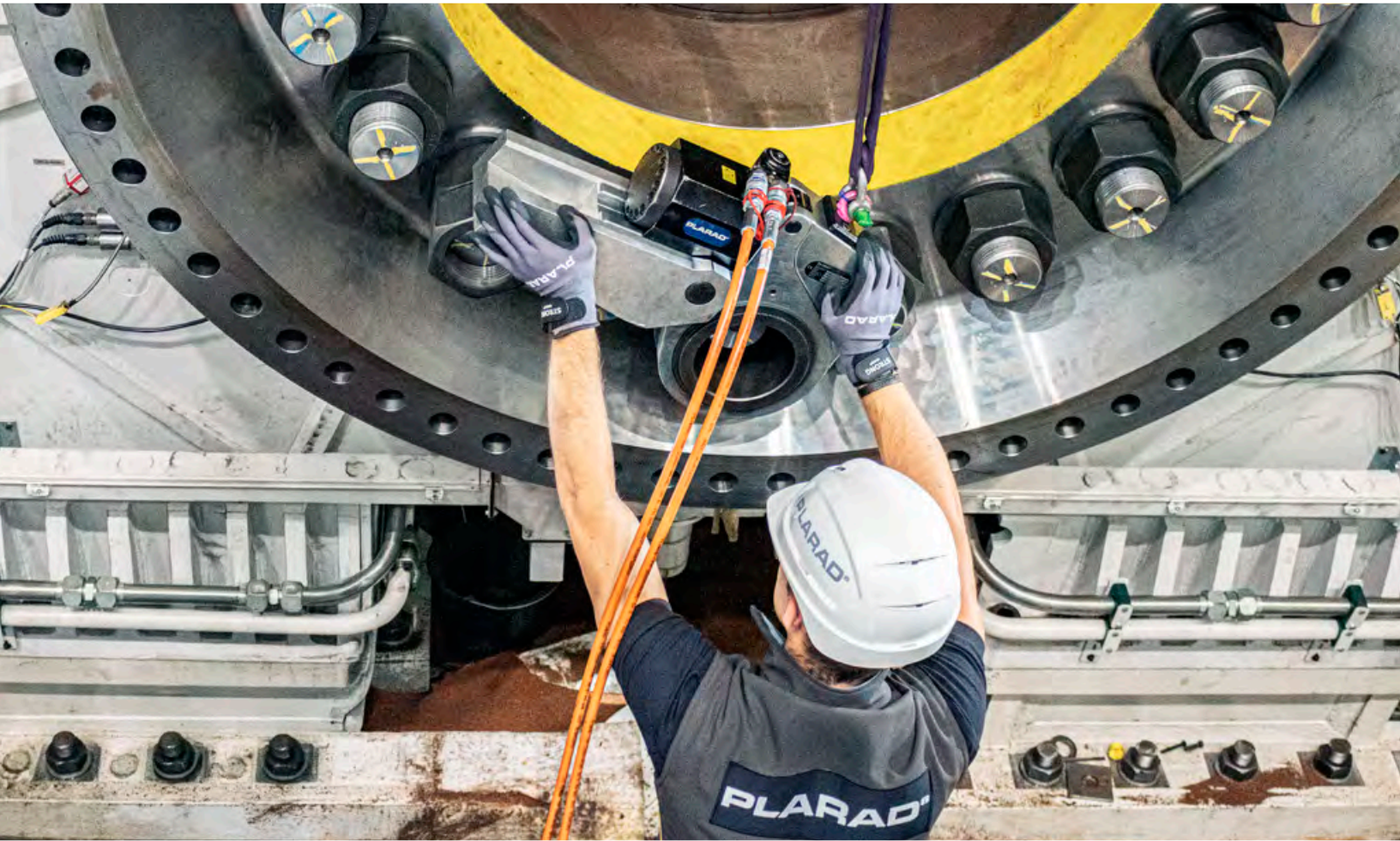




PRODUCTS

WWW.PLARAD.US







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COMPANY

Quality made in Germany



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PLARAD[®]

Torque & Tension Systems



MASCHINENFABRIK WAGNER

FIRST-CLASS BOLTING TECHNOLOGY UP TO 111,000 FT LBS

As a manufacturer of torque wrenches since 1962, we proudly look back on a rich history marked by continuous innovation and dependable products in the field of bolting technology.

Offering a diverse range of products across eight product lines, from manual torque multipliers to fully automated bolting systems, we provide comprehensive solutions for every need.

With the Plarad brand, Maschinenfabrik Wagner stands for unmatched quality, innovation, and reliability in fastening technology, with capabilities up to 111,000 ft lbs.

You benefit from seamlessly integrated devices and enjoy the convenience of sourcing all products and services for your bolting applications from a single trusted provider.

With a global presence and deep industry expertise, Maschinenfabrik Wagner has established itself as a leader in bolting technology and a reliable partner for tailor-made solutions.

Our wide-ranging services, including training, on-site support, bolting analysis, and expert advice, complete our offering, ensuring you have everything you need.



PRODUCT LINK

SYSTEM VARIANTS

BATTERY NUTRUNNER

FEATURES AT A GLANCE

Plarad products for all applications – suitable for your task

POWER

Robust and user-friendly tools of the next generation

These tools set new standards in terms of precision, speed and ergonomics



Torque mode

DOCU

The upgrade to the docu version:

Documents the bolting results



Documentation



Wi-Fi capable



Torque mode

CONTROL

Also features torque, angle of rotation mode



Torque/angle of rotation mode



Rotation angle mode



Documentation



Wi-Fi capable



Torque mode





DA2^{power}

THE EXPERT FOR FAST AND MOBILE WORKING

The compact powerhouse. Strong and reliable, it masters all challenges and can be upgraded to the *docu* and *control* model variants.



1

SPEED

4 gears for optimum working speed

2

ERGONOMIC

360° swivel joint without locking steps
0% kickback at end of force

3

BATTERY LIMIT CONTROL

Proactive torque and battery monitoring
of the 5.2 Ah Lithium-Ion high-power batteries.
6.0 Ah available on request



Also available
as an angle version

+ RELIABLE

- ▶ More powerful loosening stages for stubborn bolts
- ▶ Rust-free gearbox thanks to nickel-plated surface
- ▶ FEIN drive and battery technology ensures quality and the possibility of worldwide procurement



+ BATTERY

- ▶ 5.2 Ah Li-Ion high-power batteries, 6.0 Ah available on request
- ▶ Full battery charge in under 30 minutes thanks to High-Performance Charger
- ▶ Battery charge level indicator
- ▶ Charger shows battery status to plan your next job more reliably

+ SAFETY

- ▶ Safety and ergonomics thanks to automatic release of the reaction arm after bolting procedure
- ▶ Protection and ease of use thanks to automatic locking at end of force



POWER

Robust and user-friendly tools of the next generation



DOCU

The smart upgrade to the power version:

Documents and analyses the tightening results



CONTROL

Also features combined torque, rotation angle and test mode



DA2docu

THE SMART SPECIALIST FOR SEAMLESS DOCUMENTATION

Your device for documentation and analysis. In addition to the extensive functions of the DA2power, the DA2docu saves the tightening results incl. location and sends them to a smart device via WiFi.

Documentation, bolted joint management and torque lock can be easily controlled via app.



1 BOLTING COUNTER
Integrated gear and torque-dependent bolting counter

2 PROCESS SECURITY
Tightening management and torque lock

3 DA2DOCU-APP
Android® app with comprehensive documentation (time stamp, user, GPS coordinates, up to 10,000 memory locations) for easy tracking. (Tablet not included in the scope of delivery)



DA2control

PERFECT CONTROL THANKS TO ROTATION ANGLE MODE

The new DA2control cordless nutrunner enables precise tightening for every application, due to its integrated torque and rotation angle feature as well as direction of rotation recognition.

Thanks to its intuitive handling and over-the-air updates, your device is always up-to-date – for maximum performance and reliability.

LCD DISPLAY
All important bolting parameters at a glance

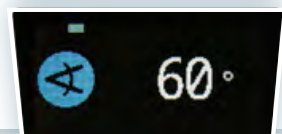
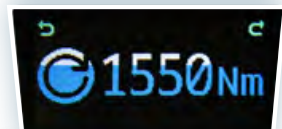
UP-TO-DATE
Updates automatically on-site (over-the-air [OTA])



**COMBINED
TORQUE / ANGLE OF
ROTATION MODE**

FEATURES

- ▶ Torque/angle of rotation mode
- ▶ Tightening parameters can be set directly on the tool
- ▶ Detects the direction of rotation



DA2*safety*

THE SAFETY AND HANDLING EXPERT

Safety-conscious design for demanding applications. The DA2*safety* offers maximum protection thanks to its two-handed operation. With swivelling additional handle for comfortable use and unrestricted operability, even when wearing gloves.

Ideal for left- and right-handed users. All DA2 models can be upgraded.

1

FLEXIBLE

Rotatable and fixable additional handle

2

SAFETY START TRIGGER (SST)

The device stops automatically when one of the two triggers has been deactivated



FEATURES

- ▶ Minimising the risk of injury
- ▶ Improved handling when moving on several bolts
- ▶ Enhanced carrying comfort
- ▶ High level of user-friendliness for left- and right-handers
- ▶ Suitable for construction sites: unrestricted handling with gloves
- ▶ Comfortable use thanks to additional handle
- ▶ The DA2-05 to DA2-36 models can be upgraded to DA2*safety* 2.0 and the DA2-48 and DA2-80 models to DA2*safety* 1.1

DA2

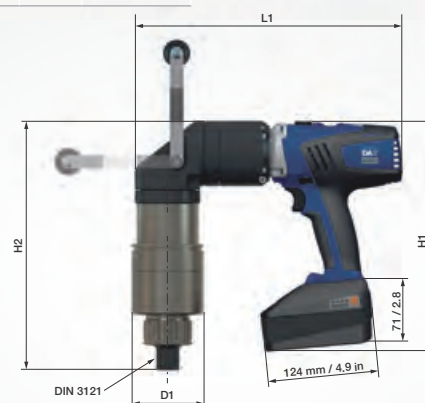
Typ Type	Drehmoment Max. torque		L1		D1		H1		Drehzahl Speed max.		Gewicht* Weight*		Vierkant Squaredrive	
	Nm	ft-lbs	mm	inch	mm	inch	mm	inch	U/min	rpm	kg	lbs	Zoll	inch
DA2-05	550	410	365	14.4	68,5	2.70	253	10.0	71,6	5,3	11.7	3/4"		
DA2-10	1.000	740	365	14.4	68,5	2.70	253	10.0	48,0	5,3	11.7	3/4"		
DA2-20	2.000	1,480	405	15.9	80,0	3.15	253	10.0	24,6	6,8	15.0	1"		
DA2-30	3.000	2,210	405	15.9	80,0	3.15	253	10.0	20,9	6,8	15.0	1"		
DA2-36	3.600	2,660	405	15.9	80,0	3.15	253	10.0	15,3	6,8	15.0	1"		
DA2-48	4.800	3,540	437	17.2	86,0	3.39	253	10.0	12,9	7,8	15.0	1 1/2"		
DA2-80	8.000	5,900	521	20.5	101,0	3.98	253	10.0	5,7	12,5	27.6	1 1/2"		



MODELS // DATA

DA2 ANGLE VERSION

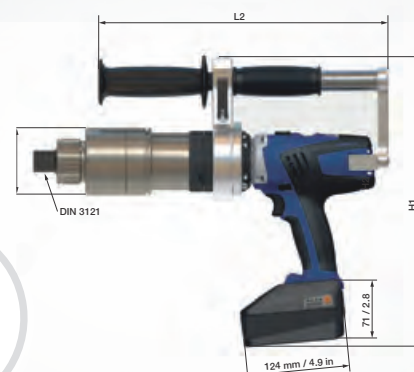
Typ Type	Drehmoment Max. torque		L1		H1		H2		D1		Drehzahl Max. speed		Gewicht* Weight*		Vierkant Squaredrive	
	Nm	ft-lbs	mm	inch	mm	inch	mm	inch	mm	inch	U/min	rpm	kg	lbs	Zoll	inch
DA2-05-W	550	410	305,25	14.4	253	10.0	245,0	9.65	68,5	2.70	71,6	6,2	13.7	3/4"		
DA2-10-W	1.000	740	305,25	14.4	253	10.0	245,0	9.65	68,5	2.70	48,0	6,2	13.7	3/4"		
DA2-20-W	2.000	1,480	311,00	15.9	253	10.0	285,0	11.22	80,0	3.15	24,6	7,8	17.2	1"		
DA2-30-W	3.000	2,210	311,00	15.9	253	10.0	285,0	11.22	80,0	3.15	20,9	7,8	17.2	1"		
DA2-36-W	3.600	2,660	311,00	15.9	253	10.0	285,0	11.22	80,0	3.15	15,3	7,8	17.2	1"		
DA2-48-W	4.800	3,540	314,00	17.2	253	10.0	316,5	12.44	86,0	3.39	12,9	9,5	20.9	1 1/2"		
DA2-80-W	8.000	5,900	321,50	20.5	253	10.0	400,5	15.77	101,0	3.98	5,7	13,5	29.8	1 1/2"		



DA2 SAFETY

Typ Type	L2		H1		D1	
	mm	inch	mm	inch	mm	inch
DA2-05-SST 2.0	343	13.50	344	13.54	68,5	2.70
DA2-10-SST 2.0	343	13.50	344	13.54	68,5	2.70
DA2-20-SST 2.0	343	13.50	344	13.54	80,0	3.15
DA2-30-SST 2.0	343	13.50	344	13.54	80,0	3.15
DA2-36-SST 2.0	343	13.50	344	13.54	80,0	3.15
DA2-48-SST 1.1	On request					
DA2-80-SST 1.1	On request					

