - 30 Nm T4 - 40 Nm									



2 - Double thru hex
3 - Partial double thru hex

Max. Hex Socket Size

MG, EE T2 head type
MM, 3/4" T3 head type
MU, 1 1/16" T4 head type 00, ##
(specials) All head types

EA - 1/4"	M5 - 5 mm	MH - 14 mm	MP - 22 mm
EC - 3/8"	M6 - 6 mm	MI - 15 mm	MQ - 23 mm
EE - 1/2"	MA - 7 mm	MJ - 16 mm (5/8")	MR - 24 mm (15/16")
EF - 9/16"	MB - 8mm (5/16")	MK - 17mm	MS - 25 mm
EH - 11/16"	MD - 10 mm	ML - 18 mm	MT - 26 mm
EJ - 13/16"	ME - 11 mm (7/16")	MM - 19 mm (3/4")	MU - 27 mm (1 1/16")
EK - 7/8"	MF - 12 mm	MN - 20 mm	
EM - 1"	MG - 13 mm	MO - 21 mm	

Model Number	Max. Output Drive	Torque Range	Speed	Weight*	Length	Head			
						A Width	B Blade Height	C Opening	D End/Centre
						Nm	rpm	kg	mm
48ETE20T2	1/2"	10 - 20	1425	2.0	430	36	14	7	13
48ETE30T3	3/4"	15 - 30	1030	2.0	422	42	15	13	19
48ETE40T4	1 1/16"	20 - 40	770	2.3	454	60	15	18	24

*Weights do not include tool cable or reaction bar.

NOTE: To order a tool, use socket and tool nomenclatures. Order T2XXXX for a complete head assembly (e.g. T2MF02). To order individual sockets, use the prefix KS (e.g. KS2EA01 for a T2 1/4" flush, though hex socket).

GENERAL:

All tools must be used with Apex Tool Group approved cables and controllers.

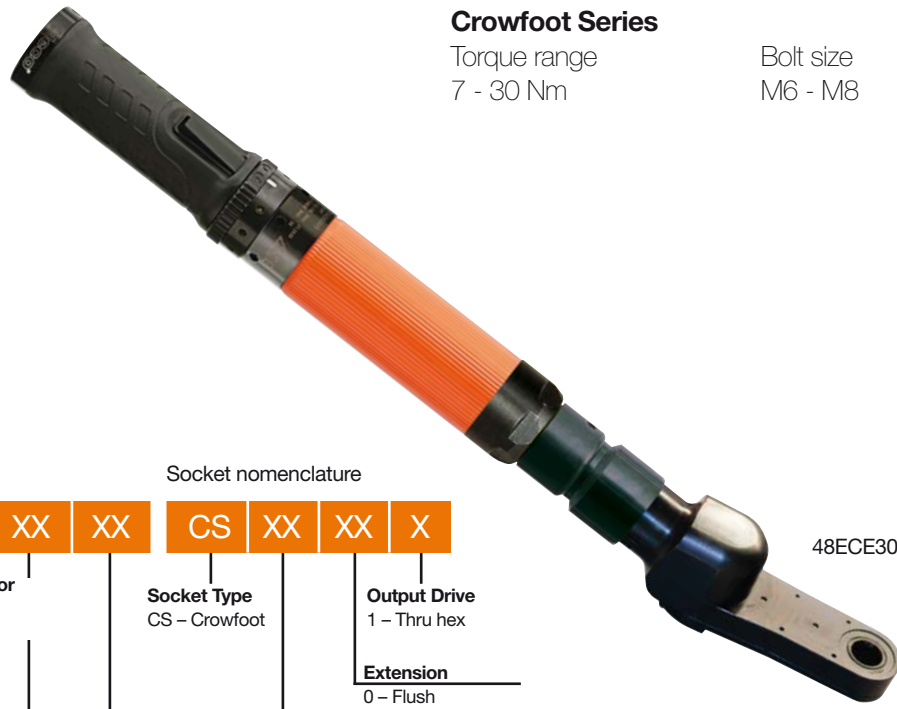
STANDARD EQUIPMENT:

Air-LB connector. Tool available with matrix connector on request.

