

**...always a step ahead**

**EFCip**

**The allweather torque wrench -  
immensely independent:**

- Torques from 70 up to 6300 Nm
- Power supply 100 - 253 V with 45 - 66 Hz
- Operation with emergency unit
- micro processor regulation
- brush-free  
synchronized motor
- maintenance-free and  
low in wear



**alki electronic**

**alki**  
**TECHNIK**  
GMBH



# alkitronic® EFCip / EFCip...plus electric driven-Torque Tool



EFCip



EFCip...plus



- **alkitronic®-EFCip/EFCip...plus** - Compact-shut off-Torque Tool Series for torques from approx. **70 up to 6.300 Nm**.
- **alkitronic®-EFCip... with Protection Art IP 54.**  
The world novelty of screwing technology with high torques.

## alkitronic® EFCip Serie - in two versions:

- **Series EFCip** - large torque range with **19 selectable shut-off torques**. Pre-set torque as well as adjusted rotation are displayed via the corresponding light-emitting diodes
- **Series EFCip...plus** - Selection of preset screwing programmes (Modes). Input, display and menu operation via an integrated LC-Display.

## alkitronic® EFCip Serie - technical informations:

- **Microcontrolled monitoring** and a **processor controlled switch-off electronic** guarantee precise repeatability of pre-set torque. Repeatability accuracy for switch-off  $\pm 5\%$  for identically soft and hard joints. Speed and torque are being controlled regularly.
- **Integrated motor protection: alkitronic®-EFCip, -EFCip...plus with automatic safety monitoring.** Permanent operation at the upper limit of the tool is prevented by means of a temperature controlled safety function. Thus the motor is sustainably protected against damages in case of a possible overload.
- **Two principles of construction within one tool:**
  - A - swivelling:** free joint motor-/operation unit with the torque pick-up (DMA).
  - B - rigid:** fixed joint motor-/operation unit with the torque pick-up (DMA).
- **One-handed operation** via a combined switch for comfortable handling: slow Right-/ Left rotation for safe and precise positioning of tool (tap operation) as well as start of screwing.
- **Ergonomic operation concept** for screwing functions and torques: Display with adjustment of shut-off torques, released angle, finishing-angle torsion etc. including menu operation via the display (functional extent depends on the type of the tool).

## alkitronic® EFCip Serie - advantages:

- **High profitability** due to **problem-free operation upon any kind of weather-** dampness or rain - no problem! The construction of the tool is rated for **Protection Art IP 54!**
- Suitable for all **international electric networks** (100-253V / 45-66Hz)
- **Convincing drive concept:**
  - the electric- and frequency controlled brush-free synchronized tool of **alki TECHNIK**
  - with high torque and excellent efficiency
- **Consistent quality** of your screwings
- **Low running costs** (maintenance-free and low in wear)
- **Highest mounting speed**
- **Highest precision:** exact shut-off when reaching required torque. Centrifugal force of motor and gearing does not impair shut-off torque
- **Exact shut-off torque** also in operation with emergency unit
- **Safe and simple tool operation** due to an ergonomic operation concept





