

alkitronic[®]

HOME OF TORQUE POWER

MDS

Mounting
Documentation Systems



MDS traceable bolting solution

Applications

High quality bolt-connections place the highest demands on bolting technology. The powerful mounting documentation system **alkitronic® MDS** provides a fast, complete and flawless collection of torque data.

alkitronic® MDS helps to fulfill legal regulations and to comply with international quality standards (documentation to the end user, traceable bolting parameters).

- The product range includes:
The manually operated **alkitronic® M-SD**, and the pneumatic operated **alkitronic® PC-SD**. The torque multipliers are used for torque controlled bolting and reliable measurement data recording on the spot.

Advantages

General

- Optimized process safety and work safety.
- Guaranteed traceability and documented bolted joints.
- Torque can be set and record on site.
- Control panel with OLED display, display of torque in Nm or ft.lbs.

alkitronic® M-SD

- Repeatability in tightening - independent of disturbances.
- Torque/torque angle procedure, manual setting, and documentation on site.
- High mobility: independent of external power supply.

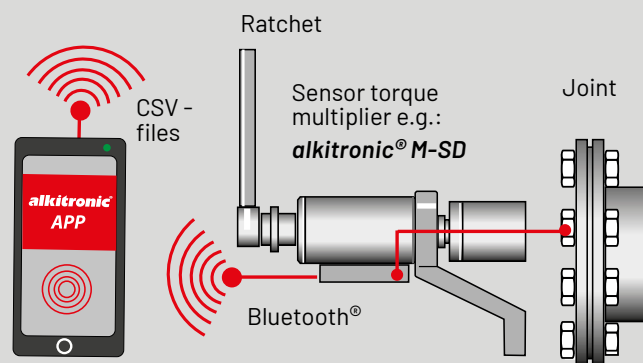
alkitronic® PC-SD

- Robust motor housing of cast aluminum with proven pneumatic drive.
- Proven high-performance gears, produced in a chip-free, high-precision process produce high loads with low wear.
- Simple 1-finger operation for right/left rotation.

alkitronic® specials

- Torque recording and sensors directly on the square drive.
- Select individual bolting- and measurement method, several preset programs can be chosen.
- Menu-guided multilingual operation, using visual and acoustic control- or warning signals.
- Data transmission via the Bluetooth interface for communication with mobile phones and other devices, such as tablets.
- **alkitronic® APP** developed for measurement data recording and fast data transmission.

alkitronic® APP application scheme

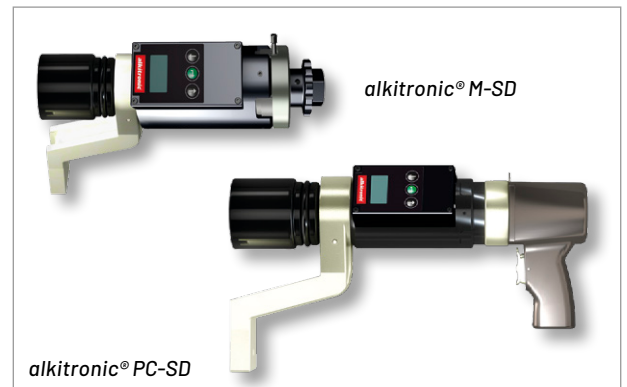
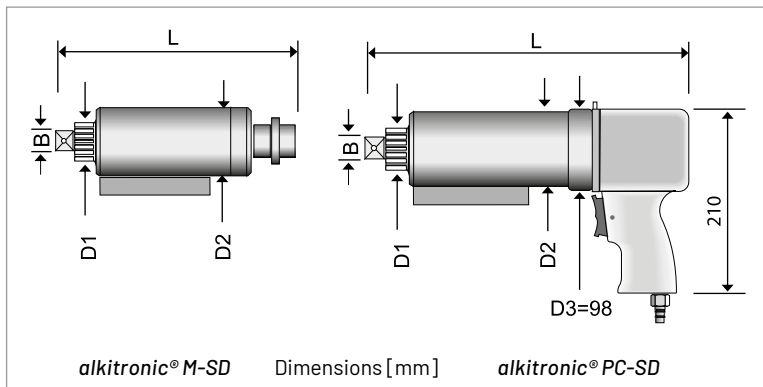


alkitronic® APP for iOS® and android® mobiles and platform independent data exchange via CSV file transfer.

Image on the upper right: **alkitronic® M-SD**.
On the lower right: **alkitronic® PC-SD** and **alkitronic® M-SD**.



