

**AB**

Battery  
Torque Multiplier



**alkitronic®**

ready for use, everywhere

alkitronic® AB

## Applications

- **alkitronic® AB:** Battery driven 2-speed torque multiplier for torques from 90 Nm to 4,000 Nm (65 to 2,950 lbf.ft).
- **Short fastening cycles:** Fast gear for run down and power gear for highest torques and precision.
- **Mobile and always ready for use:** Compact design for convenient working in limited spaces or without power supply.
- **Efficient operation:** Fast and easy gear-changing, great torque range - you can choose from 22 torque values.

## Advantages

- **Low running costs:** The low-wear brushless synchronous motor is maintenance free.
- **Health-preserving:** Low weight, ergonomically designed, low noise emissions. No noise protection necessary.
- **High performance:** Two lithium-ion battery packs ensure up to 360 screw joints in a row. Each battery features a LED charge level indicator.
- **Exact shut-off torque** even at low battery levels.

## alkitronic® Specials

- **Very low susceptibility to damage and failure:** Motor housing made of special polymer: Break-proof, impact-proof and resistant to corrosion.
- **Intelligent energy management and faster workflow:** Electronics protects battery cells from overcharging and depth discharge. Cooled battery packs during recharging. This reduces charging times and enhances maximum performance and durability.
- **Proven high-performance gears,** produced in a chip-free high-precision process.

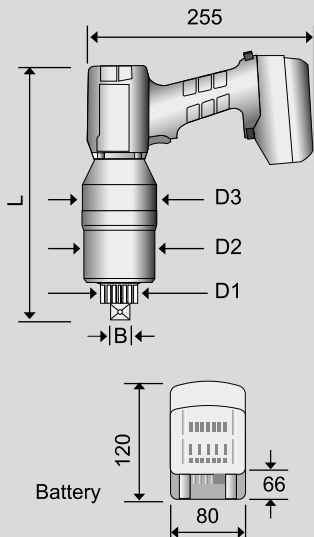


### Technical Data: alkitronic® AB Models

Type		AB 860	AB 1400	AB 2200	AB 2800	AB 3200	AB 4100
Torque range (approx.) *	Nm	115-860	150-1400	250-2200	300-2800	360-3200	500-4100
	lbf.ft	85-635	110-1030	185-1620	220-2065	265-2360	370-3025
Square drive	B	3/4"	3/4"	1"	1"	1"	1 1/2"
Diameter (approx.)	D <sub>1</sub>	mm	41	41	54	54	72
Diameter (approx.)	D <sub>2</sub>	mm	85	85	85	85	93
Diameter (approx.)	D <sub>3</sub>	mm	88	88	88	88	97
Length (approx.)	L	mm	295	295	320	345	370
Weight without DMA (approx.) **	kg	5.5	5.5	7.0	7.4	7.4	9.1
Idle speed 1 <sup>st</sup> gear	rpm	7.0	4.0	2.0	1.7	1.5	1.0
Idle speed 2 <sup>nd</sup> gear	rpm	24.0	13.0	6.5	6.0	5.0	4.0

\*) When loosening bolts, a higher torque (up to 20 %) may be necessary (release torque). We will be pleased to help you with your choice. \*\*) Torque reaction arm

### Measurements



### Scope of Delivery



2 lithium-ion battery packs 18 V, 5.2 Ah, battery charger, tool case.



**Repeat shut-off accuracy ± 3%**  
(same bolting connection).  
All alkitronic® torque multipliers are CE-certified.

**alkitronic®**

TORQUE POWER WORLDWIDE

alkitronic® products  
Made in Germany by

alki TECHNIK GmbH

Development, Production and  
Distribution of Bolting Systems

[www.alkitronic.com.sg](http://www.alkitronic.com.sg)



**AE**

Electric  
Torque Multiplier

**allkitronic®**



# world's No. 1 choice

## Applications

- **alkitronic® AE /AEC** Electric Torque Multipliers from 60 to 6,500 Nm.
- **Consistent Torque accuracy** on all international power supplies 100 - 253V / 45-66 Hz.
- **Precise shut-off** with on-site voltage-controlled portable generators.
- Models **AEC** angle tools low height for restricted access applications.

## Advantages

- **Safe and interruption-free work in any weather** (moisture, rain) - thanks to protection class IP54.
- **Low running costs:** low-wear, maintenance-free and brushless synchronous motor.
- **Permanently higher joint quality** by continuous rotation of the square drive.
- **Simple 1-finger trigger operation** for forward and reverse.
- **OLED-Display** anti-glare and high contrast - for perfect reading under all weather conditions.
- **Menu-driven intuitive operation**, control or warning signals.
- **Ergonomic and comfortable operation:** The 360 degree rotating handle prevents reaction forces from being transferred to the operator.

