

A close-up, slightly blurred photograph of a hydraulic power pack. In the upper left, a pressure gauge with a white face and black markings is visible, showing a needle pointing around 200. Below it, a white plastic component is partially visible. To the right, a black cylindrical component with a red cap is prominent. In the foreground, another red cap is visible on a metal fitting. The background is dark and out of focus.

# Hydraulic Power Packs

**PLARAD**

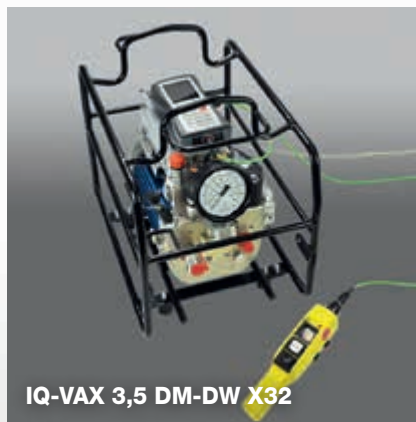
# Hydraulic Power Packs

## for every bolting situation

Our robust and long-lived hydraulic power packs are distinguished by a constant volume of oil (litres) up to the final pressure of 800 bar and have proven their mettle in heavy continuous use. From light-weight standard versions via microprocessor-controlled, fully automatic designs through to special power packs – Plarad has the correct power pack for every need, electric or pneumatic drive.



**IQ-VAX 2 WZ X32**



**IQ-VAX 3,5 DM-DW X32**



**IQ-VAX 2 Z-X32 110V**



**XB 1**



**XB 2 Z**



**XB 2**



**X2 P-Z**



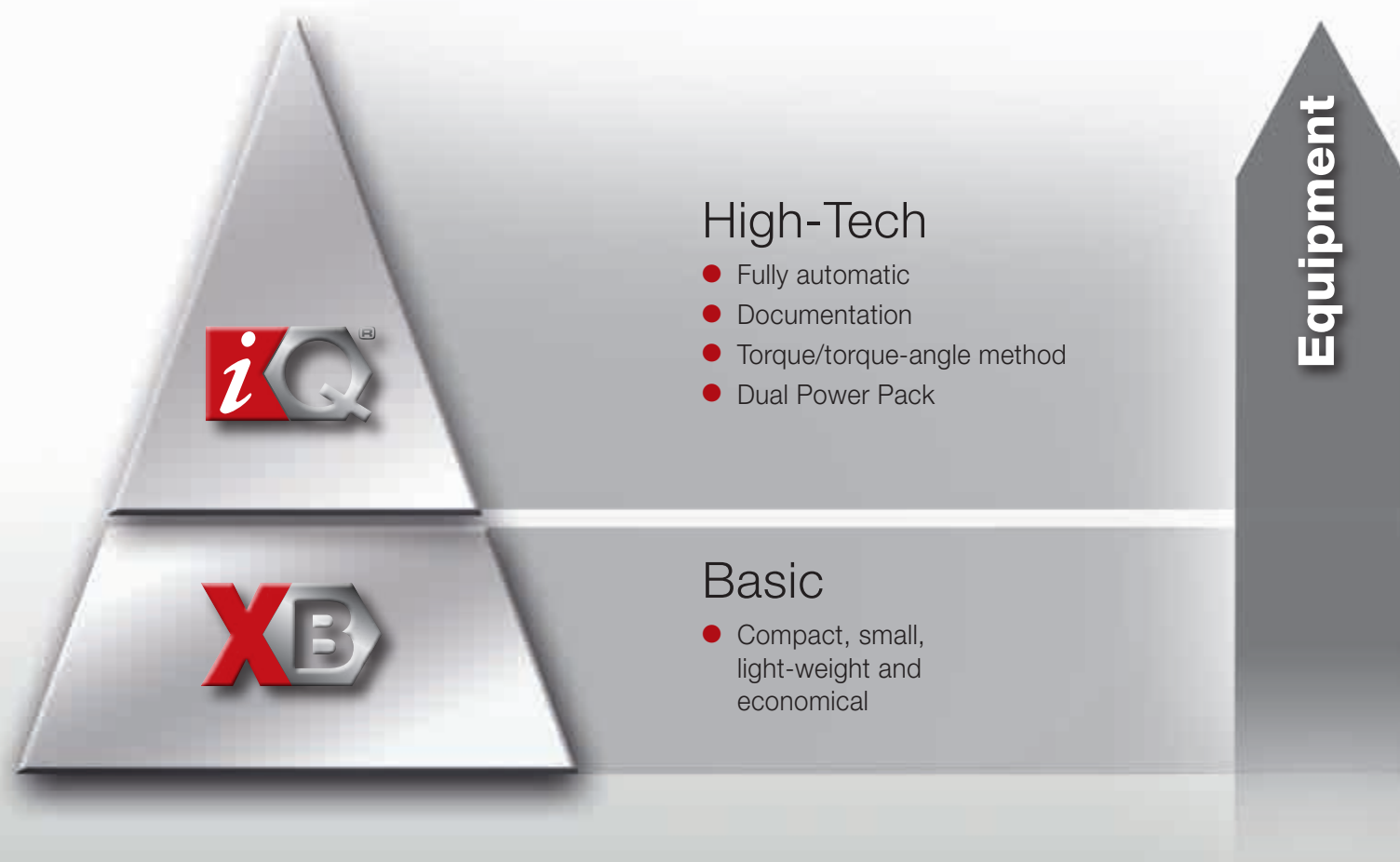
**TAX**



**IQ VAX 2 WZ Dual**

# Power Pack Overview

## electric



### Fast

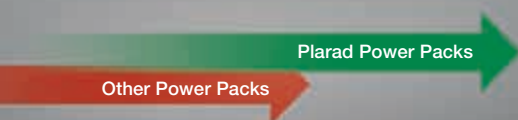
- More bolts can be tightened in the same amount of time: Plarad products are up to 3 times faster than other products.

