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# ***PUMPS ACROSS AMERICA***



P U M P S   &   A C C E S S O R I E S   C A T A L O G

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# POWERLINE™ PLUS



In today's market, Hypro still remains the only true American manufacturer of low flow high pressure piston and plunger pumps. All variations of these pumps are made in New Brighton, Minnesota, with the highest quality materials for high interval operation. Now, our complete line of PowerLine™ Plus 2200B-P, 2300B-P and 2400B-P series pumps are made with patent pending "Cartridge Technology." This technology is designed to give you increased reliability and higher pressures, as well as convenience when the time comes for preventive maintenance.



Hypro engineered these new technology pumps with the operator/service technician in mind. We realize that down time is a major problem in all industries, so we incorporated our complete wet end seal configuration into one easy replaceable cartridge. Under normal conditions you can simply replace the pressure and plunger rod oil seals, contained in the cartridge, in 30 minutes or less. This is done with three basic tools: a standard screwdriver, an allen wrench and a pliers. The best part of this operation is that you can do it at the job site without ever having to return to the shop!



Hypro's cartridge design has revolutionized the industry so much that you won't want to create a single new system or replace a pump without taking advantage of Hypro's innovative cartridge technology. Call us today at 1-800-424-9776 to "**make the switch**" to Hypro's new and improved PowerLine PLUS series plunger pumps with "cartridge technology."



# CARTRIDGE TECHNOLOGY

## 2 2 0 0 B - P & 2 3 0 0 B - P F e a t u r e s

One piece cup retainer cartridge with dual low pressure packing design for improved priming capabilities. Car wash pumps include high performance, low pressure seals for superior reliability in high vacuum applications.

Patented, one piece plunger guide cartridge provides improved guiding surface for superior alignment. Special corrosion resistant cartridges included specifically for car wash applications.

Patented pin and clip rod assembly permits higher operating pressures.

Lifetime warranty on Hypro's single-piece forged brass heads.

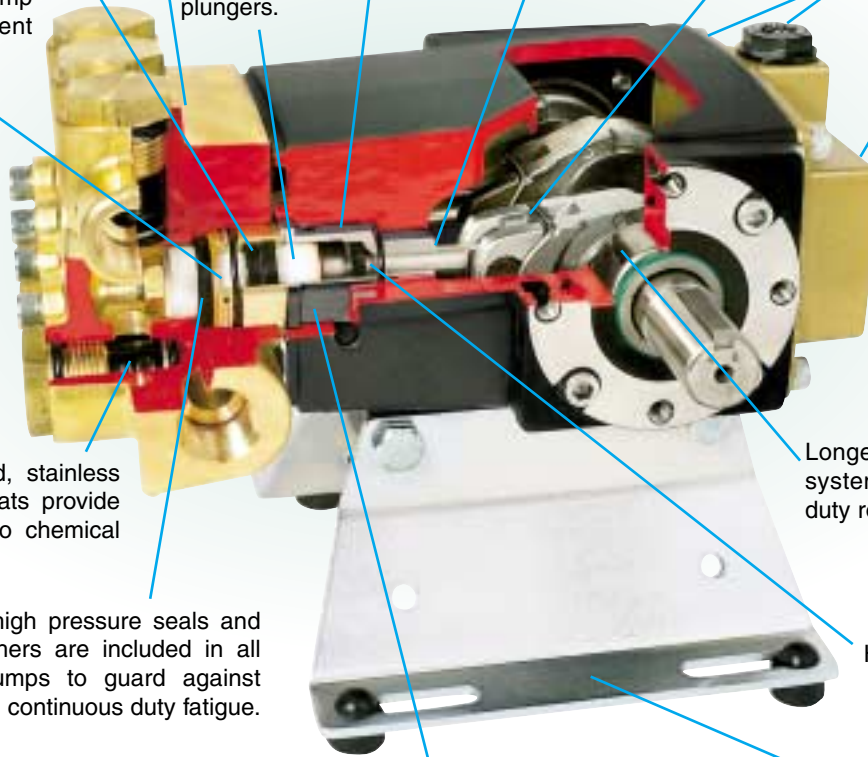
Stainless steel lower plungers offer superior corrosion and wear resistance.

O-ring seals for leak free rear cover.

Quick and easy pump packing replacement done in just a few minutes.

100% ceramic plungers.

Break resistant oil level sight glass.



Precision machined, stainless steel valve and seats provide higher resistance to chemical attack.

Longer lasting drive system with heavy-duty roller bearings.

Heavy-duty, high pressure seals and back-up washers are included in all car wash pumps to guard against corrosion and continuous duty fatigue.

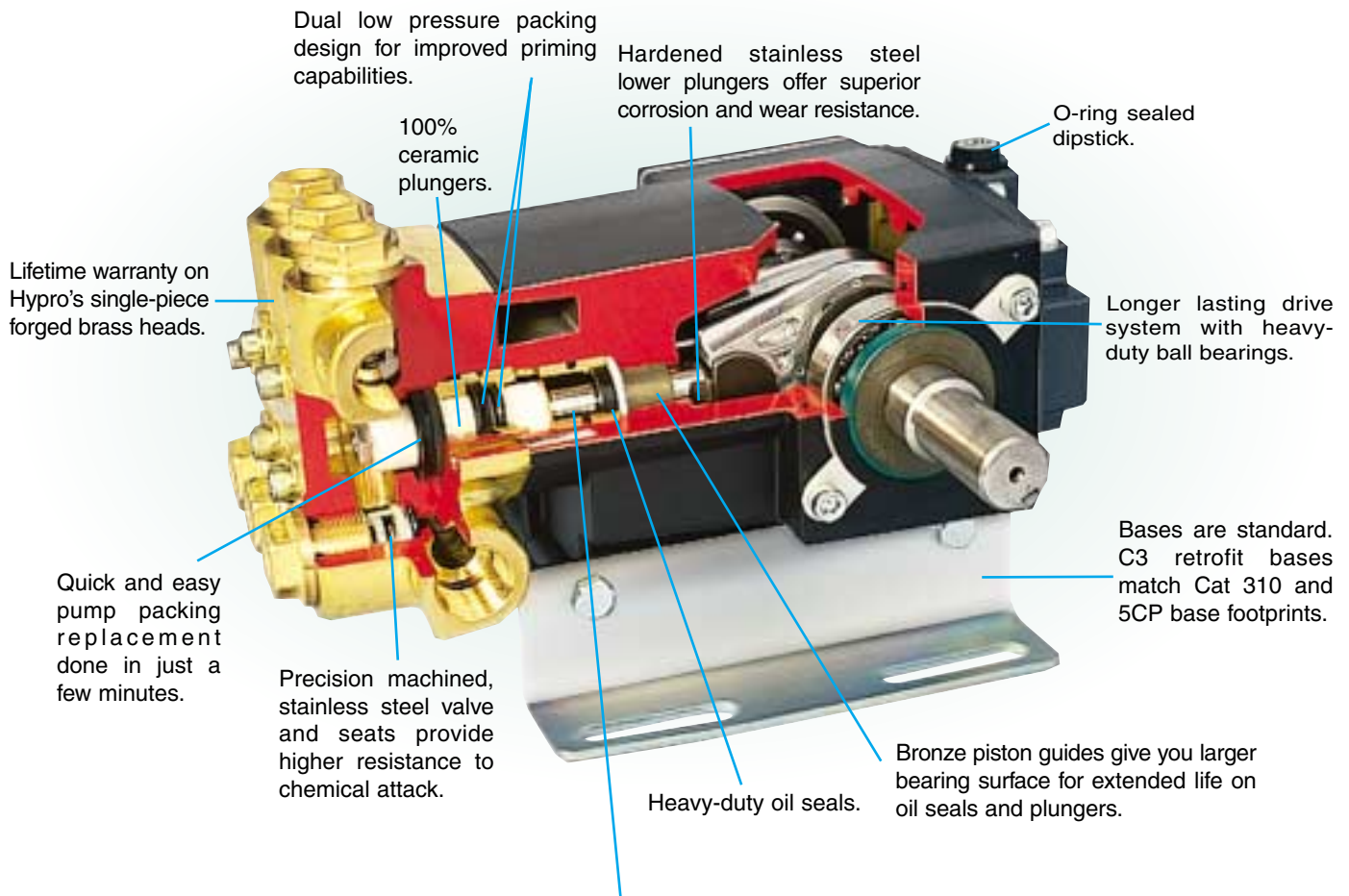
Heavy-duty oil seals.

Hypro's state-of-the-art, patented cartridge technology allows the crankcase oil seals and all wet end seals to be easily serviced by removing only the pump head.

Bases are standard. C3 retrofit bases match Cat 310 and 5CP base footprints.



## 2400B - P Features

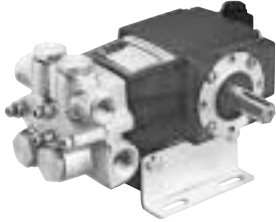


Hypro's state-of-the-art, patented cartridge technology allows the crankcase oil seals and all wet end seals to be easily serviced by removing only the pump head.

## PLUNGER PUMPS

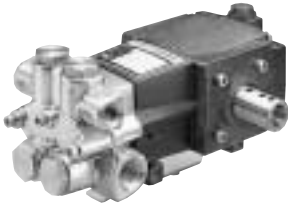
### PowerLine PLUS 2200B-P Duplex Plunger Pumps

#### 3/4" OD Solid Shaft Forged Brass Head Duplex Pumps With Rail Mounting Kit



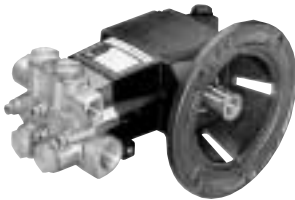
Model Number	Max. GPM	Max. PSI	Max. RPM	Inlet Port	Outlet Port
2220B-P	2.1	2000	1725	1/2"	3/8"
2221B-P	2.1	1500	3450	1/2"	3/8"
2230B-P	3.0	2000	1725	1/2"	3/8"
2231B-P	3.0	1500	3450	1/2"	3/8"

#### 5/8" ID Hollow Shaft Forged Brass Head Duplex Pumps With Torque Arm



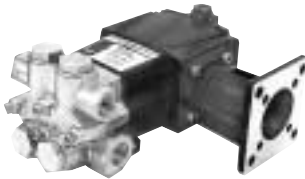
Model Number	Max. GPM	Max. PSI	Max. RPM	Inlet Port	Outlet Port
2220B-HP	2.1	2000	1725	1/2"	3/8"
2221B-HP	2.1	1500	3450	1/2"	3/8"
2230B-HP	3.0	2000	1725	1/2"	3/8"
2231B-HP	3.0	1500	3450	1/2"	3/8"

#### 5/8" ID Hollow Shaft Forged Brass Head Duplex Pumps Flanged For Direct Couple to Electric Motors (NEMA 56C)



Model Number	Max. GPM	Max. PSI	Max. RPM	Inlet Port	Outlet Port
2220B-AP	2.1	2000	1725	1/2"	3/8"
2221B-AP	2.1	1500	3450	1/2"	3/8"
2230B-AP	3.0	2000	1725	1/2"	3/8"
2231B-AP	3.0	1500	3450	1/2"	3/8"

#### 3/4" ID Hollow Shaft Forged Brass Head Duplex Pumps Flanged For Direct Couple to Gasoline Engines



Model Number	Max. GPM	Max. PSI	Max. RPM	Inlet Port	Outlet Port
2231B-CP	3.0	1500	3450	1/2"	3/8"

