



For over 40 years AIMCO has been working with manufacturers around the world, we are the complete global source for all assembly, fastening, and critical bolting needs. AIMCO can effectively and swiftly meet your needs whether you're in Thailand fastening a 3 mm nut at 3 Nm, or in Tennessee, USA torquing the last lug nut. AIMCO provides the tools and solutions, on a global scale, that guarantee the success of your project. It is with great pride that AIMCO can say the products that we manufacture are **MADE IN THE USA**.

ISO 9001: 2015 Certified

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\* E logo indicates where ERGO-DRIVE sockets/extensions benefit tool operation.

ERGO-DRIVE sockets are uniquely designed to seat deeper on the tool anvil while an O-ring inside the socket fits tight onto the anvil to reduce vibration. By reducing run-out and vibration, ERGO-DRIVE sockets allow the most repeatable, accurate rundowns, ensuring excellent product quality, longer tool life, and better ergonomics for the tool user.

Look for the ERGO-DRIVE € logo in this catalog to see where ERGO-DRIVE sockets/extensions benefit tool operation, operator, and rundown. See page 142 for ERGO-DRIVE details.



### **PRODUCTIVITY**

#### The speed and efficiency of the assembly process

Every manufacturer wants to produce finished goods in the most cost-effective manner

possible. Whether the customer is a large automotive manufacturer, building several hundred vehicles daily, or an electronics company producing individual, custom made components, AIMCO provides products and services that allow each company to work at their ideal pace in order to keep its processes running efficiently.



### RELIABILITY

#### The total cost of tool maintenance and repair

To keep production lines running, tools must perform reliably. AIMCO helps manufacturers face

the challenges of maintenance, repair and lost labor time by offering products with superior workmanship and durability. By combining high quality products with a detailed and flexible service-training program, AIMCO ensures its tools will meet the customer's expectations of reliability.



### **ERGONOMICS**

### The relationship between assembler and the assembly process

Employees are the most important assets of any company. Protecting these individuals from job related health issues is critical. To help its customers face the challenges surrounding

ergonomics, AIMCO focuses on providing products that combine a lack of torque reaction, low vibration, light weight, as well as quiet and simple operation. These features allow assemblers to do their job in the safest possible manner and help manufacturers avoid the often hidden costs of workplace injuries.



### **QUALITY**

#### The ability of the tool to adhere to process requirements

The most important challenge faced by many companies is to meet the customer's demands for

quality. AIMCO provides assembly tools that have been tested and proven to meet the most stringent engineering specifications. AIMCO backs those tools up with its innovative AuditorTM torque measurement products. This allows manufacturers to focus on their most important goal—creating a quality product.



PERQ

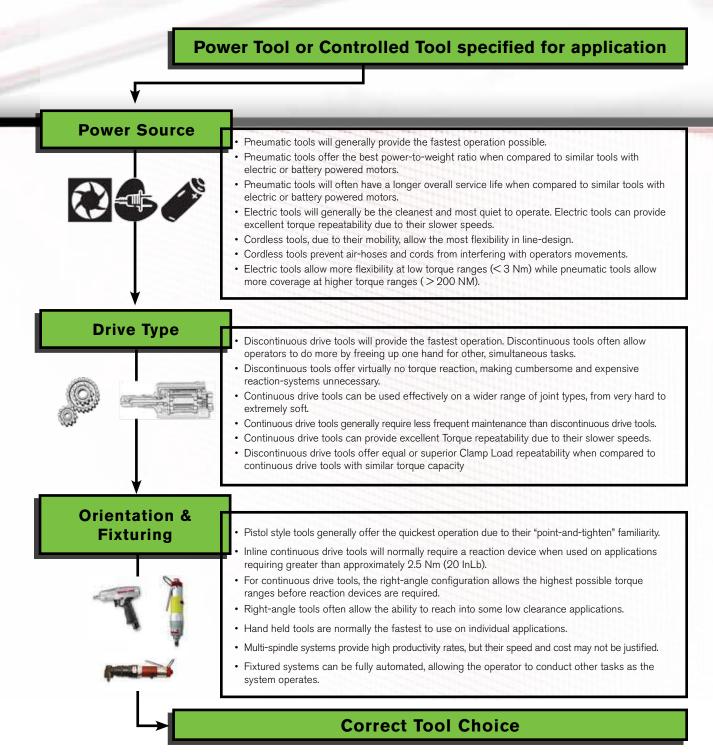
**PERQ**<sup>®</sup> is the industry-standard formula that matches the needs of manufacturers with the assembly tools they use in their processes.

AIMCO and its distributors evaluate each manufacturer based on the  $PERQ^{(R)}$  formula to determine that company's unique blend of the  $PERQ^{(R)}$  elements – productivity, ergonomics,

reliability and quality – we then provide tooling options that will enhance that mix. The end result is a manufacturing process that runs efficiently, produces high quality products and does so at the lowest possible cost.

Combining PERQ® with AIMCO's vast experience and unequalled service will enable any manufacturer to succeed in the global marketplace.

Each of the **PERQ**<sup>(R)</sup> elements acts as a gear – each interacts with the others to affect the overall profitability of the manufacturing process. AIMCO looks at each step in the manufacturing process to determine the best type of tool, or equipment, for that application. Only AIMCO, with its extensive product lineup, can offer the manufacturer the ideal tool for the job, whether it be continuous drive or pulse tool, electric, pneumatic or battery powered.





### **OVERVIEW**

### The speed and efficiency of the assembly process

AIMCO's commitment to you doesn't end with the purchase of our tools. Our goal is to educate you and your team on the most effective and efficient ways to utilize our tools; therefore, consistently producing a quality product.

One of the many benefits of purchasing AIMCO tools is the opportunity to attend our Tool-U training. AIMCO believes this is one of the greatest assets we can offer you. AIMCO has spent valuable time and dollars in setting up a

training program at our corporate headquarters in Portland, Oregon, that will enable your team to receive effective technical and practical training. Our training program is not performed in just one corner of our facility; virtually our entire facility is accessed for training individuals tailored to their specific needs and applications. This is essential for the continued success of our training.











The objective of the Tool-U program is to train your team from a technical aspect, learning how to effectively trouble shoot in order to reduce down time, as well as testing and proper use of the tool for maximum performance.

We do not depend on just one individual to train our customers; AIMCO utilizes a team of experts to share their knowledge with you. Our training programs have been designed to cover all elements influencing the fastening process. The first key to





success is understanding the mechanics of the fastened joint; AIMCO then explores the synergy between the joint, power tool, torque measurement and operator handling. The knowledge you gain from participating in the Tool University program can be applied to almost any assembly process regardless of the tool brand.

AIMCO is so committed to ensuring you receive proper training that this program is offered to our customers at no charge.







### **OVERVIEW**

#### The speed and efficiency of the assembly process

AIMCO's Technical and Repair Service departments are one of the biggest value adds in the industry. We don't just work for you, we work with you. AIMCO's Repair and Technical Field Services provide support unmatched by our competitors. Our skilled technicians work closely with our Technical Services group, as well as our expert team of engineers, to share knowledge, keep up with new technologies, and improve processes.





### **GUARANTEED**

### The relationship between assembler and the assembly process

When AIMCO receives tools and equipment for servicing, they are pre-tested and inspected to identify issues and provide pertinent feedback to the user on getting the most out of their tool investment. We provide precise repair estimates giving the best value for your money. Repairs are completed using factory standards, parts, and processes. Once a repair is complete, it is tested, and/or calibrated, using N.I.S.T. certified measuring equipment, and guaranteed to perform to factory specifications.







### **CUSTOMER SERVICE**

The total cost of tool maintenance and repair

To keep production lines running, tools must perform reliably. AIMCO helps manufacturers face the challenges of maintenance, repair, and lost labor time by offering products with superior workmanship and durability. By combining high quality products with a detailed and flexible service-training program, AIMCO ensures its tools will meet the expectations of reliability.

# FOLLOW THROUGH The ability of the tool to adhere to be

The ability of the tool to adhere to process requirements

The most important challenge faced by most companies is to meet its customer's demands for quality. AIMCO provides assembly tools that have been tested and proven to meet the most stringent engineering specifications. AIMCO backs those tools with its innovative Auditor TM torque measurement products. This allows manufacturers to focus on their most important goal — satisfied customers.









### **ACRADYNE® GEN IV CONTROLLER**



#### **GEN IV CONTROLLER**

The AcraDyne Gen IV controller is the culmination of more than 40 years of serving our industrial fastening customers with 15 years of designing and manufacturing DC tools that are Made in the USA. It is filled with countless advanced capabilities and features. The Gen IV Controller is the core of the modular AcraDyne DC system. One controller will command any tool in the AcraDyne line from 0.5 Nm to 8100 Nm, all with one cable.

#### **FEATURES AND BENEFITS**

- Backward compatible Works with any Gen III tool from 0.5 Nm – 8100 Nm.
- Bright LED screen View Torque, Angle, Bolt Count, Parameter Set, Job/Sequence easily from a distance.
- Graphical Screen with on-board software that is the same on all devices
- Web browser based programing Receive data on your PC, Tablet, SmartPhone, or any other webcapable device. You can use more than one device at a time: Be in program mode on one device while reviewing real-time curves on another while watching tool diagnostics on a third.
- Multiple Fastening Strategies Program up to 256 Parameters with as many as 20 Steps.
- Jobs Capability 99
- Backup & Restore through USB or Ethernet.
- Removable Flash Memory
- Assignable I/O (8 X 8)
- Rundown storage 1,000,000
- Curve storage 10,000
- Event log 5,000
- Real-time curve viewing
- Programmable Calibration and Service alerts.
- Top exit tool cable option available.



### **NETWORKING CAPABILITIES**

- Ethernet Protocols including Open Protocol, Ethernet/IP & PFCS
- Modular field bus connectivity: PROFIBUS, DeviceNET, Modbus TCP, or any Fieldbus offered by



- Data collection
- Serial protocols and string output
- Bar Code Scanning & printing
- Multi-spindle synchronization

## **ACRADYNE® GEN IV CONTROLLER**

### Four Digit Torque Display

#### **Secondary Display**

Allows user to easily set and toggle through information:

- Angle
- Engineering Units
- Bolt Count
- Job/Job Sequence

### Optional 7" Graphical Display

- Runs the same software on PC for ease of use.
- Real Time Graphing for Application Review.
- Selectable Run Screens.
- Touch-screen



#### **LED Display**

Large numbers can be seen from a distance.

#### Parameter Set Display

Displays current parameter set and enables user to quickly change by scrolling up or down.

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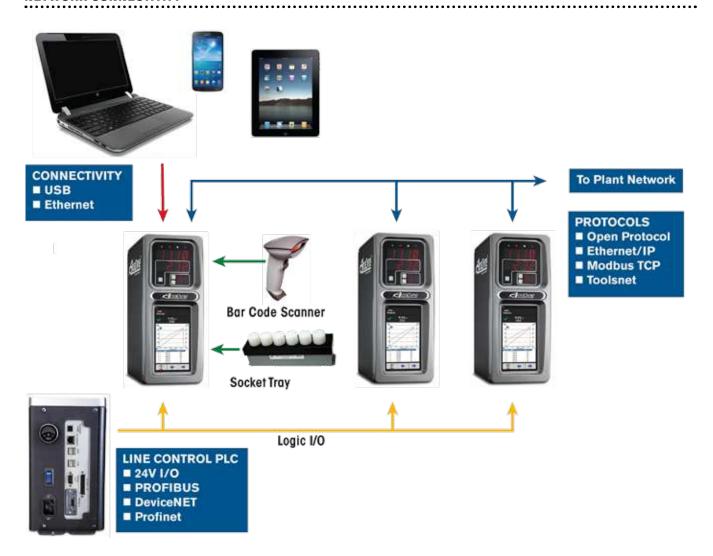
MODEL	SYSTEM PORT & REMOVABLE MEMORY	LIGHTS (L) LED DISPLAY (D) GRAPH (G)	24V I/O ASSIGNABLE 8 X 8"	SERIAL PORT WITH PROTOCOLS	BACKUP & RESTORE (USB)	ETHERNET*	DEVICENET	PROFIBUS
iEC4E	Х	L/D		Х	Х	Х		
iEC4EV(T)	Х	L/D	Х	Х	Х	Х		
iEC4EG(T)	Х	L/D/G		χ	χ	Х		
iEC4EGV(T)	Х	L/D/G	Х	Х	Х	Х		
iEC4ED	Х	L/D		Х	Х	Х	Х	
iEC4EP	Х	L/D		Х	Х	Х		Х
iEC4EVD	Х	L/D	χ	χ	χ	Х	Х	
iEC4EVP(T)	Х	L/D	Х	Х	Х	Х		Х
iEC4EGD	Х	L/D/G		Х	Х	Х	Х	
iEC4EGP	Х	L/D/G		χ	Х	Х		Х
iEC4EGVD	Х	L/D/G	Х	Х	Х	Х	Х	
iEC4EGVP	Х	L/D/G	Х	Х	Х	Х		Х

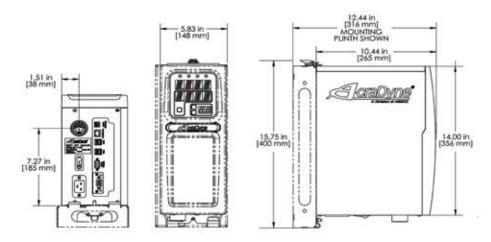
<sup>\*</sup> Ethernet channel supports The Open Protocol, Toolsnet, EtherNet/IP, Modbus/TCP, and other protocols. Add (-T) to model number for top exit tool cable option



## **ACRADYNE® GEN IV CONTROLLER**

#### **NETWORK CONNECTIVITY**





WIDTH	HEIGHT	DEPTH	WEIGHT
5.83 in / 148 mm	15.75 in / 400 mm	12.44 in / 316 mm	15.65 lbs / 7.1 kg

### **ACRADYNE® SOFTWARE**

#### **SOFTWARE**

AcraDyne's software package is on-board every AcraDyne controller and is provided FREE of charge. This comprehensive, user-friendly program allows programming, analysis, and diagnostics.

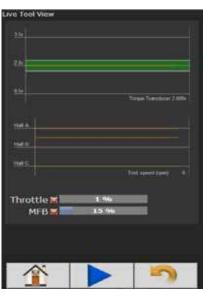
The software is based on a standard web browser. This allows you to connect the AcraDyne controller with any computer, tablet, or smart device. Connect through Ethernet, USB, or wirelessly via a network to which both devices are connected.



Adding and editing Parameter Sets (256) and Jobs (99) Is easy and intuitive in the parameter set up function



View curve results in real time or one of the up to 10000 stored in memory to program the application for optimal performance



Tool programming and diagnostics for repair, calibration and advanced troubleshooting





Several run screens to choose from. The large screen indicators are helpful in viewing real time results of the rundown from a distance

## **ACRADYNE® 1000 SERIES NUTRUNNERS**

#### **FEATURES AND BENEFITS**

#### Superior -

- Size
- Speed
- **Duty Cycle**







#### **APPLICATION DATA**

		MAX			TORQUE	FRE	E SPEED		WEIGHT (-)		OUTPUT
1000 SERIES	NM	TORQUE	FT-LB	NM	RANGE FT-LE	3	RPM	LB	SOCKET	KG	DRIVE
ANGLE*											
AEN4C12004B	4		3	1 - 4	0.7 - 3		3,111	2.0		0.91	1/4 Q.C.
AEN4C12009B	9		6.6	2.3 - 9	1.7 - 6.0		1,750	2.2		1.00	3/8 sq. dr.
AEN4C12O14B	14		10	3.5 -14	2.6 - 10		875	2.2		1.00	3/8 sq. dr.
AEN4C12O18B	18		13	4.5 - 18	3.3 - 13	1	691	2.2		1.00	3/8 sq. dr.
AEN4C12022B	22		16	5.5 - 22	4.1 - 16		560	2.2		1.00	3/8 sq. dr.
IN-LINE**											
AES4A12003B(V)(Q)	3		2.2	0.8 - 3	0.6 - 2.2	2	2,625	2.0		0.91	3/8 sq. dr.
AES4A12006B(V)(Q)	6		4.4	1.5 - 6	1.1 - 4.4	4	2,625	2.0		0.91	3/8 sq. dr.
AES4A12011B(V)(Q)	11		8.1	2.8 - 11	2 - 8.	1	1,313	2.2		1.00	3/8 sq. dr.
AES4A12014B(V)(Q)	14		10	3.5 - 14	2.6 - 10		1,037	2.2		1.00	3/8 sq. dr.
AES4A12018B(V)	18		13	4.5 - 18	3.3 - 13		840	2.2		1.00	3/8 sq. dr.
AES4A12022B(V)	22		16	5.5 - 22	4.1 - 16		656	2.2		1.00	3/8 sq. dr.
PUSH-TO-START											
AEL4A12003B(Q)	3		2.2	0.8 - 3	0.6 - 2.2	2	2,625	2.0		0.91	3/8 sq. dr.
AEL4A12006B(Q)	6		4.4	1.5 - 6	1.1 - 4.4	4	2,625	2.0		0.91	3/8 sq. dr.
AEL4A12011B(Q)	11		8.1	2.8 - 11	2 - 8.7	1	1,313	2.2		1.00	3/8 sq. dr.
AEL4A12014B(Q)	14		10	3.5 - 14	2.6 - 10		1,037	2.2		1.00	3/8 sq. dr.
AEL4A12018B	18		13	4.5 - 18	3.3 - 13		840	2.2		1.00	3/8 sq. dr.
AEL4A12022B	22		16	5.5 - 22	4.1 - 16		656	2.2		1.00	3/8 sq. dr.
FIXTURED***											
AEF4(A)(C)(X)12003B(B)	3		2.2	0.8 - 3	0.6 - 2.2	2	2,625	2.0		0.91	3/8 sq. dr.
AEF4(A)(C)(X)12006B(B)	6		4.4	1.5 - 6	1.1 - 4.4	1	2,625	2.0		0.91	3/8 sq. dr.
AEF4(A)(C)(X)12011B(B)	11		8.1	2.8 - 11	2 - 8.	1	1,313	2.2		1.00	3/8 sq. dr.
AEF4(A)(C)(X)12014B(B)	14		10	3.5 - 14	2.6 - 10		1,037	2.2		1.00	3/8 sq. dr.
AEF4(A)(C)(X)12018B(B)	18		13	4.5 - 18	3.3 - 13		840	2.2		1.00	3/8 sq. dr.
AEF4(A)(C)(X)12022B(B)	22		16	5.5 - 22	4.1 - 16		656	2.2		1.00	3/8 sq. dr.

<sup>\*</sup> Add "F" to part numbers for flush socket.

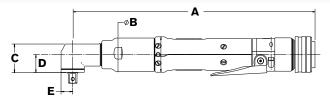
Replace "V" with "Q" for 1/4" quick change output.

\*\*\* Add "A" to part numbers for 1/2" sliding spindle models. Add "C" to part numbers for 1-3/4" sliding spindle models. Add "X" to part numbers for fixed 3/8" square drive output models.

<sup>\*\*\*</sup> Add "B" to part numbers for bottom exit cable.

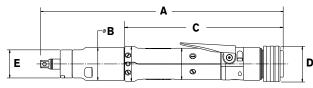
<sup>\*</sup> E logo indicates where ERGO-DRIVE sockets/extentions benefit tool operation.

## **ACRADYNE® 1000 SERIES NUTRUNNERS**



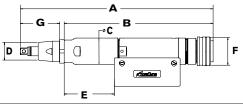
#### **DIMENSIONS**

ANGLE	IN	(A) MM	IN	(B)	MM	IN	(C)	MM	IN	(D)	MM	IN	(E)	MM
AEN4C12004B	11.65	295.9	1.47		37.3	.98		24.8	.62		15.8	.40		10.2
AEN4C12009B	11.00	279.5	1.47		37.3	1.29		32.8	.82		20.9	.52		13.1
AEN4C12014B	11.66	296.4	1.47		37.3	1.29		32.8	.82		20.9	.52		13.1
AEN4C12O18B	11.66	296.4	1.47		37.3	1.29		32.8	.82		20.9	.52		13.1
AEN4C12022B	11.66	296.4	1.47		37.3	1.29		32.8	.82		20.9	.52		13.1



#### **DIMENSIONS**

INLINE	IN	(A) MM	IN	(B)	MM	IN	(C)	MM	IN	(D)	MM	IN	(E)	ММ
AES4A12003B	11.12	282.7	1.47		37.3	7.38		187.5	1.59		40.4	1.25		31.8
AES4A12006B	11.12	282.7	1.47		37.3	7.38		187.5	1.59		40.4	1.25		31.8
AES4A12011B	11.44	290.5	1.47		37.3	7.38		187.5	1.59		40.4	1.25		31.8
AES4A12014B	11.44	290.5	1.56		39.6	7.38		187.5	1.59		40.4	1.25		31.8
AES4A12018B	11.44	290.5	1.47		37.3	7.38		187.5	1.59		40.4	1.25		31.8
AES4A12022B	11.44	290.5	1.47		37.3	7.38		187.5	1.59		40.4	1.25		31.8
PUSH-TO-START	IN	(A) MM	IN	(B)	MM	IN	(C)	MM	IN	(D)	MM	IN	(E)	MM
PUSH-TO-START AEL4A12003B	IN 11.31	(A) MM 287.3	IN 1.56	(B)	мм 39.6	7.38	(C)	MM 187.5	IN 1.59	(D)	MM 40.4	IN 1.25	(E)	MM 31.8
				(B)			(C)			(D)			(E)	
AEL4A12003B	11.31	287.3	1.56	(B)	39.6	7.38	(C)	187.5	1.59	(D)	40.4	1.25	(E)	31.8
AEL4A12003B AEL4A12006B	11.31 11.32	287.3 287.4	1.56 1.56	(B)	39.6 39.6	7.38 7.38	(C)	187.5 187.5	1.59 1.59	(D)	40.4 40.4	1.25 1.25	(E)	31.8 31.8
AEL4A12003B AEL4A12006B AEL4A12011B	11.31 11.32 11.62	287.3 287.4 295.4	1.56 1.56 1.56	(B)	39.6 39.6 39.6	7.38 7.38 7.38	(C)	187.5 187.5 187.5	1.59 1.59 1.59	(D)	40.4 40.4 40.4	1.25 1.25 1.25	(E)	31.8 31.8 31.8



FIXTURED	IN	(A) MM	IN	(B) MM	IN	(C)	ММ	IN	(D)	ММ	IN	(E)	ММ	IN	(F)	ММ	IN	(G)	ММ
AEF4A12003B	11.53	292.9	9.10	231.04	1.47		37.3	1.13		28.57	2.06		52.2	1.59		40.4	2.18		55.5
AEF4A12006B	11.53	292.9	9.10	231.04	1.47		37.3	1.13		28.57	2.06		52.2	1.59		40.4	2.18		55.5
AEF4A12011B	12.20	309.8	9.10	231.04	1.47		37.3	1.13		28.57	2.72		69.1	1.59		40.4	2.18		55.5
AEF4A12014B	12.20	309.8	9.10	231.04	1.47		37.3	1.13		28.57	2.72		69.1	1.59		40.4	2.18		55.5
AEF4A12018B	12.20	309.8	9.10	231.04	1.47		37.3	1.13		28.57	2.72		69.1	1.59		40.4	2.18		55.5
AEF4A12022B	12.20	309.8	9.10	231.04	1.47		37.3	1.13		28.57	2.72		69.1	1.59		40.4	2.18		55.5
AEF4C12003B	15.32	389.2	9.10	231.04	1.47		37.3	1.13		28.57	2.06		52.2	1.59		40.4	5.98		151.8
AEF4C12006B	15.32	389.2	9.10	231.04	1.47		37.3	1.13		28.57	2.06		52.2	1.59		40.4	5.98		151.8
AEF4C12011B	15.99	406.1	9.10	231.04	1.47		37.3	1.13		28.57	2.72		69.1	1.59		40.4	5.98		151.8
AEF4C12014B	15.99	406.1	9.10	231.04	1.47		37.3	1.13		28.57	2.72		69.1	1.59		40.4	5.98		151.8
AEF4C12018B	15.99	406.1	9.10	231.04	1.47		37.3	1.13		28.57	2.72		69.1	1.59		40.4	5.98		151.8
AEF4C12022B	15.99	406.1	9.10	231.04	1.47		37.3	1.13		28.57	2.72		69.1	1.59		40.4	5.98		151.8
AEF4X12003B	9.35	237.5	9.10	231.04	1.47		37.3	1.13		28.57	2.06		52.2	1.59		40.4	.80		20.4
AEF4X12006B	9.35	237.5	9.10	231.04	1.47		37.3	1.13		28.57	2.06		52.2	1.59		40.4	.80		20.4
AEF4X12011B	10.00	254.4	9.10	231.04	1.47		37.3	1.13		28.57	2.72		69.1	1.59		40.4	.80		20.4
AEF4X12014B	10.00	254.4	9.10	231.04	1.47		37.3	1.13		28.57	2.72		69.1	1.59		40.4	.80		20.4
AEF4X12018B	10.00	254.4	9.10	231.04	1.47		37.3	1.13		28.57	2.72		69.1	1.59		40.4	.80		20.4
AEF4X12022B	10.00	254.4	9.10	231.04	1.47		37.3	1.13		28.57	2.72		69.1	1.59		40.4	.80		20.4

## ACRADYNE® PISTOL GRIP NUTRUNNERS

#### **FEATURES AND BENEFITS**

- Cable configurations available in rear exit, bottom exit, or right angle exit.
- Configured with AcraDyne's multi-function button (MFB) enabling flexibility in operation.
- On-board lights and audible signal for operator feedback.







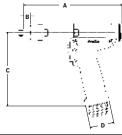


#### **APPLICATION DATA**

1000 SERIES*	NM	MAX TORQUE	FT-LB	NM	TORQUE RANGE	FT-LB	FREE SPEED RPM	LB	WEIGHT (-) SOCKET	KG	OUTPUT DRIVE
AEP4(A)(R)(T)12003B(V)(Q)	3		2.2	0.8 - 3		0.6 - 2.2	2,625	2.2		1.00	3/8 SQ. DR.*
AEP4(A)(R)(T)12006B(V)(Q)	6		4.4	1.5 - 6		1.1 - 4.4	2,625	2.2		1.00	3/8 SQ. DR.*
AEP4(A)(R)(T)12011B(V)(Q)	11		8.1	2.8 - 11		2 - 8.1	1,313	2.3		1.04	3/8 SQ. DR.
AEP4(A)(R)(T)12014B(V)(Q)	14		10	3.5 - 14		2.6 - 10	1,037	2.3		1.04	3/8 SQ. DR.
AEP4(A)(R)(T)12018BV	18		13	4.5 - 18		3.3 - 13	840	2.3		1.04	3/8 SQ. DR.
AEP4(A)(R)(T)12022BV	22		16	5.5 - 22		4.1 - 16	656	2.3		1.04	3/8 SQ. DR.

		MAX			TORQUE		FREE SPEED		WEIGHT (-)		
2000 SERIES*	NM	TORQUE	FT-LB	NM	RANGE	FT-LB	RPM	LB	SOCKET	KG	OUTPUT DRIVE
AEP4(A)(R)(T)22020BV	20		14	5 - 20		3.7 - 14	1,313	2.4		1.09	3/8 SQ. DR.
AEP4(A)(R)(T)22025BV	25		18	6.3 - 25		4.6 - 18	1,037	2.4		1.09	3/8 SQ. DR.
AEP4(A)(R)(T)22030BV	30		22	7.5 - 30		5.5 - 22	840	2.4		1.09	3/8 SQ. DR.
AEP4(A)(R)(T)22035BV	35		25	8.8- 35		6.5 - 25	747	2.4		1.09	3/8 SQ. DR.
AEP4(A)(R)(T)22040BV	40		29	10 - 40		7.4 - 29	656	2.4		1.09	3/8 SO. DR.

<sup>\*</sup> Add "Q" to part numbers for 1/4" quick change output standard



1000 SERIES	IN	(A)	ММ	IN	(B)	ММ	IN	(C)	MM	IN	(D)	ММ
AEP412003BV	7.34		186.3	0.54		13.7	6.01		152.6	1.96		49.7
AEP412006BV	7.34		186.3	0.54		13.7	6.01		152.6	1.96		49.7
AEP412011BV	8.00		203.3	0.54		13.7	6.01		152.6	1.96		49.7
AEP412014BV	8.00		203.3	0.54		13.7	6.01		152.6	1.96		49.7
AEP412018BV	8.00		203.3	0.54		13.7	6.01		152.6	1.96		49.7
AEP412022BV	8.00		203.3	0.54		13.7	6.01		152.6	1.96		49.7
2000 SERIES	IN	(A)	MM	IN	(B)	MM	IN	(C)	MM	IN	(D)	MM
AEP422020BV	8.66		219.9	0.56		14.2	6.87		174.4	1.96		49.7
AEP422025BV	8.66		219.9	0.56		14.2	6.87		174.4	1.96		49.7
AEP422030BV	8.66		219.9	0.56		14.2	6.87		174.4	1.96		49.7
AEP422035BV	8.66		219.9	0.56		14.2	6.87		174.4	1.96		49.7
AEP422040BV	8.66		219.9	0.56		14.2	6.87		174.4	1.96		49.7

<sup>€</sup> logo indicates where ERGO-DRIVE sockets/extentions benefit tool operation.

Add "A" to part numbers for bottom exit cable models,

Add "R" to part numbers for rear exit cable models,

Add "T" to part numbers for top exit cable models,

<sup>&</sup>quot;V" indicates extended Ergo-Drive output 🙋 Replace "V" with "Q" for 1/4" quick change output. Push To Start models available by special order.

## **ACRADYNE® PISTOL GRIP NUTRUNNERS**



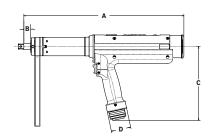
#### **APPLICATION DATA**

5000 SERIES	NM	MAX TORQUE	FT-LB	NM	TORQUE RANGE	FT-LB	FREE SPEED RPM	LB	WEIGHT (-) SOCKET	KG	OUTPUT DRIVE
AEP35075AV(T)	75		55	19 - 75		14 - 55	944	9.2		4.17	1/2 SQ. DR.
AEP35090AV(T)	90		66	23 - 90		17 - 66	767	9.2		4.17	1/2 SQ. DR.
AEP35110AV(T)	110		81	28 - 110		21 - 81	634	9.2		4.17	1/2 SQ. DR.
AEP35135AV(T)	135		99	34 - 135		25 - 99	515	9.2		4.17	1/2 SQ. DR.
AEP35170AV(T)	170		125	43 - 170		32 - 125	418	9.2		4.17	1/2 SQ. DR.
AEP35280A(T)	280		206	70 - 280		52 - 207	236	13.6		6.17	3/4 SQ. DR.
AEP35350A(T)	350		258	88 - 350		65 - 258	192	13.6		6.17	3/4 SQ. DR.
AEP35420A(T)	420		310	105 - 420		78 - 310	159	13.6		6.17	3/4 SQ. DR.
AEP35515A(T)	515		380	128 - 515		95 - 380	129	13.6		6.17	3/4 SQ. DR.
AEP35635A(T)	635		468	159 - 635		117 - 469	104	13.6		6.17	3/4 SQ. DR.

<sup>&</sup>quot;V" indicates extended Ergo-Drive output.



Add "T" to part numbers for top exit cable models,



5000 SERIES	IN	(A)	ММ	IN	(B)	MM	IN	(C)	MM	IN	(D)	MM
AEP35075AV	15.95	4	105.2	.68		17.4	7.37		187.1	1.96		49.7
AEP35090AV	15.95	4	105.2	.68		17.4	7.37		187.1	1.96		49.7
AEP35110AV	15.95	4	105.2	.68		17.4	7.37		187.1	1.96		49.7
AEP35135AV	15.95	4	105.2	.68		17.4	7.37		187.1	1.96		49.7
AEP35170AV	15.95	4	105.2	.68		17.4	7.37		187.1	1.96		49.7
AEP35280A	18.43	4	168.2	1.11		28.1	7.37		187.1	1.96		49.7
AEP35350A	18.43	4	168.2	1.11		28.1	7.37		187.1	1.96		49.7
AEP35420A	18.43	4	168.2	1.11		28.1	7.37		187.1	1.96		49.7
AEP35515A	18.43	4	168.2	1.11		28.1	7.37		187.1	1.96		49.7
AEP35635A	18.43	4	168.2	1.11		28.1	7.37		187.1	1.96		49.7

<sup>\*</sup> **E** logo indicates where ERGO-DRIVE sockets/extentions benefit tool operation.

## **ACRADYNE® ANGLE NUTRUNNERS**

#### **FEATURES AND BENEFITS**

AcraDyne® angle nutrunners provide are the perfect solution to space-limited fastening applications that are not practical with inline or pistol model tools. A compact, durable head houses a precision right angle gear set which fits into the tightest of spaces and delivers a highly accurate fastening cycle. Lightweight materials and a uniform body diameter provide a comfortable grip and an ergonomically placed start lever allows for simple control.



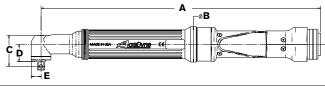
#### **APPLICATION DATA**

2000 SERIES*	NM	MAX TORQUE	FT-LB	NM	TORQUE RANGE	FT-LB	FREE SPEED RPM	LB	WEIGHT (-) SOCKET	KG	OUTPUT DRIVE
AEN32015C(F)(DL)	15		11	3 - 15		2.2 - 11	1,481	2.7		1.22	3/8 SQ. DR.
AEN32025C(F)(DL)	25		18	5 - 20		3.7 - 15	833	2.7		1.22	3/8 SQ. DR
AEN32030C(F)(DL)	30		22	6 - 30		4.4 - 22	803	2.8		1.27	3/8 SQ. DR.
AEN32040C(F)(DL)	40		30	8 - 40		5.9 - 29	574	2.8		1.27	3/8 SQ. DR.

		MAX			TORQUE		FREE SPEED		WEIGHT (-)		OUTPUT
3000 SERIES*	NM	TORQUE	FT-LB	NM	RANGE	FT-LB	RPM	LB	SOCKET	KG	DRIVE
AEN33042C(F)	42		31	9.5 - 42		7 - 31	1,095	4.4		2.00	3/8 SQ. DR.
AEN33053C(F)	53		39	12 - 53		8 - 39	865	4.4		2.00	3/8 SQ. DR.
AEN33060C(F)(DL)	60		44	12 - 60		9 - 44	845	6.6		2.99	1/2 SQ. DR.
AEN33090C(F)(DL)	90		66	18 - 90		13 - 66	568	6.6		2.99	1/2 SQ. DR.
AEN33120C(F)(DL)	120		89	24 - 120		18 - 88	442	9.3		4.22	1/2 SQ. DR.
AEN33200C(F)(DL)	200		148	40 - 200		29 - 147	245	9.4		4.26	3/4 SQ. DR.
AEN33210C(F)(DL)	210		95	50 - 210		37 - 155	234	10.0		4.54	3/4 SQ. DR.
AEN33300C(F)(DL)	300		221	60 - 300		42 - 221	151	10.0		4.54	3/4 SQ. DR.
AFN33375C(F)(DL)	375		977	75 - 375		55 - 276	151	10.0		4 54	3/4 SO DR

<sup>\*</sup> Add "F" to part numbers for flush socket.

Add "DL" to part numbers for dual levers.



2000 SERIES	IN	(A)	MM	IN	(B)	MM	IN	(C)	MM	IN	(D)	MM	IN	(E)	MM
AEN32015C	14.61		371	1.85		47	1.37		34.8	.90		22.9	.52		13.1
AEN32025C	14.61		371	1.85		47	1.37		34.8	.90		22.9	.52		13.1
AEN32030C	14.42		366.2	1.85		47	1.65		41.8	1.16		29.4	.70		17.8
AEN32040C	14.42		366.2	1.85		47	1.65		41.8	1.16		29.4	.70		17.8
3000 SERIES	IN	(A)	MM	IN	(B)	MM	IN	(C)	MM	IN	(D)	MM	IN	(E)	MM
AEN33042C	16.63		422.33	1.85		47	1.66		42.11	1.17		29.67	.7		17.78
AEN33053C	16.63		422.33	1.85		47	1.66		42.11	1.17		29.67	.7		17.78
AEN33060C	18.92		480.53	1.85		47	1.90		48.36	1.37		34.90	.83		20.96
AEN33090C	18.92		480.53	1.85		47	1.90		48.36	1.37		34.90	.83		20.96
AEN33120C	21.00		533.46	1.85		47	2.78		70.59	2.08		52.81	1.05		26.67
AEN33200C	23.21		589.64	1.85		47	2.59		65.75	1.89		47.98	1.05		26.67
AEN33210C	23.58		598.88	1.85		47	2.90		73.53	1.97		50.04	1.25		31.75
AEN33300C	23.58		598.88	1.85		47	2.90		73.53	1.97		50.04	1.25		31.75
AEN33375C	23.58		598.88	1.85		47	2.90		73.53	1.97		50.04	1.25		31.75

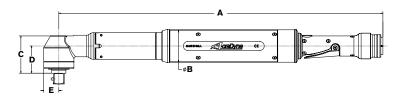
## **ACRADYNE® ANGLE NUTRUNNERS**



#### **APPLICATION DATA**

5000 SERIES*	NM	MAX TORQUE	FT-LB	NM	TORQUE RANGE	FT-LB	FREE SPEED RPM	LB	WEIGHT (-) SOCKET	KG	OUTPUT DRIVE
AEN35090B(F)	90		66	23 - 90		17 - 66	607	6.9		3.13	1/2 SQ. DR.
AEN35140B(F)	140		103	35 - 140		26 - 103	472	10.4		4.72	3/4 SQ. DR.
AEN35175B(F)	175		129	44 - 175		33 - 129	384	10.5		4.76	3/4 SQ. DR.
AEN35225B(F)	225		166	56 - 225		41 - 166	291	12.3		5.58	3/4 SQ. DR.
AEN35285B(F)	285		210	71 - 285		52 - 210	236	12.3		5.58	3/4 SQ. DR.
_AEN35350B(F)	350		258	88 - 350		65 - 258	191	12.3		5.58	3/4 SQ. DR

<sup>\*</sup> Add "F" to part numbers for flush socket.



5000 SERIES	IN	(A)	ММ	IN	(B)	ММ	IN	(C)	ММ	IN	(D)	MM	IN	(E)	ММ
AEN35090B	22.59		573.7	2.31		58.7	1.90		48.4	1.37		34.9	.81		20.6
AEN35140B	22.52		571.9	2.31		58.7	2.59		65.8	1.89		48	1.05		26.7
AEN35175B	22.52		571.9	2.31		58.7	2.59		65.8	1.89		48	1.05		26.7
AEN35225B	22.88		581.1	2.31		58.7	2.90		73.5	1.97		50	1.25		31.8
AEN35285B	22.88		581.1	2.31		58.7	2.90		73.5	1.97		50	1.25		31.8
AEN35350B	22.88		581.1	2.31		58.7	2.90		73.5	1.97		50	1.25		31.8

### **ACRADYNE® IN-LINE NUTRUNNERS**

#### FEATURES AND BENEFITS

AcraDyne® inline nutrunners are the perfect choice for fixtured fastening applications because of their compact size and durability. A uniform body diameter and a hex shaped mounting point allow for simple installation into fixture plates. Simply machine a female hex into a steel plate, insert the nutrunner, secure with the factory supplied nut and your fastening machine is assembled. A reaction bar for use in handheld applications is also included with all AcraDyne® inline nutrunners.

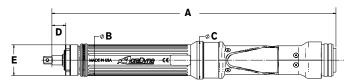


#### **APPLICATION DATA**

2000 SERIES*	NM	MAX TORQUE	FT-LB	NM	TORQUE RANGE	FT-LB	FREE SPEED RPM	LB	WEIGHT (-) SOCKET	KG	OUTPUT DRIVE
AES32010C(V)(Q)	10		7.4	2 - 10		1.5 - 7.4	2,222	2.5		1.13	3/8 SQ. DR.*
AES32020C(V)(Q)	20		15	4 - 20		3.0 - 15	1,250	2.5		1.13	3/8 SQ. DR.*
AES32025C(V)(Q)	25		18	5 - 25		3.7 - 18	893	3.2		1.45	3/8 SQ. DR.*
AES32038C(V)	38		28	7.5 - 38		5.5 - 28	595	4.2		1.91	3/8 SQ. DR.

3000 SERIES*	NM	MAX TORQUE	FT-LB	NM	TORQUE RANGE	FT-LB	FREE SPEED RPM	LB	WEIGHT (-) SOCKET	KG	OUTPUT DRIVE
AES33040C(V)(-2)	40	TORQUE	30	8 - 40	RANGE	5.9 - 30	1.314	6.4	SOCKET	2.90	1/2 SQ. DR.
. , , ,				-			7.				
AES33060C(V)(-2)	60		44	12 - 60		8.9 - 44	883	6.4		2.90	1/2 SQ. DR.
AES33100C(V)(-2)	100		74	20 - 100		15 - 74	489	8.1		3.67	1/2 SQ. DR.
AES33150C(V)(-2)	150		111	30 - 150		22 - 111	329	8.1		3.67	1/2 SQ. DR.
AES33230C(V)(-2)	230		170	46 - 184		34 - 184	221	8.1		3.67	1/2 SQ. DR.
AES33400C	400		295	80 - 400		59 - 295	122	13.0**		5.90**	3/4 SQ. DR.
AES33600C	600		440	120 - 480		89 - 440	82	13.0**		5.90**	3/4 SQ. DR.

<sup>\*</sup> Add "Q" to part numbers for 1/4" quick change output standard. Add "V" to part numbers for standard spindle models. Add "-2" to part numbers for 2" sliding spindle models, and add 2.3 lb to the weight listed.



2000 SERIES	IN	(A)	ММ	IN	(B)	MM	IN	(C)	MM	IN	(D)	MM	IN	(E)	MM
AES32010CV	13.85		351.7	1.59		40.4	1.85		47	.56		14.3	1.50		38.1
AES32020CV	13.85		351.7	1.59		40.4	1.85		47	.56		14.3	1.50		38.1
AES32025CV	13.85		351.7	1.59		40.4	1.85		47	.56		14.3	1.50		38.1
AES32038CV	16.69		424	1.50		38.1	1.85		47	.51		12.9	1.50		38.1
3000 SERIES	IN	(A)	MM	IN	(B)	MM	IN	(C)	MM	IN	(D)	MM	IN	(E)	MM
AES33040CV	18.24		463.38	1.94		49.28	1.85		47	.68		17.17	1.85		47
AES33060CV	18.24		463.38	1.94		49.28	1.85		47	.68		17.17	1.85		47
AES33100CV	22.56		572.99	1.94		49.28	1.85		47	.68		17.17	1.85		47
AES33150CV	22.56		572.99	1.94		49.28	1.85		47	.68		17.17	1.85		47
AES33230CV	22.56		572.99	1.94		49.28	1.85		47	.68		17.17	1.85		47
AES33400C	24.90		532.36	1.94		49.28	1.85		47	1.11		28.08	2.64		67.1
AES33600C	24.90		532.36	1.94		49.28	1.85		47	1.11		28.08	2.64		67.1

<sup>\*</sup> E logo indicates where ERGO-DRIVE sockets/extentions benefit tool operation.

<sup>\*\*</sup>Includes reaction bar and fixture nut

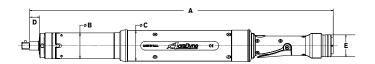
## **ACRADYNE® IN-LINE NUTRUNNERS**



#### **APPLICATION DATA**

5000 SERIES	NM	MAX TORQUE	FT-LB	NM	TORQUE RANGE	FT-LB	FREE SPEED RPM	LB	WEIGHT (-) SOCKET	KG	OUTPUT DRIVE
AES35075AV	75		55	19 - 75		14 - 55	944	9.2		4.17	1/2 SQ. DR.
AES35090AV	90		66	23 - 90		17 - 66	767	9.2		4.17	1/2 SQ. DR.
AES35110AV	110		81	28 - 110		21 - 81	634	9.2		4.17	1/2 SQ. DR.
AES35135AV	135		100	34 - 135		25 - 100	515	9.2		4.17	1/2 SQ. DR.
AES35170AV	170		126	43 - 170		32 - 126	418	9.2		4.17	1/2 SQ. DR.
AES35280A	280		207	70 - 280		52 - 207	236	12.8		5.81	3/4 SQ. DR.
AES35350A	350		258	88 - 350		65 - 258	192	12.8		5.81	3/4 SQ. DR.
AES35420A	420		310	105 - 420		78 - 310	159	12.8		5.81	3/4 SQ. DR.
AES35515A	515		380	128 - 515		95 - 380	129	12.8		5.81	3/4 SQ. DR.
AES35635A	635		469	159 - 635		117 - 469	104	12.8		5.81	3/4 SQ. DR.

"V" indicates extended Ergo-Drive output. E



5000 SERIES	IN	(A)	MM	IN	(B)	ММ	IN	(C)	MM	IN	(D)	MM	IN	(E)	MM
AES35075AV	21.86		555.2	1.85		47	2.31		58.7	.68		17.4	1.78		45.2
AES35090AV	21.86		555.2	1.85		47	2.31		58.7	.68		17.4	1.78		45.2
AES35110AV	21.86		555.2	1.85		47	2.31		58.7	.68		17.4	1.78		45.2
AES35135AV	21.86		555.2	1.85		47	2.31		58.7	.68		17.4	1.78		45.2
AES35170AV	21.86		555.2	1.85		47	2.31		58.7	.68		17.4	1.78		45.2
AES35280A	24.22		615.1	2.64		67.1	2.31		58.7	1.11		28.1	1.78		45.2
AES35350A	24.22		615.1	2.64		67.1	2.31		58.7	1.11		28.1	1.78		45.2
AES35420A	24.22		615.1	2.64		67.1	2.31		58.7	1.11		28.1	1.78		45.2
AES35515A	24.22		615.1	2.64		67.1	2.31		58.7	1.11		28.1	1.78		45.2
AES35635A	24.22		615.1	2.64		67.1	2.31		58.7	1.11		28.1	1.78		45.2

<sup>\*</sup> **E** logo indicates where ERGO-DRIVE sockets/extentions benefit tool operation.

## **ACRADYNE® FIXTURED NUTRUNNERS**



AEF35135AV Standard Spindle, Rear Exit Cable



AEF35135AVB Standard Spindle, Bottom Exit Cable



AEF35350A Standard Spindle, Rear Exit Cable



AEF35135A-2 2" Sliding Spindle, Rear Exit Cable



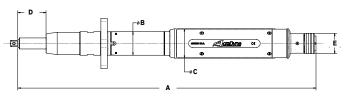
AEF35135AB-2 2" Sliding Spindle, Rear Exit Cable

#### **APPLICATION DATA**

5000 SERIES*	NM	MAX TORQUE	FT-LB	NM	TORQUE RANGE	FT-LB	FREE SPEED RPM	LB	WEIGHT (-) SOCKET	KG	OUTPUT DRIVE
AEF35075A(V)(VB)(-2)(B-2)	75		55	19 - 75		14 - 55	944	9.6		4.35	1/2 SQ. DR.
AEF35090A(V)(VB)(-2)(B-2)	90		66	23 - 90		17 - 66	767	9.6		4.35	1/2 SQ. DR
AEF35110A(V)(VB)(-2)(B-2)	110		81	28 - 110		21 - 81	634	9.6		4.35	1/2 SQ. DR
AEF35135A(V)(VB)(-2)(B-2)	135		100	34 - 135		25 - 100	515	9.6		4.35	1/2 SQ. DR
AEF35170A(V)(VB)(-2)(B-2)	170		125	43 - 170		32 - 125	418	9.6		4.35	1/2 SQ. DR
AEF35280A(V)(VB)(-2)(B-2)	280		207	70 - 280		52 - 207	236	13.6		6.17	3/4 SQ. DR.
AEF35350A(V)(VB)(-2)(B-2)	350		258	88 - 350		65 - 258	192	13.6		6.17	3/4 SQ. DR
AEF35420A(V)(VB)(-2)(B-2)	420		310	105 - 420		77 - 310	159	13.6		6.17	3/4 SQ. DR
AEF35515A(V)(VB)(-2)(B-2)	515		380	128 - 515		95 - 380	129	13.6		6.17	3/4 SQ. DR
AEF35635A(V)(VB)(-2)(B-2)	635		469	159 - 635		117 - 469	104	13.6		6.17	3/4 SQ. DR

<sup>\*</sup> Add "V" to part numbers for standard spindle with rear exit cable models. Add "VB" to part numbers for standard spindle with bottom exit cable models.

<sup>\*</sup> Item 28843 is a panel mount 2" sliding spindle for 280 - 635 Nm models.



5000 SERIES	IN	(A) MM	IN	(B)	MM	IN	(C)	MM	IN	(D)	MM	IN	(E)	MM
AEF35075AV	17.67	448.8	1.85		47	2.31		58.7	.72		18.4	1.59		40.4
AEF35090AV	17.67	448.8	1.85		47	2.31		58.7	.72		18.4	1.59		40.4
AEF35110AV	17.67	448.8	1.85		47	2.31		58.7	.72		18.4	1.59		40.4
AEF35135AV	17.67	448.8	1.85		47	2.31		58.7	.72		18.4	1.59		40.4
AEF35170AV	17.67	448.8	1.85		47	2.31		58.7	.72		18.4	1.59		40.4
AEF35075A-2	23.43	595.1	1.85		47	2.31		58.7	2.22		56.4	1.59		40.4
AEF35090A-2	23.43	595.1	1.85		47	2.31		58.7	2.22		56.4	1.59		40.4
AEF35110A-2	23.43	595.1	1.85		47	2.31		58.7	2.22		56.4	1.59		40.4
AEF35135A-2	23.43	595.1	1.85		47	2.31		58.7	2.22		56.4	1.59		40.4
AEF35170A-2	23.43	595.1	1.85		47	2.31		58.7	2.22		56.4	1.59		40.4
AEF35280A	18.43	468.2	1.11		28.1	7.37		187.1	1.96		49.7	20.4		518
AEF35350A	18.43	468.2	1.11		28.1	7.37		187.1	1.96		49.7	20.4		518
AEF35420A	18.43	468.2	1.11		28.1	7.37		187.1	1.96		49.7	20.4		518
AEF35515A	18.43	468.2	1.11		28.1	7.37		187.1	1.96		49.7	20.4		518
AEF35635A	18.43	468.2	1.11		28.1	7.37		187.1	1.96		49.7	20.4		518

<sup>\*</sup>  $\mathbf{E}$  logo indicates where ERGO-DRIVE sockets/extentions benefit tool operation.

<sup>\*</sup> Add "-2" to part numbers for 2" sliding spindle with rear exit cable models. Add "B-2" to part numbers for 2" sliding spindle with bottom exit cable models.

### **ACRADYNE® TUBENUT NUTRUNNERS AND SPECIALTY GEARHEADS**

#### **FEATURES AND BENEFITS**

- Patented Safety Algorithm.
- Transducer senses resistance in the initial 90 degrees of rotation and returns to open upon any resistance encountered.
- Durable tubenut head design.
- Simple, one-touch back to open operation for maximum productivity.



