Portable Electric Torque Wrench Pumps

▼ Shown: PMU-10427



- Powerful two-speed pump is lightweight and easy to carry
- Standard heat exchanger package keeps pump cool under extreme use
- Glycerin filled gauge with scales reading in psi and bar
- Transparent overlays in Ft.lbs and Nm for all Enerpac torque wrenches provide a quick torque reference
- Universal motor for a high power-to-weight ratio; generates full pressure on as little as 50% of the rated line voltage
- Adjustable pressure relief valve for accurate torque adjustments and precise repeatability

PMU/PME **Series**

Reservoir Capacity:

0.5-1 gal.

Flow at 10,000 psi:

20 in³/min.

Motor Size:

0.5 hp

Maximum Operating Pressure:

10,000 and 11,600 psi



Pump Ratings

- **-Q** suffix pumps are for 10,000 psi torque wrenches, and include spin-on couplers.
- **-E** suffix pumps are for use with 11,600 psi rated torque wrenches, and include polarized lock-ring safety couplers.



Twin Torque Wrench Hoses

Use Enerpac THQ-700 series twin hoses with 10,000 psi pumps, or use THC-700 series twin hoses

with 11,600 psi pumps.

10,000 psi	
19.5 feet long, 2 hoses	THQ-706T
39 feet long, 2 hoses	THQ-712T
11,600 psi	
19.5 feet long, 2 hoses	THC-7062
39 feet long, 2 hoses	THC-7122

▼ SELECTION CHART

For Use With Torque Wrenches			Maximum Pressure Oil Flow Rate Rating		w Rate	Model Number	Useable Oil	Electric Motor	Dimensions L x W x H	Weight
		(p	osi)	(in³/	/min)		Capacity			
		1st stage	2 nd stage	1 st stage	2 nd stage		(gal)		(in)	(lbs)
		700	10,000	200	20	PMU-10427-Q	.50	115V- 1 ph -50/60Hz	17 x 11 x 15	46
S1500X	W2000X	700	10,000	200	20	PMU-10447-Q	1.0	115V- 1 ph -50/60Hz	17 x 13 x 15	53
S3000X	W4000X	700	10,000	200	20	PMU-10422-Q	.50	230V- 1 ph -50/60Hz	17 x 11 x 15	46
		700	10,000	200	20	PMU-10442-Q	1.0	230V- 1 ph -50/60Hz	17 x 13 x 15	53
		700	11,600	200	20	PMU-10427	.50	115V- 1 ph -50/60Hz	17 x 11 x 15	46
SQD-25-I	HXD-30	700	11,600	200	20	PMU-10447	1.0	115V- 1 ph -50/60Hz	17 x 13 x 15	53
SQD-50-I	HXD-60	700	11,600	200	20	PMU-10422	.50	230V- 1 ph -50/60Hz	17 x 11 x 15	46
		700	11,600	200	20	PMU-10442	1.0	230V- 1 ph -50/60Hz	17 x 13 x 15	53

^{*} For pump without heat exchanger change PMU into PME. Example: PME-10442-Q. PME-Series pump size 10 x 10 x 14 inches. Weight 37.5 lbs. (.50 gallon) and 44 lbs (1 gallon).

TQ-700 Series, Electric Torque Wrench Pump



▼ Shown: **TQ-700E**



- Three stage pump design delivers optimized flow rates and enables up to 50% faster bolting than competing pumps
- Compact and lightweight design fits through tight openings and provides easy handling
- Built-in protection for controls, gauge, and pendant for job-site durability
- IP55 rating for superior dust and water protection
- Advanced brushless motor provides for quiet, continuous operation, high voltage tolerance, and low maintenance
- Heat exchanger prevents breakdown of oil during heavy usage in hot environments
- Simple pressure setting and convenient pendant control for hassle-free operation
- ▼ The TQ-700E and the W-Series wrenches are a productive combination in wind applications.



Lightweight Electric Torque Wrench Pump



Optimized for S- and W-series Hydraulic Torque Wrenches

Enerpac offers a complete range of square drive and

hexagon cassette torque wrenches.

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Pendant Control

The TQ-700 comes equipped with a 20-foot pendant cord which allows the user to pressurize the pump from a distance increasing productivity and speed of setup.



Four Port Manifold

The **TQ-700** Classic offers an optional four wrench manifold as an accessory (TQM) factory installed. (Add suffix "M" at the end of the model number. For example: **TQ700EM**)



Twin Torque Wrench Hoses

Use Enerpac **THQ-700** series twin hoses with 10,000 psi pumps.

10,000 psi	
19.5 feet long, 2 hoses	THQ-706T
39 feet long, 2 hoses	THQ-712T



Gauge Overlay Kit

Gauge overlay kits are also available separately.

GT-4015-Q includes overlays for all S- and W-Series

Torque Wrenches.

GT-4015 includes overlays for all SQD and HXD torque wrenches.

Electric Torque Wrench Pump

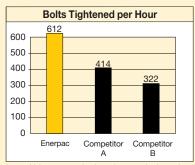
TQ-700 Series Pump Applications

The TQ-700 Series pump is ideal for powering hydraulic wrenches for the Power Generation and Wind Markets.

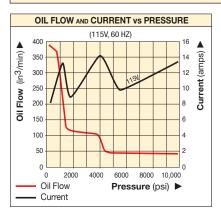
The TQ-700 has been engineered with **Optimized Flow Technology** to deliver up to 50% faster bolt tightening than competing pumps.

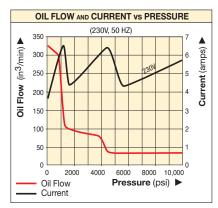
Bolting speed is more complex than how much flow per minute the pump produces. The key is optimizing the flow rate across the entire bolting cycle. With more oil flowing at the right time and at the right volume, you achieve the optimized flow for a hydraulic bolting system.