#### PowerLine PLUS options

**Subtract base** - Add suffix "K" - example 2220B-KP.

**Left hand shaft extension** - Add suffix "L" - example 2220B-ALP.

**Viton seals** - Add suffix "W" - example 2220B-APW.

**1500 psi unloader / bypass system** - Add suffix "U2" - example 2220B-APU2.

**Gear reduction assembly 8000-0002 for 1725 rpm Solid Shaft pumps** - Add suffix "G3" - example 2220B-G3P.

**Disabler valves** - Add suffix "T" - example 2220B-PT.

**Aluminum head (Max PSI 1000)** - Substitute suffix "B" with "A" - example 2220B-P to 2220A-P (Max PSI 1000).

**PowerLine PLUS 2200B-P Duplex Plunger Pumps**  
*With Unloader/Bypass System and Adjustable Chemical Injector*

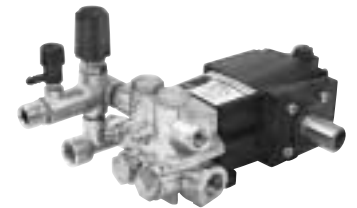
**3/4" OD Solid Shaft Forged Brass Head Duplex Pumps With Rail Mounting Kit**

Model Number	Max. GPM	Max. PSI	Max. RPM	Inlet Port	Outlet Port
2220B-PU3	2.1	2000	1725	1/2"	3/8"
2221B-PU3	2.1	1500	3450	1/2"	3/8"
2230B-PU3	3.0	2000	1725	1/2"	3/8"
2231B-PU3	3.0	1500	3450	1/2"	3/8"



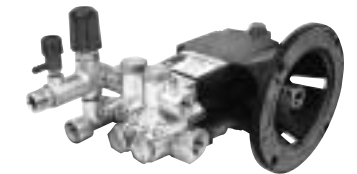
**5/8" ID Hollow Shaft Forged Brass Head Duplex Pumps With Torque Arm**

Model Number	Max. GPM	Max. PSI	Max. RPM	Inlet Port	Outlet Port
2220B-HPU3	2.1	2000	1725	1/2"	3/8"
2221B-HPU3	2.1	1500	3450	1/2"	3/8"
2230B-HPU3	3.0	2000	1725	1/2"	3/8"
2231B-HPU3	3.0	1500	3450	1/2"	3/8"



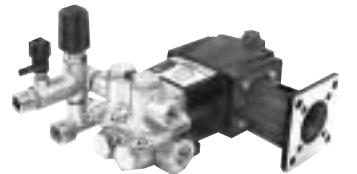
**5/8" ID Hollow Shaft Forged Brass Head Duplex Pumps Flanged For Direct Couple to Electric Motors (NEMA 56C)**

Model Number	Max. GPM	Max. PSI	Max. RPM	Inlet Port	Outlet Port
2220B-APU3	2.1	2000	1725	1/2"	3/8"
2221B-APU3	2.1	1500	3450	1/2"	3/8"
2230B-APU3	3.0	2000	1725	1/2"	3/8"
2231B-APU3	3.0	1500	3450	1/2"	3/8"



**3/4" ID Hollow Shaft Forged Brass Head Duplex Pumps Flanged For Direct Couple to Gasoline Engines**

Model Number	Max. GPM	Max. PSI	Max. RPM	Inlet Port	Outlet Port
2231B-CPU3	3.0	1500	3450	1/2"	3/8"



**PowerLine PLUS options**

**Subtract base** - Add suffix "K" - example 2220B-KPU3.

**Garden hose inlet fitting for unloader** - 3/4" Garden Hose x 1/2" NPT (M) - order separately 2404-0256.

**Left hand shaft extension** - Add suffix "L" - example 2220B-ALPU3.

**Viton seals** - Add suffix "W" - example 2220B-APU3W.

**Gear reduction assembly 8000-0002 for 1725 rpm Solid Shaft pumps** - Add suffix "G3" - example 2220B-G3PU3.

**Disabler valves** - Add suffix "T" - example 2220B-PTU3.

**Aluminum head (Max PSI 1000)** - Substitute suffix "B" with "A" - example 2220B-PU3 to 2220A-PU3 (Max PSI 1000).

## PLUNGER PUMPS

### PowerLine PLUS 2300B-P Triplex Plunger Pumps

#### 3/4" OD Solid Shaft Forged Brass Head Triplex Pumps with Rail Mounting Kit



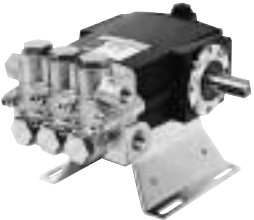
Model Number	Max. GPM	Max. PSI	Max. RPM	Inlet Port	Outlet Port
2330B-P	3.1	2500	1725	1/2"	3/8"
2359B-P	3.5	3000	1725	1/2"	3/8"
2351B-P	4.0	3000	1725	1/2"	3/8"
2340B-P	4.2	2500	1725	1/2"	3/8"
2345B-P	4.8	2500	1725	1/2"	3/8"

#### 3/4" ID Hollow Shaft Forged Brass Head Triplex Pumps Flanged for Direct Couple to Gasoline Engines



Model Number	Max. GPM	Max. PSI	Max. RPM	Inlet Port	Outlet Port
2354B-CP	2.7	2000	3450	1/2"	3/8"
2331B-CP	3.0	1500	3450	1/2"	3/8"

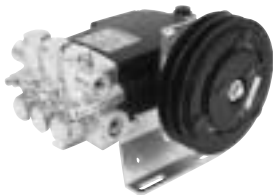
### Clutch Drive PowerLine PLUS 2300B-P Triplex Plunger Pumps



#### 3/4" OD Solid Shaft With M6X1" Tapped Thread Forged Brass Head Triplex Pump With Mounting Rail Kit

Model Number	Max. GPM	Max. PSI	Max. RPM	Inlet Port	Outlet Port
2359B-P	3.5	3000	1725	1/2"	3/8"

#### 3/4" OD Solid Shaft Forged Brass Head Triplex Plunger Pump With 6" Electric Clutch Assembly And Rail Mounting Kit



Model Number	Max. GPM	Max. PSI	Max. RPM	Inlet Port	Outlet Port
2359B-PY	3.5	3000	1725	1/2"	3/8"

#### PowerLine PLUS options

**Subtract base** - Add suffix "K" - example 2330B-KP.

**Left hand shaft extension** - Add suffix "L" - example 2351B-LP.

**Viton seals** - Add suffix "W" - example 2351B-PW.

**1500 psi unloader / bypass system** - Add suffix "U2" - example 2351B-PU2.

**Gear reduction assembly 8000-0002 for 1725 rpm Solid Shaft pumps** - Add suffix "G3" - example 2351B-G3P.

**Disabler valves** - Add suffix "T" - example 2351B-PT.

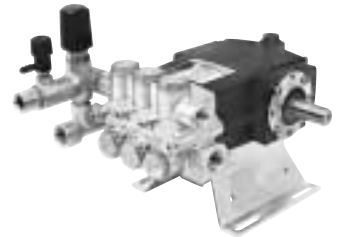


## PowerLine PLUS 2300B-P Triplex Plunger Pumps

*With Unloader/Bypass System and Adjustable Chemical Injector*

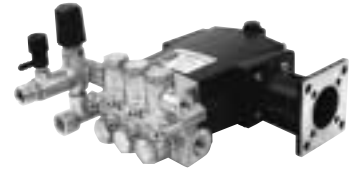
### 3/4" OD Solid Shaft Forged Brass Head Triplex Pumps with Rail Mounting Kit

Model Number	Max. GPM	Max. PSI	Max. RPM	Inlet Port	Outlet Port
2330B-PU3	3.1	2500	1725	1/2"	3/8"
2359B-PU3	3.5	3000	1725	1/2"	3/8"
2351B-PU3	4.0	3000	1725	1/2"	3/8"
2340B-PU3	4.2	2500	1725	1/2"	3/8"
2345B-PU3	4.8	2500	1725	1/2"	3/8"



### 3/4" ID Hollow Shaft Forged Brass Head Triplex Pumps Flanged for Direct Couple to Gasoline Engines

Model Number	Max. GPM	Max. PSI	Max. RPM	Inlet Port	Outlet Port
2354B-CPU3	2.7	2000	3450	1/2"	3/8"
2331B-CPU3	3.0	1500	3450	1/2"	3/8"

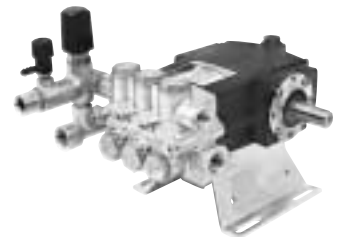


## Clutch Drive PowerLine PLUS Triplex Plunger Pumps

*With Unloader/Bypass System and Adjustable Chemical Injector*

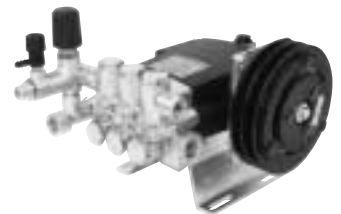
### 3/4" OD Solid Shaft With M6X1" Tapped Thread Forged Brass Head Triplex Pump With Mounting Rail Kit

Model Number	Max. GPM	Max. PSI	Max. RPM	Inlet Port	Outlet Port
2359B-PU3	3.5	3000	1725	1/2"	3/8"



### 3/4" OD Solid Shaft Forged Brass Head Triplex Plunger Pump With 6" Electric Clutch Assembly And Rail Mounting Kit.

Model Number	Max. GPM	Max. PSI	Max. RPM	Inlet Port	Outlet Port
2359B-PU3Y	3.5	3000	1725	1/2"	3/8"



### PowerLine PLUS options

**Subtract base** - Add suffix "K" - example 2220B-KPU3.

**Garden hose inlet fitting for unloader** - 3/4" Garden Hose x 1/2" NPT (M) - order separately 2404-0256.

**Left hand shaft extension** - Add suffix "L" - example 2351B-LPU3.

**Viton seals** - Add suffix "W" - example 2351B-PU3W.

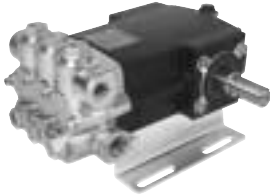
**Gear reduction assembly 8000-0002 for 1725 rpm Solid Shaft pumps** - Add suffix "G3" - example 2351B-G3PU3.

**Disabler valves** - Add suffix "T" - example 2351B-PTU3.

## PLUNGER PUMPS

### PowerLine PLUS 2400B-P Triplex Plunger Pumps

#### 1" OD Solid Shaft Forged Brass Head Triplex Pumps with Rail Mounting Kit



Model Number	Max. GPM	Max. PSI	Max. RPM	Inlet Port	Outlet Port
2410B-P	4.4	2500	1725	3/4"	1/2"
2411B-P	5.3	2500	1725	3/4"	1/2"
2412B-P	5.9/4.0	2500	1725/1100	3/4"	1/2"
2413B-P	7.2	1800	1725	3/4"	1/2"
2414B-P	8.0/4.0	1800	1725/800	3/4"	1/2"

#### PowerLine PLUS options

Subtract base - Add suffix "K" - example 2414B-KP.

Cat 310 retrofit base - Add suffix "C3" - example 2414B-C3P.

Cat 530 retrofit base - Add suffix "C5" - example 2414B-C5P.

Left hand shaft extension - Add suffix "L" - example 2414B-LP.

Gear reduction assembly 8000-0021 - Add suffix "G1" - example 2414B-G1P. B & S and Honda Engines.

Gear reduction assembly 8000-0015 - Add suffix "G2" - example 2414B-G2P. Kohler Engine.