#### WITH INNOVATIVE SAFETY SENSOR TECHNOLOGY!







**AET 2000 Series Model with Double Levers** 

#### **APPLICATION DATA**

1000 SERIES*	NM	MAX TORQUE	FT-LB	NM	TORQUE RANGE	FT-LB	FREE SPEED RPM	LB	WEIGHT (-) SOCKET	KG	IN	OUTPUT DRIVE	NM
AET4AA12018B	14		13	3.6 - 14		2.7 - 11	516	3.1		1.41	1/4 - 7/16		7 - 12
AET4AB12025B	20		18	5 - 20		3.7 - 15	387	3.1		1.41	3/8 - 5/8		10 - 17
AET4A12025B-KD	20		18	5 - 20		3.7 - 15	387	3.1		1.41	3/8 - 5/8		10 - 17
2000 SERIES*	NM	MAX TORQUE	FT-LB	NM	TORQUE RANGE	FT-LB	FREE SPEED RPM	LB	WEIGHT (-) SOCKET	KG	IN	OUTPUT DRIVE	NM
AET32020C(DL)	20		15	4 - 16		3.0 - 12	622	3.1		1.41	1/4 - 7/16		7 - 12
AET32025C(DL)	25		18	5 - 20		3.7 - 15	466	4.0		1.81	3/8 - 5/8		10 - 17
AET32035C(DL)	35		26	7 - 28		5.2 - 21	347	4.5		2.04	1/2 - 7/8		13 - 24
AET32050C(DL)	50		37	10 - 40		7.4 - 30	257	5.6		2.54	5/8 - 1-3/16		17 - 32

<sup>\*</sup> Add "DL" to part numbers for double levers. Request specific socket size when placing your order. AIMCO offers a wide variety of socket sizes to fit your needs. Contact AIMCO at 1-800-852-1368.

#### **SPECIALTY GEARHEADS**

AIMCO can provide specialized heads for almost any application. Tubenut, Hold and Drive, Crow Foot, Offsets and Sliding Spindles are just a few of the head styles available. Whatever your requirements are, we will help select the head configuration to get the job done.





## **ACRADYNE® HOLD & DRIVE NUTRUNNERS**

### **FEATURES AND BENEFITS**

- Torques Ranging from 20 Nm 200 Nm.
- Very Robust modern design.
- 1" and 2" travels are standard.
- Sockets and holders are custom to order.

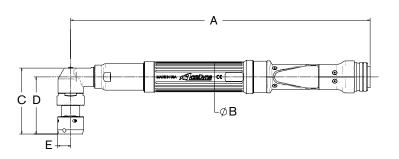




#### **APPLICATION DATA**

MODEL*	NM	MAX TORQUE	FT-LB	NM	TORQUE RANGE	FT-LB	FREE SPEED RPM	WEIGH	HT LB	MIN/MAX SOCKET
AEH4F12020B-(1,2)	20		15	4 - 20		3 - 15	533	-1=2.8,	-2=3.0	9/16 (14 MM) / 13/16, (21 MM)
AEH4F12026B-(1,2)	26		19	5 - 26		4 - 19	432	-1=2.8,	-2=3.1	9/16 (14 MM) / 13/16, (21 MM)
AEH32025C-(1,2)	25		18	5 - 25		4 - 18	833	-1 = 3.5,	-2=3.5	9/16 (14 MM) / 13/16, (21 MM)
AEH32030C-(1,2)	30		22	6 - 30		4 - 22	803	-1 = 3.5,	-2=3.6	9/16 (14 MM) / 13/16, (21 MM)
AEH32040C-(1,2)	40		30	8 - 40		6 - 30	574	-1 = 3.5,	-2=3.7	9/16 (14 MM) / 13/16, (21 MM)
AEH33042C-(1,2)	42		31	10 - 42		7 - 31	1,095	-1=5.6,	-2=5.8	9/16 (14 MM) / 13/16, (21 MM)
AEH33053C-(1,2)	53		39.	12 - 53		8 - 39	865	-1=5.6,	-2=5.8	9/16 (14 MM) / 13/16, (21 MM)
AEH33060C-(1,2)	60		44	12 - 60		9 - 44	845	-1=7.3,	-2=7.5	5/8 (16 MM) / 1-1/4, (32 MM)
AEH33090C-(1,2)	90		66	18 - 90		13 - 66	568	-1=7.3,	-2=7.6	5/8 (16 MM) / 1-1/4, (32 MM)
AEH33120C-(1,2)	120		89	24 - 120		18 - 89	442	-1=10.0,	-2=10.3	5/8 (16 MM) / 1-1/4, (32 MM)
AEH33200C-(1,2)	200		148	40 - 200		29 - 148	245	-1=10.0,	-2=10.4	5/8 (16 MM) / 1-1/4, (32 MM)
AEH35140B-(1,2)	140		103	35 - 140		26 - 103	472	-1=10.6,	-2=11.0	5/8 (16 MM) / 1-1/4, (32 MM
AEH35175B-(1,2)	175		129	44 - 175		33 - 129	384	-1=10.6,	-2=11.1	5/8 (16 MM) / 1-1/4, (32 MM)

<sup>\*</sup> Add "1" to part numbers for 1" travel. Add "2" to part numbers for 2" travel.



MODEL	IN	(A)	MM	IN	(B)	MM	IN	(C)	MM	IN	(D)*	MM	IN	(E)	MM
AEH4F12020B-1	14.59		370.7	1.59		40.4	3.72		94.4	3.17		80.6	.76		19.3
AEH4F12026B-1	14.59		370.7	1.59		40.4	3.72		94.4	3.17		80.6	.76		9.3
AEH32025C-1	14.59		370.7	1.85		47	3.72		94.4	3.17		80.6	.76		19.3
AEH32030C-1	14.59		370.7	1.85		47	3.72		94.4	3.17		80.6	.76		19.3
AEH32040C-1	14.59		370.7	1.85		47	3.72		94.4	3.17		80.6	.76		19.3
AEH33053C-1	16.79		426.5	1.85		47	3.72		94.4	3.17		80.6	.76		19.3
AEH33060C-1	18.92		480.53	1.96		49.8	4.04		102.5	3.37		85.66	.94		23.9
AEH33090C-1	18.92		480.53	1.96		49.8	4.04		102.5	3.37		85.66	.94		23.9
AEH33120C-1	21.00		533.49	1.96		49.8	4.87		123.66	4.09		103.82	1.13		28.6
AEH33200C-1	23.21		589.5	1.96		49.8	4.87		123.66	4.09		103.82	1.13		28.6
AEH35140C-1	22.52		572.0	2.31		58.7	4.87		123.66	4.09		103.82	1.13		28.6
AEH35170C-1	22.52		572.0	2.31		58.7	4.87		123.66	4.09		103.82	1.13		28.6

### **ACRADYNE® MID-EXIT CABLE NUTRUNNERS**

#### **FEATURES AND BENEFITS**

#### Length

- The tool's length is reduced by the cable exiting in front of the grip surface.

#### Ergonomics

- Torque reaction is reduced relative to pistol style tools.
- The hand is positioned farther away from the application for more leverage. This is maximized by the cable being in front of the hand. The handle is inline, putting less stress on the wrist.

#### · Cable management

- If used with a spring balancer, the tool hangs naturally near its center of gravity, the cable is controlled by the balancer.
- The front position of the cable provides easy cable management. This is especially beneficial where one plane has length constraints and at 90° is free from obstruction (vertical for Doors-On).

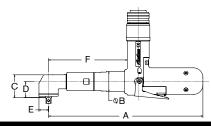


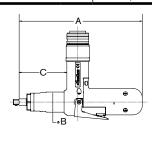
Specialized heads and blades available by request. Contact AIMCO at 1-800-852-1368.

#### **APPLICATION DATA**

		MAX		TORQUE	FREE		WEIGHT (-)		OUTPUT
MODEL*	NM	TORQUE FT-LB	NM	RANGE FT-LB	SPEED RPM	LB	SOCKET	KG	DRIVE
AEN4C22015BM(F)	15	11	3.75 - 15	2.77 - 11	700	2.6		1.18	3/8 sq. dr.
AEN4F22O3OBM(F)	30	22	7.5 - 30	5.53 - 22	675	3.3		1.50	3/8 sq. dr.
AEN4F22O37BM(F)	37	29	9.25 - 37	6.82 - 29	533	3.3		1.50	3/8 sq. dr.
AEN4F22O44BM(F)	44	32	11 - 40	8.11 - 29	432	3.3		1.50	3/8 sq. dr.
AES4A22020BVM	20	15	5 - 20	3.7 - 15	1050	2.4		1.09	3/8 sq. dr.
AES4A22O25BVM	25	18	6.3 - 25	4.6 - 18	830	2.4		1.09	3/8 sq. dr.
AES4A22030BVM	30	22	7.5 - 30	5.5 - 22	672	2.4		1.09	3/8 sq. dr.
AES4A22040BVM	40	30	10 - 40	7.4 - 30	525	2.4		1.09	3/8 sa. dr.

<sup>\*</sup> Add "F" to part numbers for flush socket.





MODEL	IN	(A) MI	4I N	(B)	MM	IN	(C)	MM	IN	(D)	MM	IN	(E)	MM	IN	(F)	MM
AEN4C22015BM	9.02	229	.1 1.4	7	37.3	1.29		32.8	.82		20.9	.52		13.1	5.53		140.4
AEN4D22023BM	11.1	280	.3 1.4	7	37.3	1.42		36.1	.92		23.4	.56		14.1	5.67		144.1
AEN4D22029BM	11.1	280	.3 1.4	7	37.3	1.42		36.1	.92		23.4	.56		14.1	5.67		144.1
AEN4D22O35BM	11.1	280	.3 1.4	7	37.3	1.42		36.1	.92		23.4	.56		14.1	5.67		144.1
AEN4F22030BM	11.24	285	.6 1.4	7	37.3	1.66		42.1	1.17		29.7	.70		17.8	5.73		145.6
AEN4F22O37BM	11.24	285	.6 1.4	7	37.3	1.66		42.1	1.17		29.7	.70		17.8	5.73		145.6
AEN4F22044BM	11.24	285	.6 1.4	7	37.3	1.66		42.1	1.17		29.7	.70		17.8	5.73		145.6
AES4A22020BM	9.0	228	.1 1.4	7	37.3	3.49		88.6									
AES4A22025BM	9.0	228	.1 1.4	7	37.3	3.49		88.6									
AES4A22030BM	9.0	228	.1 1.4	7	37.3	3.49		88.6									
AES4A22040BM	9.0	228	.1 1.4	7	37.3	3.49		88.6									

## **ACRADYNE® RIV-NUT NUTRUNNERS**

#### **FEATURES AND BENEFITS**

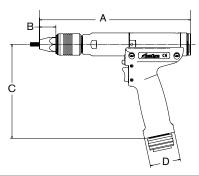
- · Top and Rear exit cable are standard.
- Straight, Fixtured and Push to Start models are available by request. Contact AIMCO at 1-800-852-1368.



#### **APPLICATION DATA**

MODEL*	NM	MAX TORQUE	FT-LB	NM	TORQUE RANGE	FT-LB	FREE SPEED RPM	LB	WEIGHT (-) SOCKET	KG	OUTPUT DRIVE
AEP4(A,R,T)12011BR	11		8.1	2.8 - 11		2 - 8.1	1,313	2.3		1.04	3/8 sq. dr.
AEP4(A,R,T)12014BR	14		10	3.5 - 14		2.6 - 10	1,037	2.3		1.04	3/8 sq. dr.
AEP4(A,R,T)12018BR	18		13	4.5 - 18		3.3 - 13	840	2.3		1.04	3/8 sq. dr.
AEP4(A,R,T)12022BR	22		16	5.5 - 22		4.1 - 16	656	2.3		1.04	3/8 sq. dr.
AEP4(A,R,T)22020BR	20		15	5 - 20		3.7 - 15	1,313	2.4		1.09	3/8 sq. dr.
AEP4(A,R,T)22025BR	25		18	6.3 - 25		4.6 - 18	1,037	2.4		1.09	3/8 sq. dr.
AEP4(A,R,T)22030BR	30		22	7.5 - 30		5.5 - 22	840	2.4		1.09	3/8 sq. dr.
AEP4(A,R,T)22040BR	40		30	10 - 40		7.4 - 30	656	2.4		1.09	3/8 sq. dr.

<sup>\*</sup> Add "A" to part numbers for bottom exit cable models, Add "R" to part numbers for rear exit cable models, Add "T" to part numbers for top exit cable models,



MODEL	IN	(A) MM	IN	(B)	MM	IN	(C)	MM	IN	(D)*	MM
AEP412011BR	9.68	245.9	1.05		26.7	6.87		174.5	1.96		49.8
AEP412014BR	9.68	245.9	1.05		26.7	6.87		174.5	1.96		49.8
AEP412018BR	9.68	245.9	1.05		26.7	6.87		174.5	1.96		49.8
AEP412022BR	9.68	245.9	1.05		26.7	6.87		174.5	1.96		49.8
AEP422020BR	10.18	258.6	1.05		26.7	6.87		174.5	1.96		49.8
AEP422025BR	10.18	258.6	1.05		26.7	6.87		174.5	1.96		49.8
AEP422030BR	10.18	258.6	1.05		26.7	6.87		174.5	1.96		49.8
AEP422040BR	10.18	258.6	1.05		26.7	6.87		174.5	1.96		49.8

## **ACRADYNE® HIGH TORQUE D/C TOOLS**

Critical bolting demands tools that will deliver high torque with superior performance. The HT Series from AcraDyne combines these features in an electric high-torque bolting tool that beats the competition in accuracy, speed, and safety.

When combined with AcraDyne's controller, customers have a high-torque critical bolting system that can handle the toughest and most important bolting jobs.

#### FEATURES AND BENEFITS

- One of the most accurate high-torque tools in the world today
- Up to 100 times faster than hydraulic tools
- 1 Nm 8,100 Nm
- Ergonomic, robust design with five handle configurations
- Over 300 models to choose from
- · Built-in integral transducer for optimal monitoring and control
- The world's ONLY traceable system at the square drive for high-torque bolting
- Data retrieval
- Designed and MADE IN THE USA









Fixtured Type (AEF)



Straight Lever Type (AES)

FIXED GEARCASE		APPROX.	TORQUE	APPROX. SPEED	WEI	GHT	LEN	GTH	DI	A.	DRIVE	SOUND LEVEL
MODEL*	SERIES	Nm	ft-lb	rpm	kg	lb	mm	in	mm	in	in	dBA
(AEP) (AED) (AES) (AEJ) (AEF)4A66250B	6000	250	185	315	4.6	10.5	254	10	66	2.6	0.75	66
(AEP) (AED) (AES) (AEJ) (AEF)4A66425B	6000	425	315	165	4.6	10.5	254	10	66	2.6	0.75	66
(AEP) (AED) (AES) (AEJ) (AEF)4A66625B	6000	625	460	106	4.8	10.5	254	10	66	2.6	0.75	66
(AEP) (AED) (AES) (AEJ) (AEF)4A66925B	6000	925	682	72	4.8	10.5	254	10	66	2.6	0.75	66
(AEP) (AED) (AES) (AEJ) (AEF)4A771200B	7000	1200	885	65	6.6	14.5	259	10.2	76	3.0	1	66
(AEP) (AED) (AES) (AEJ) (AEF)4A773000B	7000	3,000	2,213	25	7.5	16.5	294	11.6	76	3.0	1	66
(AEP) (AED) (AES) (AEJ) (AEF)4A884200B1	8000	4,200	3,100	12	11.1	24.5	340	13.4	86	3.6	1	66
(AEP) (AED) (AES) (AEJ) (AEF)4A884200B	8000	4,200	3,100	12	11.1	24.5	340	13.4	86	3.6	1.5	66
(AEP) (AED) (AES) (AEJ) (AEF)4A885000B	8000	5,000	3,700	9	11.1	24.5	340	13.4	86	3.6	1.5	66
(AEP) (AED) (AES) (AEJ) (AEF)4A896500B	8000/9000	6,500	4,800	7	15.7	34.5	378	14.9	101	4.0	1.5	66
(AEP) (AED) (AES) (AEJ) (AEF)4A898100B	8000/9000	8,100	6,000	5	15.7	34.5	378	14.9	101	4.0	1.5	66

<sup>\*</sup> Add "B" to the end of the model number for bottom exit cable (AEF fixtured models only).

CLUTCHED MODEL	SERIES	APPROX. Nm	TORQUE ft-lb	APPROX. SPEED rpm	WEI kg	GHT lb	LEN:	GTH in	DI mm	A. in	DRIVE in	SOUND LEVEL dB(A)
(AEP) (AEJ)4B66250B	6000	250	185	315	5.3	12	305	12	66	2.6	0.75	66
(AEP) (AEJ)4B66425B	6000	425	315	165	5.3	12	305	12	66	2.6	0.75	66
(AEP) (AEJ)4B66625B	6000	625	460	106	5.5	12	305	12	66	2.6	0.75	66
(AEP) (AEJ)4B66925B	6000	925	682	72	5.5	12	305	12	66	2.6	0.75	66
(AEP) (AEJ)4B771200B	7000	1200	885	65	7.3	16	310	12.2	76	3.0	1	66
(AEP) (AEJ)4B773000B	7000	3,000	2,213	25	8.2	18	345	13.6	76	3.0	1	66
(AEP) (AEJ)4B884200B1	8000	4,200	3,100	12	11.8	26	391	15.4	86	3.6	1	66
(AEP) (AEJ)4B884200B	8000	4,200	3,100	12	11.8	26	391	15.4	86	3.6	1.5	66
(AEP) (AEJ)4B885000B	8000	5,000	3,700	9	11.8	26	391	15.4	86	3.6	1.5	66
(AEP) (AEJ)4B896500B	8000/9000	6,500	4,800	7	16.4	36	429	16.9	101	4.0	1.5	66
(AEP) (AEJ)4B898100B	8000/9000	8,100	6,000	5	16.4	36	429	16.9	101	4.0	1.5	66

## **ACRADYNE® HIGH TORQUE D/C ANGLE TOOLS**

#### FEATURES AND BENEFITS

- Transducerized closed-loop control like all AcraDyne HT-Series tools.
- Torque is measured at the output, not before the gearing like competing products.
- A unique solution: Low profile head, small diameter, lever operated tools with the transducer at the output.
- No effect on results caused by gear wear, like other angle tools. The torque reported is the torque delivered to the fastener.
- Most accurate right-angle high torque tools in the world.
- · Smallest tools of their kind on the market.
- Same durable high-cycle gearing as our other HT-series tools.
- Models up to 8,100 Nm available by special order.



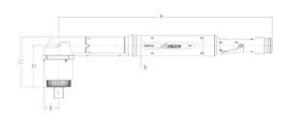






#### **SPECIFICATIONS**

	MAX. TO	DRQUE*	TORQUE	RANGE	FREE SPEED	WEI	GHT	
MODEL	nm	ft-lbs.	nm	ft-lbs.	RPM	lbs.	kg	OUTPUT DRIVE
AEN356540A	540	398	135-540	100-398	109	13.1	5.95	3/4" Square Drive
AEN3571000A	1000	737	250-1000	184-737	61	16.3	7.39	1" Square Drive
AEN3571600A	1600	1180	400-1600	295-1180	33	16.7	7.57	1" Square Drive
AEN3572600A	2600	1917	650-2600	479-1917	21	18.5	8.40	1" Square Drive





	/	A	В		(	2	[	)	E	
DIMENSIONS	in	mm	in	mm	in	mm	in	mm	in	mm
AEN356540A	22.58	573.6	2.31	58.7	4.75	120.6	4.05	102.8	1.33	33.7
AEN3571000A	22.92	582.2	2.31	58.7	5.36	136.1	4.44	112.7	1.53	38.7
AEN3571600A	22.92	582.2	2.31	58.7	5.36	136.1	4.44	112.7	1.53	38.7
AEN3572600A	22.92	582.2	2.31	58.7	6.77	171.9	5.86	148.8	1.53	38.7

### **ACRADYNE® HIGH TORQUE DUAL LEVER AND GEARHEAD TOOLS**

### **DUAL LEVER TOOLS**

#### **FEATURES AND BENEFITS**

- Additional safety when using a tool with a reaction bar or nose extension.
- Requires the operator to use both hands when starting the tool, which keeps hands clear of the application.
- Helps to avoid accidental starting of the tool.
- · Available in three handle types: "Handle Bar" (F) style, Straight (S) style with side handle, and Pistol (P) style.



MODEL*		APP TOR	ROX. QUE	APPROX. SPEED	WEI	GHT	LEN	IGTH	DI	Α.	DRIVE	SOUND LEVEL
(HANDLE TYPE)	SERIES	Nm	ft-lb	rpm	kg	lb	mm	in	mm	in	in	dB(A)
AE(S)(F)(P)4(A)(B)66250BDL	6000	250	185	315	4.6	10.5	254	10	66	2.6	0.75	66
AE(S)(F)(P)4(A)(B)66425BDL	6000	425	315	165	4.6	10.5	254	10	66	2.6	0.75	66
AE(S)(F)(P)4(A)(B)66625BDL	6000	625	460	106	4.8	10.5	254	10	66	2.6	0.75	66
AE(S)(F)(P)4(A)(B)66925BDL	6000	925	682	72	4.8	10.5	254	10	66	2.6	0.75	66
AE(S)(F)(P)4(A)(B)771200BDL	7000	1,200	885	65	6.6	14.5	259	10.2	76	3.0	1	66
AE(S)(F)(P)4(A)(B)773000BDL	7000	3,000	2,213	25	7.5	16.5	294	11.6	76	3.0	1	66
AE(S)(F)(P)4(A)(B)884200B1DL	8000	4,200	3,100	12	11.1	24.5	340	13.4	86	3.6	1	66
AE(S)(F)(P)4(A)(B)884200BDL	8000	4,200	3,100	12	11.1	24.5	340	13.4	86	3.6	1.5	66
AE(S)(F)(P)4(A)(B)885000BDL	8000	5,000	3,700	9	11.1	24.5	340	13.4	86	3.6	1.5	66
AE(S)(F)(P)(P)4(A)(B)896500BDL	8000/9000	6,500	4,800	7	15.7	34.5	378	14.9	101	4.0	1.5	66
AE(S)(F)(P)4(A)(B)898100BDL	8000/9000	8,100	6,000	5	15.7	34.5	378	14.9	101	4.0	1.5	66

<sup>\*</sup> The fifth digit of the model number is "A" for fixed gearcase models and "B" for clutched gearcase models.

### **HT GEARHEAD TOOLS**

#### **FEATURES AND BENEFITS**

- Custom made to fit virtually any application.
- Same high durability gearing as on AcraDyne's standard HT Series tools.
- Model types available:
  - HT Offset Gearhead tools
  - HT Right Angle with Offset Gearhead Tools
  - HT Right Angle Air Tools with Offset Gearhead







<sup>-</sup> Above data is for clutched gearcase models. For no-clutched models, reduce weight by 1.5 lb (0.7 kg) and length by 2 in (51 mm).

<sup>-</sup> For Straight Type Tools Choose the Position of the Handle by Adding (L) for Left Side and (R) for Right Side

## **ACRADYNE® HIGH TORQUE NOSE EXTENSIONS**



### **NOSE EXTENSIONS**

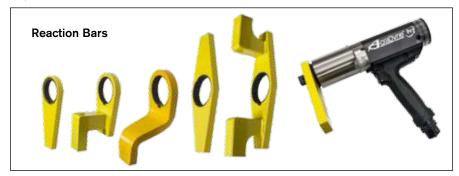
#### **FEATURES AND BENEFITS**

- Ideal for hard-to-reach applications when a torque tube, or arm, is not desirable.
- Used as a cost-effective, more flexible option to a multiple spindle system.
- · Common Applications:
  - Wheel install and repair stations.
  - Large flange assembly



#### **REACTION BARS**

Each tool includes a standard spline-attachment reaction device. Custom reaction devices are also available; contact your AIMCO sales representative for more details, 1-800-852-1368.



S

#### **ACCESSORIES**

Custom accessories are also available for your application; contact your AIMCO Sales Representative for more details, 1-800-852-1368.







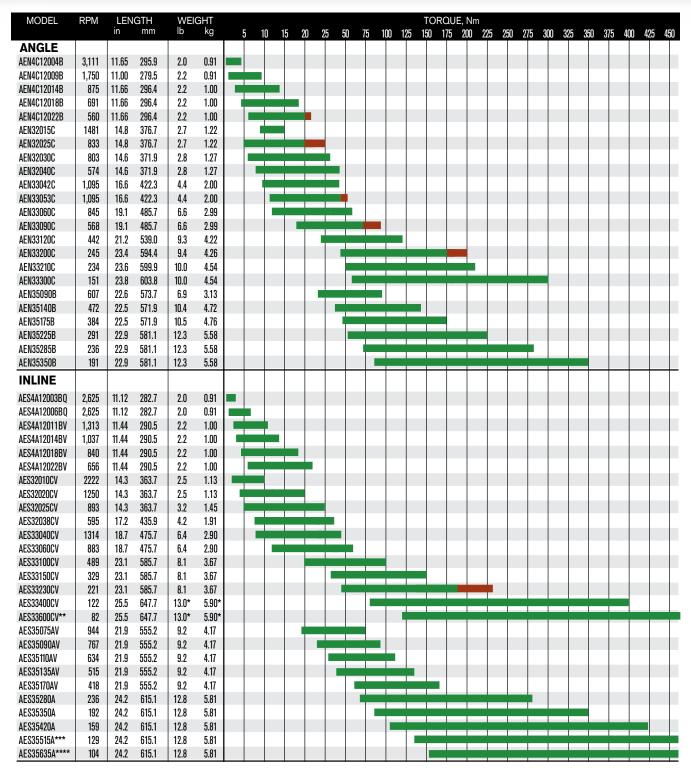


Fixed Handle with Hoist Ring

MODEL	DESCRIPTION
26477	Swivel Bail, 6000 Series
26327	Swivel Bail, 7000 Series
25287	Swivel Bail, 8000 Series
26478	Swivel D-Handle, 6000 Series
26328	Swivel D-Handle, 7000 Series
25291	Swivel D-Handle, 8000 Series
26479	Stationary Bail, 6000 series (26336 handle not included)
26332	Stationary Bail, 7000 series (26336 handle not included)
25289	Stationary Bail, 8000 series (26336 handle not included)
26336	Fixed Handle (for use with 26479, 26332, 25289)
26337	Rear Fixed Hoist Ring, 6000/7000/8000 Series Pistols
28514	Rear Folding Hoist Ring Kit for 8000 Series Pistols
28549	Sliding Spindle, 6000 Series
27045	Slidina Spindle, 7000 Series

## NOTES

### DC TOOLS: TOOL/SPINDLE SELECTION GUIDE

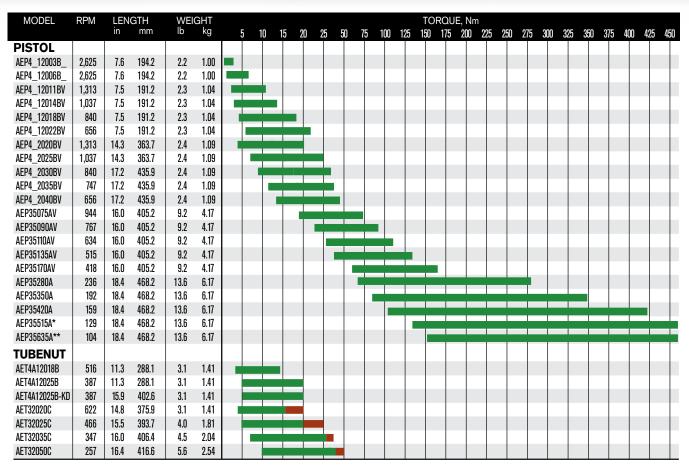


<sup>\*</sup>Includes reaction bar and fixture nut.

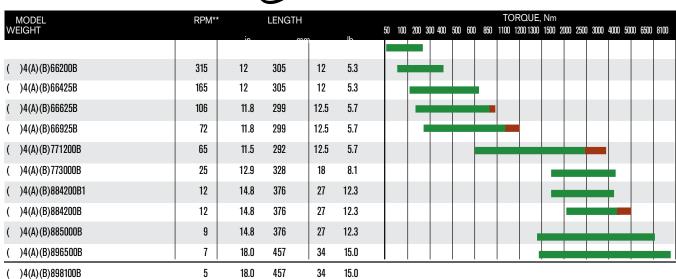
<sup>\*\*</sup>Torque Range: 120-480 Nm Max Torque: 600 Nm

<sup>\*\*\*\*</sup> Torque Range: 128-515 Nm \*\*\*\*\*Torque Range: 159-635 Nm

## DC TOOLS: TOOL/SPINDLE SELECTION GUIDE



## HIGH TORQUE SERIES - CraDyne®



Recommended Torque Range

Max Torque

### **ACRADYNE® ACCESSORIES**

#### **CABLE ASSEMBLIES**

The AcraDyne® DC electric nutrunner tool system uses a single cable to carry all necessary conductors for superior ergonomics and durability.

- Flexible polyurethane cover for maximum durability, abrasion and transmission fluid resistant.
- Quick disconnects at both ends facilitate tool changeover and troubleshooting.
- The CAN data/signal is via RJ45 for products such as the KDM, socket tray or computer.



	LEN	GTH		
DESCRIPTION	m	ft		
ABLES				
Cable G3 Tool Cable 3M	3	9.8		
Cable G3 Tool Cable 5M	5	16.4		
Cable G3 Tool Cable 10M	10	32.8		
Cable G3 Tool Cable 3M Lightweight*	3	9.8		
Cable G3 Tool Cable 5M Lightweight*	5	16.4		
Cable G3 Tool Cable 10M Lightweight*	10	32.8		
EXTENSIONS				
Extension cable 10M	10	32.8		
Extension cable 20M	20	65.6		
	ABLES Cable G3 Tool Cable 3M Cable G3 Tool Cable 5M Cable G3 Tool Cable 10M Cable G3 Tool Cable 3M Lightweight* Cable G3 Tool Cable 5M Lightweight* Cable G3 Tool Cable 10M Lightweight* ONS Extension cable 10M	DESCRIPTION m ABLES Cable G3 Tool Cable 3M 3 Cable G3 Tool Cable 5M 5 Cable G3 Tool Cable 10M 10 Cable G3 Tool Cable 3M Lightweight* 3 Cable G3 Tool Cable 5M Lightweight* 5 Cable G3 Tool Cable 10M Lightweight* 10 IONS Extension cable 10M 10		

<sup>\*</sup>Lightweight cables are for use only with 1000 & 2000 Series tools.

#### **CABLE ADAPTERS AND CONNECTORS**





MODEL	DESCRIPTION			
ADAPTERS AND CONNECTORS				
25646	G1 iEC to G3 Cable Adapter			
26934	G3 iEC to G1 Cable Adapter			
27210	G3 Tool to G1 Cable Adapter			
26364	Right Angle Cable Adapter			
26709	G3 Tool to G1 Cable (Cable Tester only)			
26700	Cable Tester Unit, G3			
26594	Conversion Kit G1 iEC to G3 iEC			
27370	Conversion Kit G3 iEC to G1 iEC			
25491	Breakaway Cable Connector – Ensures disconnect of cable should stress in excess of 40 lbs occur			

### DATA INTERFACE OPTIONS

	MODEL	DESCRIPTION
DATA INTERFACE OF	PTIONS	
	20403	Data/signal cable connects accessories to controller. Length: 7 ft (2.0 m)
	23490	I/O Wiring Connector – Simple Module to facilitate connections to I/O on iEC Controllers
Accepted as a second as a seco	AEC-CIM	Interface module that allows communication between a computer and an AcraDyne® controller through USB or CAN connections. All necessary cables included.

#### **CABLE TESTER UNIT**

AcraDyne's cable tester unit helps you diagnose and verify functionality of AcraDyne Tool Cables.

- · Eliminate guesswork 26700
- as to whether cable has been damaged or is functioning within specifications.
- · Verifies each specific conductor within the cable for continuity.
- · Simple, quick testing facilitates troubleshooting.

### **ACRADYNE® ACCESSORIES**

#### **SOCKET TRAY**

- Simply remove the assigned socket to select the application to be run.
- Quick and easy set up. Parameters assigned to socket position automatically.
- · Optional self illuminating socket receptacles.
- Delrin® blanks may be easily machined by the customer to accommodate custom socket profiling.
- Nothing to break, wear out, or maintain.
- · Proximity sensors detect presence of socket.
- Can also be used with UEC style controllers.

	MODEL	DESCRIPTION
100	AMPST-2-I	2 Position Socket Tray for iEC Controllers
9000	AMPST-4-I	4 Position Socket Tray for iEC Controllers
	AMPST-6S-I	6 Position Socket Tray for iEC Controllers, Straight Line
	AMPST-6-I	6 Position Socket Tray for iEC Controllers
0000000	AMPST-8-I	8 Position Socket Tray for iEC Controllers

#### **SLIDING SPINDLES**



MODEL	DESCRIPTION
20712	Sliding Spindle 2" Stroke 2000 Series Tools, 3/8" Drive
20848	Sliding Spindle 2" Stroke 3000 Series Tools, 1/2" Drive

#### **TOOL BAILS**

- AcraDyne's spring bails are designed for use with any of the AcraDyne® 1000, 2000, or 3000 Series tools.
- The spring bails snap on quickly and firmly at any place on the body of the tool for perfect balance and secure suspension.

	MODEL	DESCRIPTION
0	25501	Wire Bail for 1000 Series Tools
8=	27594	Stationary Bail for 1000 Series Tools
8	27791	Rotating Bail Assembly for 1000 Series Tools
6	26568	Cable Bail to Hang Tool Vertically for Gen III Cables
1	21208	Spring Bail for 2000 Series Tools
8	23662	Rotating Bail for 2000 Series Tools
8	23575	Rotating Bail for 3000 Series Tools

#### **TOOL STORAGE**

Tool baskets and tool hangers are a great way to keep a tool in place when not being used.

#### **UNIVERSAL TOOL BASKET**

Interchangeable among angle head and pistol grip tool models throughout the industry.



#### **VERTICAL TOOL HANGER**

Designed for AcraDyne Gen 1 tools.



### **ACRADYNE® ACCESSORIES**

#### **CONTROLLER BRACKETS**



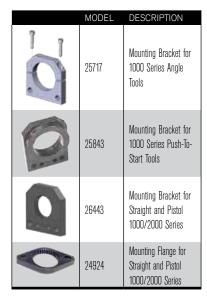




27816

MODEL DESCRIPTION
20322 Basic wall-mounting plate
20853 Table stand free standing platform
27816 Mounting bracket with internal wireways

#### **MOUNTING BRACKETS**



	MODEL	DESCRIPTION
	25718	Mounting Bracket for 3000/5000 Series Angle Tools
	26570	Mounting Bracket for 3000/5000 Series Straight Tools
8	25265	Angle head Mounting Bracket (Cradle type) for 3000/5000 Angle Tools over 225 Nm

#### **LIGHT TOWER**

Cost- and energy-efficient LED light tower is highly visibile from any direction, angle, and distance.

- Two built-in alarms (FB Type) with selectable sound patterns.
- Adjustable Volume (Max. 85 dB at 1m)
- Tower includes red, yellow, green, blue, and clear lenses.



23730

28489 Light Tower Bracket for Gen IV Controller

#### **ANGLE TOOL BODY JACKETS**

Keep your tools protected and avoid accidental damage to the application with AIMCO's tool body jackets.



MODEL	DESCRIPTION
BJ10051	For 1000 series angle tools
BJ10052	For 2015, 2025 series angle tools
BJ10053	For 2030, 2040, 2055 series angle tools
BJ10054	For 3060, 3090 series angle tools
BJ10055	For 3120, 3200 series angle tools

#### **BAR CODE SCANNER**



LS4278
Bluetooth®-Enabled Scanner Kit

Sturdy bar code scanners deliver superior scanning, allowing you to easily scan small, stacked, or poorly one-dimensional (1D) printed bar codes. Kit includes a cradle, power supply, and USB/Ethernet cable.

- Scratchproof tempered glass exit window.
- Single-circuit board construction eliminates common interconnection failures.
- Industrial long-life charging contacts can withstand 250,000+ insertions into cradle.
- Wireless scanner enables users to hold scanner at any angle.

MODEL	DESCRIPTION
LS4208	RS232 Barcode Reader Kit
LS4278	RS232 Wireless Barcode Reader Kit

# **ACRADYNE® HIGH TORQUE PNEUMATIC TOOLS**





#### **FEATURES AND BENEFITS**

AcraDyne's High Torque
Pneumatic Bolting Tools
offer a reliable and
dependable
solution for the
installation and
removal of heavyduty fasteners in a
variety of industries
that require high torque
capability, accuracy, power,
and safety.

- Modular design allows for ease of maintenance.
- Motors and gearing are interchangeable.
- Durable and reliable gearbox
- Proven air motor
- Faster free speed
- · One-hand reverse







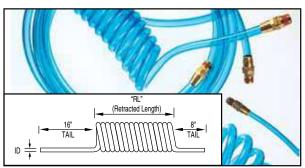


MODEL	TORQUE (Nm)	TORQUE (Ft-lb)	SPEED (rpm)	WEIGHT (lb)	SQUARE DR. (in)	AIR CONSUMPTION (CFM)
AAP1B66400A	400	300	70	9.75	3/4	22.9
AAP1B66600A	600	450	50	9.75	3/4	22.9
AAP1B66850A	850	625	36	9.75	1	22.9
AAP1B76950A	950	700	37	10.4	1	26.3
AAP1B771350A	1350	1000	22	10.4	1	26.3
AAP1B771800A	1800	1325	15	14.9	1	26.3
AAP1B772950A	2950	2175	9	14.9	1	26.3
AAP1B885100A	5100	3775	7.5	23	1-1/2	31.5

# **ACRADYNE® HT PNEUMATIC TOOL ACCESSORIES**

#### **AIR LINE**

#### **AIMCO AIR HOSE**





- Durable Polyurethane or Rubber hose.
- Excellent recoil memory.
- · Maximum flexibility and light weight.
- Polyurethane available in transparent hose color (opaque available).
- · Custom colors available.
- High chemical resistance.

#### **REACTION BARS**

Each tool includes a standard spline-attachment reaction device. See page 30 for part numbers. Custom reaction devices are also available; contact your AIMCO Sales Representative for more details, 1-800-852-1368.



#### SINGLE AIR HOSE ASSEMBLIES (COILED)

MODEL WORKING PRESSURE 100 PSI	DESCRIPTION (OD x ID x LENGTH)	RETRACTED LENGTH	NPT FITTINGS
ASH-500C-15MSZ	3/4" x 1/2" x 15'	13"	1/2"
ASH-500C-25MSZ	3/4" x 1/2" x 25'	23"	1/2"

### SINGLE AIR HOSE (COILED) CUSTOM LENGTHS

# Custom length coil assemblies and special colors are available in minimum order quantities.

#### STRAIGHT AIR HOSE (SOLD PER FOOT)

MODEL	DESCRIPTION
ASH-500Z	1/2" I.D.

- Assemblies include reusable swivel fitting.
- Burst pressure 428 PSI @ 68° F.
- Working temperature: -104° F to 175° F.
- Straight hose is available by the foot with, or without, hose fittings.
- Ask about full-reel pricing. Call 1-800-852-1368.

#### **AIR HOSE FITTINGS**



#### **PLUGS**

MODEL	DESCRIPTION
28161	1/2" x 1/4" MPT
28162	1/2" x 3/8" MPT
28163	1/2" x 1/2" MPT
28164	1/2" x 1/2" FPT



#### QUICK-CHANGE COUPLERS

MODEL	DESCRIPTION
27768	1/2" FPT
27769	1/2" MPT



27771

#### PROTECTIVE COUPLER

MODEL	DESCRIPTION
27771	Vinyl



#### **BRASS FITTINGS**

MODEL	CAPACITY
500-RZ	1/2" NPT Rigid Fitting
500-SZ	1/2" NPT Swivel Fitting

#### **PROTECTIVE COVERS**

Durable protective covers prevent marring and damage.



	0	
MODEL		DESCRIPTION
BJ10078		Protective Cover, 6000 Series
BJ10077		Protective Cover, 7000 Series
BJ10076		Protective Cover, 8000 Series

# **ACRADYNE® SYSTEMS**



#### **MULTIPLE NUTRUNNING SYSTEMS**

AIMCO has the capability to integrate the AcraDyne® tool spindle into a customized Multiple Nutrunning System. From simple systems vertically suspended above the part to assembly stations that integrate with your line, AIMCO can effectively accommodate your project.

LET US KNOW YOUR REQUIREMENTS AND WE WILL PROPOSE A SOLUTION TAILORED TO YOUR NEEDS.



#### SMALL ENGINE MANUFACTURER

- Air cooled small vehicle engine assembly.
- Ten spindle 2.4 2.8 kgf-m.
- Integrated PLC control of system functions.
- Supplied overhead rail follows line and returns powerhead to home position.
- Powerhead features single lever control and visual confirmation of accepted torque.

#### **FEATURES AND BENEFITS**

- Nutrunner sequencing Allows nutrunners to be sequenced at each phase of the tightening process providing even distribution of torque and load to each fastener.
- Even torque distribution Where there is uneven torque distribution, part damage or distortion could occur with possible fastener failure or loss of residual clamp load.
- Snug, threshold, final torque in one pass No need for multiple torque stage sequencing. Fixtured nutrunners save time and effort.
- No missed fasteners With multiple nutrunners there is a spindle dedicated to each location, ensuring quality on every rundown on every bolt.
- Better residual torques Synchronized controlled fastening allows residual torque levels to be consistent with the dynamic torque specification.
- Saving in cycle time Compared to using a single nutrunner tool with many rundowns, running all fasteners simultaneously reduces in-station cycle time.
- Cost saving benefits Saving installation cycle time frees operators to handle additional tasks and potentially reduce labor costs.
- Collect data Most common methods of collecting data for quality control and statistical analysis can be implemented from a serial data string using RS232 to formatted data from a network database.

#### **ENGINE MANUFACTURER**

- Gasoline generator assembly.
- Six spindle 30 Nm
- Replaced hand assembly with rotation pattern to simultaneous rundown.

#### **AUTOMOTIVE MANUFACTURER**

- Wheel lug nut assembly.
- Four spindle 105 Nm
- Rotating spindle trunnion.
- Replaced competitive system.
- Built-in PC for data storage.
- Custom display panel showing application.
- Cpk range of 3.2 6.9 far exceeds quality requirements.





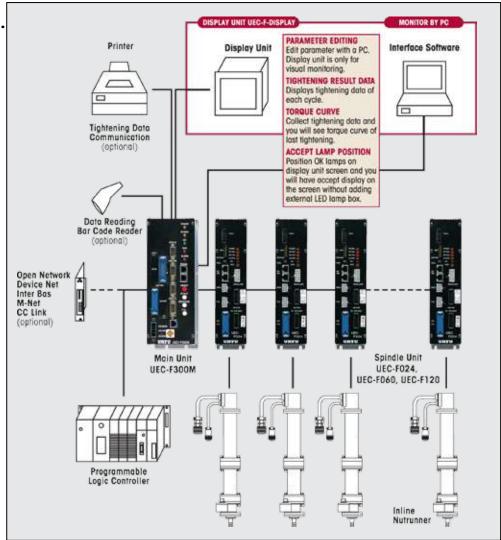
#### **FEATURES AND BENEFITS**

- Reduced Cable Numbers Integral type tube containing torque sensor cable and resolver cable.
- Enhanced Memory Capacity Designed with increased memory capacity for improved efficiency of assembly line and tightening data control.
- Open Network Communication We have prepared various types of communication boards for your specifications (M-NET, Device net, Inter-bas, CC-link).
- Automatic Setting (Automatic recommended value input) Advance value preparation per application will help you simplify your parameter setting.
- Space Saving One piece structure contained spindle controller and driver unit reduces space occupancy by 40% to 60%.

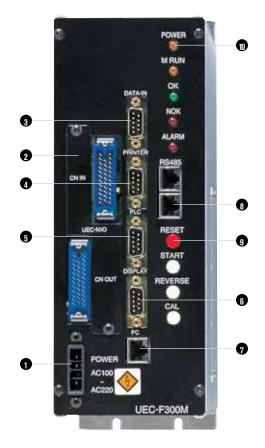
	VOLUME	& WIDTH		VOLUME & WIDTH WITH F-SERIES						
	BEF	ORE	UEC-	F024	UEC-F120					
NO. OF SPINDLES	CM	MM	CM	MM	CM	MM				
1-Spindle	16,800	200	6,360	150	8,268	195				
2-Spindle	24,360	290	8,904	210	12,084	285				
5-Spindle	47,040	560	16,536	390	24,804	585				
10-Spindle	84,840	1,010	29,256	690	48,336	1,140				

# F-SERIES NETWORK CONNECTIVITY





#### Main Unit UEC-F300M



TID BYPASS MICHAEL STATE OF THE SOLVER STATE O

UEC-F024

Spindle unit UEC-F024

# GTART REV CAL RESET DATA UEC-MKB RAMI D-NO MODE DATA SET DATA SET TID RESOLVER MCN. FILIN OK FILIN OK

**UEC-MKB** 

Power Socket

 $AC100 \sim 220V$  single phase

External Input/Output Connector

PLC1: input signal connector for control signal input (fixed allocation) PLC2: output signal connector for judgement result and status output (free allocation)

3 Serial Port (Data Input Connector)

RS232C DATA-IN accepts serial numbers, etc. provided by external equipment such as a barcode reader then outputs tightening data together with serial numbers.

Serial Port (Data Output Connector)

RS232C PRINTER outputs tightening result data to your printer (free format)

**5** Serial Port (Data Output Connector)

RS232C PLC outputs tightening result data to PLC (free format)

**6** Serial Port (Data Output Connector)

RS485 outputs tightening result data to an external exclusive display unit

**7** PC Connector

RS232C for communication with a PC

Spindle-to-Spindle Communication Connector

RS485 for internal spindle unit to spindle unit communications

Manual Switches

RESET, START, REVERSE and CAL

1 LED Display

POWER, M RUN, ACCEPT, REJECT and ALARM

#### Status Change Switch

0

RUN/BYPASS change switch RUN: Operation possible status BYPASS: Non-operation status

2 External Communication Device

RS485 connector

Resolver Connector

Tool and resolver connection

MON Connector (Monitor Output)

Analog torque electric pressure and angle pulse output

**5** T/D Connector

Tools torque sensor connection

6 I/O Connector

External input and output control connection

**7** MOTOR Connector

Connection with tools magnet motor

8 AC IN Connector

AC200V ~ 220V 3-phase power socket

#### **1** Manual Operation Switches

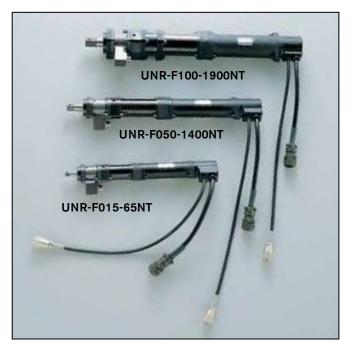
START: manual start switch REVERSE: Manual reverse switch CAL: Manual calibration switch RESET: Manual reset switch

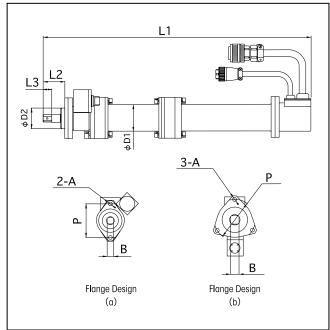
2 Data Display Operation Switch

MODE switch SET switch DATA UP switch DATA DOWN switch

NOTE: Display unit (UEC-MKB) is an option.

#### **INLINE NUTRUNNERS**





#### The "F" Series Nutrunner System will satisfy multiple tightening patterns.

- Torque Tightening
- Spline Press Ft Tightening
- Torque
- Pin Hole Alignment Tightening
- Angle Tightening

- Pre-Load Detection
- Angle
- Idle Operation Check
- Plastic Range Monitor

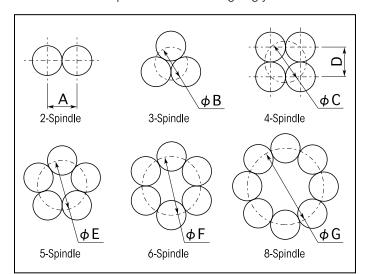
Rated Strain	2000X10-6
Output Voltage	1.0 mV/V
Non-Lineality	±0.5% R.O.
Influence on Zero Point Due to Temperature	±0.1% R.O./°C
Temperature Rating	-10∼+65°C
Input Output Resistance	480Ω
Maximum Input Voltage	16V
Insulation Resistance	Greater than $300\Omega$
Overload Capacity	150%
Overload Capacity	150%

#### **INLINE NUTRUNNER SPECIFICATIONS**

TIGHTENING FREE EXTERNAL DIMENSIONS (MM) TORQUE CAPACITY MOTOR TORQUE SPEED WEIGHT SPINDLE FLA												FLANGE				
MODEL	L1	L2	L3	D1	D2	Р	Α	В	SENSOR	NM	TYPE	NM	RPM	KG	UNIT	DESIGN
UNR-F015-45NT	371	41	12	40.5	38	51	M6	9.5	TM-035	34.3	F015	4.5	3,200	2.48	UEC-F024	(a)
UNR-F015-65NT	371	41	12	40.5	38	51	M6	9.5	TM-035	34.3	F015	6.5	2,200	2.48	UEC-F024	(a)
UNR-F015-200NT	400	41	12	40.5	38	51	M6	9.5	TM-035	34.3	F015	20	730	2.73	UEC-F024	(a)
UNR-F015-280NT	400	41	12	40.5	38	51	M6	9.5	TM-035	34.3	F015	28	500	2.73	UEC-F024	(a)
UNR-F015-350NT	400	41	12	40.5	38	51	M6	9.5	TM-035	34.3	F015	35	410	2.73	UEC-F024	(a)
UNR-F050-270NT	453.5	41	12	50	38	51	M6	9.5	TM-035	34.3	F050	27	1,750	4.86	UEC-F060	(a)
UNR-F050-630NT	500.5	41	16.5	50	38	62	M8	12.7	TM-085	83.3	F050	63	750	5.08	UEC-F060	(a)
UNR-F050-730NT	500.5	41	16.5	50	38	62	M8	12.7	TM-085	83.3	F050	73	650	5.08	UEC-F060	(a)
UNR-F050-880NT	512.5	45	20	50	48	62	M8	15.88	TM-150	147	F050	88	540	5.47	UEC-F060	(a)
UNR-F050-1400NT	512.5	45	20	50	48	62	M8	15.88	TM-150	147	F050	140	340	5.47	UEC-F060	(a)
UNR-F100-1300NT	519.5	45	20	62	48	62	M8	15.88	TM-150	147	F100	130	730	7.42	UEC-F120	(a)
UNR-F100-1900NT	515.5	45	20	62	48	76	M8	15.88	TM-250	245	F100	190	500	7.94	UEC-F120	(b)
UNR-F100-2500NT	515.5	45	20	62	48	76	M8	15.88	TM-250	245	F100	250	370	7.94	UEC-F120	(b)
UNR-F100-3700NT	589	57	30	62	58	76	M10	19	TM-400	392	F100	370	260	9.55	UEC-F120	(b)
UNR-F100-5400NT	704.5	80	40	62	70	90	M10	25.4	TM-700	686	F100	540	175	17.0	UEC-F120	(b)

#### "F" NUTRUNNER MOTORS' MINIMUM PITCH CIRCLE

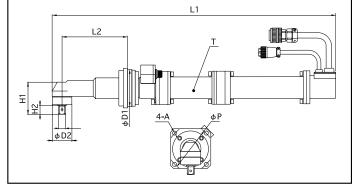
Refer to minimum pitch circles for designing your machine.



