



**CL**

Pneumatic  
Torque Multiplier

# globally successful

## 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 55 to 1,070 ft.lbs.
- **alkitronic® CLD comfortable torque multiplier** with rotating handle for torques of 225 to 7,225 ft.lbs.
- **alkitronic® CLS2** high-performance 2-gear machine for torques of 90 to 35,855 ft.lbs.

## 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. Barely any reaction forces are transferred to the user.
- **alkitronic® CLS2** with fast gear for turning in and simple, quick switching to power gear (is used for applying the final torque).

## alkitronic® specials

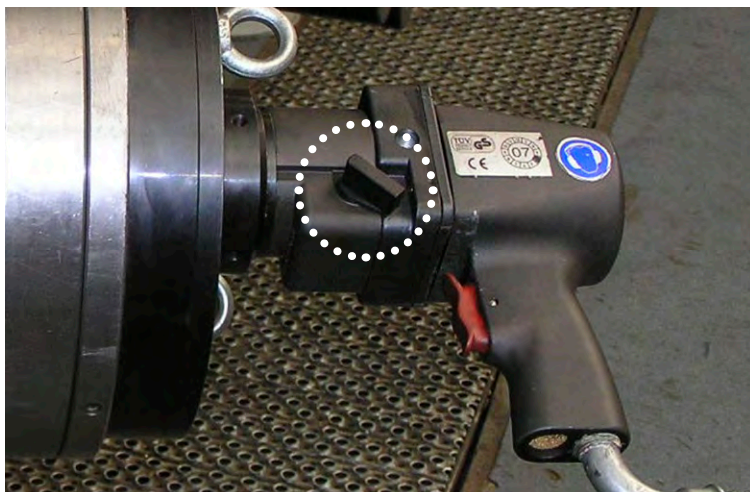
- **Simple 1-finger operation** for right/left rotation, option to enable the reaction to be locked in one position.
- **Robust cast aluminum housing** with proven pneumatic drive.
- **Proven high-performance gears**, produced in a chip-free, high-precision process produce high loads with low wear.
- **alkitronic® CLS2** with uniquely high torque - 35,855 ft.lbs.
- **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 29-10,000 psi at a volume flow of approx. 122-915 cu.in./min. The torque accuracy depends on the stability of the supply system.

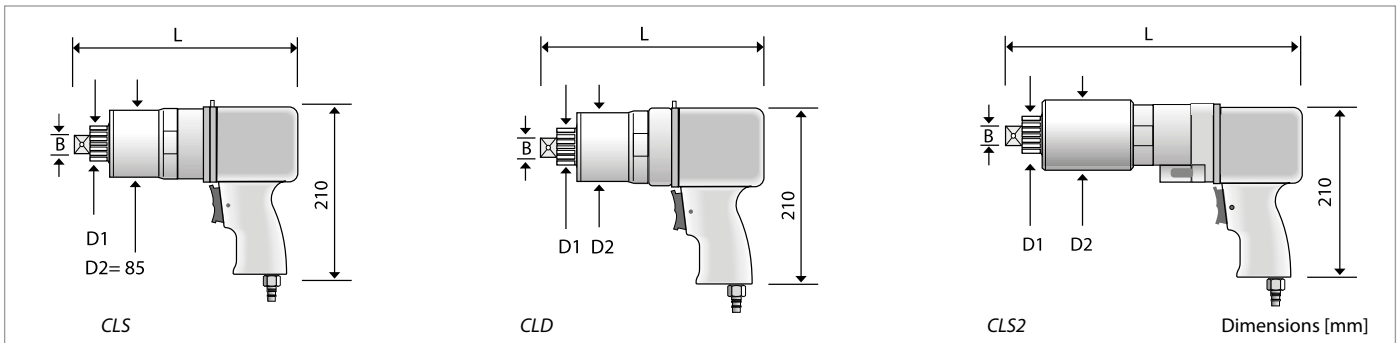


**alkitronic® CLS2**, 2-gear pneumatic torque multiplier. Mechanically switchable from fast gear to power gear.

**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	75-225	95-280	135-390	165-485	305-895	365-1080	495-1450	645-1900	910-2670	1180-3460
	ft.lbs	55-165	70-205	100-290	120-360	225-660	270-795	365-1070	475-1400	670-1970	870-2555
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	54	54	54	54
Length (approx.)	L	mm	255	255	255	255	277	277	300	300	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 85	CLD 105	CLD 125	CLD 175	CLD 225	CLD 280	CLD 380	CLD 580	CLD 780	CLD 980
Torque range (approx.)*	Nm	305-895	365-1080	495-1450	645-1900	910-2670	1180-3460	1490-4380	2080-6115	2610-7675	3330-9795
	ft.lbs	225-660	270-795	365-1070	475-1400	670-1970	870-2555	1100-3230	1535-4510	1925-5665	2460-7225
Square drive	B	3/4"	3/4"	3/4"	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	72	72	91
Diameter (approx.)	D <sub>2</sub>	mm	85	85	85	85	85	85	98	109	173
Length (approx.)	L	mm	275	275	275	300	300	300	320	350	370
Weight without DMA (approx.)	kg	7	7	7	7	8,5	8,5	10,5	13	15	25
Idle speed	rpm	19	13	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	120-355	170-505	385-1130	540-1585	840-2470	1010-2965	1175-3455	3310-9720	4725-13890
	ft.lbs	90-260	125-375	285-835	400-1170	620-1820	745-2185	865-2550	2440-7170	3485-10245
Torque range 1st gear (approx.)*	Nm	380-1125	550-1615	1225-3595	1720-5055	2675-7865	3210-9435	3745-11010	11575-34025	16540-48610
	ft.lbs	280-830	405-1190	900-2650	1270-3730	1975-5800	2370-6960	2765-8120	8540-25100	12200-35855
Square drive	B	3/4"	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	72	72	72	91	
Diameter (approx.)	D <sub>2</sub>	mm	85	85	85	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	

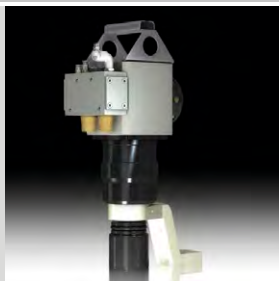
\*) When loosening a bolted connection, up to 20% higher torque may be required (loosening torque). We will gladly advise you with details.

### 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 2,555 ft.lbs.

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 5 m/16.4 ft hose, incl. couplings.



## YOUR PLUS FOR MORE PERFORMANCE

### Increased quality

Premium production  
Highest quality materials  
Long product life cycles  
Experience in bolting technology since 1984  
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

alki TECHNIK GmbH

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## EXTRACT FROM OUR PRODUCT RANGE



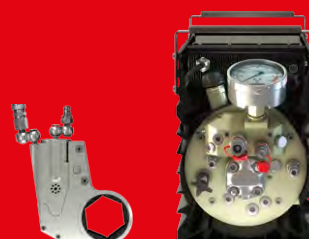
**alkitronic XE-SERIES**

THE ELECTRICS



**alkitronic XP-SERIES**

THE PNEUMATICS



**alkitronic XH-SERIES**

THE HYDRAULICS



**alkitronic XM-SERIES**

THE MANUALS