The result of this optimized flow is more bolts tightened faster and a more productive work team.

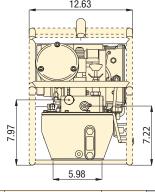


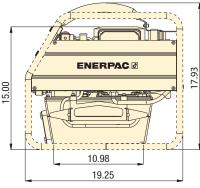
Internal laboratory testing based on standard torquing procedure on a pipe flange with 14, 11/8" bolts.





Dimensions shown in inches.





Performance	For Use with Torque Wrenches		Pressure Rating	Model Number ¹⁾	Usable Oil Capacity	Motor Electrical Specification	Sound Level	Weight (no oil)
Per			(psi)		(gal)		(dBA)	(lbs)
Optimal	S1500X S3000X	W2000X W4000X		TQ-700B	1	115V-1 ph, 50 / 60 Hz	82-85	68
	S6000X S11000X	W8000X W15000X	10,000	TQ-700E ²⁾	1	230V-1 ph, 50 Hz	82-85	66
Acceptable	S25000X	W22000X W35000X		TQ-700I ³⁾	1	230V-1 ph, 60 Hz	82-85	66

- All models meet CE safety requirements and all TÜV requirements
- 2) European plug and CE EMC directive compliant 3) With NEMA 6-15 plug

3) WITH NEWA 6-15 Plug

TQ Series



Reservoir Capacity:

1 gallon

Motor Size:

1.0 hp

Maximum Operating Pressure:

10,000 psi

IP55 Rating for Superior Dust and Water Protection

The IP Code (or Ingress Protection Rating) classifies and rates the degrees of protection provided against the intrusion of solid objects and water in mechanical casings and electrical enclosures.

An IP55 rating means the TQ-700 offers complete protection against contact with mechanical and electrical components, and that dust will not enter in a sufficient quantity to interfere with the operation of the equipment.

The IP55 rating also means water jets sprayed against the TQ-700 from any direction will not have any harmful effects.

▼ The TQ-700E and the W-Series wrenches are a productive combination.



ZU4T Electric Torque Wrench Pumps



Shown: ZU4204TB-Q and ZU4204BB-Q



- Features Z-Class high-efficiency pump design; higher oil flow and bypass pressure, cooler running and requires 18% less current draw than comparable pumps
- Powerful 1.7 hp universal electric motor provides high power-to-weight ratio and excellent low-voltage operating characteristics
- High-strength, molded composite shroud protects motor and electrical components, while providing an ergonomic, non-conductive handle for easy transport
- Low-voltage pendant provides additional safety for the operator

Pro-Series

- LCD readout provides pressure and torque display and a number of diagnostic and readout capabilities never before offered on a portable electric pump
- Auto cycle feature provides continuous cycle operation of the torque wrench as long as the advance button is pressed. (Pump can be used with or without auto cycle feature)



 Any brand of hydraulic torque wrench can be powered by the portable ZU4-Series torque wrench pump.

Tough. Dependable. Innovative.



Classic Electrical

Basic electrical package includes mechanical contactor, ON/OFF toggle switch, pendant with

electro-mechanical pushbuttons, 24V transformer timer and operator accessible circuit breaker.



FIRMWARE for Pro-Series

- Display torque in Ft.lbs. or Nm
- Display pressure in bar, MPa or psi
- Torque wrench model is selectable
- "Auto cycle" setting easily programmable

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Back-lit LCD Display for Pro Series

- Digital pressure or torque read-out
- Programmable "Auto-Cycle" setting
- "Auto-Cycle" setting easily programmable
- Torque wrench model is selectable
- Display torque in Nm or Ft.lbs
- Pump usage information, hour and cycle counts
- Low-voltage warning and recording
- Self-test and diagnostic capabilities
- Information can be displayed in English, French, German, Italian, Spanish and Portuguese
- Pressure transducer is more accurate and durable than analog gauges

ZU4T Torque Wrench Pumps



Z-Class - A Pump For **Every Application**

Patented Z-Class pump technology provides

high by-pass pressures for increased productivity-important in applications using long hose runs and high pressure-drop circuits, like heavy lifting or certain doubleacting tools.

Enerpac ZU4 Hydraulic Pumps are built to power small to large torque wrenches. Choosing the right ZU4 torque wrench pump for your application is easy.

Classic Electric Torque Wrench Pump

• The Classic has an analog gauge and traditional electro-mechanical components (transformers, relays and switches) in place of solidstate electronics. The Classic

delivers durable, safe and efficient hydraulic power.

Pro Series Electric Torque Wrench Pump

- Digital (LCD) display features a built-in hour meter, pressure and torque display, and shows self-diagnostic, cycle-count and low voltage warning information. These premium features are not available on any other pump-anywhere!
- AutoCycle feature provides continuous cycle operation of the torque wrench as long as the advance button is pressed. (Pump can be used with or without AutoCycle feature).

ZU4T **Series**



Reservoir Capacity:

1 and 1.75 gal.

Flow at 10,000 psi:

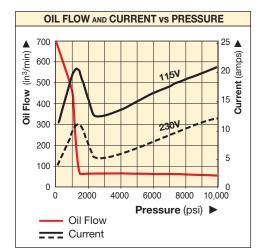
60 in³/min.