			DIME	NSIONS	(mm)		
TYPE	Α	В	С	D	E	F	G
UNR-F015-45NT	43	52	64	46	74	92	122
UNR-F015-65NT	43	52	64	46	74	92	122
UNR-F015-200NT	43	52	64	46	74	92	122
UNR-F015-280NT	43	52	64	46	74	92	122
UNR-F015-350NT	43	52	64	46	74	92	122
UNR-F050-270NT	59	72	90	64	108	122	160
UNR-F050-630NT	59	72	90	64	108	122	160
UNR-F050-730NT	59	72	90	64	108	122	160
UNR-F050-880NT	59	72	90	64	108	122	160
UNR-F050-1400NT	59	72	90	64	108	122	160
UNR-F100-1300NT	66	75	92	65	116	130	170
UNR-F100-1900NT	70	100	110	78	115	132	174
UNR-F100-2500NT	70	100	110	78	115	132	174
UNR-F100-3700NT	76	100	110	78	120	140	184
UNR-F100-5400NT	94	125	143	102	166	188	257
UNR-F100-7000NT	94	125	143	102	166	188	257
UNR-F100-10000NT	94	125	143	102	166	188	257

#### **RIGHT ANGLE NUTRUNNERS**





#### RIGHT ANGLE NUTRUNNER SPECIFICATIONS

			EXT	ERNAL	DIMEN:	SIONS (	MM)			STRAIG	GHT MOTORS	5	TIGHTENING TORQUE	FREE SPEED	WEIGHT	SPINDLE
MODEL	L1	L2	H1	H2	D1	D2	Р	Α	В	TYPE	SENSOR	MOTOR	(NM)	(RPM)	(KG)	UNIT
UNR-F015-25NTC	507	120	49	10.6	70	28	85	M6	9.5	UNR-F015-200NT	TM-035	F015	25	460	4.18	UEC-F024
UNR-F015-55NTC	521	130	58	18	70	36	85	M6	12.7	UNR-F015-350NT	TM-035	F015	55	260	4.37	UEC-F024
UNR-F050-95NTC	643	150	73.5	20	85	45	102	M6	15.88	UNR-F050-630NT	TM-085	F050	95	480	8.08	UEC-F060
UNR-F050-130NTC	649	150	73.5	20	85	45	102	M6	15.88	UNR-F050-880NT	TM-150	F050	130	340	8.3	UEC-F060
UNR-F100-200NTC	681.5	170	85.5	20	85	56	102	M6	15.88	UNR-F100-1300NT	TM-150	F100	200	460	11.92	UEC-F120
UNR-F100-250NTC	677.5	170	85.5	20	100	56	120	M8	15.88	UNR-F100-1900NT	TTM-150	F100	250	340	12.3	UEC-F120
UNR-F100-380NTC	716.5	200	109.5	25	110	74	134	M10	19	UNR-F100-2500NT	TM-250	F100	380	235	15.92	UEC-F120
UNR-F100-550NTC	784	200	114.5	29	110	74	134	M10	25.4	UNR-F100-3700NT	TM-400	F100	550	165	17.43	UEC-F120

# **UEC-4800 CONTROLLER**

#### STATE-OF-THE-ART CONTROLLER FOR PULSE TOOLS

#### FEATURES AND BENEFITS: UEC-4800

- Programmable from front panel or PC no separate touchpad module or cable required.
- 12,000 data point memory.
- On-screen statistical readout.
- Eight parameter sets available.
- Increased programmable I/O options.
- Built-in Ethernet connectivity.
- PC Windows based software included.
- For use with pneumatic or electric transducerized tools.
- Compatible with: UA-MC, UEP-MC (with driver box), UA-SMC, UA-AMC (with optional Angle Encoder Board), ALPHA-MC, and UXR-MC series tools.







UEC-4800-EX Controller with network connectivity

UEC-4800TP Controller with Touch-Screen option.

#### FEATURES AND BENEFITS: UEC-4800TP

- Provides all features of the UEC-4800.
- Enhanced user interface via Touch-Screen programming and information access.

MODEL	24V I/O	URYU DATA, BARCODE,	LIGHT TOWER & BYPASS	ETHERNET	SERIAL PROTOCOLS	ANYBUS	ANYBUS	TOUCH PANEL	ANGLE
UFC-4800	Х	& PRINTER X	SWITCH CAPABLE	PROTOCOLS	& BAR CODE	DEVICENET	PROFIBUS	DISPLAY	MONITORING
UEC-4800A-ANGLE	Х	X							Х
UFC-4800TP	Х	X						Х	Λ
UFC-4800TPA	Х	X						Х	Х
UFC-4800-FX	Х	٨		Х	Х			٨	Λ
UFC-4800-FXI	Х		Х	Х	X				
UEC-4800-EDA	Х		٨	Х	۸	Х			
UFC-4800-FDAL	Х		Х	Х		Х			
UEG-4800-EDAL	Х		٨	Х		٨	Х		
UEC-4800-EPAL	Х		Х	Х			Х		
UEG-4800A-EX			٨		V		٨		V
V = V	X		V	Х	Х				X
UEC-4800A-EXL	X		Х	Х	Х	V			X
UEC-4800A-EDA	Х		V	Х		Х			Х
UEC-4800A-EDAL	Х		Х	Х		χ	.,,		Х
UEC-4800A-EPA	Х			Х			Х		Х
UEC-4800A-EPAL	Х		Х	Х			Х		Х
UEC-4800TP-EX	Х			Х	Х			Х	
UEC-4800TP-EXL	Х		Х	Х	Х			Х	
UEC-4800TP-EDA	Х			Х		Х		Х	
UEC-4800TP-EDAL	Х		Х	Х		Х		Х	
UEC-4800TP-EPA	Х			Х			χ	Х	
UEC-4800TP-EPAL	Х		Х	Х			χ	Х	
UEC-4800TPA-EX	Х			Х	Х			Х	Х
UEC-4800TPA-EXL	Х		Х	Х	Х			Х	Х
UEC-4800TPA-EDA	Х			Х		χ		Х	χ
UEC-4800TPA-EDAL	χ		χ	Х		χ		Х	χ
UEC-4800TPA-EPA	χ			χ			χ	Х	χ
UEC-4800TPA-EPAL	Х		χ	Х			χ	Х	χ
UEC-5500	χ	Х							

# **UEC-4800A/E(SD) CONTROLLER**

#### FEATURES AND BENEFITS: UEC-4800A/E(SD)

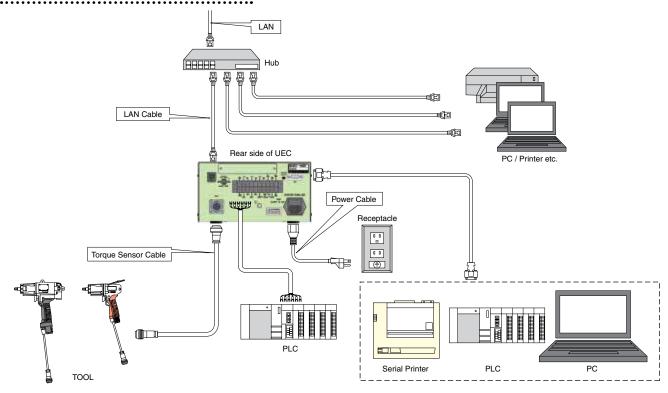
- · Economical LCD front panel.
- Easy programming or upload of your program from a PC.
- Torque Wave data visible on your PC.
- UEC-4800(SD) memorizes maximum 12,000 fastening data. When connected to a PC, standard deviations, Cp value, and Cpk values can be analyzed instantly from the stored data within the controller.
- · Graph statistical data.



#### **UEC-4800A/E(SD) SPECIFICATIONS**

Power Supply	AC100~240V ±10%		Torque Desclution +9040 (19 Bit A/D)			
Power Frequency	50/60 Hz		Torque Resolution ±2048 (12-Bit A/D) LCD: 20 characters x 4 lines			
Noise Protection	1000V 1µS (according to noise simulator)	Display	Contents: Work No., Fastening Count, Down No., Fastening Time, Pulse No. 1-digit digital display (DPM): WORK NO. 4-digit digital display (DPM): TORQUE			
Insulation Protection	DC500V over 10M $\Omega$					
Ambient Temperature	$0\sim50^{\circ}\text{C}$ (non-freezing)					
Ambient Humidity	Under 90%RH (no dew)	LED	COUNT Lamp: OK (Green), NOK (Red) TORQUE Lamp: LOW (Yellow), OK (Green), HIGH (Red) Operation Voltage/Current: DC24V/approx. 10mA			
Power Consumption	Approx. 30VA	LED				
Weight	Approx. 3.6 kg	Input Torminal Cianal				
Dimensions	265(d) x 222(w) x 120(h)	Input Terminal Signal	6 terminals (free format), VALVE			
Main Functions	Torque Monitoring/Control + Fastening Counter		Contact Conscitu AC-19EV 0.9A DC-90V 1A			
Parameter Setup	Manual Input on Front LCD Panel Personal Computer (with setup software)	Output Terminal Signal	Contact Capacity: AC:125V, O.3A, DC:30V, 1A 6 terminals (free format), VALVE			

#### **UEC-4800(SD) SERIES BLOCK DIAGRAM**



# **UEC-4800TPA/E(SD) CONTROLLER**

#### FEATURES AND BENEFITS: UEC-4800TPA/E(SD)

- Programming is easy on the front touch panel or upload your program from a PC.
- UEC-4800(SD) can be used with various transducerized tools:
  - Oil-Pulse Tools fitted with a Magnetostrictive Transducer: UA-MC series, ALPHA-MC Series, UEP-MC Series (UEPD driver is required separately).
  - Oil-Pulse Tools fitted with a Strain-Gauged Transducer: U-EC Series, UX-EC Series.
  - Pneumatic Tools fitted with a Strain-Gauged Transducer UAN-M Series, UOW-M Series, UNR-NT Series.
- Highly reliable Torque Control and Monitor.
- Ethernet (TCP/IP) capable.

#### **FUNCTIONS: UEC-4800TPA/E(SD)**

- Choose between Torque Control and Monitor. Detect various errors and control the job with the fastening counter.
- Torque Wave data visible on both front touch panel and PC.
- UEC-4800(SD) can be used for eight different fastening applications.
- Front panel, PC display, or buzzer indicates Input/Output (terminal blocks and tool wiring), checks, and errors.
- UEC-4800(SD) memorizes cumulative fastening numbers and pulse numbers from the start of operation.
- UEC-4800(SD) memorizes maximum 12,000 fastening data. Analyze standard deviations, Cp value, and Cpk value instantly from stored data within the controller. When connected to a PC, statistical data can be graphed.
- Using Input/Output terminals, UEC-4800(SD) can be interlocked with production line.

#### **UEC-4800TPA/E(SD) SPECIFICATIONS**

	_ `				
Power Supply	AC100~240V ±10%				
Power Frequency	50/60 Hz				
Noise Protection	1000V 1µS (according to noise simulator)				
Insulation Protection	DC500V over 10M $\Omega$				
Ambient Temperature	$0 \sim 50$ °C (non-freezing)				
Ambient Humidity	Under 90%RH (no dew)				
Power Consumption	Aprox. 30VA				
Weight	Approx 3.6 kg				
Dimensions	265(d) x 222(w) x 120(h)				
Main Functions	Torque Monitoring/Control + Fastening Counter				
Parameter Setup	Manual Input on Front Touch Panel				
rarameter setup	Personal Computer (with setup software)				
Display	Torque Resolution ±2048 (12-Bit A/D)				
ыгріау	320 x 240 dot 25 characters X 15 lines				
LFD	COUNT Lamp: OK (Green), NOK (Red)				
LLU	TORQUE Lamp: LOW (Yellow), OK (Green), HIGH (Red)				
Input Terminal Signal	Operation Voltage/Current: DC24V/approx. 10mA				
IIIput IEIIIIIIai oiyildi	6 terminals (free format), VALVE				
Output Terminal Signal	Contact Capacity: AC:125V, O.3A, DC:30V, 1A				
output icitilliai olytiai	6 terminals (free format), VALVE				

The conventional UEC-4800 Series has been superceded by UEC-4800(SD), which has the following new functions:

- 1) miniSD card slot on back panel
  - Fastening data and wave can be saved to mniniSD card.
  - Option to save and read setting values in miniSD card.
- 2) Terminal on the rear side. The following terminals are added:
  - 1 x Input terminal
- 2 x Input COM terminals
- 1 x Output terminal
- 2 x Output COM terminals

Torque Wave

Monitor Display

**Torque Monitor Display** 

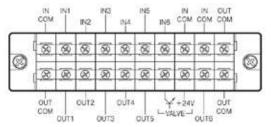
#### 3) Valve Check

Valve wiring check function checks the valve connection to the terminal. If using ALPHA-MC fitted with the valve inside the tool, it checks the tool valve connection.

- 4) Other Features
  - Increased PC communication speed to 115,200 bps.
  - Faster data input and memory deletion.

#### (Input Terminal Block)

Signal Allocations
COM: Common Terminal for the input termianls. (-)
IN 1∼6: Input Terminals
IN COM: Common Terminal for the input terminals. (-)
OUT COM: Common Terminal for the output terminals.



#### (Output Terminal Block)

	Signal Allocations
I	COM: Common Terminal for the output terminals.
	OUT 1~5: Output Terminals
ĺ	VALVE: Valve Output (OV)
	VALVE COM: +24V
ĺ	Out 6: Output Terminal
ı	OUT COM: Common Terminal for the output terminals

# **UECD-4800 CONTROLLER**

#### **UECD-4800 FOR UEP TOOLS**

#### FEATURES AND BENEFITS

- Integrates Tool Driver and UEC-4800 Controller No Separate Box.
- · Windows Based PC Software included.
- Programmable Tool Speeds.
- 4 Models to suit UEP Series Tools.



#### **UECD-4800 FUNCTIONS AND SPECIFICATIONS**

- Motor Setting
  - Motor current can be set in four steps.
  - Motor rotational speed can be set in 100 rpm increments.
- Fastening error detection and fastener number countdown functions ensure seamless operation.
- Allows setup or changeover of fastening torque and fastening number count.
- Tool's maintenance is possible by counting both total cycle numbers (how many fasteners) and/or total pulse numbers.
- Input/Output check and error messages can be checked from your PC or the front panel of UECD-4800, which will notify you with a buzzer.
- Can set up and monitor various control values.
   Values can be set either on the front panel or on the PC.
- Ethernet (TCP/IP) capable. Upload and receive setting values. Upload fastening result/waveform data through PC software.
- Power Supply: UEP tool is driven by commercial electricity, providing flexible assembly line changes.

Power Supply	AC100 ~ 240V ±10%
Power Frequency	50/60 Hz
Noise Protection	1000V 1µS (according to noise simulator)
Insulation Protection	DC500V over 10M $\Omega$
Ambient Temperature	$0 \sim 50^{\circ}\text{C}$ (non-freezing)
Ambient Humidity	90%RH or less (no dew)
Weight	Approx. 11.30 kg
Dimensions	265(d) x 222(w) x 200(h)
Main Functions	Torque control, Torque monitoring, Fastener number count
Parameter Setup	Manual Input on Front LCD Panel PC (with exclusive setup software)
Display	Torque Resolution ±2048 (12-Bit A/D use) LCD type, 20 characters x 4 lines Contents: Work No., Bolt Count No., Tightening Time, Pulse Blow Number 1-digit digital display (DPM): Work No. displayed 4-digit digital display (DPM): Torque reading displayed
LED	Total Lamp (for count judgment): OK (Green), NOK (Red) Torque Lamp (for torque judgment): LOW (Yellow), OK (Green), HIGH (Red)
Input Terminal Signal	Operation Voltage/Current: DC24V, approx. 10mA 6 terminals available (programmable). Note: Contact input necessary
Output Terminal Signal	Contact Capacity: DC 30V, 1A 6 terminals available (programmable), VALVE

# **UECD-4800 CONTROLLER**

MODEL	24V I/O	URYU DATA, BARCODE & PRINTER	LIGHT TOWER & BYPASS SWITCH CAPABLE	ETHERNET PROTOCOLS	SERIAL PROTOCOLS & BAR CODE	ANYBUS DEVICENET	ANYBUS PROFIBUS	TOUCH PANEL Display
UECD-4800A-50	Х	& FRINTER	OWITOIT ON ADEL	TRUTUUULO	& DAIL GODE	DEVIGENCE	סטעו וטאו ו	DISI LAI
UECD-4800A-60	Х	Х						
UECD-4800A-70	Х	Х						
UECD-4800A-100	Х	Х						
UECD-4800TPA-50	Х	Х						Х
UECD-4800TPA-60	Х	Х						X
UECD-4800TPA-70	Х	Х						Х
UECD-4800TPA-100	Х	Х						X
UECD-4800A-EX-50	Х			Х	Х			
UFCD-4800A-FXI-50	Х		Х	Х	Х			
UECD-4800A-EDA-50	Х			Х		Х		
UECD-4800A-EDAL-50	Х		Х	Х		Х		
UECD-4800A-EPA-50	Х		,	Х			Х	
UECD-4800A-EPAL-50	Х		Х	Х			X	
UECD-4800A-EX-60	Х		A	Х	Х		A	
UECD-4800A-EXL-60	Х		χ	Х	Х			
UECD-4800A-EDA-60	Х		,	Х		Х		
UECD-4800A-EDAL-60	Х		Х	X		X		
UECD-4800A-EPA-60	Х		, A	Х		Λ	Х	
UECD-4800A-EPAL-60	X		χ	X			X	
UECD-4800A-EX-70	X		, A	Х	Х		, A	
UECD-4800A-EXL-70	X		χ	X	X			
UECD-4800A-EDA-70	X		, A	Х	A	Х		
UECD-4800A-EDAL-70	X		χ	X		X		
UECD-4800A-EPA-70	X		Λ	Х		Λ	Х	
UECD-4800A-EPAL-70	X		χ	X			X	
UECD-4800A-EX-100	X		Λ	Х	Х		Λ	
UECD-4800A-EXL-100	X		χ	X	X			
UECD-4800A-EDA-100	Х		Λ	Х	٨	Х		
UECD-4800A-EDAL-100	X		χ	X		Х		
UECD-4800A-EPA-100	X		Λ	Х		Λ	Х	
UECD-4800A-EPAL-100	Х		χ	Х			Х	
UFCD-4800TPA-FX-50	Х		Λ	Х	Х		Λ	Х
UECD-4800TPA-EXL-50	X		χ	X	X			X
UECD-4800TPA-EDA-50	Х		Λ	Х	٨	Х		X
UECD-4800TPA-EDAL-50	Х		χ	Х		X		X
UECD-4800TPA-EPA-50	Х		Λ	Х		Λ	Х	X
UECD-4800TPA-EPAL-50	Х		χ	Х			X	X
UECD-4800TPA-EX-60	X		Λ	Х	Х		, A	X
UECD-4800TPA-EXL-60	X		χ	X	X			χ
UECD-4800TPA-EDA-60	X		Λ	Х	٨	Х		X
UECD-4800TPA-EDAL-60	X		χ	X		X		χ
UECD-4800TPA-EPA-60	X		Λ	Х		Λ	Х	X
UECD-4800TPA-EPAL-60	X		χ	X			Х	X
UECD-4800TPA-EX-70	X		Λ	Х	Х		Λ	X
UECD-4800TPA-EXL-70	X		χ	Х	X			χ
UECD-4800TPA-EDA-70	X		Λ	Х	Λ	Х		X
UECD-4800TPA-EDAL-70	Х		χ	Х		Х		X
UECD-4800TPA-EPA-70	Х		Λ	Х		٨	Х	X
UECD-4800TPA-EPAL-70	Х		χ	Х			Х	X
			Λ		V		٨	
UECD-4800TPA-EX-100	χ		V	Х	Х			X
UECD-4800TPA-EXL-100	χ		Х	Х	Х	v		χ
UECD-4800TPA-EDA-100	χ		V	Х		X		X
UECD-4800TPA-EDAL-100	χ		Х	Х		Х	v	χ
UECD-4800TPA-EPA-100	χ		V	Х			Х	X
UECD-4800TPA-EPAL-100	Х		Х	Х			Х	Х

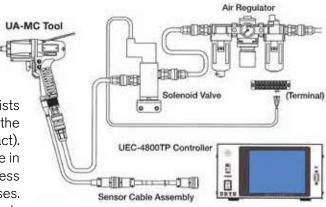
# **UA-MC SERIES**

#### **MAGNETOSTRICTIVE TRANSDUCER**

# OIL-PULSE UNIT MAGNETOSTRICTIVE TRANSDUCER SENSOR SHAFT SENSING & EXCITING COIL

Uryu's brushless Magnetostrictive Torque Transducer consists of an Anvil and a pair of sensor coils. Without contacting the Anvil, the sensor coil detects load to the Anvil (non-contact). The grooves in the Anvil are provided at a 45 degree angle in one region. When torque is applied to the Anvil, tensile stress appears on the region and magnet permeability increases. These permeability changes are detected, respectively transformed to the voltage change (proportional to applied torque) and converted to torque signals to control the tool.

#### SYSTEM LAYOUT



#### UA-MC SERIES €

#### **FEATURES AND BENEFITS**

- The UA-MC features patented Auto Relief Technology providing additional control to the application of torque during the pulsing events.
- The external solenoid valve increases power-to-weight ratios by 20%.
- · Magnetostrictive Transducer provides increased durability with low size and weight.
- Pulse Tool requirements with Controlled Tool advantages.
- All models work with any UEC Series controller and can connect to a wide range of network protocols.
- With torque reaction virtually non-existent, allowing for a one-handed operation, the UA-MC provides significantly increased productivity.

RECOMMENDED AIR PRESSURE: 85 PSI

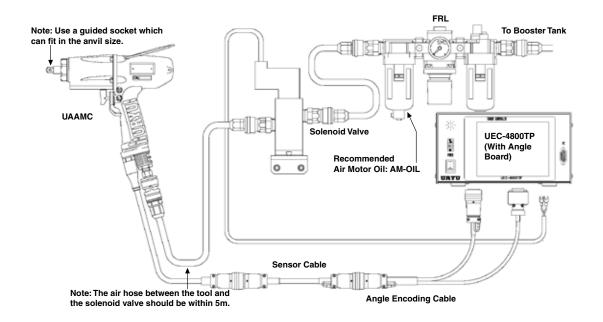
UA-50MC

	TORQUE RANGE		FREE SPEED	LEN	IGTH	WEIGHT		DRIVE SIZE	AIR USAGE
MODEL	NM	FT-LB	RPM	MM	IN	LB	KG	IN	CFM
PISTOL TYPE									
UA-40MC	6.8 - 12.0	5.0 - 8.8	3,600	170	6.7	2.4	1.1	3/8	7.0
UA-40DMC	6.9 - 12.0	5.0 - 8.8	3,600	170	6.7	2.4	1.1	1/4 QC	7.0
UA-50MC	16.6 - 29.0	12.2 - 21.4	4,250	170	6.7	2.4	1.1	3/8	8.8
UA-50DMC	16.6 - 29.0	12.2 - 21.4	4,250	170	6.7	2.4	1.1	1/4	8.8
UA-60MC	25.1 - 44.0	18.5 - 32.5	5,000	175	6.9	2.5	1.1	3/8	14.0
UA-70MC	28.5 - 50.0	21.0 - 37.0	5,700	187	7.4	2.7	1.2	3/8	15.8
UA-80MC	40.0 - 60.0	29.6 - 44.4	6,000	195	7.7	3.4	1.6	3/8	16.8
UA-90MC	45.7 - 80.0	33.8 - 59.2	5,500	203	8.0	3.7	1.7	1/2	18.6
UA-100MC	51.4 - 90.0	38.0 - 66.6	5,200	215	8.5	4.5	2.1	1/2	19.3
UA-130MC	74.2 - 130.0	54.9 - 96.2	4,500	233	9.2	6.2	2.8	1/2	25.6
STRAIGHT TYPE									
UA-40SMC	7.0 - 13.0	5.2 - 9.6	3,600	246	9.7	2.7	1.2	3/8	7.0
UA-40SDMC	5.0 - 12.0	3.7 - 8.9	3,600	246	9.7	2.7	1.2	1/4	7.0
UA-50SMC	11.0 - 25.0	8.1 - 18.5	4,250	246	9.7	2.7	1.2	3/8	8.8
UA-50SDMC	9.0 - 23.0	6.7 - 17.0	4,250	246	9.7	2.7	1.2	1/4	8.8
UA-60SMC	18.0 - 38.0	13.3 - 28.1	5,000	252	10.0	2.9	1.3	3/8	14.0
UA-60SDMC	16.0 - 34.0	11.8 - 25.2	5,000	252	10.0	2.9	1.3	1/8	14.0
UA-70SMC	30.0 - 50.0	22.2 - 37.0	5,700	265	10.4	3.1	1.4	3/8	15.8

<sup>\* €</sup> logo indicates where ERGO-DRIVE sockets/extentions benefit tool operation.

# **UA-AMC SERIES**

#### **SYSTEM LAYOUT**



#### **UA-AMC SERIES €**

#### **FEATURES AND BENEFITS**

- The UA-AMC features angle measurement for improved process control.
- · No torque reaction.
- The UA-AMC Series detects cross threading, double hits on the same fastener, stripped and damaged fastener threads and incorrect fasteners for an application.
- Two Angle Resolver types: External Resolver and Transducer Integrated Resolver.
- The UA-AMC features patented Auto Relief Technology providing smooth delivery of torque during pulsing events.
- Triple chamber air motors for high power output in UA-400AMC, UA-500AMC and UA-600AMC models.
- UEC-4800 controllers can easily be upgraded to angle capable models. Contact your AIMCO representative for details, 1-800-852-1368.



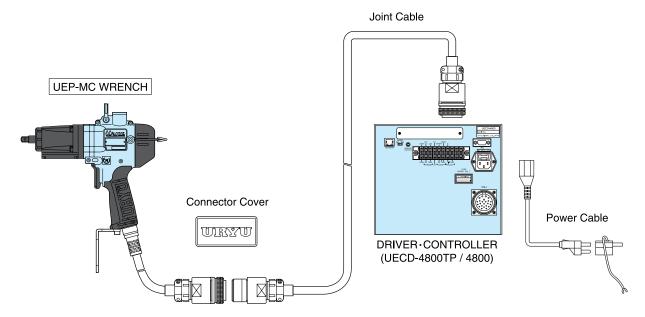
RECOMMENDED AIR PRESSURE: 85 PSI

	TORQUE RANGE		ORQUE RANGE FREE SPEED		IGTH	WEIGHT		DRIVE SIZE	AIR USAGE
MODEL	NM	FT-LB	RPM	MM	IN	LB	KG	IN	CFM
UA-400AMC	7 - 13	5.2 - 9.6	3,600	193.0	7.6	3.0	1.4	3/8	7.0
UA-500AMC	11 - 25	8.1 - 18.4	4,250	193.0	7.6	3.0	1.4	3/8	8.8
UA-600AMC	18 - 38	13.3 - 28.0	5,000	198.5	7.8	3.1	1.4	3/8	14.0
UA-700AMC	30 - 50	22.1 - 36.9	5,700	207.5	8.2	3.3	1.5	3/8	15.8
UA-800AMC	40 - 60	29.5 - 44.3	6,000	215.5	8.5	3.7	1.7	3/8	16.8
UA-900AMC	40 - 80	29.5 - 59.0	5,500	227.5	9.0	4.7	2.2	1/2	18.6
UA-1000AMC	50 - 90	36.9 - 66.4	5,200	235.0	9.3	5.4	2.5	1/2	19.3
UA-1300AMC	85 - 130	62.7 - 95.9	4,500	256.5	10.1	7.2	3.3	1/2	25.6

<sup>\*</sup> E logo indicates where ERGO-DRIVE sockets/extentions benefit tool operation.

# **UEP-MC SERIES**

#### **SYSTEM LAYOUT**



Uryu's unique feature, a non-contact and Magnetostrictive Transducer, provides tightening and fastening counter monitoring controlled by a highly accurate torque control mechanism connected to the multi-functional UECD-4800 Series controller (This is a combination unit of UEC-4800 and UEPD driver box).

#### UEP-MC SERIES €

#### **FEATURES AND BENEFITS**

- Operates on standard 110V or 220V power.
- Extremely durable, brushless motor.
- Programmable tool RPM for increased accuracy and adjustability to joint conditions.
- Two stage trigger for separate, slower RPM for soft start applications.
- · Quiet operation.
- I/O capability for programmable line control.
- Pulse tool advantages on applications that require controlled electric tools.



		TORQU	E RANGE	FREE SPEED	WEIGHT	LENGTH	DRIVE	SOUND LEVEL	REQUIRED
MODEL	TYPE	NM	FT-LB	RPM	LB	IN	IN	DB(A)	DRIVER BOX
UEP-50MC(-STDA)*	Transducerized	5 - 10	3.7 - 7.4	2,000	4.0	7.9	3/8 sq.	70	UEPD-51A-UL
UEP-50DMC(-STDA)*	Transducerized	5 - 10	3.7 - 7.4	2,000	4.0	7.9	1/4 hex	70	UEPD-51A-UL
UEP-60MC(-STDA)*	Transducerized	10 - 25	7.4 - 18.5	2,000	4.7	8.7	3/8 sq.	70	UEPD-61A-UL
UEP-60DMC(-STDA)*	Transducerized	10 - 25	7.4 - 18.5	2,000	4.7	8.7	1/4 hex	70	UEPD-61A-UL
UEP-70MC(-STDA)*	Transducerized	25 - 40	18.5 - 29.6	2,000	5.2	9.3	3/8 sq.	72	UEPD-71A-UL
UEP-80MC(-STDA)*	Transducerized	30 - 60	22.2 - 44.4	2,000	6.6	9.3	1/2 sq.	75	UEPD-71A-UL
UEP-100MC(-STDA)*	Transducerized	60 - 120	44.4 - 88.8	2,000	9.2	10.9	1/2 sq.	75	UEPD-101A-UL

<sup>\*</sup> Add "-STDA" to part numbers to include tool, driver box, and driver cable (components can be purchased individually).

<sup>\*</sup> E logo indicates where ERGO-DRIVE sockets/extentions benefit tool operation.

# **UECP-4800 CONTROLLER**

#### **UECP-4800 - UDP TOOLS**

#### **FEATURES AND BENEFITS**

- Integrates Tool Driver and UEC-4800 Controller No Separate Box.
- · Windows Based PC Software included.
- Programmable Tool Speeds.

# U.S.P. A ROO

The UECP-4800 is an exclusive controller for UDP-MC Series, so it cannot be connected to other MC/EC tools.

#### **UECP-4800 FUNCTIONS AND SPECIFICATIONS**

- · Motor Setting
  - Motor current can be set in four steps.
  - Motor rotational speed can be set in 100 rpm increments.
- Fastening error detection and fastener number countdown functions ensure seamless operation.
- Allows setup or changeover of fastening torque and fastening number count.
- Tool's maintenance is possible by counting both total cycle numbers (how many fasteners) and/ or total pulse numbers.
- Input/Output check and error messages can be checked from your PC or the front panel of UECP-4800, which will notify you with a buzzer.
- Can set up and monitor various control values.
   Values can be set either on the front panel or on the PC.
- Ethernet (TCP/IP) capable. Upload and receive setting values. Upload fastening result/waveform data through PC software.
- Power Supply: UDP tool is driven by commercial electricity, providing flexible assembly line changes.

Power Supply	AC100 ~ 240V ±10%
Power Frequency	50/60 Hz
Noise Protection	1000V 1µS (according to noise simulator)
Insulation Protection	DC500V over 10M $\Omega$
Ambient Temperature	$0 \sim 50$ °C (non-freezing)
Ambient Humidity	90%RH or less (no dew)
Weight	Approx. 11.30 kg
Dimensions	265(d) x 222(w) x 200(h)
Main Functions	Torque control, Torque monitoring, Fastener number count
Parameter Setup	Manual Input on Front LCD Panel PC (with exclusive setup software)
Display	Torque Resolution ±2048 (12-Bit A/D use) LCD type, 20 characters x 4 lines Contents: Work No., Bolt Count No., Tightening Time, Pulse Blow Number 1-digit digital display (DPM): Work No. displayed 4-digit digital display (DPM): Torque reading displayed
LED	Total Lamp (for count judgment): OK (Green), NOK (Red) Torque Lamp (for torque judgment): LOW (Yellow), OK (Green), HIGH (Red)
Input Terminal Signal	Operation Voltage/Current: DC24V, approx. 10mA 6 terminals available (programmable). Note: Contact input necessary
Output Terminal Signal	Contact Capacity: DC 30V, 1A 6 terminals available (programmable), VALVE

MODEL	24V I/O	URYU DATA, BARCODE, & PRINTER	LIGHT TOWER & BYPASS SWITCH CAPABLE	ETHERNET PROTOCOLS	SERIAL PROTOCOLS & BAR CODE	ANYBUS DEVICENET	ANYBUS PROFIBUS	TOUCH PANEL DISPLAY
UECP-4800A	Х	Х						
UECP-4800A-EX	Х			Х	Х			
UECP-4800A-EXL	Х		Х	Х	Х			
UECP-4800A-EDA	Х			Х		Х		
UECP-4800A-EDAL	Х		χ	Х		Х		
UECP-4800A-EPA	Х			Х			Х	
UECP-4800A-EPAL	Х		Х	Х			Х	

# **UDP-MC SERIES**

#### UDP-MC SERIES €

#### **FEATURES AND BENEFITS**

- · High speed for increased productivity.
- No torque reaction.
- Magnetostrictive Transducer provides increased durability with low size and weight.
- Auto relief pulse mechanism for measured application of tightening energy.
- Durable 11 mm cable.
- Use with UECP-4800A Controller with integrated driver box.
- Automatic Ventilation System: Cooling fan is activated automatically when pulling the throttle trigger, which reduces heat and increases duty cycle.
- Safety: To protect the operator, the UDP-MC tool stops operation immediately when failure is detected, including overloaded operation, short circuit, and broken wire.



		TORQUE	TORQUE RANGE		WEIGHT	LENGTH	DRIVE	SOUND LEVEL	REQUIRED
MODEL	TYPE	NM	FT-LB	RPM	LB	IN	IN	DB(A)	DRIVER BOX
UDP-A60MCL	Transducerized	4 - 20	3.0 - 14.8	1000 - 4,800	3.4	8.4	3/8 SQ.	74	
UDP-A60MC	Transducerized	5 - 25	3.7 - 18.5	1,000 - 4,800	3.4	8.4	3/8 SQ.	74	n/a
UDP-A80MC	Transducerized	25 - 55	18.5 - 40.5	1,000 - 4,800	3.9	9.5	3/8 SQ.	76	N/a
UDP-A100MC	UNDER DEVELOPMENT								

#### TOOL HOLDERS FOR MC TOOLS

Tool Holder Kits provide excellent tool management and protect the torque sensor on the tool from damage when not in use. Kits are supplied with rubber holder, metal bracket, and fasteners to facilitate easy installation.

MODEL	DESCRIPTION
852-669-1	RUBBER TOOL HOLDER, 40 - 90 SERIES
852-669-1 KIT	TOOL HOLDER KIT, 40 - 90 SERIES
852-645-1	RUBBER TOOL HOLDER, 100 SERIES
852-645-1 KIT	TOOL HOLDER KIT, 100 SERIES







852-669-1





852-669-1 KIT 852-645-1 KIT

<sup>\* €</sup> logo indicates where ERGO-DRIVE sockets/extentions benefit tool operation.

# ACRA-PULSE® MC & EC SERIES





#### **ACRA-PULSE® MC SERIES**

#### RECOMMENDED AIR PRESSURE: 85 PSI

	TORQUI	E RANGE	FREE SPEED	LEN	GTH	WEI	GHT	DRIVE	NOISE LEVEL	AIR USAGE
MODEL	NM	FT-LB	RPM	MM	IN	LB	KG	IN	DB(A)	CFM
PISTOL										
ALPHA-101MC	38 - 70	27.4 - 51.3	6,200	243	9.6	4.6	2.1	1/2 SQ.	80	17.6
ALPHA-130MC	90 - 150	65.8 - 109.9	3,400	276	10.9	7.7	3.5	1/2 SQ.	82	22.9
ALPHA-140MC	150 - 220	110.7 - 162.0	3,500	295	11.6	10.2	4.6	3/4 SQ.	85	28.3
UXR-1820MC	160 - 250	117.8 - 183.7	4,600	322	12.7	12.3	5.5	3/4 SQ.	84	24.7
UXR-2000MC	250 - 400	184.4 - 295.1	4,800	355	14.0	17.6	8.0	3/4 SQ.	85	33.6
INLINE										
ALPHA-60SMC*	10 - 17	7.2 - 14.4	6,300	280	11.0	2.6	1.4	3/8 SQ.	75	8.8
UXR-2400SMC	350 - 600	258.2 - 442.7	3,300	457	18.0	27.6	12.5	1.0 SQ.	85	35.3

Air Hose Size: 3/8" I.D. 1/2" I.D. for 2000MC

N.P.T. 1/2" for UXR-2400SMC



#### **ACRA-PULSE® EC SERIES**

#### RECOMMENDED AIR PRESSURE: 85 PSI

	TORQL	JE RANGE	FREE SPEED	LEN	GTH	WEI	GHT	CENTER TO	O OUTSIDE	DRIVE	NOISE LEVEL	AIR USAGE
MODEL	NM	FT-LB	RPM	MM	IN	LB	KG	MM	IN	IN	DB(A)	CFM
PISTOL												
U-50EC	5 - 11	3.7 - 8.1	2,100	195	7.7	3.3	1.5	24.0	1.0	3/8 SQ.	72	8.8
INLINE												
U-60SEC*	15 - 25	11.1 - 18.4	1,900	305	8.1	4.4	2.0	27.0	1.1	3/8 SQ.	75	12.3

Air Hose Size: 3/8" I.D.

\* External Solenoid Valve (909-749-0) required

<sup>\*</sup> External Solenoid Valve (909-749-0) Required

Air Inlet: N.P.T. 1/4"

N.P.T. 3/8" for UXR-1820MC

Air Inlet: N.P.T. 1/4"

NOTE: Torque ranges reflect residual B joint torque values

<sup>\*</sup> E logo indicates where ERGO-DRIVE sockets/extentions benefit tool operation.

# **UEC-4800 CONTROLLER ACCESSORIES**

#### **UEC-4800 CONTROLLER BRACKETS**

- Provides a stable platform for the UEC-4800 Controller.
- Flexible mounting configurations for ease of access and operator viewing.
- Optional accessory bracket provides compact storage of light tower and accessories with Controller.
- · Durable, Powder Coat finish.

UEC-4800TRAY Complete Assembly for Standard Controllers and Light Towers/Accessories

MODEL	DESCRIPTION
24582	Advanced Communication Enabled Controller Hold Down Bracket
24588	Controller Tray Mount
24587	Wall Mount
24583	Standard Controller Hold Down Bracket
24586	Bypass Bracket



#### PROGRAMMABLE PNEUMATIC REGULATOR

- Provides enhanced control for pneumatic assembly tools.
- Enables downshifts with controlled air tools.
- Automatically changes air pressure when programmed Start Torque (threshold) value is reached.
- Can be programmed to switch from high pressure to low pressure or from low pressure to high pressure.
- Excellent for use on extremely hard or extremely soft joints.
- · Can be programmed to fully disable tool via PLC input.
- Link to other devices such as a four-position socket tray.





# CONTROLLED PULSE TOOL CABLES









## **CONTROLLED PULSE TOOL CABLES**

			LEN	GTH					IFC.			CONTR	OLLER PL	ATEODIA
PART			LEN	GIH	UA-	UA-	UEP-	OOL SERI UDP-	ALPHA-	UXR-	U/UX-	UEC-	UECD-	UECP-
NUMBER	DESCRIPTION	FUNCTION	М	FT	MC	AMC	MC	MC	МС	МС	EC	4800	4800	4800
909-921-0	Sensor Cable Assembly	Tool Cable to Controller	5	18	Х	Х			Х	Х	Х	Х		
910-974-0	Joint Cable Assembly	Tool Cable to Controller	5	18				Х						Х
910-975-0	Joint Cable Assembly	Tool Cable to Controller	10	35				Х						Х
910-546-0	Joint Cable Assembly	Tool Cable to Controller	3	10			Х						Х	
910-547-0	Joint Cable Assembly	Tool Cable to Controller	5	18			Х						Х	
910-548-0	Joint Cable Assembly	Tool Cable to Controller	10	35			Х						Х	
EC/MCCBL-3	Sensor Cable Assembly	Tool Cable to Controller	1	3	Х	Х			Х	Х	Х	Х		
EC/MCCBL-10	Sensor Cable Assembly	Tool Cable to Controller	3	10	Х	Х			Х	χ	Х	Х		
EC/MCCBL-25	Sensor Cable Assembly	Tool Cable to Controller	7	25	Х	Х			Х	Х	Х	χ		
EC/MCCBL-30	Sensor Cable Assembly	Tool Cable to Controller	9	30	χ	Х			Х	Х	Х	χ		
EC/MCCBL-35	Sensor Cable Assembly	Tool Cable to Controller	10	35	Х	Х			Х	Х	Х	Х		
EC/MCCBL-40	Sensor Cable Assembly	Tool Cable to Controller	12	40	Х	Х			Х	χ	Х	Х		
EC/MCCBL-45	Sensor Cable Assembly	Tool Cable to Controller	13	45	Х	Х			Х	Х	Х	Х		
EC/MCCBL-50	Sensor Cable Assembly	Tool Cable to Controller	15	50	Х	Х			Х	Х	Х	Х		
EC/MCCBL-60	Sensor Cable Assembly	Tool Cable to Controller	18	60	Х	Х			Х	Х	Х	Х		
EC/MCCBL-75	Sensor Cable Assembly	Tool Cable to Controller	22	75	Х	Х			Х	Х	Х	Х		
911-023-0	Encoder "Y" Cable	Enables Angle Sensor-Splits Tool Cable to Controller	0.3	1		Х						Х*		
910-623-0	Sensor Cable Assembly	External Driver Box to Controller	0.3	1			Х					Х		

<sup>\*</sup> Requires Controller with Angle Encoder Board installed

# **TORQUE MEASUREMENT: OVERVIEW**

TORQUE MEASUREMENT AND THE VERIFICATION OF TORQUE TOOLS AND APPLIED TORQUE ARE AN INTEGRAL PART OF TODAY'S THREADED ASSEMBLY PROCESS. The method used to measure torque can affect the judgments made regarding tool performance, assembly processes and overall product quality.

#### DYNAMIC TORQUE

The torque produced during the actual tightening process, normally measured using rotary transducers and a torque analyzer.

#### Advantages:

- · Reduces operator influence.
- Measures applied torque.
- Can also include angle of rotation as error proofing parameter.

# HARD JOINT Less than 30° degrees of rotation Metal Metal Metal Metal Dynamic Torque: 15 Nm Residual Torque: 18 Nm

Values as examples only

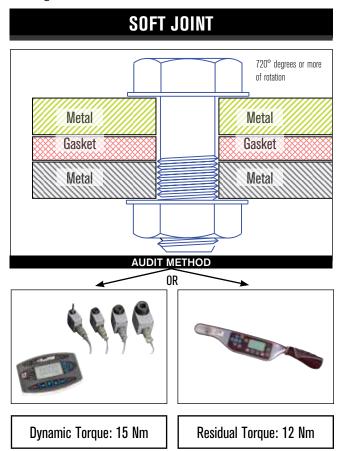
A hard joint, one requiring a low degree of rotation during tightening, will normally show very little relaxation after tightening. Due to the high amount of remaining clamp load and friction within the joint members, additional movement of the fastener requires additional torque energy to be applied. Therefore, Residual Torque values will be higher than Dynamic Torque values.

#### **RESIDUAL TORQUE**

The torque measured by producing an incremental amount of movement of the fastener after the actual tightening process, normally measured using a dial or digital torque wrench.

#### Advantages:

- Easy access to fastener.
- Error proofing.
- Can detect missed fasteners or joints with significant relaxation.



Values as examples only

A soft joint, one requiring a high degree of rotation during tightening, will normally show significant amounts of relaxation after tightening. Relaxation leads to a loss of clamp load and friction within the joint members. Due to this relaxation, additional movement of the fastener requires relatively small amounts of additional torque energy and Residual Torque values will be lower than Dynamic Torque values.

# **TORQUE MEASUREMENT: OVERVIEW**

#### CHECKING TORQUE MEASUREMENT BEFORE, DURING, AND AFTER ASSEMBLY ENSURES QUALITY

**MANUFACTURING**. Proper torque measurement is critical in many assembly operations. AIMCO utilizes years of experience to design a process around your specific auditing requirements. From simple dial wrenches to electronic data collectors and joint analyzers for R&D, AIMCO is with you every step of the way.

#### **BEFORE ASSEMBLY**

#### - TOOL CAPABILITY

#### Is the tool working correctly?

Testing and verifying tools under controlled conditions. Identify the accuracy & repeatability of the tool before using it in production.

#### Equipment used:

- · Desktop testers with internal transducers.
- Auditor™ analyzers with either stationary or rotary transducers.
- UFT hydraulic joint simulators and rotary transducers.

#### PRODUCTS TO USE...



#### **DURING ASSEMBLY**

#### - PROCESS CAPABILITY

#### How does the tool work with the product being assembled?

Testing the tools during the actual process helps ensure that the process is working correctly. This is where variables in the parts and influences from the operator can be accounted for.

#### Equipment used:

- Torque Data Collectors/Analyzers
- Auditor™ Rotary Transducers



#### AFTER ASSEMBLY

#### - PRODUCT CAPABILITY

#### Does the finished product meet the user's expectations?

Checking the product after assembly is the final opportunity to check the product prior to user delivery. This is the way to verify that product quality is satisfactory.

#### Equipment used:

- Click/Dial wrenches
- Electronic wrenches with Auditor™ analyzers.
- Rotary transducers and Auditor™ analyzers with hand driver to move fastener.



# **TORQUE MEASUREMENT: OVERVIEW**

#### **MEASURING QUALITY - PROCESS CAPABILITY**

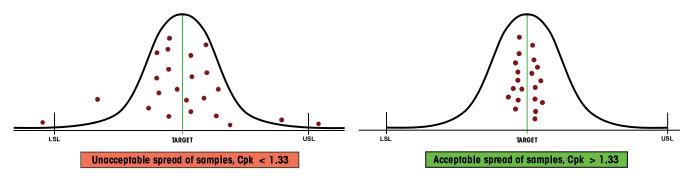
#### STATISTICAL ANALYSIS IS AN IMPORTANT STEP IN ANY QUALITY CONTROL PROCESS.

One of the most widely accepted statistical indicators of process quality, and therefore product quality, is Cpk, or the process capability for a centered process. This value indicates how capable a process is and whether the results of that process are properly centered near a specific target. A capable process is one that approaches, as a limit, 100% conformance to specifications.

Cpk is a statistical value that indicates how tightly grouped a series of samples is around the target value. Cpk is a function of the Upper Specification Limit (USL), the Lower Specification Limit (LSL), the mean of the samples and the standard deviation ( $\sigma$ ) of the samples.

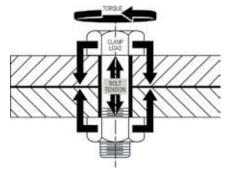
Cpk = either 
$$\frac{\text{(USL - Mean)}}{\text{(3 x \sigma)}}$$
 or  $\frac{\text{(Mean - LSL)}}{\text{(3 x \sigma)}}$ , whichever is smaller.

An acceptable, or capable, process will normally have a Cpk value of at least 1.33.



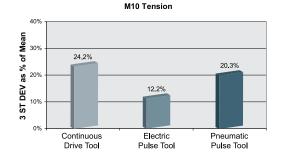
### **MEASURING QUALITY - CLAMP LOAD**

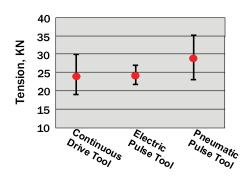
#### THE PURPOSE OF THREADED FASTENING IS TO PRODUCE THE CORRECT AMOUNT OF CLAMP LOAD WITHIN THE JOINT.



Due to the cost and difficulty of measuring clamp load during the actual assembly process, torque is used as the control parameter during tightening. Many manufacturers use torque values as the primary indicator of threaded assembly quality. However, achieving repeatable clamp load is a better indicator of joint quality.

Studies have shown that discontinuous drive tools can produce equal or better clamp load results when compared to continuous drive tools.





# **TORQUE MEASUREMENT SYSTEMS**



TORGOL MEA	SUREMENT SYSTEMS				Torque	External	Stationary	Stationary	Rotary	Rotary
Devices	Model Series	Data Collector	Integrated Transducer	Torque Wrench	Wrench Loader	Transducer Port	Transducers -Smart	Transducers -Ind Std	Transducer -Smart	Transducer - Ind Std
Tester	ATC		Х							
	AUET		Х							
	AUET-DC	Х	Х							
	AUET/MTM		Х			Х				
	AUET/MTM-DC	Х	Х			Х				
Analyzer	ATDA					Х				
	ATDA-DC	Х				Х				
	ATDA-8000 -10-DCA(-TA)(-TP)	Х				Х				
	ADET	Х				Х				
	DataTouch3	Х				Х				
Wrench	ADW			χ						
	ADW-DC	χ								
	APTW			Х						
	ATW			χ						
	ATWL				χ					
	FRDM3	Х		χ						
	FWE			Х						
Transducer	ARTIS									χ
	ASTIS							Х		
	AISI						Х			
	AISF						Х			
	AIRI								Х	
	AIRF								Х	
	ARTB (Bluetooth)									Х
	ASTB (Bluetooth)								Х	
Rundown Fixtures	AJKR									
	AJKS									
	ARDFA									
	ARDIA									
	ARDA (Spline Drive)									
Joint Simulator	UFT									
Test Stands	AHCTS*	Х*	Х*	Х*			χ*	Х*	Х*	Х*
	AHCTS-K*	χ*	χ*	χ*			χ*	χ*	Χ*	Х*
	AHDTS*	χ*	χ*	χ*			χ*	Х*	χ*	χ*
	AHBTS*	χ*	χ*	χ*			χ*	χ*	Χ*	χ*
	AIMTS*	χ*	χ*	χ*			χ*	Х*	χ*	Х*
Torque Cart	iTVC*	Х*	Х*	Х*			χ*	Х*	Х*	Х*
	FTY*									
	MSB*	χ*	Х*	χ*			Х*	Х*	Х*	Х*

<sup>\*</sup>configured to customer specifications

# **TORQUE MEASUREMENT TESTERS**

#### **Features and Benefits**

- Heavy Industrial Design
- All Software included
- Auditor Torque Testers are designed for intuitive and functional usability. AUET/MTM models are











and functional usability. AUCT/MITM models are	ATC	AUET	AUET/MTM	AUET-DC	AUET/MTM-DC
available with our unique dual integrated torque transducer package.	Auditor Torque Cube	Auditor Universal	Auditor Universal Electronic	Auditor Universal	Auditor Universal Electronic
tranoudor puotago.		Electronic Tester	Tester - Multiple Transducer	Electronic Tester - Data	Tester - Multiple transducer
Testers are designed to audit torque wrenches and			Module	Collector	Module - Data Collector
power tools, including pulse tools	Compact vertical or horizontal bench-mount	Bench mount or line side tester utilizing	Bench mount or line side tester with dual integrated	Bench mount or line side	Bench mount or line side tester with dual integrated
	tester.	integrated transducer.	transducer and external	tester utilizing integrated transducer. Provides data	transducer and external
	tooton.	miogratou tranoducon.	transducer capacity.	collection capability with	transducer capacity. Provides
				included software to	data collection capability with
				interface with PC.	included software to interface
Laborate I Toronto an Donor	100 - /- 1 000 6 //	100 :- / 750 6 ///-	100 - / 750 6 ///-	100 :- (0 - 750 6 ///	with PC.
Integrated Transducer Range (values are in full scale)	100 in/oz - 1,000 ft/lbs	100 in/oz - 750 ft/lbs	100 in/oz - 750 ft/lbs	100 in/0z - 750 ft/lbs	100 in/oz - 750 ft/lbs
,	1 - 1,350 Nm	1 - 1,000 Nm	1 - 1,000 Nm	1 - 1,000 Nm	1 - 1,000 Nm
External Transducer Capacity (transducer sizes exceeding this range may be special			up to 5,000 ft-lbs		up to 5,000 ft-lbs
ordered)			ap to 0,000 to 100		ap to oposo it iss
Vertical / Horizontal Mount	Х				
Bi-directional accuracy of +/- X of indicated reading	1%	0.50%	0.50%	0.50%	0.50%
within the top 90% of the Tester's capacity	·	·	·	·	·
Data Output to PC	Х	Х	Х	Х	Х
Integrated Torque Transducer	1	1	2	1	2
External Transducer Port			Х		Х
Number of stored readings	999	999	999	999	999
Adjustable rundown fixture included *	1	1	2	1	2
Rechargeable NiMH Battery	Х	Х	Х	Х	Х
<u>Measurement Modes</u>	1				
Peak	Х	Х	Х	Х	Х
First Peak (Click)	Х	Х	Х	Х	Х
Pulse	Х	Х	Х	Х	Х
Track	Х	Х	Х	Х	Х
Units of Measure Options	8	8	8	8	8
Tool Manager Software Included				Х	Х

<sup>\*</sup> Included with all testers and analyzers with a range up to 1000 in/lbs.