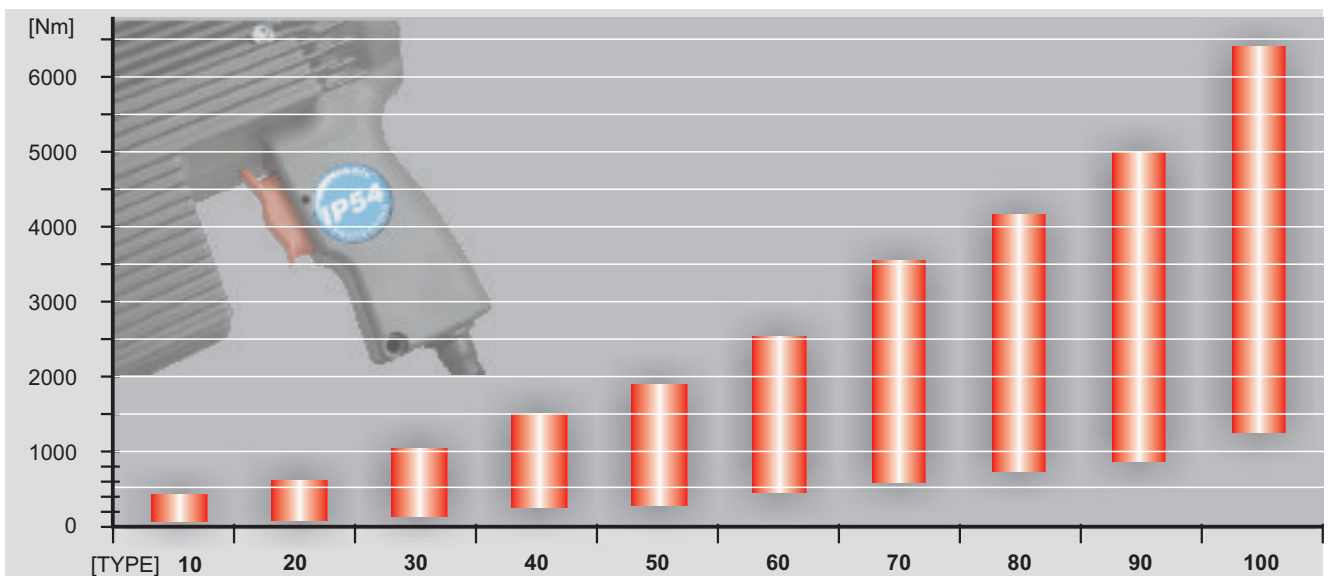
- Ribbed housing for optimized heat emission
- Robust body cases of aluminium lost-wax casting
- Operation range with low in wear foil protection
- Fall protected operational elements
- Protected against dampness and spattered water, IP 54 Protection
- Integrated motor protection with temperature regulated safety function



Overview of the Torque Ranges

**EFCip / EFCip...plus**

**alkitronic®-EFCip Series** - Mounting torque tools from 70 Nm up to 6300 Nm





Comfortable and high quality screwings with the compact-electric driven -torque tool **alkitronic EFCip...plus**

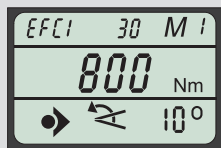
**Special features:** Selection of screwing programmes (Modes) with systematic parameter settings, i.e. for desired **torque**, **releasing angle**, **pre torque**, **finishing-angle tortion** etc. (see the following examples).  
Input, display and menu operation via an integrated LC-Display.

### The Programmes (Modes)

The user may choose between 2 programmes within the basic equipment.  
For user specific pre-setting, i. e. frequently arising joints, further modes can be installed optionally.

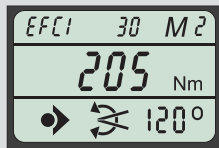
#### Standard examples

Mode 1



Screwing with the torque  
Option: automatic release according to pre-set angle degrees

Mode 2



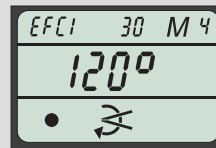
#### Examples of possible user specific programmes