## alkitronic® specials

- **High-quality bolting** according to the **torque/angle procedure**.
- **Highly innovative generation of electric multipliers** with new sensorless control motor technology. Lower power consumption increases the service life of the electronic components.
- **Repeat shut-off accuracy**  $\pm 2\%$  for the same bolting application.
- **Robust and long lasting:** motor housing of cast aluminum.



## Specifications

### Update packages:

Bluetooth interface for communication and documentation of bolting applications.

**Modular software solutions** for the upgrading of user-specific applications.

**Special solution:** presetting of torque to 5 Nm precisely is possible.

All **alkitronic®** torque multipliers with CE-certification.

### Electrical data:

Universal AC input 100 V – 253 V, frequency 45 Hz – 66 Hz.

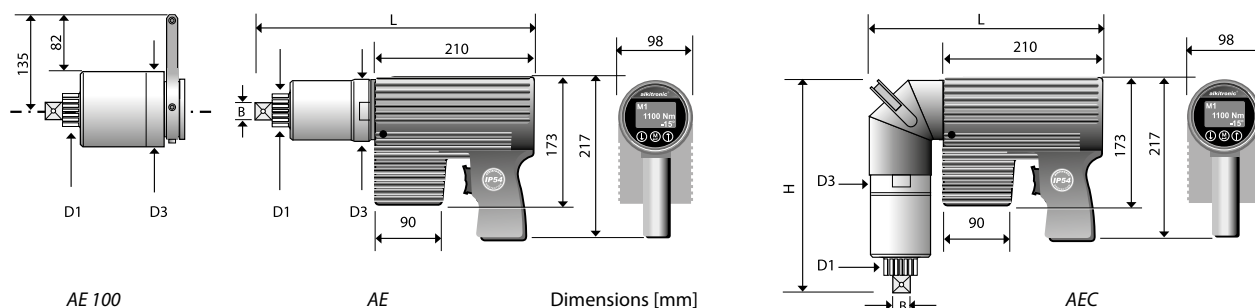
Power max. 1100 W, protection category I, protection class IP 54 (standard).



**alkitronic® AE**, intuitively operable user interface with graphics-capable OLED-display.  
Image right **AE** use in steel construction.



## Technical Data



### Models AE

Type		AE 420	AE 650	AE 950	AE 1550	AE 1850	AE 2300	AE 2900	AE 3550	AE 4300	AE 5300	AE 6500
Torque range (approx.) *	Nm	60-420	80-650	100-950	150-1550	190-1850	250-2300	290-2900	350-3500	440-4300	500-5300	650-6500
Torque range (approx.) *	lbf.ft	45-310	60-480	75-700	110-1145	140-1365	185-1700	215-2140	260-2580	325-3170	370-3010	480-4795
Square drive	B	3/4"	3/4"	3/4"	1"	1"	1"	1"	1 1/1 1/2"	1 1/2"	1 1/2"	1 1/2"
Diameter (approx.)	D <sub>1</sub> mm	41	41	41	54	54	54	54	72	72	72	72
Diameter (approx.)	D <sub>3</sub> mm	88	88	88	88	88	88	88	98	98	109	109
Length (approx.)	L mm	330	330	330	382	382	388	388	406	406	405	430
Weight without DMA (approx.)	kg	9	9	9	10	10	11	11	13	13	14,5	15,5
Idle speed	rpm	70	40	30	15	14	11	8	7	5	4	3

### Models AEC

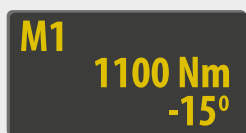
Type		AEC 420	AEC 650	AEC 950	AEC 1550	AEC 1850	AEC 2300	AEC 2900	AEC 3500	AEC 4300	AEC 5300	AEC 6500
Torque range (approx.) *	Nm	60-420	80-650	100-950	150-1550	190-1850	250-2300	290-2900	350-3500	440-4300	500-5300	650-6500
Torque range (approx.) *	lbf.ft	45-310	60-480	75-700	110-1145	140-1365	185-1700	215-2140	260-2580	325-3170	370-3010	480-4795
Square drive	B	3/4"	3/4"	3/4"	1"	1"	1"	1"	1 1/1 1/2"	1 1/2"	1 1/2"	1 1/2"
Diameter (approx.)	D <sub>1</sub> mm	41	41	41	54	54	54	54	72	72	72	72
Diameter (approx.)	D <sub>3</sub> mm	88	88	88	88	88	88	88	98	98	109	109
Length (approx.)	L mm	310	310	310	310	310	310	310	318	318	326	315
Height (approx.)	H mm	249	249	249	300	300	305	305	315	315	345	350
Weight without DMA (approx.)	kg	12	12	12	13	14	14	14	16	16	17	18
Idle speed	rpm	70	40	30	15	14	11	8	7	5	4	3