TORQUE MEASUREMENT TESTERS USED	IN CONJUNCTION WI	TH			
External Transducers					
ASTIS - Stationary			Х		Х
ARTIS - Rotary			Х		Х
Switch box for External Transducer					
AISWT-4L > 4 Way Intellect box			Х		Х
AISWT-6L > 6 Way Intellect box			Х		Х
Cables					
ICBL-USB - USB Serial > PC	χ	χ	Х	Х	Х
ATDBLIS - IS Transducer w/angle (10 Pin)			Х		Х
ATDBRIS - IS Transducer (4 Pin)			Х		Х
ICBL-10P - Intellect transducer cable Identification chip in cable - 10 pin connector			Х		Х
ICBL-4P - Intellect transducer cable. Identification chip in cable - 4 pin connector			Х		Х

# **AUDITOR™ TORQUE CUBE™**





ATC-250F ATC-750F



#### **AUDITOR™ TORQUE CUBE™**

The Auditor Torque Cube (ATC) is a compact, versatile desktop tester and provides a multitude of capabilities. The ATC is designed to test hand or power tools with the following:

- · Peak, first peak and track modes.
- Multiple engineering units.
- Manual and auto clear function.
- Multiple frequency response settings.
- · Bi-directional use and accuracy.
- Accuracy is better than 1% of indicated reading top 90% of range.
- · Serial data output.
- Memory 999 data samples.
- Battery and/or mains powered.

Because precision and quality are critical, you can depend on our testers to calibrate and certify your tools. Whether you are assembling large complicated systems or small precise time pieces, AIMCO provides the best system for your application. Our instruments have been judged "best in class" by independent National Standards laboratories. Auditor Torque Cube is rugged enough to test and verify tools at "point of use" while still being accurate enough to calibrate hand and power tools.

Each tester is shipped with a mains/battery charger power cord, a hex to allen drive bit, and a bolting template. Models with max torque of 1,000 ft-lb or less also include a joint rundown fixture. The ATC can be positioned vertically or horizontally for the ergonomic testing of inline or pistol grip tools.

MODEL	RECOMMENDED	TORQUE RANGE	WEIGHT		WXI	SQUARE DRIVE	
	Nm	in-lb	kg	lb	mm	in	in
ATC-10	0.13 - 1.13	1 - 10	1.13	2.5	79 x 95 x 83	3.13 x 3.75 x 3.25	1/4
ATC-25	0.28 - 2.83	2.5 - 25	1.13	2.5	79 x 95 x 83	3.13 x 3.75 x 3.25	1/4
ATC-100	1.13 - 11.3	10 - 100	1.13	2.5	79 x 95 x 83	3.13 x 3.75 x 3.25	1/4
ATC-250	2.83 - 28.3	25 - 250	1.13	2.5	79 x 95 x 83	3.13 x 3.75 x 3.25	3/8
ATC-500	5.65 - 56.5	50 - 500	1.13	2.5	79 x 95 x 83	3.13 x 3.75 x 3.25	3/8
ATC-250F	34 - 340	25 - 250 ft-lb	2.25	5	79 x 95 x 83	3.13 x 3.75 x 3.25	1/2
ATC-750F	101.7 - 1017	75 - 750 ft-lb	2.25	5	79 x 95 x 83	3.13 x 3.75 x 3.25	3/4

# **AUDITOR™ BENCH MOUNT TESTERS**







AUET/MTM-DC

AUET/MTM

#### **AUDITOR™ UNIVERSAL ELECTRONIC TESTERS**

The Auditor Universal Electronic Testers (AUET) have a broad range of features to accommodate most requirements. These instruments are designed to be bench top mounted and are available in several configurations and various single or multiple torque ranges. They are also available with file capability (DC) models. The DC models require PC software Auditor Tool Manager (ATM).

Instruments up to 1,000 in-lb are supplied with rundown adapters/joint kits. Rundown kits for larger instruments can be ordered separately. AUET/MTM units are supplied with an external transducer port and selector switch for connecting additional transducers.

These AUET instruments utilize the same transducers that are featured in the ATC instruments, providing the same high quality accuracy and durability. The common interface makes the Auditor tester extremely user friendly.



#### SINGLE TRANSDUCER MODELS

MODEL**	RECOMMENDED	TORQUE RANGE
	In-oz/In-lb	kgf-cm/Nm
AUET-0100(-DC)	10 - 100 in-oz	0.7 - 7.2 kgf-cm
AUET-10(-DC)	1 - 10 in-lb	1.1 - 11.5 kgf-cm
AUET-50(-DC)	5 - 50 in-lb	0.5 - 5.6 Nm
AUET-100(-DC)	10 - 100 in-lb	1.1 - 11.3 Nm
AUET-250(-DC)	25 - 250 in-lb	2.8 - 28.3 Nm
AUET-500(-DC)	50 - 500 in-lb	5.7 - 56.5 Nm
AUET-1000(-DC)	100 - 1,000 in-lb	11.3 - 113 Nm
AUET-1200(-DC)	120 - 1,200 in-lb	13.6 - 135.6 Nm

#### **DUAL TRANSDUCER MODELS**

	RECOMMENDED TORQUE RANGE			
MODEL**	Transducer 1	Transducer 2	Transducer 1	Transducer 2
AUET/MTM-10-100(-DC)	1.0 - 10 in-lb	10 - 100 in-lb	0.11 - 1.12 Nm	1.3 - 11.3 Nm
AUET/MTM-50-250(-DC)	5.0 - 50 in-lb	25 - 250 in-lb	0.56 - 5.65 Nm	2.8 - 28.3 Nm
AUET/MTM-50-500(-DC)	5.0 - 50 in-lb	50 - 500 in-lb	0.56 - 5.65 Nm	5.65 - 56.5 Nm
AUET/MTM-100-500(-DC)	10 - 100 in-lb	50 - 500 in-lb	1.13 - 11.3 Nm	5.65 - 56.5 Nm
AUET/MTM-100-1000(-DC)	10 - 100 in-lb	100 - 1,000 in-lb	1.13 - 11.3 Nm	11.3 - 113 Nm

<sup>\*</sup>Custom sizes are also available, please inquire.

Data collecting models allow multiple files/tools/applications to be associated with torque data. Requires Tool Manager software.

<sup>\*\*</sup>Add "-DC" to part numbers for data collecting models.

# **AUDITOR™ TORQUE MEASUREMENT ANALYZERS**

#### TORQUE MEASUREMENT: ANALYZER

#### Features and Benefits

- Auditor Torque Analyzers share similar features across all products and are designed for intuitive and functional usability.
- Connects to AIMCO's line of rotary and stationary transducers

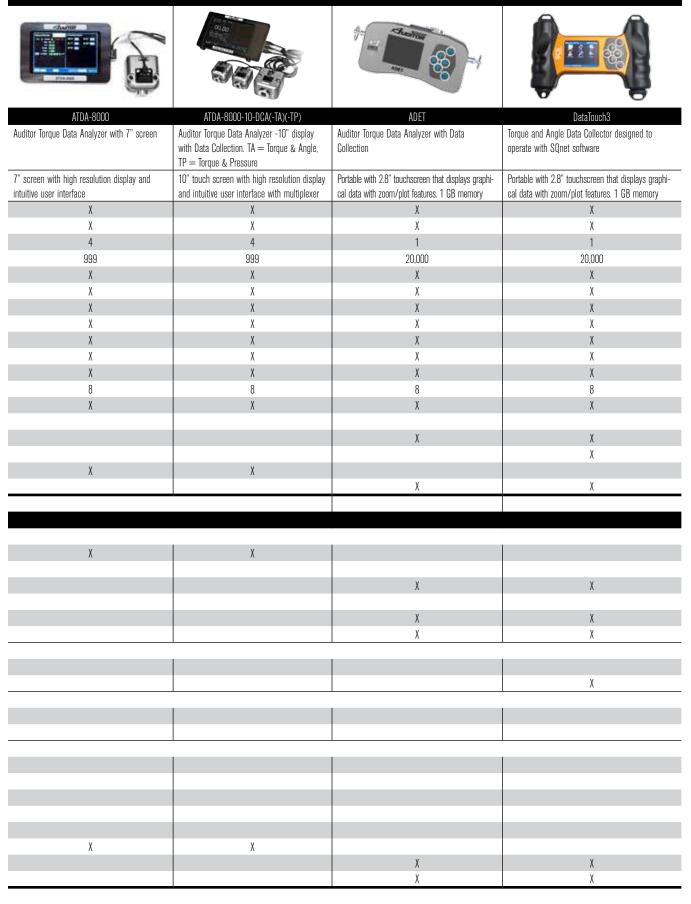




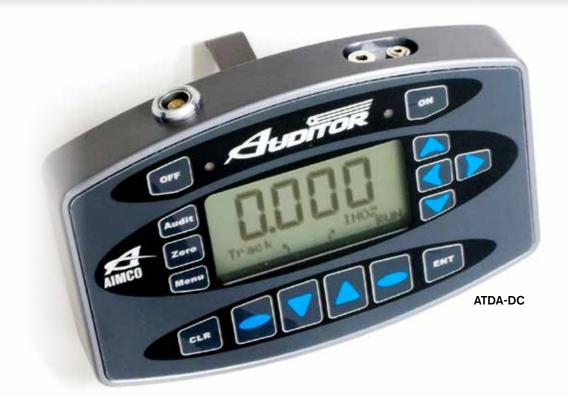
	ATDA	ATDA-DC
	Auditor Torque Data Analyzer	Auditor Torque Data Analyzer with Data Collection
	Portable analyzer to be connected to various transducers	Portable analyzer to be connected to various transducers. Provides data collection capability with included software to interface with PC
Bi-directional	Х	Х
Data Output to PC	Х	Х
External Transducer Port	1	1
Number of stored readings	999	999
Rechargeable NiMH Battery	Х	Х
Digital I/O for external devices	Х	Х
Measurement Modes	Х	Х
Peak	Х	Х
First Peak (Click)'	Х	Х
Pulse	Х	Х
Track	Х	Х
Measurement Units	8	8
Software Included		Х
Firmware		
LAB - Line Side Auditing		
SPC - Quality Control		
Barcode Reader	Х	Х
Bluetooth Wireless Option		

USED IN CONJUNCTION WITH		
Transducers		
AISI / AISF - Digital		
ASTIS - Stationary	Х	Х
ASTB - Stationary Wireless		
ARTIS - Rotary	Х	Х
ARTIS2 - Rotary		
ARTB - Rotary Wireless		
Wrenches		
ATW	Х	Х
FWE		
Switch boxes for External Transducers		
AISWT-4L > 4 Way Intellect box	Х	Х
AISWT-6L > 6 Way Intellect box	Х	Х
Cables		
ICBL-USB - USB Serial > PC	Х	Х
ATDBLIS - IS Transducer w/ angle (10 Pin)	Х	Х
ATDBRIS - IS Transducer (4 Pin)	χ	Х
ICBL-10P - Intellect transducer cable. Identification chip in cable - 10 pin connector	Х	Х
ICBL-4P - Intellect transducer cable. Identification chip in cable - 4 pin connector	Х	Х
ICBL-8000DIG - Connect from ATDA-8000 series analyzer to AISI / AIFI transducer		
RMC Cable DT.ET		
FWE Cable DT.ET		

# **AUDITOR™ TORQUE MEASUREMENT ANALYZERS**



# **AUDITOR™ TORQUE DATA ANALYZERS**



#### **AUDITOR™ TORQUE DATA ANALYZERS**

The Auditor Torque Data Analyzer (ATDA) DC is designed to be portable or conveniently placed on a bench. Depending on requirements, the tester can be connected to various transducers. In addition, it can be connected to transducerized wrenches, rotary or stationary transducers. The user interface is common between the ATC (Cube), AUET, AUET-DC, AUET/MTM, AUET/MTM-DC, ATDA, and ATDA-DC. All of these instruments have similar menus. Additionally, all data collector testers utilize Auditor Tool Manager for tool testing and data management.

The Auditor Torque Data Analyzer is available in two configurations:

- ATDA: A simple torque analyzer with sequential memory, 999 data samples, engineering limits, limited statistical processing average, range, Cp and CpK with serial output.
- ATDA-DC: Contains all of the features of the ATDA and has additional file capability. It can associate data with file names and manage data collection with a computer and Auditor Tool Manager software.



This is a great "starter" tool management system. It provides testing, archiving, and analysis of tools at single or multiple torque targets. The tool and torque data is stored in a SQL database and can be exported to Excel or any .csv spreadsheet.

MODEL	DESCRIPTION
ATDA	Auditor Torque Data Analyzer
ATDA-DC	Auditor Torque Data Collector

# **AUDITOR™ TORQUE DATA ANALYZERS**



#### TOUCH SCREEN AUDITOR™ TORQUE DATA ANALYZERS

Auditor offers the ATDA-8000 and the ATDA-8000-10-DCA(-TA)(-TP). The ATDA-8000 is a touch screen instrument with a high resolution display and user interface that facilitates "point of use" tool validation. The user interface is intuitive and the display provides clear easy to read data. Features and parameter settings are password protected to ensure parameters cannot be inadvertently changed. After initial setup, the instrument provides semi-automatic tool validation and judgment.

The ATDA-8000 is a single channel instrument. The ATDA-8000-10-DCA(-TA)(-TP) is a larger instrument that includes a multiplexor for connection to multiple transducers allowing a wide range of tools to be tested with one instrument. The (-TA) model is designed for torque and angle analysis and the (-TP) model is designed for torque and pressure analysis.

Both the ADTA-8000 and the ATDA-8000-10-DCA(-TA)(-TP) systems work with AIMCO's line of digital transducers.

MODEL	DESCRIPTION
ATDA-8000	Auditor Torque Analyzer Single channel 7" touch screen point of use validation system
ATDA-8000-10-DCA(-TA)(-TP)	Auditor Torque Analyzer Multiple transducer 10" touch screen point of use validation system

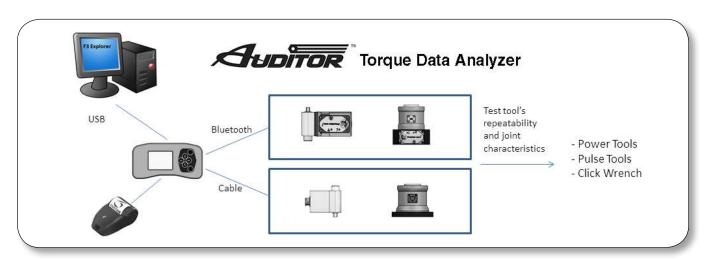


# **AUDITOR™ TORQUE DATA ANALYZER**

Auditor Data Analyzer provides a simple way to monitor nutrunners and torque wrenches on the assembly line. This quick, simple data collector provides an economical alternative to the DataTouch Data Analyzer.

#### **Features and Benefits**

- Full-color touchscreen for easy navigation.
- Graphical display with zoom/plot features for inspecting charts and graphs on the analyzer.
- Transducer auto-recognition reduces set-up time.
- Bluetooth wireless (Advanced).
- Embedded LAB firmware makes it easy to create quality tool strategies.
- Simple transfer of data to PC using F3 Explorer software for data storage.
- 1 GB memory stores multiple test strategies and data.
- Li-Ion battery with 8 hour life.
- Available in two versions:
  - Basic ADET
  - Advanced ADETB
- Advanced version connects with wireless transducers and printers, then exports data using system software.



#### **Specifications**

Internal Memory: 1 GB

20,000 results, 20,000 curves,

1,000 programs

High-resolution 2.3" touchscreen, 320 x 240 pixels,

65,535 colors







# **DATATOUCH3 DATA ANALYZER**

DataTouch3 is a torque/angle data collector designed to operate with SQnet software. Test tightening tools by connecting stationary or rotary transducers. Test joints by connecting the FWE Wrench.



#### **Features and Benefits**

- Full-color touchscreen for easy navigation.
- Graphical display with zoom/plot features for inspecting charts and graphs on the wrench.
- Transducer auto-recognition reduces set-up time.
- WiFi and Bluetooth options for cableless communication with transducer and laptop.
- Keyboard for navigation and switching on/off.
- Program advanced tightening strategies with easy input steps.
- Embedded firmware (LAB and SPC) targets quality functions.
- 1 GB memory enables storage of all test parameters, results, and curves.
- Li-lon battery with 8-hour life.
- · Optional bar code reader for data traceability.

SQnet software provides protection protocols and allows user to define routes linked to location and tool ID. User downloads events to wrench, performs tasks and sends results back that can be graphed or charted so that statistics can be analyzed.

#### **Specifications**

Internal Memory: 1 GB

20,000 results, 20,000 curves,

1,000 settable programs

High-resolution 2.8" touchscreen, 320 x 240 pixels, 65,535 colors

#### **Dimensions**

Length 215 mm

Width 144 mm (with battery cap)

Depth 63 mm

Weight 750 g + 90 g (belt)



**Battery** 

#### Power Supply

 Li-lon changeable battery 3.6 V, 2700 mA

Wireless

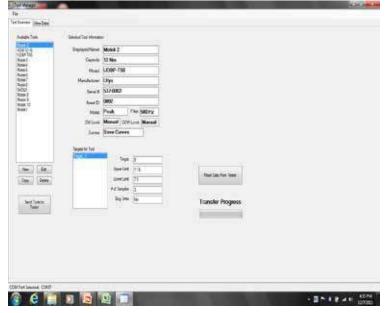
- 9 hours battery life
- 6 hours to recharge battery by PC USB port
- 4 hours to recharge battery using external battery charger (optional)

# **AUDITOR™ TOOL MANAGER/AUDIT MANAGER**

#### **AUDITOR™ TOOL MANAGER SOFTWARE**

Tool Manager Software is included with the purchase of AUET-DC and AUET/MTM-DC data-collecting torque testers, as well as the ADW-DC data-collecting torque wrench. Create a database of tools and store test results with this easy-to-use software integrator to/from tester to PC.

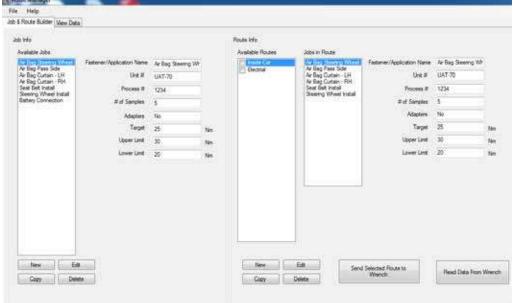
Tool Manager Software



#### **AUDITOR™ AUDIT MANAGER SOFTWARE**

Audit Manager Software is included with the purchase of ATDA-DC data collecting torque analyzers. The View Data tab allows you to look at the collected data and the trace file. This data can be exported to Excel as a .csv file and displayed by Excel charts. The trace file displays the data in a torque/time graph and allows the user to supersede the move-on reading selected by the wrench by visually discerning via the trace where the fastener started to rotate. When selecting a single job the average, range, sigma, Cp, and CpK values are listed.





# **AUDITOR™ HIGH CAPACITY TEST STANDS**

#### TORQUE MEASUREMENT: HIGH CAPACITY TEST STANDS

#### **Features and Benefits**

- Advanced test stations for larger tools and higher torque output
- Configured to meet application requirements
- Durable industrial grade devices











	AHCTS	AHCTS-K	AHDTS	AHBTS	AIMTS
	Auditor High Capacity Test Stand	Auditor High Capacity Test Stand - Hydraulic	Auditor High Capacity Test Stand Dual Trans- ducer	Auditor High Capacity Stand w/variable joint simulation	Auditor High Capacity Impact Test Stand
	Designed for testing tools with continuous rotating output spindles and pulse tools.	Specifically designed for hydraulic wrenches testing.	Two transducers, one for rotary tools and one for hydraulic tools. Includes rundown & reaction fixtures with a single display.	Designed for testing rotating tools without the use of rundown fixtures. Adjustable airbrake joint simulation eliminates CCW rotation after rundown.	Ideal for testing impact wrenches and is recommended to utilize rundown fixtures when testing impacts.
Capacity	6,750 Nm	33,750 Nm	33,750 Nm	6,750 Nm	2,700 Nm

ACCESSORIES						
Rundown fixtures						
AHCTS-3/4RDF		Х		Х		
AHCTS-1RDF		χ		Х		
AHCTS-1.5RDF		Х		Х		
Insert Square Drive	e Adapters					
CA1510	1-1/2" Male to 1" Female	Х		Х	Х	
CA1550	1-1/2" Male to 1/2" Female	χ		Х	Х	
CA1575	1-1/2" Male to 3/4" Female	Х		Х	Х	
CA2510I	2-1/2" Male to 1" Female	χ		Х	Х	
CA2515I	2-1/2" Male to 1-1/2" Female	Х		Х	Х	
CA25751	2-1/2" Male to 3/4" Female	χ		Х	Х	
CA150108DHD	1-1/2" Male to 1-1/2" Male Hex		Х			

Please refer to the Test Stand Configurator in Appendix C on 94 for required ordering options.



# **AUDITOR™ HIGH-CAPACITY TEST STANDS**



#### AHCTS TEST STAND FOR ROTATING TOOLS

Designed for testing tools with continuous rotating output spindles. The test stand includes a rundown fixture, bushing for side load support, reaction post or reaction paddles, transducer and torque analyzer display.

MODEL	DESCRIPTION
AHCTS-0500	3/4" Square Drive w/rundown fixture
AHCTS-2500	1.5" Square Drive w/rundown fixture
AHCTS-7500	1.5" Square Drive w/rundown fixture
AHDTS-5025*	1.5" Sq Dr dual station w/rundown fixture and reaction devices

<sup>\*</sup>This stand has two transducers embedded into the base, one for rotary tools and one for hydraulic tools, and comes with rundown and reaction fixtures and one display.

<sup>\*\*</sup>Please refer to 94 for required ordering options.





AHCTS-001K

#### AHCTS-K STAND FOR HYDRAULIC TOOLS

The AHCTS-K stands are specifically designed for hydraulic wrench testing. Hydraulic wrenches have very low profiles but very high torque output, therefore, working height must be minimized to prevent side loading which could lead to errors in data or damage to tool or reaction devices.

Either stand can be ordered with options such as extension legs, casters, embedded or attached torque analyzers with various rundown fixtures and reaction devices. Contact an AIMCO Customer Service Associate for additional information, 1-800-852-1368.

MODEL	DESCRIPTION
AHCTS-0.5K	3/4" Square Drive w/reaction device
AHCTS-001K	1" Square Drive w/reaction device
AHCTS-2.5K	1.5" Square Drive w/reaction device
AHCTS-005K	1.5" Square Drive w/reaction device
AHCTS-010K	1.5" Square Drive w/reaction device
AHCTS-025K	2" Square Drive w/reaction device

# **AUDITOR™ HIGH-CAPACITY TEST STANDS**

#### AIMTS TEST STAND FOR IMPACT TOOLS

These test stands are designed to test impact wrenches, and are compatible with any Auditor Torque Analyzer. It is necessary to bolt the AIMTS to a bench. We also recommend that a rundown fixture always be used for testing impacts.







**AIMTS-0500** Test stand for small impact tools



AIMTS-2000

Test stand for large impact tools

MODEL	DESCRIPTION
AIMTS-0500	3/4" square drive impact test stand
AIMTS-2000	1.5" square drive impact test stand

Please refer to the Test Stand Configurator in Appendix C on page 94 for required ordering options.



### AHBTS TEST STAND WITH BRAKING SYSTEM FOR ROTATING TOOLS

These test stands are for testing rotating tools without requiring the use of rundown fixtures. We utilize an airbrake for testing tools that cannot or should not be used in reverse. These test stands are compatible with any Auditor Torque Analyzer.

MODEL	DESCRIPTION
AHBTS-2500	1.5" square drive, brake system w/reaction device, rotary transducer and display
AHBTS-5000	1.5" square drive, brake system w/reaction device, rotary transducer and display

Auto Release test stand for quickly testing large rotating tools

# **AUDITOR™ TORQUE WRENCHES**

TORQUE MEASUREMENT	: TORQUE WRENCH					
Features and Benefits  • Multiple Options from Simple to Sophisticated  • Similar Interface with other	of Blad and	Gad a		Albert Marie	-	
Auditor Products  • Durable	ADW	ADW-DC	APTW	ATW	Freedom3 Digital Wrench	FWE
	* Auditor Digital Wrench	* Auditor Digital Wrench with Data Collection	Auditor Preset Torque Wrench	Auditor Torque Wrench	Freedom3 Torque/Angle Wrench	Electric Torque Wrench
Torque Range	7 - 370 ft/lbs 10 - 500 Nm	7 - 370 ft/lbs 10 - 500 Nm	4 - 250 ft/lbs 5 - 340 Nm	4 - 148 ft/lbs 5 - 200 Nm	1.1 - 885 ft/lbs 1.5 - 1,200 Nm	1.1 - 885 ft/lbs 1.5 - 1,200 Nm
	Digital wrench with multiple head options for line side testing/ auditing	Digital wrench with multiple head options for line side testing/audit- ing. Data Collector	Interchangeable heads. Preset uses proprietary adjustment tool to guard against unauthorized setting changes	Transducer on a stick. Communicates with Data Collector Testers and Analyzers	Freedom3 offers a uniquely complete tightening solution with large color touchscreen and 1 GB of memory	Transducerized wrench communicates with DataTouch Analyzer (required)
Bi-Directional accuracy of +/- X of indicated reading within the top 90% of the Tester's capacity	1%	1%	3%	0.50%	1%	1%
Software Included	Х	Х			Х	

USED IN CONJUNCTION WITH			
ATDA(DC) Data Analyzer		Х	
AUET(DC) Tester		Х	
AUET/MTM(DC) Tester		Х	
DataTouch3 Data Analyzer			Х

### TORQUE WRENCH LOADERS



For Calibration of all types of torque wrenches eliminating human variable for more accurate measurement - digital transducer used with ATDA-8000-10-DCA

ATWL-250	Torque range up to 250 ft/lbs
ATWL-750	Torque range up to 750 ft/lbs
ATWL-1000	Torque range up to 1000 ft/bs

See Appendix B on page 92 to configure wrench with options.

# **AUDITOR™ DIGITAL WRENCH SERIES**





#### ADW DATA COLLECTING TORQUE WRENCH

- Large memory capacity.
- Every torque value has associated trace file.
- "Pick a Point" and "Move On" feature.
- · Barcode scanner.
- Alpha Numeric screen for entering text.
- Field replaceable batteries.
- Docking station connection.
- Serial connection.
- · Battery charger connection.
- · Ergonomic handle.

- Switch between measure and data collection modes at any time.
- · Multiple files and route capability.
- Data memory and simple statistics "On Board".
- Complete statistical analysis, data archiving and exporting in Audit Manager software.
- Five models standard ranges 10 500 Nm full scale.
- Torsion transducer not length dependent.
- · Transducer is replaceable.
- 1,400 Nm model uses different handle design.

	TORQUE RANGE		WEIGHT		OVERALL LENGTH		SQ. DRIVE
MODEL	NM	FT-LB	LB	KG	IN	MM	IN
ADW-0010K	1 - 10	0.7 - 7.4	2.2	1	18	457.2	1/4
ADW-0075K	7.5 - 75	5.5-55	3.1	1.4	23.5	596.9	3/8
ADW-0180K	18 - 180	13-130	3.6	1.6	30.1	765.2	1/2
ADW-0270K	27 - 270	20-198	3.6	1.6	30.1	765.2	3/4
ADW-0500K	50 - 500	37-369	4	1.8	36	914	1
ADW-1400F	140 - 1,400	103-1,033	4.8	2.2	60	1524	1

Unit accuracy is  $\pm$  1.0% FSD of indicated reading for the top 95% of full scale as indicated above.

Each model includes a case, a battery charger, and a standard square-drive head. Other heads are available at additional cost.

\*Part numbers with K, D or F followed by a 1 designate models with file and route capability. K followed by 2 indicate sequential memory but no file capability.

Part numbers with K, D or F followed by a 1,1 indicate file and route with bar code and docking station capability, K, D or F followed by a 1,2 indicate file and route capability with serial port only.

Please refer to the Wrench Configurator in Appendix B on page 92 for required ordering options.



### **DOCKING STATION**

- Nest for accepting all wrench sizes.
- Charger and serial communication accomplished through docking station.
- Bench mountable.

# **AUDITOR™ ELECTRONIC TORQUE WRENCHES**

### ALLOW PRECISE TIGHTENING AND AUDITING OF YOUR ASSEMBLY APPLICATIONS



#### "TRANSDUCERS ON A STICK"

- Non-Length Dependent Where the operator's hand is positioned during use has no effect on torque readings.
- Available in Industry Standard (IS) or Intelligent (Intellect) Configurations – Transducer is compatible with a wide variety IS style instruments or Auditor™ Intellect instruments that self recognize the transducer.
- Durable Steel, Aluminum and Carbon Fiber construction providing optimal strength and weight characteristics. Transducer supplied with overload capacity of 150% of full scale.
- Accurate Torque readings are accurate to 1% of indicated reading in top 95% of full scale.

	TORQUI	SQUARE DRIVE		
MODEL	Nm	ft-lb	in	
ATW-0100F	14-136	10-100	3/8	
ATW-0200F	27-272	20-200	1/2	
ATW-0500F	68-680	50-500	3/4	
ATW-1000F	136-1360	100-1000	1	

Unit accuracy is  $\pm$  0.5% of indicated reading for the top 90% of full scale as indicated above. Required Accessory: ATDBRIS IS cable to connect Auditor ATDA instrument.

# **AUDITOR™ PRESET TORQUE WRENCHES**

### **FEATURES AND BENEFITS**

- Easy-to-use preset wrenches for fastener torque auditing.
- Torque ranges from 5 340 Nm.
- User friendly, sleek, ergonomic design.
- Tactile feedback on achievement of preset torque.
- Proprietary adjustment tool guards against unauthorized setting changes.
- Wide range of interchangeable heads provide flexibility and convenience.
- +/- 3% accuracy when used in clockwise or counterclockwise directions.

Preset Wrenches	Description
APTW-25	Auditor Preset Torque Wrench, 5 - 25 Nm, Accepts 12 mm Inserts
APTW-50	Auditor Preset Torque Wrench, 10 - 50 Nm, Accepts 12 mm Inserts
APTW-100	Auditor Preset Torque Wrench, 20 - 100 Nm, Accepts 12 mm Inserts
APTW-150	Auditor Preset Torque Wrench, 30 - 150 Nm, Accepts 12 mm Inserts
APTW-200	Auditor Preset Torque Wrench, 40 - 200 Nm, Accepts 14 mm Inserts
APTW-340	Auditor Preset Torque Wrench, 60 - 340Nm, Accepts 14 mm Inserts

Ratchet and Square Drive Heads	Description
APTH-12RT25	Auditor Preset Torque Wrench Ratchet Insert, 1/4 SQ DR, 12 mm
APTH-12RT38	Auditor Preset Torque Wrench Ratchet Insert, 3/8 SQ DR, 12 mm
APTH-12RT50	Auditor Preset Torque Wrench Ratchet Insert, 1/2 SQ DR, 12 mm
APTH-14RT50	Auditor Preset Torque Wrench Ratchet Insert, 1/2 SQ DR, 14 mm
APTH-14RT34	Auditor Preset Torque Wrench Ratchet Insert, 3/4 SQ DR, 14 mm
APTH-12SD25	Auditor Preset Torque Wrench SQ DR Insert, 1/4 SQ DR, 12 mm
APTH-12SD38	Auditor Preset Torque Wrench SD DR Insert, 3/8 SQ DR, 12 mm
APTH-12SD50	Auditor Preset Torque Wrench SQ DR Insert, 1/2 SQ DR, 12 mm
APTH-14SD50	Auditor Preset Torque Wrench SQ DR Insert, 1/2 SQ DR, 14 mm





Open End Heads	Description
APTH-120E7	Auditor Preset Torque Wrench Insert 7 mm OE, 12 mm
APTH-120E8	Auditor Preset Torque Wrench Insert 8 mm OE, 12 mm
APTH-120E9	Auditor Preset Torque Wrench Insert 9 mm OE, 12 mm
APTH-120E10	Auditor Preset Torque Wrench Insert 10 mm OE, 12 mm
APTH-120E11	Auditor Preset Torque Wrench Insert 11 mm OE, 12 mm
APTH-120E12	Auditor Preset Torque Wrench Insert 12 mm OE, 12 mm
APTH-120E13	Auditor Preset Torque Wrench Insert 13 mm OE, 12 mm
APTH-120E14	Auditor Preset Torque Wrench Insert 14 mm OE, 12 mm
APTH-120E15	Auditor Preset Torque Wrench Insert 15 mm OE, 12 mm
APTH-120E16	Auditor Preset Torque Wrench Insert 16 mm OE, 12 mm
APTH-120E17	Auditor Preset Torque Wrench Insert 17 mm OE, 12 mm
APTH-120E18	Auditor Preset Torque Wrench Insert 18 mm OE, 12 mm
APTH-120E19	Auditor Preset Torque Wrench Insert 19 mm OE, 12 mm
APTH-140E13	Auditor Preset Torque Wrench Insert 13 mm OE, 14 mm
APTH-140E14	Auditor Preset Torque Wrench Insert 14 mm OE, 14 mm
APTH-140E15	Auditor Preset Torque Wrench Insert 15 mm OE, 14 mm
APTH-140E16	Auditor Preset Torque Wrench Insert 16 mm OE, 14 mm
APTH-140E17	Auditor Preset Torque Wrench Insert 17 mm OE, 14 mm
APTH-140E18	Auditor Preset Torque Wrench Insert 18 mm OE, 14 mm
APTH-140E19	Auditor Preset Torque Wrench Insert 19 mm OE, 14 mm
APTH-140E21	Auditor Preset Torque Wrench Insert 21 mm OE, 14 mm
APTH-140E22	Auditor Preset Torque Wrench Insert 22 mm OE, 14 mm
APTH-140E24	Auditor Preset Torque Wrench Insert 24 mm OE, 14 mm
APTH-140E27	Auditor Preset Torque Wrench Insert 27 mm OE, 14 mm
APTH-140E30	Auditor Preset Torque Wrench Insert 30 mm OE, 14 mm
APTH-140E32	Auditor Preset Torque Wrench Insert 32 mm OE, 14 mm
APTH-140E34	Auditor Preset Torque Wrench Insert 34 mm OE, 14 mm
APTH-140E36	Auditor Preset Torque Wrench Insert 36 mm OE, 14 mm
APTH-140E38	Auditor Preset Torque Wrench Insert 38 mm OE, 14 mm
APTH-140E41	Auditor Preset Torque Wrench Insert 41 mm OE, 14 mm

# **SCS WRENCHES**

TORQUE MEASUREMENT: SCS WRENCHES				
Features and Benefits Torque and Angle Measurement Wireless Communication (optional) Use as a production wrench or for quality control with high-resolution touch screen display storing data points and curves for quick viewing or transfer to PC	Freedom3 DIGITAL WRENCH	FWE TA	FWE	
Torque Range	11 - 740 ft/Lbs 15 - 1000 Nm	11 - 740 ft/Lbs 15 - 1000 Nm	11 - 740 ft/LbS 15 - 1000 Nm	
Performance/Display	1GB Memory stores 20,000 values / 20,000 curves /	11 - 140 IV ED2 10 - 1000 MIII	11 - 740 11/EDS 10 - 1000 WIII	
	1,000 parameter sets, 80 Mips CPU, 32-Bit processor HiRes 2.3" Touch-screen display, 320 x 240 pixel resolution Li-lo rechargeable battery 3.6V 2700mAh, 9 hrs charge	-	-	
Bi-directional Measurement accuracy of + / -	.5% in top 80% of range 1.0% in top 90% of range 0.1% display deviation of angle	-	-	
Firmware				
LAB: Use to create tests on wrench, then store results including curves on wrench. These results can be downloaded to PC via F3 Explorer	Х	Х	Х	
SPC: Jobs and routes are developed for QC and Production via SQnet and downloaded/uploaded to/from wrench	Х	Х		
PRW: Used as production tool - communicating on-line via radio, BT or Wi-Fi where results are published in real time using VPG software	Х			
Software				
F3 Explorer: Collects data results/curves > edit/export to Excel	Х	Х		
SQnet: Transfers jobs and routes data to/from device to PC	Х	Х		
VPG: Real time data transfer via wireless communication	Х			
Options (must include with tool purchase)				
Barcode Reader Integrated (optional)	Х			
Bluetooth Module Integrated Beneficial in PRW mode to communicate with VPG Software	Х			
WiFi Module Integrated Beneficial in PRW mode to communicate with VPG Software	Х			
ACCESSORIES				
Battery Cradle	Х			
USB Cable	Х			
External Battery Charger	Х			
Body Jacket	Х			
WRENCH USED IN CONJUNCTION WITH		Х	V	
DataTouch		Λ	Х	
FREEDOM RATCHETS AND SOCKETS				
Reversible ratchet	Х	Х	Х	
Open end ratchet	Х	Х	Х	
Ring end ratchet	X	Х	Х	
Ring open	X	Х	Х	
Recognition chip option	Х	Х	Х	

# **SCS FREEDOM3 WRENCH**

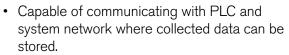
The Freedom3 Wrench offers a uniquely complete tightening solution. Its patented angle measuring system, large color touchscreen, and internal 1 GB memory, make it the best performing and flexible torque/angle wrench on the market.

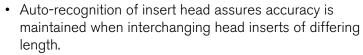
#### **Features and Benefits**

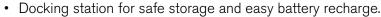
• Full-color 2.8" touchscreen provides a graphical display with zoom/plot features for easy viewing.

• Vibration and LED visual queues advise when target torque/angle is reached, reducing the risk of overtightening.

• Save time by creating a tightening strategy on the wrench without connecting to a PC.







- Bar code reader for efficient route management and data output (optional).
- Wireless technology (optional) synchronizes routes and data from multiple locations on the production line, enabling real-time analysis.
- Two firmware options enable the wrench to work on a wide range of production/assembly applications
  - SPC/LAB Firmware for laboratory analysis and quality control testing.
  - PRW Firmware for production line or rework stations.
- Long battery life provides up to 8 hours of continuous operation.

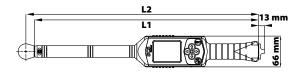
### **Specifications**

Capacity 1.5-1,200 Nm (90% of full scale)
Output 1GB memory stores 20,000 Values
with Curves over 1,000 Parameter
sets

Repeatability

Torque +/- 1% accuracy when used in top 90% of wrench range.

Angle +/- 0.1% display deviation of angle



	Capacity		Drive	L1*	L2*	Wei	ght*
Model	Nm	Ft-Lb	mm	mm	mm	lb	kg
FRDM3-15	15	11	9 x 12 female	375	393	1.8	0.8
FRDM3-30	30	22	9 x 12 female	375	393	1.8	0.86
FRDM3-70	70	52	9 x 12 female	480	498	2.1	0.93
FRDM3-100	100	74	9 x 12 female	480	498	2.1	0.93
FRDM3-200	200	148	14 x 18 female	604	629	3.3	1.5
FRDM3-300	300	221	14 x 18 female	754	779	4.1	1.86
FRDM3-400	400	295	14 x 18 female	754	779	4.1	1.86
FRDM3-600	600	442	14 x 18 female	1,032	1,057	8.0	3.65
FRDM3-800	800	590	Ø20 male	1,250	1,330	11.2	5.1
FRDM3-1000	1,000	737	Ø20 male	1,520	1,610	13.8	6.25
FRDM3-1200	1,200	885	Ø28 SA female	1,732	1,578	15.4	7.0

<sup>\*</sup> without ratchet

Call for quote on devices with larger capacities

FRDM3-100

FRDM3 models include predisposition for battery cradle and auto recognition of inserted socket on wrench

# SCS FREEDOM3 WRENCH

Freedom3 Wrench is available as a Quality or Production wrench, enabling it to work on a wide range of production/assembly applications.

- Quality: SPC/LAB Firmware for laboratory analysis and quality control testing.
- Production: PRW Firmware for production line or rework stations.



Choose testing method

Test joint

III**>** 

View torque/time, torque angle graphs on wrench



Transfer data where applicable

### **Tightening Strategy – Quality**

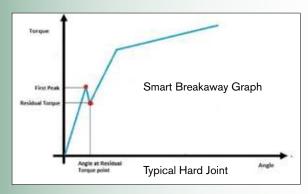
With Freedom3 Wrench, tightening strategies can be monitored using techniques designed to minimize joint elongation of typical breakaway testing. New breakaway methods employ an algorithm to protect real breakaway point and produce similar results regardless of operator influence.

#### Breakaway Angle

Preset angle 1–4° and wrench will return torque value reached at the specified angle of rotation.

### Smart Breakaway Angle

Preset angle but returns either First Peak or Residual Torque values. See graph of typical hard joint curve.



#### Breakaway Open/Close

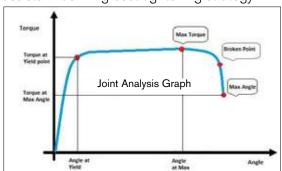
Rotate joint CCW a specific degree of angle then retighten CW the same rotation value to move bolt back to original position. Wrench returns torque value at the preset rotation parameter.

#### Minimum Torque

Validate that the joint meets established torque parameter by setting angle rotation value. Wrench returns pass/fail value.

#### Joint Analysis

Wrench will sense yield point and produce joint curves and save as yield torque, yield angle, max torque and angle at max torque. Graphic display assists in defining best tightening strategy.



# **Tightening Strategy – Production**

The Freedom3 Wrench is designed to work in realtime as an assembly tool on the production line.

- Wrench operates as a transducerized hand held nutrunner in production.
- Use for critical fastening duties with precise torque control.
- Visual display of torque data including curves.
- Create a route (list of tightening programs) using SQNet software building parameters necessary for any production process.
- Real time data transfer to quality system through VPG software.
- Use as backup tool.

# SCS FWE/FWETA ELECTRONIC WRENCH

The FWE Wrench is an economic alternative to the Freedom3 Wrench. FWE utilizes the same high-quality firmware/software programs and can be cabled to the DataTouch Data Analyzer.

### **Features and Benefits**

- Cabled torque wrench measures torque or torque/angle for simplified testing of critical joints.
- 11 standard models offer a range of 1.5 to 1,200 Nm to accommodate a wide range of applications.
- Available with internal memory for automatic recognition when connected to the DataTouch3.
- Standard end-fittings 9 x 12 or 14 x 18 allow the use of standard bits.





Use in conjunction with



DataTouch3 Analyzer

### **Specifications**

Capacity 1.5–1,200 Nm (wrenches capable of function within top 90% of full scale)

Model	<u>Function</u>
FWE TA	Torque/Angle
FWE	Torque only

	Сара	acity	Drive
Model	Nm	ft-lb	in
Freedom FWE(TA) 15	15	11	9 x 12
Freedom FWE(TA) 30	30	22	9 x 12
Freedom FWE(TA) 70	70	52	9 x 12
Freedom FWE(TA) 100	100	74	9 x 12
Freedom FWE(TA) 200	200	148	14 x 18
Freedom FWE(TA) 300	300	221	14 x 18
Freedom FWE(TA) 400	400	295	14 x 18
Freedom FWE(TA) 600	600	442	14 x 18
Freedom FWE(TA) 800	800	590	<b>Ø</b> 20
Freedom FWE(TA) 1000	1,000	740	<b>Ø</b> 20
Freedom FWE(TA) 1200	1,200	885	Ø28

FWE models measure torque. FWE-TA models measure torque/angle.

Call for quote on devices with larger capacities

# **TORQUE CARTS**

#### TORQUE MEASUREMENT: TORQUE CARTS

#### **Features and Benefits**

- Test on repeatable joint simulators or production joints
- Simple to sophisticated options
- Manual or self-propelled
- Mobile test carts can be configured for testing continuous and discontinuous drive tools that include DC electric, clutch, battery, impulse, and torque wrenches
- Each cart is customizable to meet testing needs from 1 1 356 Nm







Each cart is customizable to meet testing needs from 1 - 1,356 Nm Contact your AIMCO representative for a quote or more information	iTVC	FTY	MSB
Hydraulic Braking Technology     Dry braking with multiple hydraulic cylinders where thrust is generated equally to allow better linear control of the braking ramp     Programmable joint characteristics for use with continuous drive tools - no unwinding required after testing		X	
Per Repeatable Joint Simulator     Mechanically adjustable hydraulic pressure circuits allow the bolt tightening body to be configured to simulate various joint characteristics     Ideal for repeatable, linear joint rate simulation while testing all tools including impulse tools	X	Х*	Х*
DataPro Software	Х	Х	Х
Torque Wrench Loader Option	Х	Х	Х

<sup>\*</sup> Optional equipment - extension added to cart

# **AUDITOR TORQUE CART**



AIMCO offers torque carts for "lineside" or "point of use" tool validation and calibration. Our torque carts allow testing of tools on repeatable joint simulators and "in process" use on production joints, allowing users to identify process capability. There are multiple torque cart options:

- Manual push carts equipped with simple torque testers.
- Manual push carts equipped with data collectors and database application software.
- Self propelled cart with computer and relational database application.
- Driven cart with computer and relational database application.

Each cart can be equipped to specific customer requirements. Maximum torque range on board torque cart is 1,000 ft-lb or 1,356 Nm. Ancillary test stands up to 50,000 ft-lb available.

# **SCS TORQUE CART**

#### High-precision torque carts able to simulate a fastener in all conditions



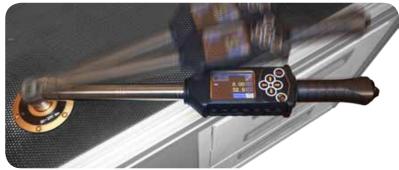
### **Features and Benefits**

- ISO 5393, VDI 2862, ISO 6789, VDE 2647
- Sophisticated DataPro software
- Time saving testing of tools with the same tightening strategy as used on production line
- Comparative test analysis
- Lightweight

**MSB Torque Cart** 



The FTY Torque Cart includes all of the features and benefits of the MSB Torque Cart, *plus* hydraulic braking technology for better linear control of the braking ramp.



## **Specifications**

- USB interface
- Sampling frequency of up to 30 kHz with settable filter up to 3 kHz
- Accuracy of 0.5% within top 90% of full scale
- Tests power tools up to 1,356 Nm

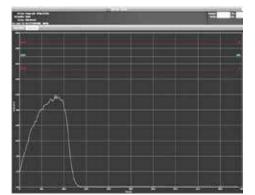
# **DATA COLLECTION SOFTWARE**

### DATAPRO SOFTWARE - TORQUE CART DATA MANAGEMENT

As the data management system for the AIMCO Torque Cart line, DataPro and SQnet software provide tool management, verification, and calibration. Users can manage complete tool inventory, create jobs/routes, and store collected data. Calibration sequencing can be scheduled by time or number of rundowns.

#### **TORQUE VERIFICATION**

DataPro displays sample values of torque, angle, and pulse count. It calculates statistics: average, Cp, Cpk, Six Sigma, and Mean variation. As values are measured, they are graphically plotted on a X-bar range chart scaled to specification limits.



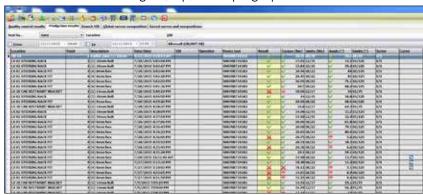
Torque Values from a Click Wrench

#### **TRACES**

The axis of the trace can be torque/time, torque/angle, angle/time. Save a trace, retrieve it, and overlay a new trace for comparison. Trace details are displayed at the bottom of the graph: max. values, plot time (ms), number of data points, filter frequency, and sample rate.

#### **DATABASE INFORMATION**

View operation lists and associated tools along with historic test or quality data. From the historic data screen, launch statistical graphs to view and analyze archived data. Graphs include X-bar range, histogram, Six Sigma, Cp, and Cpk graphs.



**Database Displaying Production Test Results** 

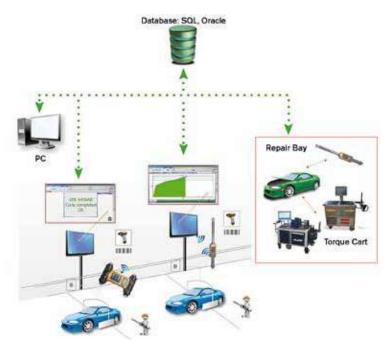
### **SQNET SOFTWARE - QUALITY CONTROL AND PRODUCTION LINE**

SQnet is designed to manage quality control of the production line, manage all the tools (supplier, models, technical specifications), and manage related quality-control tests (Cm, Cmk, and XR charts).

SQnet software communicates with Freedom3 wrench and DataTouch3 data analyzer to gather audit data from predetermined jobs and routes.

For Quality use, the software enables you to manage tools, operation locations, and qualitycontrol of production lines.

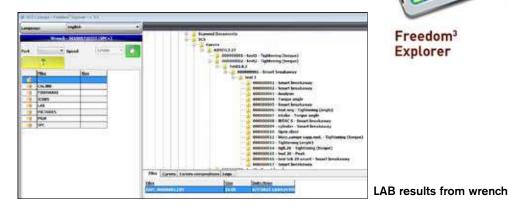
For Production use, you can check residual torque or perform joint analysis in order to test bench settings and to set accurate tightening parameters.



# **DATA COLLECTION SOFTWARE**

### FREEDOM3 EXPLORER SOFTWARE - QUALITY CONTROL

Freedom3 Explorer software enables collection of data, results, and curves from the ADET analyzer, the DataTouch3 analyzer, and the Freedom3 torque wrench. The software displays single or multi-curve graphs, and provides easy analysis of minimum/maximum torque, minimum/maximum angle, and final torque. Data can be exported to Excel.





# VPG SOFTWARE - PRODUCTION LINE

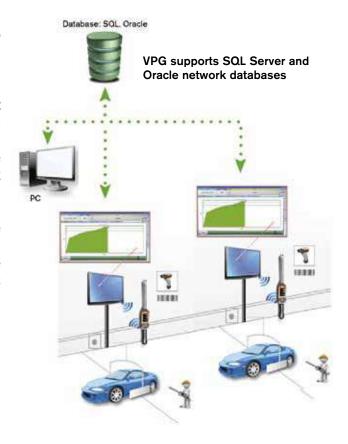
VPG (Visual Production Guide) software works with Freedom3 torque wrench, and enables operators to configure assembly and rework processes.