OPTIONAL:

See page 86

Additional accessories: See catalogue SP-1020.

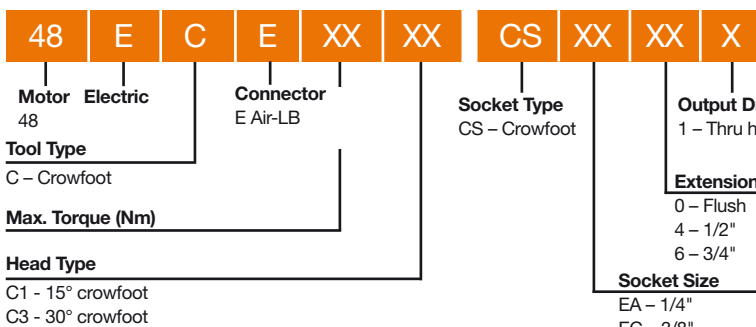


Crowfoot Series

Torque range
7 - 30 Nm

Bolt size
M6 - M8

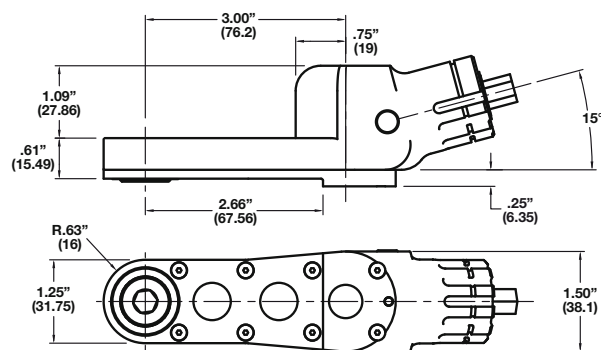
Crowfoot tool nomenclature



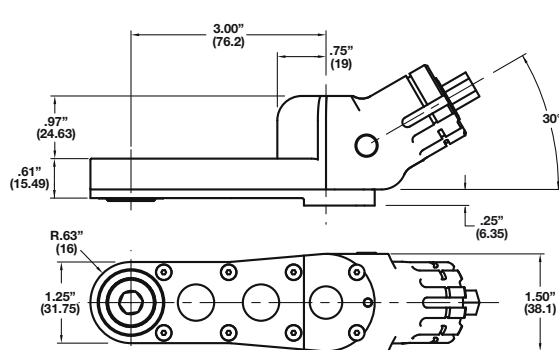
48ECE30C 1

*Fragile. Light duty applications.

C1 - 15° head (part number 301959)
Max. recomm. torque: 30 Nm



C3 - 30° head (part number 301960)
Max. recomm. torque: 30 Nm



Model Number		Torque Range	Speed	Weight*	Length
15° Head	30° Head	Nm	rpm	kg	mm
48ECE30C1	48ECE30C3	10.5 - 30	860	2.3	521

*Weights do not include tool cable or reaction bar.

NOTE: To order a tool, use socket and tool nomenclatures. To order individual sockets, use the prefix KS (e.g. CSEA01 for a 1/4" flush, though hex socket).

GENERAL:

All tools must be used with Apex Tool Group approved cables and controllers.

STANDARD EQUIPMENT:

Air-LB connector. Tool available with matrix connector on request.

OPTIONAL:

Additional accessories: See catalogue SP-1020.