FOR
FURTHER
DETAILS
SEE DA2



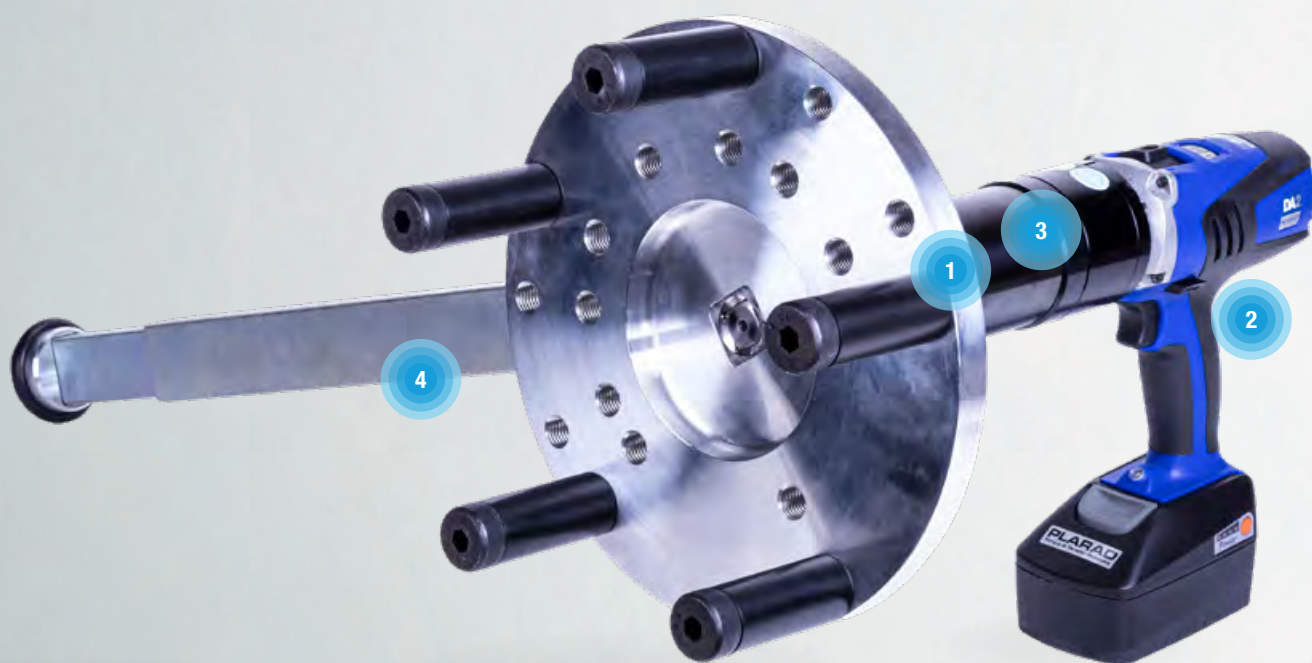
Repeat accuracy: ≤ 4%, depending on the bolting case. Technical data without guarantee.
*Specification without reaction arm and battery. Battery weight: 0.75 kg/1,65 lbs

DA2*motion*

THE BATTERY-POWERED VALVE ACTUATOR FOR EVERY ROTATIONAL MOVEMENT

In the water or energy industry, in transport or in the chemical industry, the DA2*motion* guarantees fast and safe work.

With the high output speed of the DA2*motion*, you can achieve fast results thanks to its 4-speed gearbox. A patented fully automatic locking mechanism and the digital counter ensure precision and safety. The stop buffer on the reaction arm and 'smooth start and stop feature' guarantee gentle and quiet handling. Ideal for all industries thanks to precisely fitting accessories and high mobility.



1

FLEXIBLE

Two versions,
up to 550 Nm or 1000 Nm

2

FAST

High output speed

3

ERGONOMIC

360° swivel joint without detent steps
0% kickback at end of force

4

PRECISE FIT

Telescopic reaction arm
with digital counter

Hardcase trolley,
protection class IP 67

+ ERGONOMIC

- ▶ Low-vibration and low-noise operation thanks to brushless precision drive
- ▶ Reaction arm with stop buffer: Pressure-sensitive surfaces are protected



+ PERFORMANCE

- ▶ Patented fully automatic swivel joint lock: Prevents blows to the wrist or arms, no tearing of the nutrunner
- ▶ Precisely fitting accessories for every application thanks to extensive extension packs
- ▶ Fast working thanks to 4-speed gearbox

+ SAFETY

- ▶ Smooth starting and braking behavior
- ▶ No damage to surfaces
- ▶ Digital counter with high resolution avoids damage



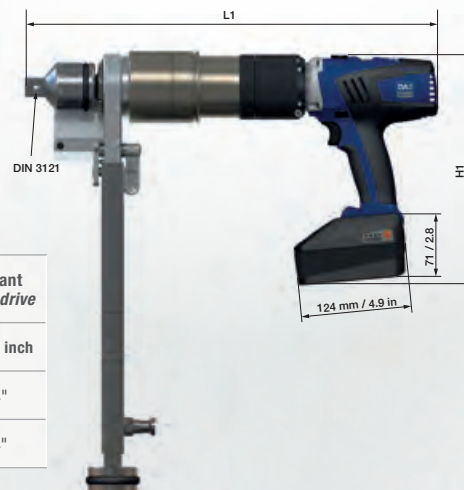
YOUR ADVANTAGES



DATA // MODELS

Typ Type	Drehmoment Max. torque		L1		H1		Drehzahl Max. speed		Gewicht* Weight*		Vierkant Squaredrive	
	Nm	ft-lbs	mm	inch	mm	inch	U/min	rpm	kg	lbs	Zoll	inch
DA2-05motion	550	410	395	15.55	253	9.96	11,1		5,1	11.2	3/4"	
DA2-10motion	1.000	740	395	15.55	253	9.96	6,8		5,9	13.0	3/4"	

Technical data without guarantee. *Details without reaction arm and battery. Battery weight: 0.75 kg/1,65 lbs





PRODUCT LINK

SYSTEM VARIANTS

ELECTRIC NUTRUNNERS

FEATURES AT A GLANCE

Plarad products for all areas of application - to suit your requirements

DOCU

Documents the bolting results

 Documentation

 Test mode

 Wi-Fi capable

 Torque mode



DOCU PLUS

Also features torque, angle of rotation
and test mode

 Torque/angle of rotation mode

 Rotation angle counting mode

 Rotation angle mode

 Documentation

 Test mode

 Wi-Fi capable

 Torque mode



DE1docu

DRIVEN BY POWERFUL FEATURES

The detailed solution – for demanding applications up to 5,900 ft lbs. High torque accuracy is achieved by compensating for voltage fluctuations and temperature changes.

The DE1docu automatically switches to the available mains frequency (e.g. 50 Hz or 60 Hz). Tamper-proof thanks to the signature feature and intelligent soft-start motor control.



+ DISPLAY

Clear presentation of all bolting information via multi functional OLED display

+ SMART DEVICE

Seamless documentation of your tightening results via Wi-Fi on mobile devices (not included in the scope of delivery)



+ PRECISION

- ▶ The DE1docu has torque-controlled bolting processes
- ▶ High repetition accuracy is achieved through state-of-the-art motor control

+ SAFETY

- ▶ The motor temperature is monitored. The motor switches off automatically in the event of overheating
- ▶ Low-vibration technology protects muscles and joints

+ DISPLAY

- ▶ The two-digit torque code 00-99 can be set using the selector buttons.
- ▶ Includes silicone display protection

YOUR ADVANTAGES

DE1*docu plus*

THE FULL SCOPE OF WHAT IS POSSIBLE

The DE1*control* sets standards in precision and versatility: The innovative software enables additional features in the area of different bolting methods.

The torque/angle of rotation mode (combined process) can be carried out in a single work step. Alternatively, the joining torque and the subsequent further rotation angle can be applied in pure rotation angle mode.



COMBINED
TORQUE / ANGLE
OF ROTATION
MODE



FEATURES

- ▶ Intuitive operating menu
- ▶ Display shows all values for measured mains voltage, mains frequency and motor temperature
- ▶ Comprehensive documentation of your bolting results via Wi-Fi on mobile devices
- ▶ Also available as an angle version
- ▶ Numerous additional features in the symbol-guided menu (e.g. button lock, locking of individual setting levels and release mode)
- ▶ Drive 360° rotatable
- ▶ Memory space for 50 programmable bolting cases

DE1 *docu plus*

+ TORQUE MODE

- ▶ Two-digit torque code 00-99 can be set via push buttons
- ▶ Set torque (according to the enclosed torque chart) can be displayed optionally

+ ANGLE OF ROTATION MODE

- ▶ Limitation of the maximum total torque (protection of the tool, protection of the bolted joint against over-tightening) is possible
- ▶ Adjustment of the joining torque in 100 setting steps according to the torque table
- ▶ Continuous setting of the rotation angle 0 until 999°

+ TORQUE/ANGLE OF ROTATION MODE

- ▶ Adjustment of the joining torque in 100 setting steps according to the torque table
- ▶ Continuous setting of the rotation angle 0 until 999°

+ ROTATION ANGLE COUNTING MODE

- ▶ Torque-controlled switch-off of the tool
- ▶ Rotation angle is counted from the minimum torque (level 00) of the respective power class and serves as a reference value

+ TEST MODE

- ▶ Checking pre-tightened bolts without over-tightening



MODELS // DATA



DE1

Typ Type	Drehmoment Max. torque		L1		H1		D1		Drehzahl Max. speed		Gewicht* Weight*		Vierkant Squaredrive	
	Nm	ft-lbs	mm	inch	mm	inch	mm	inch	U/min 110 V	rpm 230 V	kg	lbs	Zoll	inch
DE1-10	1.000	740	425	16.73	195	7.68	68,5	2.70	9,0	12,0	5,9	13.0	3/4"	
DE1-20	2.000	1,480	449	17.68	195	7.68	80,0	3.15	5,9	8,0	7,0	15.4	1"	
DE1-30	3.000	2,210	465	18.31	195	7.68	80,0	3.15	4,5	5,2	7,2	15.9	1"	
DE1-36	3.600	2,660	465	18.31	195	7.68	80,0	3.15	3,5	4,6	7,2	15.9	1"	
DE1-48	4.800	3,540	497	19.57	195	7.68	86,0	3.39	2,0	2,5	9,1	20.1	1 1/2"	
DE1-80	8.000	5,900	565	22.24	195	7.68	101,0	3.98	0,7	0,7	13,2	29.1	1 1/2"	



DE1 ANGLE VERSION

Type	Drehmoment Max. torque		L1		H1		H2		D1		Drehzahl Max. speed		Gewicht* Weight*		Vierkant Squaredrive	
	Nm	ft-lbs	mm	inch	mm	inch	mm	inch	mm	inch	U/min 110 V	rpm 230 V	kg	lbs	Zoll	inch
DE1-10-W	1.000	740	342	13.46	195	7.68	253,0	9.96	68,5	2.70	9,0	12,0	7,1	15,6	3/4"	
DE1-20-W	2.000	1,480	342	13.46	195	7.68	277,5	10.92	80,0	3.15	5,9	8,0	8,3	18.3	1"	
DE1-30-W	3.000	2,210	342	13.46	195	7.68	293,5	11.55	80,0	3.15	4,5	5,2	8,6	18.9	1"	
DE1-36-W	3.600	2,660	342	13.46	195	7.68	293,5	11.55	80,0	3.15	3,5	4,6	8,6	18.9	1"	
DE1-48-W	4.800	3,540	342	13.46	195	7.68	326,0	12.83	86,0	3.39	2,0	2,5	10,2	22.5	1 1/2"	
DE1-80-W	8.000	5,900	342	13.46	195	7.68	393,0	15.47	101,0	3.98	0,7	0,7	14,5	31.9	1 1/2"	

Repeat accuracy: 4%, depending on the bolted joint.

Technical data without guarantee. *Specification without reaction arm.

DP2^{power}

IT DOESN'T BLOW BUBBLES – THE ERGONOMIC POWER NUTRUNNER

The DP2^{power} pneumatic nutrunner is powerful, robust and easy to use: Simply set the pressure on the maintenance unit using the values in the torque chart and get straight to work.

With the DP2^{power}, you have the perfect nutrunner at hand when it's not just about precision, but also about power and performance in continuous use.



+ POWER
Nominal torque at low pressure

+ COMPACT DESIGN
Especially compact and lightweight design

+ ERGONOMIC
Low-noise and low-vibration operation

ALSO
AVAILABLE
AS AN ATEX
VERSION



II 2 G EX H IIB T6 GB
II 2 D EX H IIIC DB 85 °C



+ POWER

- ▶ Torque up to 8,000 Nm
- ▶ Durable and robust thanks to high-quality components, suitable for continuous use
- ▶ Nominal torque is reached at low pressure

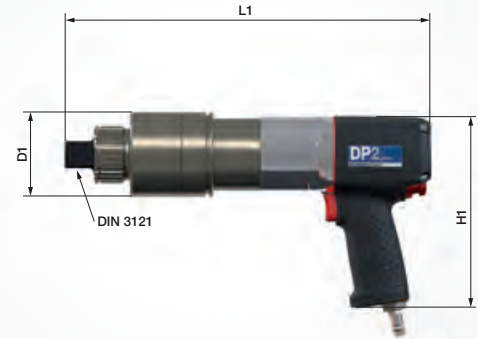
+ ERGONOMIC

- ▶ 360° rotatable drive
- ▶ Low noise and low vibration: Ergonomic working and minimal strain on the user
- ▶ Compact dimensions thanks to short drive unit – for low weight and high performance

+ BONUS

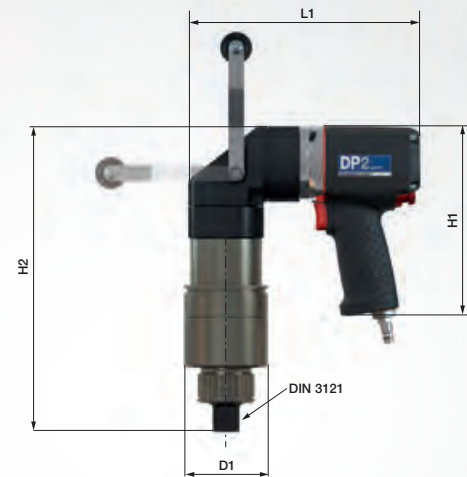
- ▶ Torque accuracy through compensation of pressure fluctuations
- ▶ Also available as an ATEX version for use in potentially explosive atmospheres

MODELS // DATA



DP2

Typ Type	Max. Drehmoment Max. torque		Max. Betriebsdruck Max. pressure		L1		H1		D1		Z	Drehzahl Max. speed		Gewicht* Weight*		Vierkant Squaredrive	
	Nm	ft-lbs	bar	psi	mm	inch	mm	inch	mm	inch		U/min	rpm	kg	lbs	Zoll	inch
DP2-05	550	406	6	87	290	11.42	181	7.13	68,5	2.70	26	26,7	4,7	10.4	3/4"		
DP2-10	1.000	740	6	87	306	12.05	181	7.13	68,5	2.70	26	11,9	4,9	10.8	3/4"		
DP2-20	2.000	1,480	6	87	330	12.99	181	7.13	80,0	3.15	26	5,4	6,0	13.2	1"		
DP2-30	3.000	2,210	6	87	346	13.62	181	7.13	80,0	3.15	26	3,4	6,6	14.6	1"		
DP2-36	3.600	2,660	6	87	346	13.62	181	7.13	80,0	3.15	26	3,1	6,6	14.6	1"		
DP2-48	4.800	3,540	6	87	378	14.88	181	7.13	86,0	3.39	45	1,1	8,6	19.0	1 1/2"		
DP2-80	8.000	5,900	6	87	446	17.56	181	7.13	101,0	3.98	39	1,1	12,7	28.0	1 1/2"		