From the computer, VPG sends tightening programs to Freedom3. Operators are driven through different tightening sequences. The software automatically selects the correct tightening program, and displays instructions accompanied by a picture of the operations, complete with status (to be tightened, OK and NOK). In rework mode, the user can manually select the sequences.

From the production line, Freedom3 sends real-time critical-joint fastening data after each tightening immediately to the PC. If the network is unavailable, the station will store the results until network connection is restored. VPG software allows full tractability including torque control, angle control, and yield control.



PRW real-time results from wrench to database - wireless



# **TRANSDUCERS**

#### TORQUE MEASUREMENT: TRANSDUCERS **Features and Benefits** Stationary Rotary Superior: Accuracy Compatibility · Durability Auditor offers multiple styles of transducers in various configurations. Industry standard transducers (2mv/v) and intellect transducers for Auditor instruments that reduce **ASTIS** AISI - AISF ARTIS ARTIS2 ARTB configuration set up time. Auditor Stationary Trans-Auditor Industry Standard **Auditor Stationary Auditor Rotary Auditor Torque** Auditor Torque and ducer Industry Standard Stationary Transducer Industry Transducer Industry and Torque/Angle Torque/Angle Rotary Please contact our Customer Service Standard Bluetooth Standard Rotary Transducer Transducer Industry Associates for additional information, Industry Standard Standard Bluetooth 1-800-852-1368. Used in Conjunction with Analyzers ATC AUET χ χ AUET/MTM χ χ ATDA ATDA-8000 ADET χ χ X χ DataTouch3 χ

See Appendix A on page 92 to configure complete part.

## **AUDITOR™ STATIONARY TRANSDUCERS**

Stationary Transducers with joint rundown fixtures and, where applicable, bench stands.



AISI/AISF Transduers connect to the ATDA-8000 analyzer and mount directly to a benchtop.

	MAX	TORQUE	WEI	GHT	WX	HXD	DRIVE
MODEL	Nm	in-lb/ft-lb	kg	lb	mm	in	in
AISI-200025	2.8	25	1.13	2.5	79 x 95 x 83	3.13 x 3.75 x 3.25	1/4
AISI-200100	11.3	100	1.13	2.5	79 x 95 x 83	3.13 x 3.75 x 3.25	1/4
AISI-200500	56.5	500	1.13	2.5	79 x 95 x 83	3.13 x 3.75 x 3.25	3/8
AISF-200100	135.6	1,200/100	2.25	5	100 x 65	4 x 3	1/2
AISF-200250	339	3,000/250	2.25	5	100 x 65	4 x 3	1/2
AISF-201000	1350	12,000/1,000	2.8	6	100 x 65	4 x 3	1



**ASTB** 

Can be connected to DataTouch or Auditor Torque Data Analyzers, or to a standard laptop via Bluetooth, allowing control of various types of power tools

	CAPA	ACITY	DRIVE
MODEL	NM	FT-LB	IN
ASTB-25S-2C	2	1.5	1/4"
ASTB-75S-10C / ASTB-75R-10P	10	7	3/4" / SA 21
ASTB-75S-20C / ASTB-75R-20P	20	15	3/4" / SA 21
ASTB-75S-50C / ASTB-75R-50P	50	37	3/4" / SA 21
ASTB-75S-100C / ASTB-75R-100P	100	74	3/4" / SA 24
ASTB-75S-250C / ASTB-75R-250P	250	185	3/4" / SA 24
ASTB-75S-500C / ASTB-75R-500P	500	370	3/4" / SA 36
ASTB-100S-1000C / ASTB-1000R-1000P	1,000	740	1" / SA 46

R= ring nut drive, S= square drive

Call for quote on devices with larger capacities



ASTIS industry standard transducers can be used with multiple analyzers.

ASTIS

	MAX T	DRIVE	
MODEL	Nm	in-lb/ft-lb	in
ASTIS-25D-11	11	100 in-lb	1/4
ASTIS-25D-28	28	250 in-lb	1/4
ASTIS-38D-135	135	100 ft-lb	3/8
ASTIS-50D-270	270	200 ft-lb	1/2
ASTIS-75D-1000	1017	750 ft-lb	3/4
ASTIS-100D-1700	1695 Nm	750 ft-lb	1

# **AUDITOR™ TRANSDUCERS**

### **AUDITOR™ ROTARY TRANSDUCERS**



**ARTIS Series** 

Suitable for use with all continuous drive tools, impulse tools and torque wrenches.

		MAX 1	MAX TORQUE		THICKNESS	WIDTH	WEIGHT
MODEL	DRIVE	Nm	in-lb/ft-lb	(A)	(B)	(C)	lb
ARTIS-25H-2T(A)	1/4 Hex	2	18 in-lb	4.6	1.1	2.2	1.0
ARTIS-25H-5T(A)	1/4 Hex	5	44 in-lb	4.6	1.1	2.2	1.0
ARTIS-25H-20T(A)	1/4 Hex	20	180 in-lb	4.6	1.1	2.2	1.0
ARTIS-25S-10T(A)	1/4 Sq.	10	88 in-lb	2.9	1.1	2.2	1.0
ARTIS-38S-75T(A)	3/8 Sq.	75	50 ft-lb	3.0	1.6	2.7	1.2
ARTIS-50S-180T(A)	1/2 Sq.	180	130 ft-lb	3.4	1.6	2.7	1.5
ARTIS-75S-500T(A)	3/4 Sq.	500	370 ft-lb	4.1	2.0	3.1	2.2
ARTIS-100S-1400T(A)	1 Sq.	1400	1025 ft-lb	4.9	2.4	3.6	4.0

<sup>\*</sup>Add "A" to the end of the part number to indicate torque/angle transducer.



ARTIS2-25S-10T

#### **ARTIS2 Series**

Can be connected to Auditor Torque Data Collector. Available with internal memory for automatic recognition when connected to Auditor Torque Data Collector.

TORQUE			
	CAPA	ACITY	DRIVE
MODEL	NM	FT-LB	IN
ARTIS2-25H-2T	2	1.5	HEX 1/4"
ARTIS2-25H-5T	5	3.7	HEX 1/4"
ARTIS2-25S-10T	10	7	SQ. 1/4"
ARTIS2-25H-10T	10	7	HEX 1/4"
ARTIS2-25H-20T	20	15	HEX 1/4"
ARTIS2-25S-20T	20	15	SQ. 1/4"
ARTIS2-38S-25T	25	18	SQ. 3/8"
ARTIS2-38S-75T	75	55	SQ. 3/8"
ARTIS2-50S-180T	180	133	SQ. 1/2"
ARTIS2-75S-250T	250	184	SQ. 3/4"
ARTIS2-75S-500T	500	369	SQ. 3/4"
ARTIS2-75S-750T	750	553	SQ. 3/4"
ARTIS2-100S-1400T	1,400	1,033	SQ. 1"
ARTIS2-150S-3000T	3,000	2,213	SQ. 1 1/2"
ARTIS2-150S-5000T	5,000	3,688	SQ. 1 1/2"

Call for quote on devices with larger capacities

TORQUE AND ANGLE			
	CAPA	ACITY	DRIVE
MODEL	NM	FT-LB	IN
ARTIS2-25H-2TA	2	1.5	HEX 1/4"
ARTIS2-25H-5TA	5	3.7	HEX 1/4"
ARTIS2-25S-10TA	10	7	SQ. 1/4"
ARTIS2-25H-10TA	10	7	HEX 1/4"
ARTIS2-25H-20TA	20	15	HEX 1/4"
ARTIS2-25S-20TA	20	15	SQ. 1/4"
ARTIS2-38S-25TA	25	18	SQ. 3/8"
ARTIS2-38S-75TA	75	55	SQ. 3/8"
ARTIS2-50S-180TA	180	133	SQ. 1/2"
ARTIS2-75S-250TA	250	184	SQ. 3/4"
ARTIS2-75S-500TA	500	369	SQ. 3/4"
ARTIS2-75S-750TA	750	553	SQ. 3/4"
ARTIS2-100S-1400TA	1,400	1,033	SQ. 1"
ARTIS2-150S-3000TA	3,000	2,213	SQ. 1 1/2"
ARTIS2-150S-5000TA	5,000	3,688	SQ. 1 1/2"

Call for quote on devices with larger capacities

### ARTB WIRELESS TORQUE AND ANGLE ROTARY TRANSDUCERS



Can be connected to DataTouch or Auditor Torque Data Analyzers, or to a standard laptop via Bluetooth, allowing control of various types of power tools.

	Torque	Range	Drive
Model	Nm	ft-lb	in
ARTB-25H-2T(TA)	0.2 - 2	0.2 - 1.5	HEX 1/4"
ARTB-25H-5T(TA)	0.5 - 5	0.4 - 3.7	HEX 1/4"
ARTB-25S-10T(TA)	1 - 10	0.7 - 7	1/4"
ARTB-25H-20T(TA)	2 - 20	1.5 - 15	HEX 1/4"
ARTB-25S-20T(TA)	2 - 20	1.5 - 15	1/4"
ARTB-38S-25T(TA)	2.5 - 25	2 - 19	3/8"
ARTB-38S-75T(TA)	7.5 - 75	6 - 56	3/8"
ARTB-50S-180T(TA)	18 - 180	13 - 133	1/2"
ARTB-75S-250T(TA)	25 - 250	19 - 185	3/4"
ARTB-75S-500T(TA)	50 - 500	37 - 370	3/4"
ARTB-100S-1400T(TA)	140 - 1,400	104 - 1,036	1"
ARTB-150S-3000T(TA)	300 - 3,000	222 - 2,220	1 1/2"
ARTB-150S-5000T(TA)	500 - 5,000	370 - 3,700	1 1/2"

Call for quote on devices with larger capacities

# TORQUE MEASUREMENT RUNDOWN FIXTURES / JOINT SIMULATORS

RUNDOWN FIXTURE	MODEL SERIES	WEAR RESISTANT HEAVY DUTY	HEAVY DUTY FULLY ENCAPSULATED	HEAVY DUTY ENCAPSULATED WASHERS	STANDARD (INCLUDED W/ ANALYZER)	SPLINE DRIVE
	ARDIA-XXXHD	X				
	ARDFA-XXXXHD	Х				
	ARDFA-XXXHDS		Х			
	ARDIA-XXXHDS		Х			
	ARDFA-XXXHDE			Х		
	ARDIA-XXXHDE			Х		
	ARDFA-XXX				Х	
	ARDIA-XXX				Х	
	ARDA-XXX	Х	Х			Х*

Fixtures can be ordered to simulate hard, med, or soft joints

Mechanical Belleville system of bolt, nut or nut body, Belleville washers and main housing, 1/4" - 3/4" drive sizes, 10 in/lbs - 1,200 ft/lbs

<sup>\*</sup>Spline drive feature provides rundown control when testing pulse tools

JOINT SIMULATOR		
٩	AJKR-	Joint Kit for Rotary Transducer
(3)	AJKS-	Joint Kit for Stationary Transducer

Provide linear response and are repeatable 1/4" - 1" drive sizes 28 - 1,695 Nm

Power Tools	Impulse Tools
Х	

HYDRAULIC MECHANICAL JOINT SIMULATOR		
山川山	UFT SERIES	

Accurate, repeatable, linear, and durable. Tests 3 - 690 Nm, M5 - M24 fastener sizes See page 90.

Rundown Fixtures used in conjunction with these external transducers:	ASTIS	AISI-AISF	ARTIS	ASTB	ARTB
ARDIA/ARDFA	χ	Х	Х		Х
ARDA				Х	Х
AJKS	χ		Х		
AJKR			Х		Х
UFT			Х		Х

Design Type: Square drive Spline Drive

# **TORQUE MEASUREMENT RUNDOWN FIXTURES / JOINT KITS**



### **AUDITOR™ RUNDOWN FIXTURES**

To test power tools, pneumatic or electric, consistent rotational speed must be achieved. The joint rundown fixture/simulator provides the means by which the tool motor and spindle rotates freely at the start of the test cycle and then develops torque as resistance to rotation increases as load on the fastener and joint increases. The linearity and consistency of the joint rundown fixtures/simulators vary greatly and the tool test data is a product of the variations in these rundown fixtures. Higher quality joint rundown fixtures produce torque data with less scatter.

#### Rundown fixtures for heavy duty use.

		RECOMMENDED TORQUE RANGE										
MODEL*	DESCRIPTION	IN-LB	Nm	SQUARE DRIVE								
ARDIA-10(HD)(HDE)(HDS)	Rundown Fixture	1.0 - 10	.13 - 1.13	1/4								
ARDIA-25(HD)(HDE)(HDS)	Rundown Fixture	2.5 - 25	.28 - 2.8	1/4								
ARDIA-100(HD)(HDE)(HDS)	Rundown Fixture	10.0 -100	1.3 - 11.3	1/4								
ARDIA-250(HD)(HDE)(HDS)	Rundown Fixture	25.0 - 250	2.8 - 28.25	3/8								
ARDIA-500(HD)(HDE)(HDS)	Rundown Fixture	50.0 - 500	5.6 - 56.5	3/8								

<sup>\*</sup> Add "HD" to part numbers for wear resistant models. Add "HDS" to part numbers for fully encapsulated wear resistant models.

<sup>\*</sup> Add "HDE" to part numbers for partial encapsulated wear resistant models.

		RECOMMENDED		
MODEL*	DESCRIPTION	IN-LB	Nm	SQUARE DRIVE
ARDFA-100(HD)(HDE)(HDS)	Rundown Fixture	10 - 100	13.6 - 136	1/2
ARDFA-150(HD)(HDE)(HDS)	Rundown Fixture	15 - 150	20.4 - 204	1/2
ARDFA-250(HD)(HDE)(HDS)	Rundown Fixture	25 - 250	34.0 - 340	1/2
ARDFA-600(HD)(HDE)(HDS)	Rundown Fixture	60 - 600	81.6 - 816	3/4

 $<sup>\</sup>cdot$  Add "HD" to part numbers for wear resistant models. Add "HDS" to part numbers for encapsulated wear resistant models.

#### **JOINT KITS**

DRIVE SIZE - IN	ROTARY KIT PART NUMBER	STATIONARY KIT PART NUMBER
1/4	AJKR-28	AJKS-25D
3/8	AJKR-135	AJKS-38D
1/2	AJKR-271	AJKS-50D
 3/4	AJKR-1017	AJKS-75D
1	AJKR-1695	AJKS-100D

<sup>\*</sup> Add "HDE" to part numbers for partial encapsulated wear resistant models.

# **UFT SERIES JOINT SIMULATORS**

### **UFT SERIES JOINT SIMULATORS**

- AIMCO's UFT Joint Simulators offer the most repeatable and linear joint rate simulation of any product on the market.
- · Pulse tool and continuous drive tool certification and testing.
- Consists of a bolt tightening body and a hydraulic pressure loading mechanism. A hydraulic pressure circuit connects these two bodies. Ideal for ISO 5393 test procedures.
- Three joint rates can be easily and quickly simulated by opening or closing two external valves.
- Specially coated testing bolt produces over 100,000 cycles without variation or deformation.



UFT-24



UFT-S10 UFT-S16

MODEL	BOLT SIZE	TORQUE FT-LB	E RANGE NM	SNUG TORQUE NM	A-JOINT RATE NM/DEG	B-JOINT RATE NM/DEG	C-JOINT RATE NM/DEG	D-JOINT RATE NM/DEG	CENTER TO OUTSIDE X HEIGHT MM	WEI0	WEIGHT LB KG	
UFT-S10	M6	5 - 11	6.7 - 14.7	2.7	0.36	0.10	0.04	0.02	76 x 203	43	19.5	
	M8	11 - 23	14.7 - 31.4	7.5	0.79	0.26	0.06	0.03				
	M10	23 - 40	31.4 - 53.9	14.9	1.22	0.35	0.09	0.06				
UFT-S16	M12	40 - 65	53.9 - 88.2	27.5	1.80	0.51	0.22	0.09	97 x 256	88	40	
	M14	65 - 110	88.2 - 149	44.0	2.70	0.79	0.22	0.14				
	M16	110 - 140	149 - 190	73.5	4.70	1.22	0.35	0.21				
UFT-24*	M18	140 - 217	190 - 294						138 x 171	108	49.1	
	M20	217 - 325	294 - 441									
	M24	325 - 506	441 - 686									

<sup>\*</sup> UFT-24 medium hard/soft joints only

Reaction fixture for continuous drive tools not included. Sockets included.

# **TORQUE MEASUREMENT CABLES**

### **CABLES**





TORQUE	TORQUE MEASUREMENT: CABLES													
	MODEL	SERIAL CABLE	TRANSDUCER CABLE	ROTARY	ROTARY W/ANGLE	STATIONARY	IND STD	INTELLECT						
1	ICBL-USB	Х												
2	ATDBLIS		Х		Х		Х							
3	ATDBRIS		Х	Х		Х	Х							
4	ICBL-10P		χ		χ			χ						
5	ICBL-4P		Х	Х		Х		Х						
6	ICBL-8000DIG		Х											
7	RMC Cable DT.ET		Х	Х	χ	Х								
8	FWE Cable DT.ET		Х											

Cables 1-5 are compatible with ATDA, AUET, ADW products

- 1. Connects between comport of display to PC
- 2. Connect to IS transducer w/ angle 10 pin
- 3. Connect to IS transducer 4 pin
- 4. Intellect transducer cable. Identification chip in cable 10 pin connector
- 5. Intellect transducer cable. Identification chip in cable 4 pin connector
- 6. Connect from ATDA-8000 series analyzer to AISI / AIFI transducer
- 7. Connect from DataTouch3 / ADET analyzer to ARTB/ARTS transducers
- 8. Connect from DataTouch3 / ADET analyzer to FWE Wrenches



CABLE COMPATIBILITY														
	ATC	AUET	AUET/ MTM	AUET- DC	AUET/ MTM-DC	ATDA	ATDA- DC	ATDA- 8000	ATDA-8000-10- DCA(-TA)(-TP)	ADW	ADW- DC	FWE	AEDT	DataTouch
ICBL-USB	Х	Х	Х	Х	Х	Х	Х			χ	Х			
ATDBLIS		Х	Х	Х	Х	Х	Х							
ATDBRIS		Х	Х	χ	Х	Х	Х							
ICBL-10P		Х	Х	Х	Х	Х	Х							
ICBL-4P		Х	Х	χ	Х	Х	Х							
ICBL-8000DIG								Х	Х					
RMC Cable DT.ET													Х	Х
FWE Cable DT.ET												Х		

### **APPENDIX A: TRANSDUCER CONFIGURATOR**

	Base	Model Number (	(1-11)			_
Model Number	1	2	3	4	5	6
Examples of part	A	I	S	I	-	2
numbers	А	I	S	F	-	2
	А	Х	R	N	-	1
Transducer Options and Configuration	Auditor	Configuration	Туре	Units		Angle
		I = Intellect	R= Rotary	I = in lb		1 = Yes
		X = Industry Standard	S = Stationary	F = ft lb		2 = No
		Otal radi d	W = Wireless	N = NM		

Base model number (first 11 characters) describes Auditor, Configuration Intellect or Industry Standard, Type Rotary, Stationary or Wireless, Engineering Units In Lb, Ft Lb or NM, Angle Yes or No and Capacity.

To complete configuration of a 15 character part number select options and configuration sequentially from column 1 through 15. Columns 7-11 specify torque capacity.

### APPENDIX B: WRENCH CONFIGURATOR

	Base Model Number (1-9)									
Model Number Columns	1	2	3	4	5	6	7	8	9	
Examples of part numbers	А	D	W	-	0	0	7	5	K	
Examples of part numbers	А	D	W	-	0	0	1	0	K	
	А	Т	W	-	0	2	0	0	F	
Wrench Options and Configuration	Auditor	Туре	Wrench	Capacity Styl			Style			
		D = Digital T = Transducer							K = Katana D = Katana w/dovetail transducer F = "Stick" straight handle	

Base model number (first 9 characters) describes Auditor, Type; Digital or Transducer, Capacity, Style; Katana, Katana w/Dovetail transducer or Stick.

To complete configuration of a 18 character part number select options and configuration sequentially from column 1 through 18. Columns 5-8 specify torque capacity.

7	8	9	10	11	12	13	14	15
0	0	0	5	0	1	2	1	2
0	0	7	5	0	1	2	1	5
0	0	1	8	0	2	2	2	4
		Capacity			Fixture	Expanded Range	Digital Transducer	Drive Size
					1 = Bench Stand	1 = Yes	1 = Yes	1 = 1/4" Hex
					2 = Inline	2 = No	2 = No	2 = 1/4" Sq
					3 = Loader			3 = 3/8" Sq
								4 = 1/2" Sq
								5 = 3/4" Sq
								6 = 1" Sq
								7 = 1-1/2" Sq

The base model number is not a complete part number, - Fixture, Expanded Range, Digital Transducer and Drive Size must be specified by building complete part number.

						Future Optio	ns (15-18)	
10	11	12	13	14	15	16	17	18
1	1	3	3	1	2	2	2	2
1	1	1	3	2	2	2	2	2
2	2	3	1	2	2	2	2	2
Data Collector	Bar Code Docking Station	Sq Dr	Configuration	Engineering Unit	Angle	Accelerometer	Graphics	Tone Generator
1 = Yes 2 = No	1 = Yes 2 = No	1 = 1/4 $2 = 3/8$ $3 = 1/2$ $4 = 3/4$ $5 = 1$ $6 = NA$	1 = Intellect (intelligent td) 2 = IS (industry standard) 3 = NA (digital wrench)	1 = NM $2 = ft lb$ $3 = in lb$	1 = Yes 2 = No Not yet	1 = Yes 2 = No available so always option		1 = Yes 2 = No ) for these

The base model number is not a complete part number, - Data Collector, Bar Code & Docking Station, Sq Dr, Configuration, Engineering Unit and Future Options must be specified by completing 18 character part number.

## APPENDIX C: TEST STAND CONFIGURATOR

				Base	Model N	umber (1	-10)				
Model Number Columns	1	2	3	4	5	6	7	8	9	10	
Example of part numbers	А	Н	С	Т	S	-	5	0	0	0	
Example of part numbers	А	Н	С	Т	S	-	5	0	0	0	
	А	Н	С	Т	S	-	0	0	5	K	
	А	Н	В	Т	S	-	2	0	0	0	
Test Stand Configuration and options	Auditor	High	Сар	Test	Stand		Co	nfiguratio K= Hy	n & Capa draulic	city	

Base model number (first 10 characters) describes Auditor, High, Capacity or Brake, Test Stand, Torque Capacity and Configuration; Rotary or Hydraulic (K).

To complete configuration of a 18 character part number select options and configuration sequentially from column 1 through 18. Columns 7-10 specify torque capacity.

11 1 6 1 4	12 3 2	13 3 3	14 5 5	<b>15</b> 7 1	16 1 1	17 1 2	18 2 2
Display Options  1 = ATDA  2 = No Embedded display  3 = ATDA-DC  4 = ATDA-8000 (7)  5 = ATDA-8000-10 (10)  6 = Embedded Display  7 = ATRC Module	Legs  1 = 6" Legs  2 = No Legs  3 = 18" Legs  4 = Custom Legs in 6" increments	Base Dimension  0 = 8" x 8"  1 = 12' x 12"  3 = 14" x 19"  4 = 18" x 24"  5 = 18" x 36"  6 = NA no base plate	Rundown Fixture Options  1 = 500 ft lb capacity  2 = No rundown fixture  3 = 1000 ft lb capacity  4 = 2500 ft lb capacity  5 = 5000 ft lb capacity  6 = 7500 ft lb capacity  7 = 1.5" rundown kit for "K" stands.  8 = 2.5" rundown kit for "K" stands.	Reaction Post Options  1 = 6" Post 2 = No Post 3 = 6" Posts 4 = Paddles 5 = Custom 6 = 9" Post 7 = 9" Posts	Casters  1 = Yes  2 = No	Arm for Display $1 = Yes$ $2 = No$	Digit Mode 1 = Y 2 = N

The base model number is not a complete part number, - Display Options, Legs, Base Dimension, Rundown Fixture, Reaction Post, Casters, Arm and Digital Module must be specified by building complete part number.

# **AIMCO PULSE TOOLS: OVERVIEW**

#### **HOW DOES A PULSE TOOL WORK?**

The unique design of a pulse tool, combining motor power and hydraulics, leads to an assembly tool that produces smooth, controlled torque in a series of very fast (2-4 ms) events and virtually no torque reaction.

- At free-speed, the entire pulse unit, a sealed cylinder containing hydraulic fluid and an output shaft, rotates at the same speed as the tool motor.
- As resistance to rotation increases, the rotation of the output shaft slows, while the rotation of the

- cylinder and the hydraulic fluid continues until they approach a seal point within the cylinder.
- This seal point produces an increase in fluid pressure and transmits the energy from the rotational mass of the cylinder and fluid to the output shaft, producing torque on the fastener.
- After a series of these cycles (pulses), fluid pressure builds to a point that overcomes the limit of a relief valve, allowing pressure to drop and torque to be controlled

# **TIMELINE**

## 1965

#### **NEW TECHNOLOGY**

The first pulse tool prototype was designed in an attempt to provide a tool that would provide torque control without the



without the high maintenance costs of impact wrenches.

### 1980

### **U SERIES**

Uryu produces the U-series, the first pulse tools to be available commercially for assembly. The U-Series evolves over the next several years to



cover torque ranges from 4 – 850 Newton meters and finally, the development of full-shut-off tools. The lack of torque reaction and accurate, repeatable torque makes these tools a manufacturer standard.

# 1988

### **EC SERIES**

The EC Series (and later the MC Series) combines the advantages of pulse tools with the technology of controlled tools. By incorporating a transducer into the design of the U-Series



pulse tool, customers gain the Productivity and Ergonomics of pulse tools and the traceability and control of other transducerized assembly tools. Manufacturers with safety critical applications now have many more options for assembly tools.

# **2006**| UEP-MC SERIES

Uryu does what no other manufacturer can by developing the UEP series, the first and only electric powered pulse tool. The lower speeds, quiet operation, and extremely repeatable torque make the UEP the



perfect choice for applications where accuracy and clean operation are critical. By combining programmable tool speed with the MC-style transducer, extremely accurate and repeatable torque is achieved on a variety of applications.

# 2012

# **UDP-MC CONTROLLED SERIES**

Uryu introduced the UDP-MC controlled series — smaller, lighter electric pulse tools that have an integrated fan unit. The state-of-the-art



UECD controller with a built-in driver box eliminates the need for a secondary driver box in the system configuration.

# **OMEGA PULSE TOOLS: OVERVIEW**

### **BENEFITS OF AIMCO PULSE TOOLS:**

Pulse tools offer advantages in all of the PERQ® elements – productivity, ergonomics, reliability and quality.

By partnering with AIMCO, manufacturers can apply the advantages of pulse tools in many ways to reduce production costs and increase profits.

- Productivity Combining high operating speeds with one-handed operation, AIMCO pulse tools help manufacturers produce at the highest possible rates.
- Ergonomics Light weight, low vibration and no torque reaction make AIMCO pulse tools the safest assembly tools available for threaded assembly.
- Reliability Advances in design and AIMCO's extensive maintenance and training programs add up to years of low cost service from any AIMCO pulse tool.
- Quality AIMCO pulse tools offer the most repeatable torque and clamp load results of any assembly tool, guaranteeing high product quality for manufacturers.

# 1995

### **ALPHA SERIES**

The Alpha-series continued Uryu's advancements in pulse-tool design. In order to achieve the best possible power-to-weight ratio, the Alpha 9-blade, twin chamber air motor is developed. Still unique today, this new motor provides significantly more



power, thereby, reducing cycle times and improving torque repeatability. The new Alpha air motor and design changes make the tools smaller and lighter, keeping Uryu at the forefront of pulse tool technology.

# 2001

#### **ULT / UL SERIES**

Continuous innovations and developments include a new O-ring design that improves durability, roller bearings in the pulse unit to increase hydraulic fluid life and redesigned porting helps maintain fluid temperature and torque



repeatability. UL tools, with their non-shut off operation, are ideal for applications where the lightest, fastest tool is necessary. Each model features the powerful Alpha air motor and latest in pulse unit design.

# 2013

### **UA-AMC CONTROLLED PULSE SERIES**

The UA-AMC Series features angle measurement for improved process control. It detects cross threading, double hits on the same fastener, stripped and damaged fastener threads and incorrect fasteners. It also features patented Auto Relief



Technology, which modulates the beginning of the torque event, increases pulse frequency, and reduces resistance during the non-pulsing portion of the cycle. This shortens cycle time and increases fluid life.

#### **UAT SERIES**

In 2013, Uryu developed and patented the latest innovation in Pulse Tool technology. Auto Relief (PAT) enables efficient delivery of torque energy to the application. Auto Relief responds to everchanging pressures in the pulse unit, applying its energy in a smooth manner to the joint as the torque



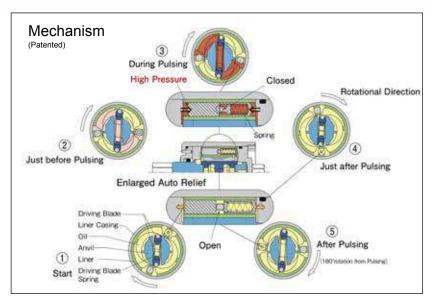
is developed. The Auto Relief valve is fully open during free run and automatically closes when torque resistance is sensed. No adjustment required. Benefits include elimination of initial torque spike on hard joints, reduction in oil flow resistance, and maximized performance of the tool.

# **OMEGA PULSE TOOLS: UAT SERIES**

# PATENTED AUTO RELIEF TECHNOLOGY:

UAT features patented Auto Relief Technology providing additional control to the application of torque during the pulsing events.

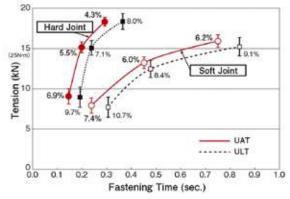
- Auto Relief eliminates initial spike of torque during a cycle. Highly effective on hard joint applications.
- Auto Relief ramps up pressure within the pulse unit resulting in more pulses in less time providing a more efficient and even torque event.

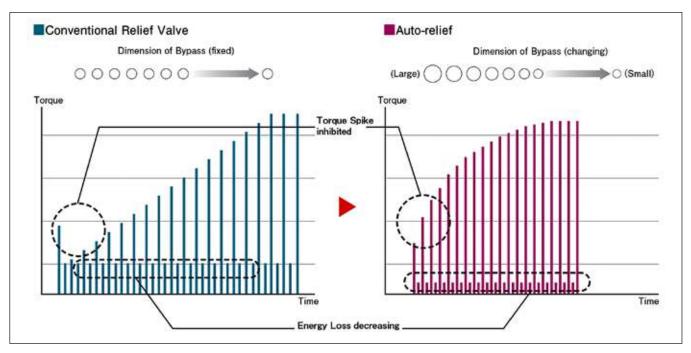


# A NEW LEAP FORWARD IN PRODUCTIVITY AND QUALITY:

 Fastening accuracy and time can be improved by as much as 30% depending on application.

### ■Fastening efficiency comparison (UAT vs ULT)





# **OMEGA PULSE TOOLS: UAT SERIES**



**PISTOL SHUT-OFF** 

Recommended Air Pressure: 85 psi

MODEL	FREE SPEED rpm	TORQUI Nm	E RANGE ft-lb	WEI Ib	IGHT kg	OVERALL in	LENGTH	DRIVE in	SOUND LEVEL dB(A)	AIR USAGE
UAT-30D	4,200	2.5 - 5.5	1.9 - 4.1	1.9	0.9	6.5	165	1/4	76	10.5
UAT-40	3,800	4.5 - 8.0	3.3 - 5.9	2.0	0.9	6.4	162	3/8	75	8.8
UAT-40D	3,800	4.5 - 8.0	3.3 - 5.9	2.0	0.9	6.5	165	1/4	75	8.8
UAT-50	4,600	7.0 - 15.5	5.2 - 11.5	2.0	0.9	6.4	162	3/8	78	8.8
UAT-50D	4,600	7.0 - 15.5	5.2 - 11.5	2.0	0.9	6.5	165	1/4	78	8.8
UAT-50L	4,000	7.0 - 15.5	5.2 - 11.5	2.0	0.9	6.4	162	3/8	75	8.8
UAT-50DL	4,000	7.0 - 15.5	5.2 - 11.5	2.0	0.9	6.5	165	1/4	75	8.8
UAT-60	6,700	15.0 - 32.0	11.1 - 23.7	2.1	1.0	6.8	174	3/8	80	12.3
UAT-60D	6,700	15.0 - 32.0	11.1 - 23.7	2.1	1.0	7.0	177	1/4	80	12.3
UAT-60L	6,000	13.0 - 28.0	9.6 - 20.7	2.1	1.0	6.8	174	3/8	77	8.8
UAT-70	6,000	30.0 - 55.0	22.2 - 40.7	2.3	1.1	7.1	180	3/8	80	14.0
UAT-70L	5,300	25.0 - 48.0	18.5 - 35.5	2.3	1.1	7.1	180	3/8	78	10.5
UAT-80	5,600	45.0 - 63.0	33.3 - 46.6	2.8	1.3	7.3	186	3/8	80	16.8
UAT-80L	5,300	35.0 - 55.0	25.9 - 40.7	2.8	1.3	7.3	186	3/8	78	14.0
UAT-90	5,700	50.0 - 85.0	37.0 - 62.9	3.2	1.5	7.6	192	1/2	82	18.6
UAT-90L	5,100	45.0 - 75.0	33.3 - 55.5	3.2	1.5	7.6	192	1/2	79	15.8
UAT-100	5,200	70.0 - 130.0	51.8 - 96.2	3.7	1.7	7.8	199	1/2	82	19.3
UAT-100L	5.200	60.0 - 110.0	44.4 - 81.4	3.7	1.7	7.8	199	1/2	79	16.8
UAT-130	4,500	110.0 - 150.0	81.4 - 111	5.1	2.3	8.5	217	1/2	82	24.6
UAT-200	2,400	200.0 - 400.0	148.0 - 296.0	12.8	5.8	11.0	279	3/4	85	35.2

Air Hose Size: 1/4" ID for UAT-30 to UAT-50, 3/8" ID for UAT-60 to UAT-100, 1/2" ID for UAT-130 to UAT-200 Note Torque Ranges reflect residual B joint torque values

Air Inlet Thread: 1/4" NPT for UAT-30 to UAT-100 3/8" NPT for UAT-130 to UAT-200 UAT Models containing "D" indicate 1/4" quick change bit holder

UAT Models containing "L" indicate models designed to run at 57 PSI air pressure.

Most models can be equipped with TM (Tightening Monitor) feature for use with qualifier systems. Order TM tools by adding "TM" to model number (for example, UAT-60 becomes UAT-60TM).

#### **INLINE SHUT-OFF** Recommended Air Pressure: 85 psi

MODEL	FREE SPEED rpm	TORQUI Nm	E RANGE ft-lb	WE lb	IGHT kg	OVERALL in	LENGTH mm	DRIVE in	SOUND LEVEL dB(A)	AIR USAGE cfm
UAT-30SD	3,400	2.5 - 5.5	1.9 - 4.1	1.9	0.8	8.7	222	1/4	68	12.3
UAT-40S	3,300	4.5 - 8.0	3.3 - 5.9	1.9	0.9	8.8	224	3/8	70	7.0
UAT-40SD	3,300	4.5 - 8.0	3.3 - 5.9	1.9	0.9	8.9	227	1/4	70	7.0
UAT-50S	3,900	7.0 - 15.5	5.2 - 11.5	1.9	0.9	8.8	224	3/8	78	8.8
UAT-50SD	3,900	7.0 - 15.5	5.2 - 11.5	1.9	0.9	8.9	227	1/4	78	8.8
UAT-50SL	3,800	7.0 - 15.5	5.2 - 11.5	1.9	0.9	8.8	224	3/8	75	7.0
UAT-50SDL	3,800	7.0 - 15.5	5.2 - 11.5	1.9	0.9	8.9	227	1/4	75	7.0
UAT-60S	5,700	15.0 - 32.0	11.1 - 23.7	1.9	0.9	9.0	229	3/8	80	10.5
UAT-60SD	5,700	15.0 - 32.0	11.1 - 23.7	1.9	0.9	9.1	232	1/4	80	10.5
UAT-60SL	5,300	13.0 - 28.0	9.6 - 20.7	1.9	0.9	9.0	229	3/8	77	8.8
UAT-60SDL	5,300	13.0 - 28.0	9.6 - 20.7	1.9	0.9	9.1	232	1/4	77	8.8
UAT-70S	4,700	30.0 - 50.0	22.2 - 37.0	2.1	1.0	9.4	239	3/8	80	12.3
UAT-70SL	4,400	25.0 - 45.0	18.5 - 33.3	2.1	1.0	9.4	239	3/8	78	9.5

Air Hose Size: 1/4" ID for UAT-30 to UAT-50, 3/8" ID for UAT-60 to UAT-70

Note Torque Ranges reflect residual B joint torque values

Air Inlet Thread: 1/4" NPT for UAT-30 to UAT-70 UAT Models containing "D" indicate 1/4" quick change bit holder

UAT Models containing "L" indicate models designed to run at 57 PSI air pressure.

Most models can be equipped with TM (Tightening Monitor) feature for use with qualifier systems. Order TM tools by adding "TM" to model number (for example, UAT-60 becomes UAT-60TM).

<sup>\*</sup> E logo indicates where ERGO-DRIVE sockets/extentions benefit tool operation.

# **OMEGA PULSE TOOLS: UL SERIES**

#### OMEGA UL SERIES E

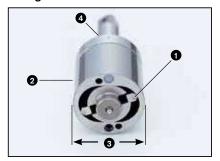
Whether the goal is improving productivity, ergonomics, reliability, or quality, the UL Series contains the technology to achieve success.

#### **FEATURES AND BENEFITS**

- Models available from 6 260 Nm (4.4 170 FtLb)
- · Models with air, electric, or battery power.
- Available in Standard, Tightening Monitor, and Transducerized versions.
- High power-to-weight ratio
- Simple operation
- · Reduced Maintenance
- Extended service life
- · Environmentally friendly design.
- Accurate and repeatable



#### Omega Series Pulse Unit



- Roller bearings reduced friction.
- 2 Accumulator stable fluid temperature.
- 3 Reduced size lightweight tools.
- New O-ring design better durability

#### Recommended Air Pressure: 85 psi

### **UL SERIES PISTOL NON SHUT-OFF**

	FREE SPEED	TORQU	E RANGE	WEIG	GHT	OVERALL	LENGTH	DRIVE	SOUND LEVEL	AIR USAGE
MODEL	rpm	Nm	ft-lb	lb	kg	in	mm	in	dB(A)	cfm
UL-30D	5,700	6 - 12	4.4 - 8.9	1.5	0.7	5.4	137	1/4 hex	75	7.0
UL-30	5,700	6 - 12	4.4 - 8.9	1.5	0.7	5.2	133	3/8 sq.	75	7.0
UL-40D	6,100	11 - 20	8.1 - 14.8	1.5	0.7	5.4	137	1/4 hex	75	7.0
UL-40	6,100	13 - 22	9.6 - 16.3	1.5	0.7	5.2	133	3/8 sq.	75	7.0
UL-50D	6,400	18 - 28	13.3 - 20.7	1.7	0.8	5.8	146	1/4 hex	78	10.5
UL-50	6,400	22 - 35	16.3 - 25.9	1.7	0.8	5.5	140	3/8 sq.	78	10.5
UL-60D	7,000	22 - 35	16.3 - 25.9	1.8	0.8	5.6	143	1/4 sq	80	14.0
UL-60	7,000	32 - 50	23.7 - 37.0	1.8	0.8	5.5	140	3/8 sq.	80	14.0
UL-70	5,700	40 - 65	29.6 - 48.1	2.1	1.0	6.0	153	3/8 sq.	80	15.8
UL-80	5,900	45 - 70	33.3 - 50.0	2.5	1.1	6.4	162	3/8 sq.	80	16.8
UL-90	6,000	60 - 100	44.4 - 74.0	2.9	1.3	6.7	170	1/2 sq.	82	18.6
UL-100	5,400	80 - 130	59.2 - 96.2	3.7	1.7	7.0	177	1/2 sq.	80	20.3
UL-130	4,400	100 - 160	74.0 - 118.4	5.1	2.3	7.8	197	1/2 sq.	83	22.7
UL-150	3,800	150 - 230	109.9 - 169.6	6.6	3.0	8.4	213	3/4 sq	84	24.7

### **UL SERIES INLINE NON SHUT-OFF**



Recommended Air Pressure: 85 psi

	FREE SPEED	TORQUE	RANGE	WEI	GHT	OVERALL	. LENGTH	DRIVE	SOUND LEVEL	AIR USAGE
MODEL	rpm	Nm	ft-lb	lb	kg	in	mm	in	dB(A)	cfm
UL-30SD	5,000	6 - 12	4.4 - 8.9	1.4	0.6	8.2	209	1/4 hex	75	8.1
UL-30S	5,000	6 - 12	4.4 - 8.9	1.4	0.6	8.1	205	3/8 sq.	72	8.1
UL-40SD	5,000	9 - 20	6.7 - 14.8	1.4	0.6	8.2	209	1/4 hex	75	8.1
UL-40S	5,000	11 - 22	8.1 - 16.3	1.4	0.6	8.1	205	3/8 sq.	72	8.1
UL-50SD	6,400	18 - 28	13.3 - 20.7	1.6	0.7	8.4	214	1/4 hex	78	12.3
UL-50S	6,400	22 - 35	16.3 - 25.9	1.6	0.7	8.2	208	3/8 sq.	78	12.3
UL-60SD	6,700	22 - 35	16.3 - 25.9	1.7	0.8	8.3	212	1/4 hex	80	15.8
UL-60S	6,700	32 - 50	23.7 - 37.0	1.7	0.8	8.2	209	3/8 sq.	80	15.8
UL-70S	5,400	36 - 60	26.6 - 44.4	1.9	0.9	8.8	223	3/8 sq.	84	14.0

Air Inlet: N.P.T. 1/4

NOTE: Torque ranges reflect residual B joint torque values

All pulse tools ending in "D" include a 1/4" Hex quick-change bit holder.

\* E logo indicates where ERGO-DRIVE sockets/extentions benefit tool operation.

# OMEGA PULSE / ACRA-PULSE® SERIES

ULT-50C



ULT-70CH



### **OMEGA PULSE ULT SERIES ANGLE SHUT-OFF**

MODEL	FREE SPEED rpm	TORQUI Nm	E RANGE ft-lb	lb WE	IGHT kg	OVERALI in	L LENGTH mm	DRIVE in	SOUND LEVEL db(a)	AIR USAGE cfm
ULT-40C	3,500	4.5 - 7.5	3.3 - 5.6	2.9	1.30	9.8	250	3/8" Sq. Dr.	70	7.0
ULT-50C	4,500	7.0 - 15.5	5.2 - 11.5	3.0	1.35	9.8	250	3/8" Sq. Dr.	78	8.6
ULT-60C	5,200	13 - 28	9.6 - 20.7	3.2	1.45	10.3	261	3/8" Sq. Dr.	80	10.5
ULT-70C	4,400	20 - 35	14.8 - 25.9	3.6	1.65	10.8	275	3/8" Sq. Dr.	82	12.3
ULT-70CH	2,500	30 - 50	22.2 - 37.0	4.1	1.85	11.4	290	1/2" Sq. Dr.	82	12.3

<sup>&</sup>quot;L" following model number denotes Low Air Pressure type

NOTE: Torque ranges reflect residual B joint torque values











## ACRA-PULSE PISTOL SHUT-OFF 3/8" - 1/2" DRIVE

Recommended Air Pressure: 85 psi

MODEL	FREE SPEED RPM	TORQUE NM	RANGE FT-LB	OVERALL MM	LENGTH IN	WEI LB	GHT KG	FROM CENTER	R TO OUTSIDE IN	SQ. DRIVE IN	NOISE LEVEL DB(A)	AIR USAGE CFM
UX-T700L*	7,500	13 - 26	10 - 19	187	7.4	3.2	1.5	25.5	1.0	3/8	72	10.5
UX-T700*	7,500	20 - 38	15 - 28	187	7.4	3.2	1.5	25.5	1.0	3/8	72	10.5
UX-T800	8,300	30 - 45	22 - 33	196	7.7	4.0	1.8	28.0	1.1	3/8	75	12.3
UX-T900	7,000	35 - 70	25 - 50	202	7.9	4.4	2.0	30.0	1.2	1/2	75	16.0
UX-T1000	6,800	50 - 90	36 - 65	207	8.2	5.2	2.4	33.0	1.3	1/2	75	17.6
UX-T1300	6,200	70 - 130	50 - 94	225	8.9	6.2	2.8	36.0	1.4	1/2	77	19.4
UX-T1400	5,300	100 - 160	75 - 115	245	9.6	7.5	3.4	40.0	1.6	1/2	79	21.1

Air Hose Size: 3/8 I.D.

Air Inlet: N.P.T. 1/4

NOTE: Torque ranges reflect residual B joint torque values

## ACRA-PULSE SHUT-OFF 3/4" - 1" DRIVE

Recommended Air Pressure: 85 psi

MODEL	FREE SPEED RPM	TORQUE NM	RANGE FT-LB	OVERALL MM	LENGTH IN	WEI0	GHT KG	FROM CENTER	R TO OUTSIDE IN	SQ. DRIVE IN	NOISE LEVEL DB(A)	AIR USAGE CFM
PISTOL												_
UX-T1620	5,000	120 - 210	87 - 150	260	10.2	8.1	3.7	40.0	1.6	3/4	82	22.9
UXR-T1820	4,400	150 - 250	110 - 180	270	10.6	9.9	4.5	42.0	1.7	3/4	84	24.7
UXR-T2000	4,000	200 - 400	150 - 290	303	11.9	15.0	6.8	47.0	1.8	3/4	85	34.0
INLINE												
UXR-T2400S*	3,600	360 - 650	260 - 470	444	17.5	26.5	12.0	61.5	2.4	1	85	35.3
UXR-T3000S	4,400	450 - 850	330 - 620	477	18.8	32.0	14.5	62.0	2.4	1	85	37.1

Air Hose Size: 3/8" l.D. for UX-T1620 - 1/2" l.D. for UXR-T1820 - UXR-T3000S NOTE: Torque ranges reflect residual B joint torque values

Air Inlet: N.P.T. 3/8" for UXR-T1820 - UXR-T2000 - N.P.T. 1/2" for UXR-T2400S - UXR-T3000S - N.P.T. 1/4" for UX-T1620 Inside Trigger Standard (UXR-T2400S - UXR-T3000S)

<sup>&</sup>quot;H" within model number denotes High Torque type

<sup>\*</sup> UX-1700 and UX-1700L models can be equipped with TM (Tightening Monitor) feature for use with qualifier systems. Order TM tools by adding "TM" to model number (for example, UX-1700 becomes UX-1700TM).

<sup>\*</sup> UXR-T2400S model can be equipped with TM (Tightening Monitor) feature for use with qualifier systems. Order TM tools by adding "TM" to model number (UXR-T2400STM).

<sup>\*</sup> F logo indicates where ERGO-DRIVE sockets/extentions benefit tool operation.

# **ACRA-PULSE® SERIES**





## PISTOL NON SHUT-OFF 1/4" HEX DRIVE

Recommended Air Pressure: 85 psi

	FREE SPEED	TORQUI	E RANGE	OVERALL	LENGTH	WE	GHT	FROM CENTE	R TO OUTSIDE	NOISE LEVEL	AIR USAGE
MODEL	RPM	NM	FT-LB	MM	IN	LB	KG	MM	IN	DB(A)	CFM
U-350D	10,500	3.5 - 5.8	2.5 - 4.2	154	6.1	1.7	0.8	22.0	0.9	74	5.3
UX-450D	9,500	8 - 14	5.8 - 10	152	6.0	1.9	0.9	22.0	0.9	<70	7.0
UX-500D	9,300	13 - 20	10 - 15	152	6.0	1.9	0.9	22.0	0.9	70	8.8
UX-612D	9,300	16 - 28	12 - 20	165	6.5	2.1	1.0	22.5	0.9	75	11.2

Air Hose Size: 1/4 l.D. for U-350D - UX-500D - 3/8" l.D. for UX-612D All Tools Standard with 1/4" Quick Change Chuck

Air Inlet Thread: N.P.T. 1/4

NOTE: Torque ranges reflect residual B joint torque values

## PISTOL NON SHUT-OFF 3/8" - 1/2" DRIVE

Recommended Air Pressure: 85 psi

MODEL	FREE SPEED RPM	TORQUE NM	RANGE FT-LB	OVERALL MM	. LENGTH IN	WEI0 LB	GHT KG	FROM CENTE MM	R TO OUTSIDE IN	SO. DRIVE IN	NOISE LEVEL DB(A)	AIR USAGE CFM
UX-450	9,500	9 - 15	6.5 - 11	147	5.8	1.9	0.9	22.0	0.9	3/8	65	7.0
UX-500	9,300	15 - 25	11 - 19	147	5.8	1.9	0.9	22.0	0.9	3/8	70	8.8
UX-612	9,300	20 - 35	15 - 25	160	6.3	2.1	1.0	22.5	0.9	3/8	75	11.2
UX-700	9,000	25 - 45	20 - 35	169	6.7	3.0	1.4	25.5	1.0	3/8	73	12.3
UX-800	9,000	35 - 60	25 - 45	175	6.9	3.7	1.7	28.0	1.1	3/8	73	14.1
UX-900	7,600	45 - 75	35 - 55	181	7.1	4.1	1.9	30.0	1.2	1/2	75	14.7
UX-1000	6,800	50 - 95	40 - 70	187	7.4	4.8	2.2	33.0	1.3	1/2	75	17.9
UX-1300	6,200	80 - 130	60 - 95	205	8.1	5.9	2.7	36.0	1.4	1/2	76	19.4
UX-1400	5,300	100 - 160	75 - 120	224	8.8	7.0	3.2	40.0	1.6	1/2	78	21.1

Air Hose Size:

1/4" I.D. for U-410 - UX-500 - 3/8" I.D. for UX-612 - UX-1400

Air Inlet: N.P.T. 1/4"

NOTE: Torque ranges reflect residual B joint torque values

## PISTOL NON SHUT-OFF 3/4" - 1" DRIVE

Recommended Air Pressure: 85 psi

MODEL	FREE SPEED RPM	TORQU NM	E RANGE FT-LB	OVERALL MM	LENGTH IN	WEI LB	GHT KG	FROM CENTER	R TO OUTSIDE IN	SQ. DRIVE IN	NOISE LEVEL DB(A)	AIR USAGE CFM
UX-1620	5,000	120 - 190	90.0 - 140.0	241	9.5	7.9	3.6	40.0	1.6	3/4	82	22.9
UXR-1820	4,600	160 - 250	120.0 - 185.0	242	9.5	9.0	4.1	42.0	1.7	3/4	84	26.3
UXR-2000	4,200	300 - 450	220.0 - 330.0	282	11.1	14.3	6.5	47.0	1.8	3/4	85	31.5

Air Hose Size: 3/8" I.D. for UX-1620
Air Inlet: N.P.T. 1/4" for UX-1620

1/2" I.D. for UXR-1820

N.P.T. 1/4" for UX-1620 N.P.T. 3/8" for UXR-1820, UXR-2000

NOTE: Torque ranges reflect residual B joint torque values Torque Control in Left-Hand Rotation Available for UXR-2000

## **AUTO REVERSING**

Recommended Air Pressure: 85 psi

MODEL	FREE SPEED RPM	TORQUI NM	E RANGE FT-LB	OVERALI MM	LENGTH IN	WEI LB	GHT KG	FROM CENTE	R TO OUTSIDE IN	NOISE LEVEL DB(A)	AIR USAGE CFM
UX-ST800	7,300	35 - 55	25 - 40	195	7.7	3.8	1.8	28.0	1.1	75	10.5

Air Hose Size: 3/8" I.D.