Motor Size:

1.7 hp

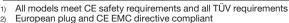
Maximum Operating Pressure:

10,000 psi



▼ COMMON PUMP MODELS

	For Use With Torque Wrenches	Model Number 1) 4)	Motor Electrical Specification	Usable Oil Capacity	Weight with Oil
				(gal)	(lbs)
		ZU4204TB-Q	115 V-1 ph	1.0	70
S		ZU4208TB-Q	115 V-1 ph	1.75	76
Series	All wrenches	ZU4204TE-Q ²⁾	208-240 V-1 ph	1.0	70
Pro S		ZU4208TE-Q ²⁾	208-240 V-1 ph	1.75	76
<u>-</u>		ZU4204TI-Q ³⁾	208-240 V-1 ph	1.0	70
		ZU4208TI-Q ³⁾	208-240 V-1 ph	1.75	76
		ZU4204BB-QH	115 V-1 ph	1.0	82
		ZU4204BB-Q	115 V-1 ph	1.0	73
ssic	All wrenches	ZU4208BE-QH ²⁾	208-240 V-1 ph	1.75	83
Clas		ZU4204BE-Q ²⁾	208-240 V-1 ph	1.0	74
		ZU4208BI-QH ³⁾	208-240 V-1 ph	1.75	88
		ZU4208BI-Q ³⁾	208-240 V-1 ph	1.75	79



Replace the Q-suffix with an -E suffix for Enerpac SQD and HXD 11,600 psi torque wrench pumps



Torque Wrench Pump Selection Matrix

For optimum speed and performance see the torque wrench pump and hose selection matrix.

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Pump Ratings

- -Q suffix pumps are for 10,000 psi torque wrenches, and include spin-on couplers.
- -E suffix pumps are for use with Enerpac SQD and HXD 11,600 psi torque wrenches, and include polarized lockring safety couplers.

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Gauge Overlay Kit

Gauge overlay kits are also available separately.

GT-4015-Q includes overlays for all S- and W-Series

torque wrenches.

GT-4015 includes overlays for all SQD and HXD torque wrenches.

ZU4T Ordering Matrix and Specifications



▼ This is how a ZU4 Series pump model number is built up:

Reservoir

Size



Valve

Operation

Type Type 1 Product Type

Product

Z = Pump series

Motor

2 Motor Type

U = Universal electric motor

Flow

Group

Valve

Type

3 Flow Group

 $4 = 60 \text{ in}^3/\text{min} @ 10,000 \text{ psi}$

4 Valve Type

2 = Torque wrench valve

5 Reservoir Size (useable capacity)

04 = 1.0 gallon**08** = 1.75 gallons

6 Valve Operation

Voltage

T = Solenoid valve with pendant, LCD Electric and pressure transducer

Must be

E or Q

Options Options

B = Solenoid valve with pendant, classic electrical

7 Voltage

- B = 115V, 1 ph, 50/60 Hz
- E = 208-240V, 1 ph, 50/60 Hz (with European plug CE RF compliant)
- I = 208-240V, 1 ph, 50/60 Hz (with NEMA 6-15 plug)

8 Factory installed features and options

- E = 11,600 coupler for use with HXD-, SQD-Series or other wrenches
- Q = 10,000 coupler for use with S- and W-Series or other wrenches
- **H** = Heat exchanger
- K = Skidbar
- M = 4-wrench manifold
- R = Roll cage

ENERPAC. 9.00 11.00 16.29 19.00 25.00 23.40

20 (0) 3.75 9.46 10.50

ZU4-Series Torque Wrench Pumps

Reservoir Size (useable gallons)	A (in)
1	6.0
1.75	8.1

Dimensions shown in inches

- 1) User adjustable relief valve
- ② Heat exchanger (optional)
- ③ Skidbar (optional)
- 4-wrench manifold (optional)
- (5) Roll cage (optional)

	ZU4 Performance						
Motor Size	Output Flow Rate (in³/min)		*Motor Electrical Specification	Sound Level	Relief Valve Adjustment Range		
(hp)	100 psi	700 psi	5,000 psi	10,000 psi		(dBA)	(psi)
1.7	700	535	76	60	115 VAC, 1-ph 208-240 VAC, 1-ph	85-90	1,800-10,000**
	+ = 0 (00 1						

How to order your ZU4T-Series torque wrench pump

Ordering Example 1

Model No. ZU4208TB-QMHK

10,000 psi pump for use with Enerpac S- and W-Series and other 10,000 psi torque wrenches, 115V motor, 1.75 gallon reservoir, 4-wrench manifold, heat exchanger and skidbar.

Refer to the torque wrench pump selection matrix for optimum wrench, pump and hose combinations.



Twin Torque Wrench Hoses

Use Enerpac THQ-700 series twin hoses with 10,000 psi pumps, or use THC-700 series twin hoses

with 11,600 psi pumps.

10,000 psi	
19.5 feet long, 2 hoses	THQ-706T
39 feet long, 2 hoses	THQ-712T
11,600 psi	
19.5 feet long, 2 hoses	THC-7062
39 feet long, 2 hoses	THC-7122

▼ Most hydraulic torque wrenches can be powered by the Enerpac ZU4-Series torque wrench pump.



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^{**} Pump type (-Q) shown, (-E) range is 1,800 - 11,600 psi.

ZU4T Torque Wrench Pump Options



Heat Exchanger

- · Removes heat from the bypass oil to provide cooler operation
- . Stabilizes oil viscosity, increasing oil life and reduces wear of pump and other hydraulic components

Accessory Kit No. *	Can be used with:
ZHE-U115	115V pumps
ZHE-U230	230V pumps

Add suffix **H** to pump model number for factory installation. Heat Exchanger adds 9.1 lbs. to pump weight.