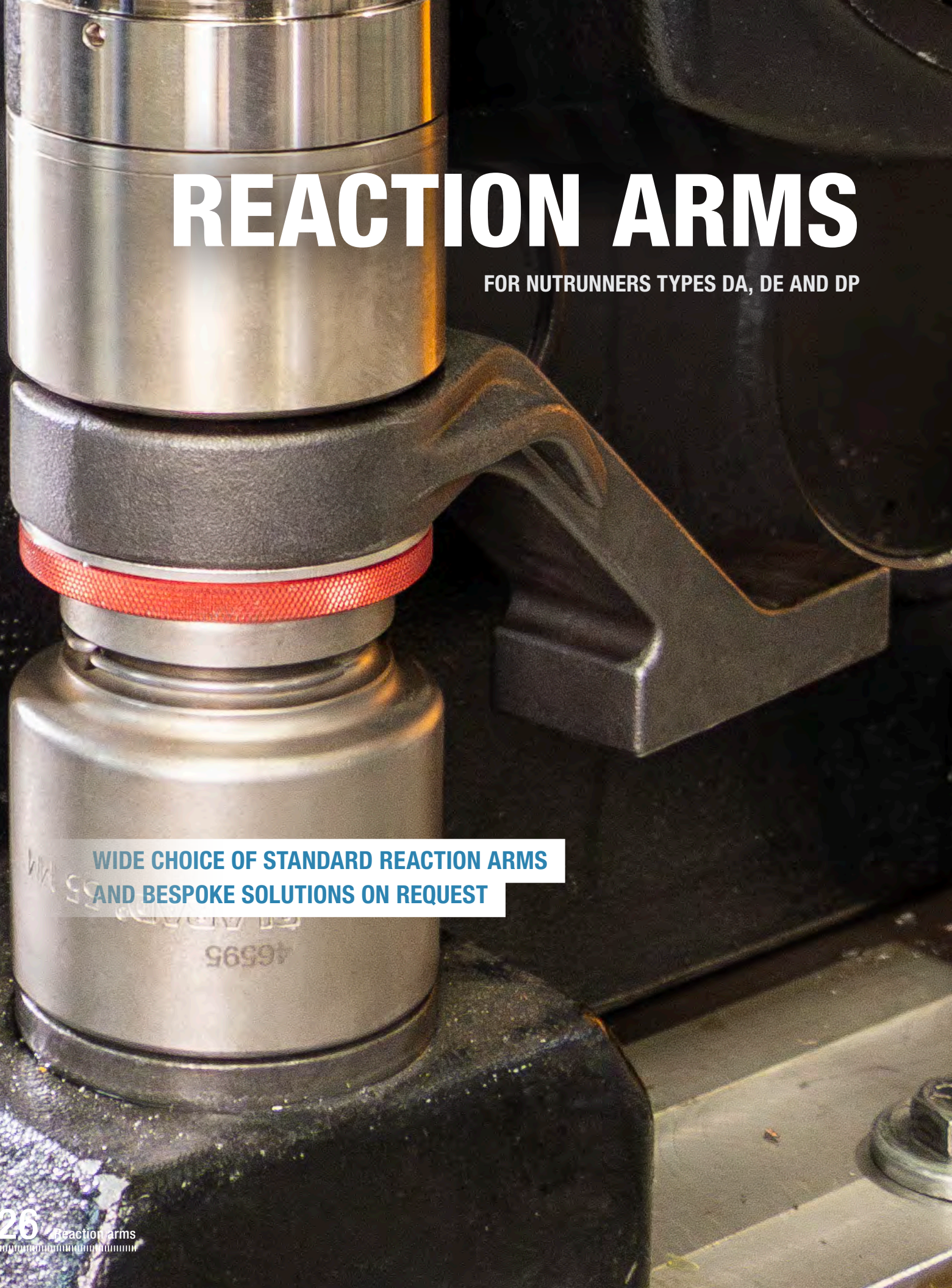


DP2 ANGLE VERSION

Typ Type	Max. Drehmoment Max. torque		Max. Betriebsdruck Max. pressure		L1		H1		H2		D1		Z	Drehzahl Max. speed		Gewicht* Weight*		Vierkant Squaredrive	
	Nm	ft-lbs	bar	psi	mm	inch	mm	inch	mm	inch	mm	inch		U/min	rpm	kg	lbs	Zoll	inch
DP2-05-W	550	406	6	87	220	8.66	181	7.13	237	X.XX	68,5	2.70	26	26,7	4,7	10.4	3/4"		
DP2-10-W	1.000	740	6	87	220	8.66	181	7.13	253	X.XX	68,5	2.70	26	11,9	4,9	10.8	3/4"		
DP2-20-W	2.000	1,480	6	87	226	8.90	181	7.13	277	X.XX	80,0	3.15	26	5,4	6,0	13.2	1"		
DP2-30-W	3.000	2,210	6	87	226	8.90	181	7.13	292	X.XX	80,0	3.15	26	3,4	6,6	14.6	1"		
DP2-36-W	3.600	2,660	6	87	226	8.90	181	7.13	292	X.XX	80,0	3.15	26	3,1	6,6	14.6	1"		
DP2-48-W	4.800	3,540	6	87	229	9.02	181	7.13	324	X.XX	86,0	3.39	45	1,1	8,6	19.0	1 1/2"		
DP2-80-W	8.000	5,900	6	87	236	9.29	181	7.13	392	X.XX	101,0	3.98	39	1,1	12,7	28.0	1 1/2"		

Repeat accuracy: ≤ 4%, depending on the bolted joint. Technical data without guarantee.

*Specification without reaction arm.

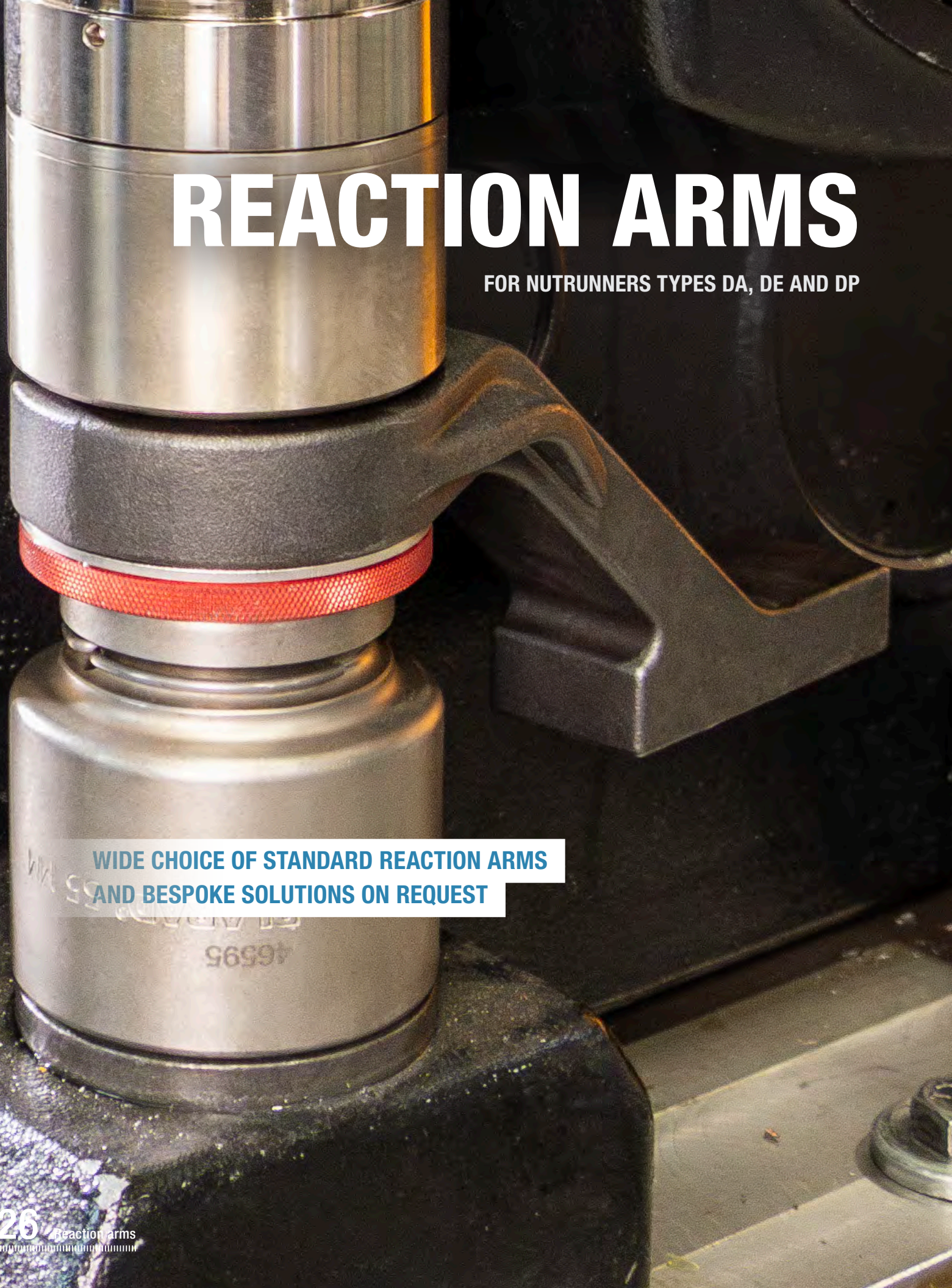


REACTION ARMS

FOR NUTRUNNERS TYPES DA, DE AND DP

WIDE CHOICE OF STANDARD REACTION ARMS
AND BESPOKE SOLUTIONS ON REQUEST

26 Reaction arms



REACTION ARMS

FOR NUTRUNNERS TYPES DA, DE AND DP

WIDE CHOICE OF STANDARD REACTION ARMS
AND BESPOKE SOLUTIONS ON REQUEST

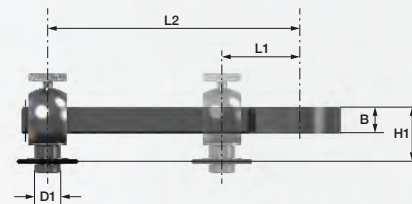
26 Reaction arms

**WIDE CHOICE OF STANDARD REACTION ARMS
AND BESPOKE SOLUTIONS ON REQUEST**

MODELS // DATA

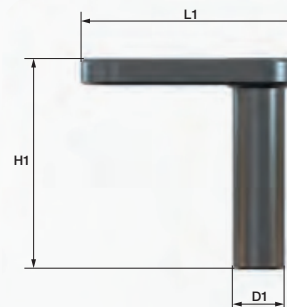
SLIDING REACTION ARMS

Typ Type	L1		L2		H1		D1	B		Gewicht Weight	
	mm	inch	mm	inch	mm	inch	Zoll/inch	mm	inch	kg	lbs
DE/DA/DP-05	70	2.76	400	15.75	51,7	1,93	1"	25	0,98	3,2	7,05
DE/DA/DP-10	70	2.76	400	15.75	51,7	1,93	1"	25	0,98	3,2	7,05
DE/DA/DP-20	68	3.15	400	15.75	51,7	2,04	1"	25	0,98	2,5	7,72
DE/DA/DP-30	75	3.15	400	15.75	51,7	2,04	1"	25	0,98	2,4	7,72
DE/DA/DP-36	65	3.15	400	15.75	48,0	2,04	1"	25	0,98	5,5	8,16
DE/DA/DP-48	115	4.53	400	15.75	68,2	2,69	1 1/2"	30	1,18	5,6	12,13
DE/DA/DP-80	168	6.30	400	15.75	75	2,95	1 1/2"	50	1,97	–	–



PIN REACTION ARMS

Typ Type	L1		H1		D1		Gewicht Weight	
	mm	inch	mm	inch	mm	inch	kg	lbs
DE/DA/DP-05	250	9.84	220	8.66	20	0.79	3,3	5.5
DE/DA/DP-10	250	9.84	250	9.84	30	1.18	3,9	5,5
DE/DA/DP-20	250	9.84	250	9.84	40	1.57	4,5	5.5
DE/DA/DP-30	250	9.84	250	9.84	40	1.57	4,8	5.5
DE/DA/DP-36	250	9.84	250	9.84	50	1.97	5,6	5.5
DE/DA/DP-48	250	9.84	270	10.63	60	2.36	6,6	5.5
DE/DA/DP-80	on request							



BASIC REACTION ARMS

Typ Type	L1		H1		H2		Gewicht Weight	
	mm	inch	mm	inch	mm	inch	kg	lbs
DE/DA/DP-05	150	5.90	80	3.15	15	0.59	1,2	2.64
DE/DA/DP-10	150	5.90	80	3.15	15	0.59	1,2	2.64
DE/DA/DP-20	150	5.90	100	3.94	20	0.79	1,9	4.19
DE/DA/DP-30	190	7.48	100	3.94	20	0.79	2,1	4.63
DE/DA/DP-36	210	8.27	130	5.12	15	0.59	2,9	6.39
DE/DA/DP-48	210	8.27	130	5.12	15	0.59	2,9	6.39
DE/DA/DP-80	250	9.84	165	6.50	25	0.98	6,6	14.55



OFFSET GEARBOXES

FOR DA, DE AND DP SERIES NUTRUNNERS

STX

COMPATIBLE
WITH ALL PLARAD
NUTRUNNERS
FROM P. 8

OFFSET GEARBOX FOR NUTRUNNERS UP TO 4,425 FT-LBS – SW/AF 150

The STX offset gearbox has been specially designed to meet the needs of our customers.

Robust and powerful up to 4,425 ft-lbs.

Classic applications are found in all bolting cases with long threaded rods such as plate heat exchangers or bolted connections in places that cannot be reached directly with a nutrunner.