Air Inlet: N.P.T. 1/4"

NOTE: Torque ranges reflect residual B joint torque values

<sup>\*</sup> E logo indicates where ERGO-DRIVE sockets/extentions benefit tool operation.

# **ACRA-PULSE® SERIES**



## INLINE NON SHUT-OFF 1/4" HEX DRIVE

Recommended Air Pressure: 85 psi

MODEL	FREE SPEED RPM	TORQUE NM	E RANGE FT-LB	OVERALL MM	LENGTH IN	WEI LB	GHT KG	FROM CENTE MM	R TO OUTSIDE IN	NOISE LEVEL DB(A)	AIR USAGE CFM
U-310SD	11,000	2.5 - 3.1	1.8 - 2.2	222	8.7	1.5	0.6	18.0	0.7	74	5.3
U-350SD	10,500	3.5 - 5.8	2.5 - 4.2	238	9.4	1.5	0.7	22.0	0.7	74	5.3
U-410SD	10,500	7 - 10	5.0 - 7.2	240	9.5	1.8	0.8	22.0	0.9	70	5.3
UX-450SD	9,500	8 - 14	5.8 - 10	239	9.4	1.8	0.8	22.0	0.9	<70	7.0
UX-500SD	9,300	13 - 20	10 - 15	244	9.5	2.0	0.9	22.0	0.9	70	8.8
UX-612SD	9,300	16 - 28	12 - 20	253	10.0	2.2	1.0	23.3	0.9	75	11.1
UX-700SD	9,000	20 - 36	16 - 28	249	9.8	2.8	1.3	26.5	1.0	78	12.3

Air Hose Size: 1/4 LD. for U-310SD - UX-500SD - 3/8" LD. for UX-612D - UX-700SD Air Inlet: N.P.T. 1/4" All Tools Standard with 1/4 Quick Change Chuck

NOTE: Torque ranges reflect residual B joint torque values

### INLINE NON SHUT-OFF 3/8" - 1/2" DRIVE

Recommended Air Pressure: 85 psi

MODEL	FREE SPEED RPM	TORQUE NM	RANGE FT-LB	OVERALL MM	. LENGTH IN	WEI LB	GHT KG	FROM CENTE MM	R TO OUTSIDE IN	SQ. DRIVE IN	NOISE LEVEL DB(A)	AIR USAGE CFM
U-410S	10,500	7 - 10	5.0 - 7.2	239	9.4	1.8	0.8	22.0	0.9	3/8	70	5.3
UX-450S	9,500	9 - 15	6.5 - 11	234	9.2	1.8	0.8	22.0	0.9	3/8	<70	7.0
UX-500S	9,300	15 - 25	11 - 19	239	9.4	2.0	0.9	22.0	0.9	3/8	70	8.8
UX-612S	9,300	20 - 35	15 - 25	248	9.8	2.2	1.0	23.3	0.9	3/8	75	11.1
UX-700S	9,000	25 - 45	20 - 35	244	9.5	2.8	1.3	26.5	1.0	3/8	78	12.3
UX-800S	9,000	35 - 60	25 - 45	250	9.8	3.2	1.5	35.5	1.0	3/8	75	14.2
UX-900S	7,600	45 - 75	35 - 55	310	12.2	3.9	1.8	37.5	1.1	1/2	75	14.9
UX-1000S	6,800	50 - 95	40 - 70	320	12.6	4.6	2.1	39.0	1.1	1/2	75	17.9
UX-1300S	6,200	80 - 130	60 - 95	336	13.2	6.6	2.6	42.0	1.3	1/2	77	19.4

Air Hose Size: 1/4" I.D. for U-410S - UX-500S - 3/8" I.D. for UX-612S - UX-1300S

Air Inlet: N.P.T. 1/4"

NOTE: Torque ranges reflect residual B joint torque values

### INLINE NON SHUT-OFF 3/4" - 1" DRIVE

Recommended Air Pressure: 85 psi

MODEL	FREE SPEED RPM	TORQUE NM	RANGE FT-LB	OVERALL MM	LENGTH IN	WEI LB	GHT KG	FROM CENTER	R TO OUTSIDE IN	SQ. DRIVE IN	NOISE LEVEL DB(A)	AIR USAGE CFM
UXR-2000S	4,200	300 - 450	220 - 330	340	13.4	15.4	7.0	47.0	1.8	3/4	85	31.6
UXR-2400S	4,000	400 - 650	290 - 470	385	15.2	23.7	11.0	55.0	2.1	1	85	35.2
UXR-3000S	4,400	500 - 850	360 - 630	455	17.9	29.3	13.3	62.0	2.1	1	85	37.1
UXR-3000S(OUT)	4,400	500 - 850	360 - 630	455	17.9	29.3	13.3	62.0	2.1	1	85	37.1

UXR-2000 S - UXR-3000S have an inside trigger. UXR-3000S(OUT) has an outside trigge Air Hose Size: 1/2" I.D. Air Inlet (NPT): 3/8" for UXR-2000S

1/2" for UXR-2400S, UXR-3000S, and UXR-3000S(OUT)

NOTE: Torque ranges reflect residual B joint torque values Torque control in left-hand rotation available

## **ANGLE 3/8" - 1/2" DRIVE**

Recommended Air Pressure: 85 psi

MODEL	FREE SPEED RPM	TORQ NM	UE RANGE FT-LB	WEI LB	GHT KG	OVERALL MM	_ LENGTH IN	SQ. DRIVE IN	NOISE LEVEL DB(A)	AIR USAGE CFM
ALPHA-70C	6,300	28 - 45	20.2 - 32.5	3.9	1.8	266	10.5	3/8	82	15.8
ALPHA-70CH	3,600	50 - 76	36.1 - 56.0	4.4	2.0	282	11.1	1/2	82	15.8
UX-500C	9,300	13 - 20	10.0 - 15.0	2.8	1.3	270	10.6	3/8	82	8.8
UX-612C	9,800	16 - 28	12.0 - 20.0	3.0	1.4	283	11.1	3/8	85	11.2
UX-700C	9,500	20 - 36	16.0 - 28.0	3.7	1.7	273	10.8	3/8	85	12.3
UX-800C	9,000	29 - 43	20.0 - 31.0	4.3	1.9	285	11.2	3/8	85	14.1
UX-1000C	6,800	50 - 80	40.0 - 58.0	6.8	3.1	365	14.4	1/2	90	17.9

Air Hose Size:

1/4" I.D. for UX-500C - 3/8" I.D. for ALPHA-70C, ALPHA-70CH, UX-612C - UX-1000C

Air Inlet: N.P.T. 1/4

NOTE: Torque ranges reflect residual B joint torque values

\* E logo indicates where ERGO-DRIVE sockets/extentions benefit tool operation.

# **UDBP PULSE SERIES CORDLESS TOOLS**

The next-generation cordless pulse tool combines industry-leading pulse technology with Lithium-lon battery power.

#### **FEATURES AND BENEFITS**

- Uryu Direct Battery Pulse (UDBP) This new design connects the pulse unit directly to the motor – no reduction gearing – resulting in a tool with less noise and vibration.
- Brushless Internal Permanent Magnet (IPM) motor provides longer motor life and more efficiency allowing more fastening cycles per battery charge.
- UDBP features patented Auto Relief Technology providing additional control to the application of torque during the pulsing events.
- On board LEDs for application illumination.
- Li-lon battery provides more power and ends the "battery-memory" issues of NiCd batteries.
- Tool/battery combination is 27% lighter than earlier UBP tools.
- RF Types transmit "good" signal to receiver (sold separately) over 426Mhz.
- "Good" signal can be used for Poka-Yoke or Bolt Counting.



**UDBP-TA50** 



Battery: UB111Li, UB222Li, UB333Li



The lithium-ion battery provides excellent power-toweight ratio. It does not experience the memory effect caused by repeated recharging after being only partially discharged.

The battery power indicator provides you with a visual indication to charge the lithium-ion battery.

- = good charge
- = low charge (recharging needed)
- = very low charge (immediate recharging needed)

The slide design battery provides the high-energy efficiency in power and no damage to contact.

(RF) represents the tool with wireless transmission feature.

		FREE SPEED	TORQUE	RANGE	WEIGHT W/ BATTERY	LENGTH	DRIVE	SOUND LEVEL	VOLTAGE		
MODEL	TYPE	RPM	Nm	ft-lb	lb	in	in	dB(A)	V	BATTERY	CHARGER
UDBP-TA40(RF)	Shut-off	4,800	4.5 - 8	3.3 - 5.9	3.1	8.2	1/4 hex	75	11.1	UB111Li	UBC
UDBP-TA40(P)-RF	Shut-off	4,800	4.5 - 8	3.3 - 5.9	3.1	8.2	1/4 hex	75	11.1	UB111Li	UBC
UDBP-TA50(RF)	Shut-off	4,800	6.5 -13	4.8 - 9.6	3.1	8.2	1/4 hex	76	11.1	UB111Li	UBC
UDBP-TA50(P)(RF)	Shut-off	4,800	7 - 15	5.1 - 11.1	3.1	8.1	3/8 sq.	76	11.1	UB111Li	UBC
UDBP-TA60(RF)	Shut-off	4,800	13 - 26	9.6 - 19.2	3.7	8.8	1/4 hex	77	22.2	UB222Li	UBC
UDBP-TA60(P)(RF)	Shut-off	4,800	15 - 28	11.1 - 20.7	3.7	8.7	3/8 sq.	76	22.2	UB222Li	UBC
UDBP-TA70(P)(RF)	Shut-off	4,800	26 - 47	19.2 - 34.7	4.4	9.2	3/8 sq.	76	33.3	UB333Li	UBC

<sup>(</sup>P) Designates 3/8" square drive anvil with socket retainer pin. Tools with no (P) suffix have a quick-change driver anvil.

Adding "KIT" to the tool model number will include two (2) batteries and the battery charger with the specified tool. Example: UDBP-T50KIT

NOTE: Torque ranges reflect residual B joint torque values.

Charge Time: 80% battery capacity - 40 minutes, 100% battery capacity - 64 minutes.

<sup>\*</sup> Flogo indicates where ERGO-DRIVE sockets/extentions benefit tool operation.

# **UDBP PULSE TOOL BATTERIES**

### **UDBP SERIES KITS AND COMPONENTS**

Standard Shut Off Type

TOOL	TOOL BATTERY (SUPPLIED SEPARATELY)	CHARGER	TOOL PLUS 1 BATTERY	TOOL PLUS 2 BATTERIES AND 1 CHARGER
UDBP-TA40	UB111LI	UBC	UDBP-TA40-B	UDBP-TA40-KIT
UDBP-TA50	UB111LI	UBC	UDBP-TA50-B	UDBP-TA50-KIT
UDBP-TA50(P)	UB111LI	UBC	UDBP-TA50(P)-B	UDBP-TA50(P)-KIT
UDBP-TA60	UB-222LI	UBC	UDBP-TA60-B	UDBP-TA60-KIT
UDBP-TA60(P)	UB-222LI	UBC	UDBP-TA60(P)-B	UDBP-TA60(P)-KIT
UDBP-TA70(P)	UB-333LI	UBC	UDBP-TA70(P)-B	UDBP-TA70(P)-KIT

Shut Off Type With Rf Communication (Poka Yoke)

TOOL	2 CHANNEL RF RECEIVER	TOOL BATTERY (SUPPLIED SEPARATELY)	CHARGER	TOOL PLUS 1 BATTERY	TOOL PLUS 2 BATTERIES AND 1 CHARGER
UDBP-TA40RF	TWF-600R	UB111LI	UBC	UDBP-TA40RF-B	UDBP-TA40RF-KIT
UDBP-TA50RF	TWF-600R	UB111LI	UBC	UDBP-TA50RF-B	UDBP-TA50RF-KIT
UDBP-TA50(P)-RF	TWF-600R	UB111LI	UBC	UDBP-TA50(P)-RF-B	UDBP-TA50(P)-RF-KIT
UDBP-TA60RF	TWF-600R	UB-222LI	UBC	UDBP-TA6ORF-B	UDBP-TA6ORF-KIT
UDBP-TA60(P)-RF	TWF-600R	UB-222LI	UBC	UDBP-TA60(P)-RF-B	UDBP-TA60(P)-RF-KIT
UDBP-TA70(P)-RF	TWF-600R	UB-333LI	UBC	UDBP-TA70(P)-RF-B	UDBP-TA70(P)-RF-KIT

### **BODY JACKETS FOR UDBP SERIES**



MODEL	DESCRIPTION
863-964-1	Body Jacket for UDBP 40/50 Series
863-965-1	Body Jacket for UDBP 60 Series
863-966-1	Body Jacket for UDBP 70 Series

### **BATTERY COVERS**



MODEL	DESCRIPTION
863-976-1	Battery Cover for UDBP 40/50 Series
863-977-1	Battery Cover for UDBP 60 Series
863-978-1	Battery Cover for for UDBP 70 Series

### **RECEIVER**



MODEL	DESCRIPTION
TWF-600R	Receiver for UDBP (RF) type
	tools 426Mhz (sold separately)

www.aimco-global.com

800-852-1368



# **UDP-TA SERIES**

# **DIRECT PLUG IN, SHUT OFF PULSE TOOLS**

### FEATURES AND BENEFITS

- Direct Wall Plug in Tool plugs directly to 100 – 115 VAC wall power with circuit protection breaker box or integrated power cable balancer.
- Brushless (IPM) Motor provides long motor life with integrated trigger activated fan for increased duty cycle.
- · Patented Auto Relief Pulse Unit Technology.
- Lightweight, high impact, rugged plastic housing for superior ergonomics.
- Optional power cable integrated balancer available.



MODEL	TORQUE	TORQUE RANGE		OVERALL	LENGTH	WEI		
	NM	FT LBS	FREE SPEED	IN	MM	LB	KG	DRIVE
Bottom Cable Exit Models	(denoted by -B)							
UDP-TA40-B	4.5 - 8.0	3.3 - 5.9	3,300	7.1	179.5	3.0	1.4	3/8" Sq.
UDP-TA40D-B	4.5 - 8.0	3.3 - 5.9	3,300	7.2	182.5	3.0	1.4	1/4" Hex
UDP-TA50-B	7.0 - 15.5	5.2 - 11.5	3,900	7.1	179.5	3.0	1.4	3/8 Sq.
UDP-TA50D-B	7.0 - 15.5	5.2 - 11.5	3,900	7.2	182.5	3.0	1.4	1/4" Hex
UDP-TA55-B	12.5 - 25.0	9.3 - 18.5	4,800	7.3	184.5	3.0	1.4	3/8" Sq.
	"							
Top Cable Exit Models (de	enoted by (B-TL) )							
UDP-TA40 (B-TL)	4.5 - 8.0	3.3 - 5.9	3,300	7.1	179.5	3.0	1.4	3/8" Sq.
UDP-TA40D (B-TL)	4.5 - 8.0	3.3 - 5.9	3,300	7.2	182.5	3.0	1.4	1/4" Hex
UDP-TA50 (B-TL)	7.0 - 15.5	5.2 - 11.5	3,900	7.1	179.5	3.0	1.4	3/8" Sq.
UDP-TA50D (B-TL)	7.0 - 15.5	5.2 - 11.5	3,900	7.2	182.5	3.0	1.4	1/4" Hex
	12.5 - 25.0	9.3 - 18.5	4.800	7.3	184.5	3.0	1.4	3/8" Sq.

### **OPTIONAL ACCESSORIES**

M	IODEL	DESCRIPTION
U	CB-25	Power Cable Balancer
9	10-629-0	Breaker Unit
9	10-618-0	5M UDP Tool to Breaker Cable
9	10-619-0	10M UDP Tool to Breaker Cable
9	10-627-0	5M UDP Extension Cable*

<sup>\*</sup> Extension Cables connect between Tool and Breaker Cables



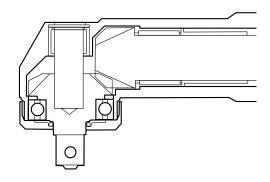


# **NUTRUNNERS: OVERVIEW**

#### **UAN SERIES ANGLE NUTRUNNERS**

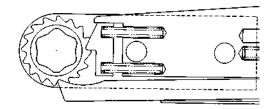
- Torque Control
- Electronically Monitored or Controlled Type

Designed for fastening in tight quarters or applications not served well by a pulse tool. The UAN Series transfers torque through beveled angle gears, continuously driving the fastener. When the resistance to rotation overcomes the spring resistance on the clutch, the tool will disengage at the adjusted torque value. Low reaction force characteristics on hard joints make it comfortable for the operator to use. Ideal for applications ranging from 6-60 Nm (4 - 44 ft-lbs).



#### **URW SERIES IN-LINE RATCHET WRENCHES**

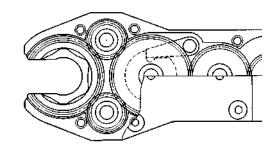
Designed to set flush over the fastener head, the URW Series is ideal for narrow fastening spaces. Motor torque is transferred from a gear driven, dual lobed cam that pushes a spring loaded push rod, rotating the socket one tooth at a time. A wide variety of socket sizes, head thicknesses, and tool lengths allow the URW Series access to many difficult applications.



#### **UOW SERIES OPEN-END NUTRUNNERS**

Designed for tubenut fastening, the UOW Series can transfer torque through a variety of options.

- Stall Type Depending on the application requirements, the standard UOW Series will stall when torque resistance matches power output.
- Mechanical Shut-off Type For greater torque accuracy and less reaction impulse to the operator, the UOW-T Series incorporates a mechanical clutch to shut off the tool at the preset torque.
- Electronically Monitored Type For critical torque applications requiring monitoring or controlling of the fastening torque, the UOW-M Series utilizes a transducer to signal the clutch shut-off.
- UOW series incorporates a one-hand, two-step throttle, which automatically reverses the socket to a preset open position.



# **NUTRUNNERS**



## **ANGLE TORQUE CONTROL UAN SERIES**

Recommended Air Pressure: 85 psi

	TORQUE RANGE		FREE SPEED	OVE LEN				FROM CENTER TO OUTSIDE		WEIGHT LESS SOCKET		SQUARE DRIVE	NOISE LEVEL	AIR USAGE
MODEL	NM	FT-LB	RPM	MM	IN	MM	IN	MM	IN	KG	LB	IN	DB(A)	CFM
UAN-611R-60C	6.5 - 12.0	4.3 - 8.6	620	383	15.1	47	1.9	14.0	0.5	1.6	3.5	3/8	80	21.2
UAN-611R-50C	8.5 - 15.0	5.7 - 10.8	470	373	14.7	47	1.9	14.0	0.5	1.6	3.5	3/8	80	21.2
UAN-611R-40C	10.0 - 18.0	7.2 - 12.9	400	373	14.7	47	1.9	14.0	0.5	1.6	3.5	3/8	80	21.2
UAN-611R-30C	13.0 - 25.0	9.3 - 18.0	270	373	14.7	47	1.9	14.0	0.5	1.6	3.5	3/8	80	21.2
UAN-701R-60C	20.0 - 31.0	14.5 - 23.1	600	445	17.5	47	1.9	14.0	0.5	2.4	5.3	3/8	85	31.8
UAN-701R-40C	28.0 - 45.0	21.0 - 33.3	400	455	17.9	51	2.0	18.0	0.7	2.4	5.3	3/8	85	31.8
UAN-701R-30C	37.0 - 60.0	27.5 - 44.1	300	455	17.9	58	2.3	18.0	0.7	2.4	5.3	1/2	85	31.8

Air Hose Size: 3/8 I.D.

Air Inlet: N.P.T. 1/4



UOW-11-14

### **UOW/UOW-T SERIES TUBENUT WRENCHES**

Recommended Air Pressure: 85 psi

	MAX TORQUE/RANGE		FREE SPEED	PEED OVERALL LENGTH		WEIGHT		MIN/MAX HE	X SOCKET SIZE	NOISE LEVEL	AIR USAGE
MODEL	NM	FT-LB	RPM	MM	IN	LB	KG	MM	IN	DB(A)	CFM
STALL											
U0W-11-10	13	9.6	390	295	11.7	3.3	1.5	7 - 12	1/4 - 7/16	76	10.5
U0W-11-14	16	11.8	290	311	12.3	3.5	1.6	10 - 17	7/16 - 5/8	76	10.5
U0W-11-22	24	17.8	220	326	12.8	3.9	1.8	11 - 24	7/16 - 5/8	76	10.5
U0W-11-30	32	23.7	160	347	13.7	4.4	2.0	14 - 36	5/8 - 1-3/16	76	10.5
SHUT-OFF C	LUTCH										
U0W-T60-10	4 - 14	3.0 - 10.4	300	370	14.6	4.6	2.1	7 - 12	1/4 - 7/16	76	10.5
U0W-T60-14	5 - 17	3.7 - 12.6	240	385	15.1	4.9	2.2	10 - 17	7/16 - 5/8	76	10.5
UOW-T60-22	7 - 24	5.2 - 17.8	170	400	15.8	5.2	2.4	11 - 24	7/16 - 5/8	76	10.5
UOW-T60-30	10 - 32	7.4 - 23.7	130	420	16.6	5.7	2.6	14 - 36	5/8 - 1-3/16	76	10.5
GEARED WR	ENCHES										
UGW-6N	18	13.3	530	310	12.2	3.1	1.4	9 - 12	3/8 - 7/16	76	10.5
UGW-8N	23	17.0	410	322	12.7	3.2	1.5	10 - 17	7/16 - 5/8	76	10.5

Air Hose Size: 3/8 I.D.

Air Inlet: N.P.T. 1/4

<sup>\*</sup> **E** logo indicates where ERGO-DRIVE sockets/extentions benefit tool operation.

# **NUTRUNNERS**



# **URW SERIES RATCHET WRENCHES**

Recommended Air Pressure: 85 psi

	MAX T	ORQUE	FREE SPEED	OVERALL	LENGTH	WEI	GHT	MIN/MAX HE	X SOCKET SIZE	AIR USAGE
MODEL	Nm	ft-lb	rpm	mm	in	lb	kg	mm	in	cfm
STRAIGHT HE	AD									
URW-6	11	8.1	210	292	11.5	2.5	1.2	6 - 12	1/4 - 7/16	9.9
URW-8N	16	11.8	260	300	11.8	4.2	1.9	7 - 15	7/16 - 9/16	19.5
URW-8	16	11.8	240	360	14.2	5.0	2.3	7 - 15	7/16 - 9/16	19.8
URW-9N	31	22.9	140	380	15.0	5.2	2.4	7 - 15	7/16 - 9/16	23.7
URW-10N	57	42.2	155	394	15.5	5.8	2.7	10 - 19	9/16 - 3/4	25.0
URW-12N	59	43.7	145	397	15.6	5.9	2.7	12 - 23	3/8 - 13/16	25.0
URW-12NA	78	57.7	105	408	16.1	6.2	2.8	17 - 27	11/16 - 15/16	25.0
URW-12NB	93	68.8	90	416	16.3	6.4	2.9	24 - 32	5/8 - 1-1/8	25.0

Air Hose Size: 3/8 I.D.

Air Inlet: N.P.T. 1/4



	MAX T	ORQUE	FREE SPEED	OVERALI	LENGTH	WEI	GHT	MIN/MAX HE	X SOCKET SIZE	AIR USAGE
MODEL	Nm	ft-lb	rpm	mm	in	lb	kg	mm	in	cfm
BENT HEAD										
URW-60R*	11	8.1	210	288	11.3	2.5	1.2	6 - 12	1/4 - 7/16	9.9
URW-60*	11	8.1	210	288	11.3	2.5	1.2	6 - 12	1/4 - 7/16	9.9
URW-80R*	16	11.8	240	300	11.8	5.0	2.3	7 - 15	7/16 - 9/16	19.5
URW-80*	16	11.8	240	300	11.8	5.0	2.3	7 - 15	7/16 - 9/16	19.5
URW-81**	16	11.8	240	300	11.8	5.0	2.3	7 - 15	7/16 - 9/16	19.5
URW-81R**	16	11.8	240	300	11.8	5.0	2.3	7 - 15	7/16 - 9/16	19.5

Air Hose Size: 3/8 I.D.

Air Inlet: N.P.T. 1/4

\* 160° Bent Head

\*\* 150° Bent Head

# DYNATORQUE MANUAL TORQUE MULTIPLIERS

# FEATURES AND BENEFITS

Manual Torque Multipliers offer the perfect, economical solution to high torque bolting applications.

- Superior power to weight ratio.
- Delivered torque accuracy +/- 4%.
- Anti-Wind Up feature (2,800 NM models and up).
- True Torque Multiplication Ratios.
- Standard Reaction Arms supplied. Custom reaction arms/nose extensions available to suit specific applications.
- Replaces long lever arms and/or slugging wrenches.
- Manually powered no external power source required.
- Value priced.
- No preventative maintenance required.
- Overload protected by Shear Drive design.





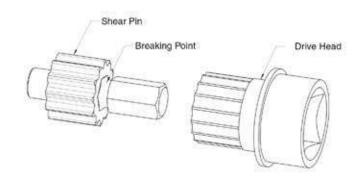
# ANTI-WIND UP FEATURE

Standard on models delivering 2,800 NM and up.

- Eliminates the backward force on the torque input device.
- Insures safe operation by the operator by not allowing the input device to spring backward when released.
- Eliminates the need to continually rotate the input device in 360 degree movements to apply torque. In many applications this is simply not possible.
- Facilitates removal of the multiplier from the application upon completion of the job.

# **SHEAR-OFF SYSTEM**

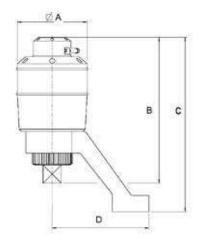
In order to protect the gear system against overload, DynaTorque Multipliers are fitted with a controlled shear-off system (spare torsion shaft included). Sheared off pins can easily be replaced at the work site.



# **DYNATORQUE MANUAL TORQUE MULTIPLIERS**

# **SPECIFICATIONS**

	INPUT	OUTPUT	RATIO	MAX TORQUE	OUTPUT
MODEL	in	in		ft-lb	Nm
ATM-800	1/2	3/4	1:3.5	590	800
ATM-1800	3/4	1	1:3.6	1238	1800
ATM-2800	1/2	1	1:13	2066	2800
ATM-3800	3/4	1	1:13	2804	3800
ATM-5000	3/4	1.5	1:17	3690	5000
ATM-8000	3/4	1.5	1:49	5904	8000
ATM-12000	3/4	1.5	1:58	8856	12000
ATM-16000	3/4	2.5	1:75	11808	16000



# **DIMENSIONS**

	А	В	С	D	WEI	GHT*
	(MM)	(MM)	(MM)	(MM)	LB	KG
ATM-800	65	105	132	130	2.9	1.3
ATM-1800	90	150	188	132	6.6	3.0
ATM-2800	95	200	240	132	11.5	5.2
ATM-3800	95	200	240	132	11.5	5.2
ATM-5000	120	215	272	150	15.4	7.0
ATM-8000	132	268	344	200	25.4	11.5
ATM-12000	156	272	348	200	30.9	14.0
ATM-16000	215	292	370	225	57.3	26.0

<sup>\*</sup> Weight shown does not include weight of reaction device.

# **ACCESSORIES**



# **CARRYING CASE**

All DynaTorque Multipliers are supplied in a rugged, weather-resistant, portable carrying case.



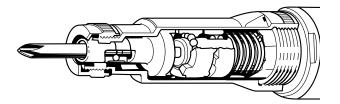
# **SCREWDRIVERS: OVERVIEW**

# TORQUE CONTROL AUTOMATIC SHUT-OFF TYPE

- Precise repeatability improves quality.
- Minimal wear on internal parts for longer life.
- Quick shut off for minimum torque reaction.
- Speed choice for flexibility.
- Easy external torque adjustment.
- · Midrange air motor provides high speed during entire cycle.
- Ideal for industrial torque control applications.

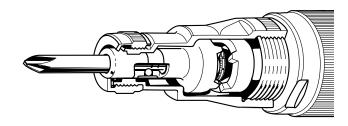
# **CUSHION CLUTCH TYPE**

- Good general duty screwdriver.
- · High speed rundown.
- · Clutch ratchets at preset torque.
- · Internal torque adjustment.
- General assembly, wood, and sheet metal screws.



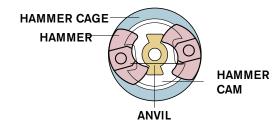
# **POSITIVE CLUTCH TYPE**

- Good for varying torque applications.
- Clutch ratchets at preset torque.
- Operator can force clutch engagement for higher torque.
- · Good for prevailing torque applications.



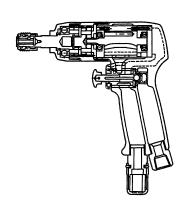
# **IMPACT TYPE**

- High power-to-weight ratio.
- Fast cycle times with free speeds up to 16,000 rpm.
- Ideal for non-critical applications.



# **DIRECT DRIVE**

- · Air motor driven gears.
- Stall torque dependent on air pressure.
- Simple maintenance.
- Lightest and smallest air screwdriver.
- Ideal for soft draw applications such as wood screws, self tapping screws, or trim screws.



# PNEUMATIC SCREWDRIVERS

# TORQUE CONTROL LIGHT TOUCH (LT) SERIES - PUSH-TO-START INLINE

Recommended Air Pressure: 85 psi

	TORQU	E RANGE	FREE SPEED	OVERALL	LENGTH	WEI	GHT	FROM CENTE	R TO OUTSIDE	NOISE LEVEL	AIR USAGE
MODEL	Nm	in-lb	rpm	mm	in	lb	kg	mm	in	dB(A)	cfm
US-LT10B	0.2 - 0.6	1.8 - 5.3	1,000	191	7.5	0.6	0.3	12.0	0.5	75	5.2
US-LT20B-10	0.4 - 1.1	3.1 - 9.7	1,000	180	7.1	0.7	0.3	13.0	0.5	70	5.6
US-LT20B-18	0.3 - 0.7	2.2 - 6.2	1,800	180	7.1	0.7	0.3	13.0	0.5	70	5.6
US-LT20B-26	0.2 - 0.4	1.3 - 3.1	2,600	180	7.1	0.7	0.3	13.0	0.5	71	5.6
US-LT30B-11	1.1 - 2.1	9.7 - 18.5	1,100	187	7.4	0.9	0.4	15.5	0.6	70	7.0
US-LT30B-17	0.7 - 1.5	6.2 - 13.2	1,700	187	7.4	0.9	0.4	15.5	0.6	70	7.0
US-LT30B-23	0.4 - 1.0	3.5 - 8.8	2,300	187	7.4	0.9	0.4	15.5	0.6	71	7.0
US-LT40B-08	1.6 - 4.0	14.1 - 35.2	800	209	8.2	1.4	0.7	16.5	0.6	70	10.5
US-LT40B-15	1.0 - 2.2	6.2 - 19.4	1,500	209	8.2	1.4	0.7	16.5	0.6	70	10.5
US-LT40B-21	1.0 - 1.7	6.2 - 15.0	2,100	209	8.2	1.4	0.7	16.5	0.6	74	10.5
US-LT50B-05	5.0 - 10.2	44.0 - 92.4	480	240	9.5	2.2	1.0	19.5	0.8	74	17.5
US-LT50B-08	3.0 - 5.5	26.4 - 48.4	800	240	9.5	2.2	1.0	19.5	0.8	75	17.5
US-LT50B-17	1.5 - 2.6	9.7 - 23.0	1,700	240	9.5	2.2	1.0	19.5	0.8	75	17.5

Air Hose Size: 1/4 I.D. for US-LT10B - US-LT40B Series - 3/8" I.D. for US-LT50B Series Each model is equipped with its standard and alternate clutch springs

Air Inlet: 1/8 for US-LT10B - US-LT20B Series - 1/4" for US-LT30B - US-LT50B Series

# TORQUE CONTROL LIGHT TOUCH (LT) SERIES - ANGLE AND LEVER

Recommended Air Pressure: 85 psi

		RANGE JOINT	FREE SPEED	OVEF LEN		WEI	GHT	FROM C TO OU		HEX BIT OR DRIVE SIZE	NOISE LEVEL	AIR USAGE
MODEL	Nm	in-lb	rpm	mm	in	lb	kg	mm	in	in	dB(A)	cfm
ANGLE												
US-LT30B-11C	1.1 - 2.1	3.5 - 18.5	1,100	298	10.7	1.5	0.7	10	0.4	1/4	73	7.0
US-LT30B-17C	0.7 - 1.5	3.5 - 13.2	1,700	295	10.7	1.5	0.7	10	0.4	1/4	73	7.0
US-LT40B-05C	2.3 - 5.7	20.0 - 49.5	500	322	13.0	2.1	0.9	13	0.5	1/4	75	10.5
US-LT40B-08C	1.6 - 4.0	8.7 - 34.7	800	320	12.8	2.0	0.9	10	0.4	1/4	75	10.5
US-LT40B-15C	1.0 - 2.2	8.7 - 19.4	1,500	320	12.8	2.0	0.9	10	0.4	1/4	75	10.5
US-LT40-03C	5.0 - 10.0	43.4 - 86.8	300	360	14.2	2.4	1.1	13	0.5	1/4 Sq.	72	10.5
US-LT40-05C	2.3 - 5.7	20.0 - 50.2	500	322	13.0	2.1	0.9	13	0.5	1/4 Sq.	75	10.5
US-LT40-08C	1.6 - 4.0	8.7 - 34.7	800	320	12.8	2.0	0.9	10	0.4	1/4 Sq.	75	10.5
US-LT40-15C	0.98 - 2.06	8.7 - 18.2	1,500	320	12.8	2.0	0.9	10	0.4	1/4 Sq.	75	10.5
LEVER												
US-LT30BL-11	1.1 - 2.1	9.7 - 18.5	1,100	229	8.2	1.2	0.5	15	0.6	1/4	70	5.2
US-LT30BL-17	0.7 - 1.5	6.2 - 13.2	1,700	229	8.2	1.2	0.5	15	0.6	1/4	70	5.2
US-LT30BL-23	0.4 - 1.0	3.5 - 8.8	2,300	229	8.2	1.2	0.5	15	0.6	1/4	71	5.2
US-LT40BL-08	1.6 - 4.0	14.1 - 35.2	800	249	9.8	1.5	0.7	17	0.7	1/4	70	5.6
US-LT40BL-15	1.0 - 2.2	8.8 - 19.4	1,500	249	9.8	1.5	0.7	17	0.7	1/4	70	5.6
US-LT40BL-21	1.0 - 1.7	8.8 - 15.0	2,100	249	9.8	1.5	0.7	17	0.7	1/4	74	5.6

Angle Head Height: 32 - 36mm

Air Inlet: N.P.T. 1/4"

Air Hose Size: 1/4" I.D. for all models

# TORQUE CONTROL LIGHT TOUCH (LT) SERIES - PISTOL

Recommended Air Pressure: 85 psi

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		E RANGE JOINT)	FREE SPEED		RALL GTH	WEI	GHT	FROM ( TO OU	CENTER ITSIDE	NOISE LEVEL	AIR USAGE
MODEL	Nm	in-lb	rpm	mm	in	lb	kg	mm	in	dB(A)	cfm
US-LT31PB-05	2.4 - 5.0	21.1 - 44.0	500	189	8.2	1.9	0.9	16	0.6	70	7.0
US-LT31PB-11	1.1 - 2.1	9.7 - 18.5	1,100	170	7.0	1.6	0.7	16	0.6	70	7.0
US-LT31PB-17	0.7 - 1.5	6.2 - 13.2	1,700	170	7.0	1.6	0.7	16	0.6	70	7.0
US-LT31PB-23	0.4 - 1.0	3.5 - 8.8	2,300	170	7.0	1.6	0.7	16	0.6	70	7.0
US-LT41PB-08	1.6 - 4.0	14.0 - 35.2	800	175	7.7	1.9	0.9	17	0.6	70	10.5
US-LT41PB-15	1.0 - 2.2	8.8 - 19.4	1,500	175	7.7	1.9	0.9	17	0.6	70	10.5
US-LT41PB-21	1.0 - 1.7	8.8 - 15.0	2,500	175	7.7	1.9	0.9	17	0.6	74	10.5
US-LT51PB-05	5.0 - 10.5	44.0 - 92.4	480	198	8.5	2.6	1.2	20	0.8	74	17.5
US-LT51PB-08	300 - 5.5	26.4 - 48.4	800	198	8.5	2.6	1.2	20	0.8	75	17.5
US-LT51PB-17	1.5 - 2.6	13.2 - 22.9	1,700	198	8.5	2.6	1.2	20	0.8	75	17.5
US-LT60P-03*	7.0 - 20.0	61.6 - 176.0	320	230	9.1	3.7	1.7	22	0.9	75	21.0
US-LT60P-07*	4.0 - 10.0	35.2 - 88.0	650	230	9.1	3.7	1.7	22	0.9	76	21.0
US-LT60P-11*	4.0 - 7.0	35.2 - 61.6	1,100	230	9.1	3.7	1.7	22	0.9	77	21.0

Air Hose Size: 1/4 I.D. for US-LT31PB & US-LT41PB Series

Air Inlet: N.P.T. 1/4"

3/8 I.D. for US-LT31PB-05, US-LT51PB Series & US-LT60P Series

<sup>\*</sup> Optional 3/8" Sq. Drive available for US-LT60P Series ADD (P) to Model Number

# PNEUMATIC SCREWDRIVERS

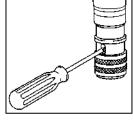


# **OPTIONAL CLUTCH SPRINGS**

	CLUTCH PROV		RECOMMENDED HARD		CLUTCH SPRING
MODEL	Standard	Option	Nm	in-lb	CODE NUMBER
US-LT10B	Black	·	0.20 - 0.60	1.7 - 5.2	976-379-0
US-LT20B-10	Black		0.34 - 1.10	3.0 - 9.5	976-432-0
		Red	0.20 - 0.70	1.7 - 6.1	976-431-0
		Yellow	0.15 - 0.34	1.3 - 3.0	976-430-0
US-LT20B-18	Red		0.24 - 0.67	2.2 - 6.1	976-431-0
		Yellow	0.15 - 0.34	1.3 - 3.0	976-430-0
US-LT20B-26	Yellow		0.15 - 0.34	1.3 - 3.0	976-430-0
US-LT31PB-05	Red		2.35 - 5.00	20.9 - 44.0	976-493-0
		Pink	0.98 - 2.74	8.7 - 24.3	976-471-0
US-LT30 Series, 1100 rpm	Blue		0.98 - 2.1	8.7 - 18.5	976-472-0
		Red	0.67 - 1.76	6.1 - 15.6	976-493-0
		Pink	0.39 - 0.98	3.5 - 8.7	976-471-0
	Black	(not included)	1.22 - 2.74	10.8 - 24.3	976-504-0
US-LT30 Series, 1700 rpm	Red		0.67 - 1.47	6.1 - 13.0	976-493-0
		Pink	0.39 - 0.98	3.5 - 8.7	976-471-0
US-LT30 Series, 2300 rpm	Pink		0.39 - 0.98	3.5 - 8.7	976-471-0
US-LT40-03C	Red		4.90 - 9.80	43.4 - 86.8	976-516-0
US-LT40 Series, 800 rpm	Black		1.57 - 3.92	13.9 - 34.7	976-515-0
		Red	0.98 - 2.17	8.7 - 19.1	976-516-0
		Yellow	0.98 - 1.67	8.7 - 14.8	976-517-0
US-LT40 Series, 1500 rpm	Red		0.98 - 2.17	8.7 - 19.1	976-516-0
		Yellow	0.98 - 1.67	8.7 - 14.8	976-517-0
US-LT40 Series, 2100 rpm	Yellow		0.98 - 1.67	8.7 - 14.8	976-517-0
US-LT50 Series, 500 rpm	Black		4.9 - 10.3	43.4 - 91.1	976-620-0
		Red	2.9 - 5.4	26.1 - 47.7	976-614-0
		Yellow	1.4 - 2.5	13.0 - 22.6	976-588-0
US-LT50 Series, 800 rpm	Red		2.7 - 5.4	24.3 - 47.7	976-614-0
		Yellow	1.4 - 2.5	13.0 - 22.6	976-588-0
US-LT50 Series, 1700 rpm	Yellow		1.4 - 2.6	13.0 - 23.0	976-588-0

# EXTERNAL TORQUE ADJUSTMENT (AIR SHUT-OFF)

Set the hand driver into the key hole on the Adjusting Gear, turn clockwise to increase torque. Turn counter clockwise to decrease torque.



# **SILENCER ASSEMBLIES**

MODEL	DIRECT TYPE SILENCER	LEADER HOSE ASSEMBLY	EXHAUST HOSE ASSEMBLY
US-LT10 Series	N/A	934-201-0	459-885-1
US-LT20 Series	455-088-2	934-201-0	455-885-1
US-LT30 Series	408-088-2	934-150-0	408-885-0
US-LT40 Series	496-088-1	934-150-0	496-885-1

# PNEUMATIC SCREWDRIVERS



# **DIRECT DRIVE SERIES**

Recommended Air Pressure: 72 psi

		MAX TO	DRQUE										
	SOFT	JOINT	HARD	JOINT	FREE SPEED	OVERALL	LENGTH	WEI	GHT	FROM CENTE	R TO OUTSIDE	NOISE LEVEL	AIR USAGE
MODEL	Nm	ft-lb	Nm	ft-lb	rpm	mm	in	lb	kg	mm	in	db(A)	cfm
PISTOL													
US-LD40P-08	4.8	3.6	5.7	4.2	940	130	5.1	1.5	0.7	17	0.7	70	14.0
US-LD40P-15	3.0	2.2	3.2	2.4	1,700	130	5.1	1.5	0.7	17	0.7	70	14.0
US-LD40P-21	2.0	1.5	2.8	2.1	2,500	130	5.1	1.5	0.7	17	0.7	74	14.0
US-LD50P-05	10.0	7.4	11.2	8.3	500	153	6.0	2.0	0.9	20	0.8	74	17.5
US-LD50P-08	6.5	4.8	7.8	5.8	900	153	6.0	2.0	0.9	20	0.8	75	17.5
US-LD50P-17	3.5	2.6	5.9	4.4	1,900	150	5.9	2.0	0.9	20	0.8	75	17.5
	CA	CAPACITY (SCREW SIZE)		FREE SPEED	OVERALL	LENGTH	WEI	GHT	FROM CENTE	R TO OUTSIDE	NOISE LEVEL	AIR USAGE	
ANGLE	m	mm in		rpm	mm	in	lb	kg	mm	in	db(A)	cfm	
US-3.5ACB		4 No. 8		2,000	200	7.9	1.4	0.7	10.0	0.4	85	7.0	

Air Hose Size: 1/4 I.D.



# **CUSHION CLUTCH SERIES**

Recommended Air Pressure: 57 psi

	CAPACITY (	(SCREW SIZE)	FREE SPEED	OVERALL	LENGTH	WEIGHT	LESS BIT	FROM CENTER TO OUTSIDE		NOISE LEVEL	AIR USAGE
MODEL	mm	in	rpm	mm	in	lb	kg	mm	in	db(A)	cfm
US-3.5PB*	4	No. 8	2,000	200	7.9	1.7	0.8	17	0.7	75	7.0
US-3.5B	4	No. 8	2,000	214	8.5	1.4	0.6	17	0.7	75	7.0
US-5	5	No. 10	1,400	236	7.1	2.4	1.1	21	0.8	75	7.0

<sup>\*</sup> Push-To-Start Air Hose Size: 1/4" I.D. for all models Air Inlet: N.P.T. 1/4"

Air Inlet: N.P.T. 1/4



# **IMPACT SERIES**

Recommended Air Pressure: 85 psi

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	CAPACITY (	(SCREW SIZE)	FREE SPEED	OVERALI	LENGTH	WEIGHT	LESS BIT	FROM CENTE	R TO OUTSIDE	NOISE LEVEL	AIR USAGE
MODEL	mm	in	rpm	mm	in	lb	kg	mm	in	db(A)	cfm
PISTOL											
US-350PW	4	No. 8	15,000	121	4.8	1.2	0.5	17	0.7	81	7.0
US-450PW	5	No. 10	14,000	151	5.9	1.7	8.0	17	0.7	79	7.0
US-652PW	6	1/4	9,000	155	6.1	1.9	0.9	23	0.9	79	12.4
STRAIGH	Т										
US-450WB	5	No. 10	11,000	161	6.3	1.2	0.6	18.5	0.7	80	7.0

Air Hose Size: 1/4" I.D. Air Inlet: N.P.T. 1/4"

(R) Denotes Directional Muffled Rear Exhaust option

Recommended air pressure: 57 psi for US-350PW, US-450PW, and US-450WB / 72 psi for US-652PW.

NOTE: Additional models available. Please contact AIMCO, 1-800-852-1368

# SIGNATURE SERIES PRECISION CLUTCH CORDLESS TOOLS



# **SIGNATURE SERIES PRECISION TOOLS**

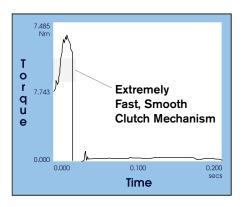
Simple to use, yet sophisticated in performance, the AIMCO Signature Series pistol tools provide the operator the performance required to meet the needs of today's cordless tool applications.

The ergonomic handle design provides the operator ideal balance and weight. These tools allow for fastening in hard-to-reach locations at torques up to 9 ft-lb (12 NM) in the pistol configuration and 52 ft-lb (70 NM) in the angle nutrunner configuration. The Signature Series Precision Clutch range features a wide range of torque outputs and the ability to program the tool speed for the demands of the application. Bright LED indicator lights provide clear feedback to the operator on OK/NOK tightening result, Tool Direction setting, and Battery Status. Signature Series Precision tools all operate with a single 18V Li-lon Battery and common chargers to maximize flexibility while minimizing cost associated with differing battery chemistries.

### SIGNATURE SERIES PRECISE QUICK RELEASE CLUTCH

The Signature Series tool features a quick releasing clutch that delivers accuracy across multiple joint types. Each clutch assembly is constructed of precisely machined parts to guarantee accuracy and durability over the life of the tool. In addition to tight tolerances, the driving anvil is well supported to ensure that torque is precisely sensed by the clutch and not influenced by side loads or runout of the tool's rotating components.

Typical Torque Graph of the Signature Series Precision Cordless Tools





Whether the application is made up of soft materials, such as plastics or gaskets, or harder materials, such as direct metal to metal joints, the Signature Series Precision Clutch tool delivers the accuracy the job requires.

# SIGNATURE SERIES PRECISION CLUTCH CORDLESS TOOLS





	TORQUE	RANGE	FREE SPEED RPM RANGE	BATTERY	TOOL WEIGHT	(W/O BATTERY)	ANVIL
MODEL	ft-lb	Nm	(Programmable with Programmer Accessory)	VOLTAGE	lb	kg	SIZE
Pistol Grip							
SPC-P2325Q	.6 - 2.2	.8 - 3	500 - 1550	18V	2.1	.95	1/4" hex
SPC-P2625Q	.7 - 4.4	1 - 6	300 - 1000	18V	2.1	.95	1/4" hex
SPC-P2925Q	1.1 - 6.6	1.5 - 9	300 - 800	18V	2.1	.95	1/4" hex
SPC-P21225Q	1.5 - 8.8	2 - 12	250 - 600	18V	2.1	.95	1/4" hex
Angle Nutrunner							
SPC-A21025Q	2.2 - 8.8	3 - 12	400 - 1000	18V	3.5	1.6	1/4" hex
SPC-A21025	2.2 - 8.8	3 - 12	400 - 1000	18V	3.5	1.6	1/4" Sq
SPC-A21038	2.2 - 8.8	3 - 12	400 - 1000	18V	3.5	1.6	3/8" Sq
SPC-A21625Q	3.7 - 13.3	5 - 18	300 - 600	18V	3.5	1.6	1/4" hex
SPC-A21625	3.7 - 13.3	5 - 18	300 - 600	18V	3.5	1.6	1/4" Sq
SPC-A21638	3.7 - 13.3	5 - 18	300 - 600	18V	3.5	1.6	3/8" Sq
SPC-A23038	5.9 - 22	8 - 30	250 - 480	18V	3.5	1.6	3/8" Sq
SPC-A23538	7.4 - 25.8	10 - 35	220 - 330	18V	3.5	1.6	3/8" Sq
SPC-A25038	7.4 - 37	10 - 50	200 Non-Programmable Fixed Speed*	18V	5.3	2.4	3/8" Sq
SPC-A27038	14.8 - 51.7	20 - 70	170 Non-Programmable Fixed Speed*	18V	6.3	2.9	3/8" Sq

- Pistol Grip Tools include: Torque Adjustment Tool and one (1) 18V Li-lon Battery
- Angle Nutrunners include: Torque Adjustment Tool, Head Indexing Spanner Wrench, and one (1) 18V Li-lon Battery

\* High torque tools feature fixed RPM.

# SIGNATURE SERIES BATTERY, CHARGER, AND ACCESSORIES

### **BATTERIES AND CHARGERS**

The AIMCO Signature Series battery and charging system could not be more simple. One universal battery and one universal charger interface with any of the Signature Series Precision Clutch tools. Pistol type, angle type, low amount of torque output, or the highest torque tool in the range, each tool utilizes the same 18V Lithium Ion battery for superior charge life and weight. The charger accepts input AC power of 100–240AC, making use simple anywhere in the world.

The Signature Series battery features a slim profile design and a slide mount connection to the tool, which ensures durability and makes changing out batteries simple.







SPC-C218-19

# BATTERY AND CHARGER SPECIFICATIONS

BATTERY MODEL NUMBER	VOLTAGE	TYPE	CAPACITY	WEIGHT
SPC-B218LI	18V	Li-lon	2.0Ah	.8 Lb/.4 kg
SPC-B218LI-HC	18V	Li-lon	4.0Ah	1.4 Lb/.64 kg
CHARGER MODEL NUMBER	OUTPUT	INPUT	DIMENSIONS	WEIGHT
SPC-C218-19	18V-19.2V, 3.0A	100-240VAC, 50-60Hz	6.25" deep X 5" wide X 3.5" tall (w/o Battery) 158.75 mm X 127 mm X 89 mm	1.2 Lb/.54 kg

### TOOL SPEED PROGRAMMER

The Signature Series Precision Cordless tool line is capable of specifically programming the running RPM into the tool within its range of operation. Each tool in the range has an integrated Mini USB



connector that couples to the Signature Series Programmer module. Simply connect the tool to the Programmer Module and flash the tool to the desired RPM. Once flashed, the tool will hold the RPM setting until a change is desired and it is re-flashed. New tools, that have not been specifically set by the programmer module, will run at their maximum rated RPM as shown in the catalog and on the tool label.

# BODY JACKETS

MODEL	DESCRIPTION
BJ10082	For Signature Series G2 Pistol Tools
BJ10083	For Signature Series G2 Angle Nutrunners

# **QUICK CLIP**

Carry your Signature Series Pistol tool on any work belt with the Quick Clip. The two piece Quick Clip comes with a belt clip and a stretch cord attachment for the tool. The patented ball feature allows for quick and easy release on the belt. The Quick Clip keeps the tool well balanced and frees the operator's hands for other tasks.

SPC-QC

# **HOLSTERS**



Easily carry your Signature Series pistol and right angle tools. AIMCO offers right-hand and left-hand holsters.

