

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



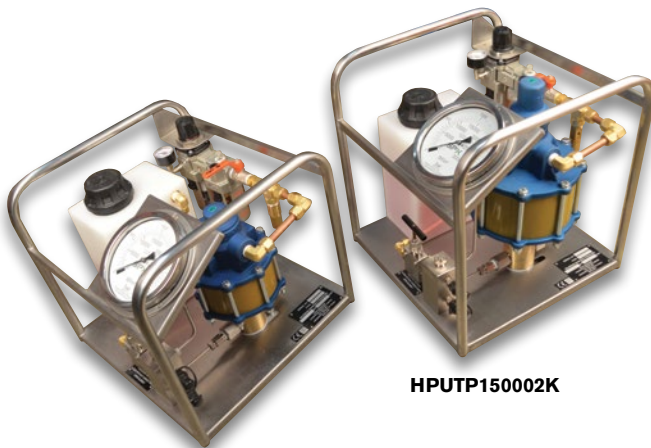
Page
HPUTP-1...94-95
Standard Flow Tensioner
Power Pack



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 700 bar (10,000 psi). 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 FLOW 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)

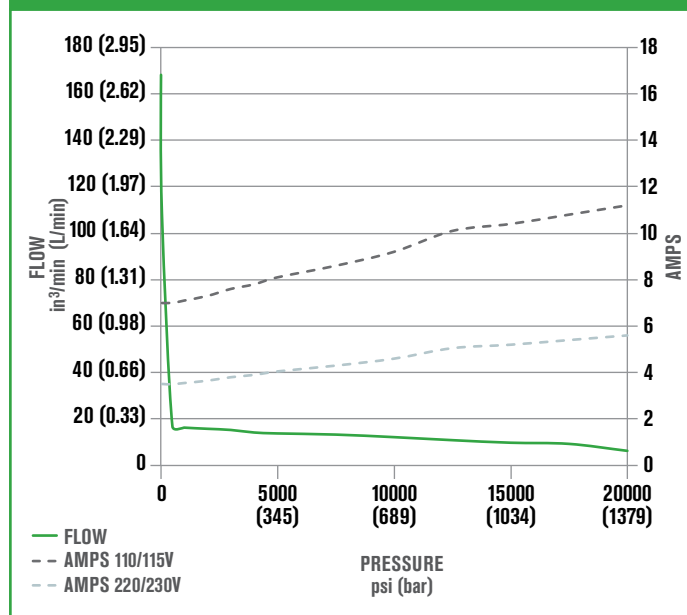
Pressure: 0 - 1,500 bar (0 - 21,750 psi)

Typical Flow: 2.7 L/min - 0.13 L/min
(168 in³/min - 8 in³/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)

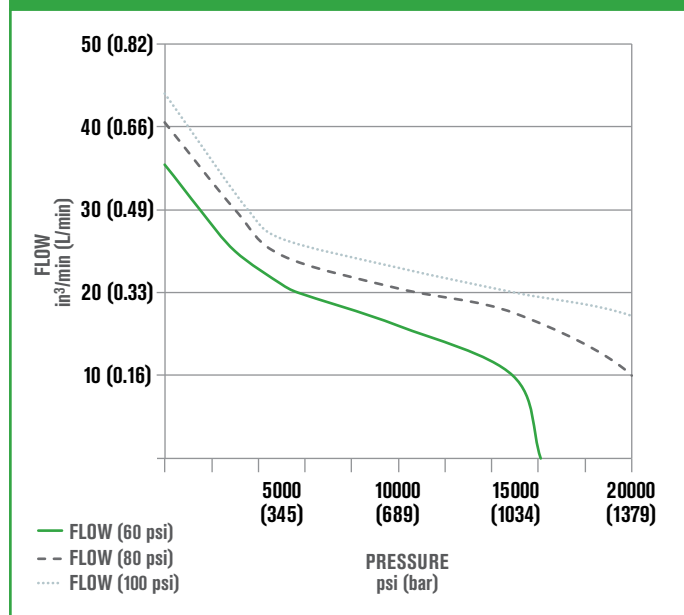
Typical Flow: 0.72 L/min - 0.28 L/min
(44 in³/min - 17 in³/min)

Air: 0.68 m³/min @ 5.5 bar (24 cfm @ 80 psi)
0.74 m³/min @ 6.2 bar (26 cfm @ 90 psi)
0.80 m³/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