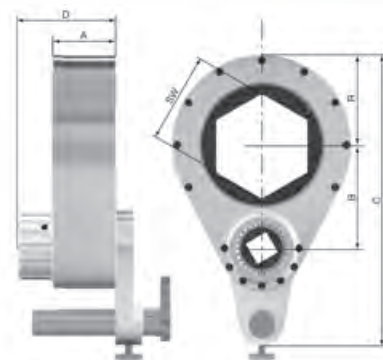
VERSATILE

Interchangeable inserts available in various designs and sizes



LONG DISTANCE RUNNER

The STX enables driving on long threaded spindles, nuts up to AF/SW 150



MODELS // DATA

Typ Type	Für Schrauber ab dem Modell For wrenches from model	Vierkant Square drive in	Drehmoment Max. Torque ft-lbs	A in	B in	C in	D in	R in	AF in	Gewicht Weight lbs
STX 05-02 TL	DA2/DE1/DP1-05, -10	¾	369	1.65	2.75	6.69	3.15	2.36	1.77	4.4
STX 22-02 TL	DA2/DE1/DP1-20, -30,	1	1,623	2.60	3.19	7.48	4.09	2.52	2.17	7.0
STX 36-02 TL	DA2/DE1/DP1-36	1	2,655	2.68	4.37	10.00	4.17	3.82	3.94	11.5
STX 60-02 TL	DA2/DE1/DP1-48, -80	1½	4,425	2.91	6.38	14.37	4.52	5.32	5.90	26.5



PRODUCT LINK

ST2

OFFSET GEARBOX FOR NUTRUNNERS UP TO 2,655 FT-LBS – SW/AF 60

Thanks to its small yet robust design, the newly developed ST2 offset gearbox is perfect for all bolting applications with long threaded rods, such as plate heat exchangers or for bolted joints in hard-to-reach places.



1

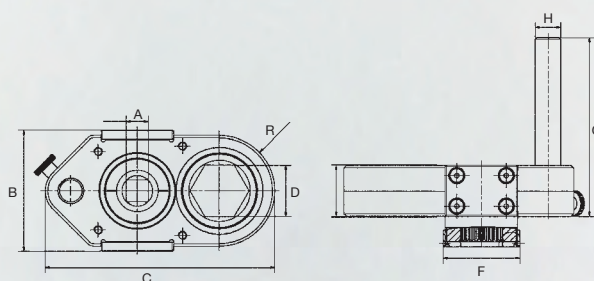
REACTION ARM

The pin reaction arm can be customized and we offer various lengths. We are also happy to develop customized solutions for your bolting applications.

2

REDUCER INSERTS

Our reducer inserts allow you to use the offset gearbox flexibly and economically. No matter which spanner width you use, our extensive range of reducers gives you maximum flexibility at minimum cost.



MODELS // DATA

Typ Type	Für Schrauber ab dem Modell For wrenches from model	A Vierkant / Zoll Square drive in	B in	C in	D in	ØF in	G in	ØH in	R in	Gewicht Weight lbs
ST2 10	DA2/DE1/DP1-05, -10	¾	3.86	8.07	1.61	3.23	8.86	1.18	1.77	9.5
ST2 36	DA2/DE1/DP1-20, -30, -36	1	5.59	10.59	2.36	3.54	9.68	1.18	2.56	20.2

EFFICIENTLY COMBINING FORCES



HYDRAULIC BOLTING SYSTEMS

POSSIBLE COMBINATIONS AT A GLANCE



K



LT



MX-EC



FSX



ECO

Reliable
Plarad quality

Economical
entry-level models
that fulfil their promises:
durability and
functionality



Test mode



Torque mode



POWER

Robust and
user-friendly tools of
the next generation

These automatic
tools set new standards
in terms
of precision, speed and
ergonomics

Upgradeable to the
docu and *control*
versions



Test mode



Torque mode



DOCU

The upgrade to the
docu version

Test mode,
bolting case definition
and documentation

Upgradeable to the
control version



Documentation



Test mode



Torque mode



CONTROL

The upgrade to
the *control* version
also features torque
and rotation angle
mode



Torque/angle
of rotation mode



Rotation angle
counting mode



Documentation



Rotation angle mode



Test mode



Torque mode

MX-EC

THE ALL-ROUNDER IN FLEXIBILITY AND DURABILITY

With its fine-toothed ratchet system and quick-change mechanism for the square drive, it is perfect for versatile and demanding bolted joints.

Power ranges from 35 to 47,940 ft lbs and the smallest dimensions open up new possibilities for the MX-EC, even in hard-to-reach work areas.

ALSO
AVAILABLE
AS AN ATEX
VERSION



EXII 2 GD
Ex h IIB T4 Gb X
Ex h IIIC T110°C Db X



1

FLEXIBLE

2-axis hose connection
(rotatable and swivelling)

2

ROBUST

Extremely flat, lightweight
and high-strength housing

3

SAFE & COMFORTABLE

360° adjustable reaction arm

4

FAST

High speed thanks to
optimised compatibility
with Plarad power packs

SQS

SAFETY QUALITY
SERVICE SYSTEM



SQS Safety Quality Service system

Plarad hydraulic devices offer the reliability that is essential for absolute precision, high availability, and cost-effectiveness.

- ▶ Special high-pressure safety chamber with an operating pressure of up to 11,600 psi
- ▶ Maximum torque accuracy and no jamming thanks to special drive system
- ▶ Integrated release shock absorber

QUALITY

- ▶ Durable fine-toothed ratchet system
- ▶ No jamming of the torque wrench regardless of the piston position
- ▶ Replaceable wear parts for effortless maintenance



UPGRADE
Combined with
Plarad power packs
suitable for docu-
mentation, torque and
angle of rotation
mode

SAFETY

- ▶ SQS system: Hydraulic system encapsulated in a hardened steel cylinder for housing protection
- ▶ Protection against housing damage thanks to integrated release shock absorber
- ▶ The safety latch prevents unintentional unlocking of the support

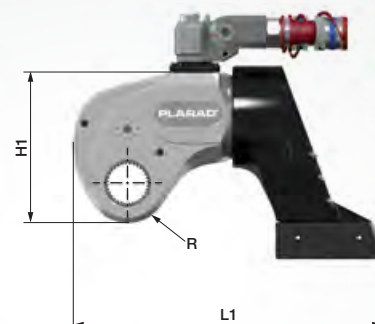


OPTIONAL

- ▶ Available as a single hose system
- ▶ Various insertion tools with quick-change system available
- ▶ Wide range of customised reaction arms available



Various inserts
available as
accessories



Typ Type	Drehmoment Torque max.		max. Betriebsdruck Pressure max.		L1		H1		R		B1		Gewicht* Weight*		Vierkant Squaredrive		Material
	Nm	ft-lbs	bar	psi	mm	inch	mm	inch	mm	inch	mm	inch	kg	lbs	Zoll	inch	
MX-EC 5 TSM	500	369	800	11,600	138,0	5.43	47,0	1.85	16,0	0.63	35	1.38	1,65	3.64	1/2"		Steel
MX-EC 10	1.000	738	800	11,600	166,0	6.54	78,5	3.09	20,5	0.81	40	1.57	2,60	5.73	3/4"		Steel
MX-EC 20	2.100	1,549	800	11,600	194,5	7.66	93,0	3.66	24,0	0.94	50	1.97	2,50	5.51	1"		Aluminium
MX-EC 45	4.500	3,319	800	11,600	255,8	10.07	127,0	5.00	32,0	1.26	67	2.64	4,90	10.80	1"		Aluminium
MX-EC 75	7.500	5,532	800	11,600	304,0	11.97	108,5	4.27	37,5	1.48	80	3.15	7,30	16.09	1 1/2"		Aluminium
MX-EC 95	9.500	7,007	800	11,600	301,5	11.87	156,0	6.14	42,0	1.65	85	3.35	9,50	20.94	1 1/2"		Aluminium
MX-EC 120	12.000	8,851	800	11,600	341,0	13.43	169,0	6.65	46,0	1.81	93	3.66	10,50	23.15	1 1/2"		Aluminium
MX-EC 155	15.500	11,433	800	11,600	360,0	14.17	181,0	7.13	49,0	1.93	100	3.94	13,50	29.76	1 1/2"		Aluminium
MX-EC 200	20.500	15,121	800	11,600	394,0	15.51	213,0	8.39	55,0	2.17	112	4.41	20,50	45.19	2 1/2"		Aluminium
MX-EC 300	30.000	22,128	800	11,600	436,0	17.17	245,0	9.65	61,5	2.42	130	5.12	35,50	78.26	2 1/2"		Aluminium
MSX/T 400	40.000	29,504	800	11,600	453,0	17.83	273,5	10.77	66,5	2.62	136	5.35	49,30	108.69	2 1/2"		Aluminium
MSX/T 650	65.000	47,944	800	11,600	431,0	16.97	329,5	12.97	84,0	3.31	155	6.10	77,70	171.30	2 1/2"		Aluminium

All appliances with twin swivel (double-acting - TS) and 2-axis hose connection (2AS)

Repeat accuracy: ≤ 4%, depending on the bolted joint. Technical data without guarantee. *Specification with reaction arm.

FSX

LOW PROFILE WRENCH FOR UNUSUAL FLANGES

Thanks to its lightweight, slim design and fine-toothed ratchet system, the FSX is perfect for tight, sensitive and hard-to-reach areas. The easy transition from tightening to loosening mode, its high bolting speed and the ease with which the cassette can be changed make the FSX the ultimate tool.

ALSO
AVAILABLE
AS AN ATEX
VERSION



EXII 2 GD
Ex h IIB T4 Gb X
Ex h IIIC T110°C Db X



1

PROTECTION

Integrated release
shock absorber

2

SAFETY

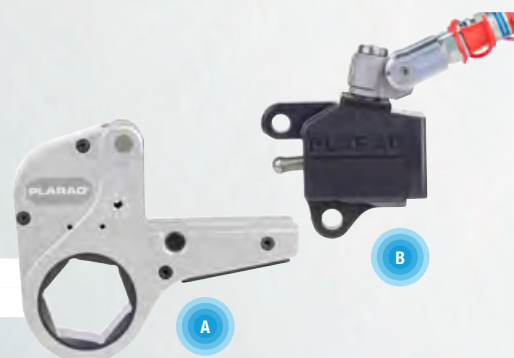
Overpressure
safety valve

3

LIGHT WEIGHT

Housing made of
high-resistant aluminium

Several inserts
optionally available



A

Cartridge HSX

- Comfortable and safe working thanks to 360° adjustable handle
- Sustainable and durable thanks to replaceable spare parts
- Also available to suit ANSI flanges

B

Drive unit SX/SX-EC

- Easy assembly/disassembly thanks to patented connection of piston and ratchet system
- Also available as a single-hose version - for even better handling



FSX

+ ADAPTABILITY

- ▶ Quick and safe change of the output unit thanks to automatic separation of piston and ratchet system
- ▶ Rotatable 2-axis hose connection (rotatable and swiveling)



+ QUALITY

- ▶ Durable fine-toothed ratchet system
- ▶ No jamming of the wrench regardless of the piston position
- ▶ SQS system: Hydraulic system encapsulated in a hardened steel cylinder for housing protection

SQS
SAFETY QUALITY
SERVICE
SYSTEM

+ UPGRADE

- ▶ Combined with Plarad power packs suitable for documentation, torque and rotation angle mode
- ▶ Bolting parameters can be preset



Absorber protects the housing from damage in the case of a release shock



MODELS // DATA

Typ FSX-Kombination Type FSX-Combination	max. Drehmoment Torque max.		max. Betriebsdruck Pressure max.		L1		H1		R		B2		Gewicht* Weight*		Material
	Nm	ft-lbs	bar	psi	mm	inch	mm	inch	mm	inch	mm	inch	kg	lbs	
SX-EC 1** / HSX	1.000	738	800	11,600	149	5.87	116	4.57	29,5	1.16	32,0	1.26	1,60	3.5	Aluminium
SX-EC 2 / HSX	2.500	1,844	800	11,600	173	6.81	141	5.55	38,0	1.50	41,0	1.61	2,75	6.1	Aluminium
SX-EC 5 / HSX	5.500	4,057	800	11,600	221	8.70	184	7.24	46,0	1.81	50,0	1.97	5,85	12.9	Aluminium
SX-EC 8 / HSX	8.500	6,270	800	11,600	250	9.84	207	8.15	55,0	2.17	55,0	2.17	6,40	14.1	Aluminium
SX-EC 12 / HSX	12.000	8,851	800	11,600	298	11.73	232	9.13	66,5	2.62	64,0	2.52	7,90	17.4	Aluminium
SX-EC 20 / HSX	20.000	14,752	800	11,600	360	14.17	299	11.77	87,5	3.44	80,0	3.15	16,50	36.4	Aluminium
SX 30 TST / HSX	30.000	22,128	800	11,600	389	15.31	328	12.91	99,5	3.92	102,5	4.04	26,50	58.4	Aluminium
SX 45 TST / HSX	45.000	33,192	800	11,600	426	16.77	376	14.80	119,0	4.69	111,0	4.37	35,00	77.2	Aluminium

Repeat accuracy: ≤ 4%, depending on the bolted joint. Technical data without guarantee.

*Specification without reaction arm.

**Supplied with TSM connection.

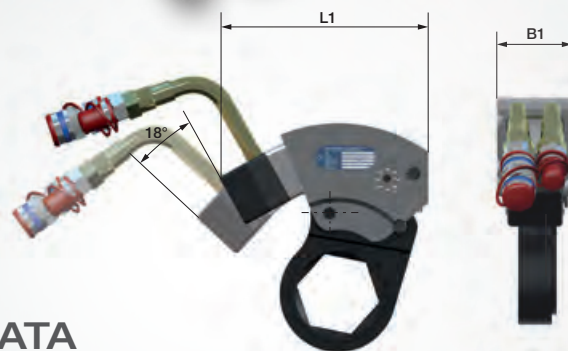
K Series

THE ULTIMATE PROBLEM SOLVER FOR SPECIAL CASES AND CONFINED SPACES

- ▶ One product, hundreds of possible uses: quick and easy change of the ring spanner for customized applications
- ▶ The special device from Plarad: no comparable tool system on the market
- ▶ Tightest diameters and high insertion depths of the spanner inserts
- ▶ Open and split ring spanners for special applications
- ▶ Wide range of bolting options thanks to large range of accessories
- ▶ Low weight with high performance
- ▶ Torque range from 221 to 22,128 ft lbs
- ▶ Up to 11,600 psi system pressure



Various inserts
available as
accessories



MODELS // DATA

Typ Type	max. Drehmoment Torque max.		max. Betriebsdruck Pressure max.		SW A/F		L1		B1		Gewicht* Weight*	
	Nm	ft-lbs	bar	psi	min	max	mm	inch	mm	inch	kg	lbs
K 30 TF	3.000	2,213	800	11,600	24	90	163,0	6.42	25	0.98	6,0	13.2
K 60 TF	6.600	4,868	800	11,600	24	90	170,0	6.69	30	1.18	7,3	16.1
K 150 TF	11.000	8,114	800	11,600	27	110	180,0	7.09	45	1.77	11,6	25.6
K 200 TF	20.000	14,752	800	11,600	60	135	248,5	9.78	70	2.76	30,5	67.2
K 300 TF	30.000	22,128	800	11,600	80	150	319,0	12.56	120	4.72	38,0	83.8

Repeat accuracy: ≤ 4%, depending on the bolted joint. Technical data without guarantee.