SPC-P-HL

# **TOOL BASKETS**



Tool Baskets are a great way to keep the Signature Series tool in place when not being used. AIMCO tool baskets can be affixed to a bench or rack and can be used for either a pistol or right angle tool.

# **ELECTRIC SCREWDRIVERS**



- Available in push-to-start and lever start styles.
- Ergonomic design Lightweight, compact housings ensure operator comfort during operation.
- Accurate torque control Precise controlled fastening with automatic shut-off clutches.
- External brush replacement Virtually no down time for brush replacement.
- External torque adjustment Torque level can be easily adjusted by simply turning the external adjustment ring.



- UL Listed and CE Certified Drivers meet electrical safety standards in both the U.S. and Europe.
- Direct plug-in style Offers easy and convenient start-up (certain models) simply plug it in.
- State-of-the-art motor design Ensures comfortable grip temperature for operator and extended motor life.

# **ELECTRA SERIES**

	TORQL	JE RANGE	FREE SPEED	WEI	GHT	LEN	GTH	HEX I	DRIVE	POWER	
MODEL	IN-LB	KGF-CM	RPM	LB	KG	IN	MM	IN	MM	SOURCE	
PUSH-TO-	-START DIREC	T PLUG-IN SERIE	ES								
AE-5681 <sup>3</sup>	3.5 - 15.6	4 - 18.0	1,000	1.2	0.5	9.3	237	1/4	6.4	115V AC1	
AE-8681 <sup>4</sup>	15 - 45	23.0 - 51.8	600	1.6	0.7	10.6	269	1/4	6.4	115V AC1	
LOW VOL	TAGE LEVER S	START SERIES <sup>2</sup>								POWER SUPPLY:	
AE-2020	.35 - 1.3	.40 - 1.5	720	0.7	0.3	8.0	203	1/4	6.4	See page 121 for	
AE-4020	.9 - 5	1.0 - 6.0	720	0.7	0.3	8.0	203	1/4	6.4	required power	
AE-4520	1.3 - 8.7	1.5 - 10.0	720	0.7	0.3	8.0	203	1/4	6.4	supplies <sup>2</sup>	
AE-7010	6.1 - 17.4	7.0 - 20.0	750	1.4	0.6	9.3	236	1/4	6.4		
AE-8010	10.4 - 26.0	12.0 - 29.9	550	1.4	0.6	9.3	236	1/4	6.4		
LOW VOL	TAGE PUSH-TO	O-START SERIES	$S^2$							POWER SUPPLY:	
AE-7010PS	6.1 - 17.4	7.0 - 20.0	750	1.4	0.6	9.3	236	1/4	6.4	See page 121 for	
AE-8010PS	10.4 - 26.0	12.0 - 29.9	550	1.4	0.6	9.3	236	1/4	6.4	power supplies <sup>2</sup>	

- 1 220V AC is available upon request. Contact AIMCO at 1-800-852-1368.
- <sup>2</sup> Low voltage units require an external power supply.

- <sup>3</sup> AE-5681 includes a torque cover.
- <sup>4</sup> AE-8681 includes a pistol grip handle adapter

### **ELECTRA LOW ESD SERIES**

- Grounded bit Grounded chuck assembly routes any existing charge to ground.
- Carbonized housing Handle material and buttons are constructed of carbonized plastic throughout, enabling any charge received by the handle to be routed to ground.
- Long-Lasting ESD resistant handle Material will maintain its integrity for the life of the handle, unlike coatings or paints.



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# **ELECTRA LOW ESD SERIES**

	TORQUE RANGE		FREE SPEED	WEIGHT		LEN	IGTH	HEX I	POWER	
MODEL	IN-LB	KGF-CM	RPM	LB	KG	IN	MM	IN	MM	SOURCE
AE-2020ESD	.35 - 1.3	.40 - 1.5	720	0.7	0.3	8.0	203	1/4	6.4	See page 121
AE-4520ESD <sup>2</sup>	1.3 - 8.7	1.5 - 10.0	720	0.9	0.4	8.0	204	1/4	6.4	35V DC
AE-5681ESD	3.5 - 15.6	4 - 18.0	1,000	1.2	0.5	9.3	237	1/4	6.4	115V AC1

- 1 220V AC is available upon request. Contact AIMCO at 1-800-852-1368.
- 2 Low voltage units require an external power supply.

# **ELECTRIC SCREWDRIVERS**

### **ELECTRA SLIP CLUTCH SERIES**

- High-speed performance For quick and consistent assembly and disassembly
- Maximum ergonomics and convenience Offers a combination of a slip clutch with a high speed motor to provide low torque reaction; one of the best power-to-weight ratios in the industry.
- Added maintenance feature LED light indicates when to change brushes. Brush cap contains a switch that shuts off the power during brush replacement.
- Direct 110V plug-in Eliminates the need for an external power supply.



- 1/4" hex quick change chuck For easy bit changes
- External torque collar For easy torque adjustment.

# **ELECTRA SLIP CLUTCH SERIES**

	RECOMMENDED TORQUE RANGE					WEI	GHT	LEN	IGTH	HEX [	DRIVE	POWER
MODEL	IN-LB	KGF-CM	RPM	LB	KG	IN	MM	IN	MM	SOURCE		
AE-2015	4.3 - 21.7	5.0 - 25.0	1000	1.2	.55	9.2	234	1/4	6.4	110 V / 120V AC <sup>1</sup>		

 <sup>1 220</sup>V AC is available upon request. Contact AIMCO at 1-800-852-1368.

### **PRECISION SERIES**

### For low torque applications

- Featuring ergonomic design in shape and materials.
- Comes with options such as long-life brushless motors and adjustable speed power supplies.

# STANDARD MODELS

- Optional speed control power supply Enables infinite control from 20% to 100% of maximum tool speed and adjustable soft start to minimize cross threading.
- Ergonomic housing Oval shape conforms to hand.
- Duralite Casing material provides a secure grip.
- Integrated Lever Feather touch integrated lever reduces travel and stress. Requires only 2 mm of travel to activate.
- External torque control Twist and go.



### **EXTENDED LIFE MODELS**

- Sealed Swiss motor For higher duty cycles, longer life, and less maintenance. Sealed casing means no brush changes are necessary.
- Extended warranty on tool motor Three year standard motor warranty.
- Compact power supply Makes setup a breeze.

# PRECISION SERIES

. ILEGIOIO	· OLILIEO							
	TORQUE	E RANGE	FREE SPEED	WE	IGHT	LEN	IGTH	HEX DRIVE
MODEL	IN-LB	KGF-CM	RPM	LB	KG	IN	MM	IN
STANDARD								
AE-6300	.85 - 5.0	1.0 - 5.8	725	0.9	0.4	8.5	216	1/4
AE-6450	1.3 - 8.7	1.5 - 10.0	770	0.9	0.4	8.5	216	1/4
HIGH SPEED	)							
AE-6300S	1.2 - 5.5	1.4 - 6.3	920	0.9	0.4	8.5	216	1/4
AE-6450S	1.3 - 8.7	1.5 - 10.0	920	0.9	0.4	8.5	216	1/4
EXTENDED L	_IFE							
AE-6300M	1.0 - 5.5	1.1 - 6.3	550	0.9	0.4	8.5	216	1/4

# **ELECTRIC SCREWDRIVERS**











AE-224PS AE-278PS

# **ELECTRA SERIES ACCESSORIES - POWER SUPPLIES**

MODEL	COMPATIBLE SCREWDRIVERS	TOOL RPM	VOLTAGE CONVERSION	DIMENSIONS (LB)	WEIGHT (KG)
AE-224PS	AE-2020 AE-6300 AE-2020ESD AE-6300S AE-4020 AE-6450 AE-4520 AE-6450S AE-4520ESD	720	110V AC / 35V DC	2.6 x 1.6 x 5.0 66 x 41 x 127 mm	1.0 .45
APS-35W	AE-2020 AE-6300 AE-2020ESD AE-6300S AE-4020 AE-6450 AE-4520 AE-6450S AE-4520ESD	VARIABLE SPEED / SOFT START	110V AC / 35V DC	2.6 x 1.6 x 5.0 66 x 41 x 127 mm	1.0 0.5
AE-278PS	AE-7010 AE-8010 AE-7010PS AE-8010PS	STANDARD	110V AC - 220V AC / 30V DC	1.6 x 5.0 x 2.6 41 x 127 x 66 mm	1.0 .45
APM-30	AE-6300M	550	110V AC - 220V AC / 30V DC	2.1 x 3.4 x 1.9 53 x 87 x 48mm	0.4 0.2



# ANGLE HEAD ATTACHMENTS

Available for lever start series.

Not available for Low ESD Series.



### **PISTOL GRIP HANDLE**

Converts to a pistol style driver for horizontal fastening. Available for Trigger Start only (included with AE-8681).



# **TORQUE COVER**

Prevents accidental torque adjustment by the operator (included with AE-5681).



### **FASTENER COUNTER**

Verifies and error-proofs assembly process.

# **OPTIONAL ACCESSORIES**

OF HUNAL AUGL	JJUIIILJ	
ITEM	MODEL	COMPATIBLE SCREWDRIVERS
Angle Head Attachments	AE-2045A	For AE-2020, AE-4020, AE-4520
	AE-7080A	For AE-7010, AE-8010
Pistol Grip Handle	AE-PG7080	For AE-7010, AE-1070PS, AE-8010, AE-8010PS
Torque Cover	AE-TC2040	For AE-2020, AE-4020, AE-4520
	AE-TC7080	For AE-7010, AE-7010PS, AE-8010, AE-8010PS
	4H2O55	For AE-8681
Fastener Counter	TM-45	For AE-2020, AE-4020, AE-4520 Standard and ESD types
	TM-65	For AE-7010, AE-8010 and AE-8010PS

# **IMPACT TOOLS**

### **UW-SERIES IMPACT TOOLS**

UW-Series impact tools offer fast, economical operation in high-volume heavy assembly applications.



TORQUE RANGE **OVERALL** FROM CENTER SQ. DR. OR NOISE CAPACITY SPEED LENGTH WEIGHT HEX SIZE LEVEL AVERAGE AIR (APPROX) TO OUTSIDE MODEL CONSUMPTION MM IN NM FT-LB RPM MM IN KG LB MM DB(A) PISTOL 1/4 Hex UW-6SLRDK 6 1/4 6.9 - 18 5 - 13 8,500 175 6.9 1.0 2.1 31.0 1.2 91 12.4 6 1/4 7.8 - 19 8,500 175 1.0 2.1 1.2 1/4 Sq. 92 12.4 UW-6SLK 6 - 14 6.9 31.0 92 UW-6SLRK 6 1/4 6.9 - 18 5 - 13 8.500 175 6.9 1.1 2.1 31.0 1.2 3/8 Sa. 10.5 150 29.5 UW-61ER(D)K 8 5/16 14 - 40 10 - 30 7,300 5.9 1.5 3.3 1.2 3/8 Sq. 91 12.4 8 5/16 29 - 69 21 - 51 7,500 172 6.8 1.6 3.4 31.0 1.2 1/2 Sq. 93 14.0 UW-8SHK UW-8SHRK 8 5/16 18 - 40 13 - 30 7,300 172 6.8 1.6 3.4 31.0 1.2 1/2 Sq. 93 14.0 10 3/8 35 - 87 26 - 64 7,000 178 7.0 1.8 3.9 34.0 1/2 Sq. 93 16.0 UW-9SRK 1.3 UW-9SK 10 3/8 35 - 87 26 - 64 7,000 178 7.0 1.8 4.0 34.0 1.3 1/2 Sq. 95 17.6 12 6,500 183 7.2 2.1 4.7 95 16.0 UW-10SHK 1/2 49 - 180 36 - 133 35.0 1.4 1/2 Sq. 12 6,000 183 2.1 4.7 95 UW-10SHRK 1/2 47 - 170 35 - 125 7.2 30.5 1.4 1/2 Sq. 16.0 UW-13SK 13 1/2 88 - 250 65 - 184 6,500 215 8.5 2.6 5.7 37.5 1.5 1/2 Sq. 95 19.4 UW-13SRK 13 1/2 88 - 250 65 - 184 6.000 215 8.5 2.6 5.7 37.5 1/2 Sq. 95 1.5 16.0 INLINE 7.8 - 22 6 - 16 7,500 2.1 1/4 Hex 91 UW-6SSDK 6 1/4 185 7.3 1.0 28.0 1.1 10.5 UW-6SSHDK 8 5/16 15 - 30 11 - 22 7,500 205 8.1 1.2 2.7 22.0 8.0 1/4 Hex 91 12.4 UW-6SSLRDK 6 1/4 6.9 - 18 5 - 13 8.500 239 9.4 0.9 1.9 31.0 1.3 1/4 Hex 91 10.5 UW-6SSHK 8 5/16 22 - 50 16 - 37 7,500 205 8.1 1.3 2.7 27.5 1.1 1/4 Sq. 92 12.4 7,300 2.8 91 UW-6SSHRDK 8 5/16 15 - 30 11 - 22 249 9.8 1.3 27.5 1.1 1/4 Hex 12.4 UW-6SSHRK 8 5/16 22 - 50 16 - 37 7.300 249 9.8 1.3 2.8 27.5 1.1 3/8 Sq. 91 12.4 UW-9SSK 10 3/8 35 - 87 26 - 64 7,000 290 11.4 2.1 4.6 34.0 1.3 95 16.0 1/2 Sq. **ANGLE** UW-6CSK 6 1/4 7.8 - 22 6 - 16 7.500 218 8.8 1.4 3.1 28.0 1.1 3/8 Sa. 94 10.5 3.8 94 UW-6CSHK 8 5/16 19 - 41 14 - 30 7,500 238 9.4 1.7 27.5 1.1 3/8 Sq. 12.4 7,300 3/8 Sq. 94 UW-6CSHRK 8 5/16 19 - 41 14 - 30 282 11.1 1.7 3.8 27.5 10.5 1.1 95 UW-9CSK 10 3/8 27 - 71 20 - 52 7.000 337 13.3 2.8 6.1 34.0 1/2 Sq. 12.4 1.3 UW-13CSK 13 1/2 75 - 200 55 - 148 6,500 374 14.7 5.2 11.4 39.0 1.5 1/2 Sq. 97 26.5 **SWING HAMMER** UW-140P(WR) 12 1/2 70 - 210 52 - 155 6,500 200 7.9 2.7 5.9 33.0 1.3 1/2 Sq. 93 25.0 UW-381 38 1-1/2 760 - 2,000 561 - 1,475 4,700 395 115.6 9.5 20.9 58.5 2.3 1 Sq. 100 31.5 UW-381P 38 1-1/2 760 - 2,000 561 - 1,475 4,700 276 10.9 10.0 20.9 58.5 2.3 1 Sq. 99 31.5 JUMBO 7,800 - 17,000 5,753 - 12, 539 1,400 56.0 123.0 3.8 1-1/2 Sq. UW-75S 76 3 670 26.4 96.0 112 114.0

Air Hose Size:

3/8" I.D. (UW-6 - 140P) 1/2 I.D. (UW-381, UW-381P) 3/4 I.D. (UW-75S)

N.P.T. 1/4" (UW-6 - 140P) N.P.T. 1/2 (UW-381, UW-381P) N.P.T. 1 (UW-75S)

NOTE: Additional models available. Please contact AIMCO, 1-800-852-1368.

Recommended Air Pressure: 85 psi

IMPACT TOOLS MODEL NUMBER KEY

C: Angle Head D: Quick Change Driver E: Built-in Air Regulator H: Heavy Duty R: Rear Air Exhaust SS: Inline L: Long Anvil

# **GRINDERS AND SANDERS**







# **GRINDERS**

Recommended Air Pressure: 85 psi

	CAPACITY (WHEEL SIZE)	SPEED	RATED HORSEPOWER	OVERALL	LENGTH	OVERALL	HEIGHT	WEI	GHT	NOISE LEVEL	AVERAGE AIR CONSUMPTION
MODEL	IN	RPM	HP	MM	IN	MM	IN	KG	LB	DB(A)	CFM
UAG-40SBL-136	4	13,600	1.0	246	9.7	76	3.0	1.3	2.9	84	34.0
UAG-50SBL-109	5	10,900	1.0	246	9.7	76	3.0	1.4	3.1	82	34.0
UAG-50SBL-120	5	12,000	1.0	246	9.7	76	3.0	1.4	3.1	82	34.0
UAG-70SBL-76	7	7,600	2.0	300	11.8	98	3.9	2.9	6.4	83	57.0
UAG-90SBL-59	9	5,900	2.5	308	12.1	98	3.9	3.3	7.3	88	67.0

Air Hose Size: 3/8" I.D.

Air Inlet: N.P.T. 1/4" - N.P.T. 3/8" (UAG-90SBL-59)

NOTE: Additional models available. Please contact AIMCO, 1-800-852-1368.

# **GRINDERS / SANDERS**

Recommended Air Pressure: 85 psi

	CAPACITY (WHEEL SIZE)	COLLET CHUCK SIZE	SPEED	RATED HORSEPOWER		LENGTH	WEI		NOISE LEVEL	AVERAGE AIR CONSUMPTION
MODEL	IN	IN	RPM	HP	MM	IN	KG	LB	DB(A)	CFM
UG-25NA	-	1/4	23,500	0.3	153	6.0	0.5	1.2	82	10.7
UG-38N	-	1/4	25,000	0.4	164	6.5	0.6	1.3	85	10.7
UG-38NA	-	1/4	22,000	0.4	165	6.5	0.7	1.4	75	14.0
UG-38NL	-	1/4	21,000	0.4	317	12.5	0.9	2.0	85	10.7
UG-38NS	-	1/4	25,000	0.4	174	6.8	0.6	1.3	85	10.7
UG-50S-200	-	1/4	23,000	0.3	198	7.8	0.6	1.3	73	14.0
UG-45H	-	1/4	18,000	0.5	196	7.7	0.8	1.8	76	22.0
UG-20A-200	-	1/4	20,000	0.2	131	5.2	0.5	1.1	75	10.7
UG-20A-120	-	1/4	12,000	0.2	131	5.2	0.5	1.1	76	10.7
UG-50S-200A	-	1/4	20,000	0.3	195	7.7	0.9	2.0	75	14.0
UG-65EB	2.5	-	14,600	0.6	242	9.8	1.3	2.8	95	22.0
UG-65EL	2.5	-	14,600	0.6	272	10.7	1.4	3.1	85	22.0
UG-65ER	2.5	-	14,600	0.6	271	10.7	1.5	3.3	85	22.0
UG-65EBL	2.5	-	14,600	0.6	272	10.7	1.4	3.1	95	22.0
UG-650EL	2.5	-	14,600	0.6	420	16.5	1.6	3.4	85	22.0
UG-1250L-72	5	-	7,200	1.0	436	17.2	2.8	6.2	88	32.7
UP-25DB	5	-	10,000	0.3	212	8.3	1.7	3.7	73	7.0
UP-25NB	5	-	9,000	0.4	250	9.4	1.8	3.9	97	21.0

Air Hose Size: 3/8" I.D. - 1/2" I.D. (UG-1250L-72)

Air Inlet: N.P.T. 1/4" N.P.T. 3/8" (UG-1250L-72)

NOTE: Additional models available. Please contact AIMCO, 1-800-852-1368.

# **DRILLS & PERCUSSION TOOLS**



UD-60S-29

# **DRILLS**

Recommended Air Pressure: 85 psi

	CAP	ACITY	SPEED	OVEI LEN		WEIGHT W	TH CHUCK	FROM CE		NOMINAL CHUCK SIZE	TYPE OF SPINDLE	NOISE LEVEL	AVERAGE AIR CONSUMPTION
MODEL	MM	IN	RPM	MM	IN	KG	LB	MM	IN	IN	IN-THR'D	DB(A)	CFM
UD-50-200	3	1/8	23,000	135	5.3	0.7	1.5	21.0	0.8	5/16	3/8-24UNF	73	14
UD-50-45	6	1/4	5,000	145	5.7	0.9	1.9	21.0	0.8	5/16	3/8-24UNF	72	14
UD-50-22	8	5/16	2,200	140	5.5	0.9	2.0	21.0	0.8	5/16	3/8-24UNF	72	14
UD-60-29	8	5/16	2,900	167	6.6	1.1	2.4	22.5	0.9	5/16	3/8-24UNF	77	18
UD-60-20	8	5/16	2,000	180	7.1	1.2	2.6	22.5	0.9	5/16	3/8-24UNF	77	18
UD-60-15	8	5/16	1,600	180	7.1	1.2	2.6	22.5	0.9	5/16	3/8-24UNF	76	18
UD-60-07	13	1/2	700	219	8.6	1.4	3.1	22.5	0.9	1/2	1/2-20UNF	75	18
UD-60-04	13	1/2	500	220	8.6	1.4	3.1	22.5	0.9	1/2	1/2-20UNF	75	18
UD-80-12	13	1/2	1,200	216	8.5	1.8	4.0	26.0	1.0	1/2	1/2-20UNF	79	23
UD-80-07	13	1/2	700	239	9.4	2.3	5.1	26.0	1.0	1/2	1/2-20UNF	79	23
UD-80-04	16	5/8	400	247	9.7	2.9	6.4	26.0	1.0	5/8	5/8-16UNF	79	23
UD-50S-45	6	1/4	5,000	210	8.3	0.9	1.9	21.0	0.8	5/16	3/8-24UNF	77	14
UD-50S-22	8	5/16	2,200	205	8.1	0.8	1.8	21.0	0.8	5/16	3/8-24UNF	77	14
UD-60S-29	8	5/16	2,900	227	8.9	1.1	2.3	22.5	0.9	5/16	3/8-24UNF	77	18
UD-60S-15	8	5/16	1,600	238	9.4	1.2	2.5	22.5	0.9	5/16	3/8-24UNF	77	18
UD-60S-29C	8	5/16	2,900	276	10.9	1.5	3.3	22.5	0.9	5/16	3/8-24UNF	79	18
UD-60S-15C	8	5/16	1,600	283	11.1	1.6	3.5	22.5	0.9	5/16	3/8-24UNF	79	18

Air Hose Size: 3/8" I.D. Air Inlet: N.P.T. 1/4"

NOTE: Other models are available. Please contact AIMCO, 1-800-852-1368.

# **RIVETING HAMMERS**

Recommended Air Pressure: 85 psi

	CAPA( DURALUMIN	STEEL	BLOW PER MIN.	OVERALL	LENCTH	WEI	∩⊔т	PIST DIAM		PIST STR		NOISE LEVEL	AVERAGE AIR CONSUMPTION
MODEL	IN	IN	BPM	MM	IN	KG	LB	MM	IN	MM	IN	DB(A)	CFM
SBH-0	3/32	-	6,500	123	4.8	0.3	0.7	10.0	0.4	23	0.9	90	3.5
SBH-1A(R,H)*	7/64	-	4,000	209	8.2	0.9	1.9	11.1	0.4	56	2.2	92	5.0
BRH-1U(R,H)*	1/8	3/32	2,800	122	4.9	1.1	2.4	14.3	0.6	38	1.5	95	12.0
BRH-1US(R,H)*	1/8	3/32	2,800	180	7.1	1.0	2.2	14.3	0.6	38	1.5	95	12.0
BRH-1UG(R,H)*	1/8	3/32	2,800	187	7.4	1.8	3.9	14.3	0.6	38	1.5	95	12.0
BRH-5U(R,H)*	1/4	3/16	1,800	189	7.4	1.4	3.1	12.7	0.5	100	4.0	95	13.0
BRH-5US(R,H)*	1/4	3/16	1,800	246	9.7	1.5	3.2	12.7	0.5	100	4.0	95	13.0
BRH-5UG(R,H)*	1/4	3/16	1,800	258	10.2	2.1	4.7	12.7	0.5	100	4.0	95	13.0
BRH-1UV(R,H)*	1/8	3/32	2,800	143	5.6	1.4	3.0	14.3	0.6	38	1.5	91	12.0
BRH-5UV(R,H)*	1/4	3/16	1,800	210	8.3	1.7	3.7	12.7	0.5	100	4.0	91	13.0
BRH-1USV(R,H)*	1/8	3/32	2,800	271	10.7	1.6	3.5	14.3	0.6	38	1.5	91	12.0
BRH-5USV(R,H)*	1/4	3/16	1,800	338	13.3	1.9	4.1	12.7	0.5	100	4.0	91	12.0
BRH-7(R,H)*	-	-	3,400	168	6.6	1.6	3.6	19.1	0.8	50	2.0	100	17.0

Air Hose Size: 3/8" I.D.

Air Inlet: N.P.T. 1/4"

\* R - Round Bushing

H - Hex Bushing

# **ONE SHOT HAMMERS**

Recommended Air Pressure: 85 psi

	BLOW POWER	RIVET SET DIA X LENGTH	SHANK [	SHANK DIAMETER STROKE			LEN	GTH	WEIGHT	
MODEL	LB	IN	MM	IN	MM	IN	MM	IN	LB	KG
CB-13P	1.7	4.04 x 9.86	-	-	3.0	0.12	185	7.3	0.7	0.3
RH-25	20.4	-	10.2	0.401	29.8	1.2	213	8.4	2.0	0.9
RH-80	27.6	-	10.2	0.401	29.8	1.2	254	10.0	2.9	0.3
RH-90	103	-	10.2	0.401	29.8	1.2	328	12.9	3.5	1.6
RH-100Z	78.1	-	10.2	0.401	29.8	1.2	328	12.9	3.9	1.8
RH-200	139	-	10.2	0.401	39.8	1.2	341	13.4	4.6	2.1

Air Hose Size: 3/8" I.D.

Air Inlet: N.P.T. 1/4"

NOTE: Additional models available. Please contact AIMCO, 1-800-852-1368.

# **SCREW PRESENTERS: OVERVIEW**

For semi-automated assembly, look no further – AIMCO AcraFeed® screw presenters provide:

# **PRODUCTIVITY**

- One hand operation eliminates manual handling of screws.
- Screw is presented to operator for easy magnetic or vacuum pickup.
- Keeps workspace clear of dropped fasteners.
- Quick feed rate from oscillating hopper design up to two (2) screws per second.
- Large hopper holds approximately 1000 1500 fasteners.
- Solid design no tie downs or straps required.

### **FLEXIBILITY**

- Perfect for contract or dedicated assembly.
- Switch rails in minutes for different screw sizes.



### **ERGONOMICS**

Allows for fewer arm and hand movements.

### RELIABILITY

- · Heavy duty industrial design.
- Modular design for easy repairs.

# QUALITY

- · Uses existing or our new torque control drivers.
- · Keeps stray fasteners from getting into assemblies.

# **FASTENING IN 3 EASY STEPS**



Load screws into the hopper.
There is no side to load
unit and no gates to limit
capacity.



Address screw with magnetized bit.



**ΔC3Δ·FEED**<sup>®</sup>

Bring screw to workpiece and fasten parts.



# A-50 SCREW PRESENTERS



# STANDARD SCREW PRESENTERS

	ADDITIONAL RAIL	SCRE\	W SIZE	MAX SCRE	W LENGTH
MODEL	PART NO.	IN	MM	IN	MM
A-50A-0	AR-O	#0	1.4	.39	10
A-50A-1.7	AR-1.7	-	1.7	.39	10
A-50B-1	BR-1	#1	2.0	.75	18
A-50B-2	BR-2	#2	2.3	.75	18
A-50B-3	BR-3	#3	2.6	.75	18
A-50B-4	BR-4	#4	3.0	.75	18
A-50C-6	CR-6	#6	3.5	.75	18
A-50C-8	CR-8	#6-8	4.0	.75	18
A-50C-10	CR-10	#10	5.0	.75	18

Dimensions: 5.1 (W) x 8.5 (L) x 5.3 (H) Weight: 7.0 lbs.

# **ROBOTIC SCREW PRESENTERS**

				•	
	ADDITIONAL RAIL	SCRE'	W SIZE	MAX SCRE	EW LENGTH
MODEL	PART NO.	IN	MM	IN	MM
A-50ARBT-0	AR-RBT-0	#0	1.4	.39	10
A-50ARBT-1.7	AR-RBT-1.7	-	1.7	.39	10
A-50BRBT-1	BR-RBT-1	#1	2.0	.70	18
A-50BRBT-2	BR-RBT-2	#2	2.3	.70	18
A-50BRBT-3	BR-RBT-3	#3	2.6	.70	18
A-50BRBT-4	BR-RBT-4	#4	3.0	.70	18
A-50CRBT-6	CR-RBT-6	#6	3.5	.70	18
A-50CRBT-8	CR-RBT-8	#6-8	4.0	.70	18
A-50CRBT-10	CR-RBT-10	#10	5.0	.70	18

Dimensions: 5.1" (W) x 10.8" (L) x 5.3" (H) Weight: 9.2 lbs.

# **COMPACT ROBOTIC SCREW PRESENTERS**

	ADDITIONAL RAIL		NOMINAL SCREW SIZE		CREW GTH
MODEL	PART NO.	IN	MM	IN	MM
A-50ARBTC-0	AR-RBTC-0	#0	1.4	.390	10
A-50ARBTC-1.7	AR-RBTC-1.7	-	1.7	.390	10
A-50BRBTC-1	BR-RBTC-1	#1	2.0	.700	18
A-50BRBTC-2	BR-RBTC-2	#2	2.3	.700	18
A-50BRBTC-3	BR-RBTC-3	#3	2.6	.700	18
A-50BRBTC-4	BR-RBTC-4	#4	3.0	.700	18
A-50CRBTC-6	CR-RBTC-6	#6	3.5	.700	18
A-50CRBTC-8	CR-RBTC-8	#6-8	4.0	.700	18
A-50CRBTC-10	CR-RBTC-10	#10	5.0	.700	18

Dimensions: 7.2 (L) x 4.9 (W) x 5.7 (H) Weight: 6.7 lbs.

# WHICH TO USE...?

### **Standard Screw Presenters**

For manual assembly stations where the operator must otherwise pick up and hold fasteners by hand.

### **Robotic Screw Presenters**

For automated fastening systems or manual systems using vacuum assist to pick up non-ferrous fasteners.

# **Compact Robotic Screw Presenters**

For automated systems, or manual systems, using vacuum-assist to pick up nonferrous fasteners when work space is limited,

# **OPTIONAL ACCESSORIES**

MODEL	PART NO.
Mag-O-Net Bit Magnetizer	AM1/4Z, AM5Z, AM3/16Z
A-50B Series Bit Guide Protector	N8#23
A-50C Series Bit Guide Protector	NJ08004TIN8#45

# ACRA-FEED AUTOMATIC SCREW FEED SYSTEMS

# Reduces Cycle Time By Approximately Two Seconds Per Fastener

### FEATURES AND BENEFITS

- · Delivers fastener directly to the driver.
- For #2 #10 fasteners, up to 1 inch long.
- Available for captive washer type screws (A-315V).
- · Feed speed of up to 1 screw per second.
- System includes feeder, hose assembly, air screwdriver, and FRL.

### **PRODUCTIVE**

- · Eliminates reaching for fasteners.
- Most jams are easily cleared on the line.
- · Frees operator's hand for productive use.
- Large hopper holds between 1000-5000 fasteners.

# **ERGONOMIC**

- Eliminates manual handling of fasteners and shavings.
- Reduces workspace clutter.
- · Keeps workspace clean of dropped fasteners.
- Torque reaction of standard driver is minimal and can be eliminated with optional Ergo-Arm<sup>®</sup>.

# RELIABLE

- Longest warranty in the industry 3 years.
- · Rocking Bar design only operates as needed.
- "Photo eyes" maximize motor life.
- Design eliminates burrs and shavings by minimal handling of the fastener.
- Durable head assembly lasts for years.
- There are more Acra-Feed® systems in use than any other system.

	APPLICABLE	SCREW	LENGTH				DIMENSIONS
MODEL	SCREWS	IN	MM	HOPPER CAPACITY	MAX FASTENING SPEED	WEIGHT (LB)	LXWXH(IN)
A-2100 Series	M2-M5 (#2 - #10)	1/4-1	6-25	1,500cc (1,000-5,000 pcs)*	60 screws/min*	68	7 x 17 x 16
A-315V Series	M2-M5 (#2 - #10)	1/4-1	6-25	450cc (500-2,500 pcs)*	60 screws/min*	74	10 x 21 x 16

<sup>\*</sup> Dependent on screw size

Power: AC 110V, 20W, AC 220V by request. Contact AIMCO at 1-800-852-1368.





**HOW TO ORDER:** Acra-Feed systems are application-specific and configured to the unique workpiece and requirements of the user. Quotations are provided from a review of sample workpieces, 25 fasteners, and required torque specifications.

# **GRAVITY-DEFYING BALANCERS**

### TW-SERIES BALANCERS



### TW-0 and TW-00

- Gravity defying / "true balance".
- No tension buildup to cause worker fatigue.
- Easy external direct drive tensioning.
- 360 degree upper swivel.
- Safety cable provision.
- Tool clip included.

	CAPAC	CITY	ANTI-GRAVITY	
MODEL	LB	KG	CAPACITY (LB)	CABLE
TW-00	1.1 - 3.3	0.5 - 1.5	2.5 - 3.0	18" stranded steel cable 1/8 dia.
TW-0	1.1 - 3.3	0.5 - 1.5	2.5 - 3.0	3.3-ft stranded steel cable 1/8" dia
TW-3	2.2 - 6.6	1.0 - 3.0	4.5 - 6.0	4.3-ft stranded steel cable 5/32" dia.
TW-5	5.5 - 11.0	2.5 - 5.0	8.0 - 10.5	4.3-ft stranded steel cable 5/32" dia.
TW-9	9.9 - 19.8	4.5 - 9.0	15.0 - 19.0	4.3-ft stranded steel cable 5/32" dia.
TW-15	19.8 - 33.0	9.0 - 15.0	26.0 - 32.5	4.3-ft stranded steel cable 5/32" dia.
TW-22	33.0 - 48.4	15 - 22	41.0 - 48.0	5-ft stranded steel cable 3/16" dia.
TW-30	48.4 - 66.0	22 - 30	58.0 - 65.5	5-ft stranded steel cable 3/16" dia.
TW-40	66.0 - 88.0	30 - 40	77.5 - 87.5	5-ft stranded steel cable 3/16" dia.
TW-50	88.0 - 110.0	40 - 50	100.0 - 109.5	5-ft stranded steel cable 3/16" dia.
TW-60	110.0 - 132.0	50 - 60	122.0 - 131.0	5-ft stranded steel cable 3/16" dia.
TW-70	132.0 - 154.0	60 - 70	144.0 - 153.0	5-ft stranded steel cable 3/16" dia.



# TW-3 to TW-70 Series

### TW-3 through TW-70

- Tapered drum allows "true balance" throughout cable travel.
- Easy external direct drive tensioning.
- Cast aluminum casing for durability.
- Permanent lubrication.
- 360 degree top swivel.
- Enclosed spiral spring for added safety.
- Safety chain provision (TW-3 through TW-15 models)
- Automatic safety lock plus manual drum lock (TW-22 through TW-70)

# **ASB-SERIES BALANCERS**

- Built-in Safety Features: The cable, drum, and enclosed spring are fully visible without opening the unit for easy and convenient safety checks. The sturdy spiral spring is enclosed for greater control and safety.
- Ergonomic Spring Release: The automatic safety lock provides extra control.
- Extended Cable Length: Stainless steel cables allow for extended reach on applications.
- Enhanced Gear Mechanism: Allows for more exact adjustment of tension.
- No Recoil and Low Resistance: Tapered drum style provides gravity defying tool positioning and low travel.



ASB-OC Gravity Defying and Hand Adjustable Balancer



ASB-3C ASB-5C

MODEL	CAPACITY		STR	OKE	WEIGHT		
ASB-OC	1.1 - 3.3 lb	0.5 - 1.5 kg	51.1 in	130 cm	1.5 lb	0.7 kg	
ASB-3C	3.3 - 6.6 lb	1.5 - 3 kg	86.4 in	220 cm	3.0 lb	1.4 kg	
ASB-5C	5.5 - 11 lb	2.5 - 5 kg	86.4 in	220 cm	3.4 lb	1.5 kg	

# **LINE REEL BALANCERS / RETRACTORS**

# **LINE REEL BALANCERS**

### **LR-Series**

- Designed for light duty applications with small pneumatic tools.
- Integrating air hose and support cable keep work areas clean.
- Adjustable ball stop for optional positioning.
- 1/4" I.D. polyvinyl hose with 1/4" NPT inlet.
- 360 degree upper swivel.
- Maximum 142 PSI



MODEL	HUSE L	ENGIH	CAPACITY			
LR-09B-90	35.5 in	90 cm	3 lb	1.5 kg		
LR-09B-200	78.3 in	199 cm	3 lb	1.5 kg		

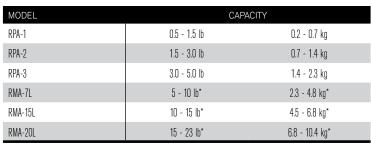
# **RETRACTORS**

### **RPA Series**

- · No tools needed to set tension.
- 5 ft nylon coated steel cable.
- Reinforced hanging bracket includes safety cable provision.
- Adjustable cable stop.
- Three (3) models support weight 0.5-5 lb.
- Tool clip included.

### **RMA-L Series**

- · Steel housing with polyester finish.
- Reinforced hanging bracket includes safety cable provision.
- 8 ft of 3/32" diameter coated steel cable.
- Permanently lubricated.
- Tool clip included.
- · External tension adjustment.
- Ratchet cable lock.



<sup>\*</sup> With ratchet lock





# **ERGO-ARM® TOOL SUPPORT SYSTEMS**

# **FEATURES AND BENEFITS**

- Ergonomic support for electric and pneumatic tools reduces operator fatigue.
- Increases productivity, consistency, and accuracy.



## PARALLEL ARM SERIES AD-D1098-P, AD-D1098-PAC, AD-D1098-PACE

- Minimizes operator control.
- · Vertical adjustment eliminates cross-threading.
- · Fixtured tool increases repeatability.
- · Adjustable reach.
- · Available in air or oil cylinder models.
- Electric tool mount standard on PACE model.



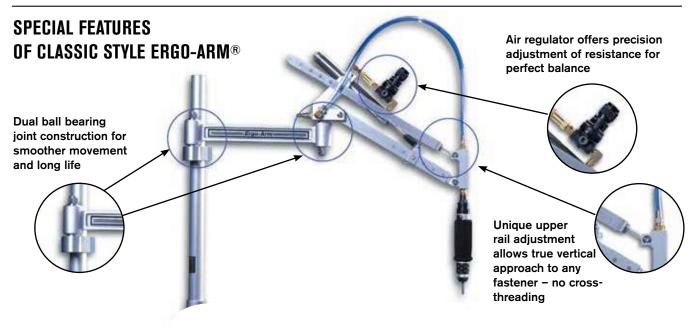
### SINGLE ARM SERIES AD-D1098-S, AD-D1098-SAC

- Full tool rotation.
- Operator control.
- · Adjustable reach.
- · Compatible with automatic screw feeder.
- Available in air or oil cylinder models.

			RE	ACH	CAPA	ACITY	MAXIMUM	TORQUE*
MODEL	ARM STYLE	TOOL MOUNT	IN	MM	LB	KG	IN-LB	NM
AIR CYLINDE	ER SERIES							
AD-D1098-SAC	Single	Air manifold	4 - 33	102 - 838	0 - 15	0 - 7	110	12
AD-D1098-PAC	Parallel	Air manifold	4 - 33	102 - 838	0 - 15	0 - 7	110	12
AD-D1098-PACE	Parallel	Electric	4 - 33	102 - 838	0 - 15	0 - 7	110	12
OIL CYLINDE	R SERIES							
AD-D1098-S	Single	Air manifold**	4 - 33	102 - 838	0 - 15	0 - 7	110	12
AD-D1098-P	Parallel	Air manifold	4 - 33	102 - 838	0 - 15	0 - 7	110	12

<sup>\*</sup> Max torque allowed may be dependent on tool clutch type and joint rate

<sup>\*\*</sup> For single arm electric tool mount, order EAP-202ED-KIT



# **ERGO-ARM® ACCESSORIES AND LINEAR ARM**

### **ERGO-ARM® ACCESSORIES**

- End-of-Arm Tooling options for the Ergo-Arm® allow you to choose the style right for your application.
- Tool holders permit the tool to swivel, rotate, swing, or twist. Heavy duty construction can lock out any single, or combination of rotating, actions allowing only the motions required by your application.
- End-of-Arm Tooling Brackets are simple to use. One Ergo-Arm® can be used for more than one application.



EAP-202ED-KIT **Electric Driver Tool** Mount Kit

# FOR USE WITH MODELS AD-D1098-P/PAC

EAP-203-ASSY Air Manifold **Tool Mount Kit** (Standard on parallel units)



EAP-202ASSY Driver Tool Mount

### LINEAR ARM

- Smooth movement and perfect balance while limiting operator control.
- Machined stainless steel and ball bearing construction.
- Two high quality tool balancers are included with each arm to provide a wide range of adjustment.



LQ-0002 Linear Arm ships with two ASB-0C balancers.

### LQ-0004 Linear Arm ships with two TW-3 balancers.

# LQ-0024H Heavy Duty

ships with two TW-3 balancers.



**EAA-04 -** Provides easy conversion of standard Ergo-Arms® to the parallel style.

		MAX. F	REACH	WEIGHT CAPACITY		MAX TORQUE		HEIGHT		STANDARD TOOL MOUNT DIAMETER	
MODEL	DESCRIPTION	IN	CM	LB	KG	FT-LB	NM	IN	CM	IN	СМ
LQ-0002	Linear Arm	14	37	1- 5	0.5 - 2.3	20	27	24	61	1.6	4.1
LQ-0004	Linear Arm	24	58	3 - 10	1.4 - 4.5	25	34	36	91.4	1.6	4.1
LQ-0024H	Heavy Duty Arm	24	58	3 - 10	1.4 - 4.5	75	102	36	91.4	1.6	4.1

# **CUSTOM REACTION DEVICES**

- Torque Tubes
- Articulating Torque Arms
- Ergo Arm 3 Zero Gravity Arms
- **Smart Arms**





Articulating **Smart Carbon** Arm



Articulating **Torque Arm** 



Carbon Fiber Arm



Ergo-Arm 3



**Torque Tube** 

Contact your AIMCO sales representative, 1-800-852-1368, in order to determine the exact torque reaction system needed to improve the productivity and ergonomics of your assembly station!

# **CARBON TORQUE ARMS / TUBES**



Carbon Arms and Carbon Torque tubes are simple, lightweight yet strong devices designed to absorb torque reactive forces.

These innovative devices adapt to a wide range of tools and eliminate hazards to operators created during fastening processes with power tools. AIMCO's range of Carbon Arm products are highly flexible and modular in nature.

# FEATURES AND BENEFITS

- Absorb torque reactions created by continuous drive tools.
- Counter balance tool weight when configured with AIMCO's wide array of tool balancers (page 128) or with integrated balancer kits
- Orient tool correctly to the workpiece to improve efficiency and reduce operator effort in alignment to the fastener



# **POSITIONING SYSTEM**

AIMCO's compact, selfcontained ACA-Posix process visualization system guides operators through their assigned tasks. It connects to ACA-P2 series arms with integrated balancer kits

# FEATURES AND BENEFITS

- HMI with an embedded 7" Color LCD Touch Screen Display
- Storage for up to 500 unique assembly sequences
- Communicates directly with Power Tool controllers over digital I/O
- · Intuitive and simple programming
- Store and display product images or CAD drawings. Images/drawings are displayed with targeting sequences to direct operators easily through their task.
- Output for synchronizing with line controls

# TELESCOPIC TORQUE ARMS



MODEL	MIN. LENGTH MM	MAX. LENGTH MM	MAX TORQUE NM
ACA10-1000	495	1105	10
ACA10-1500	665	1605	10
ACA15-1000	486	1066	15
ACA15-1500	646	1556	15
ACA15-2000	806	2046	15
ACA40-1000	486	1066	40
ACA40-1500	646	1556	40
ACA40-2000	806	2046	40
ACA40-2500	986	2576	40
ACA80-1500	658	1586	80
ACA80-2000	828	2078	80
ACA80-2500	998	2588	80
ACA150-1500	668	1578	150
ACA150-2000	838	1918	150
ACA150-2500	1003	2248	150
ACA220-1500	668	1578	220
ACA220-2000	838	2088	220
ACA220-2500	1003	2588	220



AUA-A OCITCO							
MODEL	MIN. LENGTH MM	MAX. LENGTH MM	MAX TORQUE NM				
ACA-V15-1000	777	1345	15				
ACA-V15-1500	937	1835	15				
ACA-V15-2000	1097	2325	15				
ACA-V40-1000	777	1345	40				
ACA-V40-1500	937	1835	40				
ACA-V40-2000	1097	2325	40				
ACA-V40-2500	1277	2855	40				
ACA-V80-1500	949	1865	80				
ACA-V80-2000	1119	2357	80				
ACA-V80-2500	1289	2867	80				
ACA-V150-1500	960	1957.5	150				
ACA-V150-2000	1129	2357	150				
ACA-V150-2500	1294	2862	150				
ACA-V220-1500	960	1957.5	220				
ACA-V220-2000	1129	2357	220				
ACA-V220-2500	1294	2867	220				



# ACA-P2 Series X,Y Axis Encoders (Requires ACA-POSIX System)

MODEL	MIN. LENGTH MM	MAX. LENGTH MM	MAX TORQUE NM
ACA-P215-1000	647	1227	15
ACA-P215-1500	803	1713	15
ACA-P215-2000	977	2227	15
ACA-P240-1000	647	1227	40
ACA-P240-1500	803	1713	40
ACA-P240-2000	977	2227	40
ACA-P240-2500	1157	2737	40
ACA-P280-1500	830	1757	80
ACA-P280-2000	1000	2249	80
ACA-P280-2500	1169	2760	80
ACA-P2150-1500	839	1749	150
ACA-P2150-2000	1009	2087	150
ACA-P2150-2500	1174	2419	150
ACA-P2220-1500	839	1749	220
ACA-P2220-2000	1009	2259	220
ACA-P2220-2500	1174	2760	220

# **CARBON TORQUE ARMS / TUBES**

# **ANTI-ROTATION TORQUE ARMS**



# **ACTT SERIES TORQUE TUBES**

MODEL	MIN. LENGTH MM	MAX. LENGTH MM	MAX TORQUE NM
ACTT-V15-600 150	150	600	15
ACTT-V15-800 300	300	800	15
ACTT-V40-600 150	150	600	40
ACTT-V40-850 300	300	850	40
ACTT-V40-1500 600	40-1500 600 600 1500		40
ACTT-V80-900 300	300	900	80
ACTT-V80-1500 600	600	1500	80
ACTT-V80-2100 900	900	2100	80



# ACPTT SERIES TORQUE TUBES FOR ACSA ARTICULATING SUPPORT ARMS

MODEL	MIN. LENGTH MM	MAX. LENGTH MM	MAX LENGTH MM
ACPTT-V15-510 150	150	600	15
ACPTT-V15-710 300	300	800	15
ACPTT-V40-510 150	150	600	40
ACPTT-V40-760 300	300	850	40
ACPTT-V40-1410 600	600	1500	40
ACPTT-V80-810 300	300	900	80
ACPTT-V80-1410 600	600	1500	80

# **ACCESSORIES**

# **TOOL HOLDERS**

	MODEL	DESCRIPTION	MIN. TOOL GRIP (MM)	MAX. TOOL GRIP (MM)
FOR TELESCOPIC ARMS				
3-1 A-	ACAH-15	Base tool holder 4 screws	27	45
	ACAH-40-80	Base tool holder 4 screws	30	60
	ACAH-150-220	Base tool holder 4 screws	40	70
***	Multi-Position			
	ACAH-15-MPE2745	Multi-pos tool holder interface	27	45
12	ACAH-150220-MPE4070	Multi position tool holder	40	70
	ACAH-4080-MPE2745	Multi-pos tool holder	27	45
· al	Swivel			
	ACAH-S154080	Swivel tool holder 20 to 35 mm	20	35
	ACAH-SL15150	Swivel tool holder 40 to 55 mm	40	55
FOR ANTI-ROTATION ARMS				
	ACAHTT-15A-3060	Angle Tool Holder - 15 Nm Arm	30	60
Straight	ACAHTT-15S-2745	Straight Tool Holder - 15 Nm Arm	27	45
	ACAHTT-4080A-3165	Angle Tool Holder - 40/80 Nm Arms	31	65
A.	ACAHTT-4080S-2745	Straight Tool Holder - 40/80 Nm Arms	27	45
(D)				

# ACSA ARTICULATING SUPPORT ARMS



ACSA-600-1500

MODEL	MAX REACH MM	MAX HEIGHT MM	MAX TORQUE NM
ACSA-600-1500	600	1500	80
ACSA-800-1500	800	1500	80
ACSA-1000-1500	1000	1500	80

# BALANCER KITS FOR ACA-P2 SERIES

MODEL	MIN. CAPACITY (KG)	MAX. CAPACITY (KG)
ACA-P2BK-4	2	4
ACA-P2BK-6	4	6
ACA-P2BK-8	6	8
ACA-P2BK-10	8	10
ACA-P2BK-14	10	14



# **WORKSTATION COMPONENTS AND ASSEMBLIES**

# COMPONENTS

Steel with beige polyester finish. Use for vertical and horizontal workstation support.



PART NUMBER	30# TRACK
AT3-3	3 ft track
AT3-4	4 ft track
AT3-6	6 ft track
AT3-9*	9 ft track



PART	30#
NUMBER	TRACK
NUMBER	IRACN
AT5-3	3 ft track
NIU U	
AT5-4	4 ft track
AT5-6	l 6 ft track
ATE O+	0.61
AT5-9*	9 ft track
AT5-12*	12 ft track
AIU-IZ	12 IL LIAUK



# TRACK NUT (ATN-3/5)

Zinc plated steel. Use to attach accessories to track, as end stops, or to isolate rolling accessories. Fits both 50 lb. and 30 lb. track.



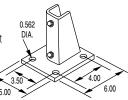
### END STOP (AES-3/5)

Zinc oxide finish. Use to prevent balancer trolley from "overtraveling" the horizontal track.



### MOUNTING PLATE

(AMP-5) Black polyester finish. Use as a base to mount vertical uprights.



# END CAP (AEP-3/5)

Black molded vinyl. Use to cap track ends for a professional finish.

- · AEP-3 for 30 lb. track
- AEP-5 for 50 lb. track



# ANGLE BRACKET (AB-3/5)

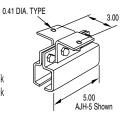
Black polyester finish. Use to mount horizontal track to vertical track. Fits both 50 lb. and 30 lb. track.



### BRACKET (AJH-3/5) Black polyester finish. Use to couple and hand

end-to-end track. • AJH - 3 for 30 lb. track





### **BALANCER TROLLEY (ABT-3/5)**

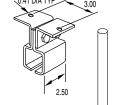
Black polyester finish. Use as moving support for tool balancers, hose, and cable. Quality ball bearing wheels for long life and smooth tracking.

- ABT-3 for 30 lb track (1.00 dia)
- ABT-5 for 50 lb track (1.25 dia)

### HANGER BRACKET

(AHB-3/5)Black polyester finish. Use to suspend track at right angle.

- AHB-3 for 30 lb. track
- AHB-5 for 50 lb. track



### **VERTICAL COLUMN (AVC-5\*)**

Beige polyester finish, 3" diameter x 9 ft upright steel column with welded base. Use as floor mount for extra stability with jibs or workstation components.

### **HOSE/CABLE TROLLEY**

Black polyester finish. Use for moving cable or hose festoon. Supports hose cable OD .60-.94.