## CARTRIDGE TECHNOLOGY

### CAR WASH

### PowerLine PLUS "Car Wash" Triplex Plunger Pumps



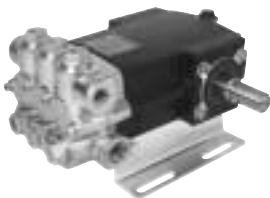
#### 3/4" OD Solid Shaft Forged Brass Head 2300B-P Triplex Pumps with Rail Mounting Kit

Model Number	Max. GPM	Max. PSI	Max. RPM	Inlet Port	Outlet Port
2303B-P	3.1	1200	1725	1/2"	3/8"
2304B-P	4.2	1200	1725	1/2"	3/8"
2314B-P	4.0/3.0	1200	1450/1100	1/2"	3/8"

#### Replace Cat 310 and 5CP pumps

2303B-C3P	3.1	1200	1725	1/2"	3/8"
2304B-C3P	4.2	1200	1725	1/2"	3/8"
2314B-C3P	4.0/3.0	1200	1450/1100	1/2"	3/8"

#### 1" OD Solid Shaft Forged Brass Head 2400B-P Triplex Pumps with Rail Mounting Kit



Model Number	Max. GPM	Max. PSI	Max. RPM	Inlet Port	Outlet Port
2412B-P	4.0	2500	1100	3/4"	1/2"
2414B-P	4.0	1800	800	3/4"	1/2"

#### Replace Cat 310 and 5CP pumps

2412B-C3P	4.0	2500	1100	3/4"	1/2"
2414B-C3P	4.0	1800	800	3/4"	1/2"

#### PowerLine PLUS Car Wash options

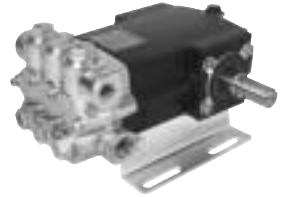
Subtract base - Add suffix "K" - example 2414B-C3KP.

Left hand shaft extension - Add suffix "L" - example 2414B-C3LP.

## PowerLine PLUS 2430B-P Triplex Plunger Pumps

### 1" OD Solid Shaft Forged Brass Head Triplex Pumps with Rail Mounting Kit

Model Number	Max. GPM	Max. PSI	Max. RPM	Inlet Port	Outlet Port
2430B-P	4.3	3600	1725	3/4"	1/2"
2431B-P	5.1	3600	1725	3/4"	1/2"
2432B-P	5.8	3600	1725	3/4"	1/2"
2433B-P	7.1	2500	1725	3/4"	1/2"
2434B-P	7.9	2500	1725	3/4"	1/2"



### PowerLine PLUS options

**Subtract base** - Add suffix "K" - example 2434B-KP.

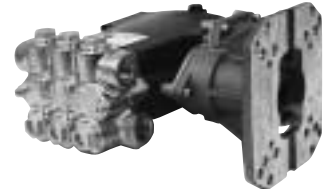
**Left hand shaft extension** - Add suffix "L" - example 2434B-LP.

**Disabler Valves** - Add suffix "T" - example 2434B-PT.

## PowerLine PLUS 2430B-P Triplex Plunger Pumps With Gearbox

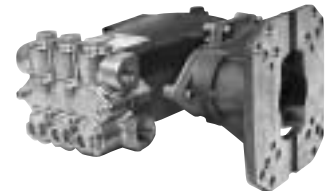
### With 8000-0021 1.8:1 Gearbox for 8-18hp Gas Engines, 1" Solid Shaft

Model Number	Max. GPM	Max. PSI	Max. RPM	Inlet Port	Outlet Port
2430B-G1P	4.3	3600	1725	3/4"	1/2"
2431B-G1P	5.1	3600	1725	3/4"	1/2"
2432B-G1P	5.8	3600	1725	3/4"	1/2"
2433B-G1P	7.1	2500	1725	3/4"	1/2"
2434B-G1P	7.9	2500	1725	3/4"	1/2"



### With 8000-0015 1.8:1 Gearbox for 10-18 hp Gas Engines, 1 1/2" Solid Shaft

Model Number	Max. GPM	Max. PSI	Max. RPM	Inlet Port	Outlet Port
2430B-G2P	4.3	3600	1725	3/4"	1/2"
2431B-G2P	5.1	3600	1725	3/4"	1/2"
2432B-G2P	5.8	3600	1725	3/4"	1/2"
2433B-G2P	7.1	2500	1725	3/4"	1/2"
2434B-G2P	7.9	2500	1725	3/4"	1/2"



### PowerLine PLUS options

**Left hand shaft extension** - Add suffix "L" - example 2434B-G1LP.

**Disabler Valves** - Add suffix "T" - example 2434B-G1PT.

## 5300 Series Small Twin® Piston Pumps

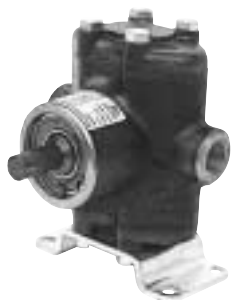
### 5/8" ID Hollow Shaft Cast Iron Small Twin® Piston Pumps With Torque Arm



Model Number	Max. GPM	Max. PSI	Max. RPM	Cup Material	NPT Ports
<b>Maximum temperature is 140°F.</b>					
5315C-HX	1.5	500	1800	Leather	1/2"
5315C-HRX	1.5	500	1800	Buna-N	1/2"
5315C-CHX	1.5	500	1800	Teflon	1/2"
5320C-HX	2.0	500	1800	Leather	1/2"
5320C-HRX	2.0	500	1800	Buna-N	1/2"
5320C-CHX	2.0	500	1800	Teflon	1/2"
5325C-HX	2.5	500	1800	Leather	1/2"
5325C-HRX	2.5	500	1800	Buna-N	1/2"
5325C-CHX	2.5	500	1800	Teflon	1/2"
5330C-HX	3.0	500	1800	Leather	1/2"
5330C-HRX	3.0	500	1800	Buna-N	1/2"
5330C-CHX	3.0	500	1800	Teflon	1/2"

Add suffix "D" to pump model for **injector head** -- example 5320C-DHRX

### 5/8" OD Solid Shaft Cast Iron Small Twin® Piston Pumps With Base



Model Number	Max. GPM	Max. PSI	Max. RPM	Cup Material	NPT Ports
<b>Maximum temperature is 140°F.</b>					
5315C-X	1.5	500	1800	Leather	1/2"
5315C-RX	1.5	500	1800	Buna-N	1/2"
5315C-CX	1.5	500	1800	Teflon	1/2"
5320C-X	2.0	500	1800	Leather	1/2"
5320C-RX	2.0	500	1800	Buna-N	1/2"
5320C-CX	2.0	500	1800	Teflon	1/2"
5325C-X	2.5	500	1800	Leather	1/2"
5325C-RX	2.5	500	1800	Buna-N	1/2"
5325C-CX	2.5	500	1800	Teflon	1/2"
5330C-X	3.0	500	1800	Leather	1/2"
5330C-RX	3.0	500	1800	Buna-N	1/2"
5330C-CX	3.0	500	1800	Teflon	1/2"

Add suffix "D" to pump model for **injector head** -- example 5320C-DRX

## 5300 Series Small Twin® Plunger Pumps

### 5/8" ID Hollow Shaft Cast Iron Small Twin® Plunger Pumps With Torque Arm and Buna-N Seals

Model Number	Max. GPM	Max. PSI	Max. RPM	Plunger Material	NPT Ports
<b>Maximum temperature is 180°F.</b>					
5321C-H	2.2	1000	1800	S.S.	1/2"
5322C-H	2.2	1000	1800	Ceramic	1/2"
<b>Maximum temperature is 140°F.</b>					
5324C-H	2.9	800	1800	S.S.	1/2"

Add suffix "D" to pump model for injector head -- example 5321C-DH.



### 5/8" OD Solid Shaft Cast Iron Small Twin® Plunger Pumps With Base and Buna-N Seals

Model Number	Max. GPM	Max. PSI	Max. RPM	Plunger Material	NPT Ports
<b>Maximum temperature is 180°F.</b>					
5321C	2.2	1000	1800	S.S.	1/2"
5322C	2.2	1000	1800	Ceramic	1/2"
<b>Maximum temperature is 140°F.</b>					
5324C	2.9	800	1800	S.S.	1/2"

Add suffix "D" to pump model for injector head -- example 5321C-D.



### Hollow Shaft Cast Iron Small Twin® Plunger Pumps With Torque Arm, Buna-Seals, and Ceramic Plungers

Model Number	Max. GPM	Max. PSI	Max RPM	Shaft ID Size	NPT Ports
<b>Maximum temperature is 180°F.</b>					
53702	2.2	1000	3450	5/8"	1/2"
53703 *	2.3	1000	3100	5/8"	1/2"

Add suffix "D" to pump model for injector head -- example 53702-D.

\* This requires a "special order" gas engine with a 5/8" shaft.



## Hydraulically-Driven Pressure Washers

Model Number	Max GPM	Max PSI	Chemical Injector	Inlet Port	Outlet Port	Hydraulic Motor Requirements	
						GPM	PSI
1802C	3.0	1000	no	1/2" NPT	3/8" Quick Disconnect	5.0	1300
* 1804C	3.0	1500	yes	3/4" GH	3/8" Quick Disconnect	8.0	1900
* 1806C	3.0	2000	yes	3/4" GH	3/8" Quick Disconnect	11.0	1300
* 1824C	4.0	1500	yes	3/4" GH	3/8" Quick Disconnect	8.5	2000
* 1826C	4.0	2000	yes	3/4" GH	3/8" Quick Disconnect	8.5	2000
<b>Without 50 ft. Hose and Gun Assembly</b>							
1803C	3.0	1000	no	1/2" NPT	3/8" Quick Disconnect	5.0	1300
* 1805C	3.0	1500	yes	3/4" GH	3/8" Quick Disconnect	8.0	1900
* 1807C	3.0	2000	yes	3/4" GH	3/8" Quick Disconnect	11.0	1300
* 1827C	4.0	2000	yes	3/4" GH	3/8" Quick Disconnect	8.5	2000

\* 1804C, 1805C, 1806C, 1807C, 1824C, 1826C, 1827C Include Thermal Relief Valve



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## Hypro 17 Guns

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- Max. pressure: 2150 psi
- Max. flow: 7.0 gpm, max. temp: 210°F
- 150 bar, 25 L/min., 100°C
- 3/8" (F) NPT inlet; 1/4" (F) NPT outlet
- Stainless steel ball and seat
- Lightweight, yet durable
- Front entry; Thumb set safety
- Consistent weep control at 1/4 gpm (+/-15%) on "W" version

Model No.  
3381-0017  
3381-0017W; weep version

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## Hypro 32 Guns

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- Max. pressure: 4000 psi
- Max. flow: 7.0 gpm, max. temp: 300°F
- 280 bar, 27 L/min., 150°C
- 3/8" (F) NPT inlet; 1/4" (F) NPT outlet
- Stainless steel ball, seat, spring and glands
- Durable insulated handle; Rear entry
- Reduced trigger pressure; Less operator fatigue
- Consistent weep control at 1/4 gpm (+/-15%) on "W" version

Model No.  
3381-0032  
3381-0032W; weep version

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## Hypro 18 Guns

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- Max. pressure: 4000 psi
- Max. flow: 9.0 gpm, max. temp: 300°F
- 280 bar, 30 L/min., 150°C
- 3/8" (F) NPT inlet; 1/4" (F) NPT outlet
- Fast, easy servicing
- Stainless steel ball, seat, spring and glands
- Durable insulated handle; Rear entry
- Reduced trigger pressure; Less operator fatigue
- Consistent weep control at 1/4 gpm (+/-15%) on "W" version

Model No.  
3381-0018  
3381-0018W; weep version

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## Foot Valve

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- Max. pressure: 3000 psi
- Max. flow: 7 gpm
- 200 bar, 25 L/min., 100°C
- 3/8" (F) NPT inlet; 1/4" (F) NPT outlet
- Stainless steel ball and seat