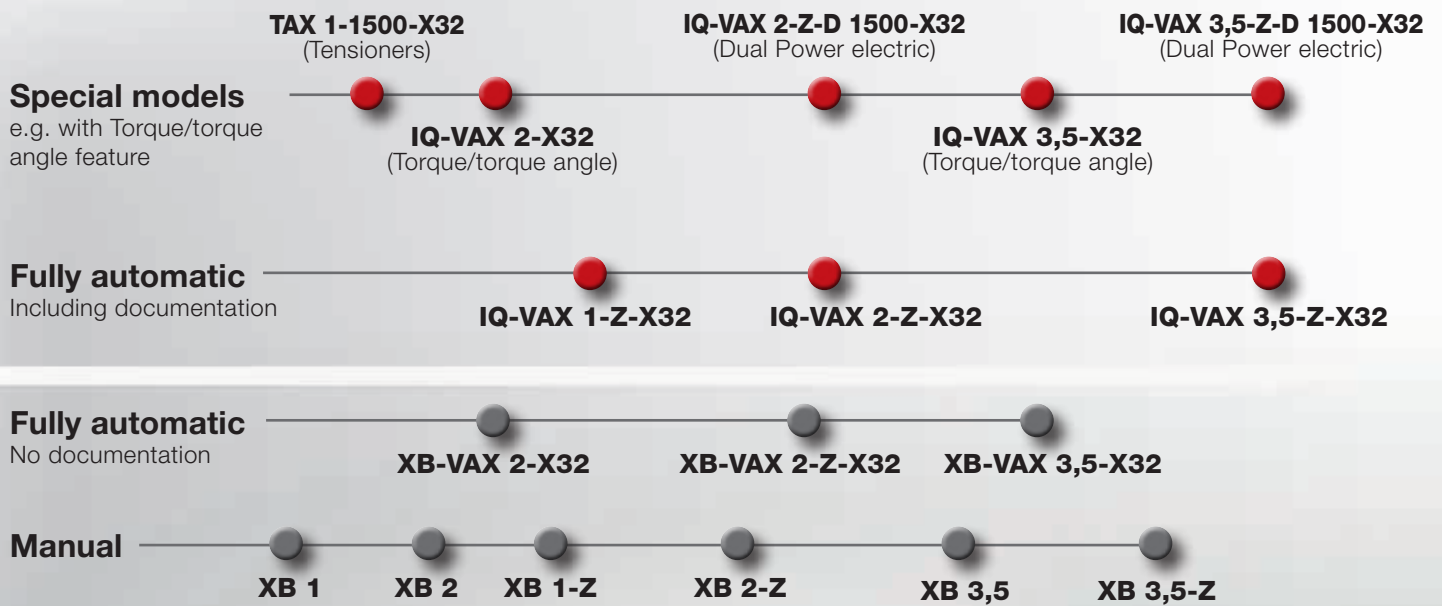
### Reliable

- Accurate, safe results as the application is controlled and monitored completely automatically by an internal microprocessor.

### Safe

- The Plarad documentation system makes it possible to record and illustrate the results of every bolted joint. For this reason the documentation is very useful in the field of product liability.





## Fast operation

### Lightweight

- Optimal power to weight ratio. The oil-filled electrical motor technology guarantees optimum weight and maximum output.



### Can be operated almost continuously

- The power packs do not over heat thanks to their special oil-filled motor design. The oil tank is part of the motor itself and no other tank is necessary. The motor, the pump unit and the oil are all cooled at the same time.



### It runs and runs and runs!

- Innovative, patented technologies and design features, plus the use of high-quality materials ensure the pump has an extremely long lifespan.





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# **iQ** Power Packs

high-tech models



Our rugged and durable power packs are characterised by the constant volume they output right up to their pressure limits, and have proved themselves through their long life in the toughest applications. The oil-filled motor prevents overheating. The design also ensures optimum performance to weight ratio.

## **IQ-VAX**

- Fully automatic for accurate, reliable bolting joints
- Documentation
- Instrumentation and control systems
- Torque-angle method

Fully automatic VAX technology keeps users perfectly safe

Power Pack	Flow rate	Weight *
<b>IQ-VAX 3,5-X32</b>	3.5 l/min	35 kg
<b>IQ-VAX 1-Z-X32</b>	5.3 / 0.75 l/min	26 kg
<b>IQ-VAX 2-Z-X32</b>	8.0 / 1.2 l/min	32 kg
<b>IQ-VAX 3,5-Z-X32</b>	13.2 / 3.0 l/min	36 kg

Extracts of the specifications.