Cleco Corded Right Angle Floating Spindle Nutrunners with Transducer

Right Angle Series with Floating Spindle

Torque range
5.1 - 255 Nm

Bolt size
M7 - M18



48EAE135S461

Right angle series with floating spindle nomenclature

XX	E	A	X	XXX	XX	X	X	
Motor 18 48 67	Electric	Connector - Air-LB			Sq. Dr. 3 - 3/8" (S1, S2) 4 - 1/2" (S3, S4) 6 - 3/4" (S4)	Extension 1 - 1.13" (S1), 1.00" (S2 & S3), 1.25" (S4) 2 - 2.13" (S1), 3.00" (S2), 2.5" (S4 1/2") 5 - 5.13" (S2), 4.25" (S4) 6 - 6.0" (S4 1/2"), 7.0" (S4 3/4") 11 - 11.0" (S4 3/4")		
Max. Torque (Nm) S1 head - 16, 23 or 30 Nm S2 head - 37 or 52 Nm S3 head - 53, 75, 95 or 110 Nm S4 head - 135 or 230 Nm (48 Series) S4 head - 150, 185, 210, 235 or 255 Nm (67 Series)			Tool Termination S1 Sliding (floating) spindle S2 Sliding (floating) spindle S3 Sliding (floating) spindle S4 Sliding (floating) spindle					

Model Number	Torque Range	Speed	Weight*	Output Drive	Length	Side to Centre
	Nm	rpm	kg		mm	mm
18EAE16S131	5.1 - 16	1225	2.00	3/8"	406	14
18EAE23S131	7.2 - 23	860	2.00	3/8"	406	14
18EAE30S131	6.0 - 30	655	2.00	3/8"	406	14
48EAE37S231	8.0 - 37	1225	2.43	3/8"	474	17
48EAE52S231	11 - 52	860	2.43	3/8"	474	17
48EAE53S341	11 - 53	850	2.74	1/2"	509	22
48EAE75S341	15 - 75	600	2.74	1/2"	509	22
48EAE95S341	20 - 95	460	3.38	1/2"	521	22
48EAE110S341	23 - 110	400	3.38	1/2"	521	22
48EAE135S461	28 - 135	270	4.03	3/4"	522	27
48EAE230S461	47 - 230	150	4.79	3/4"	563	27
67EA150S461	30 - 150	210	5.90	3/4"	655	26
67EA185S461	37 - 185	170	5.90	3/4"	655	26
67EA210S461	42 - 210	155	5.90	3/4"	655	26
67EA235S461	46 - 230	135	5.90	3/4"	655	26
67EA255S461	55 - 255	115	5.90	3/4"	655	26

*Weights do not include tool cable or mounting plate.

NOTE: All 67 Series tools require an isolating transformer (544185PT) for operation with a Cleco Global Controller

GENERAL:

All tools must be used with Apex Tool Group approved cables and controllers.

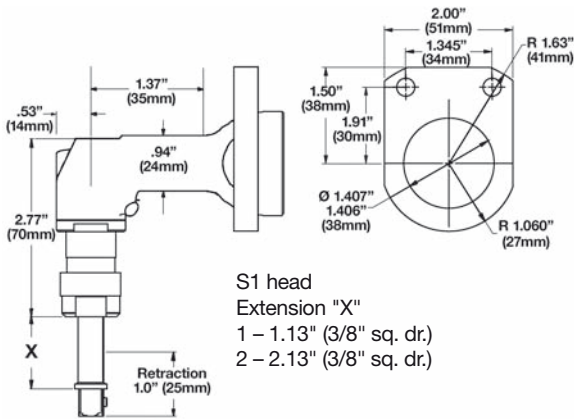
STANDARD EQUIPMENT:

18-/48 tools: Air-LB connector, mounting plate.
Tool available with matrix connector on request.
67 tools: Matrix connector, mounting plate.

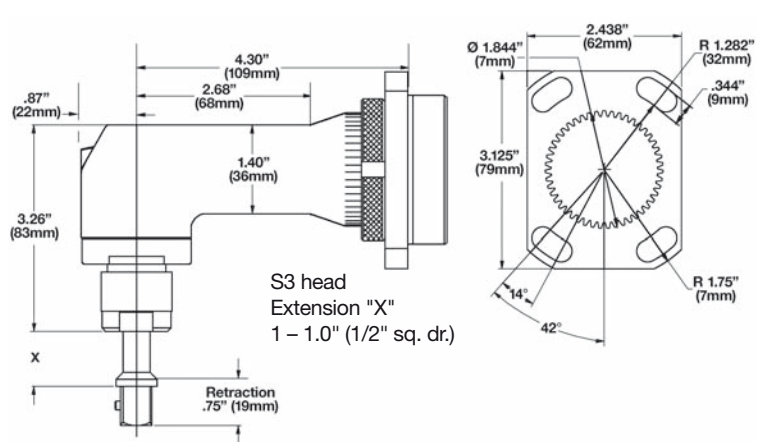
OPTIONAL:

Additional accessories: See catalogue SP-1020.

