

# PUMPS

FOR TENSIONERS

## 1,500 BAR (21,750 PSI) - HIGH PERFORMANCE HYDRAULIC PUMPS

Page  
**PE8...92-93**  
High Pressure Electric Pump



Page  
**HPUTP-2...96-97**  
High Flow & Subsea Tensioner  
Power Pack



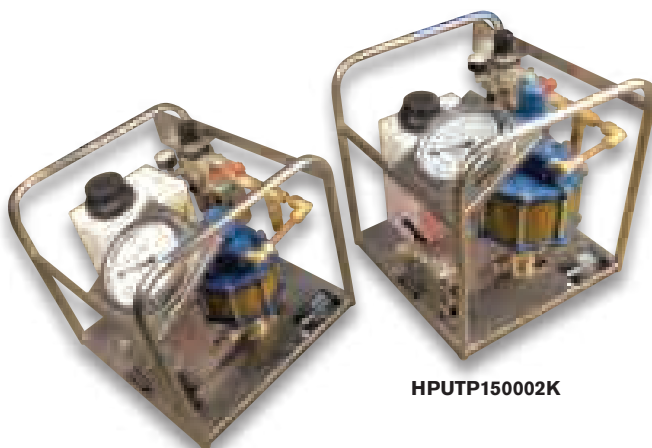
Page  
**HPUTP-1...94-95**  
Standard Flow Tensioner  
Power Pack



Page  
**HIGH PRESSURE  
HAND PUMPS...98-99**  
1,500 bar (21,750 psi)



### SIDE BY SIDE COMPARISON OF HPUTP-1 AND HPUTP-2 PUMPS



HPUTP150001K

HPUTP150002K

The HPUTP-2 produces more flow, has a larger motor and frame and weighs approximately 4 kg (9 lb) more.



**CAUTION!** These pumps can produce pressure in excess of 10,000 psi (700 bar). Check all components that are used with these pumps and never exceed the rated pressure of any component.

## HIGH PRESSURE ELECTRIC PUMP

PE8

1,500 bar/21,750 psi



## 1,500 BAR (21,750 PSI) HIGH PRESSURE ELECTRIC PUMP

The PE8 is a very high pressure pump that incorporates proven design for reliable operation. It is based on proven pump design for reliability in rugged bolt tensioning applications.

### Quality means Lower Life-Cycle Costs:

- Over 100,000 cycles
- Continuous duty up to 50°C (122°F) ambient
- Proven design = Proven reliability

### Enhanced Usability:

- Light Weight and portable: 20.6 kg (45.5 lb) [without oil]
- Quick Release, removable control pendant (5 m/15 ft)
- Removable 100 mm (4"), calibration-capable, gauge
- Universal Motor for reduced voltage applications (up to -20% nominal voltage)
- SPX Tensioners are designed to daisy-chain together so multiple tools can run off one pump
- Compact design fits into tight spaces

### Designed with Safety in Mind:

- Easily adjusted pressure regulator (relief) valve

### DESIGNED FOR

Electric



Air



Gas



Hand



MAINTENANCE  
& REPAIR

ORIGINAL  
INSTALL

Split



Tension



Torque



Max  
Flow



## Specifications and Dimensional Data

**Size (L x W x H):** 35.8 cm x 19.8 cm x 41.4 cm  
14.1" x 7.8" x 16.3"

**Weight:** 20.6 kg (45.5 lb) [without oil]

**Maximum Oil Capacity:** (vented reservoir)  
3.8 L (1.0 Gallons) [to fill line]  
3.4 L (0.9 Gallons) [usable]

**Operating Environment:** -25°C to +50°C  
(-13°F to +122°F)

(When operating near temperature extremes, it is recommended to use hydraulic oils that are rated for those temperatures. Refer to service manuals and cooling options)