\* ready for use

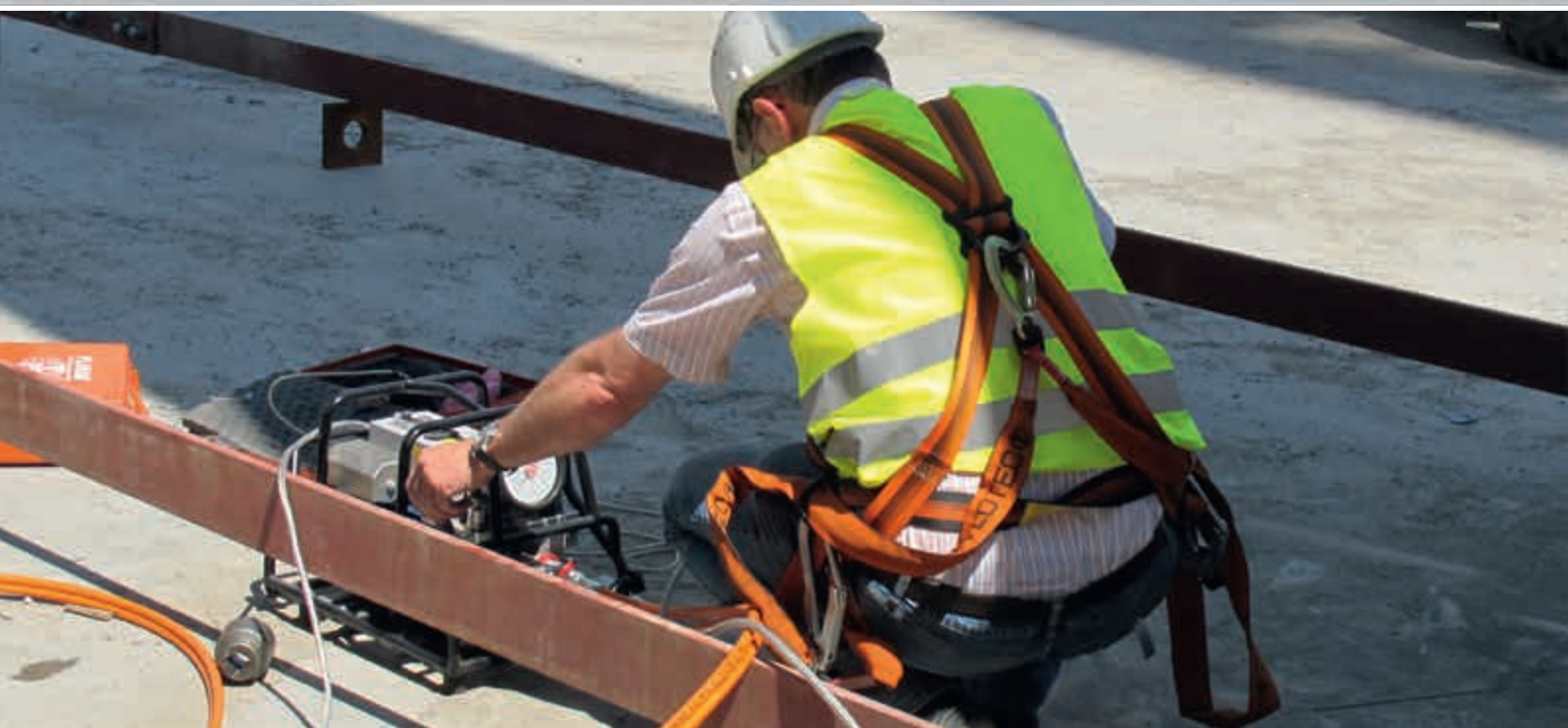


Each individual Bolting case (tightening – loosening) is controlled via the pumps microprocessor control unit utilising different processes

Rugged cage which protects the unit, even on building sites

Pressure indication displayed, assessment of the bolting case via a status indicators

Low noise while operating



## VAX – Genuine full automation function

- Straight to work at the touch of a button: the VAX Automatic controls and finishes the bolted joint automatically and accurately, even when handling multiple bolts, as well as indicating progress to the operator via the remote-control.
- Pressure is taken off the operator, hence errors are eliminated.



## Documentation

- The Plarad “Documentation” add-on saves all torque or torque angles conducted into the control unit.
- Once uploaded to a computer, the bolting data can be used for traceability purposes on each bolt joint.

## Multiple bolting technologies

- The Torque-Angle function, for example, means that differing friction coefficients of bolts no longer play a role. The required tightening torque will always be achieved.

## Synchronised operation

- Synchronised operation using two or more units (MX-EC or FSX).
- The automatic function ensures that synchronised bolted joints are handled quickly and reliably, ensuring an optimal seal.

## Optional accessories



There is an extensive range of accessories, e.g. auxiliary oil tanks, to extend the unit's range of applications



Hydraulic couplings – adaptors and hoses are available in many sizes etc.



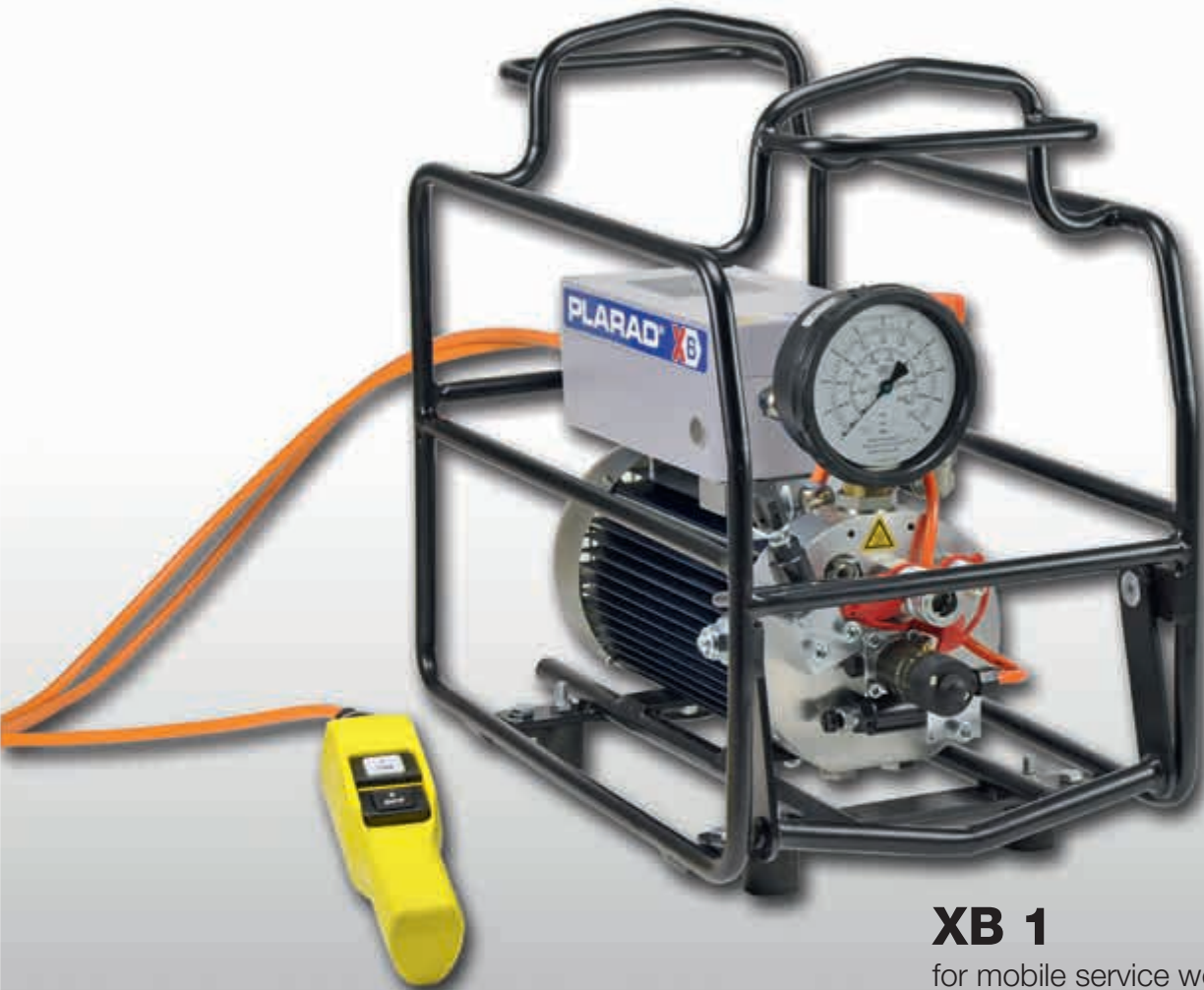
Optimal storage in a professional Plarad storage trolley



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# **XB** Power Packs

setting high standards



## **XB 1**

for mobile service work

- **XB 1**

The lightweight design of the XB 1 makes this power pack ideal for mobile service applications.

