ASSEMBLY TOOL CATALOG

AIMCO

Global Assembly Solutions™

SERVICE

- Customer Service Associates available by phone until 8:00 PM EST
- Shipments until 6:30 PM EST
- Service Quotes within 24 hours
- Most repairs within 72 hours
- Full Calibration and Certification Available
- Extensive inventory of products, parts and accessories

SUPPORT

- Representatives in the United States, Mexico, Europe and Asia for fast, thorough support
- More than 500 years of total industry experience
- Extensive sales, product and repair training available
- On-site product installation and set-up
- PERQ analysis of applications and customer needs
- Payback and ROI Analysis

Quality Statement

AIMCO has an unwavering commitment to customer service and satisfaction

SALES | **SUPPORT** | **SERVICE**

PERQ®

PRODUCTIVITY | ERGONOMICS | RELIABILITY | QUALITY

WORLD CLASS MANUFACTURING SOLUTIONS FROM AIMCO

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THE P.E.R.Q.® FORMULA

PERQ®

PRODUCTIVITY | ERGONOMICS | RELIABILITY | QUALITY

PERQ® 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® formula to determine that company's unique blend of the PERQ® elements – Productivity, Ergonomics, Reliability and Quality – and 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.

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 the ideal pace in order to keep its processes running efficiently.

ERGONOMICS

THE RELATIONSHIP BETWEEN THE WORKER AND THE ASSEMBLY PROCESS

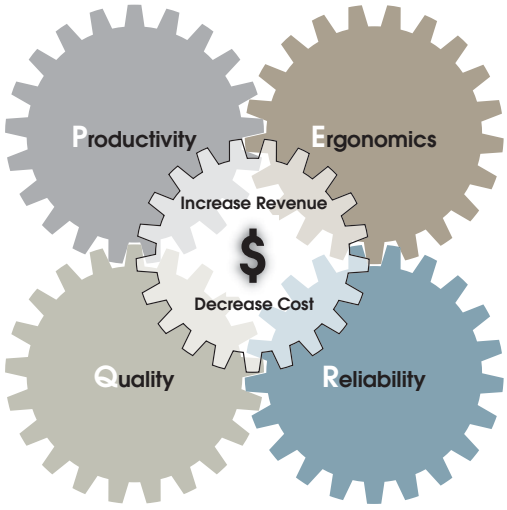
Employees are the most important assets of any company and protecting these people as they do their job is critical. To help its customers face the issues surrounding ergonomics, AIMCO focuses on providing products that combine a lack of torque reaction, low vibration, light weight, quiet operation and simple operation. These features allow workers to do their job in the safest possible manner and help manufacturers avoid the often-hidden costs of workplace injuries.

AIMCO Tool University TRAINING

Visit: WWW.OSHA.GOV
to learn more about ergonomic issues

Each of the PERQ® 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 a job, whether it be continuous drive or pulse tool, electric, pneumatic or battery powered.



RELIABILITY

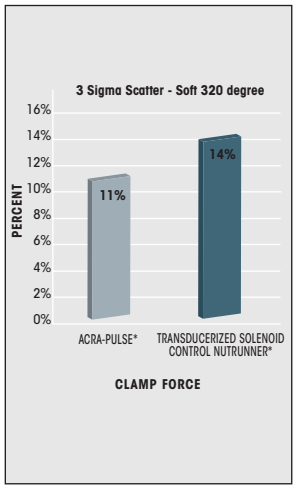
THE TOTAL COST OF TOOL MAINTENANCE AND REPAIR

To keep workers working and production lines producing, 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 any customer's expectations of reliability.

QUALITY

THE ABILITY OF THE TOOL TO ADHERE TO PROCESS REQUIREMENTS

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

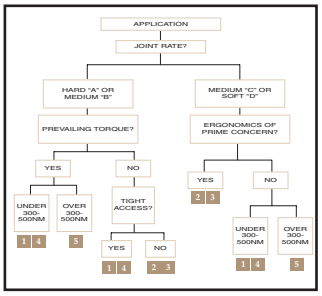


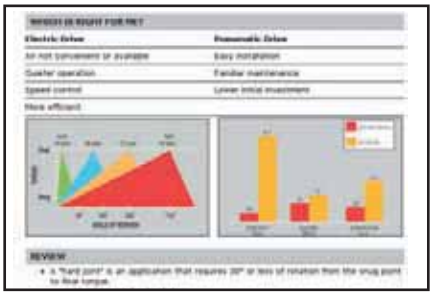
See also: TESTING AND CALIBRATING EQUIPMENT
on page 79

YOUR 24-HOUR SOURCE!

BUYER'S GUIDES AND SELECTION CHARTS

- Quick start guides
- Search by torque range
- Quick response on E-mail questions
- New features added frequently





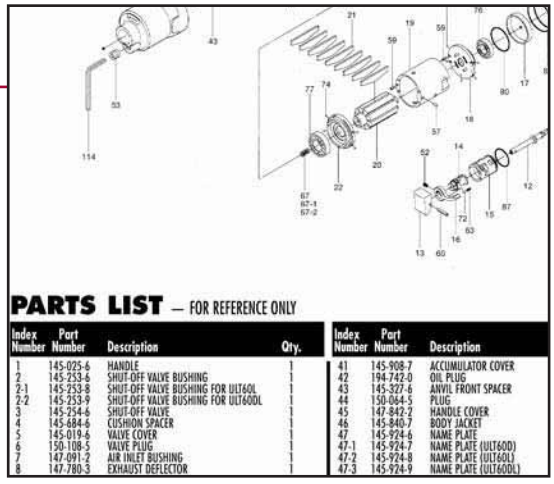
COMPLETE PRODUCT SPECS

- Product descriptions and benefits
- Specs in standard and metric
- Accessories pre-selected for the tool

AFTER-THE-SALE ONLINE SERVICE AND SUPPORT

- Manuals
- Parts Breakdowns
- Call Guide
- Service Center listing

AIMCO Tool University TRAINING



Index Number	Part Number	Description	Qty.	Index Number	Part Number	Description
1	145-025-6	HANDLE	1	41	145-908-7	ACCUMULATOR COVER
2	145-253-6	SHUT-OFF VALVE BUSHING	1	42	194-742-0	OIL PLUG
2-1	145-253-8	SHUT-OFF VALVE BUSHING FOR ULT60L	1	43	145-327-6	ANVIL FRONT SPACER
2-2	145-253-9	SHUT-OFF VALVE BUSHING FOR ULT600L	1	44	150-064-5	PLUG
3	145-254-6	SHUT-OFF VALVE	1	45	147-842-7	HANDLE COVER
4	145-684-6	CUSHION SPACER	1	46	145-840-7	BODY JACKET
5	145-019-6	VALVE COVER	1	47	145-924-6	NAME PLATE
6	150-108-5	VALVE PLUG	1	47-1	145-924-7	NAME PLATE (ULT60D)
7	147-091-2	AIR INLET BUSHING	1	47-2	145-924-8	NAME PLATE (ULT60L)
8	147-780-3	EXHAUST DEFLECTOR	1	47-3	145-924-9	NAME PLATE (ULT600L)

HOW DOES A PULSE TOOL WORK?

The unique design of 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.

BENEFITS OF AIMCO PULSE TOOLS:

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

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

- ***Productivity*** – Combining high operating speeds with one-handed operation allows AIMCO pulse tools to 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-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 in any industry.

1965

1980

1988

New Technology

The first pulse tool prototype is designed in an attempt to develop a tool that will provide torque control without the high maintenance costs of impact wrenches.

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 standard with thousands of manufacturers.

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.

OMEGA UL AND ULT SERIES

The UL and ULT Series stands as the most advanced pulse tool in the world. Whether the goal is improving Productivity, Ergonomics, Reliability or Quality, the UL / ULT Series contains the technology to achieve success.

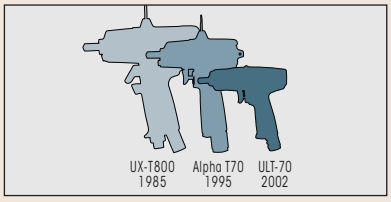
UL tools, with their non-shut-off operation, are ideal for applications where the lightest, fastest tool is necessary. ULT shut-off models offer excellent accuracy while allowing the operator to work at the highest possible speed without influencing the tightening process.

- Increases Productivity
- High Power-to-Weight Ratio
- Simple Operation
- Reduced Maintenance
- Extended Service Life
- Environmentally Friendly Design
- Accurate and Repeatable

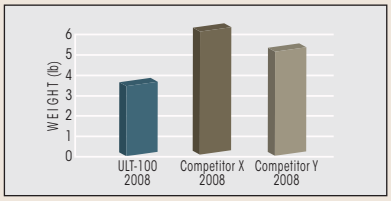
Each model features the powerful Alpha air motor and latest in pulse-unit design.

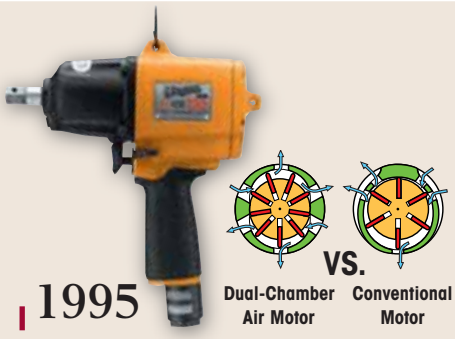
- 64 models available from 2.5 – 260 Nm (2 – 190 FtLb)
- Models with air, electric or battery power
- Available in standard, Tightening Monitor and transducerized versions

Size Comparison AIMCO 1985-2008



Weight Comparison AIMCO vs. Competition





1995

2001

2006

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 that make the tools smaller and lighter keep Uryu at the forefront of pulse tool technology.

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 that helps maintain fluid temperature and torque repeatability. These changes combined with even more decreases in tool size and the use of the Alpha air motor make the UL / ULT Series the tool of choice in major automotive and general industry manufacturers throughout the world.

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.

OMEGA PULSE TOOLS: ULT SERIES

Pistol Shut-Off

Recommended Air Pressure: 85 psi

MODEL	FREE SPEED rpm	TORQUE RANGE Nm	TORQUE RANGE ft-lb	WEIGHT lb	WEIGHT kg	OVERALL LENGTH in	OVERALL LENGTH mm	DRIVE in	SOUND LEVEL dB(A)	AIR USAGE cfm
ULT-30D	3700	2.5 - 5.5	1.9 - 4.1	1.9	0.9	6.4	163	1/4 hex dr.	74	7.0
ULT-40(D)*	3600	4.5 - 8	3.3 - 5.9	2.0	0.9	6.4	162	3/8 sq. dr.	75	7.0
ULT-50(D)*	4400	7 - 15.5	5.2 - 11.5	2.0	0.9	6.4	162	3/8 sq. dr.	78	8.8
ULT-60(D)*	6700	15 - 32	11 - 24	2.1	1.0	6.8	172	3/8 sq. dr.	80	12.3
ULT-70	6000	30 - 55	22 - 40	2.3	1.1	7.0	178	3/8 sq. dr.	80	14.0
ULT-90L**	5100	45 - 75	33 - 55	3.2	1.4	7.5	190	1/2 sq. dr.	79	12.8
ULT-90	5700	50 - 85	37 - 63	3.2	1.4	7.5	190	1/2 sq. dr.	82	18.6
ULT-100	5200	70 - 130	52 - 96	3.7	1.7	7.8	197	1/2 sq. dr.	82	19.3
ULT-130	4000	110 - 150	81 - 111	5.1	2.3	8.5	215	1/2 sq. dr.	82	25.6
ULT-150	3,700	140 - 210	103 - 155	6.4	2.9	9.4	238	3/4 sq. dr.	82	24.5
ULT-150L**	3,500	110 - 170	81 - 126	6.4	2.9	9.4	238	3/4 sq. dr.	79	17.5
ULT-180	3,300	170 - 260	126 - 192	8.1	3.7	10.4	262	3/4 sq. dr.	82	24.5

Air Hose Size: 1/4" I.D. for ULT-30 - ULT-50
3/8" I.D. for ULT-60 - ULT-100
1/2" I.D. for ULT-150 - ULT-180

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.

**Based on 57 psi air pressure

Body Jacket included.

AIMCO Tool University TRAINING

Tests have shown that non-shut-off pulse tools can provide better ***torque repeatability*** than shut-off tools, when each is used and maintained properly. Many manufacturers prefer shut-off tools due to the higher production rates and lack of operator influence they lend to the assembly process.

Pistol Non Shut-Off

Recommended Air Pressure: 85 psi

MODEL	FREE SPEED rpm	TORQUE RANGE Nm	TORQUE RANGE ft-lb	WEIGHT lb	WEIGHT kg	OVERALL LENGTH in	OVERALL LENGTH mm	DRIVE in	SOUND LEVEL dB(A)	AIR USAGE cfm
UL-30D	5700	6 - 12	4.4 - 8.9	1.5	0.7	5.3	135	1/4 hex dr.	75	7.0
UL-30	5700	6 - 12	4.4 - 8.9	1.5	0.7	5.2	131	3/8 sq. dr.	75	7.0
UL-40D	6100	11 - 20	8.1 - 14.8	1.5	0.7	5.5	140	1/4 hex dr.	75	7.0
UL-40	6100	13 - 22	9.6 - 16.3	1.5	0.7	5.2	131	3/8 sq. dr.	75	7.0
UL-50D	6400	18 - 28	13.3 - 20.7	1.7	0.8	5.7	144	1/4 hex dr.	78	10.5
UL-50	6400	22 - 35	16 - 26	1.7	0.8	5.4	137	3/8 sq. dr.	78	10.5
UL-60D	7000	22 - 35	16 - 26	1.8	0.8	5.7	144	1/4 hex dr.	80	14.0
UL-60	7000	32 - 50	24 - 37	1.8	0.8	5.4	137	3/8 sq. dr.	80	14.0
UL-70	5700	40 - 65	30 - 48	2.1	1.0	5.9	149	3/8 sq. dr.	80	15.8
UL-90	6000	60 - 100	44 - 74	2.9	1.3	6.6	168	1/2 sq. dr.	82	18.6
UL-100	5400	80 - 130	59.2 - 96.2	3.7	1.66	6.9	175	1/2 sq. dr.	80	20.3

Inline Non Shut-Off

Recommended Air Pressure: 85 psi

MODEL	FREE SPEED rpm	TORQUE RANGE Nm	TORQUE RANGE ft-lb	WEIGHT lb	WEIGHT kg	OVERALL LENGTH in	OVERALL LENGTH mm	DRIVE in	SOUND LEVEL dB(A)	AIR USAGE cfm
UL-30SD	5700	6 - 12	4.4 - 8.9	1.5	0.7	5.2	131	1/4 hex dr.	75	7.0
UL-30S	5700	6 - 12	4.4 - 8.9	1.5	0.7	5.3	135	3/8 sq. dr.	75	7.0
UL-40SD	6100	9 - 20	6.7 - 14.8	1.5	0.7	5.2	131	1/4 hex dr.	75	7.0
UL-40S	6100	11 - 22	8.1 - 16.3	1.5	0.7	5.5	140	3/8 sq. dr.	75	7.0
UL-50SD	6500	18 - 28	13.3 - 20.6	1.6	0.74	8.4	214	1/4 hex dr.	78	19.3
UL-50S	6500	22 - 35	16.3 - 25.9	1.6	0.74	8.2	208	3/8 sq. dr.	78	19.3
UL-60SD	7000	22 - 35	16.3 - 25.9	1.7	0.77	8.3	212	1/4 hex dr.	80	15.8
UL-60S	7000	32 - 50	23.7 - 37	1.7	0.77	8.2	209	3/8 sq. dr.	80	15.8
UL-70S	5700	36 - 60	26.6 - 44.4	2.1	1.0	5.9	149	3/8 sq. dr.	80	15.8

Air Hose Size: 1/4" I.D. for UL-30 (D/SD) - UL-50 (D/SD)
3/8" I.D. for UL-60 (D/SD) - UL-100 (D/SD)

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

NOTE: Torque ranges reflect residual B joint torque values

OMEGA PULSE TOOLS: ULT SERIES

Inline Shut-Off

Recommended Air Pressure: 85 psi

MODEL	FREE SPEED rpm	TORQUE RANGE Nm	TORQUE RANGE ft-lb	WEIGHT lb	WEIGHT kg	OVERALL LENGTH in	OVERALL LENGTH mm	DRIVE in	SOUND LEVEL dB(A)	AIR USAGE cfm
ULT-30SD	3700	2.5 - 5.5	1.9 - 4.1	1.6	0.8	8.7	221	1/4 hex dr.	66	7.0
ULT-40SD	3600	4.5 - 8	3.3 - 5.9	1.7	0.8	8.7	221	1/4 hex dr.	70	7.0
ULT-40S	3600	4.5 - 8	3.3 - 5.9	1.7	0.8	8.6	218	3/8 sq. dr.	70	7.0
ULT-50SD	4700	7.0 - 15.5	5.2 - 11.5	1.8	0.8	8.7	221	1/4 hex dr.	78	8.8
ULT-50S	4700	7.0 - 15.5	5.2 - 11.5	1.8	0.8	8.6	218	3/8 sq. dr.	78	8.8
ULT-60SD	5400	15 - 32	11 - 24	1.9	0.8	9.1	232	1/4 hex dr.	80	10.5
ULT-60S	5400	15 - 32	11 - 24	1.9	0.8	9.0	229	3/8 sq. dr.	80	10.5
ULT-70S	4700	30 - 50	22 - 37	2.1	1.0	9.4	239	3/8 sq. dr.	80	12.3

Air Hose Size: 1/4" I.D. for ULT-30SD - ULT-50S(D)
3/8" I.D. for ULT-60S(D) - ULT-70S

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

NOTE: Torque ranges reflect residual B joint torque values

AIMCO Tool University TRAINING

Pulse tools are discontinuous drive tools. Because they deliver torque much differently than continuous drive tools, ***ISO/TS 17104*** was published in 2004 to suggest the methods for testing and evaluating hydraulic pulse tools.

Right-Angle Shut-Off

Recommended Air Pressure: 85 psi

MODEL	FREE SPEED	TORQUE RANGE		WEIGHT		OVERALL LENGTH		SQUARE DRIVE	AIR USAGE
	rpm	Nm	ft-lb	lb	kg	in	mm	in	cfm
ULT-50C	4,800	7 - 15.5	5.2 - 11.5	3.0	1.35	9.8	250	3/8	8.6
ULT-60C	5,500	15 - 32	11.1 - 23.7	3.2	1.45	10.3	261	3/8	10.5
ULT-70C	4,600	20 - 35	14.8 - 25.9	3.6	1.65	10.8	275	3/8	12.3
ULT-70CH	2,300	30 - 50	22.2 - 37.0	4.1	1.85	11.4	290	1/2	12.3

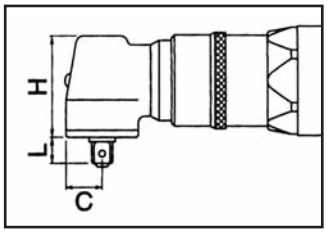
Air Hose Size: 1/4" I.D. for ULT-50C
3/8" I.D. for ULT-60C - ULT-70CH

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

NOTE: Torque ranges reflect residual B joint torque values

Dimensions

MODEL	H		C		L	
	in	mm	in	mm	in	mm
ULT-50C	1.8	45.5	0.625	16	0.469	12
ULT-60C	1.8	45.5	0.625	16	0.469	12
ULT-70C	2.14	54.5	0.703	18	0.625	16
ULT-70CH	2.234	56.5	0.875	22	0.781	20



See also: ERGO-DRIVE® SERIES EXTENSION BARS
on page 108

Pistol Shut-Off 3/8" – 1/2" Drive

Recommended Air Pressure: 85 psi

MODEL	FREE SPEED	TORQUE RANGE		OVERALL LENGTH		WEIGHT		FROM CENTER TO OUTSIDE		SQ. DRIVE	NOISE LEVEL	AIR USAGE
	rpm	Nm	ft-lb	mm	in	lb	kg	mm	in	in	dB(A)	cfm
UX-T700L	7,500	13 - 26	10 - 19	187	7.3	3.2	1.4	25.5	1.0	3/8	72	10.5
UX-T700	7,500	20 - 38	15 - 28	187	7.3	3.2	1.4	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	8.1	5.2	2.3	33.0	1.3	1/2	75	17.6
UX-T1300	6,200	70 - 130	50 - 95	225	8.9	6.2	2.8	36.0	1.4	1/2	79	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

See also: AUDITOR™ TORQUE DATA ANALYZER
on page 85

Shut-Off 3/4" – 1" Drive

Recommended Air Pressure: 85 psi

MODEL	FREE SPEED rpm	TORQUE RANGE Nm	TORQUE RANGE ft-lb	OVERALL LENGTH mm	OVERALL LENGTH in	WEIGHT lb	WEIGHT kg	FROM CENTER TO OUTSIDE mm	FROM CENTER TO OUTSIDE in	SQ. DRIVE in	NOISE LEVEL dB(A)	AIR USAGE cfm
UX-T1620	5,000	120 - 210	87 - 150	260	10.2	8.1	3.7	40	1.6	3/4	82	22.9
UXR-T1820	4,400	150 - 250	110 - 180	270	10.6	9.9	4.5	42	1.6	3/4	84	24.7
UXR-T2000	4,000	200 - 400	150 - 290	303	11.9	15.0	6.8	47	1.8	3/4	85	34.0
UXR-T2400S	3,600	360 - 650	260 - 470	444	17.5	26.4	12.0	62	2.8	1	85	35.2
UXR-T3000S	4,400	450 - 850	330 - 620	477	18.8	32.0	14.5	62	2.8	1	85	37.1

Air Hose Size: 3/8" I.D. for UX-T1620
1/2" I.D. for UXR-T1820 - UXR-T3000S

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

NOTE: Torque ranges reflect residual B joint torque values

Inside Trigger Standard (UXR-T2400S – UXR-T3000S)

See also:
AUDITOR™ BRUSHLESS ROTARY TRANSDUCERS
on page 87

Pistol Non Shut-Off 1/4" Hex Drive

Recommended Air Pressure: 85 psi

MODEL	FREE SPEED rpm	TORQUE RANGE Nm	TORQUE RANGE ft-lb	OVERALL LENGTH mm	OVERALL LENGTH in	WEIGHT lb	WEIGHT kg	FROM CENTER TO OUTSIDE mm	FROM CENTER TO OUTSIDE in	NOISE LEVEL dB(A)	AIR USAGE cfm
U-350D	10,500	3.5 - 5.8	2.5 - 4.2	155	6.1	1.6	0.8	22	0.9	74	5.3
UX-450D	9,500	8 - 14	5.8 - 10	151	5.9	1.9	0.8	22	0.9	65	7.0
UX-500D	9,300	13 - 20	10 - 15	152	6.0	1.9	0.8	22	0.9	70	8.8
UX-612D	9,300	16 - 28	12 - 20	164	6.4	2.1	0.9	23	0.9	75	11.2
UX-700D	9,000	20 - 36	16 - 28	174	6.7	3.0	1.4	26	1.0	72	12.3

Air Hose Size: 1/4" I.D. for U-350D - UX-500D
3/8" I.D. for UX-612D - UX-700D

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

NOTE: Torque ranges reflect residual B joint torque values
All Tools Standard with 1/4" Quick Change Chuck

See also: MAG-O-NETS®
on page 110

Turn virtually any standard screwdriver bit into a magnetized bit by simply sliding on a Mag-O-Net® collar.

Pistol Non Shut-Off 3/8" – 1/2" Drive

Recommended Air Pressure: 85 psi

MODEL	FREE SPEED	TORQUE RANGE		OVERALL LENGTH		WEIGHT		FROM CENTER TO OUTSIDE		SQ. DRIVE	NOISE LEVEL	AIR USAGE
	rpm	Nm	ft-lb	mm	in	lb	kg	mm	in	in	dB(A)	cfm
U-410	10,500	7 - 10	5.0 - 7.2	177	7.0	2.2	1.0	22	0.9	3/8	70	5.3
UX-450	9,500	9 - 15	6.5 - 11	148	5.8	1.9	0.8	22	0.9	3/8	65	7.0
UX-500	9,300	15 - 25	11 - 19	148	5.8	1.9	0.8	22	0.9	3/8	70	8.8
UX-612	9,300	20 - 35	15 - 25	160	6.3	2.1	0.9	23	0.9	3/8	75	11.2
UX-700	9,000	25 - 45	20 - 35	169	6.5	3.0	1.4	26	1.0	3/8	73	12.3
UX-800	9,000	35 - 60	25 - 45	176	5.9	3.7	1.7	28	1.1	3/8	73	14.1
UX-900	7,600	45 - 75	35 - 55	181	7.1	4.1	1.9	30	1.2	1/2	75	14.9
UX-1000	6,800	50 - 95	40 - 70	187	7.3	4.8	2.2	33	1.3	1/2	75	17.9
UX-1300	6,200	80 - 130	60 - 95	205	8.1	5.9	2.7	36	1.4	1/2	76	19.4
UX-1400	5,300	100 - 160	75 - 120	224	8.7	7.0	3.2	40	1.6	1/2	78	21.1
ALPHA-130	3,400	100 - 160	73 - 118	209	8.2	5.8	2.6	36	1.4	1/2	82	22.9

Air Hose Size: 1/4" I.D. for U-410 - UX-500
3/8" I.D. for UX-612 - UX-1400; ALPHA-130

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

NOTE: Torque ranges reflect residual B joint torque values

See also: AUDITOR™ ROTARY TRANSDUCERS
on page 88

Pistol Non Shut-Off 3/4" – 1" Drive

Recommended Air Pressure: 85 psi

MODEL	FREE SPEED rpm	TORQUE RANGE Nm	TORQUE RANGE ft-lb	OVERALL LENGTH mm	OVERALL LENGTH in	WEIGHT lb	WEIGHT kg	FROM CENTER TO OUTSIDE mm	FROM CENTER TO OUTSIDE in	SQ. DRIVE in	NOISE LEVEL dB(A)	AIR USAGE cfm
ALPHA-140	3,100	150 - 230	110 - 169	226	8.9	7.4	3.3	40	1.6	3/4	84	24.7
ALPHA-160	3,700	160 - 270	118 - 198	245	9.6	8.4	3.8	40	1.6	3/4	84	31.7
ALPHA-180	3,500	270 - 350	198 - 258	250	9.8	10.1	4.6	42	1.7	3/4	85	33.6
UX-1620	5,000	120 - 190	90 - 140	241	9.5	7.9	3.6	40	1.6	3/4	82	22.9
UXR-1820	4,600	160 - 250	120 - 185	242	9.5	9.0	4.1	42	1.6	3/4	84	26.3
UXR-2000	4,200	300 - 450	220 - 330	280	11.0	15.0	6.8	47	1.8	3/4	85	31.5
UXR-2000S	4,200	300 - 450	220 - 330	340	13.4	15.4	7.0	47	1.8	3/4	85	31.6
UXR-2400S	4,000	400 - 650	290 - 470	385	15.2	23.7	10.8	55	2.1	1	85	35.2
UXR-3000S	4,400	500 - 850	360 - 630	455	16.6	29.3	13.3	62	2.8	1	85	37.1

Air Hose Size: 3/8" I.D. for UX-1620, ALPHA-140 - ALPHA-160
1/2" I.D. for UXR-1820 - UXR-3000S, ALPHA-180

Air Inlet: N.P.T. 1/4" for UX-1620
N.P.T. 3/8" for UXR-1820, UXR-2000(S), Alpha-180
N.P.T. 1/2" for UXR-2400S - UXR-3000S

NOTE: Torque ranges reflect residual B joint torque values

Torque Control in Left-Hand Rotation Available (UXR-2000 - UXR-3000S)
Inside Trigger Standard (UXR-2000S - UXR-3000S)

AIMCO Tool University TRAINING

Threaded fasteners have been in use for hundreds of years as a better component than nails, pins, welding or riveting for holding parts together. Perhaps even more important is their ability to be removed and reused. Threaded fasteners are now among the most produced and used tools in the world with billions being put into use every day throughout the world.

Inline Non Shut-Off 1/4" Hex Drive

Recommended Air Pressure: 85 psi

MODEL	FREE SPEED rpm	TORQUE RANGE Nm	TORQUE RANGE ft-lb	OVERALL LENGTH mm	OVERALL LENGTH in	WEIGHT lb	WEIGHT kg	FROM CENTER TO OUTSIDE mm	FROM CENTER 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	0.7	74	5.3
U-350SD	10,500	3.5 - 5.8	2.5 - 4.2	238	9.4	1.5	0.6	22	0.9	74	5.3
U-410SD	10,500	7 - 10	5 - 7.2	240	9.4	1.8	0.8	22	0.9	69	5.3
UX-450SD	9,500	8 - 14	5.8 - 10	239	9.4	1.8	0.8	22	0.9	69	7.0
UX-500SD	9,300	13 - 20	10 - 15	244	9.6	2.0	0.9	22	0.9	70	8.8
UX-612SD	9,300	16 - 28	12 - 20	253	9.9	2.2	1.0	23	0.9	75	11.1
UX-700SD	9,000	20 - 36	16 - 28	249	9.8	2.8	1.3	27	1.0	78	12.3
ALPHA-60SD	7,000	22 - 35	16 - 25	244	9.6	2.1	0.9	22	0.9	78	15.8

Air Hose Size: 1/4" I.D. for U-310SD - UX-500SD
3/8" I.D. for UX-612D - UX-700SD, ALPHA-60SD
Air Inlet: N.P.T. 1/4"

NOTE: Torque ranges reflect residual B joint torque values
All Tools Standard with 1/4" Quick Change Chuck

AIMCO Tool University TRAINING

Threaded fasteners act as ***energy storage devices*** during and after the tightening process. As an active member of the joint they stretch as tensile force is applied and store potential energy. This stored energy results in clamp-load within the joint.

Inline Non Shut-Off 3/8" – 1/2" Drive

Recommended Air Pressure: 85 psi

MODEL	FREE SPEED	TORQUE RANGE		OVERALL LENGTH		WEIGHT		FROM CENTER TO OUTSIDE		SQ. DRIVE	NOISE LEVEL	AIR USAGE
	rpm	Nm	ft-lb	mm	in	lb	kg	mm	in	in	dB(A)	cfm
U-410S	10,500	7 - 10	5.0 - 7.2	239	9.4	1.8	0.8	22	0.9	3/8	70	5.3
UX-450S	9,500	9 - 15	6.5 - 11	233	9.2	1.8	0.8	22	0.9	3/8	67	7.0
UX-500S	9,300	15 - 25	11 - 19	239	9.4	2.0	0.9	22	0.9	3/8	70	8.8
UX-612S	9,300	20 - 35	15 - 25	248	9.8	2.2	1.0	23	0.9	3/8	75	11.1
UX-700S	9,000	25 - 45	20 - 35	244	9.6	2.8	1.3	27	1.0	3/8	78	12.3
UX-800S	9,000	35 - 60	25 - 45	250	9.8	3.2	1.5	36	1.4	3/8	75	14.2
UX-900S	7,600	45 - 75	35 - 55	310	12.2	3.9	1.8	38	1.4	1/2	75	14.9
UX-1000S	6,800	50 - 95	40 - 70	320	12.6	4.6	2.1	39	1.4	1/2	75	17.6
UX-1300S	6,200	80 - 130	60 - 95	336	13.2	6.6	2.5	42	1.3	1/2	79	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

AIMCO Tool University TRAINING

Threaded joints are classified by their "stiffness" or "joint rate". A ***hard joint*** is one that measures less than 30 degrees of rotation from snug to final torque. A ***medium joint*** measures 31 – 719 degrees of rotation from snug to final torque, while a ***soft joint*** measures 720 degrees or more.

Angle 3/8" – 1/2" Drive

Recommended Air Pressure: 85 psi

MODEL	FREE SPEED	TORQUE RANGE		WEIGHT		OVERALL LENGTH		SQ. DRIVE	NOISE LEVEL	AIR USAGE
	rpm	Nm	ft-lb	lb	kg	mm	in	in	dB(A)	cfm
UX-500C	9,300	13 - 20	10 - 15	2.8	1.3	270	10.6	3/8	82	8.8
UX-612C	9,800	16 - 28	12 - 20	3.0	1.4	283	11.1	3/8	85	11.2
UX-700C	9,500	20 - 36	16 - 28	3.7	1.7	275	10.8	3/8	85	12.3
UX-800C	9,000	29 - 43	20 - 31	4.3	1.9	285	11.2	3/8	85	14.1
UX-900C	7,600	35 - 55	25 - 40	5.0	2.2	338	13.3	3/8	90	14.9
UX-1000C	6,800	50 - 80	40 - 58	6.8	3.1	365	14.3	1/2	90	17.9
UX-612A	9,800	16 - 28	12 - 20	3.0	1.4	297	11.7	3/8	85	10.5

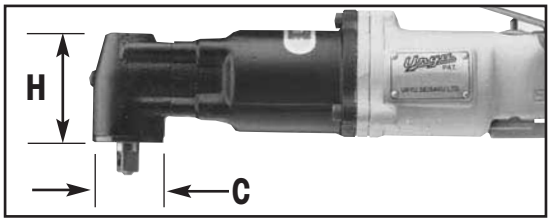
Air Hose Size: 1/4" I.D. for UX-500C
3/8" I.D. for UX-612C - UX-1000C

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

NOTE: Torque ranges reflect residual B joint torque values

MODEL	C		H	
	mm	in	mm	in
UX-500C	15.0	.59	59.5	2.34
UX-612C	16.0	.64	59.5	2.34
UX-700C	16.0	.64	62.0	2.45
UX-800C	18.0	.72	70.0	2.77
UX-900C	18.0	.72	70.0	2.45
UX-1000C	21.5	.81	79.0	3.13

Dimensions



AIMCO Tool University TRAINING

Snug Point is the point during tightening when all joint components have come into contact, either directly or indirectly, and any additional torque will lead to fastener elongation. It is also the point from which the angle of rotation for joint rate is measured.