Ordering Example:

Model No. ZU4208TB-H



Roll Cage

- Protects pump
- · Provides greater pump stability

Accessory Kit No. *	Can be used on ZU4-Series torque wrench pumps		
ZRC-04	1 and 1.75 gallon reservoir ¹⁾		
ZRC-04H	1 and 1.75 gallon reservoir ²⁾		

- Add suffix **R** for factory installation.
- 1) For use with pumps without a heat exchanger fitted
- For use with pumps with a heat exchanger fitted

Ordering Example:

Model No. ZU4208BB-QR



Skidbar

- · Provides greater pump stability on soft or uneven surfaces
- · Provides easy two-handed lift

Accessory Kit No. *	Can be used on ZU4-Series torque wrench pumps
SBZ-4	1 and 1.75 gallon ¹⁾
SBZ-4L	1 and 1.75 gallon ²⁾

- Add suffix \mathbf{K} to pump model number for factory installation.
- 1) Without heat exchanger 4.9 lbs.
- 2) With heat exchanger 7.0 lbs.

Ordering Example:

Model No. ZU4208TB-QK



4-Wrench Manifold

- · For simultaneous operation of multiple torque wrenches
- · Can be factory installed or ordered separately

Accessory Kit No. *	Can be used on ZU4-Series torque wrench pumps
ZTM-E	for 11,600 psi torque wrenches
ZTM-Q	for 10,000 psi torque wrenches

Add suffix M to pump model number for factory installation.

Ordering Example:

Model No. ZU4208TB-QM





Reservoir Capacity:

1 and 1.75 gal.

Flow at 10,000 psi: 60 in³/min.

Motor Size:

1.7 hp

Maximum Operating Pressure:

10,000 psi

ZE Series Electric Torque Wrench Pumps



▼ Shown: ZE4204TB-QHR



- Auto cycle feature provides continuous cycle operation of the torque wrench as long as the advance button is pressed (Pump can be used with or without auto cycle feature)
- LCD readout provides pressure and torque display and a number of diagnostic and readout capabilities never before offered on a portable electric pump
- Totally enclosed, fan-cooled industrial electric motors supply extended life and stand up to harsh industrial environments
- High-strength, molded electrical enclosure protects electronics, power supplies and LCD readout from harsh environments



 The ZE4 torque wrench pumps are perfectly matched for this W2000X wrench.





FIRMWARE for Pro-Series

- Display torque in Ft.lbs. or Nm
- Display pressure in bar, MPa or psi
- Torque wrench model is selectable
- "Auto cycle" setting easily programmable

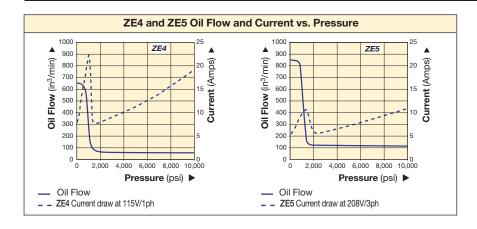
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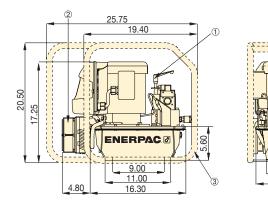


Back-lit LCD Display

- Digital pressure or torque read-out
- Programmable "Auto-Cycle" setting
- "Auto-Cycle" setting easily programmable
- Torque wrench model is selectable
- Display torque in Nm or Ft.lbs
- Pump usage information, hour and cycle counts
- Low-voltage warning and recording
- Self-test and diagnostic capabilities
- Information can be displayed in English, French, German, Italian, Spanish and Portuguese
- Pressure transducer is more accurate and durable than analog gauges

ZE Series Electric Torque Wrench Pumps





Reservoir Size	Α
(useable gallons)	(in)
1	6.0
1.75	8.1

Dimensions shown in inches.

(1) User adjustable relief valve

9.46

- ② Heat Exchanger (optional)
- ③ Roll cage (optional)

▼ COMMON PUMP MODELS

For Use With Torque Wrenches	Max. Operating Pressure	Model Number with Heat Exchanger and Roll Cage	Motor Electrical Specification	Usable Oil Capacity ¹⁾	Weight with Oil
	(psi)			(gal)	(lbs)
	10,000	ZE4208TB-QHR	115 V-1 ph	2	129
All S- and	10,000	ZE4208TI-QHR	230 V-1 ph	2	129
W-Series Wrenches	10,000	ZE4208TG-QHR	230 V-3 ph	2	131
Wrenches	10,000	ZE5208TW-QHR	400 V-3 ph	2	131
	11,600	ZE4208TB-EHR	115 V-1 ph	2	138
All SQD and	11,600	ZE4208TI-EHR	230 V-1 ph	2	129
HXD-Series Wrenches	11,600	ZE4208TG-EHR	230 V-3 ph	2	141
vviericiles	11,600	ZE5208TW-EHR	400 V-3 ph	2	132

¹⁾ Reservoir sizes available: 1, 2, 2.5, 5, 10 gallon. Contact Enerpac.

▼ PERFORMANCE CHART

Pump Series		(in	Flow Ra 3/min)		Motor Size		Relief Valve Adjustment Range	Sound Level
	100 psi	700 psi	5,000 psi	10,000 psi	hp	RPM	(psi)	(dBA)
ZE4T	650	600	62	60	1.5	1750	1000 - 11,600	75
ZE5T	850	825	123	120	3.0	1750	1000 - 11,600	75

Flow rate will be approximately 5/6 of these values at 50 Hz.







Reservoir Capacity:

1.0 -10 gal.

Flow at 10,000 psi:

60-120 in³/min.

Motor Size:

1.5-3.0 hp

Maximum Operating Pressure:

10,000 and 11,600 psi



Accessory Options

A full list of optional accessories can be found in the ZU4 section.

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Twin Torque Wrench Hoses

Use Enerpac THQ-700 series twin hoses with 10,000 psi pumps, or use THC-700 series twin hoses with 11,600 psi pumps.