- **XB 2**

The all-rounder in the XB range is the XB 2, famous for its high speed.

- **XB 3,5**

As the quickest power pack the XB 3,5 is a powerful package particularly suitable for complex bolting jobs.

## XB 2

for universal use

Guide to wind  
the cables around

Rugged industrial  
cage for tough  
environments

The Main Valve is  
within a protected  
non exposed area  
on the pump

Outward-facing oil filters (on XB 1 and  
XB 3,5) and maintenance friendly  
design, for easier maintenance

Improved valve  
technology

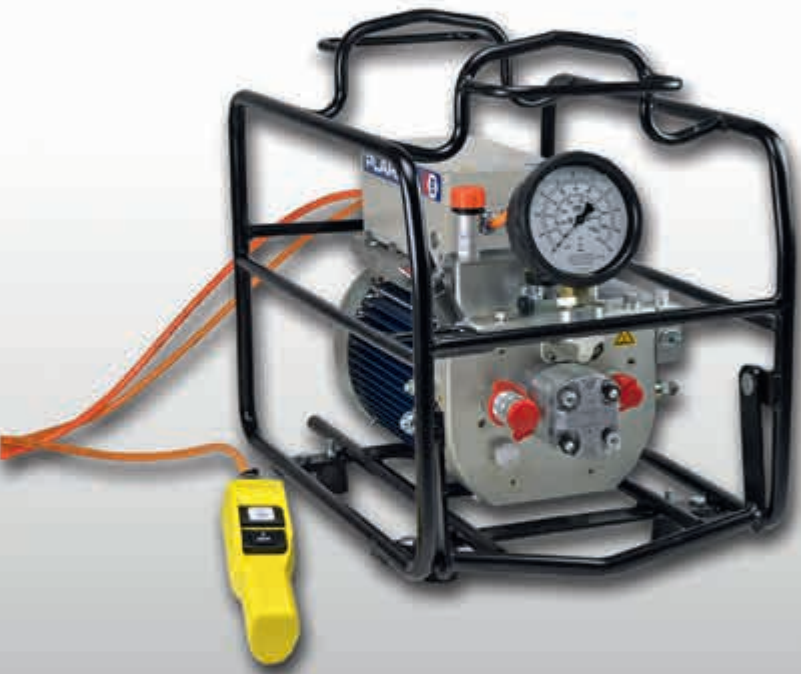
One or more hydraulic  
tools can be used  
with one or twin hose  
technology



Power Pack	Flow rate	Weight*
<b>XB 1</b>	0.8 l/min	20 kg
<b>XB 2</b>	1.2 l/min	29 kg
<b>XB 3,5</b>	3.5 l/min	33 kg
<b>XB 1-Z</b>	5.4 / 0.8 l/min	24 kg
<b>XB 2-Z</b>	8.0 / 1.2 l/min	31 kg
<b>XB 3,5-Z</b>	13.2 / 3.0 l/min	35 kg
<b>XB-VAX 2</b>	1.2 l/min	32 kg
<b>XB-VAX 2-Z X32</b>	8.0 / 1.2 l/min	32 kg
<b>XB-VAX 3,5</b>	3.5 l/min	35 kg

Extract from technical data (values apply to 230 V/50 Hz or 400 V/50 Hz versions. (Other voltages are available), e.g. 110 V.

\* ready for use



## **XB 3,5**

for use in manufacturing plants





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# TAX the pump for tensioners

Guide to wind the cables around



Power Pack	Flow rate	Weight*
<b>TAX 1-1500-X32</b>	0.4 l/min (1 500 bar)	31 kg
<b>TAX 3,5-1500-X32</b>	1.0 l/min (1 500 bar)	40 kg

Extracts of the specifications.

\* ready for use

- Dedicated pump specially for tensioning applications up to 1 500 bar (optional to 2 100 bar)
- Pressure indication in the display screen
- Compactly built with special principles being utilised to build up the pressure

# Dual Power



Hydraulic Torque Tools

Power Pack	Flow rate	Weight *
<b>IQ-VAX 2-Z-D 1500-X32</b>	8.0 / 1.2 l/min (at 800 bar) 8.0 / 0.4 l/min (at 1500 bar)	40 kg
<b>IQ-VAX 3,5-Z-D 1500-X32</b>	13.2 / 3.0 l/min (at 800 bar) 13.2 / 1.0 l/min (at 1500 bar)	42 kg

Extracts of the specifications.

\* ready for use

**800 bar**



The IQ Dual Power Pack can power both hydraulic torque tools and hydraulic tensioners.

**1 500 bars**

(optional up to 2 100 bars)