STUD BOLT SERIES

Auto Reversing

Recommended Air Pressure: 85 psi

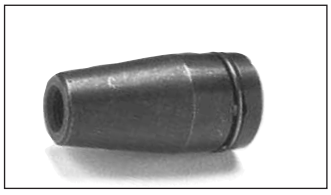
MODEL	FREE SPEED rpm	TORQUE RANGE Nm	TORQUE RANGE ft-lb	OVERALL LENGTH mm	OVERALL LENGTH in	WEIGHT lb	WEIGHT kg	FROM CENTER TO OUTSIDE mm	FROM CENTER TO OUTSIDE in	NOISE LEVEL dB(A)	AIR USAGE cfm
UX-ST800	7,300	35 - 55	25 - 40	195	7.7	3.8	1.7	28	1.1	75	10.5
UX-ST1000	6,300	50 - 90	40 - 65	210	8.3	5.5	2.5	33	1.3	75	16.8

Air Hose Size: 3/8" I.D. Air Inlet: N.P.T. 1/4" NOTE: Torque ranges reflect residual B joint torque values

See Also: STUD BOLT SOCKETS

PART NO	THREAD SIZE	LENGTH MM	LENGTH IN	DRIVE IN
A31/4P20	1/4-20"	55	2.17	3/8
A305P0.8	M5	42	1.65	3/8
A41/4P20	1/4-20"	65	2.59	1/2
A406P1.0	M6	50	1.97	1/2

Additional sizes of stud bolt sockets are available upon request.



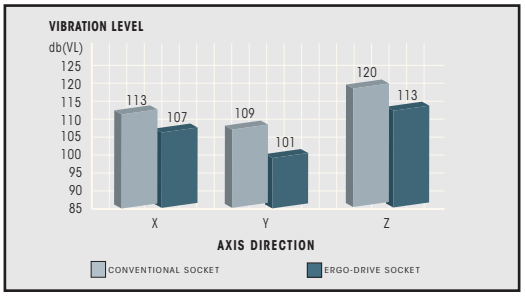
SEE ALSO: ERGONOMIC TWIST PLUGS
on page 105

These unique, ergonomically designed hose fittings provide 360° rotation and 35° angled rotation in any direction.

Ergo-Drive® sockets
Protect...

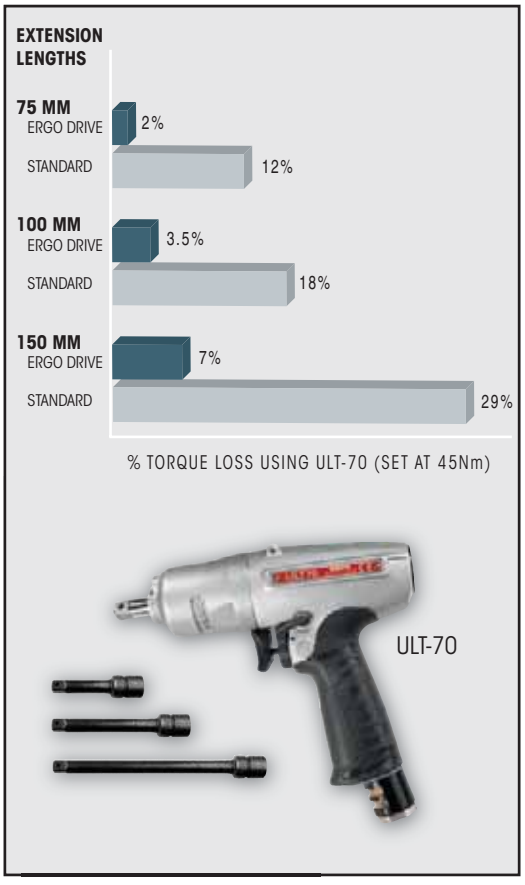
...YOUR INVESTMENT!

Pulse tools are an investment and the anvil is the most expensive single part of any pulse tool. ERGO-DRIVE® sockets mean less vibration and wear on this critical component.



...YOUR WORKERS!

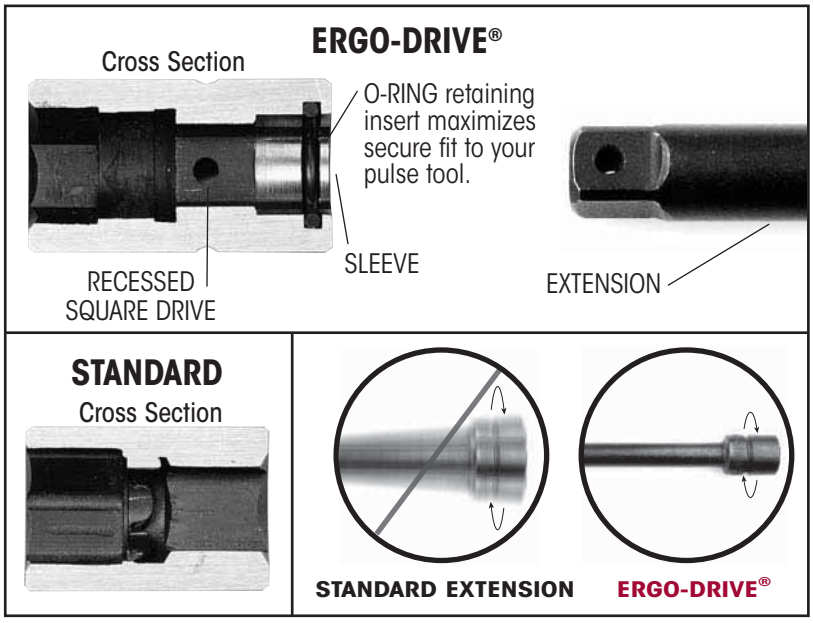
ERGO-DRIVE® sockets cause significantly less vibration during fastening than conventional sockets. This allows your workers to do their jobs without the worry of vibration-related injuries.



...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



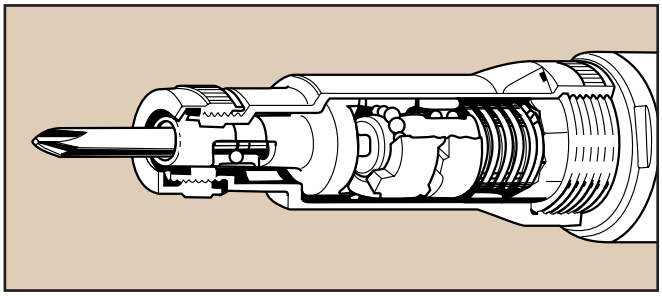
See page 109 for part numbers and specifications

TORQUE CONTROL AUTOMATIC SHUT-OFF TYPE

- Precise repeatability to improve quality
- Very little wear on internal parts for long life
- Quick shut-off for minimum torque reaction
- Choices of speeds for flexibility
- External simple torque adjustment
- Midrange air motor provides high speed during entire cycle
- Best choice for industrial torque control applications

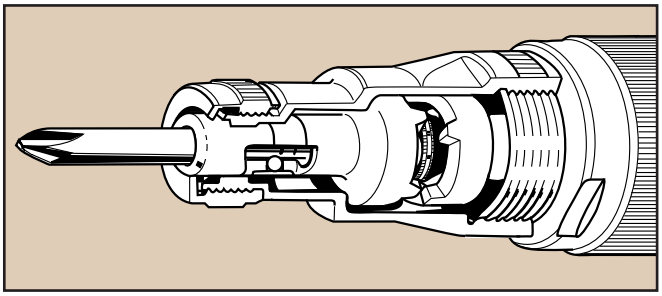
CUSHION CLUTCH TYPE

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



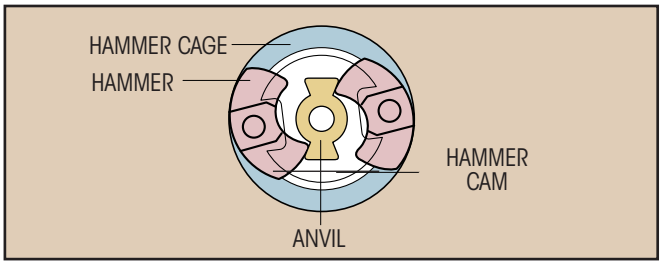
POSITIVE CLUTCH TYPE

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



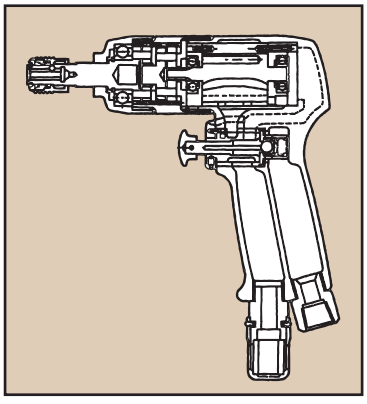
IMPACT TYPE

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



DIRECT DRIVE

- Air motor directly drives the gears
- Stall torque dependent on air pressure
- Simple maintenance
- Lightest and smallest air screwdriver
- Good for soft draw applications such as wood screws, self-tapping screws, or trim screws



AIMCO Tool University TRAINING

Only 12% of tightening energy is used to create ***clamp load*** in a joint. The other 88% of the tightening energy is consumed by friction of the threads and fastener head mating with the joint components.

1. **Tool Hanger**
2. **Muffled Exhaust**
3. **Push Button Lockable Reverse**
4. **Foam Grip**
   Standard with all models
5. **Simple Torque Adjustment**
6. **Compact Bit Holder**
7. **Thousands of Bits and Sockets available**
   Contact AIMCO for more information

Torque Control Light Touch (LT) Series – Push-to-Start Type Inline

Recommended Air Pressure: 85 psi

MODEL	TORQUE RANGE		FREE SPEED	OVERALL LENGTH		WEIGHT		FROM CENTER TO OUTSIDE		NOISE LEVEL	AIR USAGE
	Nm	in-lb	rpm	mm	in	lb	kg	mm	in	dB(A)	cfm
US-LT10B	0.20 - 0.60	1.8 - 5.3	1,000	190	7.5	0.6	0.3	12	0.5	75	5.2
US-LT20B-10	0.15 - 1.10	1.3 - 9.7	1,000	180	7.1	0.7	0.3	13	0.5	70	5.6
US-LT20B-18	0.15 - 0.70	1.3 - 6.2	1,800	180	7.1	0.7	0.3	13	0.5	70	5.6
US-LT20B-26	0.15 - 0.35	1.3 - 3.1	2,600	180	7.1	0.7	0.3	13	0.5	70	5.6
US-LT30B-11	0.40 - 2.10	3.5 - 18.5	1,100	187	7.2	0.9	0.4	16	0.6	70	7.0
US-LT30B-17	0.40 - 1.50	3.5 - 13.0	1,700	187	7.2	0.9	0.4	16	0.6	70	7.0
US-LT30B-23	0.40 - 1.00	3.5 - 8.7	2,300	187	7.2	0.9	0.4	16	0.6	71	7.0
US-LT40B-08	1.00 - 4.00	8.7 - 34.7	800	209	8.2	1.4	0.6	17	0.6	70	10.5
US-LT40B-15	1.00 - 2.20	8.7 - 19.1	1,500	209	8.2	1.4	0.6	17	0.6	70	10.5
US-LT40B-21	1.00 - 1.70	8.7 - 14.8	2,100	209	8.2	1.4	0.6	17	0.6	74	10.5
US-LT50B-05	1.50 - 10.50	13.2 - 92.4	480	240	9.4	2.2	1.0	20	0.8	74	17.5
US-LT50B-08	1.50 - 5.50	13.2 - 48.4	800	240	9.4	2.2	1.0	20	0.8	75	17.5
US-LT50B-17	1.50 - 2.50	13.2 - 23.0	1,700	240	9.4	2.2	1.0	20	0.8	75	17.5

Each model is equipped with its standard and alternate clutch springs.
Additional clutch springs specifications to provide the full torque range of each model on page 28.
Air Hose Size: 1/4" I.D. for US-LT10B - US-LT40B Series
Air Inlet: 1/8" for US-LT10B - US-LT20B Series
3/8" I.D. for US-LT50B Series
1/4" for US-LT30B - US-LT50B Series

See also: AUET/MTM DESKTOP TESTERS
on page 84

Torque Control Light Touch (LT) Series – Angle and Lever

Recommended Air Pressure: 85 psi

MODEL	TORQUE RANGE (SOFT JOINT) Nm	in-lb	FREE SPEED rpm	OVERALL LENGTH mm	in	WEIGHT lb	kg	FROM CENTER TO OUTSIDE mm	in	HEX BIT OR DRIVE SIZE in	NOISE LEVEL dB(A)	AIR USAGE cfm
ANGLE												
US-LT30B-11C	0.39 - 2.10	3.5 - 18.5	1,100	298	10.7	1.5	0.7	10	0.4	1/4	73	7.0
US-LT30B-17C	0.39 - 1.50	3.5 - 13.2	1,700	295	10.7	1.5	0.7	10	0.4	1/4	73	7.0
US-LT40B-05C	2.26 - 5.60	20.0 - 49.5	500	322	13.0	2.1	0.9	13	0.5	1/4	75	10.5
US-LT40B-08C	0.98 - 3.92	8.7 - 34.7	800	320	12.8	2.0	0.9	10	0.4	1/4	75	10.5
US-LT40B-15C	0.98 - 2.20	8.7 - 19.4	1,500	320	12.8	2.0	0.9	10	0.4	1/4	75	10.5
US-LT40-03C	4.90 - 9.80	43.4 - 86.8	300	360	14.2	2.4	1.1	13	0.5	1/4 Sq.	72	10.5
US-LT40-05C	2.26 - 5.70	20.0 - 50.2	500	322	13.0	2.1	0.9	13	0.5	1/4 Sq.	75	10.5
US-LT40-08C	0.98 - 3.92	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	0.39 - 2.10	3.5 - 18.5	1,100	229	8.2	1.2	0.5	15	0.6	1/4	70	7.0
US-LT30BL-17	0.39 - 1.47	3.5 - 13.0	1,700	229	8.2	1.2	0.5	15	0.6	1/4	70	7.0
US-LT30BL-23	0.39 - 0.98	3.5 - 8.7	2,300	229	8.2	1.2	0.5	15	0.6	1/4	71	7.0
US-LT40BL-08	0.98 - 4.00	8.7 - 35.2	800	249	9.1	1.5	0.7	17	0.7	1/4	70	10.5
US-LT40BL-15	0.98 - 2.20	8.7 - 19.4	1,500	249	9.1	1.5	0.7	17	0.7	1/4	70	10.5
US-LT40BL-21	0.98 - 1.70	8.7 - 15.0	2,100	249	9.1	1.5	0.7	17	0.7	1/4	74	10.5

Angle Head Height: 32 - 36mm Air Inlet: N.P.T. 1/4" Air Hose Size: 1/4" I.D. for all models

See also: AUDITOR™ TORQUE CUBE™ on page 83

Torque Reaction Bar standard with US-LT60P Series

Torque Control Light Touch (LT) Series – Pistol

Recommended Air Pressure: 85 psi

MODEL	TORQUE RANGE (SOFT JOINT)		FREE SPEED	OVERALL LENGTH		WEIGHT		FROM CENTER TO OUTSIDE		NOISE LEVEL	AIR USAGE
	Nm	in-lb	rpm	mm	in	lb	kg	mm	in	dB(A)	cfm
US-LT31PB-05	1.0 - 5.0	8.8 - 44.0	500	189	7.3	1.9	0.8	16.0	0.6	70	7.0
US-LT31PB-11	0.4 - 2.1	3.5 - 18.5	1,100	170	6.7	1.6	0.7	15.5	0.6	70	7.0
US-LT31PB-17	0.4 - 1.5	3.5 - 13.2	1,700	170	6.7	1.6	0.7	15.5	0.6	70	7.0
US-LT31PB-23	0.4 - 1.0	3.5 - 8.8	2,300	170	6.7	1.6	0.7	15.5	0.6	70	7.0
US-LT41PB-08	1.0 - 3.9	8.8 - 34.7	800	175	7.0	1.8	0.8	16.5	0.6	70	10.5
US-LT41PB-15	1.0 - 2.2	8.8 - 19.4	1,500	175	7.0	1.8	0.8	16.5	0.6	70	10.5
US-LT41PB-21	1.0 - 1.7	8.8 - 15.0	2,500	175	7.0	1.8	0.8	16.5	0.6	74	10.5
US-LT51PB-05	1.5 - 10.5	13.2 - 91.2	480	198	8.4	2.6	1.2	19.5	0.7	74	17.5
US-LT51PB-08	1.5 - 5.5	13.2 - 48.4	800	198	8.4	2.6	1.2	19.5	0.7	75	17.5
US-LT51PB-17	1.5 - 2.6	13.2 - 23.0	1,700	198	8.4	2.6	1.2	19.5	0.7	75	17.5
US-LT60P-03(P)	7.0 - 20.0	61.6 - 176.0	320	230	9.0	3.7	1.7	22.0	0.9	75	21.0
US-LT60P-07(P)	4.0 - 10.0	35.2 - 88.0	650	230	9.0	3.7	1.7	22.0	0.9	76	21.0
US-LT60P-11(P)	4.0 - 7.0	35.2 - 61.6	1,100	230	9.0	3.7	1.7	22.0	0.9	77	21.0

Each model is equipped with its standard and alternate clutch springs. Additional clutch springs specifications are available on page 28.
(P) DENOTES 3/8" SQ. DRIVE FOR US-LT60P SERIES.

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

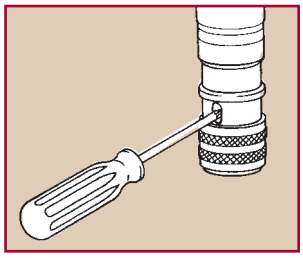
See also: LINE REEL BALANCERS
on page 99

Optional Clutch Springs

MODEL	CLUTCH SPRINGS PROVIDED		RECOMMENDED TORQUE RANGE HARD JOINT		CLUTCH SPRING CODE NUMBER
	Standard	Option	Nm	in-lb	
US-LT10/10B	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 through the slot into the key hole on the Adjusting Gear and turn clockwise to increase torque and counter clockwise to decrease.



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

See Also: AIMCO AIR HOSE
on page 105

- Durable polyurethane hose
- Excellent recoil memory
- Assemblies include reusable swivel fitting
- Straight hose is available by the foot with or without hose fittings

FEATURES

- Lightest air driver
- Perfect for woodscrews and trim screws
- Fewest parts

Direct Drive Series

Recommended Air Pressure: 85 psi

MODEL	MAX. TORQUE SOFT JOINT Nm	SOFT JOINT ft-lb	HARD JOINT Nm	HARD JOINT ft-lb	FREE SPEED rpm	OVERALL LENGTH mm	OVERALL LENGTH in	WEIGHT lb	WEIGHT kg	FROM CENTER TO OUTSIDE mm	FROM CENTER TO OUTSIDE in	NOISE LEVEL dB(A)	AIR USAGE cfm
PISTOL													
US-LD40P-08	4.8	3.6	5.2	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	6.1	2.0	0.9	20	0.8	74	17.5
US-LD50P-08	6.5	4.8	7.8	5.8	900	153	6.1	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
ANGLE													
US-3.5ACB	1.2	10.6	2.4	21.6	2,000	236	9.3	1.4	0.6	10.0	0.4	85	7.0

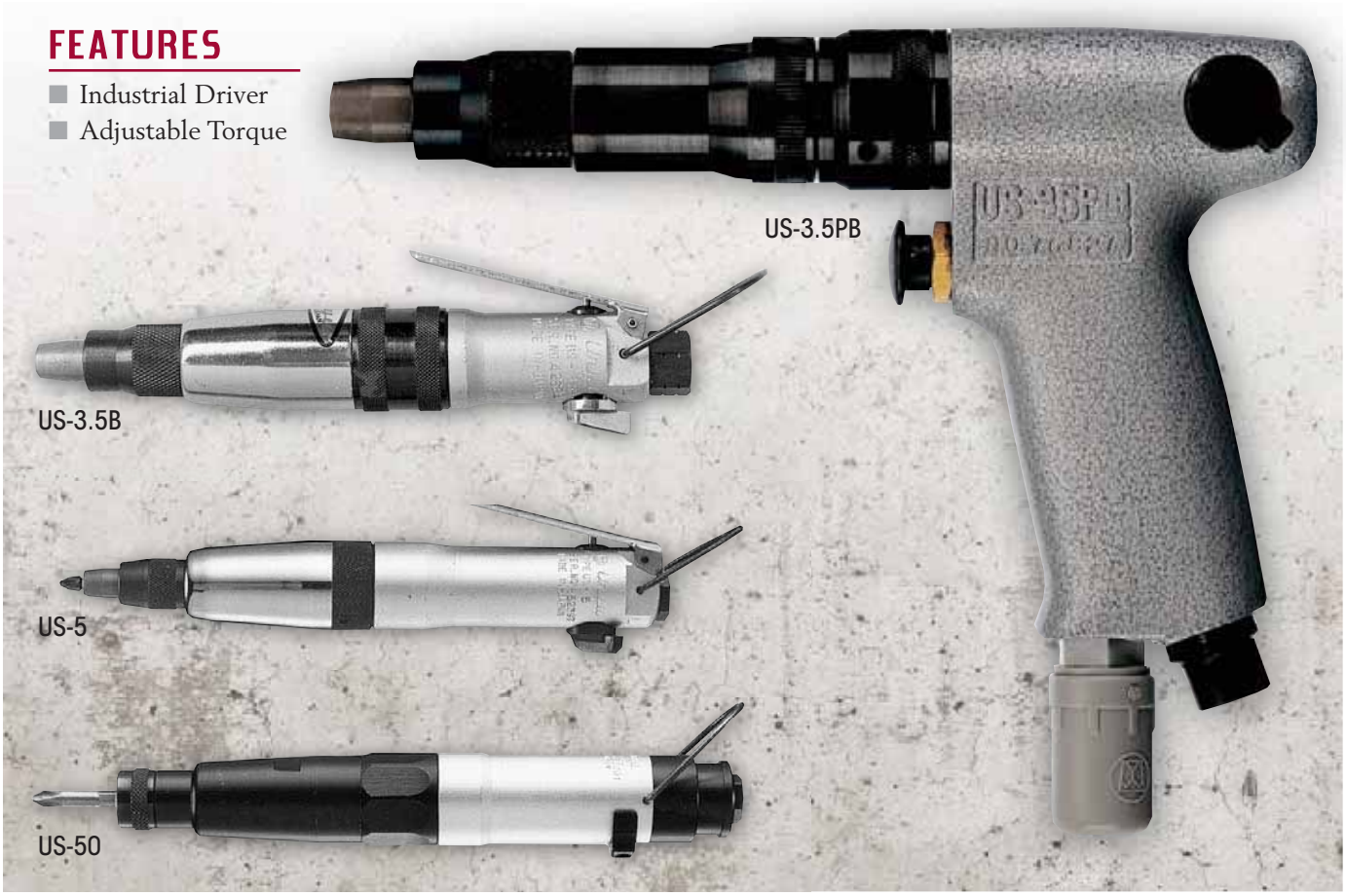
Air Hose Size: 1/4" I.D. Air Inlet: N.P.T. 1/4"

See also: TW-SERIES BALANCERS
on page 98

PNEUMATIC SCREWDRIVERS

FEATURES

- Industrial Driver
- Adjustable Torque



Cushion Clutch Series

Recommended Air Pressure: 85 psi

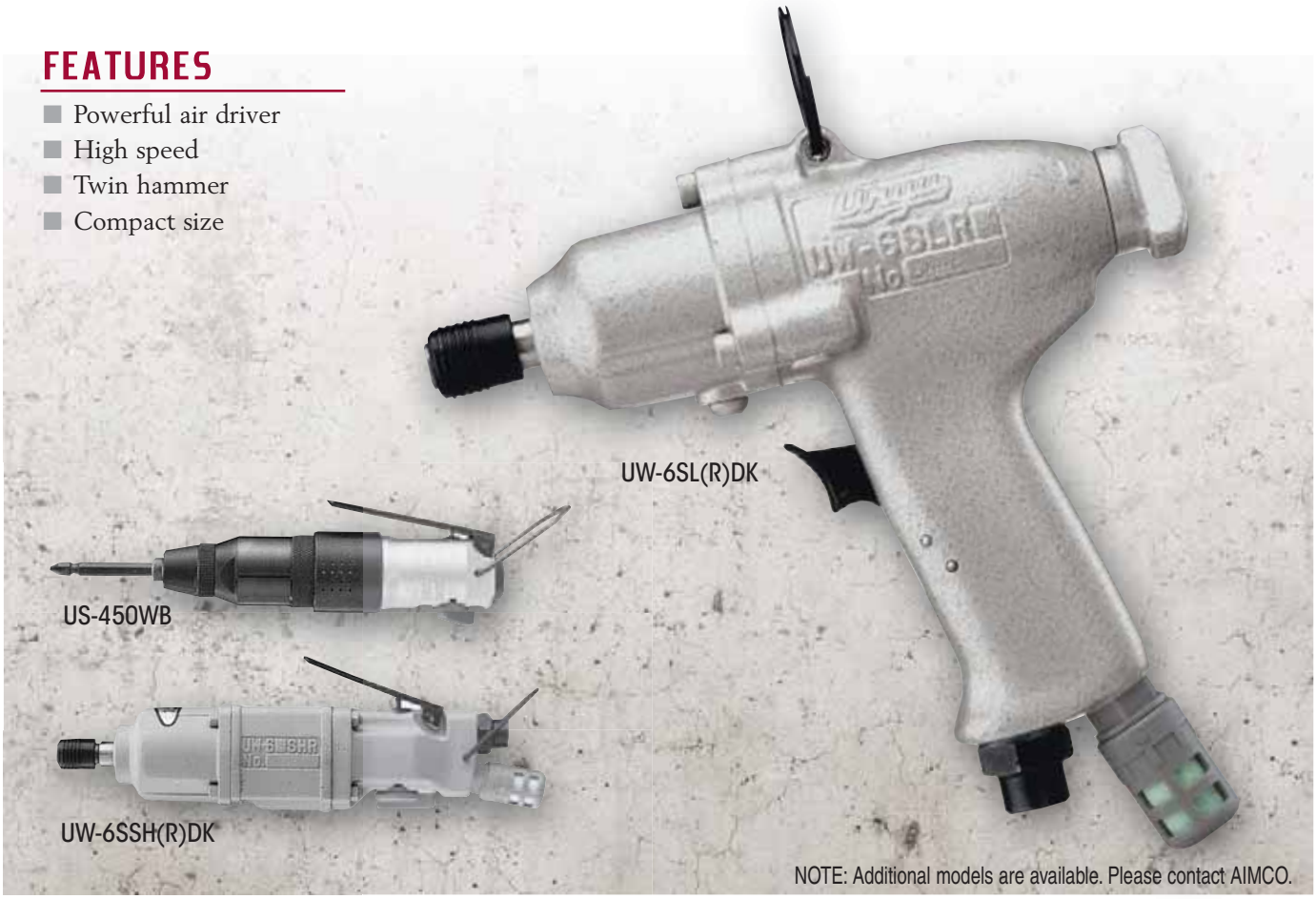
MODEL	TORQUE RANGE Nm	TORQUE RANGE in-lb	FREE SPEED rpm	OVERALL LENGTH mm	OVERALL LENGTH in	WEIGHT LESS BIT lb	WEIGHT LESS BIT kg	FROM CENTER TO OUTSIDE mm	FROM CENTER TO OUTSIDE in	NOISE LEVEL dB(A)	AIR USAGE cfm
US-3.5PB	1.1 - 2.5	10 - 22	2,000	200	7.9	1.6	0.7	17	0.7	75	7.0
US-3.5B	1.2 - 2.5	11 - 22	2,000	214	8.4	1.4	0.6	17	0.7	75	7.0
US-5	3.4 - 7.7	30 - 68	1,400	258	10.1	2.4	1.1	21	0.8	75	7.0
US-50*	3.9 - 7.7	35 - 68	1,200	245	9.6	2.0	0.9	18	0.7	76	10.7

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

See Also: FASTENER TOOLS
on page 107

FEATURES

- Powerful air driver
- High speed
- Twin hammer
- Compact size



NOTE: Additional models are available. Please contact AIMCO.

Impact Series

Recommended Air Pressure: 85 psi

MODEL	TORQUE RANGE Nm	TORQUE RANGE in-lb	FREE SPEED rpm	OVERALL LENGTH mm	OVERALL LENGTH in	WEIGHT LESS BIT lb	WEIGHT LESS BIT kg	FROM CENTER TO OUTSIDE mm	FROM CENTER TO OUTSIDE in	NOISE LEVEL dB(A)	AIR USAGE cfm
PISTOL											
US-350PW*	4.2 - 8.3	3.1 - 6.1	16,000	121	4.8	1.2	0.5	17	0.7	82	7.0
US-652PW*	7.1 - 12.1	5.2 - 8.9	9,300	155	6.1	1.9	0.8	23	0.9	78	8.8
UW-6SL(R)DK	5.7 - 15	4.2 - 11.1	8,500	165	6.5	2.2	1.0	22	0.8	90	10.5
UW-61E(R)DK	14 - 60	10.3 - 44.2	7,500	150	5.3	3.6	1.6	30	1.2	92	12.4
STRAIGHT											
US-450WB*	3.2 - 7.2	2.4 - 5.3	11,000	161	6.3	1.2	0.5	19	0.7	80	7.0
UW-6SSH(R)DK	16 - 36	11.8 - 26	7,300	265	10.4	2.8	1.3	24	0.9	91	12.4

*Recommended air pressure for US-350PW & US-450WB: 57 psi

NOTE: Additional models available. Please contact AIMCO.

(R) Denotes Directional Muffled Rear Exhaust option

Air Hose Size: 1/4" I.D. for US-350PW, US-450WB & US-652PW
3/8" I.D. for UW-6 Series

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

See also: TOOL BASKET
on page 103

ELECTRIC SCREWDRIVERS: OVERVIEW

ELECTRA SERIES

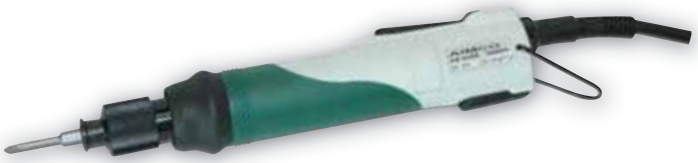
- Available in **Push-To-Start** and **Lever Start** styles.
- **Ergonomic Design** — Lightweight, compact housings ensure operator comfort during operation.
- **Accurate Torque Control** — Precise controlled fastening with automatic shut-off clutches.
- **External Brush Replacement** — Virtually no 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)... just plug it in!
- **State-of-the-Art Motor Design** — Ensures comfortable grip temperature for operator comfort and extended motor life.

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.

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 and one of the best power-to-weight ratios in the industry.
- **Added Maintenance Feature** — An LED light notifies the operator when to change brushes. Brush cap contains a switch which 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.