Mode 3



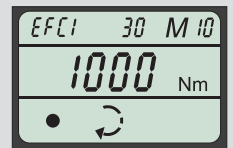
Screwing with pre-set rotations

Mode 4



Screwing with pre-set angle degrees

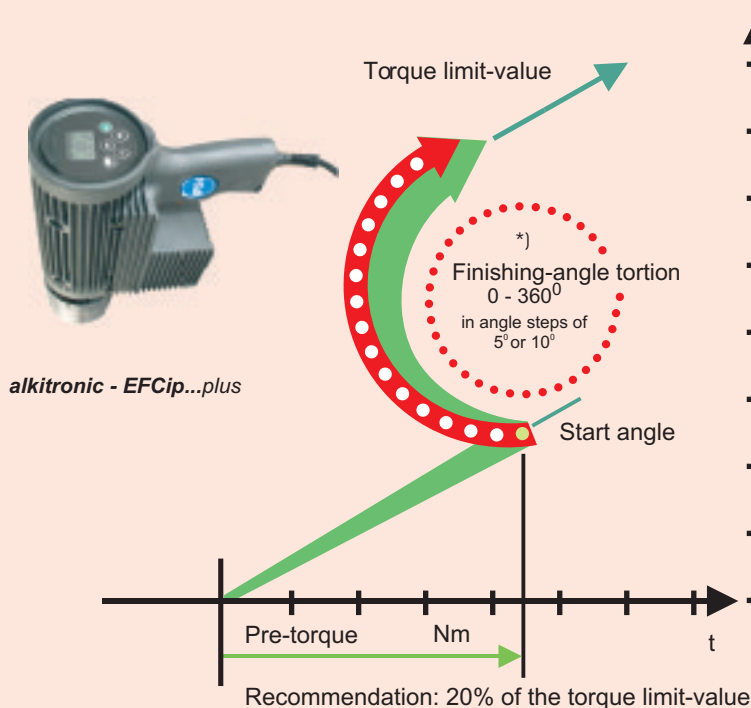
Mode 10



Screwing (loosening / tightening) with max. capacity of tool

**Pre-torque and finishing-angle tortion (Mode 2) for high quality screwings aimed at the elimination of as much as possible disturbances!**  
**A status display, i.e. screwing i.O. (ok) or n.i.O. (not ok) is implemented.**

#### Scheme Mode 2



#### Information Determination of finishing-angle tortion

The finishing-angle tortion is freely selectable  
The finishing-angle tortion is constructively pre-set for the screwing connection  
The finishing-angle tortion can be determined - easily and with minor work - with the **alkitronic-HSD / alkitronic-minicardos** (see drawing below)..

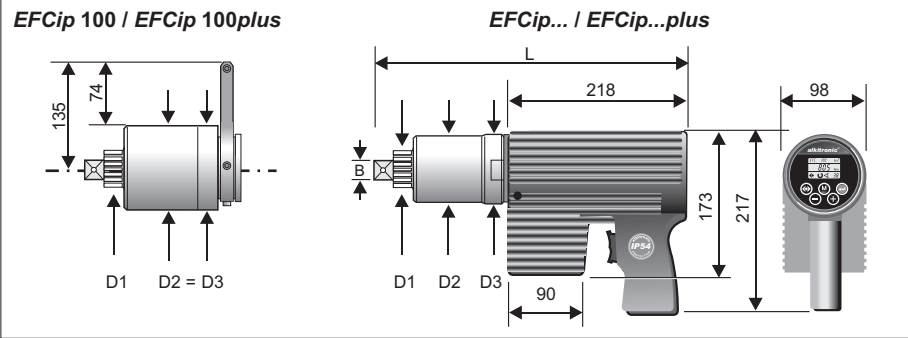


\*) Adjustments deviating from the standard upon request

For more detailed information please ask for our individual brochure.

**Annotations for Series EFCip:**

Torque ranges are in accordance with the flow chart. The following torque ranges are theoretical standard dates based on an aligned tool electronic. Depending on soft and hard joints  $M_D$ -deviations are possible. Deviations from calibrated values specific to each tool may also be possible.



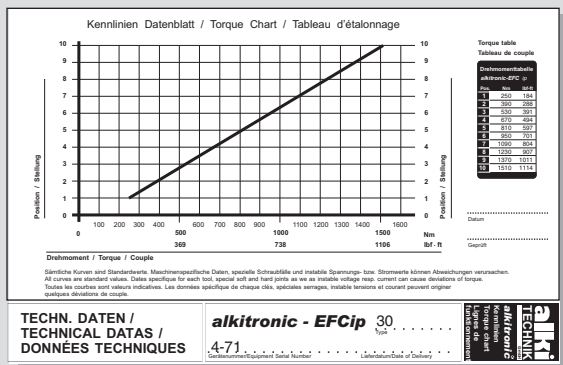
Series EFCip/EFCip..plus	Type	EFCip 10	EFCip 20	EFCip 30	EFCip 40	EFCip 50	EFCip 60	EFCip 70	EFCip 80	EFCip 90	EFCip 100
Torque range*	Nm	70-400	80-600	150-1000	250-1500	300-1800	450-2500	600-3500	800-4200	1000-5000	1300-6300
Square drive	B	3/4"	3/4"	3/4"	1"	1"	1"	1 1/1 1/2"	1 1/2"	1 1/2"	1 1/2"
Diameter D <sub>1</sub> approx.	mm	41	41	41	54	54	54	72	72	72	72
Diameter D <sub>2</sub> approx.	mm	85	85	85	85	85	85	98	98	123	123
Diameter D <sub>3</sub> approx.	mm	88	88	88	88	88	88	98	98	123	123
Length	Lmm	330	330	330	382	382	388	400/406	406	428	436
Weight without support approx.	kg	9,0	9,0	9,0	10,0	10,0	11,0	13,2	13,2	17,5	18,5
Idle speed approx.	rmin <sup>-1</sup>	76	38	24	15	13	12	9	7	6	4
Prices	EUR										