10,000 psi				
19.5 feet long, 2 hoses	THQ-706T			
39 feet long, 2 hoses	THQ-712T			
11,600 psi				
19.5 feet long, 2 hoses	THC-7062			
39 feet long, 2 hoses	THC-7122			

ZA4T Air Driven Torque Wrench Pumps



▼ Shown: ZA4204TX-QR



- Two-speed operation and high by-pass pressure reduces cycle time for improved productivity
- Glycerin filled pressure gauge with transparent overlays in Ft.lbs and Nm for Enerpac torque wrenches provide a quick torque reference
- Regulator-Filter-Lubricator with removable bowls and auto drain is standard
- Ergonomic pendant allows remote operation up to 20 feet
- Valve technology reduces oil operating temperatures and withstands contaminants to increase pump reliability





Twin Torque Wrench Hoses

Use Enerpac **THQ-700** series twin hoses with 10,000 psi pumps, or use **THC-700** series twin hoses with 11,600 psi pumps.

10,000 psi			
19.5 feet long, 2 hoses	THQ-706T		
39 feet long, 2 hoses	THQ-712T		
11,600 psi			
19.5 feet long, 2 hoses	THC-7062		
39 feet long, 2 hoses	THC-7122		



Gauge Overlay Kit

Gauge overlay kits are also available separately.

GT-4015-Q includes overlays for all S- and

W-Series torque wrenches.

GT-4015 includes overlays for all SQD and HXD torque wrenches.



 Most hydraulic torque wrenches can be powered by the Enerpac ZA4-Series torque wrench pump.

ZA4T Air Driven Torque Wrench Pumps

ZA4-Series Pump Applications

The ZA4-Series pump is best suited to power medium to large size torque wrenches.

Patent-pending Z-Class technology provides high by-pass pressures for increased productivity. Its high power-toweight ratio and compact design make it ideal for applications which require easy transport of the pump.

For further application assistance contact your local Enerpac office.

ATEX Certified

The ZA-series pumps are tested and certified according to the Equipment Directive 94 / 9 / EC "ATEX Directive".

The explosion protection is for equipment group II, equipment category 2 (hazardous area zone 1), in gas and/or dust atmospheres. The ZA-series pumps are marked with: Ex II 2 GD ck T4.





ZA4T Series



Reservoir Capacity:

1 and 1.75 gal.

Flow at 10,000 psi:

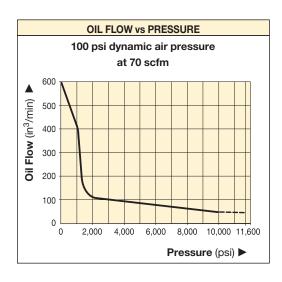
60 in³/min.

Air Consumption:

20-100 scfm

Maximum Operating Pressure:

10,000 and 11,600 psi



▼ COMMON PUMP MODELS

For Use With Torque Wrenches	Maximum Operating Pressure	Model Number 1)	Usable Oil Capacity	Weight with Oil
	(psi)		(gal)	(lbs)
	10,000	ZA4204TX-Q	1.0	94
For all S- and W- Series	10,000	ZA4208TX-Q	1.75	100
(X-Edition)	10,000	ZA4204TX-QR	1.0	101
	10,000	ZA4208TX-QR	1.75	112
	11,600	ZA4204TX-E	1.0	94
For all SQD- and	11,600	ZA4208TX-E	1.75	100
HXD-Series	11,600	ZA4204TX-ER	1.0	101
	11.600	ZA4208TX-ER	1.75	112

¹⁾ All models meet CE safety requirements and all TÜV requirements.



Torque Wrench Pump Selection Matrix

For optimum speed and performance see the torque wrench, pump and hose selection matrix.

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Accessory Options

Available by placing the following additional suffix at the end of the model number:

K = Skidbar

M = 4-wrench manifold

R = Roll cage

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Pump Ratings

-Q suffix pumps are for 10,000 psi torque wrenches, and include spin-on couplers.

-E suffix pumps are for use with Enerpac SQD and HXD 11,600 psi torque wrenches, and include polarized lock-ring safety couplers.

ZA4T Ordering Matrix and Specifications



▼ This is how a ZA4-Series pump model number is built up:

Size



1 Product Type

Type

Z = Pump Series

Type

Group

Type

2 Motor Type

 \mathbf{A} = Air motor

3 Flow Group

 $4 = 60 \text{ in}^3/\text{min} @ 10,000 \text{ psi}$

4 Valve Type

2 = Torque Wrench Valve

5 Reservoir Size (useable capacity)

04 = 1.0 gallon **08** = 1.75 gallons 6 Valve Operation

T = Air operated valve with pendant

E or Q

7 Voltage

Operation

X = Not applicable

8 Factory installed features and options

E = 11,600 psi coupler for use with HXD- and SQD-Series wrenches

Q = 10,000 psi coupler for use with Sand W-Series or other wrenches

K = Skidbar

M = 4-wrench manifold

R = Roll cage

How to order your ZA4-Series torque wrench pump

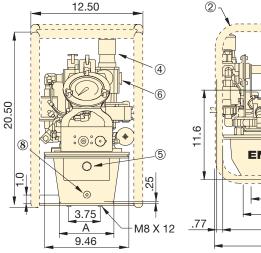
Ordering Example 1

Model No. ZA4208TX-QMR

10,000 psi pump for use with Enerpac S- and W-Series and other 10,000 psi torque wrenches, 1.75 gallon reservoir, 4-wrench manifold, and roll cage.

Refer to the torque wrench pump selection matrix for optimum wrench, pump and hose combinations.

Dimensions shown in inches.