PRECISION SERIES

FOR LOW TORQUE APPLICATIONS

Featuring ergonomic design in shape and materials and options such as long-life brushless motors or 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 lessen cross threading
- **Ergonomic Housing** — Oval shape conforms to hand
- **Duralite** — New casing material for a secure grip
- **Integrated Lever** — Feather-touch integrated lever reduces travel and stress. Requires only 2 mm of travel to activate.
- **External Torque Control** — Just 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

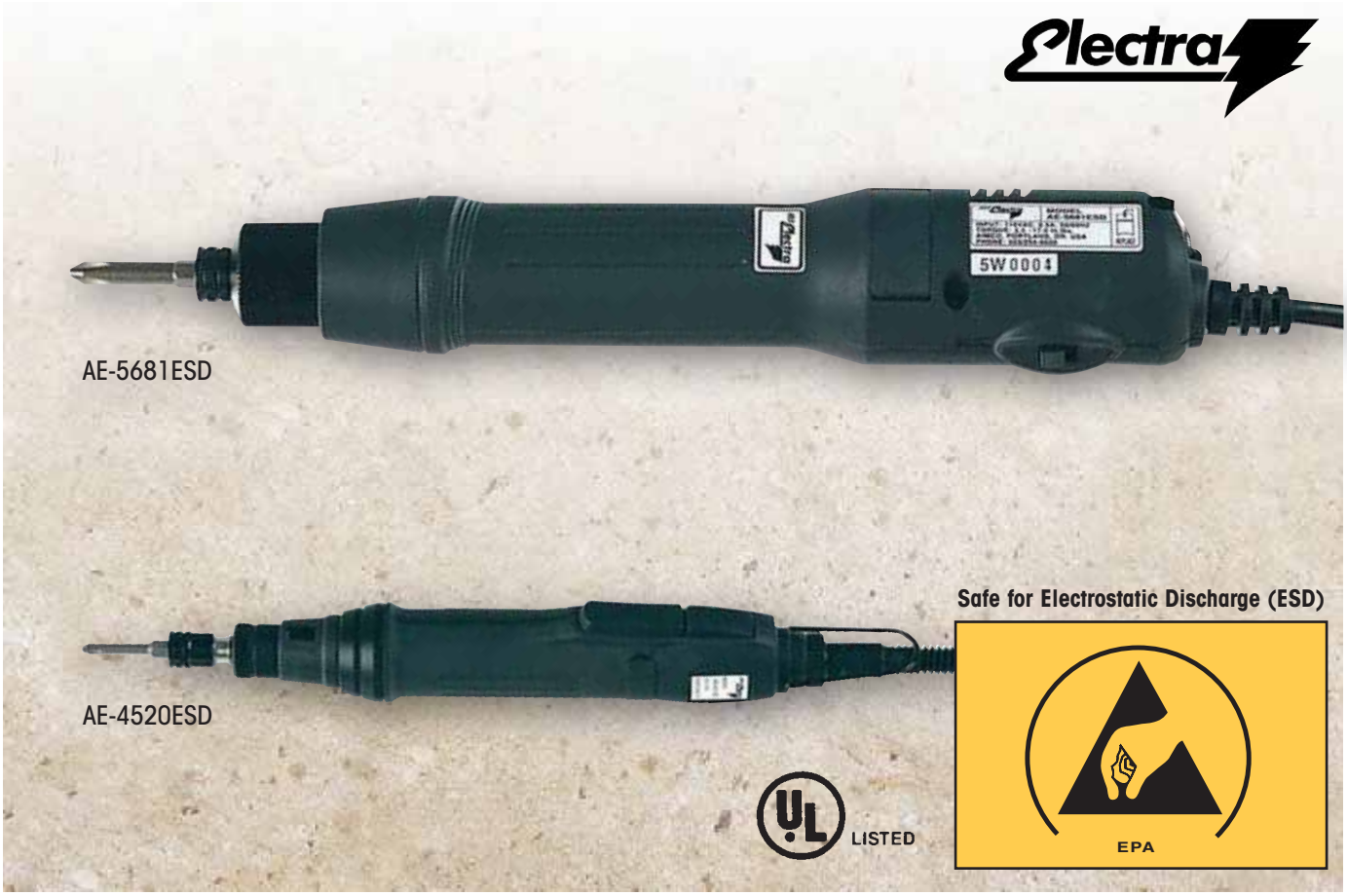
Electra Series

MODEL	TORQUE RANGE in-lb	TORQUE RANGE kgf-cm	FREE SPEED rpm	WEIGHT lb	WEIGHT kg	LENGTH in	LENGTH mm	HEX DRIVE in	HEX DRIVE mm	POWER SOURCE
PUSH-TO-START DIRECT PLUG-IN SERIES										
AE-5681[3]	3 - 17	3.4 - 19.5	1,000	1.2	0.5	9.3	237	1/4	6.4	115V AC[1]
AE-8681[4]	15 - 45	23.0 - 51.8	600	1.6	0.7	10.6	269	1/4	6.4	115V AC[1]
LOW VOLTAGE LEVER START SERIES[2]										**POWER SUPPLY:**
AE-2020B	.35 - 1.3	.40 - 1.5	720	0.7	0.3	8.0	203	1/4	6.4	See top
AE-4020	.5 - 5.5	.58 - 6.4	720	0.7	0.3	8.0	203	1/4	6.4	of page 36
AE-4520	1.3 - 8.2	1.5 - 9.4	720	0.7	0.3	8.0	203	1/4	6.4	for required
AE-7010	6.1 - 17.4	7.0 - 20.0	750	1.4	0.6	9.3	236	1/4	6.4	power supplies[2]
AE-8010	10.4 - 26.0	12.0 - 29.9	550	1.4	0.6	9.3	236	1/4	6.4	
LOW VOLTAGE PUSH-TO-START SERIES[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 36 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[2]

[1] 220V AC is available upon request
[2] Low voltage units require an external power supply. Please see page 36 for applicable units.
[3] AE-5681 includes a torque cover
[4] AE-8681 includes a pistol grip handle adapter

See also: ANGLE HEAD ACCESSORIES
on page 36

ELECTRIC SCREWDRIVERS



Electra Low ESD Series

MODEL	TORQUE RANGE in-lb	TORQUE RANGE kgf-cm	FREE SPEED rpm	WEIGHT lb	WEIGHT kg	LENGTH in	LENGTH mm	HEX DRIVE in	HEX DRIVE mm	POWER SOURCE
AE-5681ESD	3 - 17	3.4 - 19.5	1,000	1.2	0.5	9.3	237	1/4	6.4	115V AC[1]
AE-4520ESD[2]	1.3 - 8.2	1.5 - 9.4	720	0.9	0.4	8.0	204	1/4	6.4	35V DC

[1] 220V AC is available upon request
[2] Low voltage units require an external power supply. Please see page 36 for applicable units.

Electra Slip Clutch Series

MODEL	RECOMMENDED TORQUE RANGE in-lb	RECOMMENDED TORQUE RANGE kgf-cm	FREE SPEED rpm	WEIGHT lb	WEIGHT kg	LENGTH in	LENGTH mm	HEX DRIVE in	HEX DRIVE mm	POWER SOURCE
AE-2015	2.0 - 15.0	2.3 - 18.0	1000	1.2	.55	9.2	234	1/4	6.4	110V/120VAC[1]

[1] 220V AC is available upon request

See Also: ASB-SERIES BALANCERS
on page 98

- Built-in Safety Features
- Ergonomic Spring Release
- Extended Cable Length

Precision Series

MODEL	TORQUE RANGE in-lb	TORQUE RANGE kgf-cm	FREE SPEED rpm	WEIGHT lb	WEIGHT kg	LENGTH in	LENGTH mm	HEX DRIVE 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 LIFE								
AE-6300M	1.0 - 5.5	1.1 - 6.3	550	0.9	0.4	8.5	216	1/4

Power Supplies

MODEL	FEATURE	DIMENSIONS in	DIMENSIONS mm	WEIGHT lb	WEIGHT kg
STANDARD AND HIGH SPEED					
AE-24PS	Standard PS	2.6 x 1.6 x 5.0	66 x 14 x 127	1.0	0.5
AE-2045DPS	Dual Power Supply	4.6 x 3.7 x 7.8	117 x 94 x 198	7.0	3.2
APS-35W	Variable Speed / Soft Start	2.6 x 1.6 x 5.0	66 x 14 x 127	1.0	0.5
EXTENDED LIFE					
APM-30	Extended Life PS	2.1 x 3.4 x 1.9	53 x 87 x 48	0.4	0.2

See also: SCREW PRESENTERS
on page 95

AE-7080PS AE-2045DPS

APS-35W

AE-24PS and AE-78PS

Electra Series Accessories – Power Supplies

MODEL	COMPATIBLE SCREWDRIVERS		TOOL rpm	VOLTAGE CONVERSION	DIMENSIONS lb	WEIGHT kg	
AE-24PS	AE-2020B AE-4020 AE-4520 AE-4520ESD	AE-6300 AE-6300S AE-6450 AE-6450S	720	110V AC / 35V DC	2.6 x 1.6 x 5.0" 66 x 41 x 127 mm	1.0	.45
AE-2045D	AE-2020B AE-4020 AE-4520 AE-4520ESD	AE-6300 AE-6300S AE-6450 AE-6450S	500 or 720 Switchable	110V AC / 35V DC	4.6 x 3.7 x 7.8" 117 x 94 x 198 mm	7.0	3.2
APS-35	AE-2020B AE-4020 AE-4520 AE-4520ESD	AE-6300 AE-6300S AE-6450 AE-6450S	Variable Speed Soft Start	110V AC / 35V DC	2.6 x 1.6 x 5.0" 66 x 14 x 127 mm	1.0	0.5
AE-78PS	AE-7010 AE-7010PS	AE-8010 AE-7010	Standard	110V AC / 30V DC	1.6 x 5.0 x 2.6" 41 x 127 x 66mm	1.0	.45
AE-7080PS	AE-7010PS AE-8010PS	AE-7010 AE-8010	Standard	110V AC / 30V DC	4.6 x 3.7 x 7.8" 117 x 94 x 198 mm	7.0	3.2
APM-30	AE-6300M		550	110V AC / 35V DC	2.1 x 3.4 x 1.9" 53 x 87 x 48 mm	0.4	0.2

ANGLE HEAD ATTACHMENTS
Available for lever start series. Part # AE-2045A or AE-7080A. Not available on Low ESD Series.

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

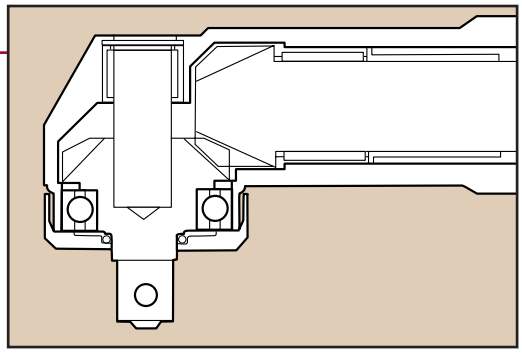
TORQUE COVER
Prevents accidental torque adjustment by the operator (included with AE-5681).

FASTENER COUNTER
Verifies and error-proofs assembly process.

Optional Accessories

ITEM	MODEL	COMPATIBLE SCREWDRIVERS
Angle Head Attachments	AE-2045A AE-7080A	For AE-2020B, AE-4020, AE-4520 For AE-7010, AE-8010
Pistol Grip Handle	AE-PG7080	For AE-7010, AE-1070PS, and AE-8010
Torque Cover	AE-TC2045 AE-TC7080 4H2055	For AE-2020B, AE-4020, AE-4520 For AE-7010, AE-7010PS, AE-8010 For AE-8681
Fastener Counter	TM-45 TM-65	For AE-2020, AE-4020, AE-4520 Standard and ESD types For AE-7010, AE-8010 and AE-8010PS

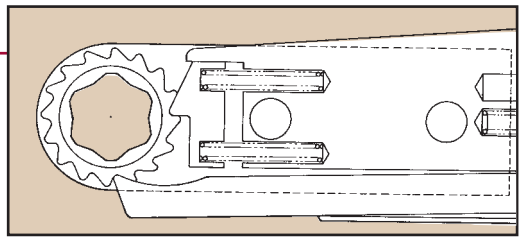
UAN SERIES ANGLE NUTRUNNERS



- **Torque Control**
- **Electronically Monitored or Controlled Type**

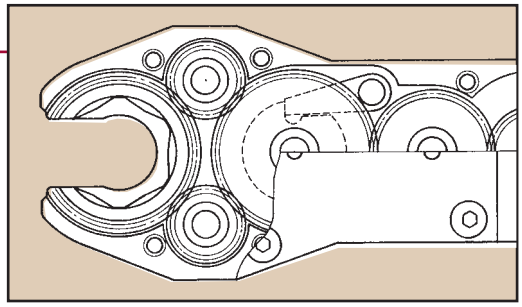
Designed for fastening in tight quarters or applications not served well by a pulse tool. The UAN Series transfers torque through beveled angle gears, continuously driving the fastener. When the resistance to rotation overcomes the spring resistance on the clutch, the tool will disengage at the adjusted 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.

Torque Control UAN Series

Recommended Air Pressure: 85 psi

MODEL	TORQUE RANGE Nm	TORQUE RANGE ft-lb	FREE SPEED rpm	OVERALL LENGTH mm	OVERALL LENGTH in	ANGLE HEAD HEIGHT mm	ANGLE HEAD HEIGHT in	FROM CENTER TO OUTSIDE mm	FROM CENTER TO OUTSIDE in	WEIGHT LESS SOCKET kg	WEIGHT LESS SOCKET lb	SQUARE DRIVE in	NOISE LEVEL dB(A)	AIR USAGE cfm
UAN-611R-60C	6.5 - 12.0	4.3 - 8.6	620	383	15.1	47.0	1.9	14.0	0.6	1.6	3.5	3/8	80	21.1
UAN-611R-50C	8.5 - 15.0	5.7 - 10.8	470	373	14.7	47.0	1.9	14.0	0.6	1.6	3.5	3/8	80	21.1
UAN-611R-40C	10.0 - 18.0	7.2 - 12.9	400	373	14.7	47.0	1.9	14.0	0.6	1.6	3.5	3/8	80	21.1
UAN-611R-30C	13.0 - 25.0	9.3 - 18.0	270	373	14.7	47.0	1.9	14.0	0.6	1.6	3.5	3/8	80	21.1
UAN-701R-60C	20.0 - 31.0	14.8 - 22.8	600	445	17.5	47.0	1.9	14.0	0.6	2.4	5.3	3/8	85	31.6
UAN-701R-40C	28.0 - 45.0	20.7 - 33.2	400	455	17.9	51.0	2.0	18.0	0.7	2.4	5.3	3/8	85	31.6
UAN-701R-30C	37.0 - 60.0	27.3 - 44.2	300	455	17.9	60.5	2.4	18.0	0.7	2.4	5.3	1/2	85	31.6

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

See also: AIR PREPARATION UNITS
on page 104

NUTRUNNERS: OPEN-END TUBENUT WRENCHES

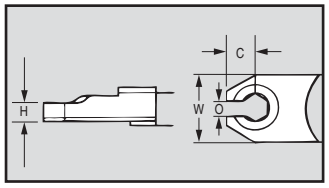
UOW/UOW-T Series

Recommended Air Pressure: 85 psi

MODEL	MAX TORQUE / RANGE Nm	ft-lb	FREE SPEED rpm	OVERALL LENGTH mm	in	WEIGHT lb	kg	MIN/MAX HEX SOCKET SIZE mm	in	NOISE LEVEL dB(A)	AIR USAGE cfm
STALL											
UOW-11-10	12.7	9.4	400	295	11.7	3.1	1.4	7 - 12	1/4 - 7/16	75	12.5
UOW-11-14	15.7	11.6	260	311	12.2	4.0	1.8	10 - 17	3/8 - 5/8	75	12.5
UOW-11-22	23.5	17.4	180	326	12.8	4.0	1.8	13 - 24	1/2 - 7/8	75	12.5
UOW-11-30	31.4	23.1	135	347	13.6	5.5	2.5	17 - 32	5/8 - 1-3/16	75	12.5
SHUT-OFF CLUTCH											
UOW-T60-10	3.9 - 12.7	2.9 - 9.4	300	370	14.6	4.0	1.8	7 - 12	1/4 - 7/16	75	18.0
UOW-T60-14	4.9 - 16.7	3.6 - 12.3	230	385	15.1	4.8	2.2	10 - 17	3/8 - 5/8	75	18.0
UOW-T60-22	6.9 - 23.5	5.1 - 17.4	170	400	15.7	4.8	2.2	13 - 24	1/2 - 7/8	75	18.0
UOW-T60-30	9.8 - 31.4	7.2 - 23.1	130	422	16.6	6.4	2.9	17 - 32	5/8 - 1-3/16	75	18.0

Dimensions

MODEL		H mm	H in	W mm	W in	O mm	O in	C mm	C in
UOW-11-10	UOW-T60-10	14	0.5	37	1.5	6	0.2	10	0.4
UOW-11-14	UOW-T60-14	14	0.5	40	1.6	8	0.3	13	0.4
UOW-11-22	UOW-T60-22	16	0.6	56	2.2	15	0.6	17	0.7
UOW-11-30	UOW-T60-30	16	0.6	68	2.7	23	0.9	21	0.8

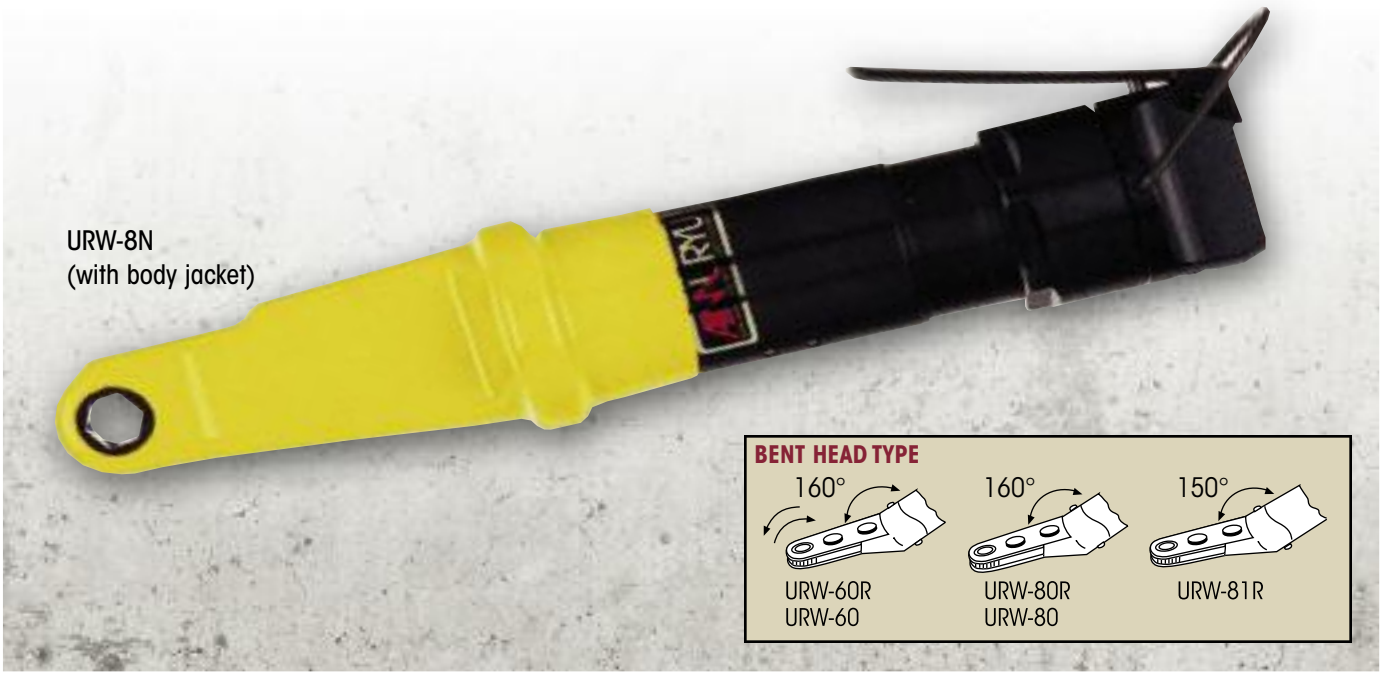


Custom heads can be built for the following specifications:

Recommended Air Pressure: 85 psi

MODEL	HIGH SPEED/RECOMMENDED MAX TORQUE	STANDARD SPEED/RECOMMENDED MAX TORQUE	LOW SPEED/RECOMMENDED MAX TORQUE
UOW-T60-10	520 rpm / 4.8 ft-lbs	300 rpm / 9.4 ft-lbs	170 rpm / 16.8 ft-lbs
UOW-T60-14	390 rpm / 6.8 ft-lbs	230 rpm / 12.3 ft-lbs	130 rpm / 22.1 ft-lbs
UOW-T60-22	290 rpm / 8.5 ft-lbs	170 rpm / 17.4 ft-lbs	95 rpm / 31.3 ft-lbs
UOW-T60-30	210 rpm / 13.4 ft-lbs	130 rpm / 23.1 ft-lbs	70 rpm / 42.4 ft-lbs

For complete socket selection and custom sockets please contact AIMCO. Specify hex size of gear socket when ordering.
Air Hose Size: 3/8" I.D Air Inlet: N.P.T. 1/4"



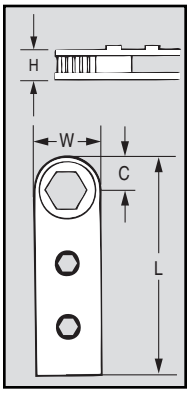
URW Series

Recommended Air Pressure: 85 psi

MODEL	MAX TORQUE Nm	MAX TORQUE ft-lb	FREE SPEED rpm	OVERALL LENGTH mm	OVERALL LENGTH in	WEIGHT lb	WEIGHT kg	MIN/MAX HEX SOCKET SIZE mm	MIN/MAX HEX SOCKET SIZE in	AIR USAGE cfm
STRAIGHT HEAD										
URW-6	10.8	7.9	200	292	11.5	2.5	1.1	5.5 - 12	1/4 - 7/16	9.9
URW-8N	15.7	11.6	220	300	11.8	4.0	1.8	6 - 15	1/4 - 9/16	19.5
URW-8	13.7	10.1	240	360	14.2	4.0	1.8	6 - 15	1/4 - 9/16	19.5
URW-9N	31.4	23.1	200	380	15.0	5.0	2.3	6 - 15	1/4 - 9/16	23.7
URW-10N	56.8	41.9	150	394	15.5	5.8	2.6	10 - 19	3/8 - 3/4	25.0
URW-10N-1	56.8	42.0	150	417	16.4	5.7	2.5	10 - 15	3/8 - 9/16	29.0
URW-12N	58.8	43.4	150	397	15.6	5.9	2.7	12 - 22	5/16 - 7/8	25.0
URW-12NA	78.4	57.8	100	408	16.1	6.6	3.0	16 - 30	7/16 - 1	25.0
URW-12NB	93.1	68.7	85	416	16.3	7.0	3.2	14 - 33	1/2 - 1-15/16	25.0
BENT HEAD										
URW-60R	10.8	7.9	200	288	11.3	2.5	1.1	5.5 - 12	1/4 - 7/16	9.9
URW-60	10.8	7.9	200	288	11.3	2.5	1.1	5.5 - 12	1/4 - 7/16	9.9
URW-80R	15.7	11.6	220	300	11.9	4.0	1.8	6 - 15	1/4 - 9/16	19.5
URW-80	15.7	11.6	220	300	11.9	4.0	1.8	6 - 15	1/4 - 9/16	19.5
URW-81R	15.7	11.6	220	300	11.9	4.0	1.8	6 - 15	1/4 - 9/16	19.5

Dimensions

MODEL	H mm	L mm	C mm	W mm	MODEL	H mm	L mm	C mm	W mm
URW-6	13	88.0	10.0	20	URW-12N	18	109.5	18.0	36
URW-6 THIN (Thin type)	9	88.0	10.0	20	URW-12N THIN (Thin type)	14	109.5	18.0	36
URW-6L (Extended type)	13	120.0	10.0	20	URW-12NA	18	120.5	23.0	46
URW-8(8N)(9N)	18	102.5	12.5	25	URW-12NA THIN (Thin type)	14	120.5	23.0	46
URW-8(8N)(9N)THIN (Thin type)	10	102.5	12.5	25	URW-12NB	18	128.5	27.0	54
URW-8(8N)(9N)L (Extended type)	18	168.5	12.5	25	URW-60(R)	13	88.0	10.0	20
URW-10N	18	106.5	16.5	33	URW-60(R)THIN (Thin type)	9.5	88.0	10.0	20
URW-10N THIN (Thin type)	13	106.5	16.5	33	URW-80(R)8(R)	13	102.5	12.5	25
URW-10NL (Extended type)	18	114.0	16.5	33	URW-80(R)THIN (Thin type)	10	102.5	12.5	25



Note: Optional Rubber Jacket Available (URW-843-1A)
Air Hose Size: 3/8" I.D. Air Inlet: N.P.T. 1/4"

For complete socket selection and custom sockets contact AIMCO
Specify hex size of gear socket when ordering.

Why use cordless tools?

FACILITY AND BUDGETARY ADVANTAGES

- When compressed air or electricity is unavailable or impractical
- Eliminate installation costs involved with air or electric tools
- Instantly transfer tools from location to location

APPLICATION AND PRODUCTIVITY ADVANTAGES

- Increase productivity in areas where corded electric or air tools hinder efficiency
- Gain access in tight spaces or inside applications
- Eliminate dragging of tool cords or hoses
- Easily walk around large products

QUALITY ADVANTAGES

- Abrasion-free tool housing and absence of hose avoids the scratching of your product – car hood, etc.
- Tool will not operate if sufficient battery power is not available

ERGONOMIC ADVANTAGES

- Balanced weight due to optimal center of gravity
- Maintains a consistent body temperature – especially compared to cold metal of air tools
- Cleaner operating environment – no oily air exhaust with which to contend!

Which power source to choose?

Manufacturers have three basic power sources to choose from when selecting power tools. Each offers distinct advantages in terms of cost, use and reliability.

POWER SOURCE	Pneumatic	Electric	Battery
			
ADVANTAGES	■ High Power ■ Durability ■ High Duty Cycles	■ Clean ■ Low Toque Capabilities ■ Affordable Energy	■ Mobility ■ Accessibility ■ Easy Implementation

AIMCO is the only company that can provide all three power sources in either pulse or continuous drive tools.

For Critical or Precise Control Applications

APPLICATIONS

- For critical assembly of screws on torque control applications from 3.6 to 25.0 ft-lbs (43 - 300 in-lbs)
- Use where a pneumatic pulse tool or angle nutrunner is inconvenient
- Best when used on hard or medium joints

PRODUCTIVITY

- Delivers high speed

ERGONOMICS

- Virtually eliminates torque reaction felt by the operator with the pulse mechanism

RELIABILITY

- Designed for industrial use, not a "box-store" type tool
- Few hard parts to replace or maintain

QUALITY

- Provides precise torque repeatability for critical joints

PERQ
PRODUCTIVITY | ERGONOMICS | RELIABILITY | QUALITY

MODEL	TYPE	FREE SPEED	TORQUE RANGE		WEIGHT (with battery)	LENGTH	DRIVE	SOUND LEVEL	VOLTAGE	BATTERY	CHARGER
		rpm	Nm	ft-lb	lb	in	in	dB(A)	V		
UBP-T40	Shut-off	2200	6 - 12	4.4 - 8.8	2.6	8.3	1/4 hex	70	12.0	EY9200B	EY0110B
UBP-T50	Shut-off	2200	8 - 22	5.9 - 16.2	2.6	8.3	1/4 hex	70	12.0	EY9200B	EY0110B
UBP-T60	Shut-off	2200	14 - 26	10.3 - 19.1	2.9	8.5	1/4 hex	70	12.0	EY9200B	EY0110B
UBP-65	Non shut-off	2200	15 - 30	11 - 22	2.7	7.5	1/4 hex	70	12.0	EY9200B	EY0110B

Battery: EY9200B (sold separately)
Charger: EY-0110B (sold separately) Charge Time: 45 min.
For use on bolts, please purchase a 3/8" square drive adaptor (A3S03A-2)

NOTE: Torque ranges reflect residual B joint torque values.

SIGNATURE SERIES PISTOL GRIP TOOLS

Simple to use, yet sophisticated in performance, the AIMCO Signature Series Pistol Tools give the operator the performance needed to meet the demands of today's cordless applications.

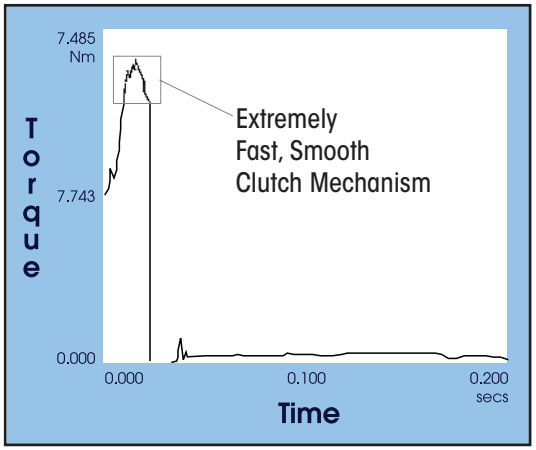
The pistol grip tools feature an ergonomic handle providing the operator with perfect balance as they use the tool. These tools allow for fastening in tight locations at torques up to 9 ft-lbs (12 Nm). With a wide range of torque outputs and speeds, the Signature Series Precision Cordless Tools provide the solution that is right for your specific application.

SIGNATURE SERIES QUICK RELEASE CLUTCH

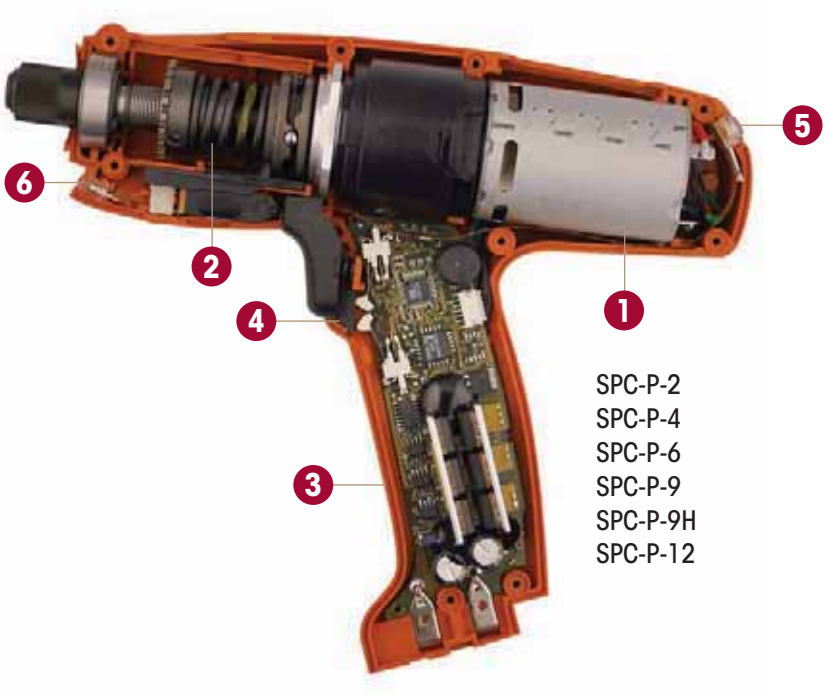
The Signature Series Tools feature a patented, quick releasing clutch that delivers accuracy across multiple joint types. Each clutch assembly is constructed of precisely machined parts to insure not only accuracy, but durability over the lifespan of the tool. In addition to tight tolerances, the driving anvil of each tool is well supported to insure that torque is sensed by the clutch versus side loads or run-out of the rotating components.

Whether your application is softer materials such as plastics and gasket products or of a harder nature such as direct metal to metal contact, the Signature Series Clutch will deliver the accuracy you need.

Typical Torque Graph of the Signature Series Precision Cordless Tools



SIGNATURE SERIES PISTOL GRIP TOOLS



SPC-P-2
SPC-P-4
SPC-P-6
SPC-P-9
SPC-P-9H
SPC-P-12

1 High Durability - No Maintenance Motors
Signature Series Tools utilize a state of the art, brushless, sealed motor that requires no maintenance. In addition to a lifespan that easily exceeds 1 million cycles, the efficiency of the Signature Series Motor means that batteries last longer.

2 Precision Clutch for Torque Accuracy
Meets ISO 5393 CMK>2.0 at +/- 10% tolerance. A wide variety of torque ranges and speeds insures that the most accurate tool can be applied to the job.

3 Low Battery Lock
Signature Series Tools feature a Low Battery Lock that disables the tool when battery power is insufficient to provide the torque required by the application.

4 Restart Lock
The tool features a Restart Lock which discourages double hits on a recently completed joint. Once torque has been achieved, the trigger function is locked out for a period of 0.8 seconds.

5 LED Lights
Signature Series Tools feature LED lights that provide simple process information to the operator. Incomplete application of torque is indicated by a RED LED light and an audible indicator. A GREEN LED light lets the operator know that the precision clutch has shut the tool off at the preset torque amount. Battery capacity is monitored by the tool and a flashing RED LED light lets the operator know that the battery needs to be recharged.

6 Application Illumination
Continuous illumination of the work area is provided by the Signature Series Tool. This helps operators installing fasteners in poorly lit environments.

7 One Touch Reverse
Signature Series Tools are designed to always be ready for fastening. Should the operator need to reverse the rotation of the tool, a unique one touch button system is on board. Buttons are strategically located for both right and left handed operators. One touch of the button places the tool into reverse rotation. After one cycle of reverse (or 10 seconds) the tool automatically changes back into its forward mode ready for fastener installation.

8 Battery Life
A high efficiency motor insures productivity between charges. Testing has shown that the 9.6V, 1250 mAh, NiCd battery, fully charged is capable of performing 3,000 run-downs before recharging is required.

9 Battery Interface
Signature Series Tools feature a precise, slide-lock interface between tool and battery. This provides a secure connection that withstands the rigors of an industrial environment.

**As tested on tools set to their mid-range, run on a UFT Joint Simulator, set to a "B" joint of 140-180 degrees from snug and a 1-1.5 second free run prior to tightening.*

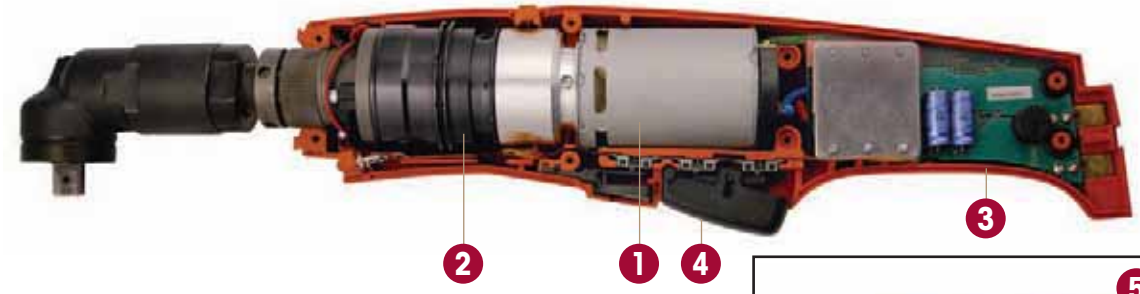
MODEL	TORQUE RANGE ft – lb	TORQUE RANGE Nm	IDLE SPEED rpm	VOLTAGE	WEIGHT (inc. battery) lb	WEIGHT (inc. battery) kg	CHUCK in	BATTERY included
SPC-P-2	0.6 - 1.48	0.9 - 2.0	380	9.6V	2.8	1.3	1/4 hex	SPC-96-NC
SPC-P-4	1.11 - 2.95	1.5 - 4.0	800	9.6V	2.8	1.3	1/4 hex	SPC-96-NC
SPC-P-6	0.7 - 4.43	1.0 - 6.0	600	9.6V	2.8	1.3	1/4 hex	SPC-96-NC
SPC-P-6SL	0.7 - 4.43	1.0 - 6.0	150	9.6V	2.8	1.3	1/4 hex	SPC-96-NC
SPC-P-6-2ST*	0.7 - 4.4	1.0 - 6.0	600	9.6V	3.0	1.3	1/4 hex	SPC-96-NC
SPC-P-9	1.48 - 6.64	2.0 - 9.0	380	9.6V	2.8	1.3	1/4 hex	SPC-96-NC
SPC-P-9H	1.48 - 6.64	2.0 - 9.0	590	12V	3.3	1.5	1/4 hex	SPC-12-NC
SPC-P-12	2.22 - 8.85	3.0 - 12.0	460	12V	3.3	1.5	1/4 hex	SPC-12-NC

*Second Step Speed: 55-155 rpm

SIGNATURE SERIES RIGHT ANGLE NUTRUNNERS

Outstanding ergonomics, superior weight distribution and long battery life are key features of the AIMCO Signature Series Right Angle Nutrunners.