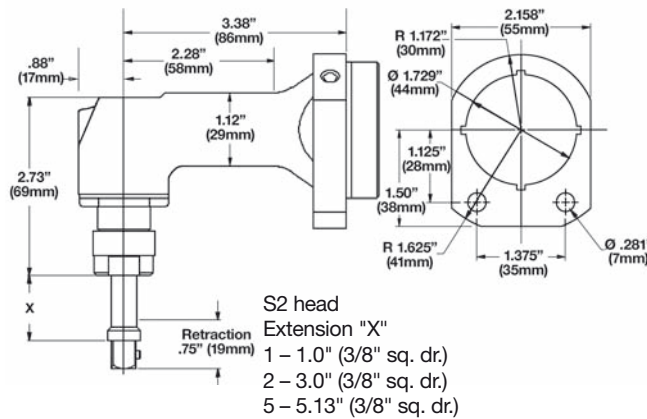
18EA, 48EA & 67EA floating spindle right angle heads



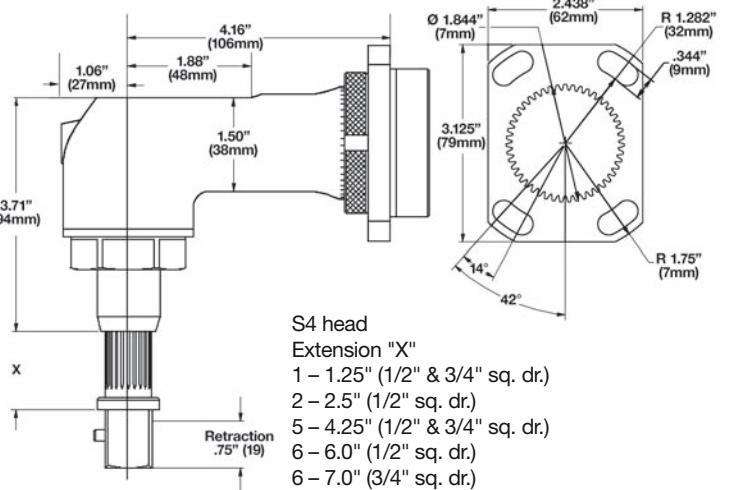
S1 head
Extension "X"
1 - 1.13" (3/8" sq. dr.)
2 - 2.13" (3/8" sq. dr.)



S3 head
Extension "X"
1 - 1.0" (1/2" sq. dr.)



S2 head
Extension "X"
1 - 1.0" (3/8" sq. dr.)
2 - 3.0" (3/8" sq. dr.)
5 - 5.13" (3/8" sq. dr.)



S4 head
Extension "X"
1 - 1.25" (1/2" & 3/4" sq. dr.)
2 - 2.5" (1/2" sq. dr.)
5 - 4.25" (1/2" & 3/4" sq. dr.)
6 - 6.0" (1/2" sq. dr.)
6 - 7.0" (3/4" sq. dr.)
11 - 11.0" (3/4" sq. dr.)

Cleco Current Control Right Angle Nutrunners

Right Angle Series

Torque range
2 - 230 Nm

Bolt size
M5 - M16



XX	C	A	E	XXX	XXX	X
Motor 18, 48	Current Control	Connector E - Air-LB				Locking Pin locking B - Ball locking
Tool Type A - Right angle				Output Drive AL2 - 1/4" sq. dr. AM4 - 1/2" sq. dr. AL3 - 3/8" sq. dr. AH4 - 1/2" sq. dr. AM3 - 3/8" sq. dr. MH4 - 1/2" sq. dr. AX6 - 3/4" sq. dr.		
Max. Torque (Nm) Under 60 Nm, rounded up to next 1 Nm. Above 60 Nm, rounded up to next 5 Nm.						