\* At maximum load please take into consideration an available reserve of 20 % for loosening torques. Attention: A safe and stable support must be provided in order to transfer the reaction moment.



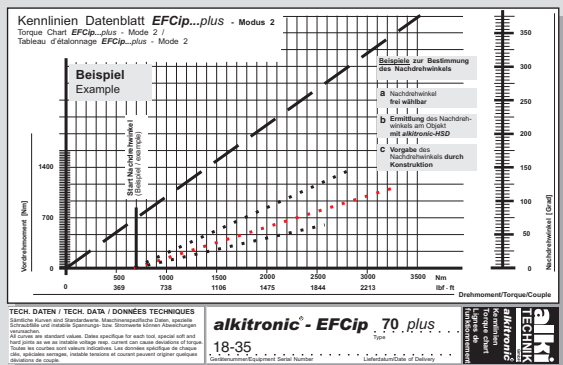
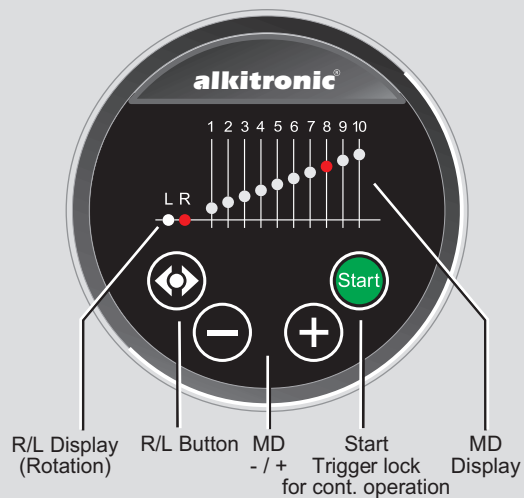
**alkitronic EFCip and EFCip...plus with CE-Certification. Protection Class I. Protection Art IP 54**

**Electrical Data: Voltage 100 - 253 V, Frequency 45 - 66 Hz, Capacity approx. 2000 W**



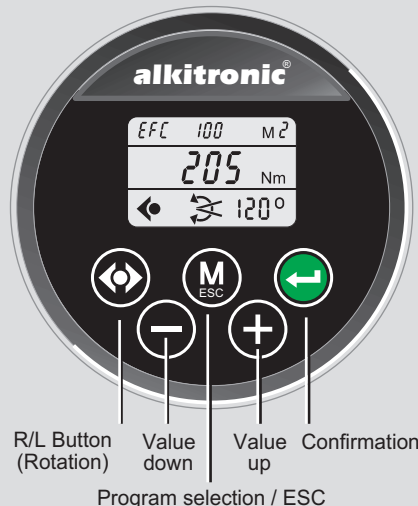
Example: **Flow Chart EFCip** for determination of torque values depending on the selected MD Position (Pos.)

**Operational range EFCip**



Example: **Flow Chart EFCip...plus** for determination of torque values depending on the finishing-angle torsion (Mode 2).

**Operational range EFCip...plus**





CLD



CLV



EFC



EFW



EFCR

## Product overview:

### **alkitronic®**

- **Continuously rotating screw systems:**  
Drive manual, electric and pneumatic
- **Gearing technic:**  
Central gearing, tangential gearing, radial gearing
- **QMS:**  
Quality Management for Screwed Joints

### **BESTMA®**

- **hydraulic screwing- and drive systems:**  
Drive manual, electric and pneumatic
- **Inspection works**

**alkitronic®**

torque power - worldwide

alkitechnik reserves the right to change specifications without prior notice.

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**alkitronic®**