LT Series

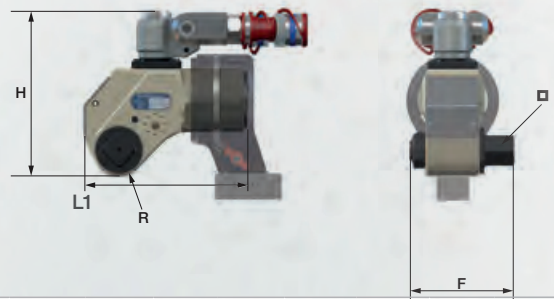
STRONG, PRECISE, ROBUST: THE HANDY BOLTING SYSTEM

The 'MS' single-hose system offers convenient handling and reduces weight – also available as a two-hose system 'TS'.

SQS – Safety-Quality-Service System.

Thanks to the SQS high-pressure safety chamber, the housing is free of oil pressure and can be used for support, no additional reaction arm is required.

If support is needed, the quick-release fastener with safety latch makes it easy.



MODELS // DATA

Typ Type	Schlauch-System Hose system	max. Drehmoment Torque max.		max. Betriebsdruck Pressure max.		L1		H1		R		F		Gewicht* Weight*	
		Nm	ft-lbs	bar	psi	mm	inch	mm	inch	mm	inch	mm	inch	kg	lbs
LT 5 MS	single	500	369	800	11,600	127,0	5.00	78,0	3.07	17,0	0.67	71,5	2.81	1,5	3.3
LT 10 TS	double	1.000	738	800	11,600	132,0	5.20	89,0	3.50	22,0	0.87	84,0	3.31	2,3	5.1
LT 10 MS	single	1.000	738	800	11,600	132,0	5.20	89,0	3.50	22,0	0.87	84,0	3.31	1,8	4.0
LT 20 TS	double	2.200	1,623	800	11,600	166,5	6.56	100,0	3.94	29,5	1.16	104,0	4.09	4,0	8.8
LT 20 MS	single	2.200	1,623	800	11,600	147,0	5.79	109,0	4.29	29,0	1.14	104,0	4.09	3,3	7.3
LT 50 TS	double	5.000	3,688	800	11,600	211,5	8.33	128,5	5.06	37,0	1.46	134,0	5.28	7,0	15.4
LT 50 MS	single	5.000	3,688	800	11,600	189,5	7.46	132,0	5.20	37,0	1.46	134,0	5.28	6,2	13.7
LT 100 TS	double	10.000	7,376	800	11,600	243,7	9.59	159,0	6.26	49,0	1.93	147,0	5.79	11,1	24.5

Repeat accuracy: ≤ 4%, depending on the bolted joint. Technical data without guarantee.

*Specification without reaction arm.

XE1eco

POWERFUL BASIC PUMP

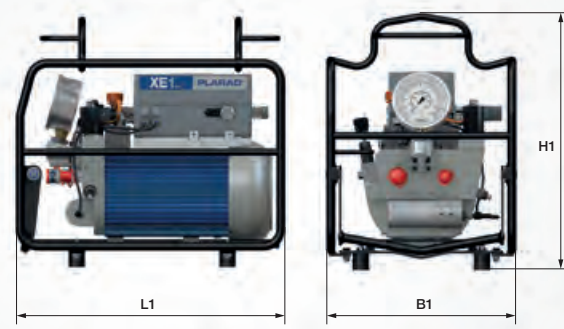
The entry-level power pack for manual operation of hydraulic tools. With an optional 2-stage version for high bolting speed, it delivers optimal performance. The user-friendly remote control allows monitoring of key operating parameters, such as motor/oil temperature, operating hours, and power consumption.

Thanks to patented motor-under-oil technology, it operates efficiently and reliably. Its robust design and optimized maintenance intervals ensure high cost-effectiveness.



2-STAGE-UPGRADE
OPTIONAL GEAR PUMP
FOR MAXIMUM FLOW RATE

- 1
EFFICIENCY
External oil filter and service-friendly design for simplified maintenance work
- 2
ROBUST
Steady and robust industrial frame protects against damage
- 3
FLEXIBLE
Use of single or multiple hydraulic wrenches in single and dual-hose technology



MODELS // DATA

Typ Type	Betriebsart Operation mode	max. Betriebsdruck Pressure max.		max. Durchfluss flow max.		max. Durchfluss flow max. (2-Stage Upgrade)		Motorleistung Motor power		Maße (L1 x B1 x H1) Dimensions (L1 x B1 x H1)	Gewicht* Weight*	
		bar	psi	l/min	gal/min	l/min	gal/min	kW	hp		kg	lbs
XE1eco 10	Manuell manual	800	11,600	0,8	0.21	5,4	1.43	0,8	1.07	455 x 286 x 449 mm 17.91 x 11.26 x 17.68 in	22	48.5
XE1eco 20	Manuell manual	800	11,600	1,2	0.32	8,0	2.11	1,1	1.48	500 x 343 x 465 mm 19.69 x 13.50 x 18.31 in	29	63.9
XE1eco 30	Manuell manual	800	11,600	3,0	0.79	13,2	3.49	2,2	2.95	500 x 343 x 465 mm 19.69 x 13.50 x 18.31 in	35	77.2

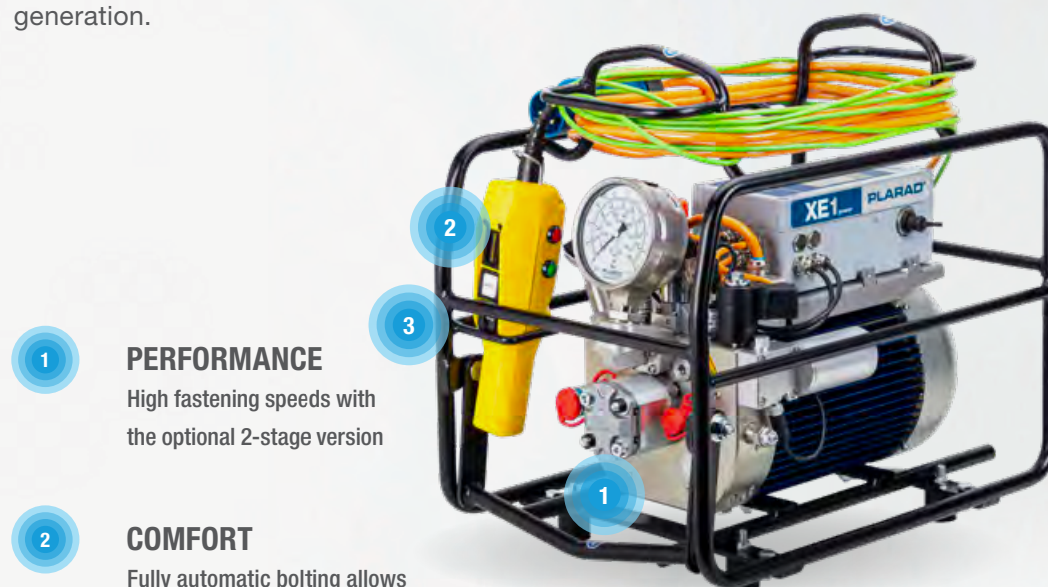
Repeat accuracy: ≤ 4%, depending on the bolted joint. Technical data without guarantee.
Units available in the following voltages: 110V 50Hz, 110V 60Hz, 230V 50Hz, 230V 60Hz, 400V 50Hz, 400V 60Hz. Others on request.

XE1power

FULLY AUTOMATIC WITH THE PUSH OF A BUTTON

The XE1power sets new standards in hydraulic bolting technology. The fully automatic system enables fast and precise bolting results with the push of a button. The work process is greatly simplified by the automatic switch-off once the final torque is reached. This innovative power pack combines efficiency, precision and convenience for demanding bolting applications.

Upgradeable to the *docu* and *control* model variants, the XE1power is the entry point to the smart pump generation.



1

PERFORMANCE

High fastening speeds with the optional 2-stage version

2

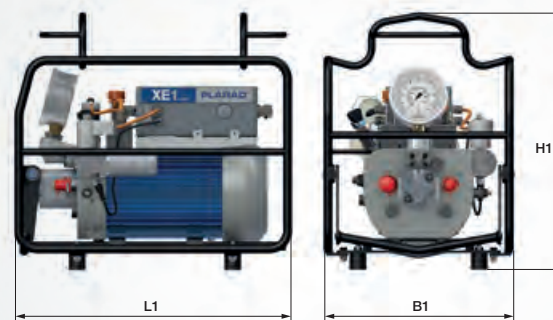
COMFORT

Fully automatic bolting allows for comfortable handling up to the preset hydraulic pressure

3

INFORMATION

Remote control with colour display: important operating parameters always in view (pressure, status message, motor/oil temperature, operating hours, power consumption and much more)



MODELS // DATA

Typ Type	Betriebsart Operation mode	max. Betriebsdruck Pres- sure max.		max. Durchfluss flow max.		max. Durchfluss flow max. (2-Stage Upgrade)		Motorleistung Motor power		Maße (L1 x B1 x H1) Dimensions (L1 x B1 x H1)	Gewicht* Weight*	
		bar	psi	l/min	gal/min	l/min	gal/min	kW	hp		kg	lbs
XE1power10	Automatik automatic	800	11,600	0,8	0.21	5,4	1.43	0,8	1.07	455 x 286 x 449 mm 17.91 x 11.26 x 17.68 in	24	52.9
XE1power20	Automatik automatic	800	11,600	1,2	0.32	8,0	2.11	1,1	1.48	500 x 343 x 465 mm 19.69 x 13.50 x 18.31 in	34	75.0
XE1power30	Automatik automatic	800	11,600	3,0	0.79	13,2	3.49	2,2	2.95	500 x 343 x 465 mm 19.69 x 13.50 x 18.31 in	36	79.4

Repeat accuracy: ≤ 4%, depending on the bolted joint. Technical data without guarantee.

Units available in the following voltages: 110V 50Hz, 110V 60Hz, 230V 50Hz, 230V 60Hz, 400V 50Hz, 400V 60Hz. Others on request.

XE1docu

PRECISION MEETS POWER

Based on the XE1power, the XE1docu offers a wide range of additional features for seamless documentation. The data can be easily transferred to all standard digital devices, ensuring transparent documentation of bolting operations. Fully automatic tightening and automatic switch-off once the final torque is reached make this power pack especially user-friendly.

The remote control with color display allows users to keep an eye on important operating parameters at all times.



The control unit saves all tightening torques and rotation angles that have been performed



INDIVIDUAL

Fast and reliable work thanks to predefined bolting cases



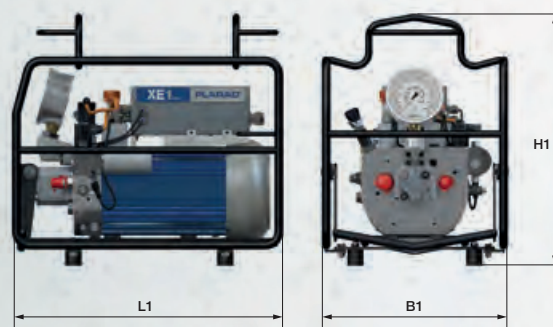
PERFORMANCE

The 2-stage version is the fastest documentable unit on the market



HIGH TECH

Patented algorithms control the bolting procedure using various methods



MODELS // DATA

Typ Type	Betriebsart Operation mode	max. Betriebsdruck Pressure max.		max. Durchfluss flow max.		max. Durchfluss flow max. (2-Stage Upgrade)		Motorleistung Motor power		Maße (L1 x B1 x H1) Dimensions (L1 x B1 x H1)	Gewicht* Weight*	
		bar	psi	l/min	gal/min	l/min	gal/min	kW	hp		kg	lbs
XE1docu 10	Automatik automatic	800	11,600	0,8	0.21	5,4	1.43	0,8	1.07	455 x 286 x 449 mm 17.91 x 11.26 x 17.68 in	24	52.9
XE1docu 20	Automatik automatic	800	11,600	1,2	0.32	8,0	2.11	1,1	1.48	500 x 343 x 465 mm 19.69 x 13.50 x 18.31 in	34	75.0
XE1docu 30	Automatik automatic	800	11,600	3,0	0.79	13,2	3.49	2,2	2.95	500 x 343 x 465 mm 19.69 x 13.50 x 18.31 in	36	79.4

Repeat accuracy: ≤ 4%, depending on the bolted joint. Technical data without guarantee.

Units available in the following voltages: 110V 50Hz, 110V 60Hz, 230V 50Hz, 230V 60Hz, 400V 50Hz, 400V 60Hz. Others on request.

XE1control

THE EFFICIENT MASTERPIECE

The XE1control is the ultimate all-rounder for torque and rotation angle bolting with an integrated documentation features. Based on the XE1docu, it offers a comprehensive range of features for maximum versatility and efficiency.

With predefined bolting cases, automatic bolting, and documentation of torque and angle of rotation, it ensures fast, safe, and user-friendly operation.



SMART

Data transfer to digital end devices for seamless documentation



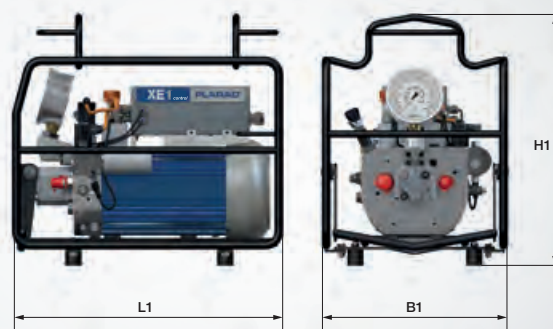
POWER

High fastening speeds with the optional 2-stage version



COMFORTABLE

Fully automatic bolting up to the preset hydraulic pressure with the push of a button



MODELS // DATA

Typ Type	Betriebsart Operation mode	max. Betriebsdruck Pressure max.		max. Durchfluss flow max.		Motorleistung Motor power		Maße (L1 x B1 x H1) Dimensions (L1 x B1 x H1)	Gewicht* Weight*	
		bar	psi	l/min	gal/min	kW	hp		kg	lbs
XE1control 10	Automatik automatic	800	11,600	0,8	0.21	0,8	1.07	455 x 286 x 449 mm 17.91 x 11.26 x 17.68 in	26	57,3
XE1control 20	Automatik automatic	800	11,600	1,2	0.32	1,1	1.48	500 x 343 x 465 mm 19.69 x 13.50 x 18.31 in	31	68,3
XE1control 30	Automatik automatic	800	11,600	3,0	0.79	2,2	2.95	500 x 343 x 465 mm 19.69 x 13.50 x 18.31 in	35	77,2

Repeat accuracy: ≤ 4%, depending on the bolting case. Technical data without guarantee. *

Units available in the following voltages: 110V 50Hz, 110V 60Hz, 230V 50Hz, 230V 60Hz, 400V 50Hz, 400V 60Hz. Others on request.