\*) When loosening a bolted connection, up to 20% higher torque may be required (loosening torque). We will gladly advise you in detail.

### OLED Display AE / AEC

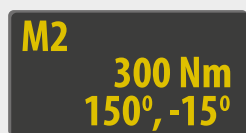
#### Example software packages

##### Softwarepackage 1 (standard)



Mode 1  
Bolting via torque.  
Automatic relief according to  
pre-set angle degrees.

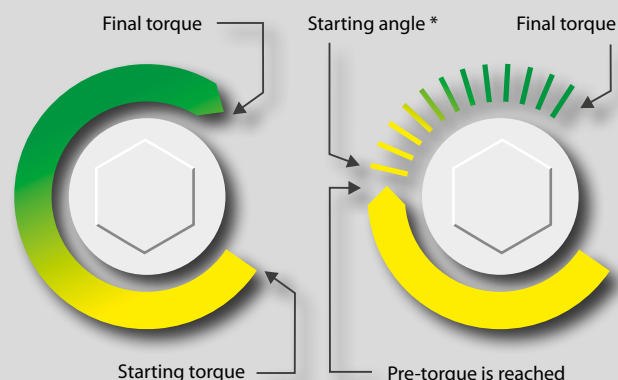
##### Softwarepackage 2 (option)



Mode 2  
Torque/angle procedure for high-  
quality bolting connections. Display  
example of pre-torque, angle and  
loosening angle.

Software package 1 is pre-installed in the basic version.  
For user-specific bolting applications or settings other software packages  
are available.

### Chart Mode 1 and Mode 2



#### \* Information on rotational angle setting for torque/angle method.

- The angle of rotation is specified constructively for the bolting connection.
- The angle of rotation can be determined individually and easily with **alkitronic® HSD**.  
We will gladly provide you with detailed product information.

**alkitronic® provides all drive technologies.**

Extract from our product range:

✓ **ELECTRIC**



✓ **PNEUMATIC**



✓ **HYDRAULIC**



✓ **MANUAL**



# **alkitronic®**

**YOUR PLUS FOR MORE PERFORMANCE**

**Increased quality**

Premium production  
Use of high-quality materials  
Long product life cycles  
30 years of experience in bolting technology  
Made in Germany – international patents

**Increased precision**

Precise, customer-specific torques  
High repeatability  
Reliability in permanent operation  
Recordable tightening outputs  
Automatic shut-off

**Increased productivity**

Quicker tightening without reworking  
No environmentally caused failures (IP54, ATEX)  
High work safety  
Simple use – easy instruction  
Low maintenance and cost efficient

**Better service**

Technical advice on site  
Training offers  
Manufacturer's calibration and certification  
Lifecycle support  
Spare part and repair service

**TORQUE POWER WORLDWIDE**

alki TECHNIK GmbH  
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**AMT**

Manual  
Torque Multiplier



**allkitronic®**

## Applications

- **alkitronic® AMT** hand torque multiplier - for energy independent precise tightening and loosening of heavy-duty bolt connections
- Torques from 200 Nm up to 50,000 Nm
- The ideal torque tool in high explosion-risk areas
- **alkitronic® AMT** provide safe, economic and problem-free operation. They replace impact wrenches, pipe extensions and other insufficient methods.