- · AIC3-2 for 30 lb. track
- · AIC5-2 for 50 lb. track

### U-BOLTS (AUB-5)

Zinc plated steel. Use to secure boom bracket, or any flat metal plate, to AVC-5 (sold individually).

# END CLAMP (AEC5-2)

Black polyester finish. Use as end stop with hose carrier for festoon. Cable/hose OD .60-.94.



# SUPPORT CLAMPS (ASC-3/5)

Black polyester finish. Use as additional support for track.

- ASC-3 for 30 lb. track
- ASC-5 for 50 lb. track

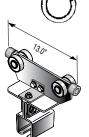
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### TOOL CLIP (SH-5)

Steel clip with safety latch. Use for tool attachment and as replacement clip for lightweight tool balancers. Measures 2.37" long.

### ROLLING HANGER (ABT5-R)

Black polyester finish. Use as support for rolling track. Allows X/Y axis movement, includes ball bearing wheels



### 90° CONNECTOR FOR 3/8" HOSE (WSCH)

3/8" I.D. Brass. Use to provide stable transfer point from air line to tool. 90 degree connector attaches to ABT-5.



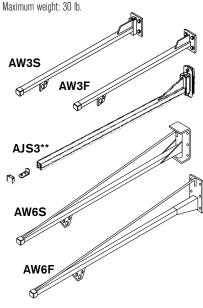
# WALL- AND FLOOR-**MOUNTED JIBS**

3 FT. SWINGING JIB (AW3S)

3 FT FIXED JIB (AW3F)

# 3 FT. SWINGING JIB FOR CHANNEL MOUNT

Jibs are mounted to wall or beams to create free standing workstations. End stop, end cap, and balancer trolley included.



## 6 FT. SWINGING JIB (AW6S) 6 FT FIXED JIB (AW6F)

Jibs can be wall mounted or attached to vertical column (AVC-5) to create a freestanding workstation. End stop, end caps, and balancer trolley are included. Maximum weight: 50 lbs.

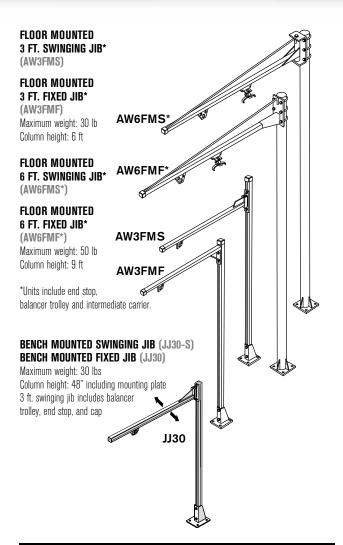
All complete assemblies are beige polyester finish and include balancer trolley, end caps, and end stops. Floor mounted assemblies are not able to ship via UPS.

### When choosing a workstation system, remember...

Total weight capacities should include tool balancer, hose/cable, and tool/fixture. Units need to be supported vertically and horizontally every 6 ft.

- \* Additional freight may apply
- \*\* AJS3 Does not include balancer trolley

# **WORKSTATION COMPONENTS AND ASSEMBLIES**



# AIMCO WORKSTATION KIT

# BENCH MOUNTED WORKSTATION WITH TORQUE ARM (JJ30-TA\*\*) • 5 lb. maximum weight (RPA-3 included) • 5' column height including mounting plate • 38" jib length (swinging) • 15 ft-lb torque rating • 3/8" NPT inlet • 1/4" NPT outlet

- Beige polyester finish
- 1/4" braided air hose
- 21" maximum vertical arm travel

# CREATE A CUSTOM SUPPORT SYSTEM USING AIMCO'S QUALITY PRODUCTS

- Organize work areas to create a safe, productive working environment.
- Reduce risk of injury to assembler by providing support for heavy tools.
- Protect valuable tools, fixtures, and monitoring devices from damage by suspending them out of the way.

# AIMCO BASIC WORKSTATION KIT (ATW-50)



- 50 lb maximum weight capacity
- 48" uprights
- 36" extensions
- · Table mounts included
- 6' tool rail with rolling trolley included
- All necessary hardware included

# TROLLEY MOUNTED TORQUE ARM WITH 3-LB RETRACTOR

AND HOSE (FA-50-2\*)

Ergonomic arm absorbs torque reaction. Moves front to back along overhead jib.

(TA-50-2) Moves side to side on overhead track



# **TOOL BASKET (21226)**Mounts easily to any work area

Mounts easily to any work area to hold pistol and angle style tools.



AIMCO can customize a workstation for you. Contact your AIMCO sales representative, 1-800-852-1368.

<sup>\*\*</sup>Additional freight may apply

<sup>\*\*</sup>For use with pneumatic tools only

# **AIR PREPARATION UNITS**

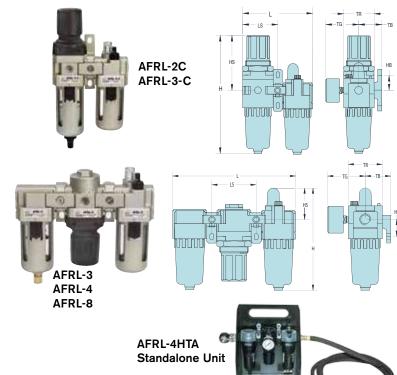
### AFRL STACKING FILTER/REGULATORS

Stacking filter/regulator combinations provide air filtration and precise regulation in a single unit for easy

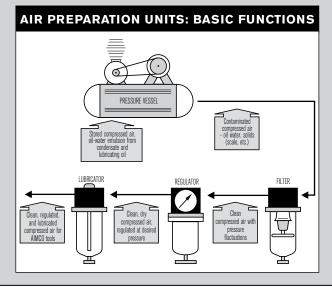
mounting and installation.

### FEATURES AND BENEFITS

- All models include L-mount bracket, gauge, and metal bowl shields.
- Polycarbonate filter and lubricator bowls (metal bowls standard on AFRL-8).
- 25-micron filter included on all models.
- Regulating range: 7 125 PSI.
- Custom order upgrade items include metal bowl, 5 micron filter, semiautomatic filter drain, and reduced PSI range regulator. Contact an AIMCO sales representative for more information, 1-800-852-1368.



MODEL	PORT	GAUGE	FLOW	/ RATE	BOWL	Н	НВ	HS	L	LS	TB	TG	TR
		PORT	CFM	L/MIN	SHIELD	IN/MM	IN/MM	IN/MM	IN/MM	IN/MM	IN/MM	IN/MM	IN/MM
AFRL-2	1/4"	1/8"	70	2,000	yes	6.16 (156.5)	1.39 (35.3)	1.50 (38.1)	7.13 (181.1)	2.52 (64.0)	1.61 (41.0)	2.39 (60.7)	2.09 (53.1)
AFRL-2-C	1/4"	1/8"	60	1,700	yes	8.31 (211.1)	1.38 (35.1)	3.64 (92.5)	4.61 (117.1)	2.30 (58.4)	1.61 (40.9)	2.39 (60.7)	2.09 (53.1)
AFRL-3	3/8"	1/4"	140	4,000	yes	7.54 (191.5)	1.57 (40.0)	1.61 (40.9)	9.37 (238.0)	3.31 (84.1)	1.97 (50.0)	2.58 (65.5)	2.76 (70.1)
AFRL-3-C	3/8"	1/4"	105	3,000	yes	10.31 (261.9)	1.57 (39.9)	4.41 (112.0)	6.06 (153.9)	3.03 (77.0)	1.97 (50.0)	2.58 (65.5)	2.76 (70.1)
AFRL-4	1/2"	1/4"	140	4,000	yes	7.54 (191.5)	1.57 (40.0)	1.61 (40.9)	9.37 (238.0)	3.31 (84.1)	1.97 (50.0)	2.58 (65.5)	2.76 (70.1)
AFRL-8	1"	1/4"	180	5,000	yes	10.69 (271.5)	1.97 (50.0)	1.89 (48.0)	11.81 (300.0)	4.13 (104.9)	2.75 (69.9)	2.97 (75.4)	3.54 (89.9)



The supply of clean, dry air is essential to the operation of pneumatic powered tools. Use only clean filtered air for longer tool life. Provide proper airflow (CFM) and regulate air pressure (PSI) for optimum performance.

# To determine unit size for application, you need to know:

- Total air flow (CFM) required for application.
- Size of incoming air line and size of air line required by tool.
- Air supply pressure (PSI)
- · Allowable pressure drop.
- Does the application requires lubrication?
- Does the overall system have the required capacity?

# **POLYURETHANE AIR HOSE**

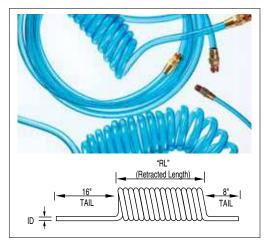
- Durable polyurethane hose is highly chemically resistant.
- · Excellent recoil memory.
- · Maximum flexibility and light weight.
- Transparent hose color. Opaque and custom colors available.
- Burst pressure 428 PSI @ 68° F.
- Working temperature: -104° F to 175° F.



# STRAIGHT AIR HOSE (Sold per foot)

MODEL	DESCRIPTION
ASH-250Z	1/4" I.D.
ASH-375Z	3/8" I.D.
ASH-500Z	1/2" I.D.

Available with or without hose fittings. Ask about full-reel pricing.



# COILED AIR HOSE ASSEMBLIES (Include reusable swivel fitting)

MODEL	DESCRIPTION (OD X ID X LENGTH)	RETRACTED LENGTH	NPT FITTINGS
ASH-250C-10MSZ	3/8" x 1/4" x 10'	7"	1/4"
ASH-250C-15MSZ	3/8" x 1/4" x 15'	9 1/2"	1/4"
ASH-250C-25MSZ	3/8" x 1/4" x 25'	15 1/2"	1/4"
ASH-375C-15MSZ	9/16" x 3/8" x 15'	10"	3/8"
ASH-375C-25MSZ	9/16" x 3/8" x 25'	14"	3/8"
ASH-500C-15MSZ	3/4" x 1/2" x 15'	13"	1/2"
ASH-500C-25MSZ	3/4" x 1/2" x 25'	23"	1/2"

Working pressure 100 PSI

Custom length coil assemblies are available in minimum order quantities.

### **HELPFUL HINTS FOR AIR HOSE USE**

- Use recommended ID air hose and fittings.
- Replace air hose regularly to help maintain clean air.
- A clear hose allows you to see water or dirt accumulation in hose.
- Use correct length of hose to reduce air loss and pressure drop.
- Use locking quickdisconnect couplers for additional safety.

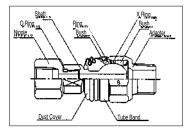
# **AIR LINE ACCESSORIES**

# **ERGONOMIC TWIST PLUGS**

These unique, ergonomically designed hose fittings provide 360° rotation and 35° angled rotation in any direction.

- Two rotation points prevent kinking of air hose.
- Design ensures full air pressure flow.
- Rotating joint comes with polyurethane dust cover.
- Heavy duty construction for maximum life.

MODEL	DESCRIPTION
TS-20NP-3NPT	1/4" NPT Female x 3/8" NPT Male
TS-30NP-2NPT	3/8" NPT Female x 1/4" NPT Male
TS-20NP-2NPT	1/4" NPT Female x 1/4" NPT Male
TS-20US-2NPT	1/4" US Plug x 1/4" NPT Male
TS-20US-3NPT	1/4" US Plug x 3/8" NPT Male
TS-30US-2NPT	3/8" US Plug x 1/4" NPT Male
TS-30US-3NPT	3/8" US Plug x 3/8" NPT Male





# AIR HOSE FITTINGS

MODEL	CAPACITY
250-RZ	1/4" NPT Rigid Fitting
250-SZ	1/4" NPT Swivel Fitting
375-RZ	3/8" NPT Rigid Fitting
375-SZ	3/8" NPT Swivel Fitting
500-RZ	1/2" NPT Rigid Fitting
500-SZ	1/2" NPT Swivel Fitting

# **AIR LINE ACCESSORIES**

# **QUICK COUPLERS**

Manual ball couplers designed for use with ergonomic twist plugs. Brass with nitrile seals, rated to 300 PSI, from -40° to +250° F.



MODEL	DESCRIPTION
B23	1/4" NPT F x 1/4" QC Brass Coupler
B23E	1/4" NPT F x 3/8" QC Brass Coupler
B25	3/8" NPT F x 3/8" QC Brass Coupler

# IN-LINE MINI LUBRICATORS

These mist type inline lubricators keep air operated tools performing with greater efficiency. The patented "on the tool" mist lubricator system is more cost effective.



MODEL	DESCRIPTION	WEIGHT	LENGTH	NPT	TOOL CFM
7006	Mini Lube	2 1/2 oz	2 1/4	1/4	3 - 7
7007	Midget Lube	3 1/2 oz	2 1/2	1/4	7 - 15
7008	Master Lube	5 oz	3 1/4	3/8	15 - 30

# **IN-LINE MINI REGULATORS**

Easily adjust airflow with the turn of a dial.

MODEL	CAPACITY
932-100-0	1/8" NPT
932-110-0A	1/4" NPT



# **SWIVEL AIR FITTINGS GAUGES**

For use with most portable air tools, including screwdrivers, drills, grinders, sanders, buffers, staple guns, and more. Rotates 360° for awkward angles.



MODEL	INLET	WEIGHT	MAX PSI	TOOL CFM
7021	1/4" NPT	3 oz	Up to 125	25
7021AG	1/4" NPT	3 oz	Up to 125	25
7041A	3/8" NPT	11 oz	Up to 125	50
7041AG	3/8" NPT	3 oz	Up to 125	50
7051	1/2" NPT	7 oz	Up to 125	60

# FITTINGS AND ADAPTERS

Brass pipe fittings for use as medium and low pressure connectors. Meets functional requirements of SAE J530, SAE J531, ASME and ASA. Rated 1,000 PSI from -65° to +250° F.



MODEL	DESCRIPTION
222P-6-4	3/8 NPT F x 1/4 NPT M Adapter
222P-8-6	1/2 NPT F x 3/8 NPT M Adapter
222P-12-8	3/4 NPT F x 1/2 NPT M Adapter
209P-6-4	1/4 NPT F x 3/8 NPT M Bushing
209P-8-6	3/8 NPT F x 1/2 NPT M Bushing

# MINI AIR GAUGE SWIVEL JOINT KITS

- Bi-directional 360° rotation.
- Keeps air hose straight and untwisted.
- Decreases operator fatigue.



•	
MODEL	DESCRIPTION
7021AG	1/4 PT/NPT
7041AG	3/8 PT/NPT



www.aimco-global.com 800-852-1368

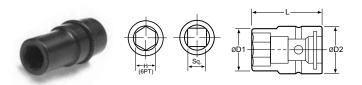
# STANDARD FASTENER TOOLS

# STANDARD FASTENER TOOLS

Connect your tool to the application with Bits, Sockets and Nutsetters from AIMCO.

AIMCO has assembled the most complete package of commonly used screwdriver bits and nutsetters in the industry. Our goal is to supply you with the highest quality bits and nutsetters for your fastener needs. Whether you're in electronics, aerospace, automotive, or general industry, AIMCO has the bits and nutsetters to fit your needs.

# **IMPACT SOCKETS**



			D1	D1	D2	D2	L	L
	PART NO	HEX	MM	IN	MM	IN	MM	IN
	3/8" Squa	aro Drive	2					
	3/0 3qu	are Drive	<del>ರ</del>					
	A31/4	1/4"	10	0.39	19	0.75	34	1.34
SAE	A35/16	5/16"	12	0.47	19	0.75	34	1.34
	A33/8	3/8"	15	0.59	19	0.75	34	1.34
C	A306	6 mm	10	0.39	19	0.75	34	1.34
METRIC	A307	7 mm	13	0.49	20	0.79	32	1.26
$\geq$	A308	8 mm	14	0.55	20	0.79	32	1.26

3/8" Squa							
A307-2	7 mm	13	0.49	20	0.79	50	1.97
A307-2.75	7 mm	13	0.49	20	0.79	70	2.76
A308-2	8 mm	14	0.55	20	0.79	50	1.97

	3/8" Squa	are Driv	e, Mag					
	A31/4MP	1/4"	10	0.39	19	0.75	34	1.34
SAE	A35/16MP	5/16"	12	0.47	19	0.75	34	1.34
	A33/8MP	3/8"	15	0.59	19	0.75	34	1.34
<u></u>	A308MP	8 mm	14	0.55	20	0.79	32	1.26
METRIC	A310MP	10 mm	17	0.65	20	0.79	32	1.26
$\geq$	A311MP	11 mm	17	0.65	19	0.75	34	1.34

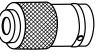
	1/2" Squa	are Driv	е					
	A43/8	3/8"	16	0.63	25	0.98	38	1.50
SAE	A47/16	7/16"	18	0.69	25	0.98	38	1.50
	A41/2	1/2"	19	0.75	25	0.98	50	1.97
<u></u>	A408	8 mm	16	0.61	25	0.98	40	1.58
METRIC	A409	9 mm	16	0.63	25	0.98	40	1.58
≥	A410	10 mm	18	0.69	25	0.98	40	1.58

	1/2" Squa	are Driv	e, Deel	р				
	A43/8-3.25	3/8"	17	0.67	25	0.98	82	3.23
SAE	A47/16-3.25	7/16"	19	0.73	25	0.98	82	3.23
	A41/2-3.25	1/2"	22	0.85	25	0.98	82	3.23
	A410-2	10 mm	18	0.69	25	0.98	50	1.97
METRIC	A410-3	10 mm	18	0.69	25	0.98	75	2.95
WEI	A410-3.25	10 mm	17	0.67	25	0.98	82	3.23
	A411-3.25	11 mm	19	0.73	25	0.98	82	3.23

	PART NO	HEX	D1 MM	D1 IN	D2 MM	D2 IN	L MM	L IN
	1/2" Squa	are Driv	e, Mag	netic				
	A408MP	8 mm	16	0.61	25	0.98	40	1.58
	A410MP	10 mm	18	0.69	25	0.98	40	1.58
	A412MP	12 mm	21	0.81	25	0.98	40	1.58
		_		_				
	3/4" Squa	are Driv	е					
	A611/16	11/16"	30	1.18	44	1.73	50	1.97
SAE	A63/4	3/4"	32	1.26	44	1.73	50	1.97
	A613/16	13/16"	35	1.38	44	1.73	50	1.97
<u></u>	A614	14 mm	24	0.95	38	1.50	55	2.17
METRIC	A616	16 mm	27	1.06	44	1.73	50	1.97
-	A617	17 mm	30	1.18	38	1.50	55	2.17
	0 ( (   0			-				
	3/4" Squa							
	A611/16-4	11/16"	31	1.22	44	1.73	100	3.94
SAE	A63/4-4	3/4"	33	1.30	44	1.73	100	3.94
	A613/16-4	13/16"	36	1.42	44	1.73	100	3.94
36	A617-4	17 mm	31	1.22	44	1.73	100	3.94
METRIC	A618-4	18 mm	32	1.26	44	1.73	100	3.94
_	A619-4	19 mm	33	1.30	38	1.50	100	3.94
	1" 0	D :	-		1			
	1" Square							
	A87/8	7/8"	37	1.46	54	2.13	59	2.32
SAE	A815/16	15/16"	38	1.50	54	2.13	59	2.32
	A81	1"	41	1.61	54	2.13	59	2.32
38	A817	17 mm	31	1.22	50	1.97	63	2.48
METRIC	A819	19 mm	33	1.30	50	1.97	63	2.48
_	A821	21 mm	37	1.46	50	1.97	63	2.48

# **QUICK CHANGE CHUCKS**







	SQ		D1	D1	L	L
PART NO	DRIVE	HEX	MM	IN	MM	IN
ADC-2S	1/4"	1/4"	19	0.75	38	1.50
ADC-3S	3/8"	1/4"	20	0.79	42	1.65
ADC-4S	1/2"	1/4"	19	0.75	46	1.81
ADC-3SH7/16Z	3/8"	7/16"	25	0.98	46	1.81
ADC-4SH7/16Z	1/2"	7/16"	33	1.30	55	2.17

# **ALLEN SOCKETS**



PART NO	HEX	L1 MM	L1 IN	L MM	L IN
3/8" Squa	are Drive				
A31/4C	1/4"	10	0.39	42	1.65
A304C	4 mm	10	0.39	42	1.65
1/2" Squa	are Drive				
A41/4C	1/4"	25	0.98	50	1.97
A405C	5 mm	25	0.98	50	1.97

# STANDARD FASTENER TOOLS

# **UNIVERSAL SOCKETS**

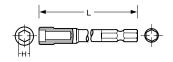




DADT NO	LIEV	D1	D1	D2	D2	L	L
PART NO	HEX	MM	IN	MM	IN	MM	IN
3/8" Squ	are Drive	Э					
A310U	10 mm	16	0.63	20	0.79	55	2.17
A311U	11 mm	16	0.63	20	0.79	60	2.36
1/2" Squ	are Drive	Э					
A412U	12 mm	20.5	0.81	25	0.98	70	2.76
A413U	13 mm	19	0.75	24	0.95	70	2.76

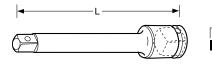
# **NUTSETTERS**





PART NO	HEX	L MM	L IN
A3B1/4-2	1/4"	50	1.97
A3B1/4-2.5	1/4"	63	2.50
A3B5/16-2	5/16"	50	1.97
A3B5/16-2.5	5/16"	63	2.50
A3B3/8-2	3/8"	50	1.97
A3B3/8-2.5	3/8"	63	2.50
A3B05-2.75	5 mm	70	2.76
A3B55-1.2	5.5 mm	30	1.18
A3B55-2.75	5.5 mm	70	2.76
		100	3.94
A3B55-4	5.5 mm		
A3B06-2.75	6 mm	70	2.76
A3B07-1.2	7 mm	30	1.18
A3B07-2	7 mm	50	1.97
A3B07-2.75	7 mm	70	2.76
A3B07-4	7 mm	100	3.94
A3B08-1.2	8 mm	30	1.18
A3B08-2	8 mm	50	1.97
A3B08-2.75	8 mm	70	2.76
A3B08-4	8 mm	100	3.94
A3B08-6	8 mm	150	5.91
A3B08-8	8 mm	200	7.87
A3B09-2.75	9 mm	70	2.76
A3B09-4	9 mm	100	3.94
A3B10-1.2	10 mm	30	1.18
A3B10-2	10 mm	50	1.97
A3B10-2.75	10 mm	70	2.76
A3B11-2.75	11 mm	70	2.76
A3B12-1.2	12 mm	30	1.18
A3B13-2.75	13 mm	70	2.76
A3B14-2.75	14 mm	70	2.76
A3B16-2.75	16 mm	70	2.76
A3B17-2.75	17 mm	70	2.76

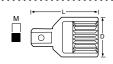
# **EXTENSIONS**



	SQ		L	L	D	D
PART NO	DRIVE	HEX	MM	IN	MM	IN
A375E	3/8"	3/8"	75	2.95	20	0.79
A405E	1/2"	1/2"	51	2.01	30	1.18
A610E	3/4"	3/4"	100	3.94	44	1.73
A810E	1"	1"	102	4.02	54	2.13
A1220E	1-1/4"	1-1/4"	200	7.87	60	2.36
A1418E	1-1/2"	1-1/2"	178	7.01	84	3.31
A2426E	2-1/2"	2-1/2"	264	10.39	137	5.39

# **SOCKET ADAPTERS**





	FEMALE	MALE	D	D	L	L
PART NO	SQ. DRIVE	SQ. DRIVE	MM	IN	MM	IN
A302A	3/8"	1/4"	22	0.87	35	1.38
A403A	1/2"	3/8"	25	0.98	37	1.46
A504A	5/8"	1/2"	35	1.38	47	1.46
A604A	3/4"	1/2"	38	1.50	53	2.09
A806A	1"	3/4"	50	1.97	70	2.76
A128A	1-1/4"	1"	60	2.36	76	2.99
A#508A	Spline #5	1"	60	2.36	90	3.54

Dit and Natsot	ici i ait i uiiibci	Nomenciatore
Precedes Part Number	er	Contained within
BITS  A3S = Phillips* Power Drive  A3W = Double Ended Phillips*  A38S = Phillips* Insert  A39S = Phillips* Insert  A39S = Phillips* Insert  Reduced Nose  A3M = Slotted Power Drive  A38M = Slotted Insert	A7 = 7/16 Power Drive AS = Electric Type Phillips*  AM = Electric Type Slotted ATW = ElectricType Tri- Wing*  AT = Electric Hios Type Torx*  A26S = Electric Driver Phillips*	Part Number  BITS PZ = Pozidriv* PZACR = Pozidriv* SDV = Supadriv* TR = Torx* Tamper Resistant ACRI = ACR* Installation ACR = ACR* Remove
A3MT = Slotted Power Drive Reduced Nose A3C = Allen Socket Head Power Drive A3BC = Allen Socket Head Insert A3R = Square Recess	A26M = Electric Driver Slotted A26C = Electric Driver Allen Socket Head A3BHM = Insert Bit Holder (Magnetic Type) A3BHD = Insert Bit Holder (Non Magnetic)	ACRB = ACR* 4x4 Both Install and Remove E4 = Electric 4mm diameter E5 = Electric 5mm diameter
Power Drive A3RT = Square Recess Turned Down (Power) A38R = Square Recess Insert A3T = Torx* Power Drive A3RT = Torx* Insert A3RT = Torq-Set** Power Drive	NUTSETTERS A3B = Nutsetter A3BMP = Magnetic (MP) Pressed Type A3BMS = Magnetic (MS) Spring Loaded A3BMT = Magnetic (MT)	RS = Reduced Shank
A38TS = Torq-Set* Insert A3TA = Triangle Power Drive A3TW = Tri-Wing* Power Drive A38TW = Tri-Wing* Insert	Tube Type A3BU = Universal Nutsetter  MAG-0-NETS AM = AIMCO Mag-0-Net®	

# STANDARD FASTENER TOOLS

# MAG-O-NETS®: A Revolutionary Way to Convert Standard Bits to Magnetic Bits

# **FEATURES AND BENEFITS**

- Easy, cost effective alternative to traditional magnetic bit holder and insert bit combination.
- Improves torque transfer by eliminating "wobble effect."
- Easily adjust magnetic attraction by moving Mag-O-Net collar closer to or further from fastener.
- Fits virtually any standard screwdriver bit.

- Reusable and interchangeable

   once a bit is worn out, simply
   remove your Mag-O-Net and slide it onto the next bit.
- Lifetime guarantee on magnetic attraction.

PART	INNER	OUTER	L
NO	DIAMETER (ID)	DIAMETER (OD)	MM
AM1/4Z	7 mm	19 mm	10
AM5Z	6 mm	17.5 mm	10
AM3/16Z	3/16 in	17.5 mm	10



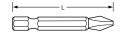






# **PHILLIPS POWER BITS**

# 0





	POINT	L	L
PART NO	SIZE	MM	IN
A3S0-2	0	50	1.97
A3S1-2	1	50	1.97
A3S1-2.75	1	70	2.76
A3S1-3	1	75	2.95
A3S1-3.5	1	90	3.54
A3S1-4	1	100	3.94
A3S1-6	1	150	5.91
A3S2-1.2	2	30	1.18
A3S2-1.6	2	40	1.57
A3S3-2	3	50	1.97
A3S3-2.75	3	70	2.76

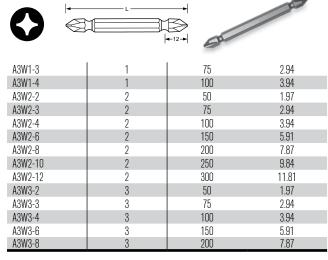
# **TORX POWER BITS**





	TORX	L	L
PART NO	SIZE	MM	IN
A3T6-2	T6	50	1.97
A3T7-2	T7	50	1.97
A3T7-2.75	T7	70	2.76
A3T7-3.5	T7	90	3.54
A3T7-6	T7	150	5.91
A3T8-2	T8	50	1.97
A3T9-2.75	T9	70	2.76

# Double-Ended



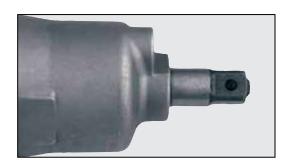
### **BIT HOLDERS**



	L	L
PART NO	MM	IN
1/4" Hex, Magnetic		
A3BHM-3	75	2.94
A3BHM-4	100	3.94
A3BHM-6	150	5.91
A3BHM-8	200	7.87
A3BHM-10	250	9.84

# **ERGO-DRIVE® SERIES**

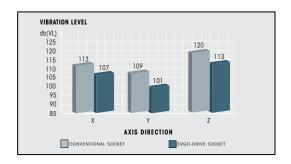
# **ERGO-DRIVE® SOCKETS PROTECT...**



# ...YOUR INVESTMENT!

Pulse tools are an investment and the anvil is the most expensive single part of any pulse tool. ERGO-DRIVE® sockets decrease vibration and wear on this critical component.





### ...YOUR ASSEMBLERS!

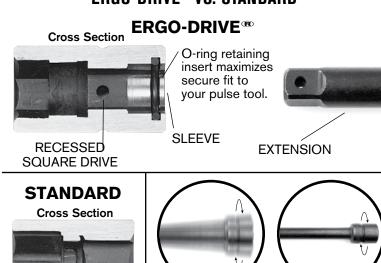
ERGO-DRIVE® sockets cause significantly less vibration during fastening than conventional sockets. This allows your assemblers to do their jobs without the worry of vibration related injuries.

# **EXTENSION** LENGTHS **75 MM** ERGO DRIVE STANDARD 12% 100 MM 3.5% ERGO DRIVE 18% STANDARD 150 MM ERGO DRIVE STANDARD % TORQUE LOSS USING ULT-70 (SET AT 45Nm) JDBP-TA50

# ...YOUR PRODUCTS!

By reducing run-out and vibration, ERGO-DRIVE® sockets allow the most repeatable, accurate rundowns to take place, ensuring excellent product quality.

# **ERGO-DRIVE® VS. STANDARD**



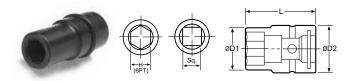
STANDARD

**EXTENSION** 

**ERGO-DRIVE®** 

# **ERGO-DRIVE® FASTENER TOOLS**

# **ERGO-DRIVE® SOCKETS**



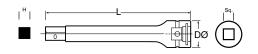
17411110	112/						
3/8" Squar	e Drive						
A31/4EDS	1/4"	10	0.39	19	0.75	44	1.73
A31/2EDS	1/2"	20	0.77	22	0.87	44	1.73
A306EDS	6 mm	10	0.39	19	0.75	44	1.73
A308EDS	8 mm	14	0.55	20	0.79	42	1.65
A310EDS	10 mm	17	0.65	20	0.79	42	1.65
A312EDS	12 mm	20	0.79	20	0.79	42	1.65
A314EDS	14 mm	22	0.87	20	0.79	42	1.65
A316EDS	16 mm	25	0.98	20	0.79	45	1.77
A318EDS	18 mm	27	1.06	20	0.79	45	1.77

1/2" Squa	re Drive						
A41/2EDS	1/2"	19	0.75	25	0.98	50	1.97
A413EDS	13 mm	22	0.85	25	0.98	52	2.05
A414EDS	14 mm	23	0.89	25	0.98	52	2.05
A415EDS	15 mm	24	0.93	25	0.98	52	2.05
A416EDS	16 mm	25	0.98	25	0.98	52	2.05
A417EDS	17 mm	28	1.10	28	1.10	54	2.13
A418EDS	18 mm	29	1.14	28	1.10	54	2.13
A419EDS	19 mm	30	1.18	28	1.10	54	2.13

3/4" Squa							
A61-1/8EDS	1-1/8"	44	1.73	44	1.73	64	2.52
A61-1/4EDS	1-1/4"	49	1.91	44	1.73	66	2.60
A61-1/2EDS	1-1/2"	57	2.24	44	1.73	68	2.68
A618EDS	18 mm	31	1.22	44	1.73	60	2.36
A624EDS	24 mm	40	1.52	40	1.73	65	2.36

1" Square	Drive						
A815/16EDS	15/16"	38	1.50	54	2.13	69	2.72
A8100EDS	100 mm	136	5.35	76	2.99	120	4.72

# **ERGO-DRIVE® EXTENSIONS**



	SQ		L	L	D	D
PART NO	DRIVE	Н	MM	IN	MM	IN
3/8" Squa	re Drive					
A352EDE	3/8"	3/8"	52	2.05	20	0.79
A3100EDE	3/8"	3/8"	100	3.94	20	0.79
A375EDE	3/8"	3/8"	75	2.95	20	0.79
A3150EDE	3/8"	3/8"	150	5.91	20	0.79
A3190EDE	3/8"	3/8"	190	7.48	20	0.79
A3254EDE	3/8"	3/8"	254	10.00	20	0.79
A3300EDE	3/8"	3/8"	300	11.81	20	0.79
A3320EDE	3/8"	3/8"	320	12.60	20	0.79
1/2" Squa	re Drive					
A464EDE	1/2"	1/2"	64	2.52	28	1.10
A476EDE	1/2"	1/2"	76	2.99	28	1.10
A4125EDE	1/2"	1/2"	125	4.92	28	1.10
A4204EDE	1/2"	1/2"	204	8.03	28	1.10
A4254EDE	1/2"	1/2"	254	10.00	28	1.10
A4355EDE	1/2"	1/2"	355	13.98	28	1.10
3/4" Squa	re Drive					
A676EDE	3/4"	3/4"	76	2.99	40	1.58
A6100EDE	3/4"	3/4"	100	3.94	40	1.58
A6150EDE	3/4"	3/4"	150	5.91	40	1.58
A6200EDE	3/4"	3/4"	200	7.87	40	1.58
1" Square	Drive					
A8150EDE	1"	1"	150	5.91	54	2.13
A8200EDE	1"	1"	200	7.87	54	2.13

# **QUICK CHANGE CHUCKS**





PART NO	SQUARE DRIVE	HEX
3/8" Square Drive		
ADC-3SEDSQ	3/8"	1/4"
ADC-3SEDSQH7/16	3/8"	7/16"
1/2" Square Drive		
ADC-4SEDSQ	1/2"	1/4"
ADC-4SEDSQH7/16	1/2"	7/16"

# **CUSTOM BITS, SOCKETS, AND EXTENSIONS**

# CUSTOM BITS, SOCKETS, AND EXTENSIONS FOR THE POWER TOOL USER

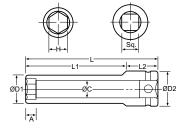
AIMCO can provide specials for virtually any application. From design to delivery, AIMCO's quick response ensures high quality, tight tolerance specials.

Specials are available in every style including:

- Deep Socket
- Extended Socket
- Universal
- Allen Head
- Torx Head
- Socket Adapter
- Nut Runner Socket
- Nut Runner Joint
- Nutsetter
- Magnetic Nutsetter
- Universal Nutsetter
- Screwdriver Bits



Sample request forms are shown. Your detailed requirements will allow AIMCO to quickly respond with custom solutions for your fastening requirements.

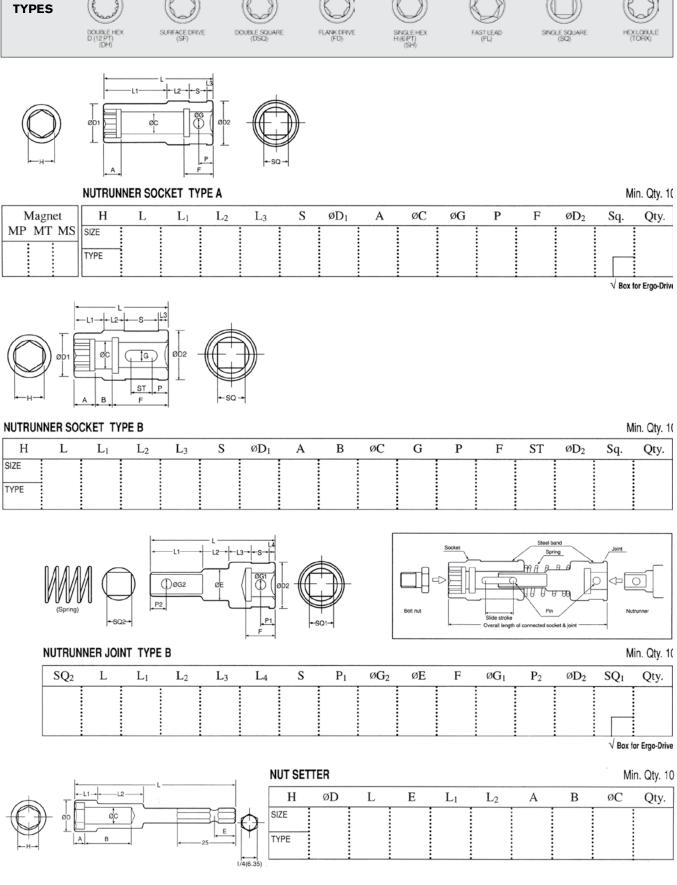




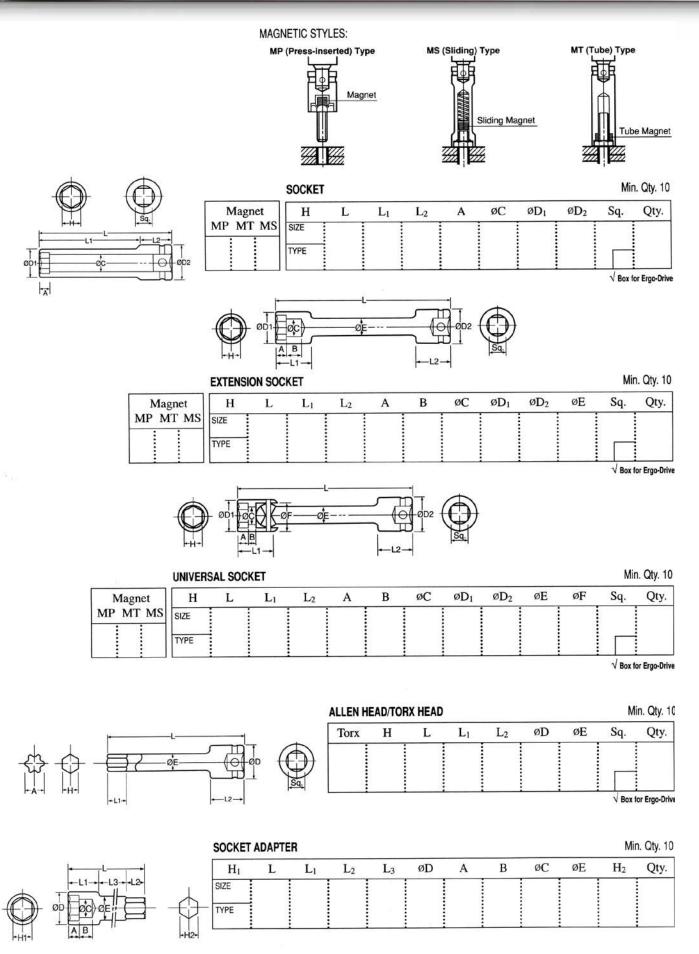
SOCKE	Т							
Н	L	L <sub>1</sub>	$L_2$	Α	ØC	$\emptyset D_1$	$\varnothing D_2$	Sq.
SIZE		•				:		
TYPE		•						

#### **SPECIAL PARTS**

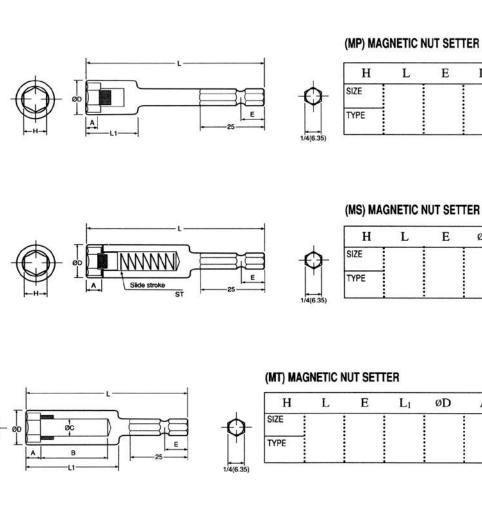
SOCKET

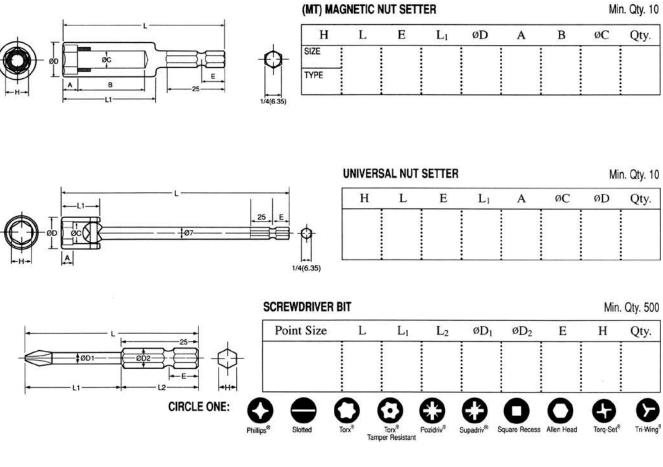


#### **SPECIAL PARTS**



### **SPECIAL PARTS**





Min. Qty. 10

Qty.

Min. Qty. 10

Qty.

 $L_1$ 

ØD

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A

ST

# **CONVERSION CHARTS**

	Fra	ction	. D	ecima	I - M	etric	Conv	ersior	ıs (t	o .32)	
	Decimal	mm		Decimal	mm		Decimal	mm		Decimal	mm
1/32	.03125	.7938	9/32	.28125	7.1438	17/32	.53125	13.4938	25/32	.78125	19.8438
1/16	.0625	1.5875	5/16	.3125	7.9375	9/16	.5625	14.2875	13/16	.8125	20.6375
3/32	.09375	2.3812	11/32	.34375	8.7312	19/32	.59375	15.0812	27/32	.84375	21.4312
1/8	.125	3.175	3/8	.375	9.525	5/8	.625	15.875	7/8	.875	22.225
5/32	.15625	3.9688	13/32	.40625	10.3188	21/32	.65625	16.6688	29/32	.90625	23.0188
3/16	.1875	4.7625	7/16	.4375	11.1125	11/16	.6875	17.4625	15/16	.9375	23.8125
7/32	.21875	5.5562	15/32	.46875	11.9062	23/32	.71875	18.2562	31/32	.96875	24.6062
1/4	.25	6.35	1/2	.5	12.7	3/4	.75	19.05	1	1.0	25.4

Inread Size to nex Size									
	0		•		0		0		
	MM		MM	UNC	INCHES	SAE	INCHES		
M 2	4	M 27	41	1/4	7/16	1/4	7/16		
M 2.3	4.5	M 30	46	5/16	1/2	5/16	1/2		

	MM		MM	UNC	INCHES	SAE	INCHES
M 2	4	M 27	41	1/4	7/16	1/4	7/16
M 2.3	4.5	M 30	46	5/16	1/2	5/16	1/2
M 2.6	5	M 33	50	3/8	9/16	3/8	9/16
M 3	5.5	M 36	55	7/16	11/16	7/16	5/8
M 3.5	6	M 39	60	1/2	3/4	1/2	3/4
M 4	7	M 42	65	9/16	7/8	9/16	7/8
M 5	8	M 45	70	5/8	15/16	5/8	15/16
(M 5-6)	9	M 48	75	3/4	1-1/8	3/4	1-1/16
M 6	10	M 52	80	7/8	1-5/16	7/8	1-1/4
M 7	11	M 56	85	1	1-1/2	1-1/8	1-7/16
M 8	13	M 60	90	1-1/8	1-11/16	1-1/4	1-13/16
(M 8)	14	M 64	95	1-1/4	1-7/8	1-3/8	2
M 10	16	M 68	100	1-3/8	2-1/16	1-1/2	2-3/16
(M 10)	17	M 72	105	1-1/2	2-1/4		
M 12	18	M 76	110	1-3/4	2-5/8		
(M 12)	19	M 80	115	2	3		
M 14	21	M 85	120	2-1/4	3-3/8		
(M 14)	22	M 90	130	2-1/2	3-3/4		
M 16	24	M 95	135				
M 18	27	M 100	145				
M 20	30	M 105	150				
(M 22)	32	M 110	155				
M 22	34	M 115	165				
M 24	36	M 120	170				

#### **Torque Conversion Factors**

Units to be			SAE			METRIC		INTER	NATIONAL S	YSTEM - S.I.
Converted		ozf-in	lbf-in	lbf-ft	gf-cm	kgf-cm	kgf-m	mNm	cNm	Nm
1 ozf-in	=	1	0.0625	0.005	72	0.072	0.0007	7.062	0.706	0.007
1 lbf-in	=	16	1	0.083	1152.1	1.152	0.0115	113	11.3	0.113
1 lbf-ft	=	192	12	1	13826	13.83	0.138	1356	135.6	1.356
1 gf-cm	=	0.014	0.0009	0.00007	1	0.001	0.00001	0.098	0.01	0.0001
1 kgf-cm	=	13.89	0.868	0.072	1000	1	0.01	98.07	9.807	0.098
1 kgf-m	=	1389	86.8	7.233	100000	100	1	9807	980.7	9.807
1 mN-m	=	0.142	0.009	0.0007	10.2	0.01	0.0001	1	0.1	0.001
1 cN-m	=	1.42	0.088	0.007	102	0.102	0.001	10	1	0.01
1 N-m	=	141.6	8.851	0.738	10197	10.20	0.102	1000	100	1

MODEL#	PAGE	MODEL#	PAGE	MODEL #	PAGE	MODEL #	PAGE	MODEL#	PAGE
A		A3B55-1.2		A4254EDE		AB-3/5		ACPTT-V15-710 3	300133
A128A	140	A3B55-2.75		A4355EDE		ABT-3		ACPTT-V40-510 1	
A1220E		A3B55-4		A-50A-0 A-50A-1.7		ABT-5		ACPTT-V40-760 3	
A1418E		A3BHM-3		A-50A-1.7		ACA10-1000		ACPTT-V40-1410 ACPTT-V80-810 3	
A-2100	127	A3BHM-6		A-50ARBT-1.7		ACA10-1000 ACA10-1500		ACPTT-V80-1410	
A2426E	140	A3BHM-8		A-50ARBTC-0		ACA15-1000		ACSA-600-1500.	
A31/2EDS	143	A3BHM-10		A-50ARBTC-1.7 .		ACA15-1500		ACSA-800-1500.	
A31/4		A3S0-2	141	A-50B-1	126	ACA15-2000	132	ACSA-1000-1500	133
A31/4C		A3S1-2		A-50B-2	126	ACA40-1000		ACTT-V15-600 15	50133
A31/4EDS		A3S1-2.75		A-50B-3		ACA40-1500		ACTT-V15-800 30	
A33/8		A3S1-3		A-50B-4		ACA40-2000		ACTT-V40-600 15	
A33/8MP		A3S1-3.5		A-50BRBT-1 A-50BRBT-2		ACA40-2500 ACA80-1500		ACTT V40-850 30	
A35/16		A3S1-4		A-50BRBT-3		ACA80-1300 ACA80-2000		ACTT-V40-1500 6 ACTT-V80-900 30	
A35/16MP	139	A3S2-1.2		A-50BRBT-4		ACA80-2500		ACTT-V80-1500 6	
A302A	140	A3S2-1.6		A-50BRBTC-1		ACA150-1500		ACTT-V80-2100 9	
A304C		A3S3-2	141	A-50BRBTC-2	126	ACA150-2000	132	ADC-2S	139
A306		A3S3-2.75	141	A-50BRBTC-3	126	ACA150-2500	132	ADC-3S	139
A306EDS		A3T6-2		A-50BRBTC-4		ACA220-1500		ADC-3SEDSQ	143
A307		A3T7-2		A-50C-6		ACA220-2000		ADC-3SEDSQH7/	
A307-2.75		A3T7-2.75		A-50C-8		ACA220-2500		ADC-3SH7/16Z .	
A308		A3T7-3.5		A-50C-10 A-50CRBT-6		ACAH-15 ACAH-15-MPE27		ADC-4S ADC-4SEDSQ	
A308-2		A3T8-2		A-50CRBT-8		ACAH-13-MPE27		ADC-4SEDSQ ADC-4SEDSQH7/	
A308EDS	143	A3T9-2.75		A-50CRBT-10		ACAH-150-220 .		ADC-4SH7/16Z .	
A308MP		A3W1-3		A-50CRBTC-6		ACAH-4080-MPE		AD-D1098-P	
A310EDS		A3W1-4		A-50CRBTC-8	126	ACAH-150220-		AD-D1098-PAC .	130
A310MP		A3W2-2	141	A-50CRBTC-10 .	126	MPE4070	133	AD-D1098-PACE	130
A310U		A3W2-3		A504A		ACAH-S154080.		AD-D1098-S	
A311W		A3W2-4		A#508A		ACAH-SL15150 .		AD-D1098-SAC .	
A312EDS		A3W2-6		A61-1/2EDS		ACAHTT-15A-300		ADET	
A314EDS		A3W2-8		A61-1/4EDS A61-1/8EDS		ACAHTT-15S-274 ACAHTT-4080A-:		ADETB	
A-315V	127	A3W2-12		A63/4		ACAHTT-4080S-2		ADW-0075K	
A316EDS	143	A3W3-2		A63/4-4		ACA-P2BK-4		ADW-0180K	
A318EDS		A3W3-3	141	A604A	140	ACA-P2BK-6	133	ADW-0270K	75
A352EDE		A3W3-4	141	A610E	140	ACA-P2BK-8	133	ADW-0500K	75
A375E		A3W3-6		A611/16		ACA-P2BK-10		ADW-1400F	
A3100EDE		A3W3-8		A611/16-4		ACA-P2BK-14		ADW-DS	
A3150EDE		A41/2		A613/16 A613/16-4		ACA-P215-1000. ACA-P215-1500.		AE-224PS AE-278PS	
A3190EDE		A41/2-3.23		A613/10-4		ACA-P215-1300. ACA-P215-2000.		AE-276P3	
A3254EDE	143	A41/4C		A616		ACA-P240-1000.		AE-2020	
A3300EDE		A43/8	139	A617	139	ACA-P240-1500.		AE-2020ESD	119
A3320EDE		A43/8-3.25	139	A617-4	139	ACA-P240-2000.	132	AE-2045A	121
A3B1/4-2		A47/16	139	A618-4	139	ACA-P240-2500.	132	AE-4020	
A3B1/4-2.5		A47/16-3.25		A618EDS		ACA-P280-1500.		AE-4520	
A3B3/8-2.5		A403A		A619-4		ACA-P280-2000.		AE-4520ESD	
A3B05-2.75		A405C		A624EDS		ACA-P280-2500.		AE-5681	
A3B5/16-2		A405E A408		A676EDE A6100EDE		ACA-P2150-1500 ACA-P2150-2000		AE-5681ESD AE-6300	
A3B5/16-2.5		A408MP		A6150EDE		ACA-P2150-2500		AE-6300M	
A3B06-2.75		A409		A6200EDE		ACA-P2220-1500		AE-6300S	
A3B07-1.2		A410	139	A81	139	ACA-P2220-2000		AE-6450	120
A3B07-2		A410-2		A87/8		ACA-P2220-2500		AE-6450S	
A3B07-2.75		A410-3		A806A		ACA-Posix		AE-7010	
A3B08-1.2		A410-3.25		A810E		ACA-V15-1000 .		AE-7010PS	
A3B08-2		A410MP		A815/16 A815/16EDS		ACA-V15-1500 . ACA-V15-2000 .		AE-7080A AE-8010	
A3B08-2.75		A411-3.23		A817		ACA-V13-2000 . ACA-V40-1000 .		AE-8010	
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