Model No.  
3381-0040

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## Dual Lances

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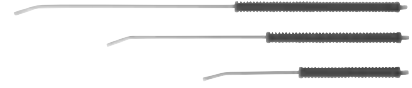
- Max. pressure: 3000 psi
- Max. flow: 10.5 gpm
- Max. temperature: 300°F
- 1/4" (M) NPT inlet; dual 1/4" (M) outlet
- Insulated lance; insulated selector handle
- Dual molded nozzle protectors
- 40" length, rotating handle for proper hi/lo nozzle control

Model No.  
3365-0002 Chrome plated  
3365-0006 Stainless steel

## Zinc Plated Bent Single Lances

- Max. pressure: 3600 psi
- Max. flow: 10.5 gpm
- Max. temp: 300°F
- 1/4" (M) NPT inlet and outlet
- Insulated handle

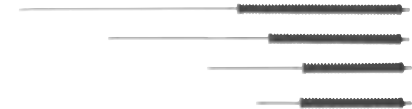
Model No.  
 3365-0004/24; 24" length  
 3365-0004/36; 36" length  
 3365-0004/47; 47" length



## Zinc Plated Straight Single Lances

- Max. pressure: 3600 psi
- Max. flow: 10.5 gpm
- Max. temp: 300°F
- 1/4" (M) inlet and outlet
- Insulated handle

Model No.  
 3365-0008/18; 18" length  
 3365-0005/24; 24" length  
 3365-0005/36; 36" length  
 3365-0005/47; 47" length



\* 3365-0008/18 includes 1/4" (M) inlet and 1/8" (F) outlet

## Front Entry Spray Gun with Black Lance + Coupler

- Max. pressure: 2150 psi
- Max. flow: 7.0 gpm
- Max. temp: 210°F
- 150 bar, 25 L/min., 100°C
- 3/8" (F) NPT inlet; Quick coupling outlet (screw type)
- Stainless steel ball and seat
- Thumb set safety; Lightweight, yet durable
- 15" Insulated lance length with screw coupling; Front entry

Model No.  
 3381-0033



## Rear Entry Spray Gun with Black Lance + Coupler

- Max. pressure: 3500 psi
- Max. flow: 7.0 gpm
- Max. temp: 300°F
- 250 bar, 27 L/min., 150°C
- 3/8" (F) NPT inlet; Quick coupling outlet (screw type)
- Stainless steel ball, seat, spring and glands
- Durable insulated handle
- Reduce trigger pressure; Less operator fatigue
- 16" Insulated lance length w/screw coupling

Model No.  
 3381-0034



## Zinc Plated Lance Extensions for above Guns

- Max. pressure: 3500 psi
- Max. flow: 10.5 gpm
- Max. temp: 300°F
- Quick Coupling inlet; 1/4" (M) NPT outlet

Model No.  
 3365-0007/14; 14" length  
 3365-0007/24; 24" length  
 3365-0007/36; 36" length



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## Gun, Wand and Nozzle Assemblies

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Hypro offers a variety of spray gun assemblies. Any assemblies may be made to customer order; refer to price list #6000 or contact Hypro's sales department for the appropriate part number for ordering.

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## Hi/Lo Nozzles

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- Max. pressure: 1000 psi
- Max. flow: 5.5 gpm
- 1/8" (F) NPT inlet
- 20° spray angle
- Variable hi/lo pressure for soap injection
- 13 sizes available; refer to price list #6000 or contact Hypro's sales department for the appropriate part number for ordering.

Model No.

3319 - (Specify 2035, 2040, 2045, 2050, 2055, 2060, 2065, 2070, 2080, 2085, 2095, 2100, 2105)

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## Spray-Flex Nozzles

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- Max. pressure: 2000 psi
- Max. flow: 7.0 gpm
- 1/8" (F) NPT inlet
- 0° to 80° spray angle
- 13 sizes available; refer to price list #6000 or contact Hypro's sales department for the appropriate part number for ordering.

Model No.

3324 - (Specify 8035, 8040, 8045, 8050, 8055, 8060, 8065, 8070, 8075, 8080, 8085, 8090, 8100)

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## Hi/Lo Variable and Variable Fan Nozzles

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- Max. pressure: 3000 psi
- Max. temp: 300°F
- 1/4" (F) NPT inlet
- Variable fan pattern, 0° to 80° fan
- Push/pull for pressure adjustment
- Twist for fan adjustment
- See tip chart on next page  
Available in both variable and Hi/Lo variable. Refer to price list #6000 or contact Hypro's sales department for the appropriate part number for ordering.

Model No.

Hi/Lo Variable  
3324-2000.85 thru 3324-2001.5

Variable  
3324-1000.85 thru 3324-1001.5



Hypro Part Number		Nozzle Capacity (GPM) at Pump Pressure (PSI)													
Variable	Hi-Lo Variable	Nozzle No.	Orifice Diam.		PSI										
			mm	inches	600	700	800	900	1000	1200	1500	1800	2000	2500	3000
3324-1000.85	3324-2000.85	2.0	.085	.033	0.77	0.80	0.89	0.95	1.00	1.10	1.20	1.35	1.40	1.60	1.70
3324-1001.05	3324-2001.05	3.0	1.05	.041	1.22	1.30	1.37	1.45	1.52	1.66	1.86	2.04	2.16	2.42	2.64
3324-1001.1	3324-2001.1	3.5	1.10	.043	1.35	1.43	1.52	1.60	1.68	1.84	2.06	2.26	2.39	2.67	2.91
3324-1001.15	3324-2001.15	3.7	1.15	.045	1.55	1.63	1.72	1.80	1.88	2.03	2.25	2.46	2.59	2.90	3.17
3324-1001.2	3324-2001.2	4.0	1.20	.047	1.60	1.70	1.80	1.90	2.00	2.19	2.45	2.69	2.84	3.17	3.44
3324-1001.25	3324-2001.25	4.3	1.25	.049	1.72	1.83	1.94	2.05	2.16	2.36	2.64	2.90	3.06	3.41	3.70
3324-1001.3	3324-2001.3	4.6	1.30	.051	1.85	1.97	2.09	2.21	2.32	2.54	2.84	3.12	3.29	3.66	3.96
3324-1001.35	3324-2001.35	5.0	1.35	.053	1.97	2.10	2.23	2.36	2.48	2.71	3.04	3.34	3.52	3.92	4.23
3324-1001.4	3324-2001.4	5.3	1.40	.055	2.09	2.23	2.37	2.50	2.63	2.89	3.23	3.55	3.74	4.16	4.49
3324-1001.45	3324-2001.45	5.6	1.45	.057	2.22	2.37	2.52	2.66	2.80	3.06	3.43	3.77	3.97	4.41	4.76
3324-1001.5	3324-2001.5	6.0	1.50	.059	2.34	2.50	2.66	2.81	2.96	3.24	3.63	3.99	4.20	4.66	5.02
Note: Capacity figures shown are representative with water at 70°F. There may be variations due to power supply, temperature, viscosity, additives, etc.															

## Turbo Nozzle

- Max. pressure: 1850 psi
- Max. temp: 140°F
- 1/4" (F) NPT inlet
- refer to tip chart above

Model No.  
3325-0001/045; 4.5 nozzle



## Turbo Nozzle

- Max. pressure: 3000 psi
- Max. temp: 190°F
- 1/4" (F) NPT inlet
- refer to tip chart above

Model No.  
3325-0002/040; 4.0 nozzle  
3325-0002/050; 5.0 nozzle



## Turbo Nozzle

- Max. pressure: 3000 psi
- Max. temp: 200°F
- 1/4" (F) NPT inlet
- refer to tip chart above

Model No.  
3325-0004/040; 4.0 nozzle  
3325-0004/045; 4.5 nozzle  
3325-0004/050; 5.0 nozzle  
3325-0004/055; 5.5 nozzle  
3325-0004/060; 6.0 nozzle



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## Adjustable Nozzle Holder

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- Max. pressure: 3600 psi
- Max. flow: 8 gpm
- Max. temp: 300°F
- 1/4" (F) NPT inlet and outlet
- Adapts high pressure nozzle to hi/lo function by turning assembly

Model No.  
3324-0001

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## Changeover Nozzle

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- Max. pressure: 3600 psi
- Max. flow: 10 gpm
- One 1/4" (F) NPT inlet
- Two 1/4" (F) NPT outlets
- Permits changing between two nozzles from a single supply line

Model No.  
3380-0005

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## Thermo-Plastic Covered Nozzle Protectors

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- Durable thermal plastic cover protects nozzle and surface being cleaned
- 1/4" (F) NPT Inlet
- 1/8" (F) NPT or 1/4" (F) NPT outlet

Model No.  
3373-0025; 1/8" (F) NPT outlet  
3373-0026; 1/4" (F) NPT outlet

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## Nozzle Adapter

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- Adapts Hi/Lo and Spray-flex nozzles from 1/4" (F) NPT inlet to 1/8" (M) NPT

Model No.  
3373-0017

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## Rotating Brush

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- Max. pressure: 600 psi
- Max. temp: 140°F
- Max. flow: 9.5 gpm
- 1/4" (M) inlet
- 25 nozzle\*
- Natural 100% horse hair
- refer to tip chart on page 12

Model No.  
3365-0001/3

\* No. 25 Nozzle accepts a wide range of flows

## Disabler Valve

*Hypro's patent pending disabler valve can easily be activated to create high pressure pulses, which improve the ability of the sewer jetter hose to traverse through 90° fittings and elbows. Disabler valve replaces standard valve cap on 2200B-P and 2300B-P PowerLine PLUS plunger pumps.*

Model No.  
 3400-0166; for 2200B-P & 2300B-P Powerline PLUS Plunger pumps  
 3400-0150; for 2400 PowerLine PLUS Plunger pumps up to 3600 psi  
 3400-0140; for 2200 & 2300 PowerLine Plunger pumps

U.S. Patent #5,775,880



## Pressure Activated 3 Port Unloaders

- Max. pressure: 200-1500 psi
- Max. flow: 5 gpm
- 3/8" (M) NPT inlet and outlet
- 1/4" (F) NPT bypass
- Buna-N cup

Model No.  
 3390-0062D; 200-600 psi  
 3390-0063D; 400-1000 psi  
 3390-0067D; 800-1500 psi  
 3390-0071D\*; 400-1000 psi  
 3390-0072D\*; 800-1500 psi



\* For close coupled bypass operation with Hypro 2200 and 2300 PowerLine PLUS pumps. Bypass not NPT. Use only with 8000-0007 and 8000-0008.