- ENERPAC ? 9.00 50 11.0 16.28 2.06 19.40
- 1) User adjustable relief valve
- ② Roll bar cage (optional)
- 3 Gauge with overlays
- 4 Filter/lubricator/regulator
- (5) Oil level sight gauge
- 6 Air input 1/2" NPTF (7) Standard handle
- Oil drain
- 9 1/4"-18 NPTF Oil Outlet

ZA4-Series Torque Wrench Pumps

Reservoir Size	Α
(useable gallons)	(in)
1	6.0
1.75	8.1

Output Flow Rate (in³/min)			ZA4 Perfor Dynamic Air Pressure Range	Air Consumption	Sound Level at 100 psi Dynamic	Relief Valve Adjustment Range		
100 psi	700 psi	5,000 psi	10,000 psi	11,600 psi	(psi)	(scfm)	(dBA)	(psi)
600	500	80	60	55	60-100	20-100	80-95	1,400-10,000*

▼ Most hydraulic torque wrenches can be powered by the Enerpac ZA4-Series torque wrench pump.



ZA4T Torque Wrench Pump Options



Skidbar

- Provides greater pump stability on soft or uneven surfaces
- Provides two-handed lift

Accessory Kit No. *	Can be used on ZA4-Series torque wrench pumps
SBZ-4	1 and 1.75 gallon reservoir

* Add suffix **K** for factory installation. Skidbar weight 4.9 lbs.

Ordering Example:

Model No. ZA4208TX-QK



4-Wrench Manifold

- For simultaneous operation of multiple torque wrenches
- Can be factory installed or ordered separately

	Can be used on ZA4-Series torque wrench pumps
ZTM-E	for 11,600 psi torque wrenches
ZTM-Q	for 10,000 psi torque wrenches

* Add suffix **M** for factory installation. **Ordering Example:**

Model No. ZA4208TX-QM

ZA4T Series



Reservoir Capacity:

1 and 1.75 gal.

Flow at 10,000 psi:

60 in³/min.

Air Consumption:

20-100 scfm

Maximum Operating Pressure:

10,000 and 11,600 psi



Gauge Overlay Kit

Gauge overlay kits are also available separately.

GT-4015 includes overlays for all SQD and HXD torque wrenches. GT-4015-Q

includes overlays for all S- and W-Series torque wrenches.



Roll Cage

- Protects pump
- · Provides greater pump stability

Accessory Kit No. *	Can be used on ZA4-Series torque wrench pumps
ZRC-04	1 and 1.75 gallon reservoir

* Add suffix **R** for factory installation. Roll bar cage weight 7.5 lbs.

Ordering Example:

Model No. ZA4208TX-QR



Twin Torque Wrench Hoses

Use Enerpac THQ-700 series twin hoses with 10,000 psi pumps, or use THC-700 series twin hoses with 11,600 psi pumps.

10,000 psi				
19.5 feet long, 2 hoses	THQ-706T			
39 feet long, 2 hoses	THQ-712T			
11,600 psi				
19.5 feet long, 2 hoses	THC-7062			
39 feet long, 2 hoses	THC-7122			



Torque Wrench Couplers

For Enerpac torque wrench couplers see our "System Components" section in this catalog.

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GT-Series Hydraulic Bolt Tensioners

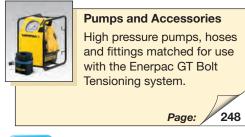


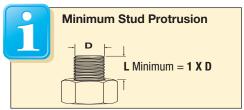
▼ Shown: GT-Series bolt tensioners

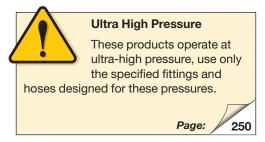


- Six load cells from 5%" to 334" or from M16 to M95
- Twin ports for quick connection of multiple tools
- Only one size of bridge per size of load cell
- Detachable and rotational bridge simplifies tool positioning
- Full bridge window
- Piston stroke indicator
- Black surface treatment protects against corrosion
- Anti-slip grip for more secure handling
- Universal and multi-use tool

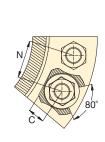
Accurate & Reliable Extreme Performance Bolt Tensioner

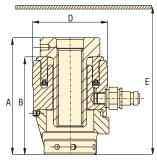






Nearest obstruction.





▼ GT2 Bolt Tensioner on a flange joint.



Threaded Fastener Range		Load Cell	_	chnical Da	ata	Dimensions (in)		Weight		
		and Bridge Reference			Stroke					
(in)	(mm)		(in²)	(ton)	(in)	Α	В	С	D	(lbs)
5/8"-1"	M16-M30	GT1-LCB	2.32	25.2	0.39	5.31	4.45	1.06	3.39	6.60
11/8"-11/2"	M30-M39	GT2-LCB	4.15	45.1	0.39	5.35	4.37	1.38	4.21	9.02
1½"-2"	M39-M52	GT3-LCB	7.95	86.4	0.39	6.30	4.96	1.81	5.43	15.40
2"-21/2"	M52-M68	GT4-LCB	15.16	164.9	0.39	7.09	5.55	2.44	6.85	26.84
21/2"-31/4"	M68-M80	GT5-LCB	23.37	254.1	0.39	7.95	6.18	3.07	8.27	41.14
31/4" - 33/4"	M80-M95	GT6-LCB	29.41	319.8	0.39	8.62	6.81	3.23	9.45	61.16