Model Number	Torque Range	Speed	Weight*	Output Drive	Length	Angle Head	
						Side to Centre	Height
	Nm	rpm	kg		mm	mm	mm
18CAE08AL2	2 - 8	3000	1.3	1/4"	345	13	36
18CAE15AM3	4 - 15	1300	1.5	3/8"	376	15	41
18CAE22AM3	5 - 22	920	1.5	3/8"	376	15	41
18CAE28AM3	6 - 28	700	1.5	3/8"	376	15	41
48CAE15AL3	3 - 15	2855	1.7	3/8"	398	15	41
48CAE28AL3	6 - 28	1300	1.9	3/8"	410	15	41
48CAE41AM3	9 - 41	1090	2.0	3/8"	440	19	48
48CAE58AM3	12 - 58	770	2.0	3/8"	440	19	48
48CAE58AM4	12 - 58	770	2.0	1/2"	440	19	48
48CAE90AH4	18 - 87	515	3.0	1/2"	470	21	58
48CAE105AH4	21 - 104	340	3.0	1/2"	470	21	58
48CAE135MH4	27 - 133	265	3.3	1/2"	485	24	61
48CAE175AX6	36 - 176	190	4.6	3/4"	549	27	69
48CAE230AX6	46 - 230	145	4.6	3/4"	549	27	69

*Weights do not include tool cable or reaction bar.

GENERAL:
All tools must be used with Apex Tool Group approved cables and controllers.

STANDARD EQUIPMENT:
Air-LB connector, locking ball optional.

OPTIONAL:
Standard tool cable 961259-XX, RA rotating cable 961260-XX, straight rotating cable 961251-XX, extension cable 961249-XX.
Additional accessories: See catalogue SP-1020.



Inline Series

Torque range
2 - 150 Nm

Bolt size
M5 - M14

48CSE25D3

18CSE06Q

XX	C	S	E	XXX	XXX	X
Motor 18, 48	Current Control		Connector E - Air-LB			Locking Pin locking B - Ball locking
Tool Type S - Inline				Output Drive		
Max. Torque (Nm) Under 60 Nm, rounded up to next 1 Nm. Above 60 Nm, rounded up to next 5 Nm.				Q - Quick-change chuck D2 - 1/4" sq. dr. D3 - 3/8" sq. dr. D4 - 1/2" sq. dr.		

Model Number	Torque Range	Speed	Weight*	Output Drive	Length	Side to Centre
	Nm	rpm	kg		mm	mm
18CSE06Q	2 - 6	4000	1.1	1/4" QC	312	23
18CSE06D2	2 - 6	4000	1.1	1/4"	300	23
18CSE12Q	3 - 12	1820	1.2	1/4" QC	330	23
18CSE12D3	3 - 12	1820	1.2	3/8"	315	23
18CSE17Q	4 - 17	1290	1.2	1/4" QC	330	23
18CSE17D3	4 - 17	1290	1.2	3/8"	315	23
18CSE22D3	5 - 22	985	1.2	3/8"	315	23
18CSE31D3	7 - 31	695	1.2	3/8"	315	23
48CSE12Q	3 - 12	4000	1.4	1/4" QC	343	23
48CSE12D2	3 - 12	4000	1.4	1/4"	330	23
48CSE25D3	6 - 25	1820	1.5	3/8"	345	23
48CSE36D3	8 - 36	1290	1.5	3/8"	345	23
48CSE48D3	10 - 48	985	1.5	3/8"	351	23
48CSE65D4	13 - 65	750	2.4	1/2"	420	29
48CES90D4	19 - 90	510	2.5	1/2"	435	29
48CSE125D4	26 - 125	360	2.5	1/2"	435	29
48CSE150D4	31 - 150	240	2.5	1/2"	435	29

*Weights do not include tool cable or reaction bar.