## Advantages

- Maintenance-free, compact and robust design. They improve on-the-job safety and provide short assembly times.
- Low energy input - high torque transfer
- Integrated anti wind-up ratchet allowing jobs to be performed easily, efficiently and safely

## alkitronic® specials

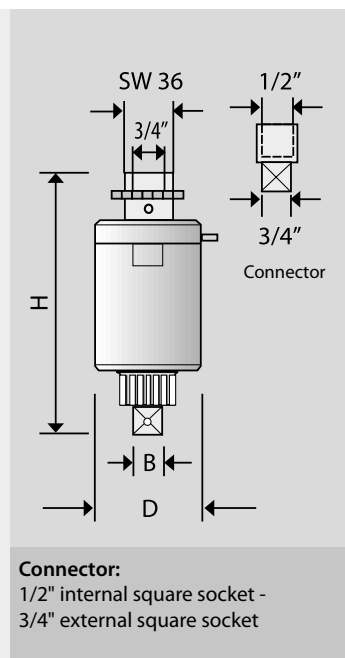
- The components of the **alkitronic®** power gears are manufactured using a high-precision chipless process - in order to ensure the highest possible operational demands upon lowest wear
- The shearing pin built into the drive shaft protects against input overload



Technical Data: Modell **H** (without ratchet) and **AMT** (with ratchet)

Type		H10	H15	AMT1400	AMT1400	AMT3500	AMT5000	AMT6000	AMT8000	AM11500	AM15000
Torque up to (approx.)*	Nm	1400	1400	1400	1400	3500	5000	6000	8000	11500	50000
Square drive	B	1/2" / 3/4"	1"	1/2" / 3/4"	1"	1"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	2 1/2"
Reduction ratio		4	4	4	4	16	18	20	24	28	180
Diameter	D mm	85	85	85	85	85	98	109	133	173	275
Height	H mm	180	200	180	200	235	250	280	280	290	360
Weight (approx.)	kg	3.5	4	3.5	4	5	6.5	7	12	28	58

\*) When loosening a bolted connection, up to 20% higher torque may be required (loosening torque). We will gladly advise you in detail.



### Specifications

**Torque Multiplier input via:**  
3/4" internal square socket torque wrench or conventional ratchets external hexagonal socket SW 36 mm.

**Handwheel** - for rough turning loose bolts/nuts.

**alkitronic®** manual torque multipliers are supplied with a support foot (DMA) as standard version. For support rings, back stops, ratchets, torque wrenches and other components please see our **alkitronic®** catalog of accessories.

alki TECHNIK GmbH reserves the right to change specifications without prior notice.



alkitronic® - power gear components



**alkitronic® AMT** operating on electricity py-lons. Accurate tightening via torque wrench.

**alkitronic®**

TORQUE POWER WORLDWIDE

**alkitronic®** products  
Made in Germany by

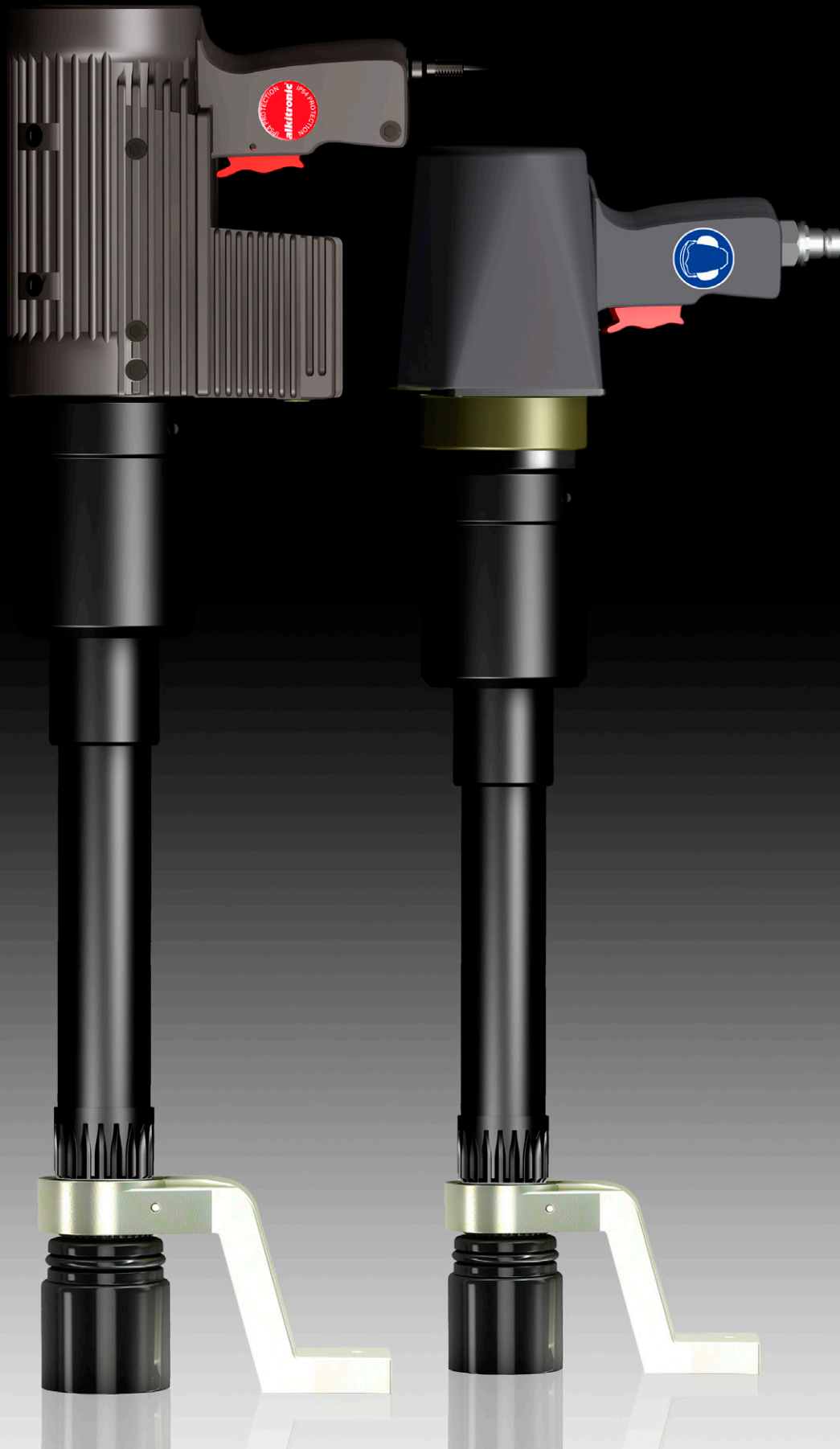
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Distribution of Bolting Systems