These tools feature all the great benefits of the Signature Series Pistol Tools with the ability to deliver torques from 4.4 to 11.8 ft-lbs (6.0 Nm to 25 Nm). Torque reaction is minimized by the precision clutch that shuts off accurately and quickly.



SPC-A-16
SPC-A-25

1 High Durability-No Maintenance Motors
Signature Series Tools utilize a state of the art, brushless, sealed motor that requires no maintenance. In addition to a lifespan that easily exceeds 1 million cycles, the efficiency of the Signature Series Motor means that batteries last longer.

2 Precision Clutch for Torque Accuracy
Meets ISO 5393 CMK>2.0 at +/- 10% tolerance. A wide variety of torque ranges and speeds insures that the most accurate tool can be applied to the job.

3 Low Battery Lock
Signature Series Tools feature a Low Battery Lock that disables the tool when battery power is insufficient to provide the torque required by the application.

4 Restart Lock
The tool features a Restart Lock which discourages double hits on a recently completed joint. Once torque has been achieved, the trigger function is locked out for a period of 0.8 seconds.

5 LED Lights
Signature Series Tools feature LED lights that provide simple process information to the operator. Incomplete application of torque is indicated by a RED LED light and an audible indicator. A GREEN LED light lets the operator know that the precision clutch has shut the tool off at the preset torque amount. Battery capacity is monitored by the tool and a flashing RED LED light lets the operator know that the battery needs to be recharged.

6 Application Illumination
Continuous illumination of the work area is provided by the Signature Series Tool. This helps operators installing fasteners in poorly lit environments.

7 One Touch Reverse
Signature Series Tools are designed to always be ready for fastening. Should the operator need to reverse the rotation of the tool, a unique one touch button system is on board. Buttons are strategically located for both right and left handed operators. One touch of the button places the tool into reverse rotation. After one cycle of reverse (or 10 seconds) the tool automatically changes back into its forward mode ready for fastener installation.

8 Battery Life
A high efficiency motor insures productivity between charges. Testing has shown that the 9.6V, 1250 mAh, NiCd battery, fully charged is capable of performing 2,000 run-downs before recharging is required.

9 Battery Interface
Signature Series Tools feature a precise, slide-lock interface between tool and battery. This provides a secure connection that withstands the rigors of an industrial environment.

**As tested on tools set to their mid-range, run on a UFT Joint Simulator, set to a "B" joint of 140-180 degrees from snug and a 1-1.5 second free run prior to tightening.*

MODEL	TORQUE RANGE ft – lb	TORQUE RANGE Nm	IDLE SPEED rpm	VOLTAGE	WEIGHT (inc. battery) lb	WEIGHT (inc. battery) kg	CHUCK in	BATTERY included
SPC-A-10	1.5 - 7.4	2 - 10.0	330	9.6V	3.1	1.4	3/8 sq.	SPC-96-NC
SPC-A-10QC	1.5 - 7.4	2 - 10.0	330	9.6V	3.1	1.4	1/4 QC	SPC-96-NC
SPC-A-16	4.4 - 11.8	6.0 - 16.0	300	12V	4.6	2.1	3/8 sq.	SPC-12A-NC
SPC-A-25	7.34 - 18.43	10.0 - 25.0	240	12V	4.6	2.1	3/8 sq.	SPC-12A-NC

BATTERIES

The AIMCO Signature Series charging and battery system utilizes proven battery technologies and a common charging station for simplicity and reliability.

AIMCO Signature Series Tools utilize a high efficiency EC brushless motor that minimizes power consumption during operation. This means that AIMCO can draw on proven, safe battery technologies and utilize the same charging system across all Signature Series Batteries without sacrificing performance.

Nickel-Cadmium Battery (NiCd)

Nickel-Cadmium batteries (NiCd) are a proven, mature industrial battery technology. The one weakness with a NiCd battery can be what is called a "memory effect". This means that the battery can "remember" its usual discharge point and begins to require a charge when it reaches that point. Topping off of NiCd batteries will cause this effect to develop. NiCd batteries do however, have long life cycles and will last in excess of 1,000 discharge/recharge cycles when properly maintained.

Nickel-Metal Hydrade Battery (NiMh)

Nickel-Metal Hydrade (NiMh) batteries are also a proven, mature industrial battery technology. These batteries do not suffer the "memory effect" that NiCd batteries do. NiMh batteries can and often do last longer between charges than NiCd batteries. The trade off with NiMh technology is that their lifecycle is significantly less than NiCd batteries. The average lifespan of a NiMh battery is around 500 discharge/recharge cycles. One other item to consider is that NiMh batteries will cease to function if completely discharged. A small charge must be left in a NiMh battery or it will refuse to accept a recharge.

Battery Specifications

MODEL	VOLTAGE	TYPE	CAPACITY	WEIGHT lb	WEIGHT gram	SUITABLE TOOLS
SPC-96-NC	9.6V	NiCd	1250 mAh	.9	450	SPC-P-2 SPC-P-4 SPC-P-6 SPC-P-9
SPC-96-NM	9.6V	NiMh	2000 mAh	1.0	460	SPC-P-2 SPC-P-4 SPC-P-6 SPC-P-9
SPC-12-NC	12V	NiCd	1250 mAh	1.3	580	SPC-P-9H SPC-P-12
SPC-12A-NC	12V	NiCd	2000 mAh	1.6	730	SPC-A-16 SPC-A-25
SPC-12-NM	12V	NiMh	2000 mAh	1.3	590	SPC-P-9H SPC-P-12 SPC-A-16 SPC-A-25

CHARGERS

The Signature Series Charger provides simple operational information to the user with LED lights indicating operational and charge status of the batteries. The latest charging systems also monitor charging temperatures and use sensors to ensure the best charging conditions for optimal battery maintenance.

One charger is all that is required for any Signature Series Battery and recharge speeds are quick. Conditioned batteries (those that have been in use and through 3-5 charge/recharge cycles) charge back from low in 15-30 minutes. New batteries charge completely in 40-60 minutes (times will vary depending on battery capacity).

Charger Specifications

MODEL	VOLTAGE	DIMENSIONS	WEIGHT lb	WEIGHT kg	POWER CONSUMPTION
SPC-C-110	110V	5 11/16" x 4 5/16" x 7 1/2" 145mm x 110mm x 190mm	2.2	1.0	110W
SPC-C-220	220V – 230V	5 11/16" x 4 5/16" x 7 1/2" 145mm x 110mm x 190mm	2.2	1.0	110W


SPC-CR

COLOR RINGS

Code your tools with Signature Series Color Rings. AIMCO offers 7 different colors per pack which allows you to visually identify your tools by line, torque setting or by another characteristic that you determine.


SPC-QC

QUICK CLIP

Carry your Signature Series Pistol Tool easily on any work belt with the Quick Clip. The 2 piece Quick Clip comes with a belt clip to slide onto the operator's belt 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 allows the operator's hands to be free for other tasks.

SPC-P-HL

SPC-A-HL

HOLSTERS

AIMCO has several holster designs for carrying the Signature Series Pistol and Right Angle Tools. The holsters make it easy to carry the tool and keep it and your applications protected.

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 the bench or rack and accept either the Pistol or Right Angle Tools.

21226

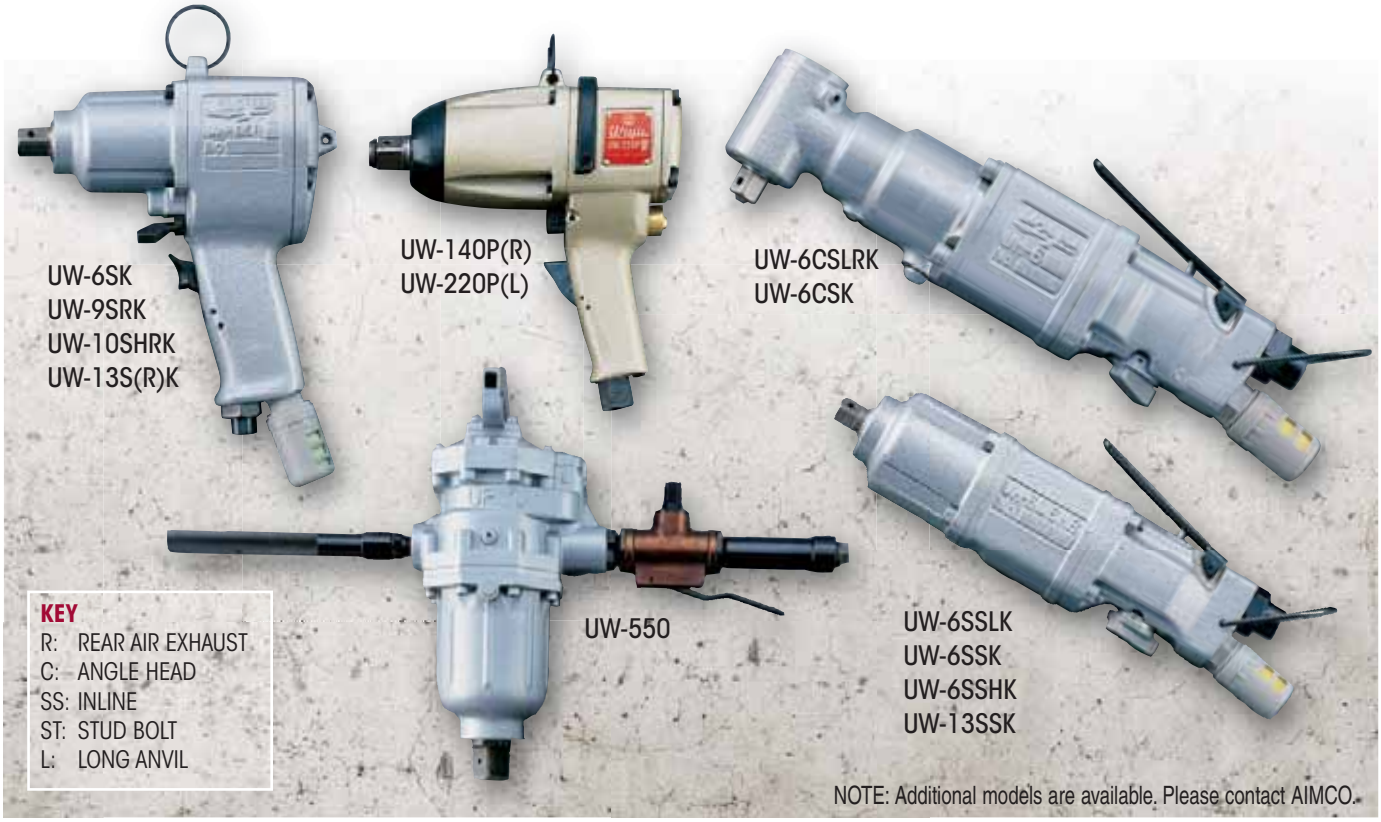
BODY JACKETS AND HEAD COVERS

Keep your tools protected and avoid accidental damage to the application with AIMCO's Signature Series Body Jackets and Head Covers.

SPC-P-843-1A
Body Jacket for Signature Series Pistol Tools

SPC-A-16-843-1A
Head Cover for 16 Nm Right Angle Tools

SPC-A-16TC-843-1A
Head Cover for 16 Nm Right Angle Tools



Recommended Air Pressure: 85 psi

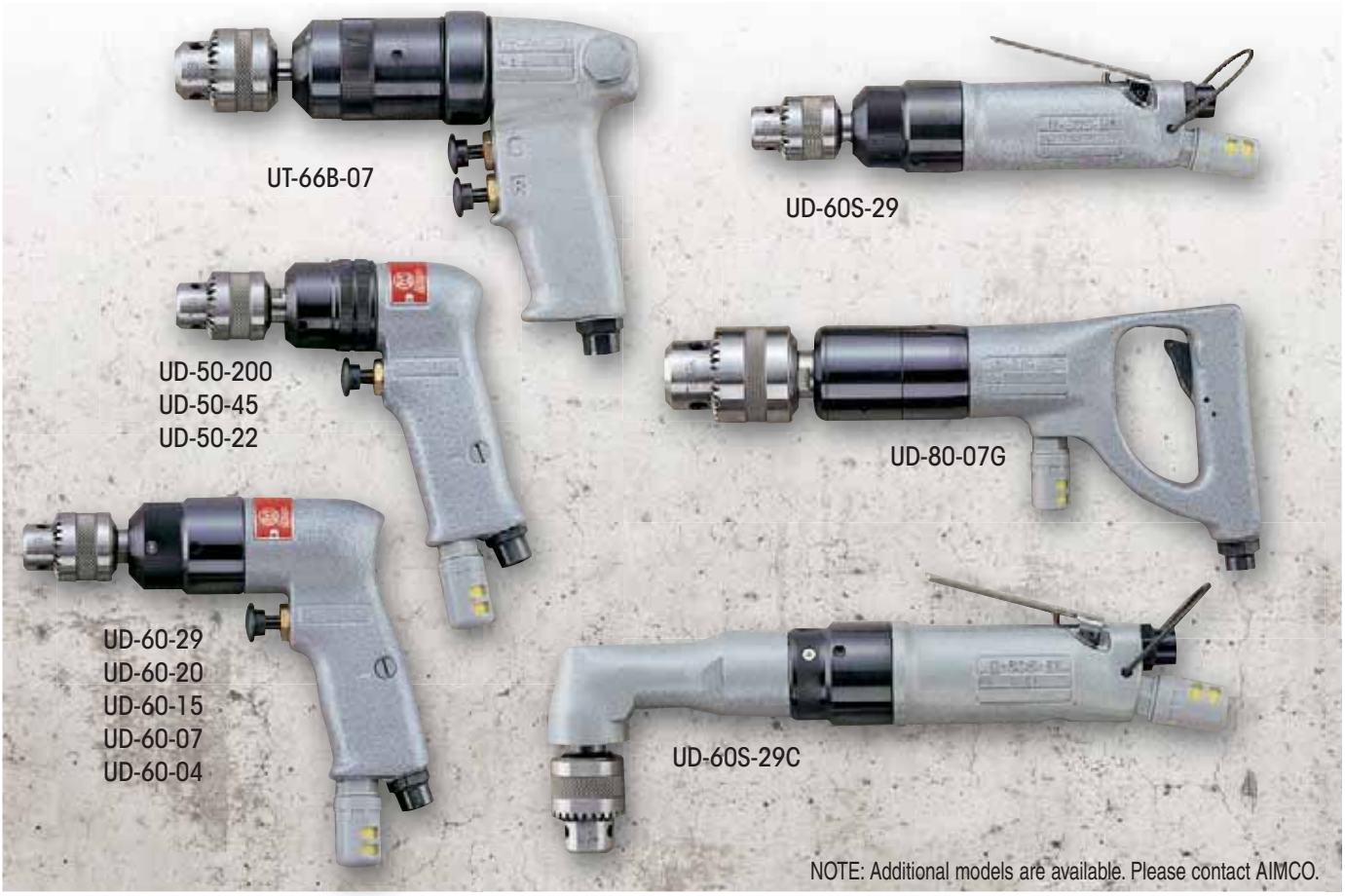
MODEL	CAPACITY		SPEED	OVERALL LENGTH		WEIGHT		FROM CENTER TO OUTSIDE		SQ. DR. OR HEX SIZE	NOISE LEVEL	AVERAGE AIR CONSUMPTION
	mm	in	rpm	mm	in	kg	lb	mm	in	in	dB(A)	cfm
UW-6ASL(R)K	6	1/4	6500	260	10.2	1.1	2.5	31.0	1.2	3/8	92	10.5
UW-6CSK	6	1/4	7500	271	10.7	1.4	3.1	22.0	0.8	3/8	94	10.5
UW-6CSLRK	6	1/4	8000	238	8.3	1.2	2.6	14.0	0.6	3/8	93	10.5
UW-6SK	6	1/4	7500	160	6.3	1.2	2.7	22.0	0.8	3/8	93	10.5
UW-6SLK	6	1/4	8500	165	6.5	1.0	2.1	22.0	0.8	1/4	92	10.5
UW-6SSK	6	1/4	7500	194	7.6	1.0	2.2	22.0	0.8	1/4	91	10.5
UW-6SSLK	6	1/4	8500	202	7.9	0.9	2.0	22.0	0.8	1/4	91	10.5
UW-61E(R)K	8	5/16	7300	154	6.0	1.5	3.3	29.5	1.2	1/4	91	12.4
UW-61E(R)K	8	5/16	7300	154	6.0	1.5	3.3	29.5	1.2	3/8	91	12.4
UW-6CSH(R)K	8	5/16	7300	256	10.1	1.7	3.8	27.5	1.1	3/8	94	10.5
UW-6SSHK	8	5/16	7500	211	8.3	1.3	2.8	24.0	0.9	1/4	92	12.4
UW-8SH(R)K	8	5/16	7300	172	6.8	1.6	3.4	31.0	1.2	1/2	93	14.0
UW-ST6SHK	8	5/16	6500	170	6.7	1.7	3.7	24.0	1.0	3/8	92	14.0
UW-9CSK	10	3/8	7000	338	13.3	2.8	6.1	34.0	1.3	1/2	95	12.4
UW-9SRK	10	3/8	7000	173	6.8	1.8	3.9	27.5	1.1	1/2	93	16.0
UW-9SSK	10	3/8	7000	290	11.4	2.1	4.6	34.0	1.3	1/2	95	16.0
UW-10SHRK	12	1/2	6000	197	7.8	2.1	4.7	30.5	1.2	1/2	95	16.0
UW-13CSK	13	1/2	6500	375	14.8	5.2	11.4	39.0	1.5	1/2	97	26.5
UW-13S(R)K	13	1/2	6000	205	8.1	2.6	5.7	37.5	1.5	1/2	95	16.0
UW-13SSK	13	1/2	6300	303	11.9	3.2	7.0	34.0	1.3	1/2	97	19.4
UW-140P(R)	12	1/2	6500	190	7.5	2.7	5.9	30.0	1.2	1/2	93	25.0
UW-220P(L)	19	3/4	5500	225	8.9	4.4	9.6	42.0	1.7	3/4	95	25.0
UW-251P(L)	25	1	5500	275	10.8	8.0	17.6	51.5	2.0	1	95	28.0
UW-550	56	2-1/4	3500	525	20.7	36.0	79.2	78.0	3.1	1-1/2	112	79.0
UW-75S	76	3	1400	668	26.3	56.0	123.0	91.0	3.6	1-1/2	112	114.0

Air Hose Size: 3/8" I.D. (UW-6 - 140P)
1/2" I.D. (UW-220P(L))
3/4" I.D. (UW-75S)

Air Inlet: N.P.T. 1/4" (UW-6 - 140P)
N.P.T. 3/8" (UW-220P(L))
N.P.T. 1" (UW-75S)

NOTE: Additional models available. Please contact AIMCO.

DRILLS



Recommended Air Pressure: 85 psi

MODEL	CAPACITY		SPEED	OVERALL LENGTH		WEIGHT WITH CHUCK		FROM CENTER TO OUTSIDE		NOMINAL CHUCK SIZE	TYPE OF SPINDLE	NOISE LEVEL	AVERAGE AIR CONSUMPTION
	mm	in	rpm	mm	in	kg	lb	mm	in	in	in-thr'd	dB(A)	cfm
UD-50-200	3	1/8	23000	135	5.3	0.7	1.5	21.0	0.8	5/16	3/8-24UNF	73	14
UD-50-45	6	1/4	5000	145	5.7	0.8	1.9	21.0	0.8	5/16	3/8-24UNF	72	14
UD-50-22	8	5/16	2200	140	5.5	0.9	2.0	21.0	0.8	5/16	3/8-24UNF	72	14
UD-50S-22	8	5/16	2200	205	8.1	0.8	1.8	21.0	0.8	5/16	3/8-24UNF	77	18
UD-60-29	8	5/16	2900	167	6.6	1.1	2.4	22.5	0.9	5/16	3/8-24UNF	77	18
UD-60S-29	8	5/16	2900	227	8.9	1.0	2.3	22.5	0.9	5/16	3/8-24UNF	77	18
UD-60-20	8	5/16	2000	180	7.1	1.2	2.6	22.5	0.9	5/16	3/8-24UNF	77	18
UD-60-15	8	5/16	1600	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	214	8.4	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-60S-29C	8	5/16	2900	276	10.9	1.5	3.3	22.5	0.9	5/16	3/8-24UNF	79	18
UD-80-07G	13	1/2	700	310	12.2	2.8	6.2	26.0	1.0	1/2	1/2-20UNF	79	23
UT-66B-07	8	5/16	800	196	7.7	1.4	3.1	25.0	1.0	—	—	85	14.4

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

NOTE: Other models are available. Please contact AIMCO.

REPLACEMENT CHUCKS are available.
Contact your AIMCO sales representative for details.

Riveting Hammers

Recommended Air Pressure: 85 psi

MODEL	CAPACITY DURALUMIN in	CAPACITY STEEL in	BLOW PER MIN. bpm	OVERALL LENGTH mm	OVERALL LENGTH in	WEIGHT kg	WEIGHT lb	PISTON DIAMETER mm	PISTON DIAMETER in	PISTON STROKE mm	PISTON STROKE in	NOISE LEVEL dB(A)	AVERAGE AIR CONSUMPTION cfm
SBH-0	3/32	—	6500	123	4.2	0.3	0.7	10.0	0.4	23	0.9	90	3.5
SBH-1A(R,H)	7/64	—	4000	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	2800	122	5.0	1.1	2.4	14.3	0.6	38	1.5	95	12.0
BRH-5U(R,H)	1/4	3/16	1800	190	7.5	1.4	3.1	12.7	0.5	100	3.9	95	13.0
BRH-1UV(R,H)	1/8	3/32	2800	162	6.4	1.4	3.0	14.3	0.6	38	1.5	91	12.0
BRH-5UV(R,H)	1/4	3/16	1800	227	9.0	1.7	3.7	12.7	0.5	100	3.9	91	13.0

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

One Shot Hammers

MODEL	BLOW POWER lb	ANVIL DIA. x LENGTH in	SHANK DIA. mm	SHANK DIA. in	STROKE mm	STROKE in	LENGTH mm	LENGTH in	WEIGHT lb	WEIGHT kg
CB-13P	1.7	4.04 x 9.86	—	—	3.0	0.12	185	7.3	0.7	0.3
RH-20	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-100Z	78.1	—	10.2	0.401	29.8	1.2	328	12.9	3.9	1.8

Air Hose Size: 3/8" I.D. Air Inlet: N.P.T. 1/4" NOTE: Additional models available. Please contact AIMCO.

Grinders

Recommended Air Pressure: 85 psi

MODEL	CAPACITY (WHEEL SIZE) in	SPEED rpm	RATED HORSEPOWER hp	OVERALL LENGTH mm	OVERALL LENGTH in	OVERALL HEIGHT mm	OVERALL HEIGHT in	WEIGHT kg	WEIGHT lb	NOISE LEVEL dB(A)	AVERAGE AIR CONSUMPTION cfm
UAG-40SB-136	4	13600	0.5	208	8.2	76	3.0	1.5	3.3	84	34.0
UAG-40SBL-136	4	13600	0.5	246	9.7	76	3.0	1.3	2.9	84	34.0
UAG-50SBL-120	5	12000	0.5	246	9.7	76	3.0	1.4	3.1	82	34.0
UAG-70SBL-76	7	7600	1.1	300	11.8	98	3.9	2.9	6.4	83	57.0
UAG-90SBL-59	9	5900	1.4	308	12.1	98	3.9	3.3	7.3	88	67.0
VG6-59	6	5900	3.0	—	—	196	7.7	4.6	10.1	89	77.7
VG7-76	7	7600	3.0	—	—	179	7.1	4.3	9.5	89	81.0
UP-25DB	5	9000	0.3	212	8.3	120	4.8	1.7	3.7	73	7.0

Air Hose Size: 3/8" I.D.
1/2" I.D. (UAG-90SBL-59)

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

NOTE: Additional models available. Please contact AIMCO.

Sanders

Recommended Air Pressure: 85 psi

MODEL	CAPACITY (WHEEL SIZE) in	COLLET CHUCK SIZE in	SPEED rpm	RATED HORSEPOWER hp	OVERALL LENGTH mm	OVERALL LENGTH in	WEIGHT kg	WEIGHT lb	NOISE LEVEL dB(A)	AVERAGE AIR CONSUMPTION cfm
UG-25NA	—	1/4	25000	.20	153	6.0	0.5	1.2	82	10.7
UG-38N	—	1/4	25000	.25	164	6.5	0.6	1.3	85	10.7
UG-38NA	—	1/4	20000	.25	165	6.5	0.7	1.4	75	14.0
UG-50S-200	—	1/4	20000	.20	198	7.8	0.6	1.3	73	14.0
UG-60S-29	—	1/4	25000	.50	227	8.9	1.1	2.3	77	18.0
UG-45H	—	1/4	18000	.30	196	7.4	0.8	1.8	76	22.0
UG-65EBL	2.5	—	14600	.30	272	10.7	1.4	3.1	95	22.0
UG-650EL	2.5	—	14600	.30	420	16.5	1.6	3.4	85	22.0
UG-1250L-72	5	—	7200	.55	436	17.2	2.8	6.2	88	32.7

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.

CONTROLLED TOOLS

ACRADYNE® DC CONTINUOUS DRIVE TOOLS

CONTROLLED PULSE TOOLS

TRANSDUCERIZED NUTRUNNERS

CONTROLLERS

MONITORS

WHEN YOUR PROCESS REQUIRES:

TORQUE VERIFICATION
- Digital display of torque value
- Green light signals

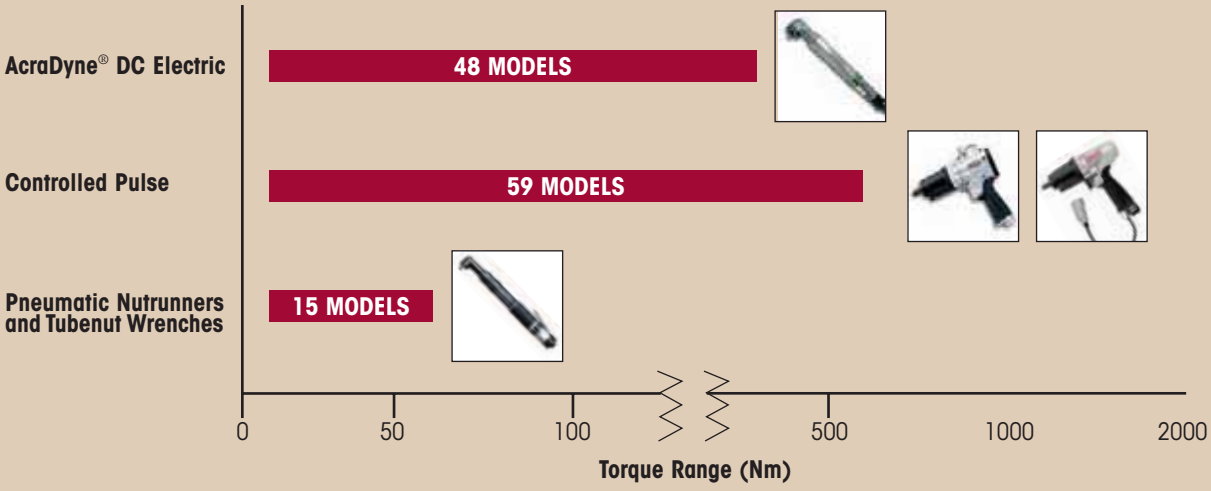
DOCUMENTATION
- Data collection
- Networking

QUALITY & PRODUCTIVITY
- Tight control
- Multiple parameter sets
- Detection of cross treading or stripped fasteners
- Line control

CONTROLLED TOOLING

For many years, our clients have enjoyed the high speed, light weight, and ergonomics of AIMCO pulse tools. But when they need controlled tooling, many users assume the only choice is DC electric nutrunners. While we offer the complete line of AcraDyne® DC electric nutrunners, you have more options at your disposal. AIMCO offers the most complete line of controlled tooling available today.

THE INDUSTRY'S MOST COMPLETE LINE OF CONTROLLED TOOLING



Electric and pneumatic pulse tools are classified as "discontinuous drive" tools.

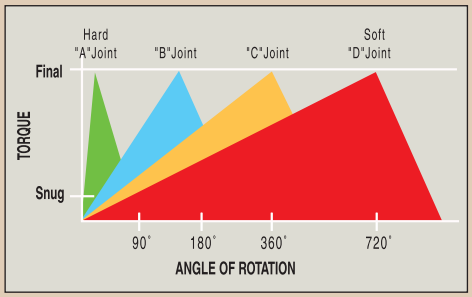
- These tools utilize a hydraulic chamber to generate torque in brief pulses under load.
- Pulse tools are best suited to applications with little or no prevailing torque and for hard to medium joints.
- Pulse tools provide fast cycle times with no torque reaction, even at higher torques.

Pneumatic angle nutrunners and DC electric tools are classified as "continuous drive" tools.

- These gear-driven tools continuously supply power during the entire cycle.
- While suitable for all joint rates, they are especially suited for softer draw applications.
- These tools will maintain their speed under load.

CONTROLLED TOOLS: DC ELECTRIC VS. PULSE

FEATURE	DC ELECTRIC NUTRUNNER	CONTROLLED PULSE TOOL
Critical torque control	Yes	Yes
Multiple parameters	Yes	Yes
Documentation and data storage	Yes	Yes
Cross-threading and stripping detection	Yes, with angle	Yes, with pulse count
Power sources	Electric only	Electric or pneumatic
Multistep run-downs	Available	Available



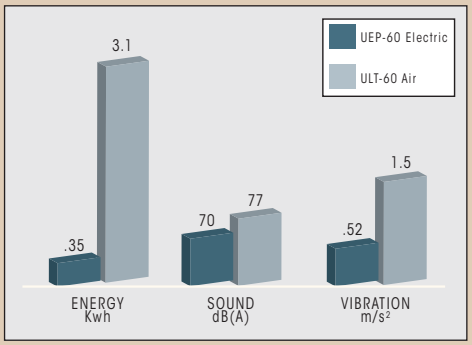
WHICH IS RIGHT FOR ME?

ELECTRIC DRIVE

- Air not convenient or available
- Quieter operation
- Speed control
- More efficient

PNEUMATIC DRIVE

- Easy installation
- Familiar maintenance
- Lower initial investment



ANGLE VS PULSE COUNT

A common use of DC electric nutrunners is to utilize a "torque and angle" strategy. Here, the tool runs down until the target torque is reached and shuts off. During this rundown, the controller also measures the angle of rotation from snug to finish. If this angle is within a prescribed range, the cycle is considered good. If the achieved angle is too small, the fastener may have cross threaded. If the achieved angle is too high, the fastener may have stripped or yielded. This provides an extra assurance that your process was completed correctly.

With pulse tools, a "torque and pulse count" strategy can be employed to gain similar results to a "torque and angle strategy". The number of pulses that occurs during rundown will be proportional to the angle of rotation. If the number of pulses during rundown is below the expected range, the fastener may have cross threaded. A high number of pulses may mean a stripped fastener or other error. All pulse tool controllers can utilize pulse count for error protection.

REVIEW

- A "hard joint" is an application that requires 30° or less of rotation from the snug point to final torque.
- A "soft joint" is an application that requires 720° or more of rotation from the snug point to final torque.

ACRADYNE® DC ELECTRIC TOOLS

- 48 models from 4 - 450 Nm
- 125 - 2600 rpm
- Good on all joint rates
- Lightest, fastest DC electric tool available

OMEGA DC ELECTRIC PULSE TOOLS

- 14 models from 5 - 120 Nm
- 2000 - 3000 rpm
- Good on hard to medium joint rates
- One hand operation with no torque reaction

ACRAPULSE® PNEUMATIC CONTROLLED PULSE TOOLS

- 45 models from 6 - 600 Nm
- 1250 - 7000 rpm
- Good on hard to medium joint rates
- Familiar technology with no torque reaction

PNEUMATIC CONTROLLED NUTRUNNERS AND TUBENUT WRENCHES

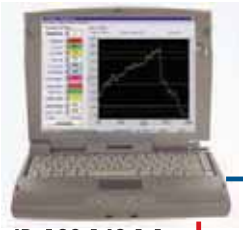
- 15 models from 4 - 60 Nm
- 65 - 620 rpm
- Good on all joint rates
- Familiar technology and great for tight access areas

AIMCO Tool University TRAINING

Controlled tools on an assembly line are often connected through a hierarchy of control systems. At the top is generally ***Human Machine Interface*** (HMI) which a human operator uses to monitor and operate the system. The HMI is often linked to a system of ***Programmable Line Controllers*** (PLC) by a communication system which processes input signals from several devices to control line operation. At the bottom of the chain is the ***Fieldbus***, which connects the actual assembly devices to the PLC.