**Sound Level:** 87-92 dBA (max)

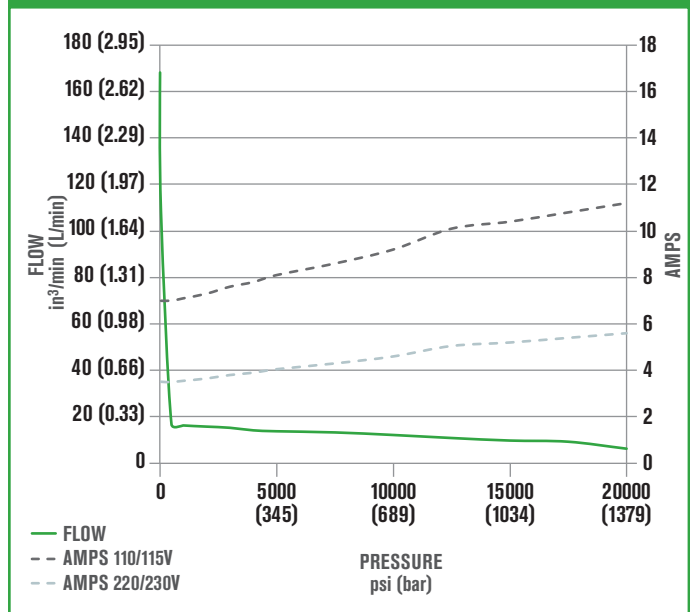
Pressure: 0 - 1,500 bar (0 - 21,750 psi)

Typical Flow: 2.7 L/min - 0.13 L/min  
(168 in<sup>3</sup>/min - 8 in<sup>3</sup>/min)

**Power:** 0.5 hp Universal Motor  
110/115V - 50/60 Hz (11 amps)  
220/230V - 50/60 Hz (5.5 amps)



### Typical Flow Curve



## Ordering Information

Order No.	Description
PE8LXX3L	110/115VAC 50/60Hz Motor
PE8PXX3L	220/230VAC 50/60Hz Motor

## STANDARD FLOW TENSIONER PUMP

HPUTP-1

1,500 bar/21,750 psi



HPUTP150001K



## 1,500 BAR (21,750 PSI) TOPSIDE BOLT TENSIONER & HYDRAULIC NUT PUMP

Standard flow tension pump. Corrosion resistant frame works well for applications near salt water. Standard flow ideal for land based (topside) tension applications where the required power source is compressed air.

### Quality means Lower Life-Cycle Costs:

- Over 100,000 cycles
- Continuous duty up to 50°C (122°F) ambient
- Proven design = Proven reliability

### Enhanced Usability:

- Calibrated 150 mm (6") Pressure Gauge
- Dual oil outlets with quick-connect, no spill couplings
- Pneumatic Filter/Regulator/Lubricator included
- Stainless Steel carrying frame

### Designed with Safety in Mind:

- Easily adjusted pressure regulator valve
- Air pressure safety relief valve

### DESIGNED FOR

Electric



Air



Gas



Hand



MAINTENANCE  
& REPAIR

ORIGINAL  
INSTALL

Split



Tension



Torque



Max  
Flow



## Specifications and Dimensional Data

**Size (L x W x H):** 42 cm x 42 cm x 39 cm  
16.5" x 16.5" x 15.5"

**Weight:** 21 kg (46 lb) [without oil]

**Maximum Oil Capacity:** (vented reservoir)  
9.5 L (2.5 Gallons) [to fill line]  
9.4 L (2.5 Gallons) [usable]

**Operating Environment:** -25°C to +50°C  
(-13°F to +122°F)

(When operating near temperature extremes, it is recommended to use hydraulic oils that are rated for those temperatures. Refer to service manuals and cooling options)

**Sound Level:** 85 dBA (max)

Pressure: 0 - 1,500 bar (0 - 21,750 psi)

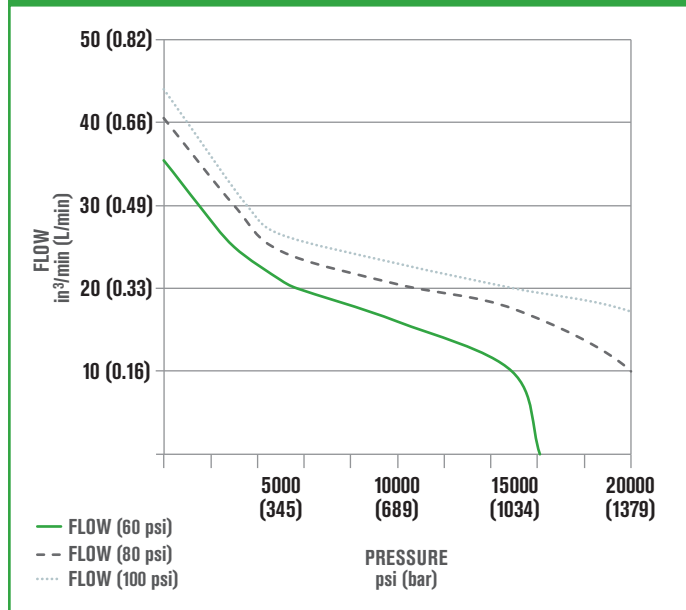
Typical Flow: 0.72 L/min - 0.28 L/min  
(44 in<sup>3</sup>/min - 17 in<sup>3</sup>/min)

Air: 0.68 m<sup>3</sup>/min @ 5.5 bar (24 cfm @ 80 psi)  
0.74 m<sup>3</sup>/min @ 6.2 bar (26 cfm @ 90 psi)  
0.80 m<sup>3</sup>/min @ 6.9 bar (28 cfm @ 100 psi)

\* Values shown are with filter/regulator/lubricator.  
Values will increase without filter/regulator/lubricator.