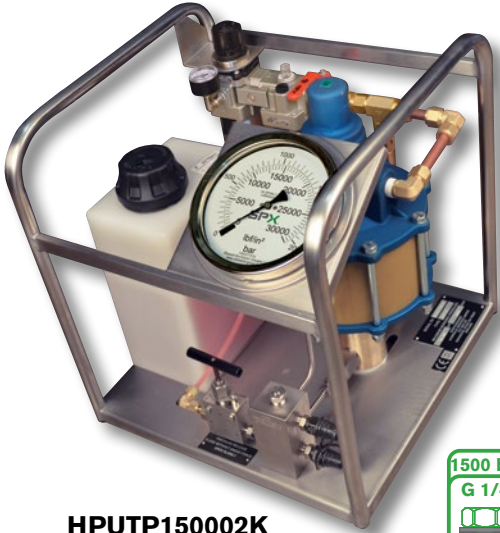
	@ 6.9 bar @ 100 psi	@ 5.5 bar @ 80 psi	@ 4.1 bar @ 60 psi
51 bar (750 psi)	0.67 L/min (41 in ³ /min)	0.62 L/min (38 in ³ /min)	0.54 L/min (33 in ³ /min)
175 bar (2,500 psi)	0.57 L/min (35 in ³ /min)	0.54 L/min (33 in ³ /min)	0.44 L/min (27 in ³ /min)
350 bar (5,000 psi)	0.44 L/min (27 in ³ /min)	0.40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

Ordering Information

Order No.	Description
HPUTP150001K	1,500 Bar (21,750 psi) 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:

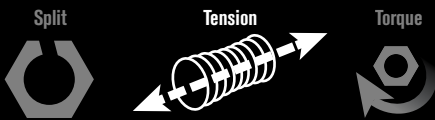
- Easily adjusted pressure regulator valve
- Air pressure safety relief valve

DESIGNED FOR



MAINTENANCE & REPAIR

ORIGINAL INSTALL



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)

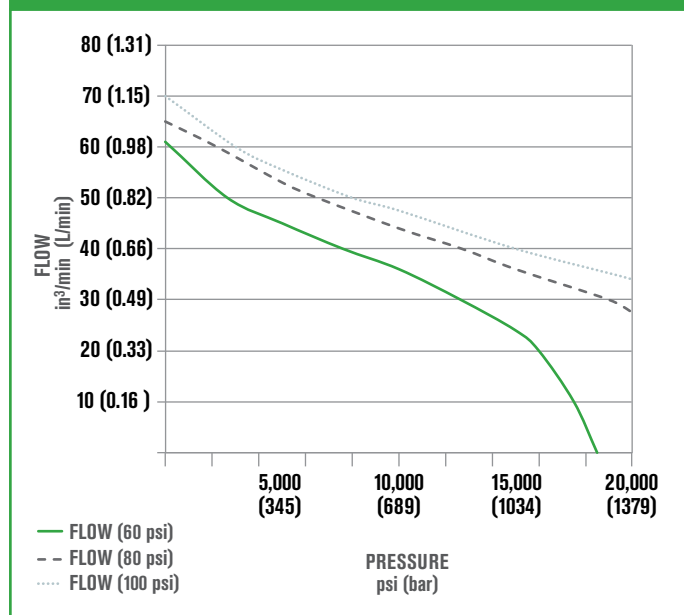
Typical Flow: 1.15 L/min - 0.50 L/min
(70 in³/min - 31 in³/min)

Air: 1.42 m³/min @ 5.5 bar (52 cfm @ 80 psi)
1.53 m³/min @ 6.2 bar (54 cfm @ 90 psi)
1.60 m³/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
51 bar (750 psi)	1.11 L/min (68 in ³ /min)	1.04 L/min (63 in ³ /min)	0.97 L/min (59 in ³ /min)
175 bar (2,500 psi)	1.03 L/min (63 in ³ /min)	0.97 L/min (59 in ³ /min)	0.87 L/min (53 in ³ /min)
350 bar (5,000 psi)	0.91 L/min (56 in ³ /min)	0.87 L/min (53 in ³ /min)	0.74 L/min (45 in ³ /min)
689 bar (10,000 psi)	0.78 L/min (48 in ³ /min)	0.72 L/min (44 in ³ /min)	0.59 L/min (36 in ³ /min)
1,000 bar (15,000 psi)	0.66 L/min (40 in ³ /min)	0.59 L/min (36 in ³ /min)	0.39 L/min (24 in ³ /min)
1,500 bar (21,750 psi)	0.51 L/min (31 in ³ /min)	-	-

Ordering Information

Order No.	Description
HPUTP150002K	1,500 Bar High Flow Tensioner Pump

HIGH PRESSURE HAND PUMP

1,500 bar/21,750 psi



P59L-1500



P59L-1500G

TWO STAGE, HIGH PRESSURE HAND PUMP

- Pressure Range - 0 to 1500 bar (0 to 21,750 psi)
- Two-speed design reduces handle effort by 40%
- Fiberglass handle provides rigidity, and reduces operator fatigue with grip.
- Convenient fill port enables pumps to be filled in a horizontal or vertical position.
- Fill cap seal acts as safety valve preventing over-pressurizing of reservoir.
- Large valve knob gives added control for slowly metering loads down.
- P59L-1500G model comes with a skid plate for stabilization and a digital pressure gauge.
- Extremely lightweight, easy to transport with the aluminum body design.