XA1power

THE WORLD'S FIRST BATTERY-POWERED, FULLY AUTOMATIC HIGH-PERFORMANCE PUMP

The new XA1power cordless power pack is revolutionising the world of hydraulic tools. It's incredibly user-friendly, requiring only a wrench, hoses, and a compact pump.

A key feature for international teams: all operations are independent of the power supply's frequency and voltage, allowing service technicians to fully focus on their tasks. An average of 170 fastening operations* can be carried out on one battery charge.

Designed for a torque range of up to 110.635 ft lbs and capable of operating hydraulic wrenches up to 11,600 psi, it weighs just 22 lbs (including batteries), compared to the 60-90 lbs power packs commonly available on the market.



- 1
- BATTERY**
Set with 3 interchangeable batteries for approx. 170 bolting operations (M36)
- 2
- PERFORMANCE**
Up to 11,600 psi operating pressure and 110.634 ft lbs torque
- 3
- COMPATIBILITY**
Compatible with all commercially available hydraulic wrenches, ensuring worldwide use without voltage restrictions
- 4
- ERGONOMIC**
approx. 10 kg including batteries
Wireless remote control
Max. 70 db noise emission

⊕ OPERATION

- ▶ Battery-operated power pack with replaceable battery (FEIN system)
- ▶ Secure and fully automatic
- ▶ Tightens with the push of a button up to the preset torque or pressure.



THE WORLD'S FIRST BATTERY-POWERED
HIGH PERFORMANCE PUMP

⊕ OPTIONS

- ▶ Compact and robust design
- ▶ Maximum freedom of movement thanks to wireless remote control
- ▶ Mobile use worldwide, independent of frequency and voltage



YOUR ADVANTAGES



MODEL // DATA

Akkusystem <i>Battery system</i>	3 x Akku 18 V 5.2 Ah (wechselbar) 3pc 18 V 5.2 Ah exchangeable
Betriebsspannung <i>Operating voltage</i>	54 V
Akku-Kapazität <i>Battery capacity</i>	3 x 5,2 Ah
Motorleistung <i>Motor power</i>	0,5 kW 0.67 hp
Max. Druck <i>Max. pressure</i>	800 bar 11,600 psi
Max. Volumenstrom <i>Flow rate</i>	1,8 l/min (bei 100 bar) 0.48 gal/min at 1,450 psi 1 l/min (bei 800 bar) .26 gal/min at 11,600 psi
Betriebsart <i>Operation mode</i>	automatisch automatic
Ölvolumen <i>Oil volume</i>	1 l 0.26 gal
Gewicht <i>Weight</i>	10 kg inkl. Akkus 22 lb incl. batteries
Maße (L x B x H) <i>Dimensions (L x W x H)</i>	185 x 270 x 360 mm 7.28" x 10.63" x 14.17" in
Einsatztemperaturen <i>Temp. Range</i>	-20°C bis +50°C -4 °F to 122 °F
Schalldruckpegel <i>Sound pressure level</i>	<70 dB



*M36x160 SW/AF 55 12.9 (1,216 ft lbs) with HSX 555 F

DXE1docu

SMART THROUGH CONVINCING ARGUMENST

Based on the XE1docu, the DXE1docu offers a wide range of additional features for seamless documentation.

The data can be easily transferred to all standard digital devices, ensuring transparent documentation of bolting operations. Fully automatic tightening and automatic switch-off once the final torque is reached make this power pack especially user-friendly.

The remote control with colour display allows users to keep an eye on important operating parameters at all times.

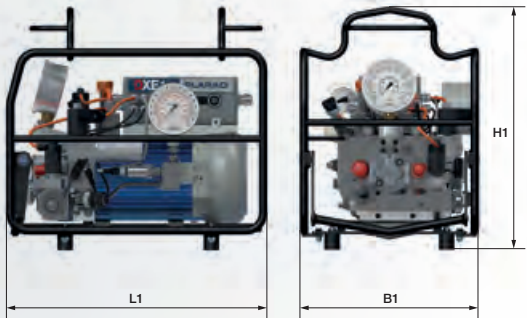


POWER PACKS ALSO AVAILABLE WITH 4 LITRE ADDITIONAL TANK

DUAL
OUR PUMP SERIES FOR
THE OPERATION OF
HYDRAULIC WRENCHES
AND TENSION
CYLINDERS



- INDIVIDUAL**
Fast and reliable work thanks to predefined bolting cases
- PERFORMANCE**
The 2-stage version is the fastest documentable hydraulic power pack on the market
- HIGH TECH**
Patented algorithms control the bolting process using various methods



MODELS // DATA

Typ Type	Betriebsart Operation mode	max. Betriebsdruck Pressure max.		max. Durchfluss flow max.		max. Durchfluss flow max. (2-Stage Upgrade)		Motorleistung Motor power		Maße (L1 x B1 x H1) Dimensions (L1 x B1 x H1)	Gewicht* Weight*	
		bar	psi	l/min	gal/min	l/min	gal/min	kW	hp		kg	lbs
DXE1docu 20	Automatik automatic	800 / 1.500	11.600 / 21.750	1.2	0.32	8.0	2.11	1.1	1.48	500 x 343 x 465 mm 19.7 x 13.5 x 18.3 in	40	88
DXE1docu 30	Automatik automatic	800 / 1.500	11.600 / 21.750	3.0	0.79	13.2	3.49	2.2	2.95	500 x 343 x 465 mm 19.7 x 13.5 x 18.3 in	42	93

Repeat accuracy: ≤ 4%, depending on the bolted joint. Technical data without guarantee.
Units available in the following voltages: 110V 50Hz, 110V 60Hz, 230V 50Hz, 230V 60Hz, 400V 50Hz, 400V 60Hz. Others on request.

DXE1control

THE EFFICIENT MASTERPIECE

The DXE1*control* is the ultimate all-rounder for torque and angle bolting with an integrated documentation function. Based on the DXE1*docu*, it offers a comprehensive range of features for maximum versatility and efficiency.

With predefined bolting cases, automatic bolting and documentation of torque, rotation angle and preload force, this pump enables fast, safe and user-friendly work.



FOR THE OPERATION OF
HYDRAULIC WRENCHES
AND TENSIONERS

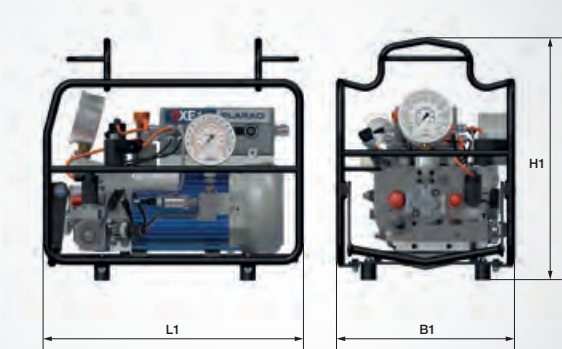


- +

SMART
Data transfer to digital devices
for seamless documentation
- +

PRECISE
Rotation angle bolting (+-2°) without
additional sensor technology thanks to
patented process
- +

COMFORTABLE
Fully automatic bolting up to
the preset hydraulic pressure
with the push of a button



MODELS // DATA

Typ Type	Betriebsart Operation mode	Max. Betriebsdruck Max. pressure		Max. Durchfluss Max. flow		Motorleistung Motor power		Maße (L1 x B1 x H1) Dimensions (L1 x B1 x H1)	Gewicht Weight	
		bar	psi	l/min	gal/min	kW	hp		kg	lbs
DXE1 <i>control</i> 20	Automatik automatic	800 / 1.500	11,600 / 21,750	1,2	0.32	1,1	1.48	500 x 343 x 465 mm 19.68 x 13.50 x 18.30 in	40	88

Repeat accuracy: ≤ 4%, depending on the bolted joint. Technical data without guarantee.
Units available in the following voltages: 110V 50Hz, 110V 60Hz, 230V 50Hz, 230V 60Hz, 400V 50Hz, 400V 60Hz. Others on request.

TXP1eco

THE PURE HYDRAULIC PUMP

The TXP1eco pneumatic hydraulic pump is ideal for simple tensioner applications. With a maximum pressure of up to 1500 bar, it provides the necessary power for challenging tasks. The handling is easy: pressure build-up and pressure release are performed with the push of a button, and a manual safety release provides additional safety.

Thanks to the robust protective frame, the TXP1eco is robust and mobile, supported by castors on the frame. With an oil volume of 1.6 gal, it is also suitable for large or several simultaneously connected tension cylinders. The TXP1eco combines performance, safety and mobility in a user-friendly design.



SOLID

Fast & safe tensioner applications
up to 1500 bar



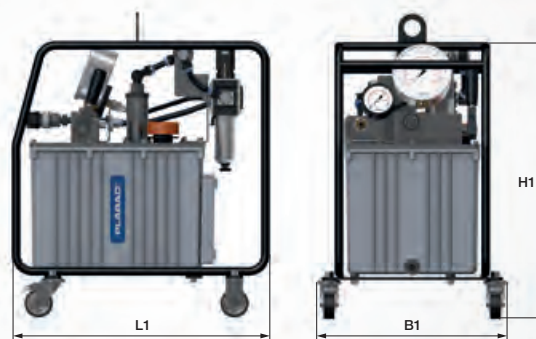
EASY OPERATION

Pressure build-up and pressure relief at
the touch of a button and manual safety
relief in extreme cases



ROBUST & MOBILE

Under-oil motor technology and robust
protective frame with castors



MODEL // DATA

Typ Type	Betriebsart Operation mode	max. Betriebsdruck Pressure max.		max. Durchfluss flow max.		pneumatischer Druck pneumatic pressure		Maße (L1 x B1 x H1) Dimensions (L1 x B1 x H1)	Gewicht Weight	
		bar	psi	l/min	gal/min	bar	psi		kg	lbs
TXP1eco 20	manuell manual	1,500	21,750	0.7	0.185	3 - 7	43 - 102	457 x 338 x 540 mm 18 x 13.3 x 21.26 in	28	61.7

Repeat accuracy: ≤ 4%, depending on the bolted joint. Technical data without guarantee.

XP2Zeco

CONSTANT UNTIL THE FINAL PRESSURE IS REACHED

Like the electrically powered models, our X2-P-Zeco 2-Stage pneumatic hydraulic power pack offers sturdiness, durability and a constant flow rate up to the final pressure. The pneumatic motor integrated in the oil tank prevents icing up and cools the hydraulic oil at the same time.

The ATEX model is also suitable for use in potentially explosive areas in zone 1G.

ALSO
AVAILABLE
AS AN ATEX
VERSION



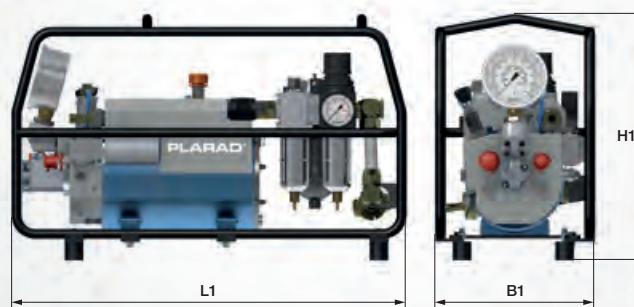
EASY TO USE

Pressure build-up and relief with the push of a button and manual safety pressure release in extreme cases



POWER

High bolting speeds thanks to the 2-stage design



MODEL // DATA

Typ Type	Betriebsart Operation mode	max. Betriebsdruck Pressure max.		max. Durchfluss flow max.		max. Durchfluss flow max. (2-Stage Upgrade)		Maße (L1 x B1 x H1) Dimensions (L1 x B1 x H1)	Gewicht Weight	
		bar	psi	l/min	gal/min	l/min	gal/min		kg	lbs
XP1eco 20 2-Stage	Automatik automatic	800	11,600	7.0	1.85	1.6	0.422	634 x 257 x 395 mm 24.96 x 10.12 x 15.55 in	32	70.5

Repeat accuracy: ≤ 4%, depending on the bolted joint. Technical data without guarantee.

TXE1eco

THE ROBUST AND RELIABLE BASIC PUMP

The TXE1eco is equipped with a powerful electric motor and can be effortlessly connected to large tension cylinders thanks to the 7-litre tank. It offers a maximum operating pressure of 21,756 psi and a flow rate of up to 0.8 gal/min. The pump has an integrated pressure gauge for easy reading of the pressure.

This power pack can be operated by remote control and is perfect for applications where no documentation is required.



1

PRESSURE GAUGE

Pressure gauge integrated into the pump for easy pressure control

2

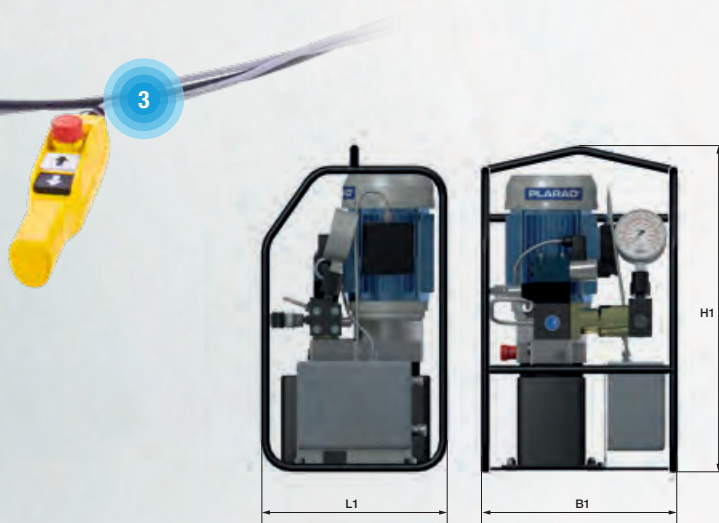
7L OIL VOLUME

For large or several simultaneously connected tools

3

OPERATION

Via wired remote control



MODELS // DATA

Typ Type	Betriebsart Operation mode	max. Betriebsdruck Pressure max.		Volumenstrom bei 0 - 120 bar Flow rate at xxx - xxxx psi		Volumenstrom bei 120 - 1.500 bar Flow rate at xxx - xxxx psi		Motorleistung Motor power		Spannungsvarianten Voltage versions	Maße (L1 x B1 x H1) Dimensions (L1 x B1 x H1)	Gewicht* Weight*	
		bar	psi	l/min	gal/min	l/min	gal/min	kW	hp			kg	lbs
TXE1eco	elektrisch + manuell electric +manual	1.500	21,756	3	0.8	0,35	0.09	1,1	1.48	230V 50/60Hz	380 x 630 x 360 mm	38	84
										110V 50/60Hz			
										400V 50H	15.0 x 24.8 x 14.2 in		

Repeat accuracy: ≤ 4%, depending on the bolted joint. Technical data without guarantee.