GT-Series Hydraulic Bolt Tensioners

Load Cell and Bridge Reference	Thread Size	Adaptor Kit Model Number	Pitch Between Bolts	Minimum Height E	Weight
	M16 x 2	GT1PM-NRS01620	N (in)	(in)	(lbs)
	M18 x 2.5	GT1PM-NRS01825	2.17	6.65 6.50	3.48
	M20 x 2.5	GT1PM-NRS02025	2.24	6.50	3.15
	M24 x 3	GT1PM-NRS02430	2.32	6.46	2.88
	M27 x 3	GT1PM-NRS02730	2.44	6.57	2.55
GT1-LCB	M30 x 3.5	GT1PM-NRS03035	2.56	6.69	2.22
	5/8" 11UN	GT1P-NRS0625U11	2.17	6.65	3.45
	34" 10un	GT1P-NRS0750U10	2.20	6.50	3.17
	7/8" 9UN	GT1P-NRS0875U09	2.32	6.46	2.86
	1" 8un	GT1P-NRS1000U08	2.44	6.57	2.68
	1½" 8UN	GT1P-NRS1125U08	2.56	6.69	2.31
	M30 x 3.5	GT2PM-NRS03035	2.80	6.81	5.68
	M33 x 3.5	GT2PM-NRS03335	2.91	6.85	5.21
	M36 x 4	GT2PM-NRS03640	3.03	6.97	4.77
GT2-LCB	M39 x 4	GT2PM-NRS03940	3.15	7.09	4.25
GIZ LOD	1 ¹ /8" 8UN	GT2P-NRS1125U08	2.80	6.81	5.81
	1¼" 8un	GT2P-NRS1250U08	2.91	6.85	5.32
	13/8" 8UN	GT2P-NRS1375U08	3.03	6.97	4.84
	1½" 8un	GT2P-NRS1500U08	3.15	7.09	4.29
	M39 x 4	GT3PM-NRS03940	3.62	8.35	12.50
	M42 x 4.5	GT3PM-NRS04245	3.78	8.46	11.77
	M45 x 4.5	GT3PM-NRS04545	3.90	8.58	10.96
	M48 x 5	GT3PM-NRS04850	4.13	8.50	10.25
GT3-LCB	M52 x 5	GT3PM-NRS05250	4.25	8.66	9.20
	1½" 8un	GT3P-NRS1500U08	3.62	8.35	12.56
	15/8" 8 UN	GT3P-NRS1625U08	3.78	8.46	11.70
	1¾" 8un	GT3P-NRS1750U08	3.90	8.58	10.89
	1 ⁷ /8" 8UN	GT3P-NRS1875U08	4.13	8.50	10.10
	2" 8un	GT3P-NRS2000U08	4.25	8.66	9.17
	M52 x 5	GT4PM-NRS05250	4.65	9.45	23.63
	M56 x 5.5	GT4PM-NRS05655	4.76	9.61	22.22
	M60 x 5.5	GT4PM-NRS06055	4.88	9.76	20.77
GT4-LCB	M64 x 6	GT4PM-NRS06460	5.00	9.92	19.32
	M68 x 6	GT4PM-NRS06860	5.12	10.08	17.80
	2" 8un	GT4P-NRS2000U08	4.65	9.45	23.63
	2¼" 8un	GT4P-NRS2250U08	4.76	9.61	21.23
	2½" 8un	GT4P-NRS2500U08	5.00	9.92	18.63
	M68 x 6	GT5PM-NRS06860	5.71	10.94	38.02
	M72 x 6	GT5PM-NRS07260	5.87	11.10	36.06
	M76 x 6	GT5PM-NRS07660	5.98	11.26	34.03
GT5-LCB	M80 x 6	GT5PM-NRS08060	6.38	11.54	32.01
	2½" 8un	GT5P-NRS2500U08	5.67	10.79	39.16
	2¾" 8un	GT5P-NRS2750U08	5.87	11.10	35.84
	3" 8un	GT5P-NRS3000U08	5.98	11.26	32.45
	3¼" 8un	GT5P-NRS3250U08	6.38	11.54	28.86
	M80 x 6	GT6PM-NRS08060	6.65	12.28	49.02
	M85 x 6	GT6PM-NRS08560	6.65	12.28	46.20
GT6-LCB	M90 x 6	GT6PM-NRS09060	7.01	12.48	42.57
	M95 x 6	GT6PM-NRS09560	7.13	12.68	39.69
	31/4" 8UN	GT6P-NRS3250U08	6.65	12.28	45.56
	3½" 8un	GT6P-NRS3500U08	7.01	12.48	41.43
	3¾" 8un	GT6P-NRS3750U08	7.13	12.68	36.94

GT Series



Bolt Range: 5/8"**-3**3/4"

M16-M95

0-319.8 tons

Maximum Operating Pressure 21,750 psi



How to Order

To provide maximum flexibility Load Cell and Bridges are ordered separately from Adaptor Kits.

Example, to order a complete tensioner for a 1" threaded bolt order:

1 x Load Cell and Bridge: GT1-LCB

1 x Adaptor Kit: **GT1P-NRS1000U08**



Bolting Integrity Software

A comprehensive on-line software solution for Bolted Joint integrity.

Integral databases hold data for:

- BS1560, MSS SP44, API 6A and 17D flanged joints
- Common gasket materials and configurations
- Comprehensive range of bolt materials
- Comprehensive range of lubricants
- Enerpac's Controlled Bolting Equipment including: Torque Multipliers, Hydraulic Wrenches and Bolt Tensioning tools

Custom Joint information can also be entered.

The software offers Tool selection, Bolt Load calculations and Tool pressure settings, as well as, a combined Application data sheet and Joint completion report.



▼ Shown: **HPT-1500**



- Lightweight and portable high-pressure hand pump
- Two-speed operation displaces a larger volume of oil per stroke, reducing cycle times for many testing applications
- Includes a gauge and coupler for direct connection to GT-Series bolting tools
- Integrated relief valve set at 21,750 psi

HPT Series

Reservoir Capacity:

155 in³

Flow at 10,000 psi:

.037-.99 in³/stroke

Maximum Operating Pressure:

21,750 psi (1500 bar)



Applications

The Enerpac HPT highpressure Hand Pump is ideally suited for use with hydraulic bolt tensioning tools and hydraulic nuts.