Typical Flow Curve



### Hydraulic Oil Delivery

	@ 6.9 bar @ 100 psi	@ 5.5 bar @ 80 psi	@ 4.1 bar @ 60 psi
750 psi (51 bar)	41 in <sup>3</sup> /min (0.67 L/min)	38 in <sup>3</sup> /min (0.62 L/min)	33 in <sup>3</sup> /min (0.54 L/min)
2,500 psi (175 bar)	35 in <sup>3</sup> /min (0.57 L/min)	33 in <sup>3</sup> /min (0.54 L/min)	27 in <sup>3</sup> /min (0.44 L/min)
5,000 psi (350 bar)	27 in <sup>3</sup> /min (0.44 L/min)	25 in <sup>3</sup> /min (0.40 L/min)	21 in <sup>3</sup> /min (0.34 L/min)
10,000 psi (689 bar)	23 in <sup>3</sup> /min (0.38 L/min)	21 in <sup>3</sup> /min (0.34 L/min)	16 in <sup>3</sup> /min (0.26 L/min)
15,000 psi (1,000 bar)	20 in <sup>3</sup> /min (0.33 L/min)	18 in <sup>3</sup> /min (0.29 L/min)	9 in <sup>3</sup> /min (0.15 L/min)
21,750 psi (1,500 bar)	15 in <sup>3</sup> /min (0.24 L/min)	-	-

### Ordering Information

Order No.	Description
<b>HPUTP150001K</b>	1,500 Bar Standard Flow Tensioner Pump

## HIGH FLOW & SUBSEA TENSIONER PUMP

HPUTP-2

1,500 bar/21,750 psi



HPUTP150002K



## 1,500 BAR (21,750 PSI) SUBSEA & LARGE TENSIONER APPLICATIONS

High flow tension pump. Corrosion resistant frame works well for applications near salt water. High flow ideal for subsea applications where compressed air is the required power source.

### Quality means Lower Life-Cycle Costs:

- Over 100,000 cycles
- Continuous duty up to 50°C (122°F) ambient
- Proven design = Proven reliability

### Enhanced Usability:

- Calibrated 150 mm (6") Pressure Gauge
- Dual oil outlets with quick-connect, no spill couplings
- Pneumatic Filter/Regulator/Lubricator included
- Stainless Steel carrying frame

### Designed with Safety in Mind:

- Easily adjusted pressure regulator valve
- Air pressure safety relief valve

### DESIGNED FOR

Electric



Air



Gas



Hand



MAINTENANCE & REPAIR

ORIGINAL INSTALL

Split



Tension



Torque



Max Flow



## Specifications and Dimensional Data

**Size (L x W x H):** 46 cm x 53 cm x 52 cm  
17.9" x 20.8" x 15.3"

**Weight:** 23 kg (51 lb) [without oil]

**Maximum Oil Capacity:** (vented reservoir)  
9.5 L (2.5 Gallons) [to fill line]  
9.4 L (x2.5 Gallons) [usable]

**Operating Environment:** -25°C to +50°C  
(-13°F to +122°F)

(When operating near temperature extremes, it is recommended to use hydraulic oils that are rated for those temperatures. Refer to service manuals and cooling options)

**Sound Level:** 85 dBA (max)

Pressure: 0 - 1,500 bar (0 - 21,750 psi)