NETWORK CONNECTIVITY

INTERFACE/ANNUNCIATION
- Touch Screen
- Buttons/Switches/Lights customized for application
- Software that connects directly or through Ethernet network



IP: 192.168.1.1

CONNECTIVITY
- USB
- Serial
- Ethernet
- Offline Use

Ethernet to Hub

Ethernet Hub

Multiple Controller
IP: 192.168.1.5

REMOTE CONTROL THROUGH CONTROLLERS I/O
- Remote Trigger
- Relay outputs report Accept/Reject information
- Enable/Disable Tool

Ethernet Direct

DC Controller

Bar Code Scanner

IP: 192.168.1.2

IP: 192.168.1.3

IP: 192.168.1.4

Socket Tray

Logic I/O

Line Control PLC

Smart D/P

ProfiBus

DATA COLLECTION
- Serial Output Data String
- Formatted Serial Output
- Comma Delimited Text File
- Access/SQL Database

PROTOCOLS
- TCP/IP
- RS232
- Devicenet
- Profibus
- Modbus®
- ToolsNet®
- EthernetIP

AcraDyne®
A Division of AIMCO

FEATURES AND BENEFITS

- **Data Storage** — Standard units store 2,040 rundowns. 10,000,000 rundowns or more are possible with advanced network capable units
- **ToolWare** — Custom-designed operating system means no licensing fees
- **Backwards Compatible** — Works with any AcraDyne® DC tool
- **Parameter Set Select and Indication** — Change operations and clear indication of your current operations with one button
- **External Port Software Updates** — Plug-in capability for software updates
- **Tool Calibration Routines** — Stores the calibration directly in the tool's memory for easy plug and play into any AcraDyne® controller
- **Rundown Storage** — Data stored for the last 2048 rundowns can be viewed as raw data or graphed with statistical information. This data can also be saved in .csv format and opened directly with MicroSoft® Excel or other programs.
- **Programmable Torque Filter Frequency** — Satisfies customer specific filter requirements
- **Programmable Calibration and Service Interval Alerts** — Configure alerts to indicate service or calibration due for a tool based on number of cycles or months since the last service or calibration
- **Real Time Clock** — For time and date stamping, rundown information and other logged data
- **Bar Code Scanning**
- **Network Capabilities** — Capable of interfacing with plant controls
- **Graphing Capabilities** — To track and monitor tightening strategies
- **Multiple Fastening Strategies** — Program up to eight parameter sets to handle eight different torques and types of joints
- **Connection Capabilities** — Connects with Parallel (legacy), USB or Ethernet

ADVANCED COMMUNICATION FEATURES OF THE iEC NETWORK CAPABLE CONTROLLER

Models iEC3, iEC3K, iEC4 and iEC4K

- Advanced feature setup is done using a web interface
- Store up to 10 million rundown cycles on 2 GB internal memory block
- Data can be retrieved using standard FTP methods
- Allows ToolWare to connect through Ethernet and is port selectable
- Allows for use of bar code scanner to scan a bar code and attach the data to each rundown
- Transmits ASCII text string of rundown information through Ethernet port when it is connected
- Ethernet setup allows for both DHCP as well as static IP addresses
- Allows parameter set selection through serial port
- Serial port can be used with other gateway devices such as Devicenet® or Profibus®
- Enable/Disable tool through bar code

AIMCO Tool University TRAINING

AcraDyne® was established in Portland, Oregon in the early 1980's. Originally tasked with developing and supporting automated assembly systems using AIMCO tools, AcraDyne® has evolved into a leading manufacturer of DC Electric Fastening Systems.

ACCURATE

- Controlled tightening improves quality
- Process controls ensure no missed screws, stripped threads, rehits or damaged threads
- Reduces human error
- Consistent torque control
- Accurate tightening means better end-product quality
- No premature shut-off

RELIABLE

- No guessing, just reliable and accurate assembly
- Automatically set your torque and reduce operator error
- No counting required
- Collect and analyze your production data

PRODUCTIVE

- Increased productivity means increased profits
- Replace up to eight conventional tools with one controlled system
- Quieter operation
- No oil contamination from air tool exhaust

CONTROL STRATEGIES (CW OR CCW)

- **Torque Control (TC)** — Provides target torque with high and low limits with simple pass or fail criteria for tightening threaded fasteners
- **Torque Control with Angle Monitoring (TC/AM)** — For tightening threaded fasteners, allows you to monitor angle and rotation to detect any changes in the joint rate which would indicate process problems
- **Torque Monitoring with Angle Control (TM/AC)** — For controlling the amount of fastener rotation
- **Torque Control and Angle Control (TC/AC)** — Providing both torque and angle targets, and high and low limits, further refining the pass or fail criteria for critical applications

ADVANCED CONTROL FEATURES

- **Start Delay** — Allows the controller to ignore initial torque reading for a period of time to aid in thread cutting fasteners, prevailing load, and high inertial load applications.
- **Rundown Backoff Rundown (RBR) Strategies** — Used when joint conditioning is required. The controller runs to an initial torque, reverses to a pre-programmed angle, and then rundown to final torque.
- **Rundown Backoff (RB) Strategies** — Allows the tool to rundown to an initial torque, then reverse to a pre-programmed angle.
- **Tubenut Control** — Runs a tubenut wrench to torque, then returns to the home position when the run command is removed. A patented safety algorithm reduces the risk of pinch point injury.

iEC Controllers

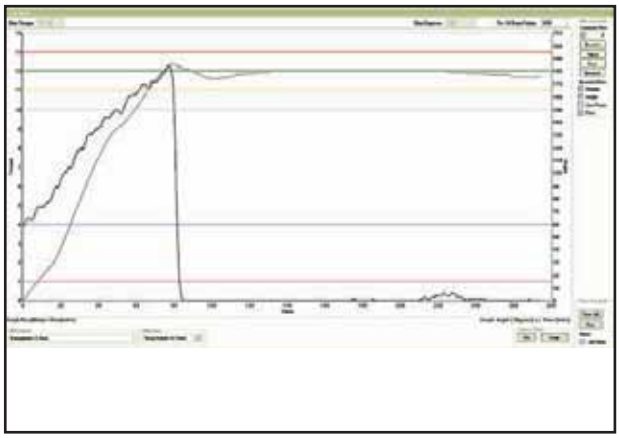
MODEL	DESCRIPTION
iEC1	Controller with Torque / Angle Control
iEC1K	Controller with Torque and Angle Control, integrated KDM
iEC2	Controller with Torque / Angle Control, I/O capability
iEC2K	Controller with Torque and Angle Control, I/O capability, integrated KDM
iEC3	Controller with Torque / Angle Control, I/O capability, Ethernet connectivity
iEC3K	Controller with Torque / Angle Control, I/O capability, Ethernet connectivity, integrated KDM
iEC4	Controller with Torque / Angle Control, I/O capability, advanced network capabilities including Ethernet and fieldbus protocols
iEC4K	Controller with Torque / Angle Control, I/O capability, advanced network capabilities including Ethernet and fieldbus protocols, integrated KDM

TOOLWARE

ToolWare is AcraDyne's software package designed specifically for AcraDyne® tools and controllers. Provided at no cost to all users, this comprehensive, user-friendly program allows programming, analysis and diagnostics via Ethernet, USB or parallel connection to any Windows® computer workstation. The software automatically detects the controller or can be used offline.

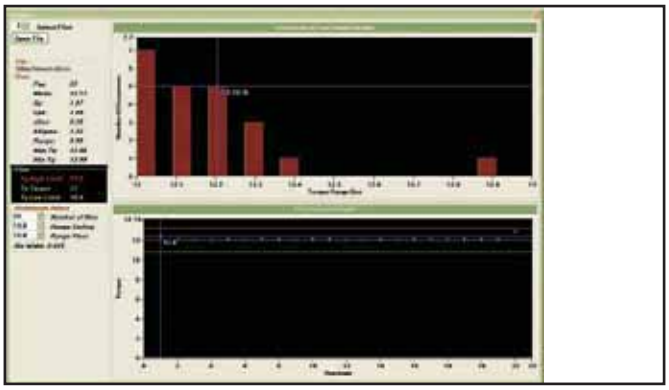
Easy Parameter Set Set-Up

Adding and editing parameter sets is simple with ToolWare 2007's Intuitive Parameter Set-up Function.



CurveWare™

With CurveWare™, fast access to torque and angle curves allows the tool and controller to be programmed for optimal performance on any application.

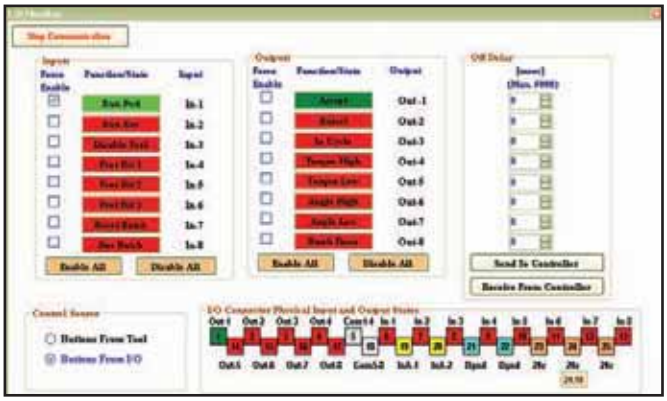


Statistics

Vital statistics and rundown plots can be quickly viewed to assure the assembly process is being performed properly.

Batch Processing

Whether simple or complex, batch jobs can be quickly set up using a variety of programming options.



I/O Monitor

For testing and visualization of processes, the I/O Monitor feature allows fast and informative observation of the controller's Fixed Logic I/O.

Calibration and Maintenance Scheduling

Programmable intervals and alerts provide immediate notice that the tool and/or controller are in need of scheduled preventive maintenance or calibration.

FEATURES

AcraDyne® angle nutrunners provide a solution to space-limited fastening applications that are not practical with inline or pistol model tools.
A compact, durable Titanium head houses a precision right-angle gear set which fits into the tightest of areas 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. AcraDyne® angle nutrunners offer the perfect solution for any handheld, precision-fastening application.

AEN12015
AEN12025
AEN12030
AEN12040
AEN12055
AEN13060
AEN13090
AEN13120
AEN13200*
AEN13300*
AEN13450*
* NOT SHOWN

Application Data

MODEL	MAX TORQUE Nm	MAX TORQUE ft-lb	TORQUE RANGE Nm	TORQUE RANGE ft-lb	FREE SPEED rpm	WEIGHT LESS SOCKET lb	WEIGHT LESS SOCKET kg	OUTPUT DRIVE in
2000 SERIES								
AEN12015	15	11.0	3 - 12	2.2 - 8.9	1360	2.6	1.2	3/8 sq. dr.
AEN12025	25	18.0	5 - 20	3.7 - 14.8	780	2.6	1.2	3/8 sq. dr.
AEN12030	30	22.0	6 - 24	4.4 - 17.7	795	2.7	1.2	3/8 sq. dr.
AEN12040	40	29.5	8 - 32	5.9 - 23.6	540	2.7	1.2	3/8 sq. dr.
AEN12055	55	40.5	11 - 44	8.1 - 32.5	360	3.6	1.6	3/8 sq. dr.
3000 SERIES								
AEN13060	60	44.0	12 - 48	8.9 - 35.4	840	5.5	2.5	1/2 sq. dr.
AEN13090	90	66.0	18 - 72	13.2 - 53.1	560	5.5	2.5	1/2 sq. dr.
AEN13120	120	88.5	24 - 96	17.7 - 70.8	400	9.0	4.1	1/2 sq. dr.
AEN13200	200	147.5	40 - 160	29.5 - 118	210	9.1	4.1	3/4 sq. dr.
AEN13300	300	221.0	60 - 240	44.2 - 177	140	9.7	4.4	3/4 sq. dr.
AEN13450	450	332.0	90 - 360	66.3 - 265.5	95	9.7	4.4	3/4 sq. dr.

Dimensions

MODEL	OVERALL LENGTH (A) in	OVERALL LENGTH (A) mm	CENTERLINE TO PIN (B) in	CENTERLINE TO PIN (B) mm	CENTERLINE TO OUTPUT (C) in	CENTERLINE TO OUTPUT (C) mm	HEAD DIAMETER (D) in	HEAD DIAMETER (D) mm	CENTERLINE TO TOP (E) in	CENTERLINE TO TOP (E) mm	BODY DIAMETER (F) in	BODY DIAMETER (F) mm
2000 SERIES												
AEN12015	14.8	376.7	1.2	29.2	0.8	20.8	1.0	26.2	0.5	12.7	1.5	38.1
AEN12025	14.8	376.7	1.2	29.2	0.8	20.8	1.0	26.2	0.5	12.7	1.5	38.1
AEN12030	14.6	371.9	1.4	34.8	1.0	26.2	1.4	35.6	0.5	13.5	1.5	38.1
AEN12040	14.6	371.9	1.4	34.8	1.0	26.2	1.4	35.6	0.5	13.5	1.5	38.1
AEN12055	17.9	454.4	1.4	34.8	1.0	26.2	1.4	35.6	0.5	13.5	1.5	38.1
3000 SERIES												
AEN13060	19.1	485.7	1.7	42.7	1.2	31.2	1.7	41.9	0.6	15.8	1.9	47.0
AEN13090	19.1	485.7	1.7	42.7	1.2	31.2	1.7	41.9	0.6	15.8	1.9	47.0
AEN13120	21.2	539.0	2.4	60.5	1.6	39.6	2.1	53.3	0.8	19.1	1.9	47.0
AEN13200	23.4	594.4	2.3	57.4	1.6	39.6	2.1	53.3	0.8	19.1	1.9	47.0
AEN13300	23.8	603.8	2.3	59.4	1.7	41.9	2.5	63.5	0.9	23.6	1.9	47.0
AEN13450	23.8	603.8	2.3	59.4	1.7	41.9	2.5	63.5	0.9	23.6	1.9	47.0

FEATURES

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.

AES12010
AES12020
AES12025

AES12038
AES12068

AES13040
AES13060

AES13100
AES13150
AES13230

AES13400
AES13600

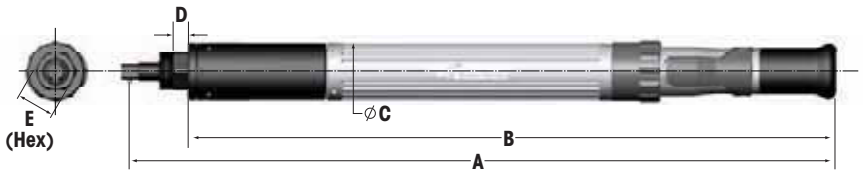
Application Data

MODEL	MAX TORQUE Nm	MAX TORQUE ft-lb	TORQUE RANGE Nm	TORQUE RANGE ft-lb	FREE SPEED rpm	WEIGHT LESS SOCKET lb	WEIGHT LESS SOCKET kg	OUTPUT DRIVE in
2000 SERIES								
AES12010(Q)*	10	7.4	2 - 8	1.5 - 5.9	2080	2.3	1.0	3/8 sq. dr.
AES12020(Q)*	20	14.8	4 - 16	3.0 - 11.8	1200	2.3	1.0	3/8 sq. dr.
AES12025(Q)*	25	18.4	5 - 20	3.7 - 14.8	820	2.3	1.0	3/8 sq. dr.
AES12038	38	28.0	7.5 - 30	5.5 - 22.1	540	3.2	1.4	3/8 sq. dr.
AES12068	68	50.1	13.5 - 54	10.0 - 39.8	320	3.2	1.4	3/8 sq. dr.
3000 SERIES								
AES13040	40	29.5	8 - 32	5.9 - 23.6	1240	4.8	2.2	1/2 sq. dr.
AES13060	60	44.0	12 - 48	8.9 - 35.4	840	4.8	2.2	1/2 sq. dr.
AES13100	100	73.8	20 - 80	14.75 - 59.0	465	7.8	3.5	1/2 sq. dr.
AES13150	150	110.6	30 - 120	22.1 - 88.5	310	7.8	3.5	1/2 sq. dr.
AES13230	230	169.6	46 - 184	33.9 - 135.7	210	7.8	3.5	1/2 sq. dr.
AES13400	400	295	80 - 320	59 - 236	116	14.7*	6.7**	3/4 sq. dr.
AES13600	600	440	120 - 480	89 - 354	78	14.7*	6.7**	3/4 sq. dr.

*Model numbers ending in "Q" come standard with 1/4" Hex quick-change chuck

**Including reaction bar and fixture nut

Dimensions

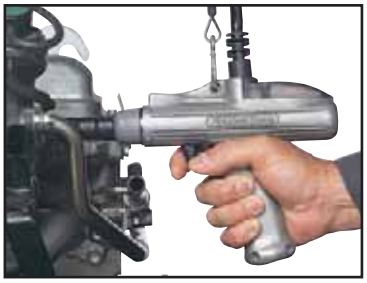


MODEL	OVERALL LENGTH (A) in	OVERALL LENGTH (A) mm	MOUNTING HEIGHT (B) in	MOUNTING HEIGHT (B) mm	BODY DIAMETER (C) in	BODY DIAMETER (C) mm	HEX THICKNESS (D) in	HEX THICKNESS (D) mm	HEX FLATS DIMENSION (E) in	HEX FLATS DIMENSION (E) mm
2000 SERIES										
AES12010(Q)	14.3	363.7	12.8	325.6	1.5	38.1	0.4	9.1	1.0	25.4
AES12020(Q)	14.3	363.7	12.8	325.6	1.5	38.1	0.4	9.1	1.0	25.4
AES12025(Q)	14.3	363.7	12.8	325.6	1.5	38.1	0.4	9.1	1.0	25.4
AES12038	17.2	435.9	15.7	398.8	1.5	38.1	0.4	9.1	1.0	25.4
AES12068	17.2	435.9	15.7	398.8	1.5	38.1	0.4	9.1	1.0	25.4
3000 SERIES										
AES13040	18.7	475.7	16.8	427.7	1.9	47.0	0.4	11.2	1.3	31.8
AES13060	18.7	475.7	16.8	427.7	1.9	47.0	0.4	11.2	1.3	31.8
AES13100	23.1	585.7	21.1	537.0	1.9	47.0	0.4	11.2	1.3	31.8
AES13150	23.1	585.7	21.1	537.0	1.9	47.0	0.4	11.2	1.3	31.8
AES13230	23.1	585.7	21.1	537.0	1.9	47.0	0.4	11.2	1.3	31.8
AES13400	25.5	647.7	23.2	589.3	1.9	47.0	0.6	15.2	2.0	50.8
AES13600	25.5	647.7	23.2	589.3	1.9	47.0	0.6	15.2	2.0	50.8

FEATURES

- Cable available in top or bottom configuration
  For models with top cable inlet please add "T" to model number (for example, AEP12010T)
- **Headlights** — First industry controlled tool with ultra-bright LEDs for illumination of your application

AEP12010
AEP12020
AEP12025



Top cable configuration

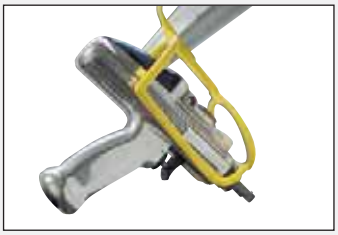
Built-in annunciator

Ultra-bright LED lights

Application Data

MODEL	MAX TORQUE Nm	MAX TORQUE ft-lb	TORQUE RANGE Nm	TORQUE RANGE ft-lb	FREE SPEED rpm	WEIGHT LESS SOCKET lb	WEIGHT LESS SOCKET kg	OUTPUT DRIVE in
AEP12010	10	7.4	2 - 8	1.5 - 5.9	2080	2.6	1.2	1/4 hex QC
AEP12020(Q)*	20	14.8	4 - 16	3.0 - 11.8	1200	2.6	1.2	3/8 sq. dr.*
AEP12025(Q)*	25	18.4	5 - 20	3.7 - 14.8	820	2.6	1.2	3/8 sq. dr.*
AEP12038	38	28.0	7.5 - 30	5.5 - 22.1	540	3.6	1.6	3/8 sq. dr.
AEP12068	68	50.1	13.5 - 54	10.0 - 39.8	320	3.6	1.6	3/8 sq. dr.

*Model numbers ending in "Q" come standard with 1/4" Hex quick-change chuck



See also: TOOL BASKET
on page 66

Safety First!

FEATURES

- Provides a safe and ergonomic solution to the serious operator safety concerns involved with tubenut wrenches
- Transducer senses resistance while socket is open to help prevent damage or injury
- Patented **Safety Algorithm**
- No double hit or twin lever needed

AET12020
AET12025
AET12035
AET12050

With Innovative Safety Sensor Technology!

Application Data

MODEL	MAX TORQUE		TORQUE RANGE		FREE SPEED	WEIGHT LESS SOCKET		OUTPUT DRIVE	
	Nm	ft-lb	Nm	ft-lb	rpm	lb	kg	in	mm
AET12020	20	14.8	4 - 16	3.0 - 11.8	580	2.9	1.3	1/4 - 7/16	7 - 12
AET12025	25	18.4	5 - 20	3.7 - 14.8	440	3.8	1.7	3/8 - 5/8	10 - 17
AET12035	35	25.8	7 - 28	5.2 - 20.7	320	4.3	2.0	1/2 - 7/8	13 - 24
AET12050	50	36.9	10 - 40	7.4 - 29.5	240	5.4	2.5	5/8 -1-3/16	17 - 32

Request specific socket size when placing your order. AIMCO offers a wide variety of socket sizes to fit your needs.

SPECIALIZED HEADS

AIMCO is able to 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. Let us know your requirements and we will help select the head configuration to get the job done.

MULTIPLE NUTRUNNING SYSTEMS

AIMCO is able to integrate the AcraDyne® tool spindle into a customized Multiple Nutrunning System that will address your needs. From simple systems vertically suspended above the part to assembly stations that integrate with your line, AIMCO can handle 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

- **Nutrunner sequencing** — This allows nutrunners to be sequenced at each phase of the tightening process allowing 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 as with a single nutrunner tool. Fixtured nutrunners save time and effort from start to finish.
- **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 more consistent with the dynamic torque specification.
- **Saving in cycle time** — Compared with 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 up operators to handle additional tasks and potentially reduce labor requirements, at the same time eliminating bottle necks.
- **Collect data** — Most common methods of collecting data for quality control and statistical analysis can be implemented from 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
- Custom display panel showing application
- Cpk range of 3.2–6.9 far exceeded quality requirements

AUTOMOTIVE MANUFACTURER

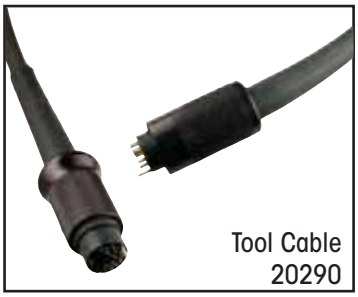
- Wheel lug nut assembly
- Four spindle 105 Nm
- Rotating spindle trunnion
- Replaced competitive system
- Built-in PC for data storage

CABLE ASSEMBLIES

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

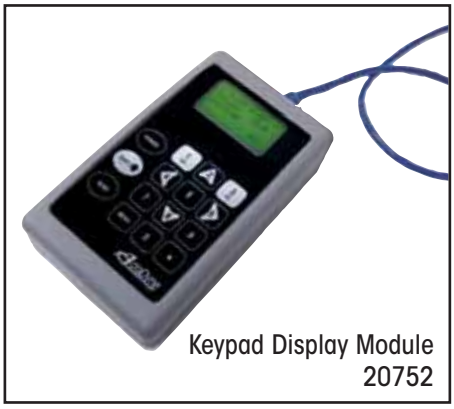
- Flexible polyurethane cover for maximum durability, abrasion and is transmission fluid resistant. Provides a soft, non-marring material to protect sensitive surfaces.
- Quick disconnects at both ends facilitate tool changeover and trouble-shooting.
- The CAN data/signal is via RJ45 for products such as the KDM, socket tray or computer.

Premium Tool Cable
23947



Tool Cable
20290

MODEL	DESCRIPTION	LENGTH m	LENGTH ft
TOOL CABLES			
20290	Standard tool cable - 8' length	2.5	8
20006	Standard tool cable - 25' length	7.6	25
23947	Premium tool cable - 3m length	3	9.8
23948	Premium tool cable - 5m length	5	16.4
24080	Premium tool cable - angle, 5m	5	16.4
24079	Premium tool cable - angle, 10m	10	32.8
PISTOL			
20292	8' captive cable	2.5	8
EXTENSION			
20291	25' extension cable	7.6	25
20722	50' extension cable	15.0	50
DATA			
20403	Data/signal connection cable – Accessories to controller	2.0	6
AEC-CIM	Interface module which allows communication between a computer and an AcraDyne® controller through USB or CAN connections. All necessary cables included.		

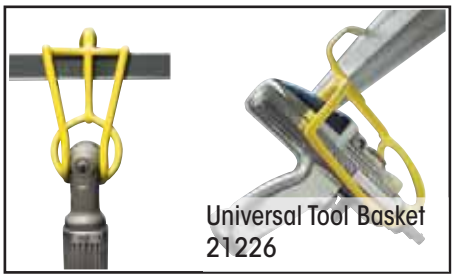


Keypad Display Module
20752

KEYPAD DISPLAY MODULE (KDM)

- For tool setup, statistical display, and basic diagnostics. It can be built-in, hand-held, or remotely mounted.
- For remote mounting. Connects to AcraDyne® controllers via 20403 data cable (Can only be used by connection to a controller).

UNIVERSAL TOOL BASKET



Universal Tool Basket
21226

Socket Tray
013-13-2

SOCKET TRAY

- Simply remove the assigned socket to select the application to be run.
- Fast 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.

MODEL	DESCRIPTION
013-13-2	2 Position Socket Tray
013-13-4	4 Position Socket Tray
013-13-6	6 Position Socket Tray
013-13-8	8 Position Socket Tray

Tool Bails

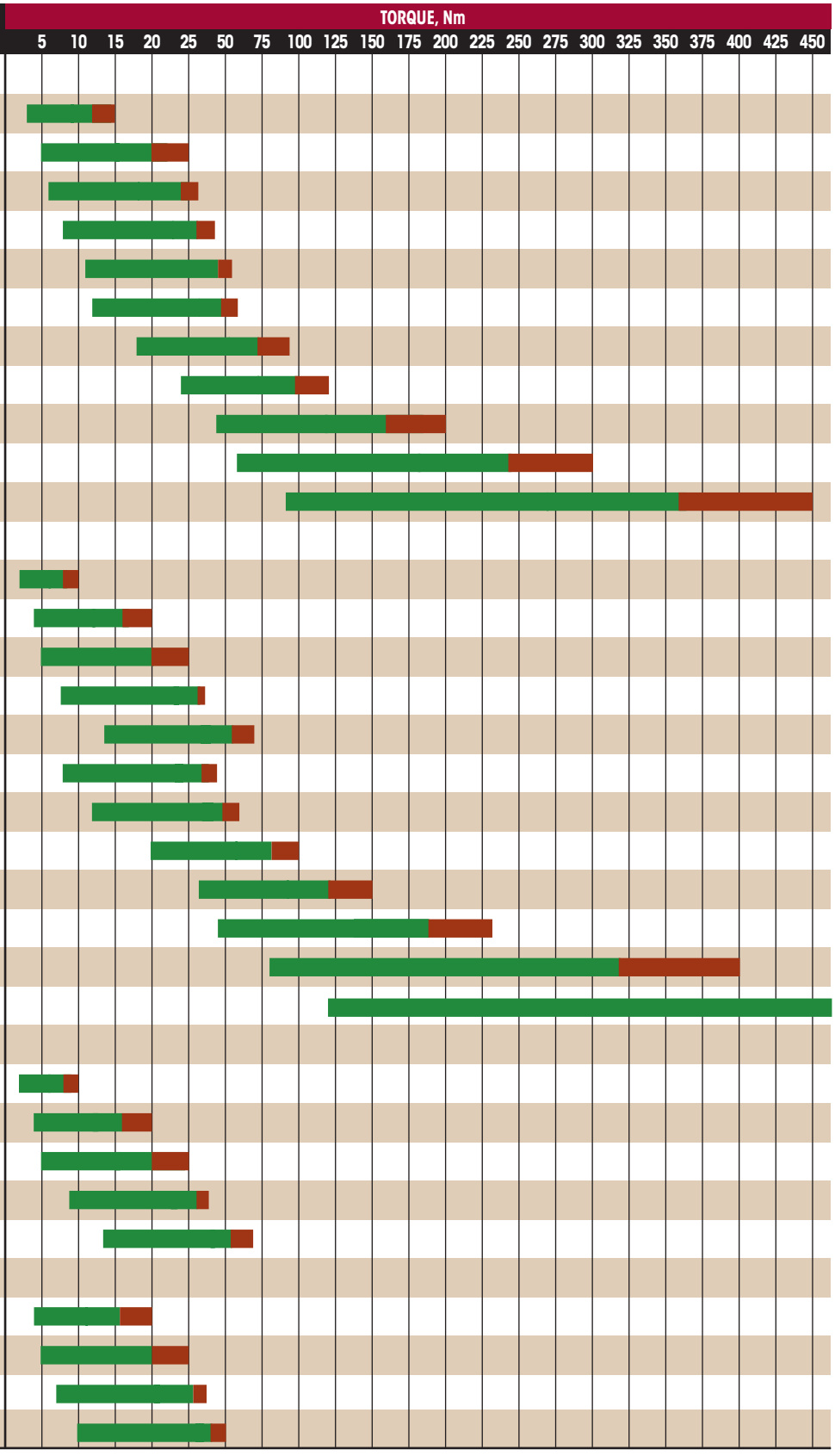
TOOL BAILS

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

MODEL	DESCRIPTION
21159	2000/3000 Series Vertical Tool Bail
2000 Series Nutrunners	
21208	Spring Bail Assembly
20601	Fixed Titanium Bail Assembly
20602	Rotating Titanium Bail
3000 Series Nutrunners	
21209	Spring Bail Assembly
20559	Fixed Titanium Bail Assembly
20556	Rotating Titanium Bail

DC TOOLS: TOOL/SPINDLE SELECTION GUIDE

MODEL	RPM	LENGTH in	LENGTH mm	WEIGHT lb	WEIGHT kg
ANGLE					
AEN12015	1360	14.8	376.7	2.6	1.2
AEN12025	780	14.8	376.7	2.6	1.2
AEN12030	795	14.6	371.9	2.7	1.2
AEN12040	540	14.6	371.9	2.7	1.2
AEN12055	360	17.9	454.4	3.6	1.6
AEN13060	840	19.1	485.7	5.5	2.5
AEN13090	560	19.1	485.7	5.5	2.5
AEN13120	400	21.2	539.0	9.0	4.1
AEN13200	210	23.4	594.4	9.1	4.1
AEN13300	140	23.8	603.8	9.7	4.4
AEN13450	95	23.8	603.8	9.7	4.4
INLINE					
AES12010	2080	14.3	363.7	2.3	1.0
AES12020	1200	14.3	363.7	2.3	1.0
AES12025	820	14.3	363.7	2.3	1.0
AES12038	540	17.2	435.9	3.2	1.4
AES12068	320	17.2	435.9	3.2	1.4
AES13040	1240	18.7	475.7	4.8	2.2
AES13060	840	18.7	475.7	4.8	2.2
AES13100	465	23.1	585.7	7.8	3.5
AES13150	310	23.1	585.7	7.8	3.5
AES13230	210	23.1	585.7	7.8	3.5
AES13400	116	25.5	647.7	14.7*	6.7*
AES13600**	78	25.5	647.7	14.7*	6.7*
PISTOL					
AEP12010	2080	14.3	363.7	2.6	1.2
AEP12020	1200	14.3	363.7	2.6	1.2
AEP12025	820	14.3	363.7	2.6	1.2
AEP12038	540	17.2	435.9	3.6	1.6
AEP12068	320	17.2	435.9	3.6	1.6
TUBENUT					
AET12020	580	14.8	375.9	2.9	1.3
AET12025	440	15.5	393.7	3.8	1.7
AET12035	320	16.0	406.4	4.3	2.0
AET12050	240	16.4	416.6	5.4	2.5



*Including reaction bar and fixture nut.

