

Battery Nutrunner

DA2 & DA2*docu*

Torque range from 130 to 8 000 Nm



Battery nutrunner **DA2**

4-gear high-speed performer



Mobile bolting has been clearly redefined at new levels. With the new *DA2* battery tool Plarad is introducing into the market place a successor of the previously brilliant predecessor tool the *DA1*. A decisive step forward has been achieved with the newest gearbox technology which enables simpler handling, reduced weight and size. Mobile cordless bolting is now safer due to the additional automatic locking of the motor and

gearbox. Versions of the tool are available up to a maximum output of 8000 Nm. Optional *Diagnostic Setting Software (DSS)* with power step lock and tool diagnostics enables the tool to be optimally set up for your specific bolting application.

Two 5.2 Ah HighPower batteries are part of the standard package and therefore enable a large number of bolt tightenings.

At a glance

The battery nutrunner *DA2* has a newly developed gearbox; it has been equipped with additional improved features in comparison to the predecessor *DA1*.



The advantages:

- optimised handling
- even lighter and more compact than its predecessor
- patented automatic locking
- integrated free rotation function
- active two-steps battery charge indication
- 7 sizes up to 8000 Nm
- optional: *Diagnostic Setting Software (DSS)* with torque setting lock and tool diagnostics

Scope of supply:

- All models from *DA2-05* up to *DA2-48* are delivered with two 5.2 Ah HighPower batteries*, quick charger and a sturdy tool case trolley.
- The *DA2-80* is provided with suspension, three 5.2 Ah HighPower batteries* and the transport case as standard.



Safe storage and comfortable transport thanks to the Plarad tool case trolley



*As an alternative we do also offer larger capacity 6.0 Ah lithium-ion batteries. However regarding the method of shipping, please be aware that both battery models are subjected to the international regulations relating to the movement of dangerous goods.

Battery nutrunner **DA2***docu*
Safe documentation of bolting data



Constantly growing demands to production processes as regards digitalisation, technical networking and transparency require new developments in the field of bolting systems. Plarad's new battery nutrunner *DA2docu* is setting new standards in achieving high quality targets.

The possibility of recording and storing/documenting up to 6 000 bolted joints via wireless transmission directly from the tool to a PC meets the future needs and trends of industrial production processes.

Extended functions at a glance

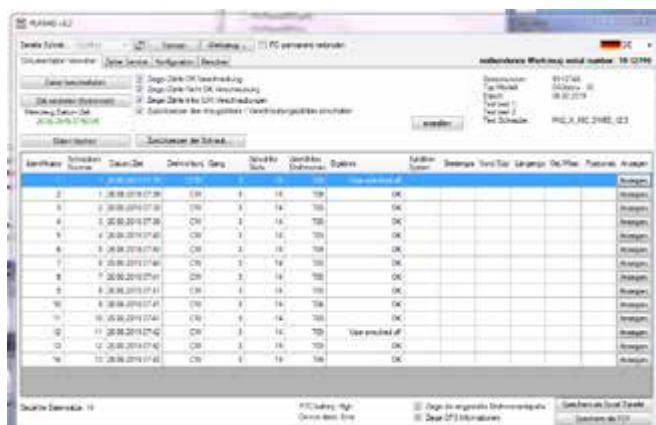
Fast, direct data transfer and user-friendly software

Seamless bolting documentation of all bolting data and – if required - transfer of the data to a PC. Independently of a WLAN network self sufficient data transfer via ISM band (Industrial, Scientific and Medical) ensures trouble free connection, regardless if a WLAN network is available or not.

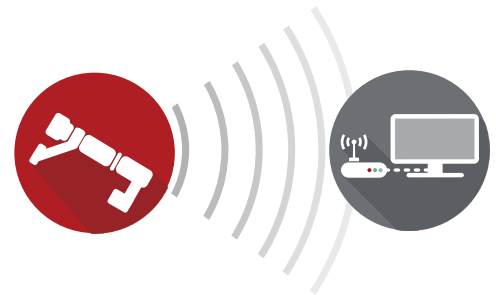
With the aid of the GPS module, it is possible to see where each individual bolting took place. This offers a high grade of security and transparency since faulty bolted joints can be located directly.

Via the specially developed *Data Transfer Software (DTS)* all saved bolting data is evaluated. The number of bolted joints, the date and time of the bolting, the direction of rotation, the torque setting, the result of the bolting process as well as the GPS data is documented. The data can be saved in xlsx or pdf format.