## Pressure Activated 3 Port Unloaders

- Max. pressure: 2000 psi
- Max. flow: 8 gpm
- Max. temp: 200°F
- 3/8" (M) NPT inlet and outlet
- 3/8" (F) NPT bypass
- Adjustment knob

Model No.  
 3390-0079



## Pressure Activated 3 Port Unloaders

- Max. pressure: 2600 psi
- Max. flow: 8 gpm
- Max. temp: 200°F
- 3/8" (M) NPT inlet and outlet
- 1/4" (F) NPT bypass
- Adjustment knob

Model No.  
 3390-0102



## Pressure Activated 3 Port Unloaders

- Max. pressure: 3600 psi
- Max. flow: 8 gpm
- Max. temp: 200°F
- 3/8" (F) NPT inlet and outlet
- 1/4" (F) NPT bypass
- Adjustment knob

Model No.  
 3390-0076



## Pressure Activated 5 Port Unloaders



- Max. pressure: 3600 psi
- Max. flow: 8 gpm
- Max. temp: 200°F
- (2) 3/8" (F) NPT inlet
- 3/8" (F) NPT outlet
- (2) 1/4" (F) NPT bypass
- Adjustment knob

Model No.  
3390-0081

## Pressure Activated 3 Port Unloaders



- Max. pressure: 200-1000
- Max. flow: 5-6 gpm
- Max. temp: 160°F
- 1/2" (F) NPT inlet and outlet
- 1/2" (F) NPT bypass

Model No.  
3390-0006; 200-500 psi; 5 gpm, Buna-N cup  
3390-0007; 200-500 psi, 5 gpm, leather cup  
3390-0008; 200-500 psi, 5 gpm, Buna-N cup  
and monel parts for special acid  
cleaning solution applications  
3390-0037; 300-1000 psi; 6 gpm, Buna-N/Teflon cup

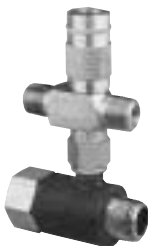
## Pressure Activated 3 Port Unloaders



- Max. pressure: 100 to 2000
- Max. flow: 15 gpm
- Max. temp: 200°F
- 3/4" (F) NPT inlet and outlet
- 3/4" (F) NPT bypass

Model No.  
3390-0051; Viton/Teflon cup,  
100-1500 psi  
3390-0053; Buna-N cup,  
1000-2000 psi

## Pressure Activated Unloader/Bypass kits



- Max. pressure: 400 to 1500
- Max. flow: 5.0 gpm
- Max. temp: 200°F
- Includes complete unloader  
and bypass assembly
- Kits available for 2200 and 2300  
Series PowerLine PLUS pumps

Model No.  
8000-0007; Max. pressure:  
400-1000 psi  
8000-0008; Max. pressure:  
800-1500 psi

## Banjo Unloader



- Max. pressure: 2600 psi
- Max. flow: 8.0 gpm
- Max. temp: 200°F
- 3/8" (M) NPT outlet
- 1/2" (F) NPT inlet
- Bypass to inlet of pump
- Injector orifice: 2 to 4 gpm

**For 2200 and 2300 Series  
PowerLine PLUS Pumps**

Model No.  
3390-0104/3A; 2.0-3.2 gpm  
3390-0104/3B; 3.2-4.0 gpm

## Banjo Unloader

- Max. pressure: 3200 psi
- Max. flow: 8.0 gpm
- Max. temp: 200°F
- 3/8" (M) NPT outlet
- 1/2" (F) NPT inlet
- Bypass to inlet of pump
- Injector orifice

For 2359 & 2351  
**PowerLine PLUS Pumps**  
Model No.  
 3390-0105



## Regulator/Relief Valve

- Max. pressure: 2000 psi
- Balanced pressure from 200-2000 psi
- Max. flow: 7.0 gpm
- Max. temp: 160°F
- 3/8" (F) NPT inlet and outlet
- Brass body with stainless steel plunger and seat
- Provides smooth, constant pressure regulation

Model No.  
 3300-0084



## Adjustable Chemical Injectors

- Max. pressure: 3200 psi
- Max. temp: 200°F
- 3/8" (M) NPT inlet
- 3/8" (M) NPT outlet
- Stainless steel ball and spring
- Forged brass body

<u>Model No.</u>	<u>GPM Range</u>
3396-0030/1.8	0 to 2.9
3396-0030/2.1	3.0 to 4.0
3396-0030/2.3	4.0 to 5.0



## Adjustable Chemical Injectors

- Max. pressure: 3200 psi
- Max. temp: 200°F
- 3/8" (F) NPT inlet
- 3/8" (M) NPT outlet
- Stainless steel ball and spring
- Forged brass body

<u>Model No.</u>	<u>GPM Range</u>
3396-0031/1.8	0 to 2.9
3396-0031/2.1	3.0 to 4.0
3396-0031/2.3	4.0 to 5.0



## Adjustable Chemical Injectors

- Max. pressure: 3200 psi
- Max. temp: 200°F
- 3/8" (M) NPT inlet
- 3/8" (F) NPT outlet
- Stainless steel ball and spring
- Forged brass body

<u>Model No.</u>	<u>GPM Range</u>
3396-0032/1.8	0 to 2.9
3396-0032/2.1	3.0 to 4.0
3396-0032/2.3	4.0 to 5.0



## Fixed Chemical Injectors



- Max. pressure: 3200 psi
- Max. temp: 200°F
- 3/8" (M) NPT inlet
- 3/8" (M) NPT outlet
- Stainless steel ball and spring
- Forged brass body

<u>Model No.</u>	<u>GPM Range</u>
3396-0033/1.8	0 to 2.9
3396-0033/2.1	3.0 to 4.0
3396-0033/2.3	4.0 to 5.0

## Fixed Chemical Injectors



- Max. pressure: 3200 psi
- Max. temp: 200°F
- 3/8" (F) NPT inlet and 3/8" (M) NPT outlet
- Stainless steel ball and spring
- Forged brass body

<u>Model No.</u>	<u>GPM Range</u>
3396-0034/1.8	0 to 2.9
3396-0034/2.1	3.0 to 4.0
3396-0034/2.3	4.0 to 5.0

## Fixed Chemical Injectors



- Max. pressure: 1500-3000 psi
- Max. temp: 200°F
- 3/8" (M) NPT inlet and 3/8" (F) NPT outlet
- Stainless steel ball and spring
- Forged brass body

<u>Model No.</u>	<u>GPM Range</u>
3396-0035/1.8	0 to 2.9
3396-0035/2.1	3.0 to 4.0
3396-0035/2.3	4.0 to 5.0

## Powerline Adj. Inj. For 2200/2300 Pump



- Max. pressure: 1500-3000 psi
- Max. flow: 2-4.8 gpm
- Max. temp: 140°F - 160°F
- 1/8" (F) NPT inlet
- Quality brass/stainless steel injector assembly
- 9-step calibrated metering for Hypro Series 2200 and 2300 plunger pumps

<u>Model No.</u>
3396-0011; for 2200 & 2300 pumps; 1500 psi; 140°F
3396-0025; for 2200B-P & 2300B-P PowerLine PLUS pumps; 3000 psi; 160°F

## Adjustable Liquid Injector Heads



- Max. temp: 140°F
- 1/8" (F) NPT inlet
- Replaces standard head on Series 5300 and Series 5321 pumps
- Allows precise metering of soaps and liquids
- Features cast iron cylinder head
- 9 step adjustable, needle-type metering assembly
- Long-life brass and stainless steel internal components

<u>Model No.</u>
3396-0014; 500 psi, 1.5-3 gpm; for 5300CX pump
3396-0006; 1000 psi, 2 gpm; for 5321 & 5324C pump

## Thermal Relief Valves

*Easy mount valve that safeguards pump from damaging heat generated within recirculating water systems*

- Temperature relief: 145°F (63°C)
- Max. psi: 200
- Dimensions: 1 1/8" hex X 1 1/8" length (27 mm x 43 mm)
- Brass, stainless steel and Buna-N
- **Easy Serviceability without removing Thermal Relief Valve from pump**

Model No.  
3312-0004; 1/2" (M) NPT inlet  
3312-0006; 3/8" (M) NPT inlet



## Thermal Relief Valves with Barb Fittings

*Easy mount valve that safeguards pump from damaging heat generated within recirculating water systems*

- Temperature relief: 145°F (63°C)
- Max. psi: 200
- Dimensions: 1 1/8" hex X 2 1/2" length (27 mm x 64 mm)
- Brass, stainless steel and Buna-N
- **Easy Serviceability without removing Thermal Relief Valve from pump**

Model No.  
3312-0005; 1/2" (M) NPT inlet  
3312-0007; 3/8" (M) NPT inlet



## Screw Couplings

- Max. pressure: 3500 psi
- Max. flow: 12 gpm
- Max. temp: 300°F

Model No.  
3341-0001; 3/8" (F) inlet  
3341-0002; 1/4" (F) inlet  
3341-0003; 3/8" (M) inlet  
3341-0004; 1/4" (M) inlet



## Connecting Nipples for Above Screw Couplings

- Max. pressure: 3500 psi
- Max. flow: 12 gpm
- Max. temp: 300°F

Model No.  
3341-0005; 3/8" (F) inlet  
3341-0006; 1/4" (F) inlet  
3341-0007; 3/8" (M) inlet  
3341-0008; 1/4" (M) inlet



## Flange Kits

<u>Model No.</u> 8000-0003; 8000-0010; 8000-0043; 8000-0017; 8000-0018;	C-Flange kit; fits NEMA 56C, 143TC and 145TC motors (2200, 2300 and 2350) C-Flange kit; fits NEMA 182TC and 184TC motors (2200, 2300 and 2350) C-Flange kit; fits NEMA 213TC and 215TC motors (2200B-P and 2300B-P pumps) C-Flange kit; fits NEMA 213TC and 215TC motors (2400 and 2430) C-Flange kit; fits NEMA 182TC and 184TC (2400 and 2430)
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## Gear Boxes



<u>Model No.</u>	<u>Description</u>
8000-0002	2:1 gearbox kit for mounting 3 hp-5 hp gas engines with a 3/4" solid shaft to 2200, 2300 and 2350 pumps.
8000-0015	1.8:1 gearbox kit for mounting 10 hp-18 hp gas engines with a 1 1/8" solid shaft to 2400 and 2430 pumps. Kohler Engines.
8000-0021	1.8:1 gearbox kit for mounting 8 hp-18 hp gas engines with a 1" solid shaft to 2400 and 2430 pumps. B & S and Honda Engines.

## Shaft Couplings

*Precision-machined couplings with shock-absorbing center discs.  
Specify coupling series by the hp of your drive motor or engine.*



<u>Series</u>	<u>Description</u>
2738—2 hp limit.	Available for 1/2", 5/8", 3/4" and 7/8" shafts. Uses 2728-1001 center disc.
2739—5 hp limit.	Available for 5/8", 3/4", 7/8", 15/16", 1", 1 1/8", and 24 mm shafts. Use 2729-1001 std. center disc or 2729-1005 heavy-duty urethane disc.
2741—10.5 hp limit.	Available for 3/4", 15/16", 1", 1 1/8", 1 1/4", 1 1/2" shafts. Use 2729-1002 std. center disc or 2729-1006 heavy duty urethane disc.
2740—18 hp limit.	Available for 3/4", 7/8", 1", 1 1/8" and 1 1/2" shafts. Use 2729-1003 center disc.

## Pulsation Dampeners



*These quality-built pulsation dampeners protect your system from damage due to pulsation and vibration. Choose the size and capacity that meets your system's needs. In most applications, the recommended dampener charge is 2/3 of the operating pressure with a 3-piston pump. Review Hypro's Price List 6000 or contact Hypro's sales department for the appropriate charging pressure and part number for ordering.\**

<u>Model No.</u>	<u>Description</u>
3375-0017;	1/2" (F) NPT; 6 gpm max; 1500 psi max.
3375-0015;	1" (F) NPT; 35 gpm max; 500 psi max.

\*Example: 3375-0015-8 = 800 psi  
3375-0017-7 = 700 psi

## Pulsation Dampener Checker



*For testing the charge pressure in pulsation dampeners. The proper charge will ensure maximum life and performance of pressure systems.*

<u>Model No.</u>
2642-0001

- Max. pressure: 2000 psi
- 5/16" 32 UNEF (F) connection thread

## Pulse Hoses



*Quality pulsation dampener hoses constructed of special Hi-Flex horizontally-braided hose.*

- Max Pressure: 1500 psi

### Model No.

3375-0008;	24" length; 3/8" (F) NPT x 3/8" (M) NPT
3375-0012;	24" Length; 3/8" (F) NPT (with one plugged end)
3375-0016;	24" length; 1/4" (M) NPT (with one plugged end)
3375-0021;	25" length; 1/4" (M) NPT (with one plugged end)
3375-0011;	40" length; 3/8" (F) NPT x 3/8" (M) NPT
3375-0022;	40" length; 1/4" (M) NPT (with one plugged end)



## Surge Tank

- Max. pressure: 500 psi
- Max. flow: 10.0 gpm
- 1/2" (F) NPT inlet
- Dampens piston pump pulsations and pressure surges to provide smoother, more even flow of liquid being pumped.
- Helps protect pump and system, adds to equipment life.