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**L Tools**

Torque Multipliers  
for  
Mining Trucks



**alkitronic<sup>®</sup>**

## Applications

Pneumatic and electric torque multipliers for continuous rotation by tightening or loosening hard-to-reach, heavy-duty bolted connections, and deep-bed rims of heavy vehicles (mining industry).  
Torques from 100 Nm up to 3,500 Nm, dependent on type.

## Advantages

- Economic, safe operation. No weather-related costly downtime.
- Comfortable to operate. The motor unit can be rotated 360 degrees. One handed operation with CW/CCW.
- Heavy duty, rugged housing made of cast aluminum. ABL motor housing made of special polymer: break-proof, and resistant to corrosion.

**AEL**, Models with protection class IP 54:

- **Low running costs.** Maintenance-free, brushless, synchronous motor.
- **Easy connection** to all international power grids, **no adjustments necessary.**

**ABL**, Li-Ion battery driven 2-speed models with release function:

- **Low weight**, ergonomically designed, low noise emissions.
- **No noise protection** necessary.

**AAWL**, pneumatic driven Models:

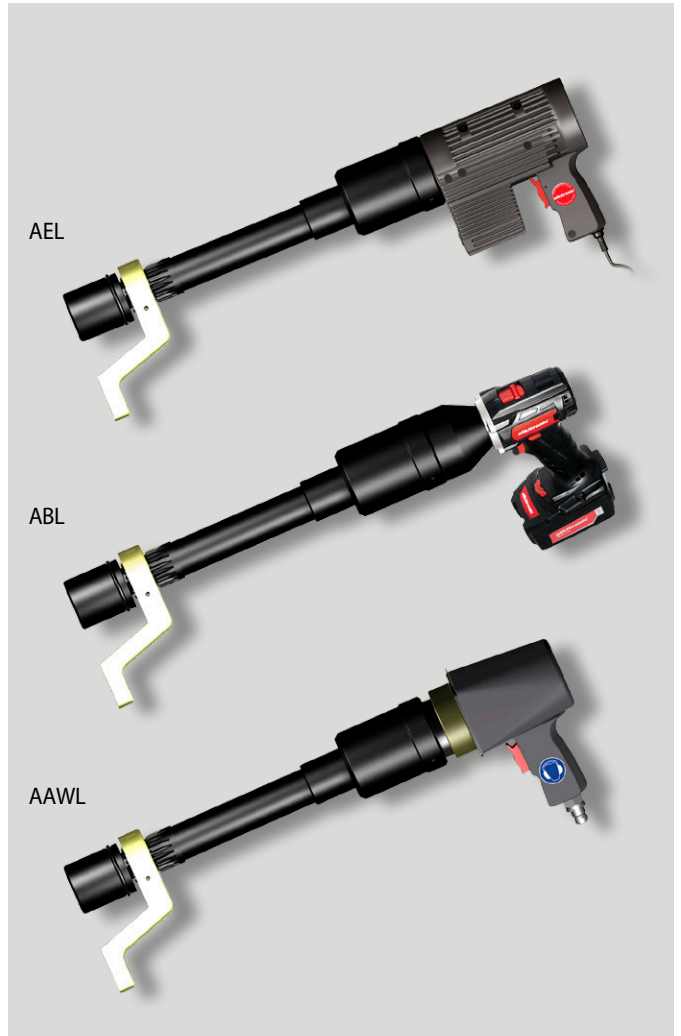
- Ideal for use in **explosion-proof working environment.**
- **World proven** reliable pneumatic drive motor.