Tensioners

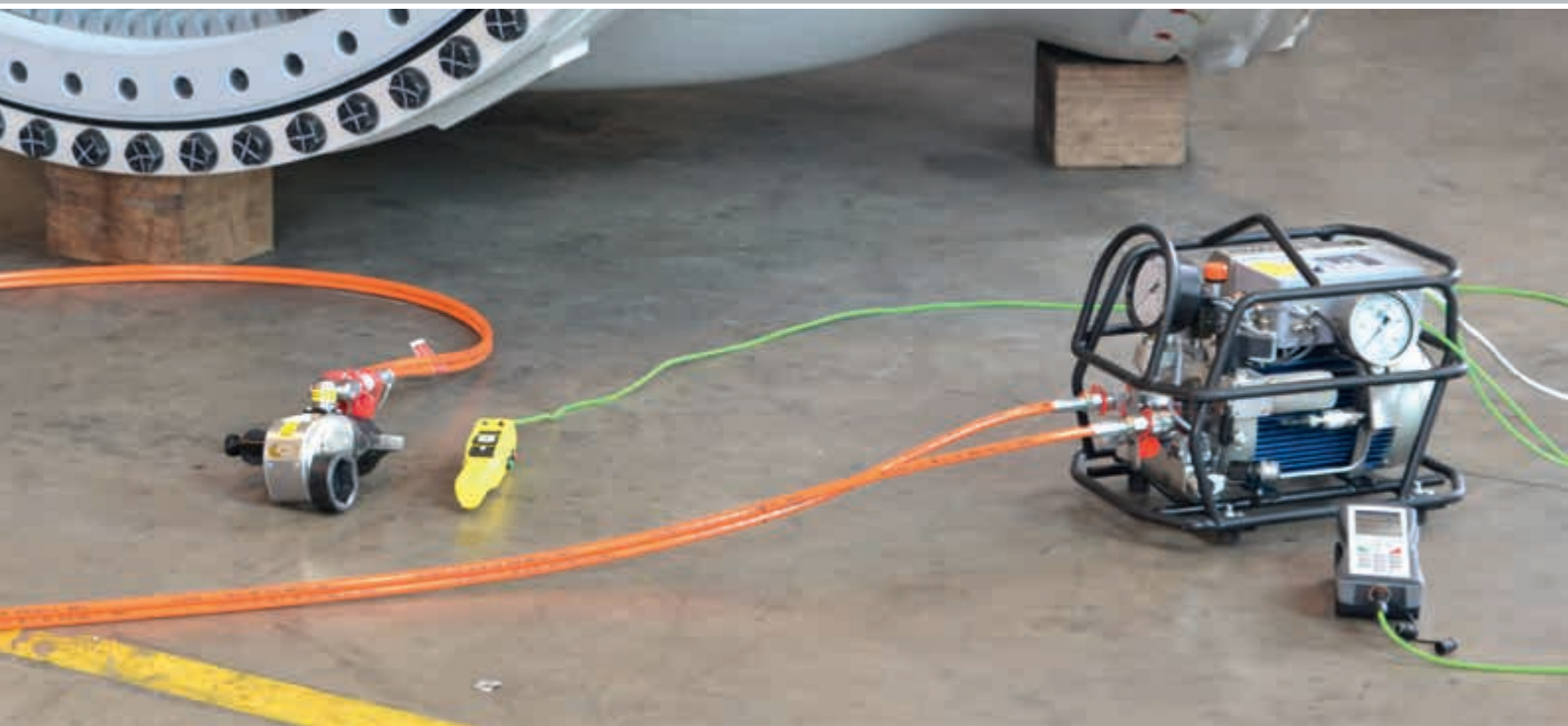
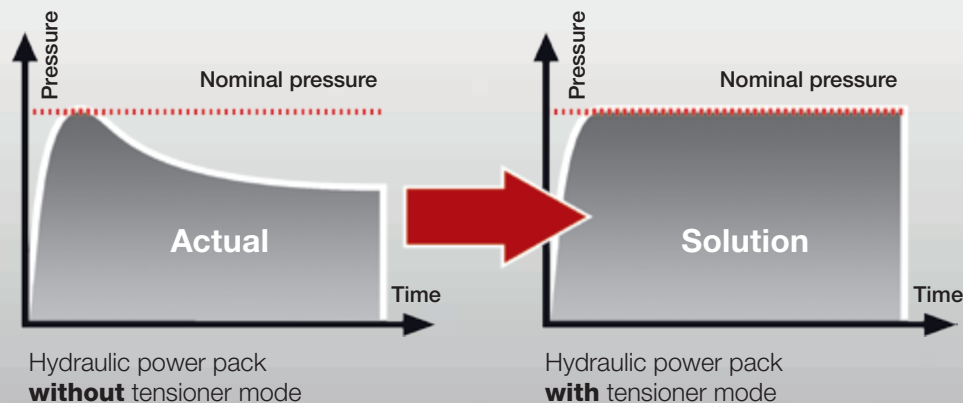
As well as a variety of bolting techniques and lifting processes in 800 bar mode, the Dual Power VAX unit can also be used for tensioning applications up to 1500 bars (optional up to 2100 bars). This universal hydraulic Power Pack saves you having to invest in additional high-pressure units.