Model No.  
3375-0003



## Check Valves

Model No.  
3320-0021; 1/4" (F) NPT ports, brass  
3320-0020; 3/8" (F) NPT ports, brass  
3320-0011; 1/2" (F) NPT ports, brass



## Pressure Reducing Valves

Model No.  
2650-0002; Pressure range: 3 to 50 psi (factory set 15 psi);  
Flow range: 2.0 to 4.0 gpm; two 3/8" (F) NPT ports  
Max. temp: 160°F  
2650-0003; Max. pressure: 20 psi (non-adjustable);  
Max. flow: 1.0 to 10.0 gpm;  
Max. temp: 160°F  
3/4" (F) GHT inlet; 1/2" (F) NPT outlet



## Zinc Plated Steel Port Adapters

Model No.	Port Openings (NPT)			
	*1	2	3	4
2404-0069;	1/2"	1/4"	1/4"	1/2"
2404-0030;	1/2"	1/4"	1/2"	1/2"
2404-0019;	3/4"	1/4"	1/2"	3/4"

\* Male thread, others female thread. No. 1 and 4 are end openings, 2 and 3 are side openings.



## Vacuum Switches

*Switches can be used with either AC or DC motors in the ratings shown:*

Model No.  
2510-0001; VAC-ON; 1.5 Hg vac.  
2510-0007; VAC-ON; 2.5 Hg vac.  
2510-0017; VAC-ON; 4.5 Hg vac.

- Max. temp: 140°F
- VAC-ON switch automatically shuts off motor when liquid is depleted or vacuum drops to a specific level
- DC (32-115-230V): up to 1/2 hp;  
Single or 3 Phase at 110V: up to 2 hp;  
Single or 3 Phase at 220V: up to 2 hp



## Pressure Switch



- Max. Pressure: 3500 psi
- Max. Temp: 200°F
- Voltage: 12-250 V
- Max. Amp vertical and horizontal mount: 15A
- 3/8" (M) NPT inlet

Model No.  
2510-0029

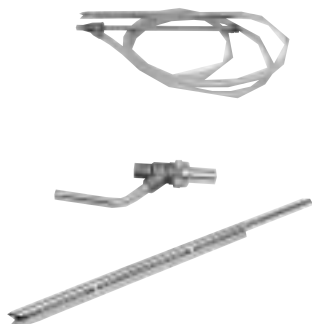
## Flow Switches



- Max. Pressure: 3500 psi
- Max. Flow: 7.8 gpm
- Max. Temp: 180°F
- Voltage: 12-250 V

Model No.  
2510-0030 vertical mount;  
3/8" (F) inlet and outlet  
2510-0031 horizontal mount;  
3/8" (M) inlet and outlet

## Sandblast Kits



Model No.	Description	Nozzle No.	Max. PSI	Max. GPM	Inlet (NPT)	Hose Included
3398-0001/1.3	Hobby Sandblast Kit	4.6	2150	7.0	1/4"	Yes
3398-0002/1.0	Professional Sandblast Head	2.5	3500	10.0	1/4"	No
3398-0002/1.2	Professional Sandblast Head	4.0	3500	10.0	1/4"	No
3398-0002/1.4	Professional Sandblast Head	5.3	3500	10.0	1/4"	No
3398-0002/1.5	Professional Sandblast Head	6.0	3500	10.0	1/4"	No
3398-0002/1.6	Professional Sandblast Head	7.0	3500	10.0	1/4"	No
2900-0056	Suction Tube					No

*Refer to tip chart on page 15*

## Glycerin Filled Pressure Gauges

*ABS Plastic Housing*



Dimensions  
Face size: 2½"  
Stem size: 1/4" (M) NPT

Model No.  
2641-0002; 0-60 psi/4 bar  
2641-0011; 0-100 psi/7 bar  
2641-0004; 0-300 psi/21 bar  
2641-0005; 0-600 psi/42 bar  
2641-0006; 0-1000 psi/70 bar  
2641-0008; 0-2000 psi/140 bar  
2641-0010; 0-5000 psi/350 bar  
2641-0013; 30" Hg - 100 psi

## Glycerin Filled Pressure Gauges

*Stainless Steel Housing*



Dimensions  
Face size: 2½"  
Stem size: 1/4" (M) NPT

Model No.  
2640-0009; 0-60 psi/4 bar  
2640-0010; 0-100 psi/7 bar  
2640-0011; 0-200 psi/14 bar  
2640-0007; 0-300 psi/21 bar  
2640-0008; 0-600 psi/42 bar  
2640-0001; 0-1000 psi/70 bar  
2640-0002; 0-1500 psi/105 bar  
2640-0003; 0-2000 psi/140 bar  
2640-0004; 0-3000 psi/210 bar  
2640-0005; 0-5000 psi/350 bar  
2640-0014; 0-10000 psi/700 bar  
2640-0006; 30" Hg/30 psi/1x2  
2640-0015; 30" Hg/100 psi/1x7

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## Standard Gauge Dampener

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- Stem size: 1/4" (M) NPT, 1/4" (F) NPT

Model No.  
2404-0047



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## Float Tank

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- Max. temp: 140°F
- 4¾" x 10¼" x 8" size
- With cover and internal baffle
- 4.5 gallon capacity

Model No.  
1530-0008



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## Float Valves

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- Max. pressure: 50 psi
- Max. flow: 4.3 gpm
- Max. temp: 140°F
- 3/4" (M) inlet

Model No.  
3321-0001; Plastic  
3321-0002; Brass



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## Float Tank Strainer

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- 1/2" Tank Outlet Filter
- 1/2" (M) outlet

Model No.  
3800-0074



---

## Pump Oil

---

- Reduces scuff and wear in piston and plunger pumps
- Inhibits moisture that causes damage
- Prevents oxidation that could lead to sludge formation
- Resists foaming and aeration that can cause equipment to operate erratically and oil to oxidize
- Provides smooth pump operation in a variety of temperatures

Model No.  
2160-0038; 1 qt. (12 per carton)  
2160-0047; 1 gallon (bulk)  
2160-0048; 2½ gallon (bulk)

*Hypro's specially formulated SAE 30 weight, nondetergent, high-grade oil with special added agents is the best prescription to maximize a pump's life. Using Hypro oil is a most affordable and highly effective means of preventive care for your pump.*



## Chemical Injection Strainers/Filters



### Plastic

- Chemical resistant plastic body and components
- 1/4" and 3/8" hose barb
- Check valve optional

#### Model No.

3350-0126; with check valve  
3350-0127; without check valve

### Stainless Steel

- Corrosion resistant stainless steel and brass construction
- 1/4" hose barb
- Check valve standard

#### Model No.

3350-0128; with check valve

## Aluminum Line Strainer



- Max. pressure: 100 psi
- Max. flow: 8 gpm
- 1/2" BPS (F) inlet; 1/2" BPS (M) outlet
- Aluminum housing
- 50 mesh screen
- Added bypass hose port G 1/4"

#### Model No.

3350-0134

## Suction Strainers



<u>Model No.</u>	<u>Description</u>
------------------	--------------------

- |            |  |
|------------|--|
| 3350-0021; | fits 1/4" (ID) plastic tubing; 50 mesh ss screen; opening size (D) .330"; overall diameter 1.25"             |
| 3350-0022; | fits 1/4" (ID) plastic tubing; 50 mesh ss screen; opening size (D) .330"; overall diameter 1.00"             |
| 3350-0033; | fits 5/8" (ID) x 61/64" (OD) garden hose; 50 mesh ss screen; opening size (D) .940"; overall diameter 2.187" |
| 3800-0035; | fits (F) garden hose end; 50 mesh ss screen.   |

## Polypropylene Strainers



- Available in the size and screen mesh your system requires
- Polypropylene body and cap
- EPDM gasket
- Stainless steel screens

**See price list #6000 for complete listing of various sized screens (mesh) and materials.**

## Nylon Line Strainers



- Available in the size and screen mesh your system requires
- Nylon body and cap
- Choice of Buna-N or Viton gasket material
- Stainless steel screens
- Clear Polyamide bowls are also available (add letter "P" to model #)

**See price list #6000 for complete listing of various sized screens (mesh) and materials.**

## Useful Equations

$$\text{Electric Brake Horsepower required} = \frac{\text{GPM} \times \text{PSI}}{1460} \times \frac{\text{Standard 85\% Mech. Efficiency}}{1}$$

$$\text{Impact Force/Cleaning Power} = .0526 \times \text{GPM} \times \sqrt{\text{PSI}^*}$$

Example:

$$2.7 \text{ @ } 1200 \text{ psi} = .0526 \times 2.7 \times \sqrt{1200} = \mathbf{4.92 \text{ lbs. force}}$$

$$2.0 \text{ @ } 1500 \text{ psi} = .0526 \times 2.0 \times \sqrt{1500} = 4.07 \text{ lbs. force}$$

*\*Impact = cleaning force of water hitting a surface.*

$$\text{Desired RPM} = \text{Desired GPM} \times \frac{\text{Rated RPM}}{\text{Rated GPM}}$$

$$\text{Desired GPM} = \text{Desired RPM} \times \frac{\text{Rated RPM}}{\text{Rated GPM}}$$

**To determine proper pulley size, use the below formula.**

$$\frac{\text{Motor RPM}}{\text{Pump RPM}} = \frac{\text{Flow (@ Rated Speed)}}{\text{Flow (Desired)}} = \frac{\text{Pump Pulley Diameter}}{\text{Motor Pulley Diameter}}$$

**EXAMPLE: Use a 1725 RPM electric motor with a pulley diameter of 3.4 inches to drive a pump at 800 RPM**

$$\frac{1725}{800} = \frac{\text{Pump Pulley Diameter}}{3.4 \text{ Inches}}$$

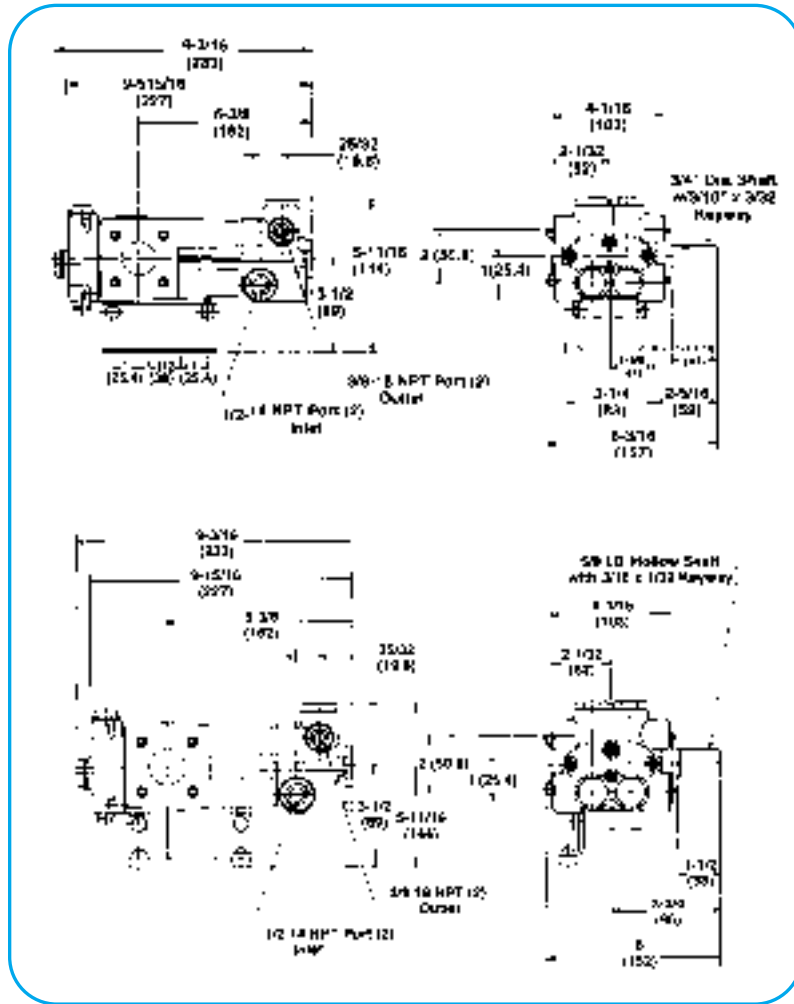
$$\frac{1725 \times 3.4 \text{ Inches}}{800} = 7.3 \text{ Inches}$$