GENERAL:

All tools must be used with Apex Tool Group approved cables and controllers.

STANDARD EQUIPMENT:

Air-LB connector, additional handle with 18CSE12Q and 18CSE12D3. Reaction bar included with inline tools with torque 17 - 150 Nm.
Ball locking optional

OPTIONAL:

Mounting plates: 543231 (all except those listed below)

543235 - 18ES06Q/D2, 48ES12Q/D2

49087108 - 48ES65D4, 48ES90D4, 48ES125D4, 48ES150D4

Additional accessories: See catalogue SP-1020.

Cleco Current Control Pistol Grip Nutrunners

Pistol Grip Series

Torque range
2 - 150 Nm

Bolt size
M5 - M14



XX	C	P	E	XXX	XX	X
Motor 18, 48	Current Control		Connector E Air-LB			Locking Pin locking B - Ball locking
Tool Type P - Pistol					Output Drive Q - Quick-change chuck D2 - 1/4" sq. dr. D3 - 3/8" sq. dr. D4 - 1/2" sq. dr.	
Max. Torque (Nm) Under 60 Nm, rounded up to next 1 Nm. Above 60 Nm, rounded up to next 5 Nm.						

Model Number	Torque Range	Speed	Weight*	Output Drive	Length	Side to Centre
	Nm	rpm	kg		mm	mm
18CPE06Q	2 - 6	4,00	1.0	1/4" QC	178	21
18CPE06D2	2 - 6	4000	1.0	1/4"	165	21
18CPE12Q	3 - 12	1820	1.1	1/4" QC	196	21
18CPE12D3	3 - 12	1820	1.1	3/8"	183	21
18CPE17Q	4 - 17	1290	1.1	1/4" QC	196	21
18CPE17D3	4 - 17	1290	1.1	3/8"	183	21
18CPE22D3	5 - 22	985	1.1	3/8"	183	21
18CPE31D3	7 - 31	695	1.1	3/8"	183	21
48CPE12Q	3 - 12	4000	1.2	1/4" QC	211	21
48CPE12D2	3 - 12	4000	1.2	1/4"	196	21
48CPE25D3	6 - 25	1820	1.3	3/8"	213	21
48CPE36D3	8 - 36	1290	1.3	3/8"	213	21
48CPE48D3	10 - 48	985	1.4	3/8"	218	21
48CPE65D4	13 - 65	750	2.3	1/2"	274	28
48CPE90D4	19 - 90	510	2.4	1/2"	287	28
48CPE125D4	26 - 125	360	2.4	1/2"	287	28
48CPE150D4	31 - 150	240	2.4	1/2"	287	23

*Weights do not include tool cable or reaction bar.

GENERAL:
All tools must be used with Apex Tool Group approved cables and controllers.

STANDARD EQUIPMENT:
Air-LB connector, swivel bail, additional handle with 18CPE12Q & 18CPE12D3.
Reaction bar included with inline tools with torque 17 - 150 Nm. Ball locking optional

OPTIONAL:
Standard tool cable 961259-XX, RA rotating cable 961260-XX,
straight rotating cable 961251-XX, extension cable 961249-XX.
Additional accessories: See catalogue SP-1020.