Technical Data



Models M-SD / PC-SD

| Type | | M-SD 100 | M-SD 200 | M-SD 400 | PC-SD 100 | PC-SD 200 | PC-SD 400 |
|----------------------------|-------------------|----------|----------|----------|-----------|-----------|-----------|
| Measuring range approx. | Nm | 100-1000 | 200-2000 | 400-4000 | 100-1000 | 200-2000 | 400-4000 |
| Power (max) | Nm | 1000 | 2000 | 4000 | 1000 | 2000 | 4000 |
| Square drive | B | 1" | 1" | 1 1/2" | 1" | 1" | 1 1/2" |
| Diameter (approx.) | D ₁ mm | 54 | 54 | 72 | 54 | 54 | 72 |
| Diameter (approx.) | D ₂ mm | 88 | 88 | 98 | 88 | 88 | 98 |
| Length (approx.) | L mm | 220 | 295 | 320 | 360 | 390 | 410 |
| Weight without DMA approx. | kg | 6.4 | 7.6 | 11.35 | 10 | 11.25 | 15 |
| Idle speed | r/min | - | - | - | 11 | 5 | 3.5 |

Operation panel/sensoric: Measurement accuracy: +/- 1% / Temperature range: 0 to +50° C

Overview of the programs 1 to 5 (Programs for M-SD: 1-4, for PC-SD: 1 and 5, only)

1 Tightening with specified torque

- Torque controlled bolting, bolt connections with target values and tolerance levels.

2 Tightening with torque/angle procedure

- Pre-torque and angle can be preset.
- Tolerance specification for the final torque (control of bolting quality).
- Storage of actual torque and angle.

3 Checking of torque

- Monitoring of already tightened bolt connections.

- Determination of already loosened torque values.
- Repeatable testing method with specified angle.
- CCW: Determination of the starting torque.

4 Determination of required angle

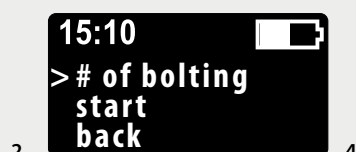
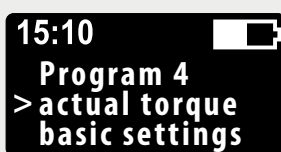
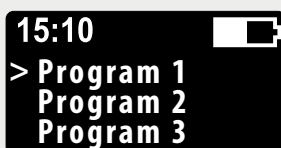
- For testing and development purposes. Pre-torque and target resp. final torque are specified.
- Measurement and storage of the reached angle.

5 Display actual torque only with model PC-SD

- Display and recording of the actual torque.

Operating range M-SD / PC-SD with OLED graphic display

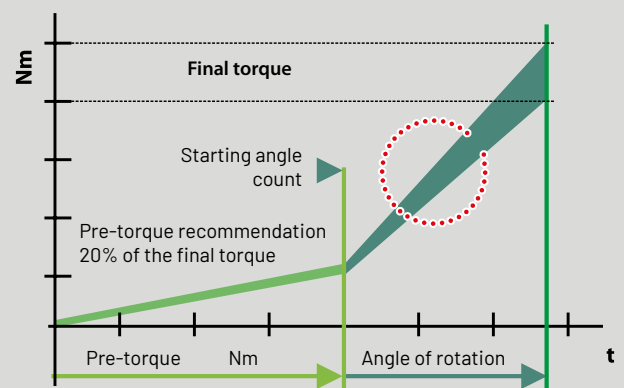
Example for menu-guided operation (M-SD)



Examples Display image in mode "Program 1"

Select units (Nm/ft.lbs) and language (German, English) during setting (image 2). Image 3 shows setting of bolting parameters. Image 4 shows the amount of boltings. Alarms and other notifications made by visual and acoustic signals.

Diagram for program 2 and 4



Information on rotational angle setting for torque/angle procedure

A pre-torque and angle of rotation are specified constructively for the bolting connection.

B The angle of rotation can be determined individually and easily with the alkitronic® M-SD.

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
Documentation 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

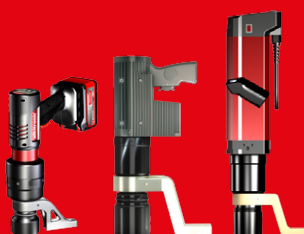
Technical advice on site
Training offers
Manufacturer's calibration and certification
Lifecycle support
Spare part and repair service

alki TECHNIK GmbH

Development, Production and Distribution of Bolting Systems

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EXTRACT FROM OUR PRODUCT RANGE



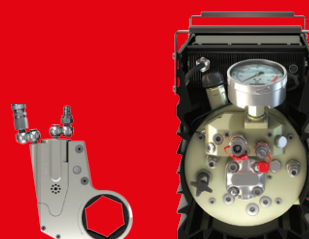
alkitronic XE-SERIES

THE ELECTRICS



alkitronic XP-SERIES

THE PNEUMATICS



alkitronic XH-SERIES

THE HYDRAULICS



alkitronic XM-SERIES

THE MANUALS