

CL

Pneumatic  
Torque Multiplier



<sup>®</sup>  
**allkitronic**

## Applications

- Continuous rotation, tightening, or loosening for all heavy duty fastening connections.
- Perfect for bolted applications in hazardous, explosive environments.
- **alkitronic® CLS** quick, compact torque multiplier for torques of 60 Nm to 3,500 Nm.
- **alkitronic® CLD** comfortable torque multiplier with rotating handle for torques of 160 Nm to 9,800 Nm.
- **alkitronic® CLS2** high-performance 2-gear machine for torques of 120 Nm to 48,000 Nm.

## Advantages

- Permanently higher joint quality (compared to impact and hydraulic wrenches) by continuous rotation of the square drive.
- **alkitronic® CLD** - the 360 degree rotating handle ensures comfortable operation. No reaction forces are transferred to the operator.
- **alkitronic® CLS2** with fast gear for turning in and simple, quick switching to power gear (is used for applying the final torque).

## alkitronic® specials

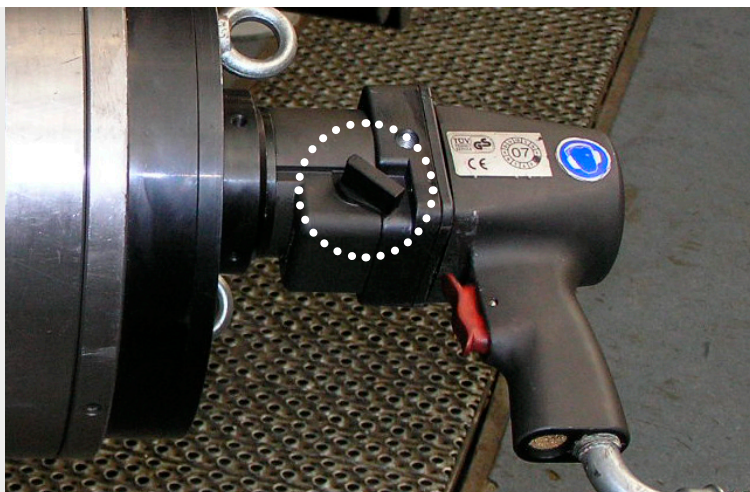
- Simple 1-finger operation for right/left rotation, option to enable the reaction to be locked in one position.
- Robust cast aluminum housing with proven pneumatic drive.
- Proven high-performance gears, produced in a chip-free, high-precision process produce high loads with low wear.
- **alkitronic® CLS2** with uniquely high torque - 48,000 Nm.
- Optional silencer levels to reduce the noise from the motor exhaust on request.

## Specifications



On request, you will receive our pneumatic multipliers with **ATEX-Certification: II 2 G D c IIB T6**

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.

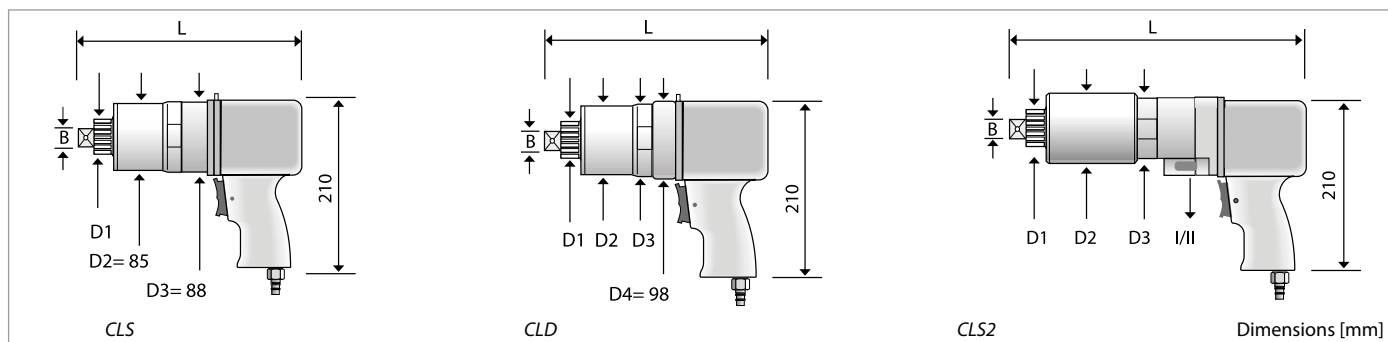


**alkitronic® CLS2** 2-gear pneumatic torque multiplier. Mechanically switchable from fast gear to power gear.

**alkitronic® CLD** torque multipliers in use (figures on the right). Screw connections at a bolt circle and a diesel unit for large construction machines