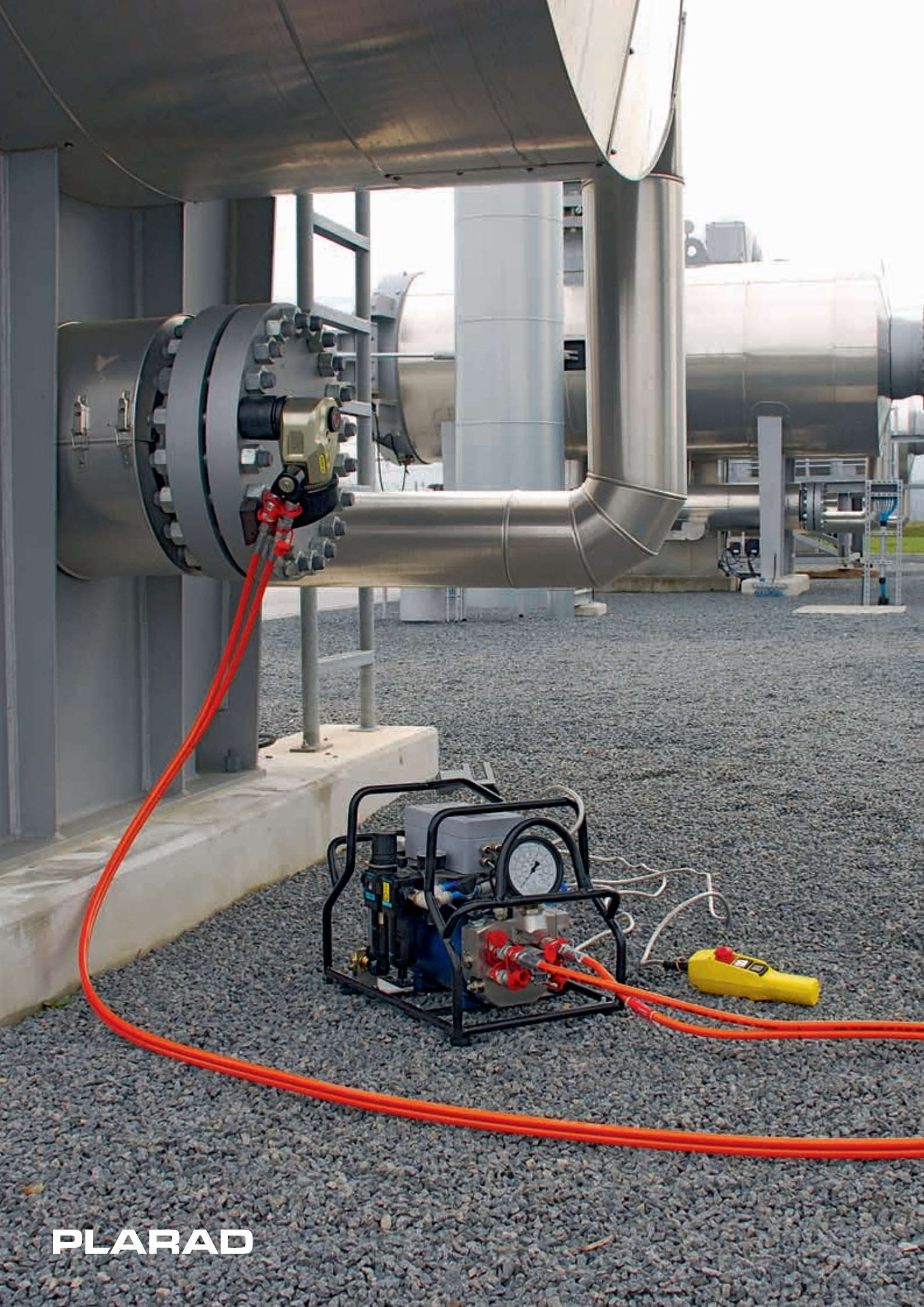
- 2-in-1, one less unit to buy
- Fully automatic pumping of hydraulic tensioners
- Automatic limit-stop
- Pumping performance accross the range
- User-friendly – a remote control with identical functions. Users can easily familiarise themselves with the operation of the units easily
- All of the upgrades and enhancements on conventional IQ Power Packs are also available for the Dual Power

## Controlled tensioning force in tensioner mode

When initially tensioning, there is a risk that oil pressure decreases due to the settling of the object during the actual stretching process or due to stretching of the attached hydraulic hoses.

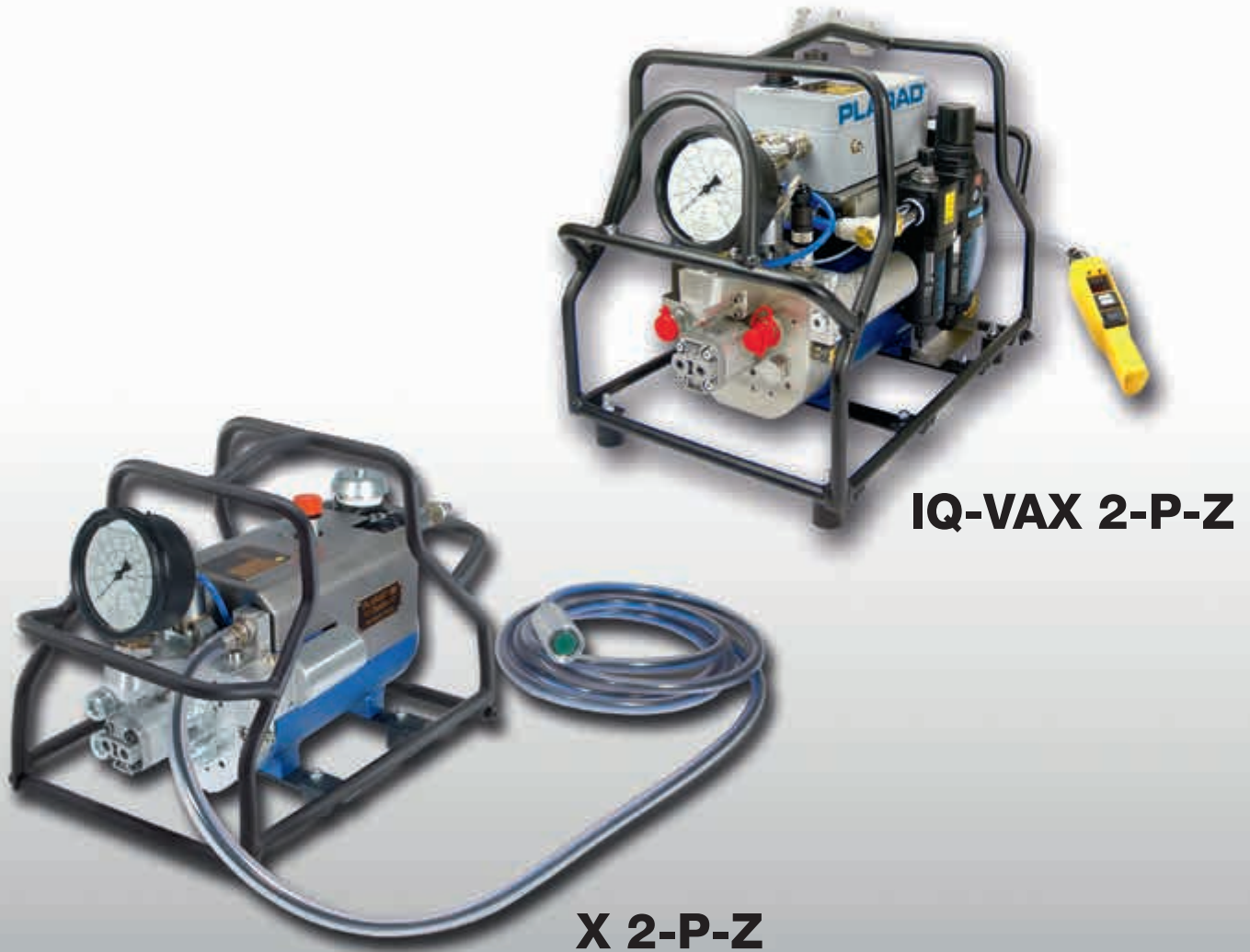
Plarad IQ Power Packs Tensioner mode monitors the pressure and pump as required, ensuring that the required tension is achieved.