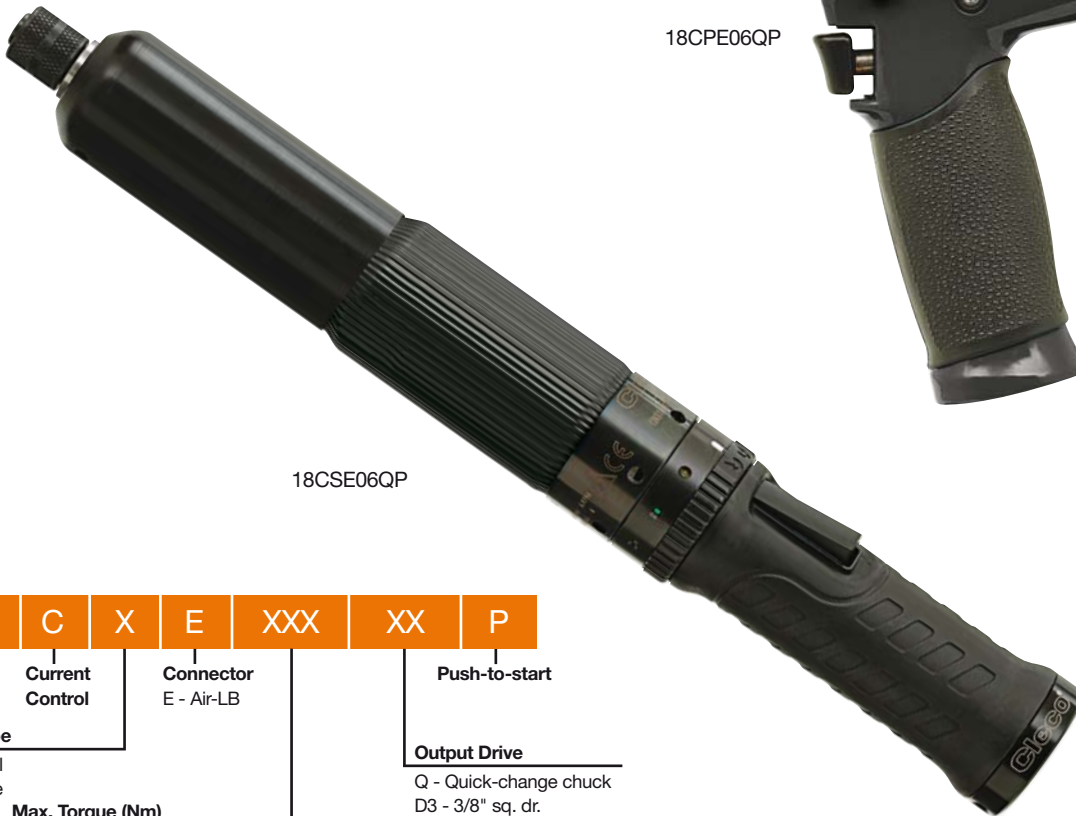
Push-to-Start Series

Torque range
2 - 12 Nm

Bolt size
M5 - M6



18CPE06QP



18CSE06QP

XX	C	X	E	XXX	XX	P
Motor 18, 48	Current Control		Connector E - Air-LB			Push-to-start
Tool Type			Output Drive			
P - Pistol S - Inline			Q - Quick-change chuck D3 - 3/8" sq. dr.			
Max. Torque (Nm)						
Under 60 Nm, rounded up to next 1 Nm.						

Model Number	Torque Range	Speed	Weight*	Output Drive	Length	Side to Centre
	Nm	rpm	kg		mm	mm
18CPE06QP	2 - 6	4000	1.19	1/4" QC	238	21
18CPE06D3P	2 - 6	4000	1.19	3/8"	224	21
18CPE12QP	3 - 12	1820	1.27	1/4" QC	238	21
18CPE12D3P	3 - 12	1820	1.27	3/8"	224	21
18CSE06QP	2 - 6	4000	1.31	1/4" QC	375	23
18CSE06D3P	2 - 6	4000	1.31	3/8"	360	23
18CSE12QP	3 - 12	1820	1.40	1/4" QC	375	23
18CSE12D3P	3 - 12	1820	1.40	3/8"	360	23

*Weights do not include tool cable or reaction bar.

GENERAL:
All tools must be used with Apex Tool Group approved cables and controllers.

STANDARD EQUIPMENT:
Air-LB connector, swivel bail pistol models, additional handle (301857) with 18CPE12Q & 18CPE12D3.

OPTIONAL:
Standard tool cable 961259-XX, RA rotating cable 961260-XX, straight rotating cable 961251-XX, extension cable 961249-XX.
Additional accessories: See catalogue SP-1020.