**Torque Range: 120-480Nm Max Torque: 600Nm

Torque Range Max Torque

FEATURES

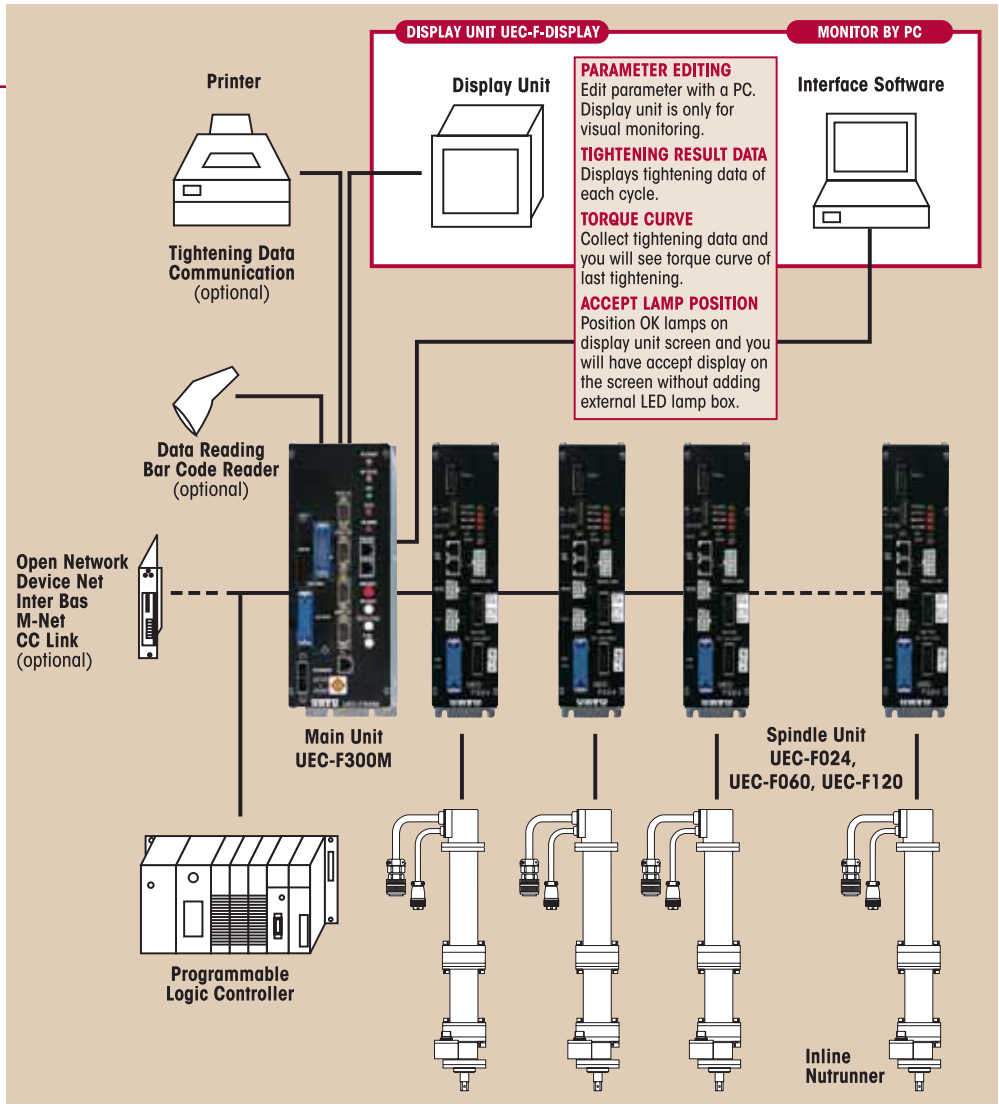
- Reduced Cable Numbers — Integral type tube containing torque sensor cable and resolver cable.
- Enhanced Memory Capacity — We have increased memory capacity to get better efficiency of assembly line and tightening data control.
- Open Network Communication — We have prepared all types of communication boards for your various 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 has reduced volume space occupancy by 40% to 60% of ordinary elements.

NO. OF SPINDLES	VOLUME & WIDTH BEFORE		VOLUME & WIDTH WITH F-SERIES UEC-F024		UEC-F120	
	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

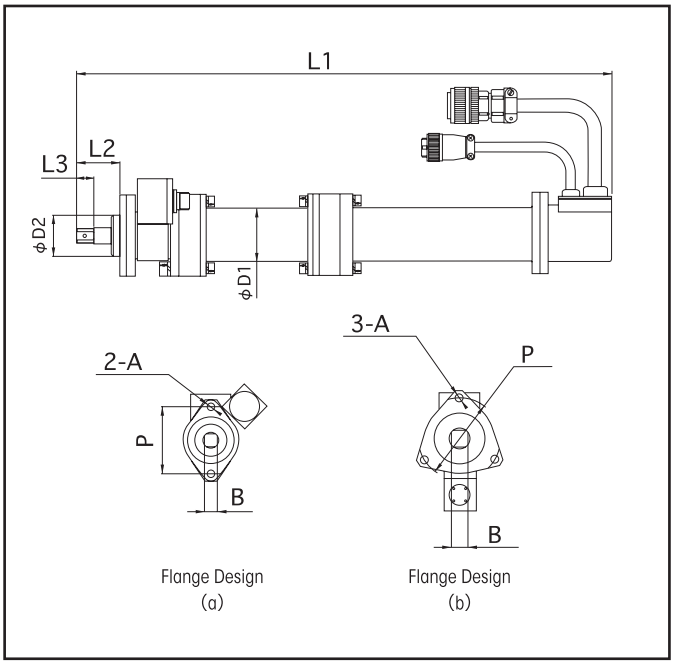
F-SERIES NETWORK CONNECTIVITY

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



INLINE NUTRUNNERS



TYPE	EXTERNAL DIMENSIONS (mm) L1	L2	L3	D1	D2	P	A	B	TORQUE SENSOR	MOTOR TYPE	FLANGE DESIGN
UNR-F015-45NT	371	41	12	40.5	38	51	M6	9.5	TM-035	F015	(a)
UNR-F015-65NT	371	41	12	40.5	38	51	M6	9.5	TM-035	F015	(a)
UNR-F015-200NT	400	41	12	40.5	38	51	M6	9.5	TM-035	F015	(a)
UNR-F015-280NT	400	41	12	40.5	38	51	M6	9.5	TM-035	F015	(a)
UNR-F015-350NT	400	41	12	40.5	38	51	M6	9.5	TM-035	F015	(a)
UNR-F050-270NT	453.5	41	12	50	38	51	M6	9.5	TM-035	F050	(a)
UNR-F050-630NT	500.5	41	16.5	50	38	62	M8	12.7	TM-085	F050	(a)
UNR-F050-730NT	500.5	41	16.5	50	38	62	M8	12.7	TM-085	F050	(a)
UNR-F050-880NT	512.5	45	20	50	48	62	M8	15.88	TM-150	F050	(a)
UNR-F050-1400NT	512.5	45	20	50	48	62	M8	15.88	TM-150	F050	(a)
UNR-F100-1300NT	519.5	45	20	62	48	62	M8	15.88	TM-150	F100	(a)
UNR-F100-1900NT	515.5	45	20	62	48	76	M8	15.88	TM-250	F100	(b)
UNR-F100-2500NT	515.5	45	20	62	48	76	M8	15.88	TM-250	F100	(b)
UNR-F100-3700NT	589	57	30	62	58	76	M10	19	TM-400	F100	(b)
UNR-F100-5400NT	704.5	80	40	62	70	90	M10	25.4	TM-700	F100	(b)

Torque Sensor Specifications

TYPE	CAPACITY (Nm)
TM-035	34.3
TM-085	83.3
TM-150	147
TM-250	245
TM-400	392
TM-700	686
TM-1000	980

Rated Strain	2000X10–6
Output Voltage	1.0mV/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 300Ω
Overload Capacity	150%

Inline Motor Specifications

TYPE	TIGHTENING TORQUE (Nm)	FREE SPEED (rpm)	WEIGHT (kg)	SPINDLE UNIT
UNR-F015-45NT	4.5	3,200	2.48	UEC-F024
UNR-F015-65NT	6.5	2,200	2.48	UEC-F024
UNR-F015-200NT	20	730	2.73	UEC-F024
UNR-F015-280NT	28	500	2.73	UEC-F024
UNR-F015-350NT	35	410	2.73	UEC-F024
UNR-F050-270NT	27	1,750	4.86	UEC-F060
UNR-F050-630NT	63	750	5.08	UEC-F060
UNR-F050-730NT	73	650	5.08	UEC-F060

TYPE	TIGHTENING TORQUE (Nm)	FREE SPEED (rpm)	WEIGHT (kg)	SPINDLE UNIT
UNR-F050-880NT	88	540	5.47	UEC-F060
UNR-F050-1400NT	140	340	5.47	UEC-F060
UNR-F100-1300NT	130	730	7.42	UEC-F120
UNR-F100-1900NT	190	500	7.94	UEC-F120
UNR-F100-2500NT	250	370	7.94	UEC-F120
UNR-F100-3700NT	370	260	9.55	UEC-F120
UNR-F100-5400NT	540	175	17.0	UEC-F120

Fixtured F-Series right angle nutrunners also available. Please contact AIMCO for details.

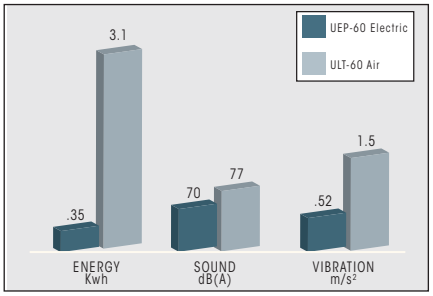
Which is right for me?

ELECTRIC DRIVE

- Air not convenient or available
- Quieter and cleaner operation
- Speed control

PNEUMATIC DRIVE

- Easy installation
- Lower initial investment
- Longer life
- Better power-to-weight ratio



OMEGA UEP SERIES

- DC Brushless electric motor
- Magneto-restrictive non-contacting transducer
- Omega series pulse unit (see p.11)
- Aluminum housing for light weight
- Single cable connection
- 70 dB(A) sound level
- Use with either controller:
  UEC-4800 (p.76)
  UEC-4500 (p.77)

See page 72

ACRAPULSE® MC

- Electronic control with pneumatic power
- Magneto-restrictive non-contacting transducer
- Internal solenoid valve included on most models
- LED on tool for verification
- Dual chamber, 9-blade motor for more power under load
- Muffled rear exhaust
- Use with either controller:
  UEC-4800 (p.76)
  UEC-4500 (p.77)

See page 73

ACRAPULSE® EC

- Electronic control with pneumatic power
- Strain gage transducer
- Integral gear package
- Internal solenoid valve included on most models
- LED on tool for verification
- Muffled rear exhaust
- Use with either controller:
  UEC-4800 (p.76)
  UEC-4500 (p.77)

See page 74

AIMCO Tool University TRAINING

The pulse unit of a ***transducerized pulse tool*** is typically set at its highest torque output. This allows the tool to reach maximum torque, if required, and allows the tool controller to shut the tool off properly. For hard joints or applications where the tool is oversized, the pulse unit may be adjusted downwards to provide more repeatable and acceptable torque values.

Fast, Accurate Pneumatic Assembly with Superior Ergonomics

FEATURES

- Pulse tool ergonomics with controlled tool advantages
- 20% increase in power-to-weight ratios due to external solenoid valve
- Magnetostrictive transducer provides high durability with low size and weight
- All models work with any UEC Series controller
- Virtually no torque reaction offers one-handed operation, leading to significant productivity advantages

MODEL	TORQUE RANGE Nm	TORQUE RANGE ft-lb	FREE SPEED rpm	LENGTH in	LENGTH cm	WEIGHT lb	WEIGHT kg	CENTER TO OUTSIDE in	CENTER TO OUTSIDE mm	DRIVE SIZE in	AIR USAGE cfm
UL-40MC	7.5 - 15	5.6 - 11.1	5,450	6.7	17.0	2.4	1.1	1.0	26	3/8	7.0
UL-40DMC	7.5 - 15	5.6 - 11.1	5,450	6.7	17.0	2.4	1.1	1.0	26	1/4	7.0
UL-50MC	20 - 35	14.8 - 25.9	6,700	6.9	17.5	2.4	1.1	1.0	26	3/8	8.8
UL-60MC	30 - 50	22.2- 37.0	6,600	6.9	17.5	2.5	1.1	1.0	26	3/8	14.0
UL-70MC	36 - 65	26.6 - 48.1	5,700	7.4	18.7	2.7	1.2	1.0	26	3/8	15.8
UL-90MC	55 - 100	40.7 - 74.0	5,500	7.9	20.3	3.7	1.7	1.2	28	1/2	20.3
UL-100MC	85 - 130	62.9 - 96.2	5,200	8.5	21.5	4.5	2.0	2.0	30	1/2	19.3

Recommended Air Pressure: 85 psi

UEC-4500 CONTROLLER

UEC-4800 CONTROLLER

UEC-4800TP CONTROLLER

With Touch-screen option.

See also: ERGO-DRIVE® SOCKETS
on page 108

OMEGA UEP-MC SERIES

FEATURES

- 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

MODEL	TYPE	TORQUE RANGE Nm	TORQUE RANGE ft-lb	FREE SPEED rpm	WEIGHT lb	LENGTH in	DRIVE in	SOUND LEVEL dB(A)	REQUIRED DRIVER BOX
UEP-50MC(-STDA)*	Transducerized	5 - 10	4 - 7	2000	4.0	7.9	3/8 sq. dr.	70	UEPD-51A-UL
UEP-50DMC(-STDA)*	Transducerized	5 - 10	4 - 7	2000	4.0	7.9	1/4 hex	70	UEPD-51A-UL
UEP-60MC(-STDA)*	Transducerized	10 - 25	8 - 18	2000	4.7	8.7	3/8 sq. dr.	70	UEPD-61A-UL
UEP-60DMC(-STDA)*	Transducerized	10 - 25	8 - 18	2000	4.7	8.7	1/4 hex	70	UEPD-61A-UL
UEP-70MC(-STDA)*	Transducerized	25 - 40	18 - 30	2000	5.2	8.4	3/8 sq. dr.	72	UEPD-71A-UL
UEP-80MC(-STDA)*	Transducerized	30 - 60	22 - 44	2000	6.6	8.4	1/2 sq. dr.	75	UEPD-71A-UL
UEP-100MC(-STDA)*	Transducerized	60 - 120	44 - 88	2000	9.2	9.9	1/2 sq. dr.	75	UEPD-101A-UL


UEP-MC-STDA Kit

*** "-STDA" option includes:**

- UEP-MC tool
- Driver Box
- Driver Cable

(Components can be sold individually)

Also requires either controller to operate:

- UEC-4800
- UEC-4500

UEP-MC Series Driver Cables

MODEL	LENGTH
910-543-0	3 Meters
910-544-0	5 Meters
910-545-0	10 Meters

See also: UEC CONTROLLERS
on page 76-77

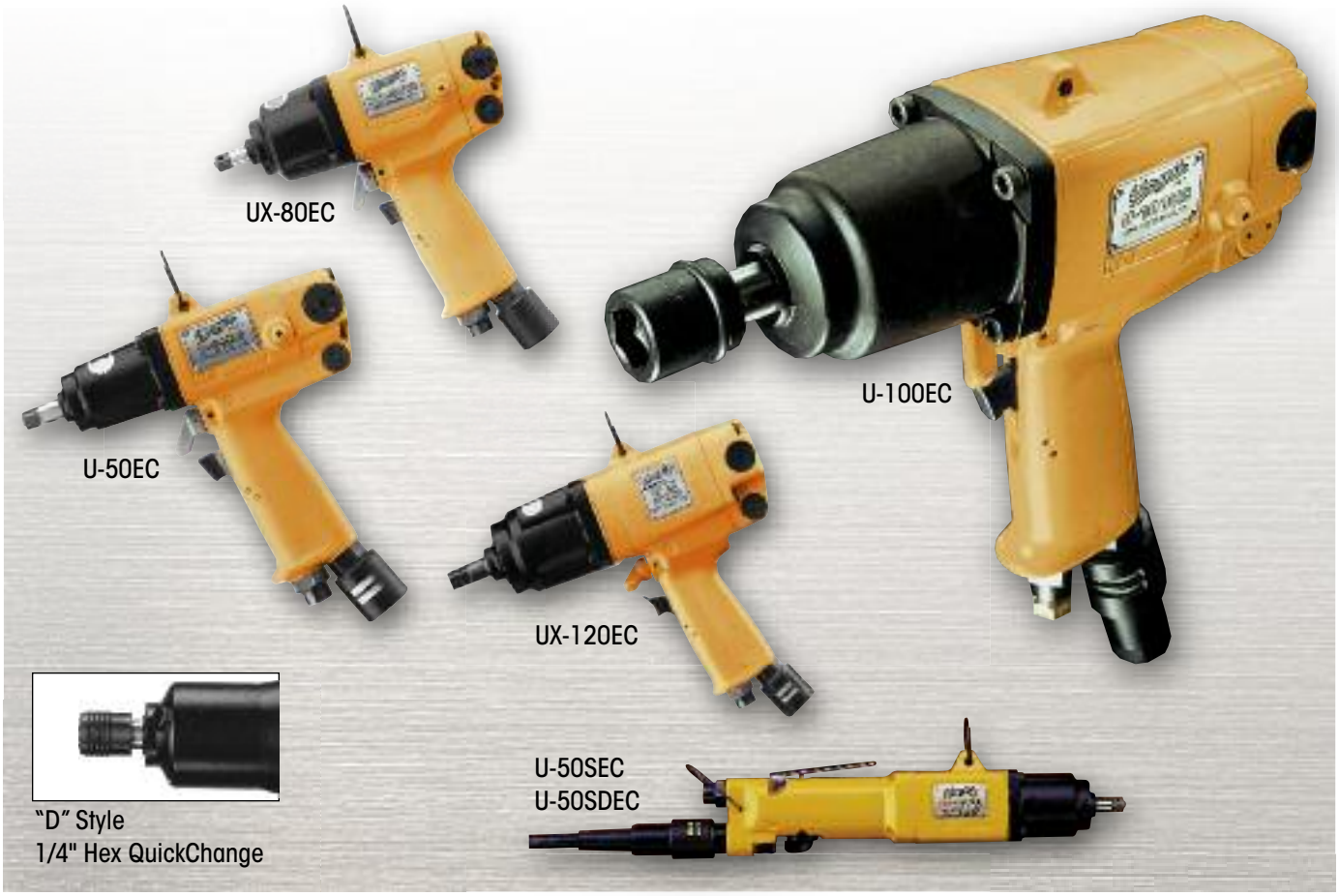
Recommended Air Pressure: 85 psi

MODEL	TORQUE RANGE		FREE SPEED	OVERALL LENGTH		WEIGHT		DRIVE	NOISE LEVEL	AIR USAGE
	Nm	ft-lb	rpm	mm	in	lb	kg	in	dB(A)	cfm
ALPHA-50DMC*	6 - 15	4.5 - 11	5,700	193	7.6	2.9	1.3	1/4 hex	82	7.1
ALPHA-50MC*	6 - 15	4.5 - 11	5,700	193	7.6	2.9	1.3	3/8	82	7.1
ALPHA-60DMC	9 - 20	7 - 14	7,000	205	8.1	3.1	1.4	1/4 hex	82	8.8
ALPHA-60MC	9 - 20	7 - 14	7,000	205	8.1	3.1	1.4	3/8	82	8.8
ALPHA-60SDMC	10 - 17	7 - 12	5,500	280	11.0	2.8	1.2	1/4 hex	82	8.8
ALPHA-60SMC*	10 - 17	7 - 12	5,500	280	11.0	2.8	1.2	3/8	82	8.8
ALPHA-70MC	12.5 - 30	9 - 22	7,000	205	8.1	3.1	1.4	3/8	82	12.3
ALPHA-80MC	16 - 40	12 - 29	7,000	221	8.7	3.3	1.5	3/8	82	15.8
ALPHA-90MC	20 - 47	14 - 34	6,500	221	8.7	3.3	1.5	3/8	82	15.8
ALPHA-101MC	34 - 70	25 - 51	6,200	233	9.2	4.6	2.1	1/2	82	17.6
ALPHA-110MC	45 - 100	33 - 72	5,000	249	9.8	5.5	2.5	1/2	82	22.9
ALPHA-130MC	80 - 150	59 - 110	3,400	266	10.5	7.7	3.5	1/2	82	22.9
ALPHA-140MC	140 - 220	103 - 162	3,500	295	11.6	10.2	4.6	3/4	82	28.3
UXR-1820MC	140 - 250	103 - 184	4,600	322	12.3	12.3	5.5	3/4	84	24.7
UXR-2000MC	200 - 400	148 - 295	4,800	355	14.0	17.6	8.0	3/4	84	33.6
UXR-2400SMC	300 - 600	221 - 443	3,300	416	16.4	27.6	12.5	1	85	35.3

Air Hose Size: 3/8" I.D.
1/2" I.D. FOR UXR-1820MC/2000MC/2400SMC
* External Solenoid Valve (909-749-0) Required

Air Inlet: N.P.T. 1/4"
N.P.T. 3/8" FOR UXR-1820MC; N.P.T. 1/2" FOR UXR-2400SMC

ACRA-PULSE® EC SERIES



Recommended Air Pressure: 85 psi

MODEL	TORQUE RANGE Nm	TORQUE RANGE ft-lb	FREE SPEED rpm	OVERALL LENGTH mm	OVERALL LENGTH in	WEIGHT lb	WEIGHT kg	FROM CENTER TO OUTSIDE mm	FROM CENTER TO OUTSIDE in	DRIVE in	NOISE LEVEL dB(A)	AIR USAGE cfm
U-50EC	4 - 10	3 - 7	2,100	195	7.7	3.3	1.5	21	0.8	3/8	78	10.2
U-50DEC	4 - 10	3 - 7	2,100	201	7.9	3.3	1.5	21	0.8	1/4 Hex	78	10.2
U-50SDEC*	4 - 10	3 - 7	2,100	280	11.5	3.4	1.6	21	0.8	1/4 Hex	72	7.7
U-50SEC*	4 - 10	3 - 7	2,100	280	11.2	3.4	1.6	21	0.8	3/8	72	7.7
U-60EC	15 - 30	11 - 22	1,900	193	7.6	3.5	1.6	27	1.1	3/8	78	14.1
U-60DEC	15 - 30	11 - 22	1,900	305	12.0	4.4	2.0	27	1.1	1/4 Hex	75	12.3
U-60SEC*	15 - 25	11 - 18	1,900	305	12.0	4.4	2.0	27	1.1	3/8	82	14.1
UX-80EC	25 - 45	18 - 33	1,900	197	7.8	4.0	1.8	30	1.2	3/8	80	17.7
U-100EC	50 - 80	36 - 59	1,700	233	8.2	6.2	2.8	33	1.3	1/2	80	24.7
UX-120EC**	65 - 120	47 - 88	900	253	10.0	8.6	3.9	36	1.4	1/2	77	28.2
UX-130EC	90 - 170	65 - 123	1,250	273	10.8	10.4	4.7	40	0.6	1/2	79	35.0

Air Hose Size: 3/8" I.D. Air Inlet: N.P.T. 1/4" NOTE: Torque ranges reflect residual B joint torque values

** Recommended air pressure for UX-120EC: 50 - 57 psi

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

See also: UEC CONTROLLERS
on page 76-77

Recommended Air Pressure: 85 psi

MODEL	TORQUE RANGE Nm	TORQUE RANGE ft-lb	FREE SPEED rpm	LENGTH mm	LENGTH in	ANGLE HEAD HEIGHT mm	ANGLE HEAD HEIGHT in	CENTER TO OUTSIDE mm	CENTER TO OUTSIDE in	WEIGHT lb	WEIGHT kg	SQUARE DRIVE in	NOISE LEVEL dB(A)	AIR USAGE cfm
UAN-611RM-60C	6.5 - 12.0	4.3 - 8.6	620	383	15.1	47.0	1.9	14.0	0.6	3.5	1.6	3/8	80	21.1
UAN-611RM-50C	8.5 - 15.0	5.7 - 10.8	470	373	14.7	47.0	1.9	14.0	0.6	3.5	1.6	3/8	80	21.1
UAN-611RM-40C	10.0 - 18.0	9.3 - 12.9	400	373	14.7	47.0	1.9	14.0	0.6	3.5	1.6	3/8	80	21.1
UAN-611RM-30C	13.0 - 25.0	9.3 - 18.0	270	373	14.7	47.0	1.9	14.0	0.6	3.5	1.6	3/8	80	21.1
UAN-701RM-60C	20.0 - 31.0	14.8 - 22.8	600	445	17.5	47.0	1.9	14.0	0.6	5.3	2.4	3/8	85	31.6
UAN-701RM-40C	28.0 - 45.0	20.7 - 33.2	400	455	17.9	51.0	2.0	18.0	0.7	5.3	2.4	3/8	85	31.6
UAN-701RM-30C	37.0 - 60.0	27.3 - 44.2	300	455	17.9	60.5	2.4	18.0	0.7	5.3	2.4	1/2	85	31.6

MODEL	TORQUE RANGE Nm	TORQUE RANGE ft-lb	FREE SPEED rpm	LENGTH mm	LENGTH in	WEIGHT lb	WEIGHT kg	MIN/MAX HEX SOCKET SIZE mm	MIN/MAX HEX SOCKET SIZE in	NOISE LEVEL dB(A	AIR USAGE cfm
MONITOR STALL											
UOW-M11-10	3.9 - 12.7	2.9 - 9.4	150	352	13.8	4.4	2.0	7 - 12	1/4 - 7/16	75	12.5
UOW-M11-14	4.9 - 15.7	3.6 - 11.6	110	368	14.5	5.3	2.4	10 - 17	3/8 - 5/8	75	12.5
UOW-M11-30	9.8 - 31.4	7.2 - 23.1	65	404	15.9	6.8	3.1	17 - 32	5/8 - 1-3/16	75	12.5
MONITOR SHUT-OFF CLUTCH											
UOW-T60-10M	3.9 - 12.7	2.9 - 9.4	150	415	16.3	4.6	2.1	7 - 12	1/4 - 7/16	75	18.0
UOW-T60-14M	4.9 - 16.7	3.6 - 12.3	110	430	16.9	5.5	2.5	10 - 17	3/8 - 5/8	75	18.0
UOW-T60-22M	6.9 - 23.5	5.1 - 17.4	85	445	17.5	5.5	2.5	13 - 24	1/2 - 7/8	75	18.0
UOW-T60-30M	9.8 - 31.4	7.2 - 23.1	65	445	17.5	7.0	3.2	17 - 32	5/8 - 1-3/16	75	18.0

For complete socket selection and custom sockets please contact AIMCO. Specify hex size of gear socket when ordering.
Air Hose Size: 3/8" I.D. Air Inlet: N.P.T. 1/4"

To monitor or control - requires a controller:
- UEC-4800 (see page 76)
- UEC-4500 (see page 77)
- Cable from tool to UEC controller included with tool
- External solenoid valve required to control tool (part #909-749-0)

Full-Featured, State-of-the-Art Control for Pulse and Continuous Drive Tools

FEATURES: UEC-4800

- Programmable from front panel or PC – no separate Teachpad module or cable required
- 12000 data point memory
- On-screen statistical readout
- 8 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

FEATURES: UEC-4800TP

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

The UEC-4800 controller works with the following transducerized tools:

UL-MC Pneumatic Series

UEP-MC Electric Seriess

UOW-Series

UAN-Series

AIMCO Tool University TRAINING

The differences between ***tightening a fastener by either the nut or bolt head*** can have a great influence on final torque and clamp load. Factors such as joint materials, hole dimensions, component dimensions and component finishes can affect the final tightening results. It is important that the proper method be specified based on initial design and testing of the joint.

Affordable, Basic Torque-Control for AIMCO Transducerized Tools

UEC-4500 OPERATES THESE CONTROLLED TOOLS:

- AIMCO Acra-Pulse® Pneumatic Pulse Tools
- AIMCO Omega Electric Pulse Tools
- AIMCO Pneumatic Nutrunners

REQUIRED COMPONENTS

- Controller Box (UEC-4500)
- Teachpad (910-208-0)
- Teachpad Cable (910-206-0)

ADDITIONAL FEATURES

- Torque control
- Pulse count control *(Pulse tools only)*
- Angle monitor/control *(Nutrunners only)*
- 4 parameter sets
- Statistical reports
- Visual/audible cycle indicators
- Multiple I/O ports
- Fastener counting
- Small size and footprint
- External or PC setup

ITEM	PART NUMBER	USE
Sensor Cable Assembly 6 meters	909-921-0	Connects between tool and main controller Lengths up to 60 ft are available
Dual Controller Board Cable	910-215-0	Connects dual controller to tool
Dual Controller Board	910-201-0	
Printer Board	910-202-0	To be used if two or more boards are required Complete with flat cable 910-211-0
Option Box	910-209-0	If two or more option boards are required
Option Box Cable	910-207-0	Connects between main controller and option box
Output Board	910-205-0	
Input Board	910-204-0	
RS232C Board	910-203-0	
Option Box Flat Cable	910-211-0	If two or more boards are installed in option box, the flat cable is required to connect them together
Main Controller Flat Cable	910-210-0	
Cable	910-622-0	Cable from driver box to controller

LENGTH in	WIDTH in	HEIGHT in	WEIGHT lb
9.4	8.7	3.5	5.5

Flexible Poka-Yoke for Quality and Line Control

FEATURES INCLUDE

- Verify your assembly procedures are being followed
- Up to four joints with one tool and one ATM
- Communicates with your line and computers
- Audible and visual indications
- Verification of "good cycle" without torque values
- Bolt counting
- Line control
- Outputs for lights or alarms

COMMUNICATION AND LINE CONTROL

- PLC communication inputs (5)/outputs (8)
- Remote parameter switch selection
- Variable relays for interfacing with process equipment
- Optional network interfaces available

SIMPLICITY

- Programming from PC or keypad
- Simple set-up for minimal training requirements
- Auto calibration
- Available for 110V or 220V incoming power
- Additional AC outlet for auxiliary power
- Incoming power fused for protection

PROCESS VERIFICATION

- Accept/Reject indication on all rundowns
- Four selectable parameters
- Cycle counting and batch counting
- Visual and audible indicators
- Programmable timers for detection of double hits, cross-threads, or premature trigger release

WHAT DO I NEED?

For a complete turnkey system:

- New or retrofitted TM tool
- Monitor Box

HOW TO ORDER

Retrofit most existing AIMCO tools for under $200. Contact your AIMCO representative for details

- Order TM tools by adding "TM" to model number *(For example, ULT-70 becomes ULT-70TM)*

ATM-1-1Tightening Monitor

UTM-1500 Series Fastening Counter

FOR USE WITH TOOLS WITH TM FEATURE INSTALLED:

- AIMCO Pulse Tools
- AIMCO Angle Nutrunners
- AIMCO Clutch Screwdrivers
- All Omega or AcraPulse® Tools
- All Pistol or Lever-Start Screwdrivers
- All AIMCO Pneumatic Nutrunners

TORQUE MEASUREMENT

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 effect 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

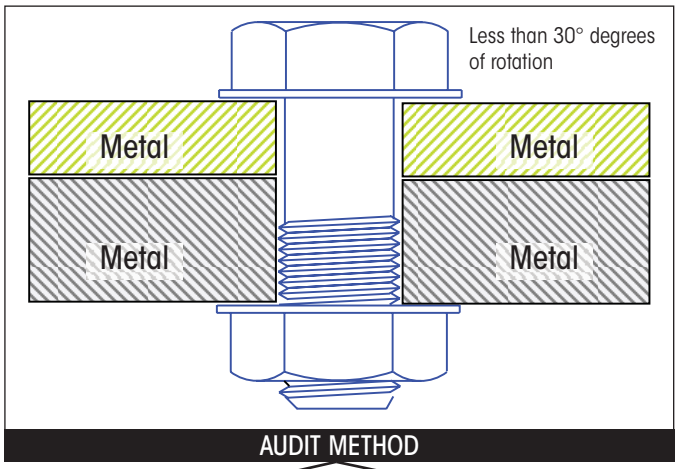
RESIDUAL TORQUE

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 fasteners
- Can detect missed fasteners or joints with significant relaxation
- Error proofing

HARD JOINT



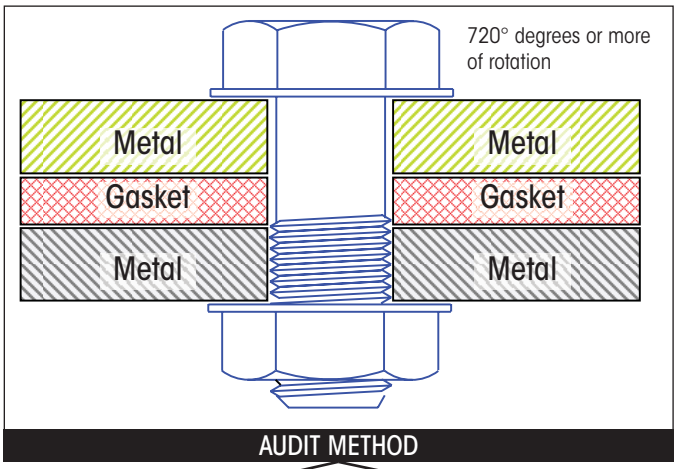
Dynamic Torque: 15 Nm

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.

SOFT JOINT



Dynamic Torque: 15 Nm

Residual Torque: 12 Nm

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 Before, During, and After Assembly Ensures Quality Manufacturing

Proper torque measurement is critical in many assembly operations. AIMCO utilizes years of experience to help 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 actual production.

The equipment used for this phase would be:

- Desktop testers with internal transducers
- Auditor™ analyzers with either stationary or rotary transducers
- UFT hydraulic joint simulators for use with rotary transducers

DURING ASSEMBLY — *Process Capability*

How does the tool work with the product being assembled?

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

The equipment used for this phase would be:

- Torque Data Collectors/Analyzers
- Auditor™ Rotary Transducers
- Transducerized Wrenches/Nutrunners

AFTER ASSEMBLY — *Product Capability*

Does the finished product meet the user's expectations?

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

The equipment used for this phase would be:

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

PRODUCTS TO USE...

AIMCO Tool University TRAINING

It is recommended to measure and record torque values during each of the three areas — ***Before, During and After assembly***. Each area is related to the others, but the values generated are independent and will not be equal. These differences should be expected and are due to the varying measurement methods and joint conditions that occur at each step of the assembly process.

MEASURING QUALITY — *PROCESS CAPABILITY*

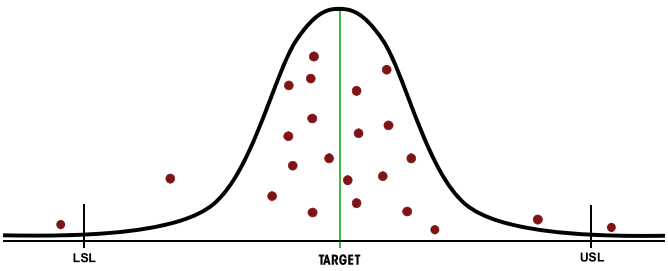
Statistical analysis is an important step in any quality control process.

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% perfect product.