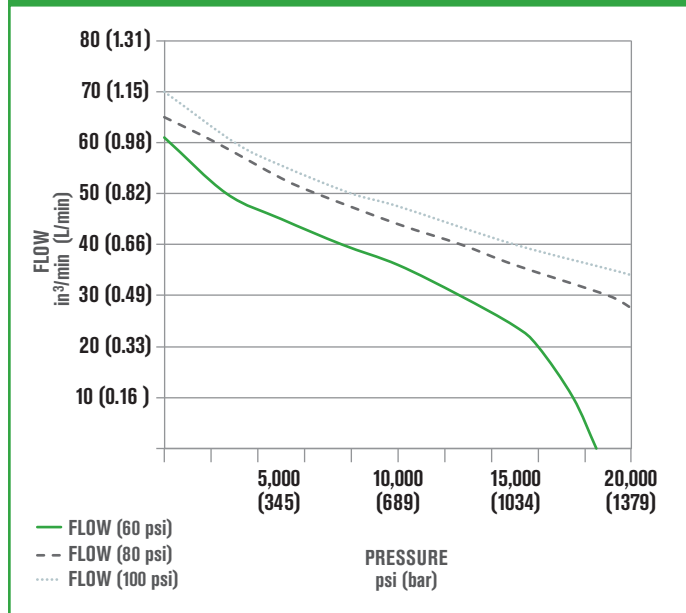
Typical Flow: 1.15 L/min - 0.50 L/min  
(70 in<sup>3</sup>/min -31 in<sup>3</sup>/min)

Air: 1.42 m<sup>3</sup>/min @ 5.5 bar (52 cfm @ 80 psi)  
1.53 m<sup>3</sup>/min @ 6.2 bar (54 cfm @ 90 psi)  
1.60 m<sup>3</sup>/min @ 6.9 bar (56 cfm @ 100 psi)

\* Values shown are with filter/regulator/lubricator.  
Values will increase without filter/regulator/  
lubricator.



**Typical Flow Curve**



### Hydraulic Oil Delivery

	@ 6.9 bar @ 100 psi	@ 5.5 bar @ 80 psi	@ 4.1 bar @ 60 psi
750 psi (51 bar)	68 in <sup>3</sup> /min (1.11 L/min)	63 in <sup>3</sup> /min (1.04 L/min)	59 in <sup>3</sup> /min (0.97 L/min)
2,500 psi (175 bar)	63 in <sup>3</sup> /min (1.03 L/min)	59 in <sup>3</sup> /min (0.97 L/min)	53 in <sup>3</sup> /min (0.87 L/min)
5,000 psi (350 bar)	56 in <sup>3</sup> /min (0.91 L/min)	53 in <sup>3</sup> /min (0.87 L/min)	45 in <sup>3</sup> /min (0.74 L/min)
10,000 psi (689 bar)	48 in <sup>3</sup> /min (0.78 L/min)	44 in <sup>3</sup> /min (0.72 L/min)	36 in <sup>3</sup> /min (0.59 L/min)
15,000 psi (1,000 bar)	40 in <sup>3</sup> /min (0.66 L/min)	36 in <sup>3</sup> /min (0.59 L/min)	24 in <sup>3</sup> /min (0.39 L/min)
21,750 psi (1,500 bar)	31 in <sup>3</sup> /min (0.51 L/min)	-	-

### Ordering Information

Order No.	Description
<b>HPUTP150002K</b>	1,500 Bar High Flow Tensioner Pump

## HIGH PRESSURE HAND PUMP

1,500 bar/21,750 psi



HPUHP150001



## TWO STAGE, HIGH PRESSURE HAND PUMP

- Two-speed reduces handle strokes so you work faster and easier
- Built-in, protected pressure gauge
- Ergonomic design for minimal handle effort
- Lightweight aluminum reservoir
- Easily accessible refill port
- Needle valve allows full control when releasing tension

