

CL

Pneumatic
Torque Multiplier



alkitronic[®]

Applications

- Continuous rotation tightening or loosening of all heavy duty fastening connections
- Perfect for bolted applications in an environment with increased hazard of explosion
- **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 capable 2-gear machine for torques of 120 Nm to 48,000 Nm

Advantages

- Permanently higher joint quality as compared to impact and hydraulic wrenches by continuous rotation of the square drive
- **alkitronic® CLD** - the 360 degree rotating handle ensures comfortable operation and none of the 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, optional facility to enable the reaction to be locked in one position
- Robust motor housing from cast aluminium 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
- On demand with optional silencer levels to reduce the noise from the motor exhaust

Specifications



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

Prerequisites for best work and 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.

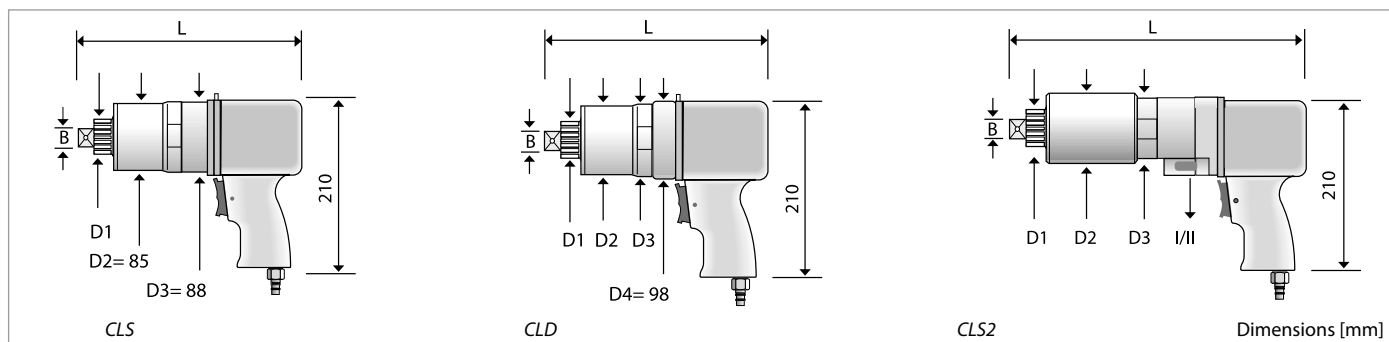


alkitronic® CLS2 2-gear pneumatic torque multiplier. Mechanically switchable from fast gear to power gear.

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 ₁ 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 ₁ mm | 41 | 41/54 | 54 | 54 | 54 | 54 | 54 | 72 | 72 | 72 | 91 |
| Diameter (approx.) | D ₂ mm | 85 | 85 | 85 | 85 | 85 | 85 | 85 | 98 | 109 | 133 | 173 |
| Diameter (approx.) | D ₃ 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 ₁ mm | 41/54 | 54 | 54 | 72 | 72 | 72 | 91 | | |
| Diameter (approx.) | D ₂ mm | 85 | 85 | 85 | 98 | 109 | 133 | 173 | | |
| Diameter (approx.) | D ₃ 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 | |

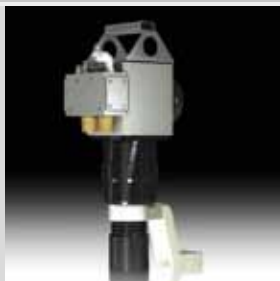
*) When loosening a bolted connection, up to 20% higher torque may be required (loosening torque). We will gladly advise you in detail.

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.

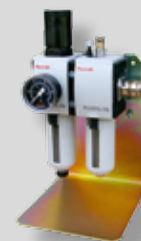
We will gladly provide you with comprehensive information on this.



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®

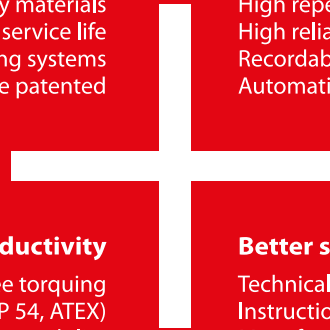
YOUR PLUS FOR MORE PERFORMANCE

Greater Quality

First-class production
Use of high-quality materials
Long product service life
30 years of experience in bolting systems
Made in Germany – worldwide patented

Greater Precision

Accurate and customized torque
High repeated accuracy
High reliability in continuous operation
Recordable tightening outputs
Automatic shut-off



Greater Productivity

Fast error-free torquing
Hazardous Area Rated (IP 54, ATEX)
Worldwide power supply compatibility
Safe operation – easy instruction
Low maintenance and cost-efficient

Better service

Technical on site advice
Instruction and training courses
Manufacturer's calibration and certification
Lifecycle maintenance
Spares and repair service

TORQUE POWER WORLDWIDE

alki TECHNIK GmbH

Development, Production and Distribution of Bolting Systems

Unterlettenweg 4 – D-85051 Ingolstadt – fon +49 841 97499-0 – fax +49 841 97499-90
info@alkitronic.com – www.alkitronic.com