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# Pneumatic Hydraulic Power Packs



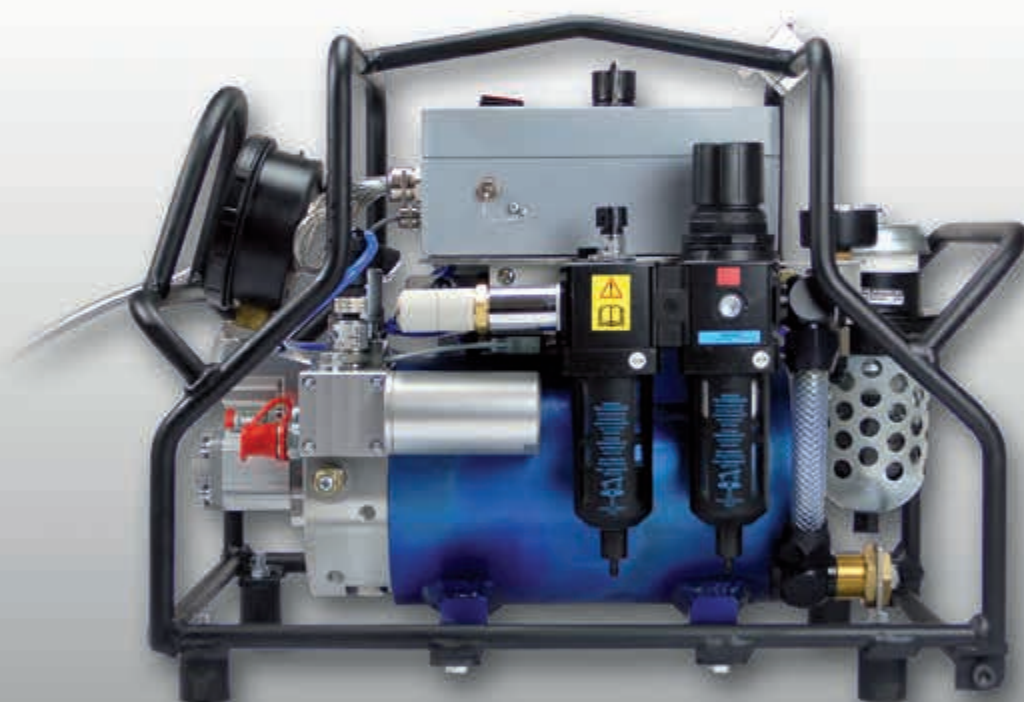
Just like our electrically powered hydraulic units, our pneumatic hydraulic power packs are characterised by their ruggedness, long life and their constant throughput right up to their pressure limits. The pneumatic motor is integrated into the oil tank, preventing seizure while simultaneously cooling the hydraulic fluid.

# IQ VAX

## pneumatic

Only from Plarad!

The first pneumatic VAX unit:  
The new, fully automatic pneumatic power pack uses the latest microprocessor technology. This eliminates user errors since operators simply start a fully automatic, controlled procedure at the push of a button. The machinery shuts off automatically when the required torque is achieved and informs the operator via the remote control.



**IQ-VAX 2-P-Z**



**For the full  
functionality of  
IQ technology**

Power Pack	Flow rate	Weight*
<b>X 1-P</b>	0.8 l/min	24 kg
<b>X 2-P</b>	1.6 l/min	31 kg
<b>X 2-P-Z</b>	7.0 / 1.6 l/min	31 kg
<b>X 2-P-Z ATEX</b>	7.0 / 1.6 l/min	32 kg
<b>IQ-VAX 2-P-Z</b>	7.0 / 1.6 l/min	35 kg

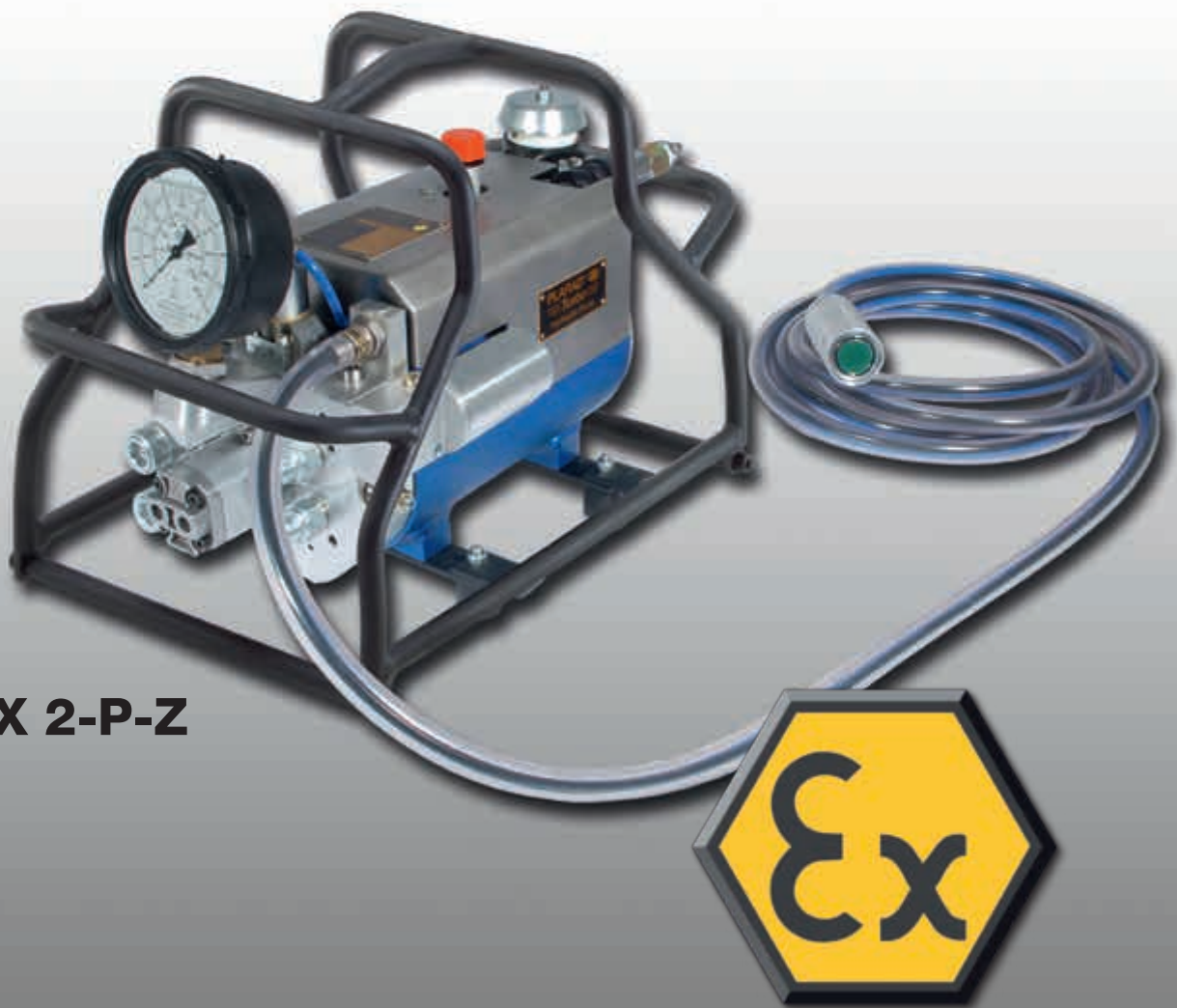
Extracts of the specifications.