Cleco Electric Control Nutrunners – Accessories



Tool Type	Model Number	Cover	Rotating Suspension Bail	Mounting Plate	Extension Kit
Right angle	17/18EA08AL2	205832	541715-2	---	---
	17/18EA...AM3	205834	541715-2	---	535832
	47/48EA...AM3/4	543070	541715-2	543235	---
	47/48EA...AH4	543070	541715	543230	542428
	47/48EA135MH4	543071	541715	543230	542428
	47/48EA...AX5	205838	541715	543232	---
	67EA...AL6	205838	35007004	49097101	48316033
			(included in the standard equipment for the tool)		
	67EA...AM6	---	48A17006	45017152	---
			(included in the standard equipment for the tool)		
Flush socket	17/18EA...F1...	---	541715-2	57217101 (screw 57218103 required)	
	47/48EA...F2...	---	541715-2	43287131	
	47/48EA...F3...	---	541715-2	49097101 (lock nut 49098103 required)	
	47/48EA...F4...	205838	541715	49097101 (lock nut 49098103 required)	
Hold-N-Drive	47/48EA ...H...over 100NM	205838		49097101 (lock nut 49098103 required)	
	47/48EA ...H...under 100NM	205838	541715-2	49097101 (lock nut 49098103 required)	

Joint Simulator with Mounting Plate for Hard/Soft Fastening Cases

Order No.	Description
W09164K	5 Nm hard/15 Nm soft
W08780K	10 Nm hard/30 Nm soft
W08779K	20 Nm hard/50 Nm soft

W08779K



Tool & cable tester

Order No.	Description
961024	Tool & Cable Tester Tool memory programming
542991	Tool & Cable Tester

Note: Adapter cable for Air-LB tool on request.



Tool Cable with Air-Lb

Order No.	Description
961259-XXX	Standard cable with fixed connector
961260-XXX	Standard cable with rotating right angle connector
961250-XXX	Special cable, highly flexible for greatest possible durability, fixed connector
961251-XXX	Special cable, highly flexible for greatest possible durability, rotating inline connector
961252-XXX	Special cable, highly flexible for greatest possible durability, rotating right angle connector

Extension Cable with Air-Lb

Order No.	Description
961249-XXX	Standard extension cable
961248-XXX	Connection cable from the STMH module in the control cabinet to the tool cable



961259



961250



961251



961252



961249

Extension Cable with Matrix Connector

Tool	Extension	Rotating Cable	Extension	
			Ft.	M
542778-1M*	542779-1M	542780-1M*	3	1
542778-2M	542779-2M	542780-2M*	6	2
542778-3M*	542779-3M	542780-3M	9	3
542778-6M	542779-6M	542780-6M	19.5	6
542778-8M	542779-8M	542780-8M	26	8
542778-10M	542779-10M	542780-10M	33	10
542778-15M	542779-15M	542780-15M	49	15
	542779-20M		66	20
	542779-25M		82	25
	542779-30M		98	30
	542779-40M		131	40
542778-50M	542779-50M	542780-50M	164	50

Rotating tool cable, can be rotated by approx. 330°



* Must be used with the extension cable 542779.

Extension cable 542779-3M



Light. Intelligent. Full per-

LiveWire 2 offers functions for precise torque, angle and speed control for safety-critical fastening cases, packed in a new, light, wireless design. With more than 1700 fastening operations per battery charge and the quick charging feature you are assured long tool operating times for the assembly of your safety-critical applications.

LiveWire™ has been designed and tested for usage in a harsh industrial environment.

New Diversity Antenna System (2.4/5 GHz)

- Optimised 5GHz performance
- Double antenna system
- Uniband 3 support up to 5.825 GHz / channel 165



Digital Process Control

- Autom. joint number worker prompting
- Autom. selection of the process visualisation
- Configurable error handling



Electronic intelligence

- Integrated controller with current/power monitoring
- Integrated servo with I/O signal processing
- Supply voltage is measured automatically
- 512-cycle memory buffer



Cleco Cordless LiveWire 5.5-70 Nm

Cleco Cordless LiveWire 2 5.5-50 Nm

360 grams lighter