## Dimensions On The Following Pages

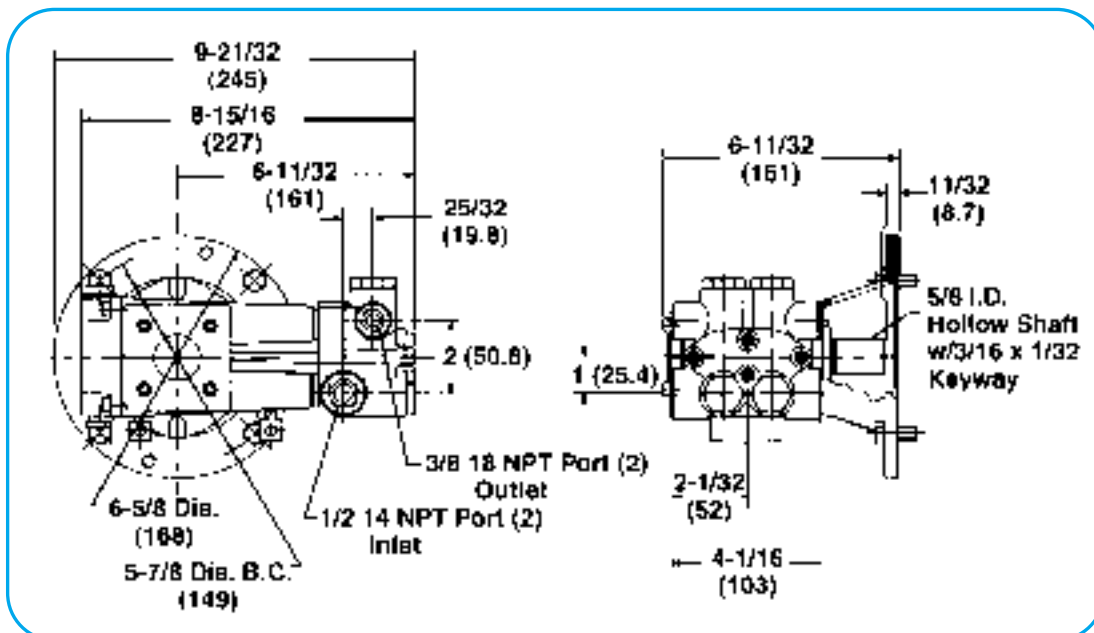
**NOTE: Figures in parentheses are approximate metric equivalents in millimeters of English System dimensions.**

## Pumps 2220, 2230, 2221, 2231

Pumps 2220B-P, 2230B-P, 2221B-P, 2231B-P, 2220B-HP, 2230B-HP, 2221B-HP, 2231B-HP

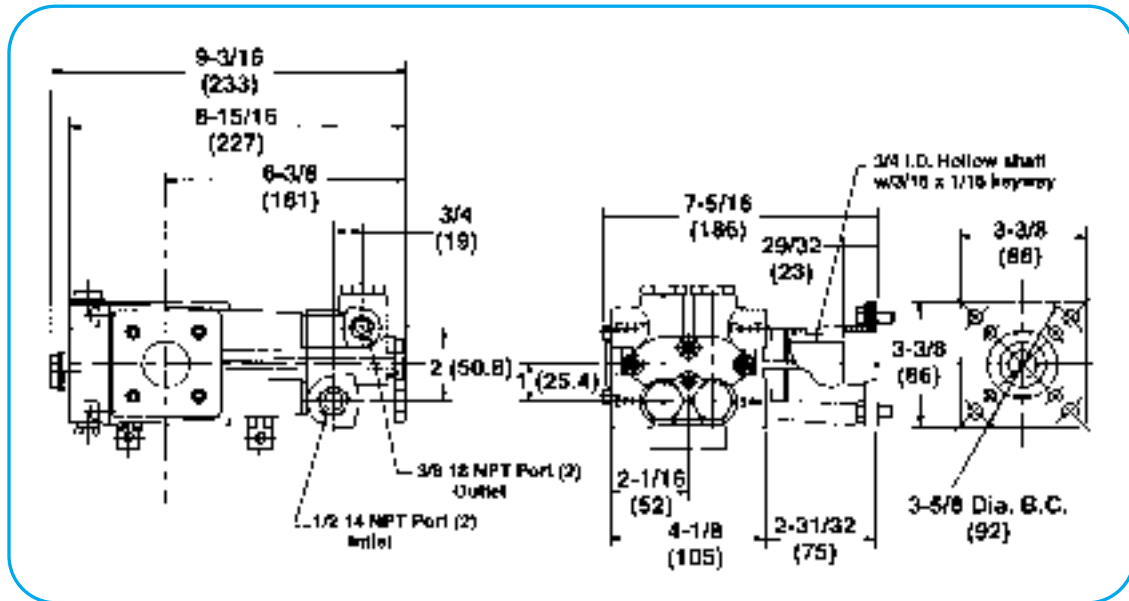


Pumps 2220B-AP, 2230B-AP, 2221B-AP, 2231B-AP



# Pumps 2220, 2221, 2230, 2231

## Pump 2231B-CP



### English Standard

Model 2220B-P	PSI	500		700		1000		1300		1500		2000	
	RPM	GPM	HP	GPM	HP	GPM	HP	GPM	HP	GPM	HP	GPM	HP
1000	1.2	0.5	1.2	0.7	1.2	0.9	1.2	1.1	1.2	1.2	1.2	1.2	1.6
1450	1.7	0.8	1.7	1.0	1.7	1.4	1.7	1.6	1.7	1.8	1.7	1.8	2.3
1600	1.9	0.9	1.9	1.1	1.9	1.5	1.9	1.8	1.9	2.1	1.9	2.1	2.7
1725	2.1	0.8	2.1	1.1	2.1	1.5	2.0	1.9	2.0	2.1	2.0	2.1	2.9

### Metric

Model 2220B-P	BAR	34		48		69		90		103		138	
	RPM	L/m	Kw	L/m	Kw	L/m	Kw	L/m	Kw	L/m	Kw	L/m	Kw
1000	4.5	0.4	4.5	0.5	4.5	0.7	4.5	0.8	4.5	0.9	4.5	1.2	
1450	6.4	0.6	6.4	0.7	6.4	1.0	6.4	1.2	6.4	1.3	6.4	1.7	
1600	7.2	0.7	7.2	0.8	7.2	1.1	7.2	1.3	7.2	1.6	7.2	2.0	
1725	7.9	0.6	7.9	0.8	7.9	1.1	7.6	1.4	7.6	1.6	7.6	2.2	

Model 2221B-P	PSI	500		700		1000		1300		1500	
	RPM	GPM	HP	GPM	HP	GPM	HP	GPM	HP	GPM	HP
1800	1.2	0.8	1.2	0.9	1.1	1.1	1.1	1.3	1.1	1.5	
2600	1.7	1.1	1.7	1.4	1.6	1.5	1.6	1.9	1.6	2.2	
2875	1.8	1.3	1.8	1.5	1.8	1.8	1.8	2.3	1.7	2.5	
3450	2.1	1.6	2.1	1.9	2.1	2.1	2.1	2.6	2.0	2.9	

Model 2221B-P	BAR	34		48		69		90		103	
	RPM	L/m	Kw	L/m	Kw	L/m	Kw	L/m	Kw	L/m	Kw
1800	4.5	0.6	4.5	0.7	4.2	0.8	4.2	1.0	4.2	1.1	
2600	6.4	0.8	6.4	1.0	6.1	1.1	6.1	1.4	6.1	1.6	
2875	6.8	1.0	6.8	1.1	6.8	1.3	6.8	1.7	6.4	1.9	
3450	7.9	1.2	7.9	1.4	7.9	1.6	7.9	1.9	7.6	2.2	

Model 2230B-P	PSI	500		700		1000		1300		1500		2000	
	RPM	GPM	HP	GPM	HP	GPM	HP	GPM	HP	GPM	HP	GPM	HP
1000	1.9	0.8	1.9	1.0	1.9	1.3	1.8	1.7	1.8	1.9	1.8	2.4	
1450	2.7	1.1	2.7	1.4	2.7	2.0	2.7	2.4	2.7	2.8	2.7	3.6	
1600	3.0	1.2	3.0	1.6	3.0	2.3	3.0	2.8	2.9	3.1	2.9	4.1	
1725	3.2	1.4	3.2	1.9	3.2	2.4	3.1	3.0	3.1	3.4	3.1	4.4	

Model 2230B-P	BAR	34		48		69		90		103		138	
	RPM	L/m	Kw	L/m	Kw	L/m	Kw	L/m	Kw	L/m	Kw	L/m	Kw
1000	7.2	0.6	7.2	0.7	7.2	1.0	6.8	1.3	6.8	1.4	6.8	1.8	
1450	10.2	0.8	10.2	1.0	10.2	1.5	10.2	1.8	10.2	2.1	10.2	2.7	
1600	11.4	0.9	11.4	1.2	11.4	1.7	11.4	2.1	11.0	2.3	11.0	3.1	
1725	12.1	1.0	12.1	1.4	12.1	1.8	11.7	2.2	11.7	2.5	11.7	3.3	