TXE1docu

THE HIGH-END SOLUTION FOR TENSION CYLINDERS

The TXE1docu has numerous additional features to ensure comprehensive documentation. The transfer of data to digital devices enables transparent recording of tensioning processes.

Automatic re-pumping in the event of a pressure drop makes this unit extremely user-friendly. The remote control with colour display allows users to keep an eye on important operating parameters at all times.



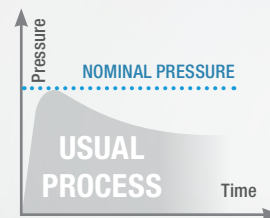
INDIVIDUAL

Fast and reliable work thanks to predefined bolting cases



HIGH TECH

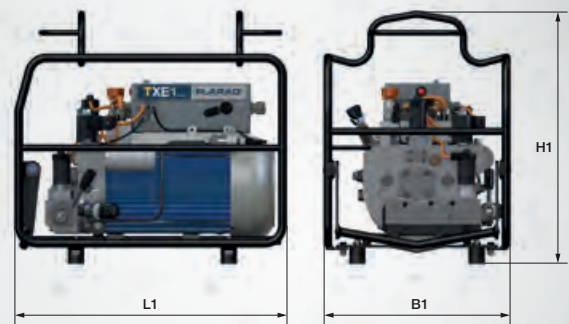
Automatic re-pumping ensures safe and qualitative connections



Hydraulic power packs
without tensioner mode



Plarad power packs
with tensioner mode



MODELS // DATA

Typ Type	Betriebsart Operation mode	max. Betriebsdruck Pressure max.		max. Durchfluss flow max.		Motorleistung Motor power		Maße (L1 x B1 x H1) Dimensions (L1 x B1 x H1)	Gewicht* Weight*	
		bar	psi	l/min	gal/min	kW	hp		kg	lbs
TXE1docu 10	Automatik automatic	1.500	21,756	0,8	0.21	0,8	1.07	450 x 317 x 366 mm 17.7 x 12.5 x 14.4 in	38	84
TXE1docu 30	Automatik automatic	1.500	21,756	1,0	0.26	2,2	2.95	500 x 343 x 465 mm 19.7 x 13.5 x 18.3 in	41	90

Repeat accuracy: ≤ 4%, depending on the bolted joint. Technical data without guarantee.

MAXIMUM POWER IN SMALL SPACES



50

Hydraulic tensioners // **PSE / PSD / PST / PSQ**



LINK TO THE
POWER PACKS



LINK TO THE
TENSIONERS

TENSIONERS

POSSIBLE COMBINATIONS AT A GLANCE



PSE



PSD



PST



PSQ



TXP1 ECO

The pneumatic hydraulic pump for tensioners

The pneumatic hydraulic pump TXP1eco is ideal for simple tensioning applications

Robust and easy to use, up to 21,756 psi



Tensioner mode



TXE1 ECO

The robust and reliable basic pump

The power pack is equipped with a powerful electric motor and can also be connected to large tension cylinders thanks to the 1.85 gal oil tank

Perfect for applications where no documentation is required



Test mode



Torque mode



Tensioner mode



TXE1 DOCU

The smart upgrade to the *docu* version: ready for comprehensive documentation on digital devices

Automatic re-pumping in case of a pressure drop makes this unit extremely effective. The remote control with colour display shows important operating parameters



Documentation



Test mode



Torque mode



Tensioner mode

TENSIONERS

1-STAGED

PSE

BOLT TENSIONING IN SMALL SPACES

Thanks to its flat design, the PSE single-stage hydraulic tension cylinder offers a distinct advantage, particularly in tight, axially confined spaces. The knurled attachment included in the scope of delivery also ensures that the tensioner can be turned open in the case of excessively long bolt protrusions.

The PSE also has all the relevant features of the PSD (see sectional model, next page).



1

CYCLE COUNTER

Prevention of damage and failures through preventive maintenance

2

FLEXIBLE

Knurled attachment for long bolt protrusions

3

HANDLING

Support bridge 360° turnable

4

PERFECT FIT

Optimized support surface for tight spaces

5

ERGONOMIC

Quick and easy screw-on of the nut via toothed drive guaranteed

TENSIONERS

2-STAGED

3-STAGED

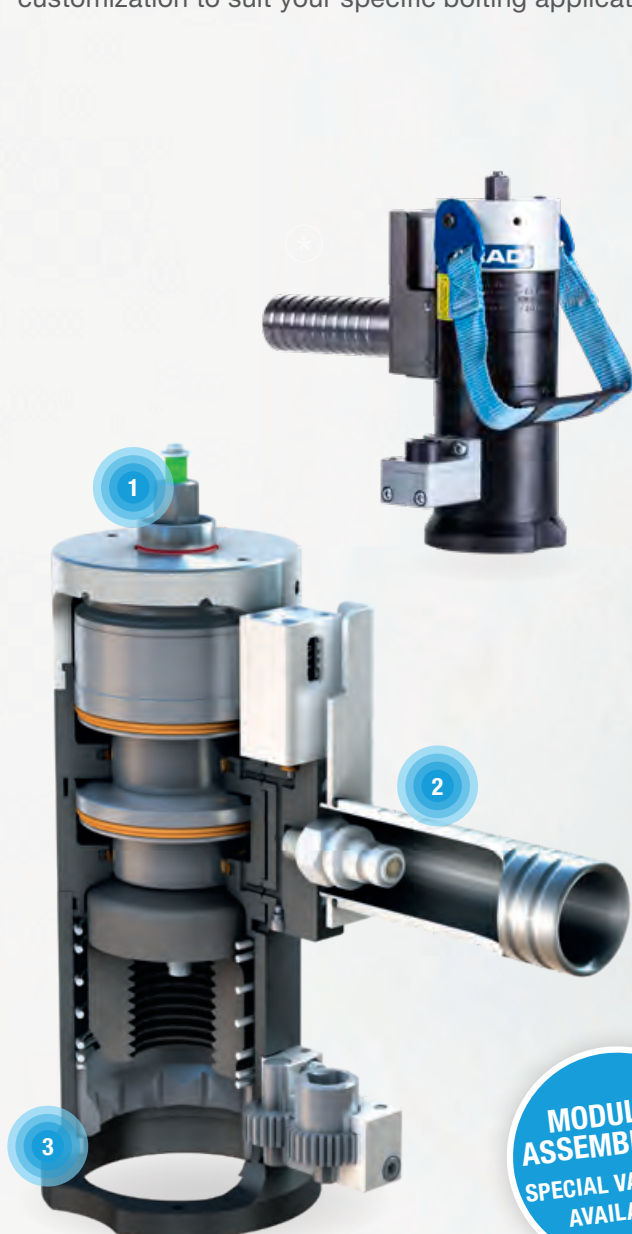
4-STAGED

PSD / PST / PSQ

QUICK, SAFE, EASY TO OPERATE

Thanks to their multi-stage design, the tension cylinders provide the required tensile forces with a minimal diameter. They are ideal for use in confined lateral installation spaces.

The preload force can be precisely adjusted, and the modular design allows for optimal customization to suit your specific bolting application.



1

SECURITY INDICATOR

GREEN: A sufficient bolt insertion depth has been reached

RED: Maximum stroke of the draw bolt has been completed

2

ERGONOMIC

The removable handle provides optimum grip and protects the hose connections from damage

3

FLEXIBLE

Optimum handling: easy alignment thanks to the turnable support, regardless of the bolt arrangement

+ EFFECTIVENESS

- ▶ Easy to operate with the toothed drive:
Ensures simple and fast nut tightening using a ratchet or torque wrench



+ PROCESS RELIABILITY

- ▶ Mechanical stroke limiter for enhanced safety:
The end stop restricts piston lifting for maximum protection



+ HIGH TECH

- ▶ Prevention of assembly damage when fitting the tension cylinder: The rotating sleeve is axially flexible with spring support
- ▶ Automatic piston return moves the tension bolt quickly to the starting position after pressure relief

+ ERGONOMIC

- ▶ 'Fail safe system':
Maximum safety through stroke limitation
- ▶ Visual indicator for the end stop
- ▶ Detachable handle and carrying strap for maximum comfort and safety



+ PERFORMANCE

- ▶ Suitable for parallel and series-connected tension cylinders
- ▶ Fast operation thanks to automatic piston reset
- ▶ Tensioning forces of up to 674.43 klb with the smallest dimension

+ UPGRADE

- ▶ Suitable for documenting the preload force when used in combination with Plarad hydraulic pumps
- ▶ Additional rings ensure optimum adaptation to different bolt lengths



MODELS // DATA

MODULAR
ASSEMBLY KIT
SPECIAL VARIANTS
AVAILABLE



PSE

Typ Type	Zugkraft max. Load max.		max. Betriebsdruck Pressure max.		Regelgewinde Bolt diameter		Hub Stroke		Betriebszyklen Operation cycles	H1		D1		D2		Gewicht* Weight*	
	kN	lbf	bar	psi	mm	inch	mm	inch		mm	inch	mm	inch	mm	inch	kg	lbs
PSE 20	212	47,659	1.500	21,756	20	0.79	8	0.31	8.000	100	3.94	64	2.52	48	1.89	2,1	4.63
PSE 24	305	68,567	1.500	21,756	24	0.94	8	0.31	8.000	95	3.74	80	3.15	72	2.83	3,2	7.05
PSE 30	482	108,358	1.500	21,756	30	1.18	10	0.39	8.000	79	3.11	98	3.86	74	2.91	5,1	11.24
PSE 33	573	128,816	1.500	21,756	33	1.30	8	0.31	8.000	125	4.92	106	4.17	90	3.54	6,4	14.11
PSE 36	681	153,095	1.500	21,756	36	1.42	10	0.39	8.000	125	4.92	114	4.49	95	3.74	7,1	15.65
PSE 42	980	220,313	1.500	21,756	42	1.65	10	0.39	8.000	135	5.31	135	5.31	115	4.53	11,1	24.47
PSE 48	1.235	277,639	1.500	21,756	48	1.89	10	0.39	8.000	144	5.67	152	5.98	130	5.12	15	33.07
PSE 52	1.458	327,771	1.500	21,756	52	2.05	10	0.39	8.000	151	5.94	163	6.42	137	5.39	17,6	38.80
PSE 56	1.676	376,780	1.500	21,756	56	2.20	10	0.39	8.000	159	6.26	175	6.89	147	5.79	21,0	46.30
PSE 64	2.259	507,843	1.500	21,756	64	2.52	10	0.39	8.000	197	7.76	205	8.07	170	6.69	27,8	61.29
PSE 72	2.960	665,434	1.500	21,756	72	2.83	10	0.39	8.000	208	8.19	245	9.65	180	7.09	42,5	93.70

PSD // PST // PSQ

Typ Type	Zugkraft max. Load max.		max. Betriebsdruck Pressure max.		Regelgewinde Bolt diameter		Hub Stroke		Betriebszyklen Operation cycles	H1		D1		D2		Gewicht* Weight*	
	kN	lbf	bar	psi	mm	inch	mm	inch		mm	inch	mm	inch	mm	inch	kg	lbs
PSD 20	220	49,458	1.350	19,580	20	0.79	8	0.31	4.500	162	6.4	51	2.01	48	1.89	3,2	7.1
PSD 24	313	70,365	1.350	19,580	24	0.94	8	0.31	4.500	196	7.7	58	2.28	55	2.17	4,8	10.6
PSD 27	397	89,249	1.370	19,870	27	1.06	8	0.31	4.500	218	8.6	66	2.60	65	2.56	5,7	12.6
PSD 30	471	105,885	1.500	21,756	30	1.18	8	0.31	4.500	196	7.7	71	2.80	70	2.76	5,7	12.6
PSD 33	581	130,614	1.500	21,756	33	1.30	10	0.39	4.500	215	8.5	79	3.11	80	3.15	7,2	15.9
PSD 36	678	152,420	1.500	21,756	36	1.42	10	0.39	4.500	228	9.0	83	3.27	83	3.27	8,1	17.9
PSD 39	808	181,646	1.500	21,756	39	1.54	10	0.39	4.500	250	9.8	92	3.62	92	3.62	10,4	22.9
PSD 42	937	210,646	1.500	21,756	42	1.65	10	0.39	4.500	263	10.4	98	3.86	98	3.86	12,3	27.1
PSD 45	1089	244,817	1.500	21,756	45	1.77	10	0.39	4.500	256	10.1	106	4.17	100	3.94	14,0	30.9
PSD 48	1278	287,306	1.500	21,756	48	1.89	10	0.39	4.500	269	10.6	112	4.41	112	4.41	16,0	35.3
PSD 52	1476	331,818	1.500	21,756	52	2.05	10	0.39	4.500	293	11.5	120	4.72	120	4.72	19,6	43.2
PSD 56	1695	381,051	1.500	21,756	56	2.20	10	0.39	4.500	300	11.8	130	5.12	130	5.12	23,4	51.6
PSD 60	1959	440,401	1.500	21,756	60	2.36	10	0.39	4.500	343	13.5	140	5.51	140	5.51	30,0	66.1
PSD 64	2233	501,998	1.500	21,756	64	2.52	10	0.39	4.500	350	13.8	146	5.75	146	5.75	32,7	72.1
PSD 68	2825	635,085	1.500	21,756	68	2.68	10	0.39	4.500	424	16.7	167	6.57	167	6.57	52,6	116.0
PSD 72	2825	635,085	1.500	21,756	72	2.83	10	0.39	4.500	424	16.7	167	6.57	167	6.57	53,6	118.2
PSD 80	3587	806,390	1.500	21,756	80	3.15	10	0.39	4.500	457	18.0	188	7.40	180	7.09	71,4	157.4
PSD 90	4524	1,017,036	1.500	21,756	90	3.54	10	0.39	4.500	486	19.1	225	8.86	200	7.87	106,7	235.2
PST 48	1404	315,632	1.400	20,306	48	1.89	10	0.39	4.500	380	15.0	112	4.41	112	4.41	23,6	52.0
PST 56	1673	376,105	1.400	20,306	56	2.20	10	0.39	4.500	394	15.5	120	4.72	130	5.12	28,8	63.5
PST 64	2239	503,347	1.500	21,756	64	2.52	10	0.39	4.500	418	16.5	130	5.12	134	5.28	36,8	81.1
PSQ 36	748	168,157	1.400	20,306	36	1.42	10	0.39	4.500	315	12.4	77	3.03	75	2.95	10,3	22.7
PSQ 42	1090	245,042	1.400	20,306	42	1.65	10	0.39	4.500	343	13.5	91	3.58	85	3.35	14,6	32.2
PSQ 48	1450	325,973	1.400	20,306	48	1.89	10	0.39	4.500	372	14.6	105	4.13	98	3.86	20,7	45.6
PSQ 56	1959	440,401	1.400	20,306	56	2.20	10	0.39	4.500	428	16.9	123	4.84	110	4.33	31,5	69.4
PSQ 64	2705	608,108	1.400	20,306	64	2.52	10	0.39	4.500	471	18.5	141	5.55	126	4.96	44,6	98.3

Repeat accuracy: ≤ 4%, depending on the bolted joint. Technical data without guarantee.