### DESIGNED FOR

Electric



Air



Gas



Hand



MAINTENANCE  
& REPAIR

ORIGINAL  
INSTALL

Split



Tension



Torque



Max  
Flow





## Specifications and Dimensional Data

**Size:** (L x W x H): 62 cm x 11 cm x 17 cm  
24.4" x 4.3" x 6.7"

**Weight:** 8.7 kg (19.1 lb) [with oil]

**Maximum Oil Capacity:** (vented reservoir)

1.1 L (0.29 Gallons) [to fill line]

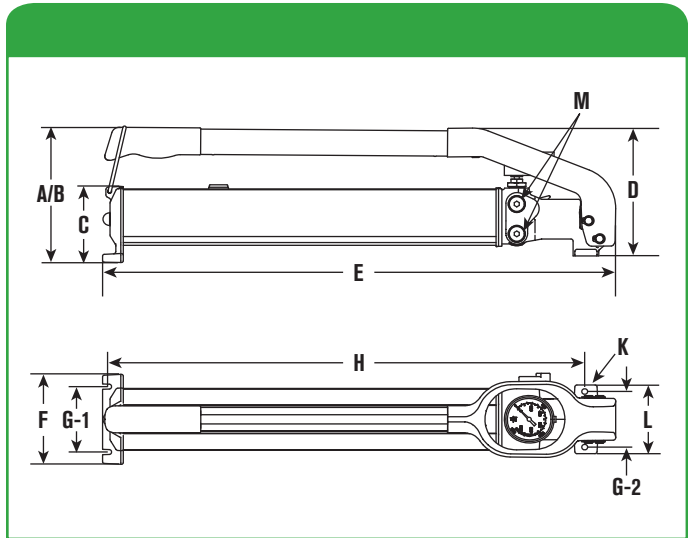
1.0 L (0.26 Gallons) [usable]

**Operating Environment:** -25°C to +50°C  
(-13°F to +122°F)

(When operating near temperature extremes, it is recommended to use hydraulic oils that are rated for those temperatures. Refer to service manuals and cooling options)

**Pressure:** 0 - 1,500 bar (0 - 21,750 psi)

Typical Flow: 20 cm<sup>3</sup> stroke - 1 cm<sup>3</sup> stroke  
(1.22 in<sup>3</sup>/stroke - 0.061 in<sup>3</sup>/stroke)

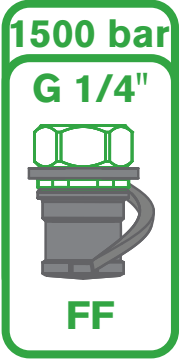
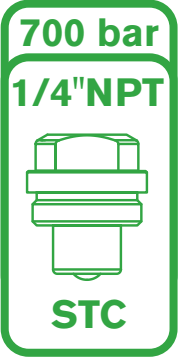
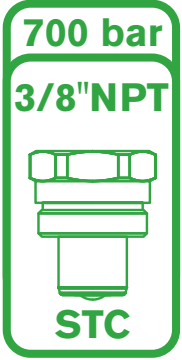
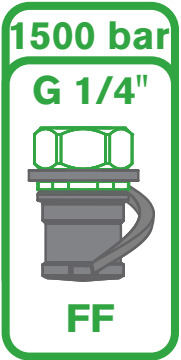




Order No.	A	B	C	D	E	F	G1	G2	H	J	K	L	M
	mm in	mm in	mm in	mm in	mm in	mm in	mm in	mm in	mm in	deg	mm in	mm in	in
HPUHP150001	170	560	152	170	620	110	80	68	575	55	6.6	84	61/4"
	6.69	22	6	6.69	24.41	4.33	3.15	2.68	22.64	55	0.26	3.31	61/4"

## Ordering Information

For use with	Order No	Speed	Volume per Stroke		Maximum Pressure		Handle Effort	Oil Capacity	Usable Oil Capacity	Oil Port	Product Weight
			LP in <sup>3</sup> cm <sup>3</sup>	HP in <sup>3</sup> cm <sup>3</sup>	LP psi bar	HP psi bar					
Tensioners	HPUHP150001	2	1.22	0.061	290	21750	83	61	61	61/4"	19.1
			20	1	20	1,500	370	1	1	61/4"	8.7

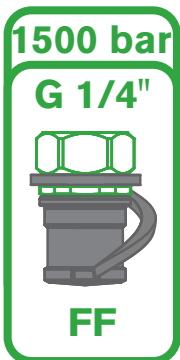
## Coupler Explanation

		1,500 BAR (21,750 PSI)	700 BAR (10,000 PSI)	
		TENSIONERS	TORQUE WRENCHES ENS SPLITTER	OTHER TOOLS
TOPSIDE		 <p>1500 bar G 1/4" FF</p>	 <p>700 bar 1/4" NPT STC</p>	 <p>700 bar 3/8" NPT STC</p>
		 <p>1500 bar G 1/4" FF</p>	 <p>700 bar 1/4" NPT PTC</p>	

Male FF couplers can connect to recessed style (standard), push to connect (PTC) couplers and Flat Face (optional) couplers. Contact factory for information about Flat Face coupler options.

### Coupler Icon Explanation

### No Coupler Included



#### RATED PRESSURE

700 bar (10,000 psi) or 1,500 bar (21,750 psi)

#### THREAD TYPE

1/4" NPT or 3/8" NPT or G 1/4"

#### ICON

#### COUPLER TYPE

STC = Screw to Connect or FF = Flat Face or

PTC = Push to Connect

Some products do not include couplers. Couplers need to be ordered separately.