## alkitronic® specials

**AEL:** Precise shut-off torque and constant torque accuracy at 100-253V / 45-66 Hz, even when operating on mobile units.

**ABL** with two battery packs ensure up to 360 screw joints in a row.

**Pneumatic driven models:** ATEX approval on request.



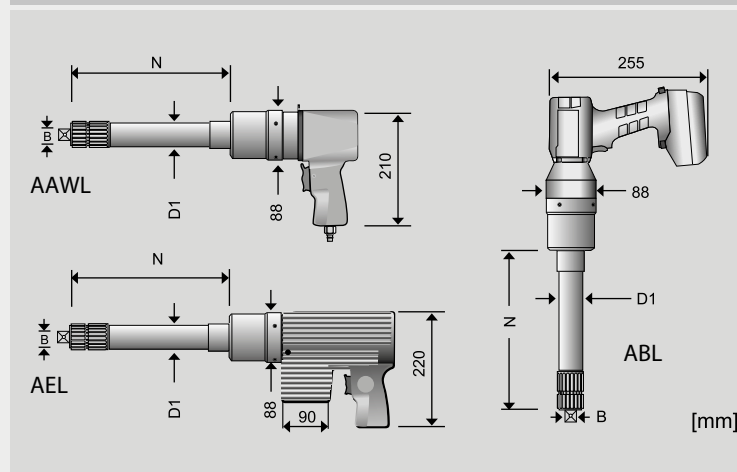
## Technical Data

Drive		electric					electric (battery)					pneumatic **				
Model L-Tool (-N)		AEL940	AEL1450	AEL1850	AEL2450	AEL2900	ABL850	ABL1100	ABL1400	ABL2200	ABL2800	AAWL1080	AAWL1450	AAWL1700	AAWL2700	AAWL3500
Torque range *	Nm	100-940	150-1450	190-1850	240-2450	290-2900	190-850	130-1100	150-1400	250-2200	300-2800	365-1080	495-1450	600-1700	900-2700	1200-3500
Square drive	B	3/4"	3/4"	1"	1"	1"	3/4"	3/4"	3/4"	1"	1"	3/4"	3/4"	1"	1"	1"
Diameter (approx.)	D <sub>1</sub> mm	46	46	56	56	56	46	46	46	56	56	46	46	56	56	56
Length extension N..	inch	N 12	N 12	N10   N12 N15   N18	N10   N12 N15   N18	N10   N12 N15   N18	N 12	N 12	N 12	N10   N12 N15   N18	N10   N12 N15   N18	N 12	N 12	N10   N12 N15   N18	N10   N12 N15   N18	N10   N12 N15   N18
(e.g. AEL 30 N12)																
Idle speed 1 <sup>st</sup> Gear   2 <sup>nd</sup> Gear	rpm	30	15	14	11	8	7   24	6   20	4   13	2   6.5	1.7   6	16	12	7	5	4

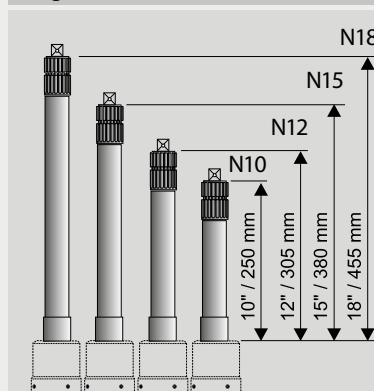
\*) When loosening bolts, a higher torque (up to 20 %) may be necessary (release torque). We will gladly advise you in detail.

\*\*) Prerequisites for best work with the indicated torques are an operating pressure of 2-7 bar at a volume flow of approx. 10-15 l/s.  
The torque accuracy depends on the stability of the supply system.

## Dimensions



## Length „N“ extension in inch (mm)



Examples of product identification:  
ABL/200 N10, AAWL 155 N12, AEL 50 N15, AEL 50 N18

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