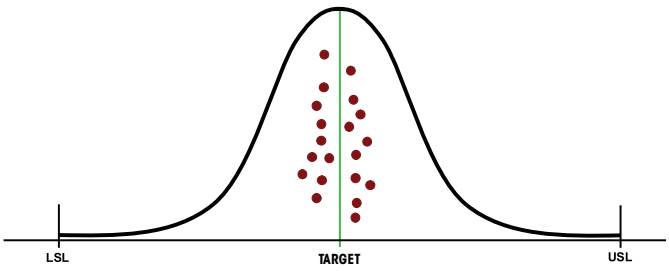
Cpk is a statistical value that indicates how tightly grouped a series of samples is around the target value. Cpk is a function of the upper specification limit (USL), the lower specification limit (LSL), the mean of the samples and the standard deviation (**σ**) of the samples.

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

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



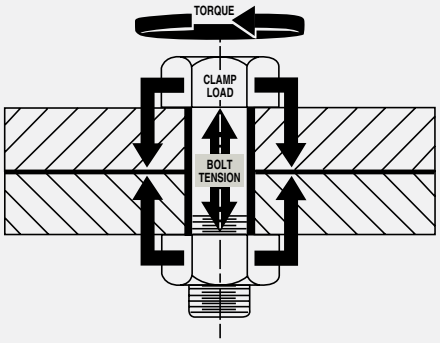
Unacceptable spread of samples, Cpk < 1.33



Acceptable spread of samples, Cpk > 1.33

MEASURING QUALITY — *CLAMP LOAD*

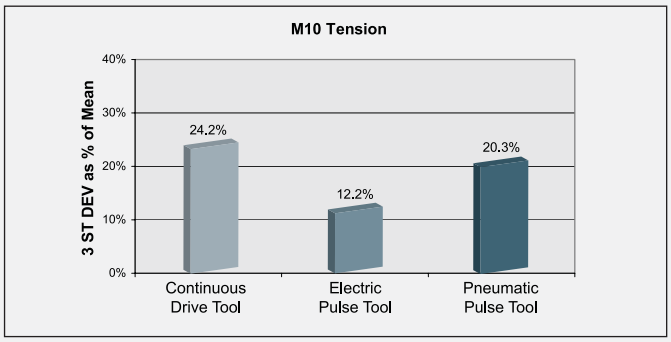
The purpose of threaded fastening is to produce the correct amount of clamp load within the joint.

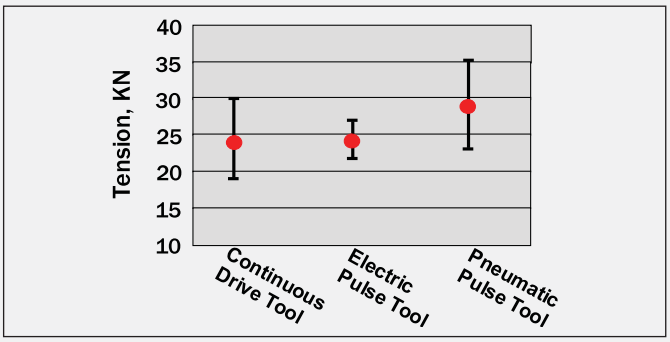


Due to the cost and difficulty of measuring clamp load during the actual assembly process, *torque* is used as the control parameter during tightening.

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.





AUDITOR™ TORQUE CUBE™

The "Cube" is a great entry level tester that packs many features into a small portable package. Versatile mounting design makes testing of pistol or inline tools simple. Belleville washer joint kits allow for easy configuration of hard, medium or soft joint rates.

FEATURES

- Simple, easy-to-use, portable tester
- Intuitive *Auditor™ Series* menu structure for quick start-up
- Bidirectional accuracy of ±1% of indicated reading within top 90% of full scale
- Eight (8) available engineering units:
  oz-in, lbf-in, lbf-ft, Nm, Ncm, kgf-cm, gf-cm, kgf-m
- 3 modes of operation:
  Track, Peak and 1st Peak
- Selectable power tool filtering:
  125Hz, 250Hz, 500Hz, 1000Hz and 1500Hz
- RS-232 output
- NiMh rechargeable batteries provide a minimum of 8-10 hours of continuous use
- For testing of power tools, click, dial and digital wrenches

AUDITOR™

SPECIFICATIONS

MODEL	RECOMMENDED TORQUE RANGE in-lb	Nm	WEIGHT lb	kg	W x H x D	W x H x D
ATC-25	2.5 - 25	.28 - 2.8	2.5	1.13	79 x 95 x 83	3.13 x 3.75 x 3.25
ATC-100	10.0 -100	1.3 - 11.3	2.5	1.13	79 x 95 x 83	3.13 x 3.75 x 3.25
ATC-250	25.0 - 250	2.8 - 28.25	2.5	1.13	79 x 95 x 83	3.13 x 3.75 x 3.25
ATC-500	50.0 - 500	5.6 - 56.5	2.5	1.13	79 x 95 x 83	3.13 x 3.75 x 3.25

OPTIONAL ACCESSORY

- RS232C - RS232 Cable to Serial (DSUB9)
  Connect your "CUBE" to a serial printer or PC

Tool University TRAINING

Cp, process capability without reference to a centered process, is often used in conjunction with Cpk. It is possible to have a fastening process with a high Cp value and a low Cpk if torque values are grouped tightly but are not grouped around a centered target specification.

AUDITOR™ SERIES UET TORQUE TESTERS

Quickly, easily and precisely check the torque on your tools with Auditor™ AUET and AUET/MTM torque testers from AIMCO. The Auditor™ Series enables you to adjust your tool on hard, medium or soft joint rates. Auditor™ testers are available in single (AUET) or dual (AUET/MTM) transducer styles to provide flexibility and true value for your testing budget.

Using torque measurement equipment before assembly is typically used for tool setup and tool capability studies. For tool setup, the tool crib will want to set the tool close to the torque required by the application. For tool capability studies, one can ensure that the tool can provide the necessary torque with required repeatability.

AUET

FEATURES

- Adjustable auto-clear feature
- Keylock security prevents unauthorized programming changes
- Provides data output to computers or serial printers via serial communication
- Uses AC power or NiMh batteries
- Multiple transducer models available with any combination of two standard transducers from 100 in-oz to 1600 in-lbs
- MTM models supplied with external transducer port
- Verify torque settings and repeatability of hand tools, power tools, and pulse tools
- Easy and convenient to use with *one button* operation
- Push-button zero to quickly re-zero instrument reading
- Four modes of processing torque signals:
  - **Peak:** Records & displays highest torque peak
  - **First Peak:** Records & displays first torque peak
  - **Track:** Displays all torsional strain applied to transducer in real time (no memory)
  - **Pulse:** Records accurate peak value achieved by hydraulic pulse tools
- Repeatable joint simulator included
- Selectable engineering units with 8 available scales
- Selectable frequency response provides filtering for testing different types of torque tools

AUET / MTM

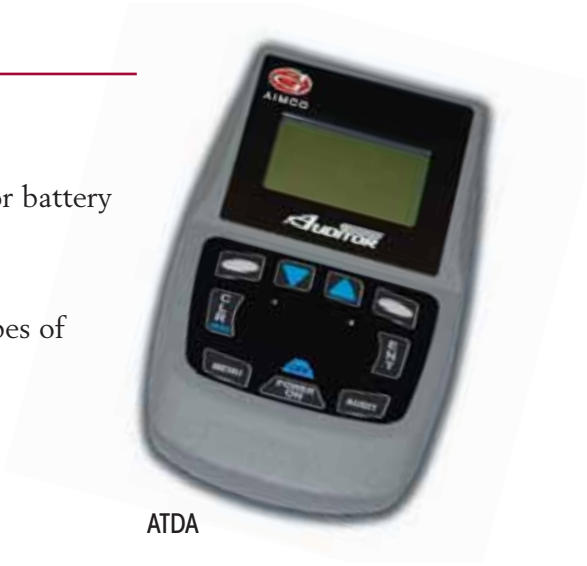
Single Transducer Models

MODEL	RECOMMENDED TORQUE RANGE	
AUET-0100	10 - 100 in-oz	0.7 - 7.2 kgf-cm
AUET-10	1 - 10 in-lb	1.1 - 11.5 kgf-cm
AUET-050	5 - 50 in-lb	0.5 - 5.6 Nm
AUET-100	10 - 100 in-lb	1.1 - 11.3 Nm
AUET-250	25 - 250 in-lb	2.8 - 28.3 Nm

Dual Transducer Models

MODEL	RECOMMENDED TORQUE RANGE			
	Transducer 1	Transducer 2	Transducer 1	Transducer 2
AUET / MTM-10-100	1.0 - 10 in-lb	10 - 100 in-lb	0.11 - 1.12 Nm	1.3 - 11.3 Nm
AUET / MTM-50-500	5.0 - 50 in-lb	50 - 500 in-lb	0.56 - 5.65 Nm	5.65 - 56.49 Nm

AUDITOR™ TORQUE DATA ANALYZER



ATDA

- Light weight and portable for production-line auditing
- 16 hour continuous-use battery life
- Battery is field serviceable – no need to send to AIMCO for battery replacement
- Monitors torque, angle & pulse count
- Track, Peak, First Peak and Pulse modes for use with all types of assembly tools
- Programmable frequency response
- Memory storage of 999 data points
- Visible indication of OK or NOT OK rundowns
- Display of X-bar, Sigma, Cp & Cpk statistical values
- Serial data output
- IS style transducer compatibility through interface cable
- Statistics Display

AUDITOR™ TORQUE DATA COLLECTOR

The Auditor™ Torque Data Collector includes all of the features of the Auditor™ Torque Data Analyzer (ATDA) and:

ATDC

- File set-up capability- allows naming separate files and saving torque data into specific files
- Advanced job set-up – set up groups of fasteners on a specific application as well as groups of applications on a specific product
- Touch-screen makes set-up and use fast and easy
- Move-on feature for precise measurement when used for residual audits.
- Menu structure and terminology identical to that of other Auditor™ torque measurement products, making set-up familiar and easy for any operator.
- Memory capacity for up to 250,000 data samples
- Auditor™ PC software, provided at no charge, allows fast set-up, as well as data analysis and downloading, from the ATDC

The Auditor™ Torque Data Collector is the most advanced torque measurement device offered by AIMCO. The ATDC combines the extensive features of the ATDA with increased memory and filing capability and advanced measurement features to provide the most comprehensive torque measurement product on the market. Touch-screen capability and alpha-numeric entry make the easy-to-use Auditor™ menu structure even easier to access and configure. When the light-weight ATDC is combined with the Auditor™ line of brushless rotary transducers, the result is an extremely mobile, durable and functional torque auditing system that can handle the most detailed auditing processes.

Auditor™

AUDITOR™ ATST SERIES ANALYZERS/COLLECTORS

FEATURES

- Provides quick, easy, and accurate:
  - Testing of pulse tools
  - Testing of continuous drive tools
  - Online monitoring of fastening process
  - Auditing of assembled joints
  - Verifying accuracy of hand tools
- Four Auditor™ models available — with either standard or Plus battery technology:
  - **Auditor™:** Torque Analyzer with sequential memory of 200 samples
  - **Auditor™ II:** Torque/Angle/Pulse Count Analyzer with sequential memory of 200 samples
  - **Auditor™ III DC:** Torque Analyzer/Data Collector with memory capability of up to 250 files with 20,000 samples
  - **Auditor™ IV DC:** Torque/Angle/Pulse Count Analyzer/Data Collector with memory capability of up to 250 files with 20,000 samples
- Provides Cp, Cpk, X-Bar, Range & Sigma values
- Each file can store the application name, acceptable conditions, parameter settings, rundown data, and statistical information

SPECIFICATIONS

AUDITOR™

- A/D accuracy + 0.2% of FSD
- LCD display is 4 rows by 16 columns alphanumeric supertwist with backlight
- NiCd battery provides 8 hours of continuous use; 8 hour recharge time
- Serial port baud rate selectable from 300 to 19,200
- Data memory backed up with internal battery
- Comes with carrying case, operations manual, communication cable, battery charger, and shoulder strap
- Weight: 3.5 lbs.; Dimensions: 9.3 in. L x 5.4 in. W

AUDITOR™ PLUS

- 16 hours of continuous use & only 1.5 hour charging time
- Won't develop "memory set," eliminating the need for battery management
- Can be operated on partial charge or directly plugged into AC power

FEATURES	BASIC UNITS MODEL/PART #	BASIC UNITS MODEL/PART #	DATA COLLECTORS MODEL/PART #	DATA COLLECTORS MODEL/PART #
	Auditor™ Model I (ATST-01) Auditor™ Plus Model I (ATST-01PL)	Auditor™ Model II (ATSTA-02) Auditor™ Plus Model II (ATSTA-02PL)	Auditor™ Model III (ATST-03) Auditor™ Plus Model III (ATST-03PL)	Auditor™ Model IV (ATSTA-04) Auditor™ Plus Model IV (ATSTA-04PL)
6 Languages	•	•	•	•
Transducer file	•	•	•	•
Impulse mode	•	•	•	•
Click mode	•	•	•	•
Peak mode	•	•	•	•
Track mode	•	•	•	•
Cycle end timer	•	•	•	•
Auto print mode	•	•	•	•
Measure mode	•	•	•	•
Statistical analysis	•	•	•	•
Password	•	•	•	•
Auto power off	•	•	•	•
Back light	•	•	•	•
Date/time clock	•	•	•	•
Angle		•		•
Pulse count		•		•
File capability – 250			•	•
Rounds			•	•
PC support			•	•
Cause code field			•	•
20,000 samples			•	•

THE MOST DURABLE ROTARY TANSDUCERS AVAILABLE

- Brushless technology means no brushes to wear or bounce.
- No Strain Gauges — no concerns about adhesive failure or contact failure through fatigue.
- Unaffected by vibration: eliminates concerns about shorts from loose brush blocks.
- Industry Standard style is designed to work with AIMCO's Auditor™ and UET/MTM series of testers.
- Also for other brands of torque analyzers or data collectors. Includes a military type connector with a torque signal of 2 mv/v excitation.

Auditor™ Brushless Rotary Transducers

APPLICATIONS

- For use with pulse tools, stall tools, right angle nutrunners, impact wrenches, screwdrivers, multiples, and DC powered tools.
- Tool Qualification — Test tools in the tool crib or after repair.
- Process Qualification — Test tools on the line; dynamic torque testing inline with application.
- Quality Audits — Perform residual torque audits to assure joint and product quality.

Auditor™

SPECIFICATIONS

Accuracy: Better than +/- 0.5% of FSD (ringed*); +/- 1.0% (ringless)

Zero Drift: Less than +/- 0.04% of FSD per degree Celsius

Overload Capacity: 150% FSD

Drag Friction: Less than 0.75% rated torque or 0.1 Nm

DRIVE	MAX TORQUE		PART NUMBER	LENGTH in	THICKNESS in	WIDTH in	SIDE TO CENTER in	WEIGHT lb
1/4" Hex	1 Nm	8.9 in-lb	ABRT-25H-1	4.0	2.1	1.6	0.68	0.5
1/4" Hex	2 Nm	17.7 in-lb	ABRT-25H-2	4.0	2.1	1.6	0.68	0.5
1/4" Hex	5 Nm	44.3 in-lb	ABRT-25H-5	4.0	2.1	1.6	0.68	0.5
1/4" Hex	10 Nm	88.5 in-lb	ABRT-25H-10	4.0	2.1	1.6	0.68	0.5
3/8" Sq.	75 Nm	55 ft-lb	ABRT-38S-75	3.6	2.8	1.6	0.68	0.8
1/2" Sq.	200 Nm	148 ft-lb	ABRT-50S-200	4.0	2.8	1.6	0.68	1.0
3/4" Sq.	500 Nm	370 ft-lb	ABRT-75S-500	6.8	4.9	3.5	1.75	2.9
3/4" Sq.	750 Nm	553 ft-lb	ABRT-75S-750	6.8	4.9	3.5	1.75	2.9
1" Sq.	1500 Nm	1107 ft-lb	ABRT-100S-1500	TBA	TBA	TBA	TBA	TBA

Hex drive models utilize precision ring design

All transducers require separate cable
- ABRT9110-3 – For Auditor™ Display
- ICBL-5000 – For UET Series

AIMCO Tool University TRAINING

Filter Frequency is a setting on high-quality torque measurement devices that allows electronic noise to be filtered out of the torque signal. A proper setting will result in the most accurate and repeatable torque values for a specific tool. Common starting points for Filter Frequency are approximately 500 Hz for continuous drive and manual tools and approximately 1000 Hz for discontinuous drive tools.

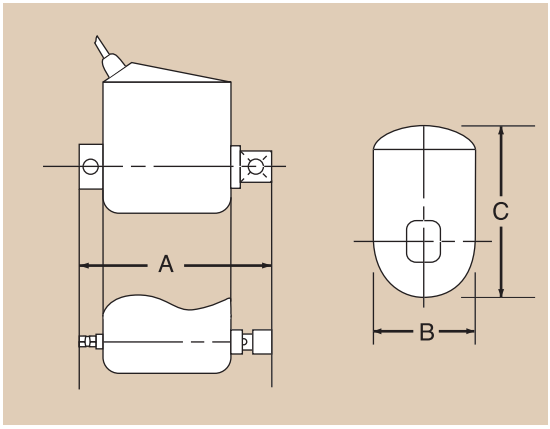
ROTARY TRANSDUCERS
FOR DYNAMIC OR RESIDUAL TESTING

- No "brush bounce" when used with pulse tools, stall tools, right angle nutrunners, screwdrivers, multiples, and DC powered tools.
- Torque or torque/angle models available in sizes from 2 to 5000 Nm (15 in-lb to 3690 ft-lb).
- Small compact design,which allows use in limited access areas.
- Rugged aluminum alloy housing.

Auditor™ Rotary Transducers

TWO STYLES AVAILABLE SMART & IS

- **Smart style** incorporates a "smart chip" for plug-n-play operation with Auditor™ Analyzer
- **IS (Industry Standard) style** is designed to work with other brands of torque analyzers or data collectors. Includes a military type connector with a torque signal of 2 mv/v excitation



AUDITOR™

DRIVE	MAX TORQUE		SMART PART NUMBER	IS PART NUMBER	TORQUE ANGLE*	LENGTH (A)	THICKNESS (B)	WIDTH (C)	WEIGHT lb
1/4" Hex	2 Nm	18 in-lb	ARTU-25H-2T	ARTIS-25H-2T	A	4.6"	1.1"	2.2"	1.0
1/4" Hex	5 Nm	44 in-lb	ARTU-25H-5T	ARTIS-25H-5T	A	4.6"	1.1"	2.2"	1.0
1/4" Hex	10 Nm	88 in-lb	ARTU-25H-10T		A	4.6"	1.1"	2.2"	1.0
1/4" Hex	20 Nm	180 in-lb	ARTU-25H-20T	ARTIS-25H-20T	A	4.6"	1.1"	2.2"	1.0
1/4" Sq.	10 Nm	88 in-lb	ARTU-25S-10T	ARTIS-25S-10T	A	2.9"	1.1"	2.2"	1.0
1/4" Sq.	20 Nm	180 in-lb	ARTU-25S-20T		A	2.9"	1.1"	2.2"	1.0
3/8" Sq.	25 Nm	225 in-lb	ARTU-38S-25T		A	3.0"	1.1"	2.4"	1.2
3/8" Sq.	75 Nm	50 ft-lb	ARTU-38S-75T	ARTIS-38S-75T	A	3.0"	1.6"	2.7"	1.2
1/2" Sq.	180 Nm	130 ft-lb	ARTU-50S-180T	ARTIS-50S-180T	A	3.4"	1.6"	2.7"	1.5
3/4" Sq.	250 Nm	180 ft-lb	ARTU-75S-250T		A	4.1"	2.0"	3.1"	2.2
3/4" Sq.	500 Nm	370 ft-lb	ARTU-75S-500T	ARTIS-75S-500T	A	4.1"	2.0"	3.1"	2.2
1" Sq.	750 Nm	550 ft-lb	ARTU-100S-750T		A	4.9"	2.4"	3.6"	4.0
1" Sq.	1400 Nm	1025 ft-lb	ARTU-100S-1400T	ARTIS-100S-1400T	A	4.9"	2.4"	3.6"	4.0

*Add this suffix to the end of the part number to indicate torque or torque/angle transducers

AIMCO Tool University TRAINING

A ***Bolt Elongation*** gauge uses ultrasonic waves to accurately measure the elongation of a fastener after tightening. This information can be vital in determining whether sufficient clamp load is being developed within a joint. AIMCO can provide this service for testing and evaluation purposes; simply contact your AIMCO Sales Representative for more information.

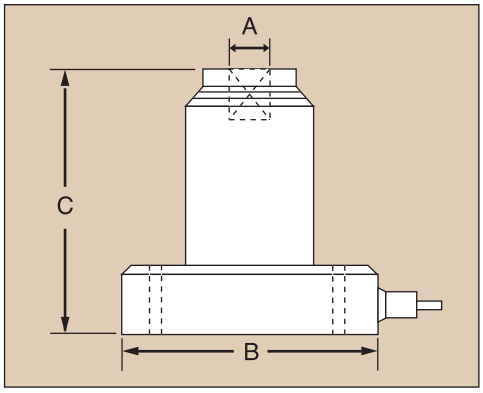
STATIONARY TRANSDUCERS
FOR TORQUE TESTING AND CALIBRATION

- Industrial transducers used in tool crib and production applications for hand & power tools
- Precision female square drives to facilitate testing
- Available in 1/4" to 1" square drive
- Heavy-duty stainless steel allows 140% overload capacity
- Metrology transducers used as master transducers in metrology labs *only* (Contact AIMCO Customer Service for more information)

Stationary Transducers (Joint kits purchased separately)

TWO STYLES AVAILABLE SMART & IS

- **Smart style** incorporates a "smart chip" for plug-n-play operation with Auditor™ Analyzer
- **IS (Industry Standard) style** is designed to work with other brands of torque analyzers or data collectors. Includes a military type connector with a torque signal of 2 mv/v excitation



ROTARY AND STATIONARY TRANSDUCERS

ALL MODELS

Accuracy: Better than ±1% of FSD
Zero Drift: Less than ±0.1% of FSD per degree Celsius
Coil Cable: 1 meter strain relieved cable on Smart models only

ROTARY MODELS

Overload Capacity: 125% FSD
Drag Friction: Less than 1% rated torque or 0.1 Nm

STATIONARY MODELS

Accuracy: Metrology models better than ±0.25% IR
Overload Capacity: 140% FSD
Mounting: 4 Holes of 8.3 mm diameter on 80 mm circle diameter

DRIVE SIZE (A)	MAX TORQUE		SMART PART NUMBER	IS PART NUMBER	BASE DIAMETER (B)	HEIGHT (C)
1/4"	5.6 Nm	50 in-lb	ASTU-25D-6		3.9"	3.0"
1/4"	11 Nm	100 in-lb	ASTU-25D-11	ASTIS-25D-11	3.9"	3.0"
1/4"	28 Nm	250 in-lb	ASTU-25D-28	ASTIS-25D-28	3.9"	3.0"
3/8"	67 Nm	50 ft-lb	ASTU-38D-67		3.9"	3.4"
3/8"	135 Nm	100 ft-lb	ASTU-38D-135	ASTIS-38D-135	3.9"	3.4"
1/2"	270 Nm	200 ft-lb	ASTU-50D-270	ASTIS-50D-270	3.9"	3.7"
3/4"	540 Nm	400 ft-lb	ASTU-75D-540		3.9"	4.4"
3/4"	1017 Nm	750 ft-lb	ASTU-75D-1000	ASTIS-75D-1000	3.9"	4.4"
1"	1695 Nm	750 ft-lb	ASTU-100D-1700	ASTIS-100D-1700	3.9"	4.8"

ACRAJOINT TOOL TEST STAND

For Testing Pulse Tools and Continuous Drive Tools

FEATURES

- For pulse and gear driven tools by utilizing lock/twist release air valve and air flow regulator
- Tests accuracy and repeatability of pulse tools without requiring reversing — less tool wear
- Ensures safe cycle testing of gear driven tools with manual brake operation through palm button or foot switch
- No reversing required — resets with the simple release of palm button or foot pedal
- Rotary transducers can be mounted inside the fixture
  – Protects the transducer
  – Eliminates any side loading that may influence test results or cause premature wear of the transducer.
- Equipped with air flow regulator allowing resistance adjustment by technician
- Safe and convenient operation of continuous drive nutrunners with built-in tool rest and reaction fixture
- Reduces tool and transducer wear with cushioned resistance — no hard slam

MODEL	CAPACITY ft-lbs	CAPACITY Nm	SQ. DRIVE in	WEIGHT lbs	WEIGHT kg	L x W x H mm
AJT-080	7.4 - 59.0	10 - 80	3/8	35	15.9	381 x 254 x 254
AJT-275	37.0 - 203.0	50 - 275	1/2	45	20.4	457 x 305 x 254

Recommended air hose size: 1/4"
Recommended air pressure: 90 PSI

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.
- Consist 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.
- Four 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.

MODEL	BOLT SIZE	TORQUE RANGE ft-lb	TORQUE 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	WEIGHT lb	WEIGHT 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								

* UFT-24 medium hard/soft joints only
Reaction fixture for continuous drive tools not included. Sockets included.

Tool University TRAINING

The International Organization for Standardization (ISO) published ***ISO 5393*** to suggest the methods for testing and evaluating continuous drive powered assembly tools that are used for installing threaded fasteners. The UFT Joint Simulator matches all ISO 5393 requirements!

TORQUE CART

Torque validation is an important step in quality control, and all torque tools and equipment should be audited frequently. The AcraDyne® torque cart offers the perfect solution to on-line auditing for all types of torque tools, while minimizing tool down-time and off-line travel to the auditing lab. The result is the ability to conveniently audit torque tools more frequently and thus maintain a higher level of quality control. We bring the test equipment to the application.

The AcraDyne® torque cart is a compact, easy-to-use, ergonomically-designed product that is suited to adapt to any type of assembly area. While housing the most accurate validation equipment available on the market, its compact design and self-propelled drive make it easy to maneuver in the tightest assembly areas. Its on-board electronics allow for simple use and reliable data storage.

FEATURES

- CartWare™ – AIMCO-designed software package allows rundown collection, data collection and statistical analysis of a wide range of assembly tools
- Use for tool testing, assembly line audits, tool calibration and tool certification
- Joint Simulators – Feature industry-standard UFT Series hydraulic joint simulators; the most repeatable and durable joint simulators available on the market
- Auditor™ Rotary Transducers – tested and proven strain-gauge rotary transducers allow auditing and calibration of any type of torque control tool, including pulse tools, continuous drive tools, manual wrenches and click wrenches
- Removable reaction bars included for each joint simulator for use with high torque continuous drive tools
- Allows the user to properly test both continuous and discontinuous tools with our hydraulic joint simulators (UFT)
- Mobile, self-propelled cart with forward and reverse speeds, and an extremely tight turning radius allows access to important assembly line areas
- Charger configured for 115 VAC or 230 VAC supply voltages


Touch-screen option available


Mobile torque cart with touch-screen monitor


UFT Joint Simulator

AIMCO can design a custom mobile or stationary torque validation system for you today! Contact your AIMCO sales representative for details.

AcraDyne® A Division of AIMCO

ASSEMBLY SYSTEMS

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 screws per second
- Large hopper holds about 1000 — 1500 fasteners
- Solid design — no tie downs or straps needed

FLEXIBILITY

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

ERGONOMICS

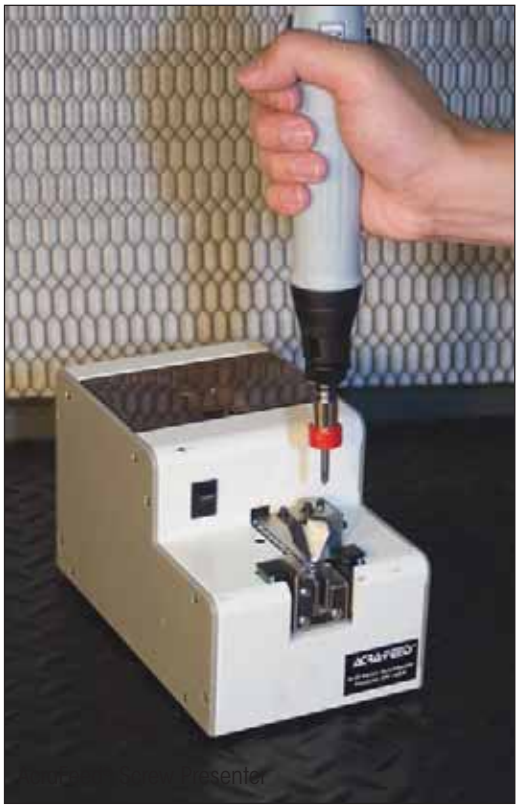
- The tool does the job for fewer arm and hand movements

RELIABILITY

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

QUALITY

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



ACRA-FEED®

FASTENING IN 3 EASY STEPS

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

2 Address screw with magnetized bit.

3 Bring screw to workpiece and fasten parts.

A-50 SCREW PRESENTERS

Standard Screw Presenters

MODEL	ADDITIONAL RAIL Part No	SCREW SIZE in	SCREW SIZE mm	MAX. SCREW LENGTH in	MAX. SCREW LENGTH mm
A-50A-0	AR-0	#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

MODEL	ADDITIONAL RAIL Part No	SCREW SIZE in	SCREW SIZE mm	MAX. SCREW LENGTH in	MAX. SCREW LENGTH 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

MODEL	ADDITIONAL RAIL Part No.	NOMINAL SCREW SIZE in	NOMINAL SCREW SIZE mm	MAX. SCREW LENGTH in	MAX. SCREW LENGTH 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.