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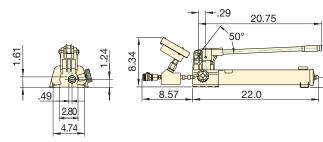
Ultra High Pressure

These products operate at ultra-high pressure, use only the specified fittings and

hoses designed for these pressures.

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▼ 21,750 F	PSI ULTRA HIGH PRESSURE PUMP						
Model	Description	Usable	Oil Displac	ement per		e Rating	Weight
Number		Oil	Stroke		(psi)		
		Capacity	(in³)				
			1 st 2 nd		1 st	2 nd	
		(in³)	stage	stage	stage	stage	(lbs)
HPT-1500	High Pressure Hand Pump with Gauge	155	.99	0.037	200	21,750	19

ZUTP-Series, Electric Tensioning Pump

▼ Shown: **ZUTP-1500B**



ZUTP Series

Reservoir Capacity:

1 gallon

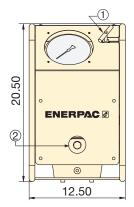
Flow at Rated Pressure: 20.0 in³/min.

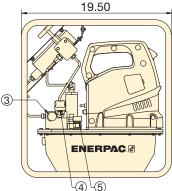
Maximum Operating Pressure:

21,750 psi



- . High efficiency Universal Motor draws lower amps for superior performance in remote locations with low power quality
- Two-stage pump design provides high flow at low pressure for fast system fills and controlled flow at high pressure for safe and accurate operation
- Compact and lightweight design fits through tight openings and provides easy handling
- Panel mounted 6" pressure gauge, with polycarbonate cover, is set into the protective metal shroud for improved visibility and safety
- Panel mounted user adjustable valve for safe and precise pressure control
- Safety relief valve limits output pressure





- (1) Release Valve
- Sight Glass
- ③ 1/4" BSPM Outlet Port
- (4) User Adjustable Pressure Control Valve
- (5) Breather

21,750 PSI	HIGH PRESSU	RE PUMP						
Pump Type	Useable Oil Capacity	Valve Type	Model Number ¹⁾	Output Flow Rate at 0 psi	Output Flow Rate at 21,750 psi	Motor Electrical Specification	Sound Level	Weight with oil
	(gal)			(in³/min)	(in³/min)		(dBA)	(lbs)
High pressure	1.0	Manual	ZUTP-1500B ZUTP-1500E ²⁾ ZUTP-1500I ³⁾	230	20	115 VAC, 1-ph 230 VAC, 1-ph 230 VAC, 1-ph	89	65

All models meet CE safety requirements and all TÜV requirements.
 European plug and CE EMC directive compliant.

With NEMA 6-15 plug.
 Add suffix "H" for factory installation of Heat Exchanger.

ATP-Series Ultra High Pressure Air Pump



▼ Shown: **ATP-1500**



- General purpose, high pressure air driven pump unit for products requiring up to 21,750 psi hydraulic pressure
- Compact, lightweight, rugged steel frame for protection and easy handling
- Prelubricated pump element, does not require an airline lubricator
- Easily adjustable output pressure control
- Integrated and protected easy to read glycerin filled gauge
- Safety relief valve limits output pressure
- ATEX Certified

The ATP-series pump was tested and certified according to the Equipment Directive 94 / 9 / EC "ATEX Directive". The explosion protection is for equipment group II, equipment category 2 (hazardous area zone 1), in gas and/or dust atmospheres. The ATP-series pump is marked with: Ex II 2 GD ck T4.

ATP Series





Reservoir Capacity:

1.0 gallon

Flow at Rated Pressure:

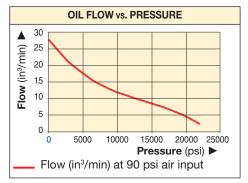
4 in³/min.

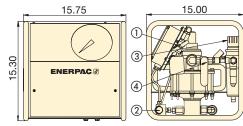
Maximum Operating Pressure:

21,750 psi



These products operate at ultra-high pressure, use only the specified fittings and hoses designed for these pressures.





- ① HPT Shut-off Valve
- ② 1/4" BSPP HPT Out Port
- ③ Filter/Regulator
- Air On/Off Valve

Model	Hoses	End 1	End 2	Length
Number				(ft)
HT-1503		1/4 BSPM 120° Cone	1/4 BSPM 120° Cone	3.28
HT-1510		1/4 BSPM 120° Cone	1/4 BSPM 120° Cone	9.84
HT-1503HR*		BH150	BR150	3.28
HT-1510HR*		BH150	BR150	9.84

Number			(ft)
HT-1503	1/4 BSPM 120° Cone	1/4 BSPM 120° Cone	3.28
HT-1510	1/4 BSPM 120° Cone	1/4 BSPM 120° Cone	9.84
HT-1503HR*	BH150	BR150	3.28
HT-1510HR*	BH150	BR150	9.84

^{*} Includes dust caps

1	Description	Fittings	Complete Set	Female Half	Male Half
	Quick Disconnect Coupler*		B150	BR150	BH150
	Quick Disconnect Coupler and Adaptor Kit*		BW150AW	-	-
	Quick Disconnect Blanking Coupler Set*	160 180	B150B	-	-

* Includes dust caps

Pump Type	Useable Oil Capacity	Model Number	Pressure Rating	Output Flow Rate at 0 psi	Output Flow Rate at 21,750 psi	Air Pressure Range	Air Consumption	Sound Level	Weight
	(gal)		(psi)	(in³/min)	(in³/min)	(psi)	(sfcm)	(dBA)	(lbs)
High pressure	1.0	ATP-1500	21,750	26	4	80-90	70	70	65