## Technical Data



### Models CLS

Type		CLS 15	CLS 25	CLS 35	CLS 45	CLS 75	CLS 95	CLS 135	CLS 175	CLS 255	CLS 315
Torque range (approx.) *	Nm	60-220	90-280	130-400	160-500	300-900	360-1100	500-1450	650-1900	900-2700	1200-3500
Square drive	B	1/2" / 3/4"	1/2" / 3/4"	3/4"	3/4"	3/4"	3/4"	1"	1"	1"	1"
Diameter (approx.)	D <sub>1</sub> mm	41	41	41	41	41	41	54	54	54	54
Length (approx.)	L mm	255	255	255	255	277	277	300	300	330	330
Weight without DMA (approx.)	kg	6	6	6	6	7	7	8	8	8.5	8.5
Idle speed	rpm	60	38	34	27	19	13	9	7	6	4

### Models CLD

Type		CLD 55	CLD 85	CLD 105	CLD 125	CLD 155	CLD 225	CLD 280	CLD 380	CLD 580	CLD 780	CLD 980
Torque range (approx.) *	Nm	160-490	300-900	360-1100	450-1300	600-1700	900-2700	1200-3500	1500-4400	2100-6100	2600-7700	3300-9800
Square drive	B	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	41/54	54	54	54	54	54	72	72	72	91
Diameter (approx.)	D <sub>2</sub> mm	85	85	85	85	85	85	85	98	109	133	173
Diameter (approx.)	D <sub>3</sub> mm	88	88	88	88	88	88	88	98	109	133	173
Length (approx.)	L mm	280	300	300	300	300	300	300	320	350	350	370
Weight without DMA (approx.)	kg	7	8	8	8	8	8.5	8.5	10.5	13	15	25
Idle speed	rpm	27	19	12	9	7	5	4	3	2	1.5	1

### Models CLS2

Type		CLS2/100	CLS2/150	CLS2/300	CLS2/400	CLS2/600	CLS2/800	CLS2/1000	CLS2/3400	CLS2/4800
Torque range 2nd gear (approx.) *	Nm	120-360	170-500	380-1150	550-1600	850-2500	1000-3000	1200-3500	3300-9700	4700-14000
Torque range 1st gear (approx.) *	Nm	380-1100	550-1600	1200-3600	1700-5100	2700-7900	3200-9400	3700-11000	11600-34000	16500-48600
Square drive	B	3/4" / 1"	1"	1"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	2 1/2"	2 1/2"
Diameter (approx.)	D <sub>1</sub> mm	41/54	54	54	72	72	72	91		
Diameter (approx.)	D <sub>2</sub> mm	85	85	85	98	109	133	173		
Diameter (approx.)	D <sub>3</sub> mm	88	88	88	98	109	133	173		
Length (approx.)	L mm	330	330	360	380	410	410	430		
Weight without DMA (approx.)	kg	7	7.5	9	11	12	16	24	58	58
Idle speed 2nd gear	rpm	36	21	15	9	6	5	4		
Idle speed 1st gear	rpm	12	7	5	3	2	1.5	1	further details upon request	

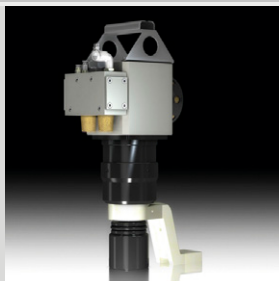
\*) When loosening a bolted connection, up to 20% higher torque may be required (loosening torque). We will gladly advise you with details.

### Product information

#### alkitronic® CLV models

Pneumatic torque multipliers with remote control for multiple bolted connections and serial assembly in semi-automatic operation. Torques up to 3,460 Nm.

We will gladly provide you with comprehensive information on this.



The torque control of the pneumatic **alkitronic®** torque multiplier takes place via the air supply or pressure regulator of the Maintenance Unit.

#### Accessories

Maintenance Unit, complete with filter, regulator, oiler and 5m hose, incl. couplings.





**alkitronic® provides all drive technologies.**

Extract from our product range:

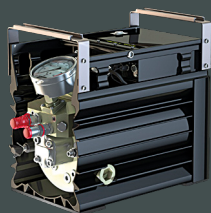
✓ **ELECTRIC**



✓ **PNEUMATIC**



✓ **HYDRAULIC**



✓ **MANUAL**



# **alkitronic®**

## **YOUR PLUS FOR MORE PERFORMANCE**

### **Increased quality**

Premium production  
Highest quality materials  
Long product life cycles  
30 years experience in bolting technology  
Made in Germany – international patents

### **Increased precision**

Precise, customer-specific torques  
High repeatability  
Reliability in permanent operation  
Dokumentation of tightening results  
Automatic shut-off

### **Increased productivity**

Quicker tightening without reworking  
No environmentally caused failures (IP54, ATEX)  
High work safety  
Easy to use: clear, simple instructions  
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

Development, Production and Distribution of Bolting Systems

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