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): 56 cm x 14 cm x 18 cm
21.94" x 5.47" x 7.17"

Weight: 4.7 kg (10.4 lb) [with oil]

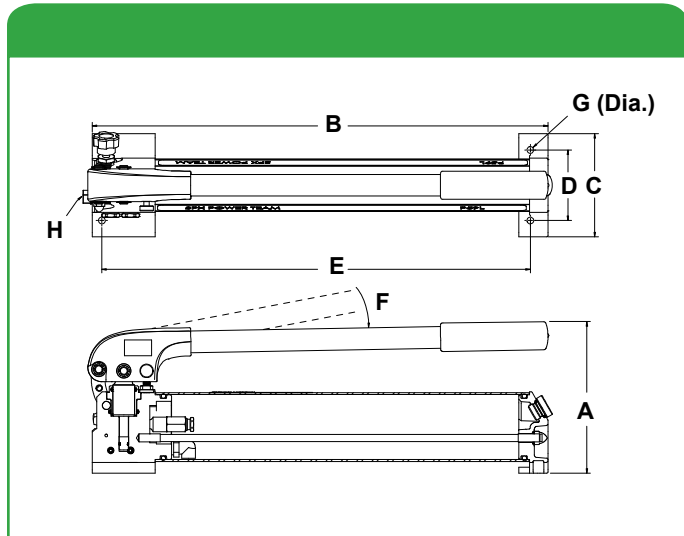
Maximum Oil Capacity: (vented reservoir)
1.1 L (0.29 Gallons) [to fill line]
0.7 L (0.18 Gallons) [usable]

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: 11 cm³ stroke - 0.8 cm³ stroke
(0.68 in³/stroke - 0.05 in³/stroke)



Order No.	A mm in	B mm in	C mm in	D mm in	E mm in	F deg	G in	H in
P59L-1500	182	556	139	83	502	7	5/16	9/16-18 UNF-2B **
	7.17	21.91	5.47	3.25	19.75	47	5/16	9/16-18 UNF-2B **
P59L-1500G*	182	556	139	83	502	7	5/16	9/16-18 UNF-2B **
	7.17	21.91	5.47	3.25	19.75	47	5/16	9/16-18 UNF-2B **

* Overall length, with the skid plate, is 718.8 mm (28.30 in.).

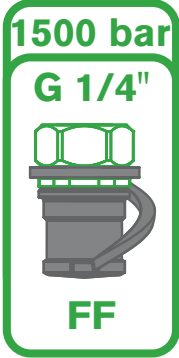
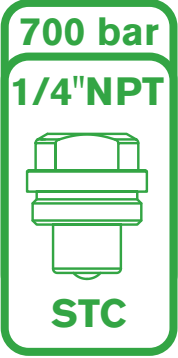
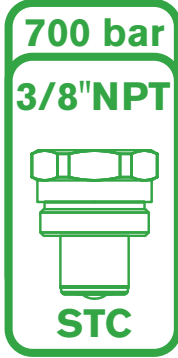
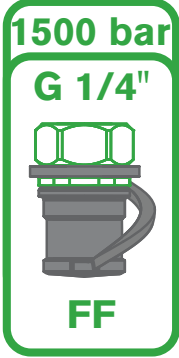
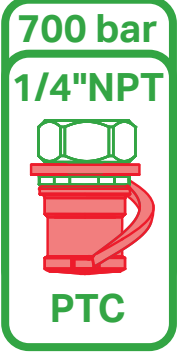

** High pressure 60° cone port.

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 cm ³ in ³	HP cm ³ in ³	LP bar psi	HP bar psi					
Tensioners	P59L-1500	2	11	0.8	20.7	1,500	320	1	1		4.7
			0.68	0.05	300	21,750	72	67.1	44.5	3/4 - 16 UNF	10.4
Tensioners	P59L-1500G*	2	11	0.8	20.7	1,500	320	1	1		6.5
			0.68	0.05	300	21,750	72	67.1	44.5	3/4 - 16 UNF	14.4

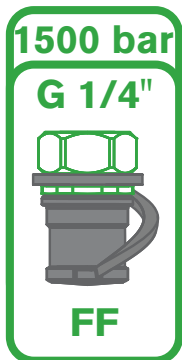
* Equipped with a skid plate and a digital gauge.

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>
SUBSEA	 <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



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

No Coupler Included

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