\* ready for use

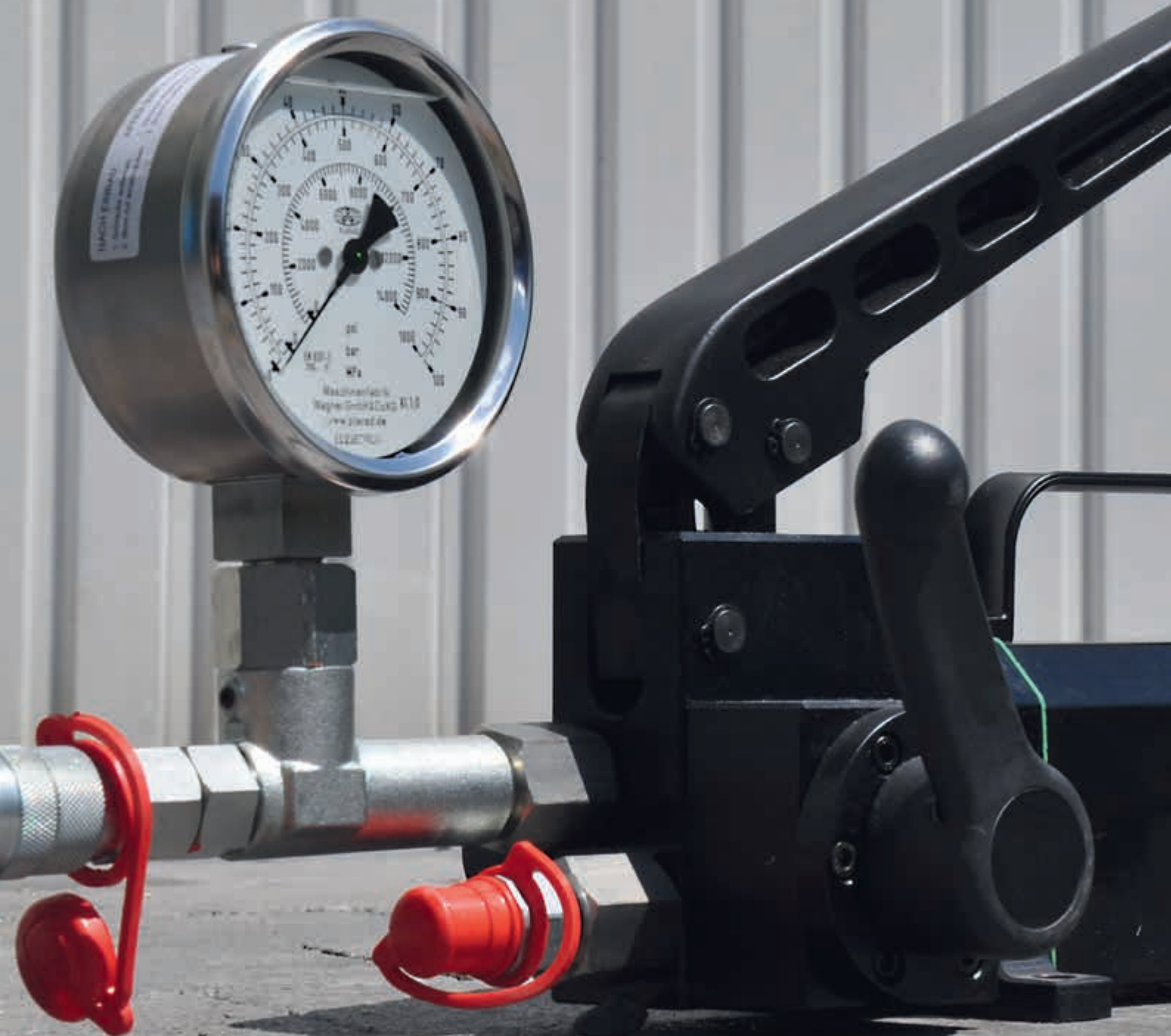
# ATEX approved

**Only from Plarad!**

X 2 P-Z ATEX: Approved for operation in Zone 2G  
Certified for use in areas containing materials with  
a minimum flame point of 0.082 mJ



**X 2-P-Z**



**PLARAD**

# HP Hydraulic Pump

## light and handy

Plarad's manual hydraulic pumps are characterised by their high performance and low weight. The use of very rigid light metal saves more than 50% in weight compared to conventional steel pumps.

35% less power required to achieve mechanical leverage, extremely low weight, and considerably higher pumping performance than conventional products, means that **HP** Power Packs are a welcome tool for everyday use in the workplace. Plarad **HP** Power Packs are also available in a variety of sizes.



- For occasional use
- Ideal for tensioners
- Extremely light
- High throughput
- More than 50% lighter than conventional steel pumps
- High throughput thanks to clever design
- Low setting down to 385 N
- Pressure limiting valve adjustable from the outside
- Carrying handle and stabilising feet
- Available with two sizes of tank, 2 l and 4 l
- Available in 800-bar and 1 600-bar models