PRODUCT LINK

XVK & XVR

QUICK AND EASY FASTENING WITH BACKSPIN PROTECTION

Our manual torque multipliers give you the freedom to work anywhere without having to rely on a power or compressed air supply. Whether in remote areas, on construction sites or in workshops - devices from the XVR/XVK series work anytime, anywhere.



1

PROCESS RELIABILITY

Selector lever between clockwise and anti-clockwise rotation

2

SECURITY

Overload protection due to easily replaceable shear pin

3

FLEXIBLE

Height-adjustable reaction arm for optimum use

FEATURES

- ▶ Power ranges from 145 to 7,450 ft-lbs
- ▶ Small dimensions
- ▶ Low weight
- ▶ Low maintenance and durable
- ▶ Suitable for all industrial requirements
- ▶ Replaces temporary solutions such as pipe extensions and impact spanners

+ COST EFFICIENCY

Our manual torque multipliers not only guarantee reliable performance, but are also easy on your wallet. With our solution, you not only save time and resources, but also money – without compromising on quality.



+ PERFORMANCE

With our bolting technology, you can easily achieve high torques to master even the most demanding bolted joints.

With an output torque of up to 7,450 ft lbs, no tightening task is too tough, and no loosening too challenging

+ FLEXIBILITY

In situations where power or compressed air supply is unreliable or unavailable, a hand-operated tool provides a dependable solution. This is especially crucial in emergencies or areas with limited infrastructure



SUITABLE
TORQUE
SPANNERS AS
ACCESSORIES
PAGE 56

YOUR ADVANTAGES

MODELS // DATA

Typ Type	H1		D		Gewicht* Weight*		Max. Drehmoment Max. torque		Übersetzungs- verhältnis Ratio	Antriebs- vierkant Input square	Abtriebs- vierkant Output square
	mm	inch	mm	inch	kg	lbs	Nm	ft-lbs			
XVK 15**	172	6.77	81	3.19	2,6	5.7	1.700	1,254	01:04	¾"	1"
XVR 25	302	11.89	81	3.19	5,2	11.5	2.300	1,696	01:07	¾"	1"
XVR 35	273	10.75	81	3.19	5,0	11.0	3.600	2,655	01:10	¾"	1"
XVR 40	238	9.37	95	3.74	6,1	13.4	4.000	2,950	01:11	¾"	1 ½"
XVR 65	244	9.61	114	4.49	8,4	18.5	6.200	4,573	01:15	¾"	1 ½"
XVR 70	302	11.89	128	5.04	11,4	25.1	6.800	5,016	01:17	¾"	1 ½"
XVR 90	300	11.81	172	6.77	21,8	48.1	8.600	6,343	01:32	¾"	1 ½"
XVR D45 Stage 1 Stage 2	310	12.20	128	5.04	16,0	35.3	4.700 10.100	3,466 7,450	01:13,5 01:22	½" SW41	1 ½" 1 ½"

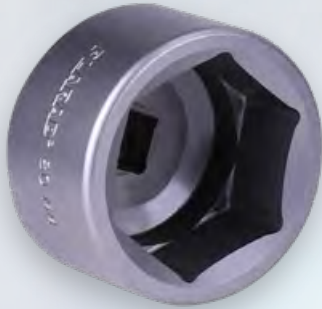


Repeat accuracy: ≤ 4%, depending on the bolted joint. Technical data without guarantee. *Specification with reaction arm

** Model XVK without backspin protection

ACCESSORIES

FOR PLARAD PRODUCTS



SIX POINT SOCKETS

Our slip-on sockets offer a practical solution for fast and efficient fastening in various sizes.

With their versatile range of applications and ease of use, they are an indispensable tool and perfectly complement our wide selection of torque tools. Our socket spanners are compatible with all square-head wrenches.



PRODUKT LINK



TORQUE SPANNER

Our torque spanners are reliable tools for the controlled tightening of nuts and bolts.

They are fully compatible with all manual torque wrenches, meeting your needs for both ergonomics and process reliability..



PRODUKT LINK



BACK UP WRENCH

Our back up wrenches help to ensure safe and effective tightening or loosening of bolts, especially in hard-to-reach places.

The back up wrench is typically used to prevent the bolt head or nut from turning while tightening with high torque.



PRODUKT LINK

EXPAND YOUR OPTIONS



HANDLE

Our in-house developed handles are extremely beneficial for heavy tools as they equalise the weight and reduce the strain on the user.

By keeping a constant balance, they enable effortless handling and increase safety, especially during long work sessions, by preventing fatigue.



PRODUKT LINK



CASE / TROLLEY

Our tool trolley allows you to transport your torque wrench quickly and effortlessly, ergonomically and without straining your back.

You always have quick and easy access to your tool and accessories.



PRODUKT LINK



DIGITAL SOLUTIONS

With our digital solutions, we are revolutionizing torque-accurate fastening in three stages.

The basic level saves costs and time by connecting torque wrenches to smart devices via a Wi-Fi chip and innovative documentation software.

The second level enables precise documentation and control of the bolting process via a local network.

The third level allows users to manage their tool inventory web-based and from anywhere.



LINK TO THE
DIGITISATION

PLARAD SERVICE

RELY ON OVER
60 YEARS
OF EXPERIENCE



REPAIR AND CALIBRATION SERVICE

Despite the highest quality, our products may eventually require repair. To ensure swift service, our experts are always on hand.

We recommend having your bolting devices and accessories inspected at regular intervals.

Devices serviced by us are provided with a new factory test certificate, ensuring that quality is thoroughly documented.



PLARAD ACADEMY

Acquire and deepen your knowledge in handling and maintaining our tools. We will train you in the use of our tools and turn you into a bolting specialist.

USER TRAINING

Teaching the basics of physics, different tightening methods, documentation of your bolting applications and safety-related topics.

SERVICE TRAINING

Avoid defects or total failure of your bolting tools through preventive maintenance.



SERVICE FORM
LINK



RENTAL SERVICE

Need a tool fast? Or have a bolting job that doesn't justify purchasing a new product? No problem!

Plarad provides the perfect solution for every bolting need with its wide range of rental options.

ADVANTAGES

- ▶ Almost 2,000 tools in the well-known Plarad quality always in stock
- ▶ Fast and easy to hire
- ▶ Individual contract agreements
- ▶ Easy rent equipment accessories
- ▶ Hire purchase option
- ▶ 24-hour ordering service



ON-SITE SERVICE

With our service vehicle, we also offer our service directly at your premises and on the construction site. Our qualified employees calibrate and certify your tools within the shortest possible time and at your desired date.

Our air-conditioned vehicle guarantees optimal test conditions with a constant temperature of 20°C and a humidity of 50 - 60%.

ADVANTAGES

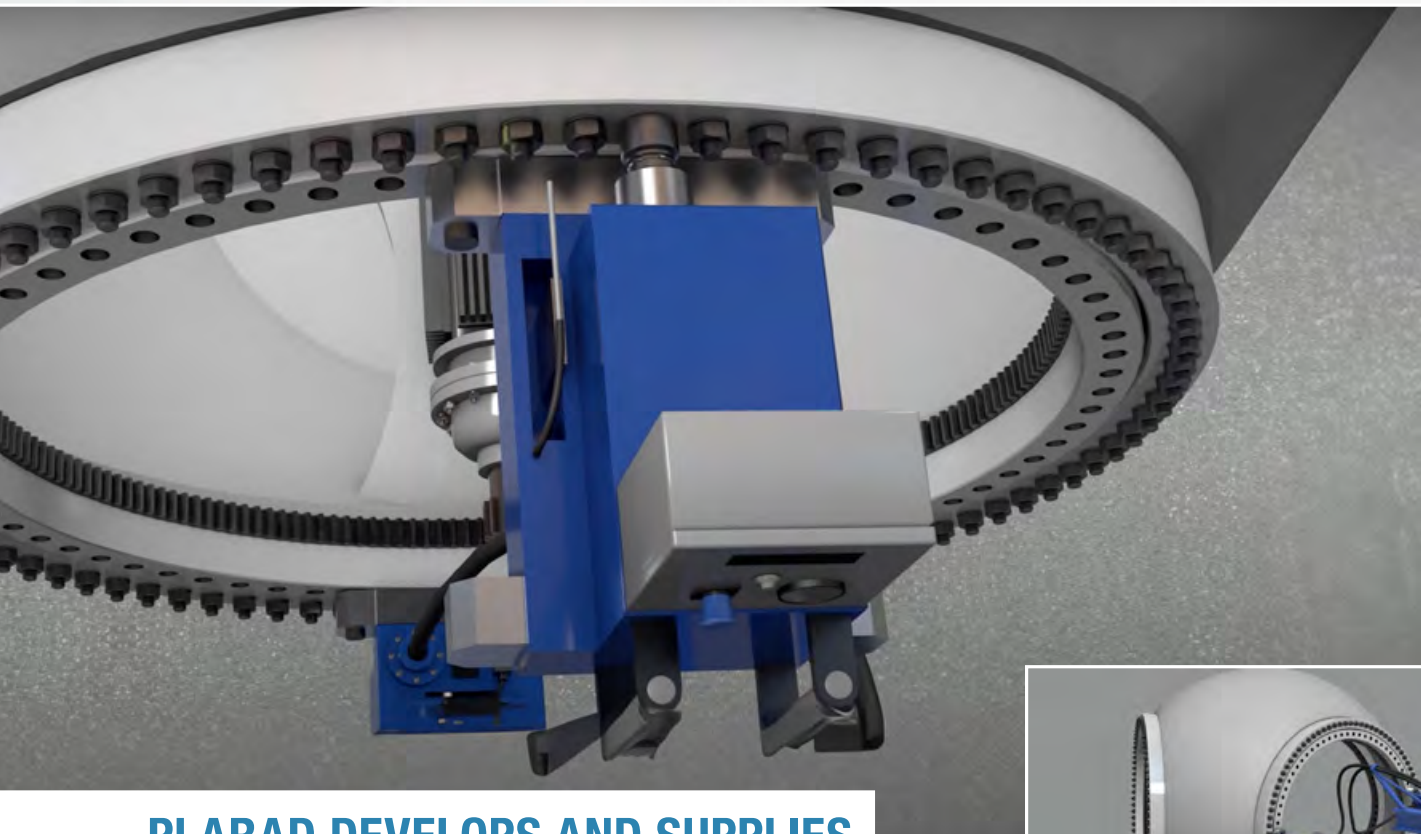
- ▶ Torque measurements up to 14,750 ft lbs under test bench conditions in a fully air-conditioned vehicle with test laboratory
- ▶ Creation of certificates for torque tools directly on-site
- ▶ Certification of hydraulic power packs (manometer calibration)
- ▶ DGV V3 testing for electrical devices
- ▶ Certification of manual torque spanners
- ▶ Europe-wide on-site service
- ▶ Preventive maintenance
- ▶ Available as an inspection and maintenance package at a fixed price



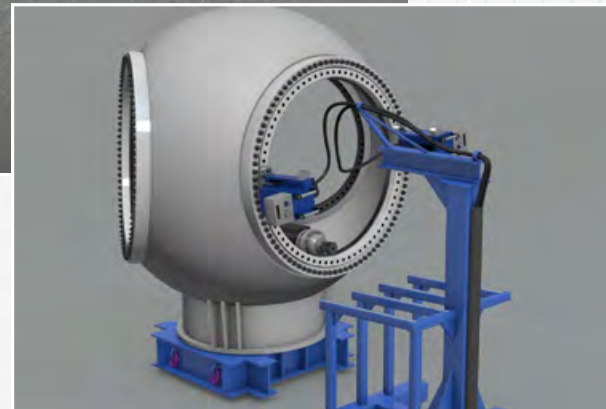
PLARAD®

**CONSULTATION
FREE OF CHARGE
&
NON-BINDING**

BESPOKE ROBOTIC BOLTING PLANT MACHINERY



**PLARAD DEVELOPS AND SUPPLIES
CUSTOMISED BOLTING SYSTEMS
FOR TORQUES FROM 370 FT LBS.**



The range of services extends from supplementary auxiliary devices for our series products to fully automated bolting systems.



AORDER PLACEDT



BEFORE PLACING THE ORDER

- ▶ Individual personal project-related coordination with the client
- ▶ Creation of the project brief: The project brief consolidates all relevant information from emails, telephone calls, notes, and more.
- ▶ Development of a specification list with the client
- ▶ Based on the requirements specification and project outline, a functional specification is created that outlines in detail how the requirements will be met
- ▶ Concept development and coordination with the client, taking into account the client's technical and economic ideas
- ▶ Concept presentation and discussion with the client
- ▶ Quotation based on the concept



PROJECT PROCESS

- ▶ MILESTONE 1: Mechanical engineering
- ▶ MILESTONE 2: Control concept, control cabinet, electrical planning, packaging
- ▶ MILESTONE 3: User interface, ergonomics, operating concept

Plarad, in collaboration with Broetje Automation, has developed a mobile platform featuring a Comau NJ-165-3.0 robot arm and the Plarad end effector.



The system can handle loads of up to 365 lb, providing omni directional movement at speeds of up to 1.4 m/s, and is autonomously controlled using laser scanners. Devices such as tension cylinders or torque wrenches can be easily attached to the end effector. Its modular design enhances automation processes and drives innovation.

PLARAD®

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