Again all *DA2docu* developments have been made in close cooperation with our partner Fein.



Interface of the DTS



The advantages:

- full documentation of bolted joints via *Data-Transfer-Software (DTS)*
- Recognition of the selected gear and the direction of rotation
- GPS-data acquisition
- Tool diagnosis and evaluation
- Delivery with calibration certificate



The software is supplied on a USB stick. The software is executable from the USB stick. The ISM receiver is also included in the scope of delivery.

Technical Data

Battery capacity

Type	Number of tightenings*	Size of bolt	Torque (Nm)
DA2-05	748	M 24x95	420
DA2-10	385	M 27x95	670
DA2-20	220	M 27x95	1 400
DA2-30	110	M 36x95	2 100
DA2-36	104	M 36x95	2 300
DA2-48	88	M 52x95	3 600
DA2-60	29	M 72x300	7 900

* Please note: The amount of bolt tightenings have been achieved via testing; the actual amount achievable will be proportional to the bolted joint being already pre-tightened or loose and the actual charge of the battery. Values have been achieved with a fully charged 6.0 Ah battery.



Models

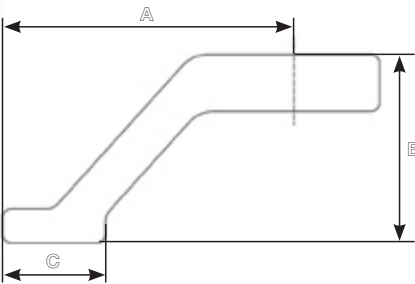
Type	Torque range (Nm)	RPM G 1	RPM G 2	RPM G 3	RPM G 4	A (mm)	B (mm)	Ø C (mm)	Ø D (mm)	E (mm)	F (mm)	Drive	Weight ² (kg)
DA2-05	130 - 550	8,4	16,6	37,0	71,6 ¹	365	245	68,5	72	144,5	60,5	¾"	5,35
DA2-10	180 - 1 000	5,3	10,8	24,5	48,0 ¹	365	245	68,5	72	144,5	60,5	¾"	5,35
DA2-20	220 - 2 000	3,0	5,6	12,7	24,6	405	245	80	72	140	61,5	1"	6,85
DA2-30	330 - 3 000	2,3	4,6	10,3	20,9	405	245	80	72	140	61,5	1"	6,85
DA2-36	380 - 3 600	1,8	3,3	7,8	15,3	405	245	80	72	140	61,5	1"	6,85
DA2-48	500 - 4 800	1,4	2,9	6,4	12,9	437	245	86	72	168	83,5	1½"	8,50
DA2-60	900 - 8 000	0,7	1,3	2,9	5,7	522	245	101	72	301	106	1½"	13,50

Repeat accuracy: ≤4%, dependent on the bolted joint. Regardless of the torque, the repeat accuracy depends on the individual bolted joint and therefore has to be determined for the specific bolting application.

¹ Attention – please observe: The 4th gear (highest speed gear) is not suited for controlled torque tightening.

² Weight without reaction arm and incl. battery pack.

Standard reaction arms



Type	A (mm)	B (mm)	C (mm)	Weight (kg)
DA2-05	150	80	90	1,46
DA2-10	150	80	90	1,46
DA2-20	150	100	90	1,85
DA2-30	190	100	90	2,14
DA2-36	190	100	90	2,14
DA2-48	210	130	90	3,48
DA2-60	250	165	140	5,30

Optional accessories

Diagnostic device **DSS**

With the *Diagnostic Setting Software (DSS)* the operator can lock individual power settings, which enables tightening at a defined torque. Furthermore the diagnostic information can be used for the preventative maintenance of the tool.



Mobile measuring unit **TC1**

The *TC1* measures the applied torque and the subsequent bolting process directly on site. The system works wirelessly during the bolting process and can easily be mounted to the torque tool.

Typ	Measuring range min. - max.		Compatible with
	Nm	ft-lbs	
TC1 - 11	110 - 1 100	81 - 811	DA2-05, -10 DA2 docu -05, -10
TC1 - 41	410 - 4 100	302 - 3 024	DA2-20, -30, -36 DA2 docu -20, -30, -36
TC1 - 55	550 - 5 500	406 - 4 056	DA2-48 DA2 docu -48



Range of accessories

Various accessories (e.g.: inserts, inverters, weldable rings, sockets, reaction arms or tooling fixtures) are available in standard and also bespoke customer designs.





... a successful connection!

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