Optional Accessories

MODEL	PART NO.
Mag-O-Net Bit Magnetizer	AM3/16 (3/16" ID)
A-50B Series Bit Guide Protector	NJ08004TIN8#23
A-50C Series Bit Guide Protector	NJ08004TIN8#45

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 non-ferrous fasteners when work space is limited

BUILDING AN ASSEMBLY SOLUTION

SELECT THE RIGHT TOOL FOR THE APPLICATION AND ADD THE APPROPRIATE ACCESSORIES TO MAXIMIZE PROFIT POTENTIAL WITH P.E.R.Q.®

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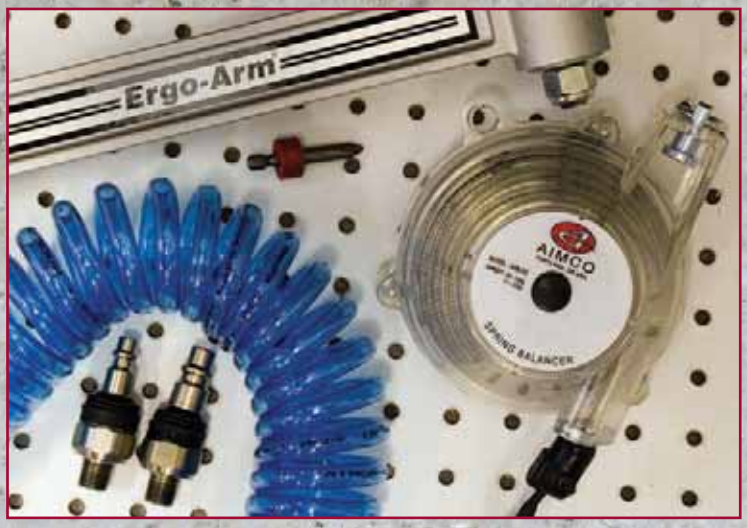
PERQ®

PRODUCTIVITY | ERGONOMICS | RELIABILITY | QUALITY
WORLD CLASS MANUFACTURING SOLUTIONS FROM AIMCO

- **Productivity:** the speed and efficiency of the assembly process
- **Ergonomics:** the relationship between the worker and the assembly process
- **Reliability:** the total cost of tool maintenance and repair
- **Quality:** the ability of the tool to adhere to process requirements



TOOL SUPPORT SYSTEMS

TW-SERIES BALANCERS

TW-0 and TW-00

- Gravity Defying / "true balance"
- No tension build-up to cause worker fatigue
- Easy external direct drive tensioning
- 360 degree upper swivel
- 3.3 ft stranded steel cable 1/8" diameter (TW-00 cable length 18")
- Provision for safety cable
- Tool clip included

TW-0 & TW-00 Series

TW-3 to TW-70 Series

MODEL	CAPACITY		Anti-Gravity Capacity (lbs)
TW-00	1.1- 3.3 lb	0.5-1.5 kg	2.5-3.0
TW-0	1.1- 3.3 lb	0.5-1.5 kg	2.5-3.0
TW-3	2.2- 6.6 lb	1.0-3.0 kg	4.5-6.0
TW-5	5.5-11.0 lb	2.5-5.0 kg	8.0-10.5
TW-9	9.9-19.8 lb	4.5-9.0 kg	15.0-19.0
TW-15	19.8-33.0 lb	9.0-15.0 kg	26.0-32.5
TW-22	33.0-48.4 lb	9-22 kg	41.0-48.0
TW-30	48.4-66.0 lb	22-30 kg	58.0-65.5
TW-40	66.0-88.0 lb	30-40 kg	77.5-87.5
TW-50	88.0-110.0 lb	40-50 kg	100.0-109.5
TW-60	110.0-132.0 lb	50-60 kg	122.0-131.0
TW-70	132.0-154.0 lb	60-70 kg	144.0-153.0

TW-3 through TW-15

- Four models supporting weights from 2.2 to 33 lb
- Tapered drum allows "true balance" throughout cable travel
- Easy external direct drive tensioning
- Cast aluminum casing for durability
- Permanent lubrication
- 360 degree top swivel
- 4.3 ft of 5/32" diameter stranded steel cable
- Safety chain provision
- Enclosed spiral spring for added safety

TW-22 through TW-70

- Six models supporting weights from 33 to 154 lb
- Tapered drum allows for "true balance"
- Cast aluminum housing
- Easy external tensioning
- Manual drum lock
- 360 degree upper swivel
- Permanent lubrication
- 5 ft of stranded steel 3/16"
- Automatic Safety Lock
- Enclosed spiral spring for added safety

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 sturdier 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		STROKE		WEIGHT	
ASB-0C	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

LR-Series

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

LR-09B-90/200

MODEL	HOSE LENGTH		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 for setting of tension
- 5 ft nylon coated steel cable
- Reinforced hanging bracket includes provision for safety cable
- Adjustable cable stop
- 3 models support weight 0.5-5 lb
- Tool clip included

RMA-L Series

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

RMA-L Series

RPA Series

MODEL	CAPACITY	
RPA-1	0.5 - 1.5 lb	0.2 - 0.7 kg
RPA-2	1.5 - 3.0 lb	0.7 - 1.4 kg
RPA-3	3.0 - 5.0 lb	1.4 - 2.3 kg
RMA-7L	5 - 10 lb*	2.3 - 4.8 kg*
RMA-15L	10 - 15 lb*	4.5 - 6.8 kg*
RMA-20L	15 - 23 lb*	6.8 - 10.4 kg*

* With ratchet lock

AIMCO Tool University TRAINING

BALANCER SELECTION

When choosing a balancer, a few important items should be noted:

1. Determine if a retractor or a true balancer is required
2. Determine total cable travel needed and total weight to be suspended, including all hose/cable, tool and fixtures
3. To ensure maximum life span of your balancer, selection should utilize weight range at the high end

FEATURES:

- 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

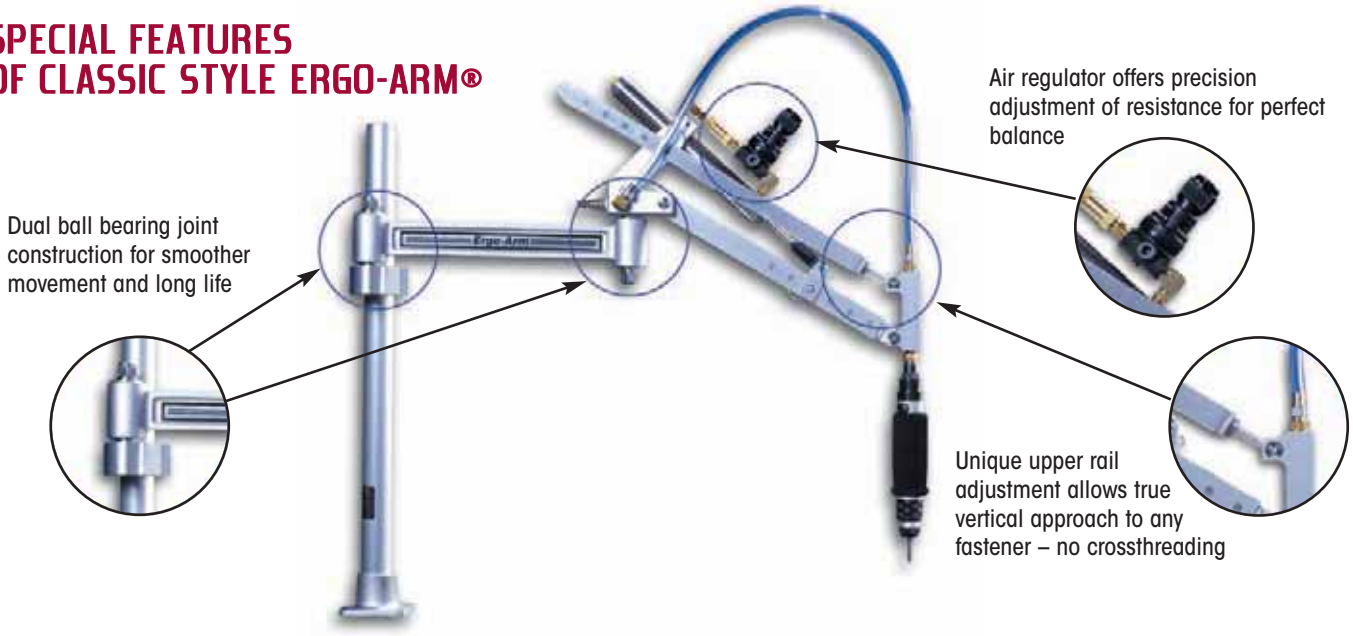
AD-D1098-S, AD-D1098-SAC

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

MODEL	ARM STYLE	TOOL MOUNT	REACH IN	REACH MM	CAPACITY LB	CAPACITY KG	MAXIMUM TORQUE* IN-LB	MAXIMUM TORQUE* NM
AIR CYLINDER 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 CYLINDER 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

*Max torque allowed may be dependent on tool clutch type and joint rate
**For single arm electric tool mount, order EAP-202ED-KIT

SPECIAL FEATURES OF CLASSIC STYLE ERGO-ARM®



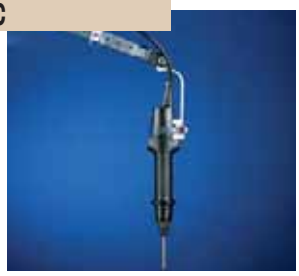
ERGO-ARM® ACCESSORIES

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

FOR USE WITH MODELS AD-D1098-S/SAC

EAA-21 - Pistol Grip Tool Mount Kit

EAA-21 - Right Angle Tool Mount



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

PARALLEL ARM KIT

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

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 included with each arm provide a wide range of adjustment

LQ-0002 Linear Arm
shipped with two ASB-0C balancers

LQ-0004 Linear Arm
shipped with two TW-3 balancers

LQ-0024H Heavy Duty Arm
shipped with two TW-3 balancers

MODEL	DESCRIPTION	MAX. REACH		WEIGHT CAPACITY		MAX. TORQUE		HEIGHT		STANDARD TOOL MOUNT DIAMETER	
		IN	CM	LB	KG	FT-LB	NM	IN	CM	IN	CM
LQ-0002	Linear Arm	14	37	1- 5	0.5 - 2.3	20	27	24	61	1.6	4.1
LQ-0004	Linear Arm	23	58	3 - 10	1.4 - 4.5	25	34	36	91.4	1.6	4.1
LQ-0024H	Heavy Duty Arm	23	58	3 - 10	1.4 - 4.5	75	102	36	91.4	1.6	4.1

CUSTOM REACTION DEVICES

- Torque Tubes with up to 300 ft-lb capacity
- Torque Arms with up to 3000 ft-lb capacity
- Floor, table, wall and overhead mounting available
- Multiple pivot-points allow reach up to 15 feet

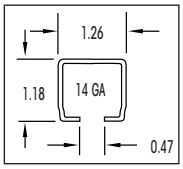
Contact your AIMCO sales representative in order to determine the exact torque reaction system needed to improve the productivity and ergonomics of your assembly station!

WORKSTATION COMPONENTS AND ASSEMBLIES

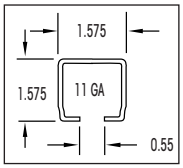
COMPONENTS

TRACK
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

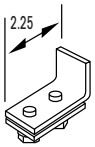


PART NUMBER	50# TRACK
AT5-3	3 ft track
AT5-4	4 ft track
AT5-6	6 ft track
AT5-9*	9 ft track
AT5-12*	12 ft track

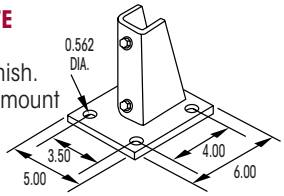


TRACK NUT (ATN-3/5)
Zinc plated steel. Use to attach accessories to track, as end stops, or to isolate rolling accessories. Fits both 50 lb. and 30 lb. track.

END STOP (AES-3/5)
Zinc oxide finish. Use to prevent balancer trolley from "overtraveling" the horizontal track.

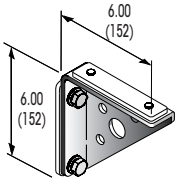


MOUNTING PLATE (AMP-5)
Black polyester finish. Use as a base to mount vertical uprights.

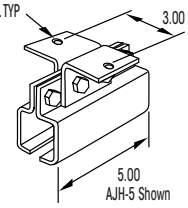


END CAP (AEP-3/5)
Black molded vinyl. Use to cap track ends for a professional finish.
- AEP-3 for 30 lb. track
- AEP-5 for 50 lb. track

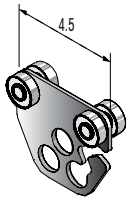
ANGLE BRACKET (AB-3/5)
Black polyester finish. Use to mount horizontal track to vertical track. Fits both 50 lb. and 30 lb. track.



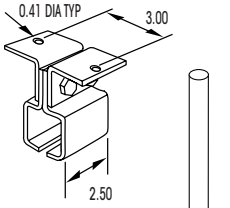
JOINT HANGER BRACKET (AJH-3/5)
Black polyester finish. Use to couple and hang end-to-end track.
- AJH - 3 for 30 lb. track
- AJH - 5 for 50 lb. track



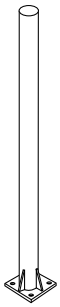
BALANCER TROLLEY (ABT-3/5)
Black polyester finish. Use as moving support for tool balancers, hose and cable. Quality ball bearing wheels for long life and smooth tracking.
- ABT-3 for 30 lb track (1.00 dia)
- ABT-5 for 50 lb track (1.25 dia)



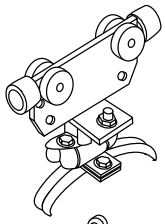
HANGER BRACKET (AHB-3/5)
Black polyester finish. Use to suspend track at right angle.
- AHB-3 for 30 lb. track
- AHB-5 for 50 lb. track



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.

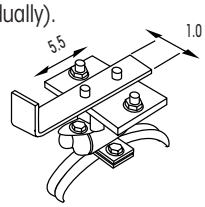


INTERMEDIATE CARRIER
Black polyester finish. Use for moving cable or hose festoon. Supports hose cable OD .60-.94.
- AIC3-2 for 30 lb. track
- AIC5-2 for 50 lb. track

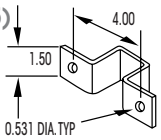


U-BOLTS (AUB-5)
Zinc plated steel. Use to secure boom bracket or any flat metal plate to AVC-5 (sold individually).

END CLAMP (AEC5-2)
Black polyester finish. Use as end stop with hose carrier for festoon. Cable/hose OD .60-.94.

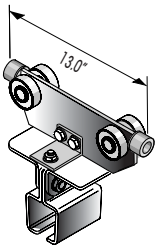


SUPPORT CLAMPS (ASC-3/5)
Black polyester finish. Use as additional support for track.
- ASC-3 for 30 lb. track
- ASC-5 for 50 lb. track

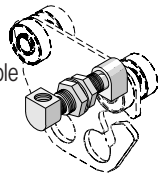


TOOL CLIP (SH-5)
Steel clip with safety latch. Use for tool attachment and as replacement clip for lightweight tool balancers. Measures 2.37" long.

ROLLING HANGER (ABT5-R)
Black polyester finish. Use as support for rolling track. Allows X/Y axis movement, includes ball bearing wheels.

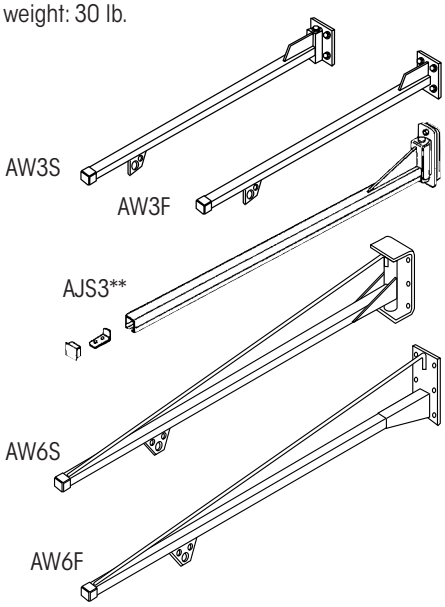


90° CONNECTOR FOR 3/8" HOSE (WSCH)
3/8" I.D. Brass. Use to provide stable transfer point from air line to tool. 90 degree connector attaches to ABT-5.



WALL AND FLOOR MOUNTED JIBS

3 FT. SWINGING JIB (AW3S)
3 FT FIXED JIB (AW3F)
3 FT. SWINGING JIB FOR CHANNEL MOUNT (AJS3**)
Jibs are mounted to wall or beams to create free standing workstations. End stop, end cap and balancer trolley included. Maximum weight: 30 lb.



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 feet.

* Additional freight may apply
** AJS3 Does not include balancer trolley

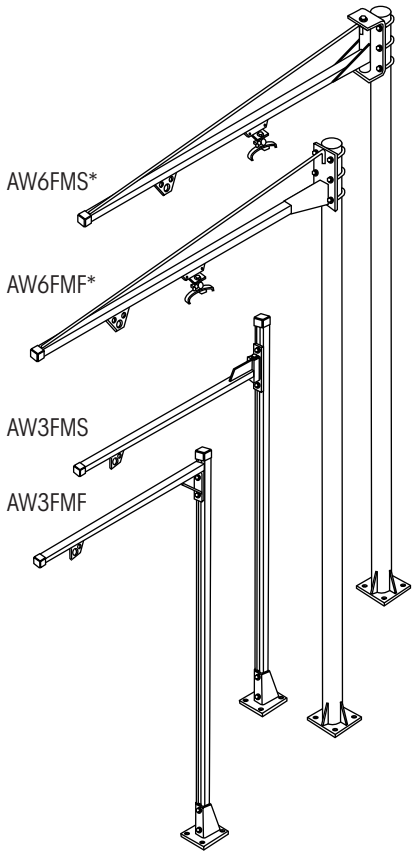
FLOOR MOUNTED 3 FT. SWINGING JIB (AW3FMS)

FLOOR MOUNTED 3 FT. FIXED JIB (AW3FMF)
Maximum weight: 30 lb
Column height: 6 ft

FLOOR MOUNTED 6 FT. SWINGING JIB (AW6FMS*)

FLOOR MOUNTED 6 FT. FIXED JIB (AW6FMF*)
Maximum weight: 50 lb
Column height: 9 ft

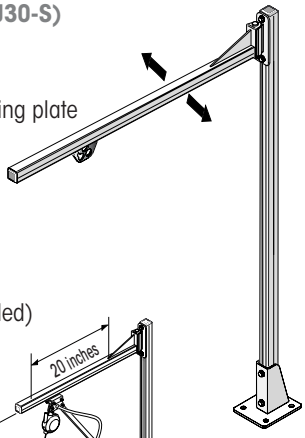
Units include end stop, balancer trolley and intermediate carrier.



AIMCO TOOL SUPPORT ARMS

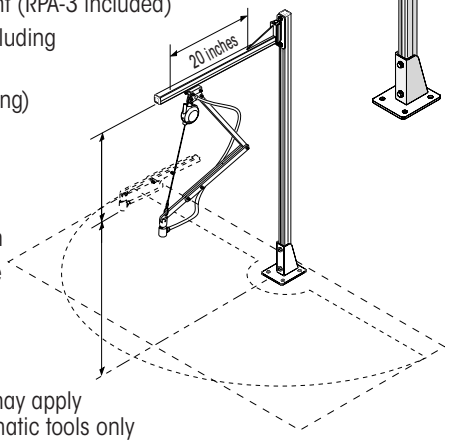
BENCH MOUNTED SWINGING JIB (JJ30-S)
BENCH MOUNTED FIXED JIB (JJ30)

- 30 lb maximum weight
- 48" column height including mounting plate
- 3 ft. swinging jib includes balancer trolley, end stop and cap



BENCH MOUNTED WORKSTATION WITH TORQUE ARM (JJ30-TA)**

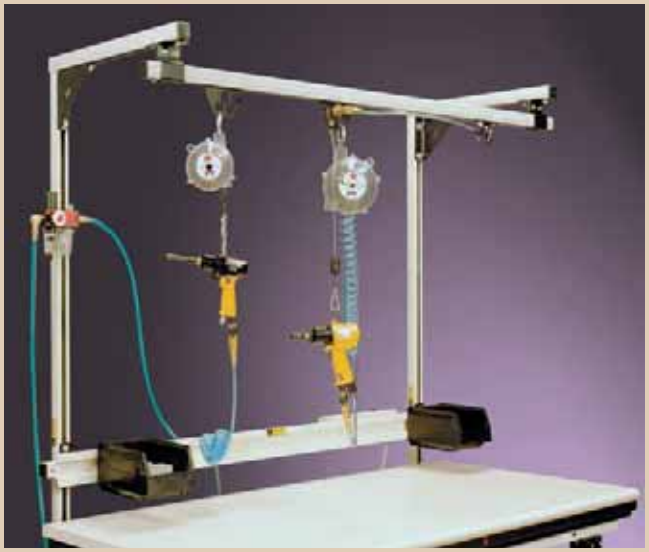
- 5 lb. maximum weight (RPA-3 included)
- 5' column height including mounting plate
- 38" jib length (swinging)
- 15 ft-lb torque rating
- 3/8" NPT inlet
- 1/4" NPT outlet
- Beige polyester finish
- 1/4" braided air hose
- 21" maximum vertical arm travel



* Additional freight may apply
** For use with pneumatic tools only

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 worker by providing support for heavy tools.
- Protect valuable tools, fixtures, and monitoring devices from damage by suspending them out of the way.

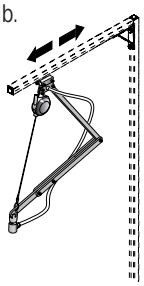


AIMCO BASIC WORKSTATION KIT (ATW-50)

- 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 to hold pistol and angle style tools.

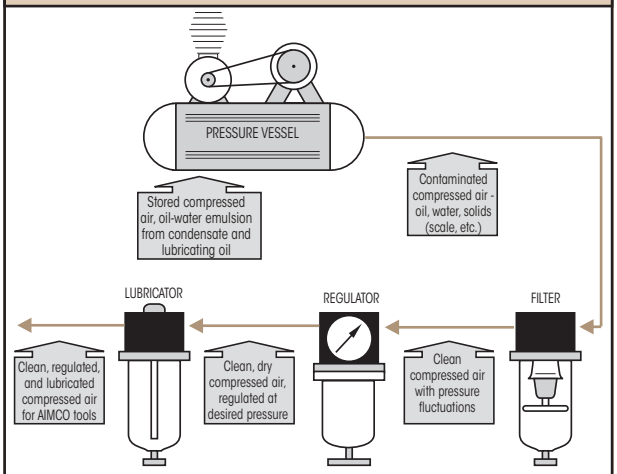
AIMCO can customize a workstation for you. Contact your AIMCO sales representative.

AIR PREPARATION UNITS

- **Complete Filter, Regulator, Lubricator Units:** Three-piece modular units feature 30-micron filter with semi-auto drain, regulator with gauge, and oil mist lubricator. All units include mounting bracket and polycarbonate bowl
- **Complete Compact FRL Stack Units:** Space saving units include combination filter/regulator with gauge and lubricator in a more compact size. Features 30-micron filter with semi-auto drain. All units include mounting bracket and polycarbonate bowl
- **Compact Filter/Regulator Stack Units:** Combination units for use when additional lubrication is not needed. Includes 30-micron filter, polycarbonate bowl, and semi-auto drain. Order mounting bracket and gauge separately

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.

AIR PREPARATION UNITS: BASIC FUNCTIONS



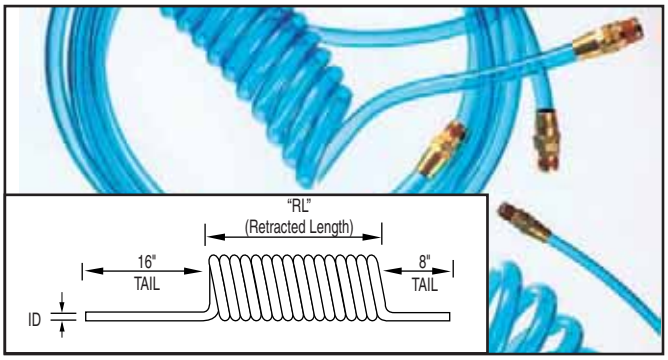
To determine unit size for application, you will need to know:

- Total air flow (CFM) required for application
- Size of incoming air line
- Size of air line required by tool
- Air supply pressure (PSI)
- Allowable pressure drop
- If the application requires lubrication
- If the overall system has the required capacity

MODEL	TYPE	NPT PORT SIZE	AIR FLOW MAX CFM	MAX PSI IN/OUT
AFRL-M24	Complete FRL	1/4"	19.4	150/120
AFRL-S24	Complete FRL	1/4"	19.4	235/120
AFRL-S34	Complete FRL	3/8"	24.0	235/120
AFRL-C34	Complete FRL	3/8"	30.0	235/150
AFRL-C44	Complete FRL	1/2"	67.1	235/150
AFRL-X64	Complete FRL	3/4"	124.0	235/150
AFRL-X84	Complete FRL	1"	177.0	235/150
AKL-M24	Compact FRL	1/4"	19.4	150/120
AKL-S24	Compact FRL	1/4"	19.4	235/120
AKL-S34	Compact FRL	3/8"	24.0	235/120
AKL-C34	Compact FRL	3/8"	30.0	235/150
AKL-C44	Compact FRL	1/2"	67.1	235/150
AK-M24	Filter/Regulator	1/4"	19.4	150/120
AK-S34	Filter/Regulator	3/8"	24.0	235/120
AK-C44	Filter/Regulator	1/2"	67.1	235/150
AK-X64	Filter/Regulator	3/4"	124.0	235/150

MODEL	ACCESSORY DESCRIPTION	SERIES
AFE-M30	Filter Element	M
AFE-S30	Filter Element	S
AFE-C30	Filter Element	C
AFE-X30	Filter Element	X
ABG-2	Bowl Guard	S
ABG-3	Bowl Guard	C
ARG-1/2M	Replacement Gauge, metal	M, S
ARG-3	Gauge for Regulator, plastic	C
ARG-4	Gauge for Regulator, plastic	X
ARG-3/4M	Replacement Gauge, metal	C, X
AMB-1	Mounting Bracket	M
AMB-2	Mounting Bracket	S
AMB-3	Mounting Bracket	C
AMB-4	Mounting Bracket	X

AIMCO AIR HOSE



- Durable Polyurethane Hose
- Excellent Recoil Memory
- Maximum Flexibility and Lightweight
- Transparent Hose Color (opaque available)
- Custom Colors Available
- High Chemical Resistance

SINGLE AIR HOSE ASSEMBLIES (COILED)

MODEL WORKING PRESSURE 100PSI	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"

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-250Z	1/4" I.D.
ASH-375Z	3/8" I.D.
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

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

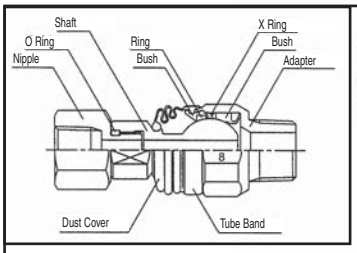
HELPFUL HINTS FOR AIR HOSE USE:

- Use recommended ID air hose and fittings
- Replace air hose regularly to help maintain clean air
- 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 quick disconnect couplers for additional safety

ERGONOMIC TWIST PLUGS

These unique, ergonomically designed hose fittings provide 360° rotation and 35° angled rotation in any direction.

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



- Two rotation points prevent kinking of air hose
- Design ensures full flow of air pressure
- Rotating joint is supplied with polyurethane dust cover
- Heavy-duty construction for maximum life

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

AIR LINE ACCESSORIES

IN-LINE MINI LUBRICATORS

These mist-type in-line lubricators keep air operated tools performing with greater efficiency. The patented "on the tool" mist lubricator system also saves money.

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.

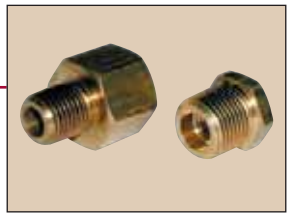
MODEL	CAPACITY
932-100-0	1/8" NPT
932-110-0A	1/4" NPT

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 GUAGE SWIVEL JOINT KITS

- Bi-directional 360° rotation
- Keeps air hose straight and untwisted
- Decreases operator fatigue

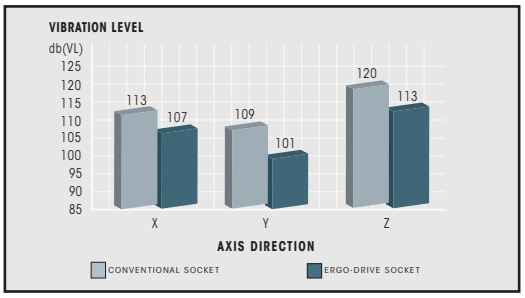
MODEL	DESCRIPTION
7021AG	1/4" PT/NPT
7041AG	3/8" PT/NPT

FASTENER TOOLS

Ergo-Drive® sockets
Protect...

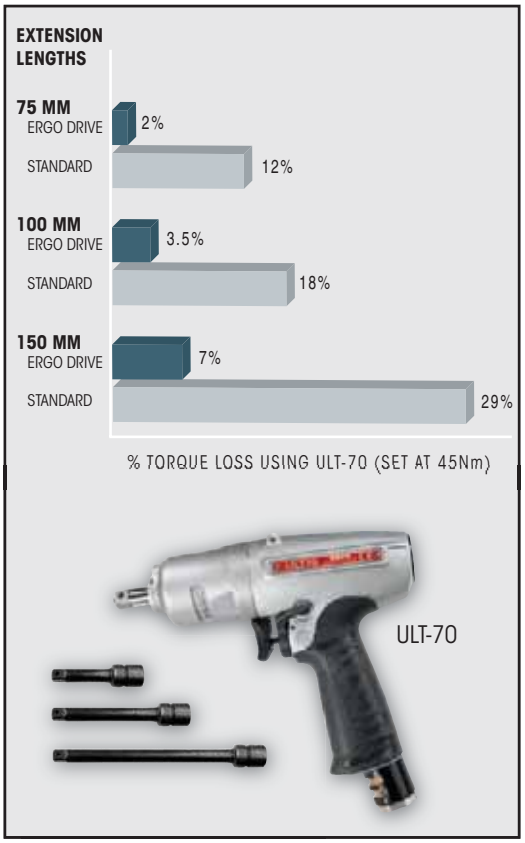
...YOUR INVESTMENT!

Pulse tools are an investment and the anvil is the most expensive single part of any pulse tool. ERGO-DRIVE® sockets mean less vibration and wear on this critical component.



...YOUR WORKERS!

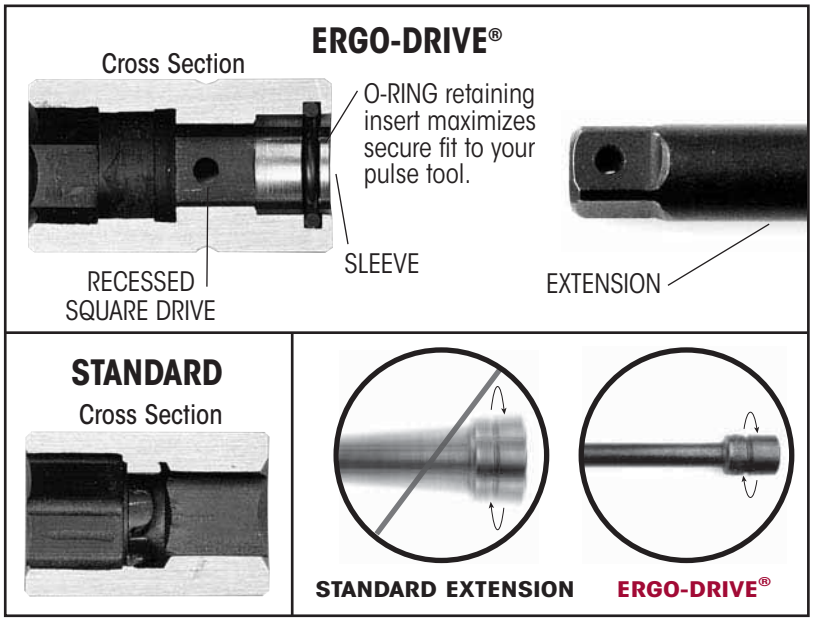
ERGO-DRIVE® sockets cause significantly less vibration during fastening than conventional sockets. This allows your workers to do their jobs without the worry of vibration-related injuries.



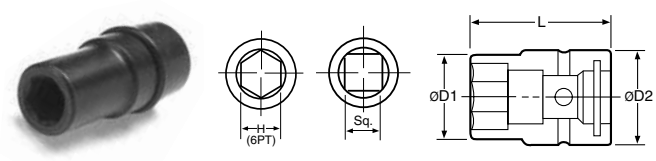
...YOUR PRODUCTS!

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



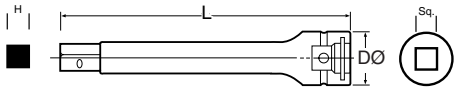
ERGO-DRIVE® SOCKETS



PART NO	HEX	D1 MM	D1 IN	D2 MM	D2 IN	L MM	L IN
3/8" Square 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" Square 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" Square Drive							
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

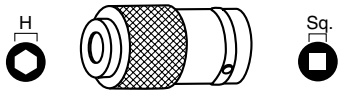
Additional sizes of Ergo-Drive® sockets and extensions are available upon request.

ERGO-DRIVE® EXTENSIONS



PART NO	SQ DRIVE	H	L MM	L IN	D MM	D IN
3/8" Square 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" Square 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" Square 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

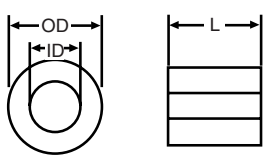


PART NO	SQUARE DRIVE	HEX
3/8" Square Drive		
ADC-3SEDSQ	3/8"	1/4"
ADC-3SEDSQH7/16	3/8"	7/16"
1/2" Square Drive		
ADC-4SEDSQ	1/2"	1/4"
ADC-4SEDSQH7/16	1/2"	7/16"

STANDARD FASTENER TOOLS

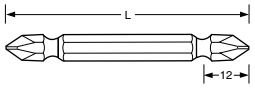
Connect your tool to the application with Bits, Sockets and Nutsetters from AIMCO.

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 all your fastener needs.
If you're in electronics, aerospace, automotive or general industry, AIMCO has the bits and nutsetters to fit your needs.



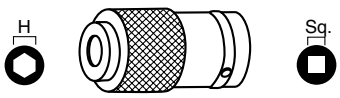
Mag-O-Nets®

PART NO.	INNER ID	OUTER ID	L mm
AM1/4Z	7 mm	19 mm	10 mm
AM5Z	6 mm	17.5 mm	10 mm
AM3/16Z	3/16"	17.5 mm	10 mm



Phillips Power Bits (Double-Ended)

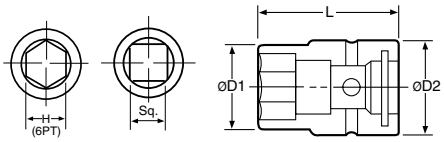
PART NO.	POINT SIZE	L mm	L in
A3W2-3	2	75	2.94
A3W2-4	2	100	3.94
A3W2-8	2	200	7.78
A3W3-4	3	100	3.94



Quick Change Chucks

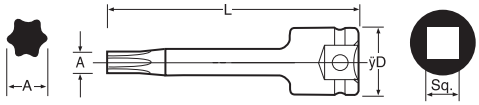
PART NO.	SQUARE DRIVE	HEX	D1 mm	D1 in	L mm	L in
ADC-3S	3/8"	1/4"	20	0.79	42	1.65

Additional types and sizes of fastener tools are available upon request.



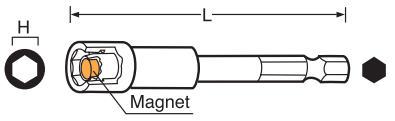
Impact Sockets (3/8" Square Drive)

PART NO.	HEX	D1 mm	D1 in	D2 mm	D2 in	L mm	L in
A35/8	5/8"	23	0.91	22	0.87	34	1.34
A310	10 mm	17	0.65	20	0.79	32	1.26
A312	12 mm	20	0.79	20	0.79	32	1.26
A315	15 mm	23	0.91	20	0.79	32	1.26
A317	17 mm	26	1.02	20	0.79	35	1.38



Torx Sockets (Torx T-Type, 3/8" Square Drive)

PART NO.	TORX SIZE	A mm	D mm	D in	L mm	L in
A345TT	45TT	7.8	20	0.79	70	2.76
A350TT	50TT	8.8	20	0.79	70	2.76



Magnetic Nutsetters (MP Type)

PART NO.	HEX	L mm	L in
A3BMP1/4-2	1/4"	50	1.97
A3BMP5/16-2	5/16"	50	1.97
A3BMP3/8-2	3/8"	50	1.97
A3BMP10-4	10 mm	100	3.94
A3BMP12-4	12 mm	100	3.94

SELECT THE RIGHT TOOL FOR THE APPLICATION AND ADD THE APPROPRIATE ACCESSORIES TO MAXIMIZE PROFIT POTENTIAL WITH P.E.R.Q.®

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- **Productivity:** the speed and efficiency of the assembly process
- **Ergonomics:** the relationship between the worker and the assembly process
- **Reliability:** the total cost of tool maintenance and repair
- **Quality:** the ability of the tool to adhere to process requirements

NOTES

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TORQUE CONVERSION TABLE

Unit to be Converted	Nm	kgf-cm	kgf-m	in-lb	ft-lb
1 Nm		10.19	0.1019	8.852	0.7375
1 kgf-cm	0.098		0.01	0.868	0.072
1 kgf-m	9.8066	100		86.8	7.233
1 in-lb	0.113	1.152	0.0115		0.083
1 ft-lb	1.355	13.83	0.138	12	

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Please contact your AIMCO representative for complete product information on any product not detailed in this catalog.

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