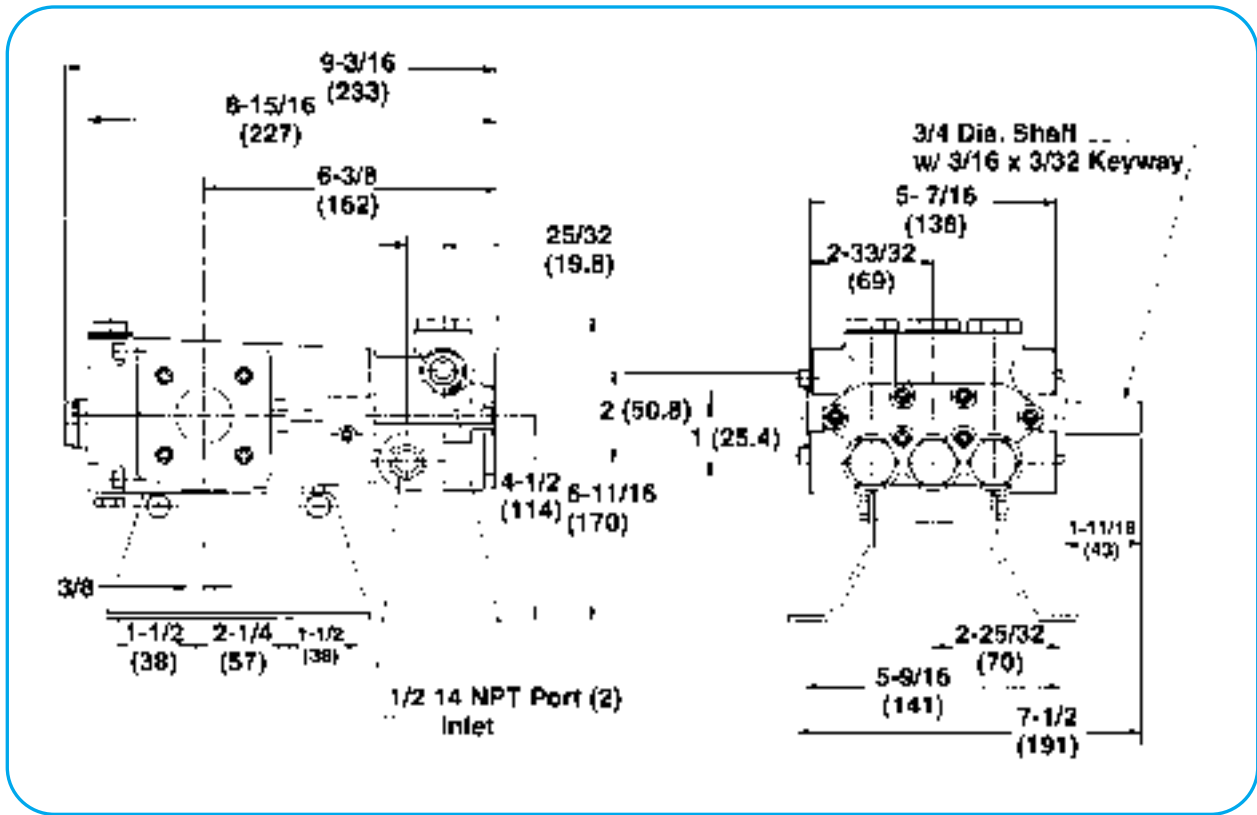
Model 2231B-P	PSI	500		700		1000		1300		1500	
	RPM	GPM	HP	GPM	HP	GPM	HP	GPM	HP	GPM	HP
1800	1.8	0.8	1.8	1.0	1.8	1.4	1.7	1.7	1.7	1.9	
2600	2.5	1.2	2.5	1.5	2.5	2.0	2.5	2.4	2.5	2.7	
2875	2.8	1.2	2.8	1.6	2.7	2.1	2.7	2.7	2.7	2.9	
3450	3.2	1.5	3.2	1.9	3.2	2.5	3.2	3.2	3.1	3.5	

Model 2231B-P	BAR	34		48		69		90		103	
	RPM	L/m	Kw	L/m	Kw	L/m	Kw	L/m	Kw	L/m	Kw
1800	6.8	0.6	6.8	0.7	6.8	1.0	6.4	1.3	6.4	1.4	
2600	9.5	0.9	9.5	1.1	9.5	1.5	9.5	1.8	9.5	2.0	
2875	10.6	0.9	10.6	1.2	10.2	1.6	10.2	2.0	10.2	2.2	
3450	12.1	1.1	12.1	1.4	12.1	1.9	12.1	2.4	11.7	2.6	

NOTE: Aluminum headed pumps maximum PSI = 1000 psi

# Pumps 2330, 2331, 2340, 2345, 2350, 2351, 2354, 2359

## Pumps 2330B-P, 2340B-P, 2345B-P, 2350B-P, 2351B-P, 2359B-PY



### English Standard

Models 2303B-P, 2304B-P, 2314B-P	PSI	500		700		1000		1200	
	RPM	GPM	HP	GPM	HP	GPM	HP	GPM	HP
1100	3.1	1.3	3.1	1.6	3.1	2.1	3.1	2.4	
1450*	4.1	1.5	4.0	2.0	4.0	2.7	4.0	3.2	
1725**	3.1	1.2	3.1	1.7	3.1	2.2	3.1	2.6	
1725***	4.3	1.6	4.3	2.0	4.2	2.9	4.2	3.4	

\* 2314 only, \*\* 2303 only, \*\*\* 2304 only

### Metric

Models 2303B-P, 2304B-P, 2314B-P	BAR	34		48		69		83	
	RPM	L/m	Kw	L/m	Kw	L/m	Kw	L/m	Kw
1100	11.7	1.0	11.7	1.2	11.7	1.6	11.7	1.8	
1450	15.5	1.1	15.1	1.5	15.1	2.0	15.1	2.4	
1725	11.7	0.9	11.7	1.3	11.7	1.6	11.7	1.9	
1725	16.3	1.2	16.3	1.5	15.9	2.2	15.9	2.5	

\* 2314 only, \*\* 2303 only, \*\*\* 2304 only

Model 2330B-P	PSI	500		700		1000		1300		1500		2500	
	RPM	GPM	HP	GPM	HP	GPM	HP	GPM	HP	GPM	HP	GPM	HP
1000	1.8	0.7	1.8	1.0	1.8	1.3	1.8	1.6	1.8	1.9	1.8	2.9	
1450	2.7	1.0	2.7	1.4	2.6	1.9	2.6	2.3	2.6	2.7	2.5	4.2	
1600	2.9	1.1	2.9	1.5	2.9	2.0	2.9	2.5	2.8	2.8	2.8	4.6	
1725	3.1	1.2	3.1	1.7	3.1	2.2	3.1	2.8	3.1	3.2	3.0	5.0	

Model 2330B-P	BAR	34		48		69		90		103		172	
	RPM	L/m	Kw	L/m	Kw	L/m	Kw	L/m	Kw	L/m	Kw	L/m	Kw
1000	6.8	0.5	6.8	0.7	6.8	1.0	6.8	1.2	6.8	1.4	6.8	2.2	
1450	10.2	0.7	10.2	1.0	9.8	1.4	9.8	1.7	9.8	2.0	9.5	3.1	
1600	11.0	0.8	11.0	1.1	11.0	1.5	11.0	1.9	10.6	2.1	10.6	3.4	
1725	11.7	0.9	11.7	1.3	11.7	1.6	11.7	2.1	11.7	2.4	11.4	3.7	

Model 2340B-P	PSI	500		700		1000		1300		1500		2500	
	RPM	GPM	HP	GPM	HP	GPM	HP	GPM	HP	GPM	HP	GPM	HP
1000	2.5	1.0	2.5	1.3	2.5	1.8	2.5	2.2	2.5	2.5	2.4	4.0	
1450	3.6	1.3	3.6	1.8	3.6	2.4	3.6	3.1	3.5	3.6	3.5	5.6	
1600	4.0	1.5	4.0	1.9	3.9	2.7	3.9	3.3	3.9	3.8	3.8	6.2	
1725	4.3	1.6	4.3	2.0	4.2	2.9	4.2	3.6	4.2	4.1	4.1	6.6	

Model 2340B-P	BAR	34		48		69		90		103		172	
	RPM	L/m	Kw	L/m	Kw	L/m	Kw	L/m	Kw	L/m	Kw	L/m	Kw
1000	9.5	0.7	9.5	1.0	9.5	1.3	9.5	1.6	9.5	1.9	9.1	3.0	
1450	13.6	1.0	13.6	1.3	13.6	1.8	13.6	2.3	13.2	2.7	13.2	4.2	
1600	15.1	1.1	15.1	1.4	14.8	2.0	14.8	2.5	14.8	2.8	14.4	4.6	
1725	16.3	1.2	16.3	1.5	15.9	2.2	15.9	2.7	15.9	3.1	15.5	4.9	

Model 2345B-P	PSI	500		700		1000		1300		1500		2500	
	RPM	GPM	HP	GPM	HP	GPM	HP	GPM	HP	GPM	HP	GPM	HP
1000	2.8	1.2	2.8	1.5	2.8	2.0	2.8	2.5	2.8	2.8	2.7	4.5	
1450	4.1	1.7	4.1	2.2	4.0	2.9	4.0	3.7	4.0	4.1	4.0	6.5	
1600	4.5	1.8	4.4	2.4	4.4	3.2	4.4	4.1	4.4	4.6	4.3	7.2	
1725	4.8	2.0	4.7	2.6	4.7	3.4	4.7	4.4	4.7	4.9	4.6	7.6	

Model 2345B-P	BAR	34		48		69		90		103		172	
	RPM	L/m	Kw	L/m	Kw	L/m	Kw	L/m	Kw	L/m	Kw	L/m	Kw
1000	10.6	0.9	10.6	1.1	10.6	1.5	10.6	1.9	10.6	2.1	10.2	3.4	
1450	15.5	1.3	15.5	1.6	15.1	2.2	15.1	2.8	15.1	3.1	15.1	4.8	
1600	17.0	1.3	16.7	1.8	16.7	2.4	16.7	3.1	16.7	3.4	16.3	5.4	
1725	18.2	1.5	17.8	1.9	17.8	2.5	17.8	3.3	17.8	3.7	17.4	5.7	



# Pumps 2330, 2331, 2340, 2345, 2350, 2351, 2354, 2359

## English Standard

Models 2350B-P, 2359B-PY	PSI	500		700		1000		1300		2000		3000	
	RPM	GPM	HP	GPM	HP	GPM	HP	GPM	HP	GPM	HP	GPM	HP
	1000	2.1	1.0	2.1	1.6	2.1	2.0	2.1	2.3	2.0	2.8	2.0	4.0
1450	3.0	1.4	3.0	2.3	3.0	2.8	2.9	3.2	2.9	4.1	2.9	5.6	
1600	3.3	1.6	3.3	2.6	3.3	3.2	3.3	3.4	3.2	4.4	3.2	6.2	
1725	3.6	1.6	3.6	2.7	3.5	3.3	3.5	3.8	3.5	4.8	3.4	6.8	

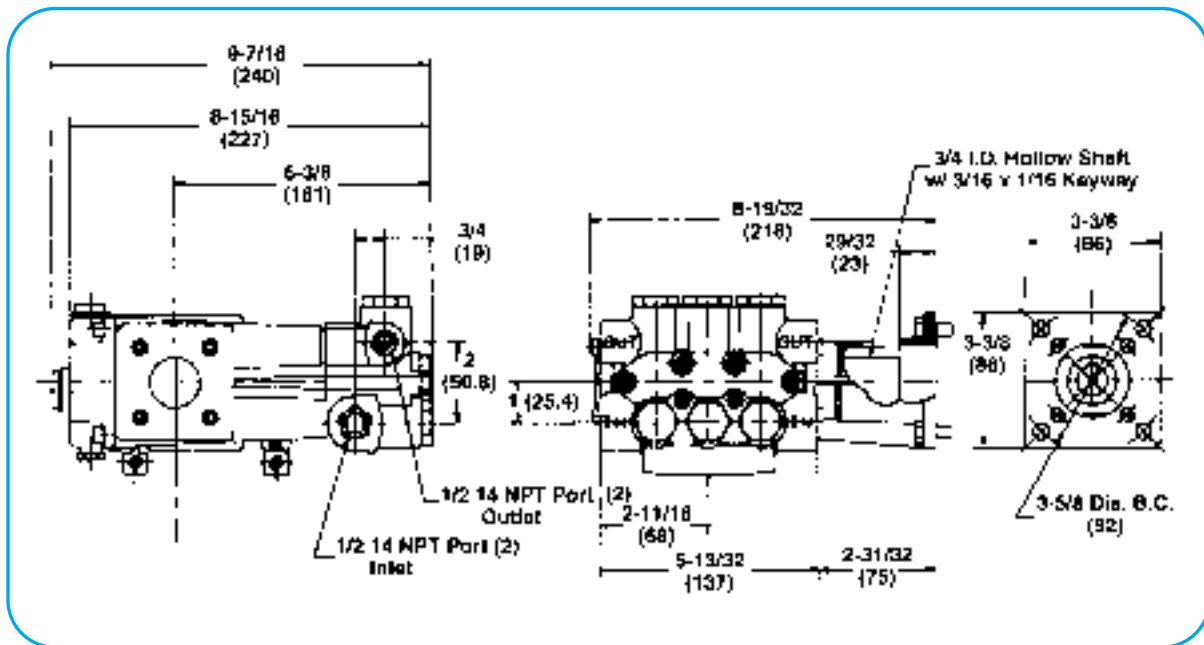
## Metric

Models 2350B-P, 2359B-PY	BAR	34		48		69		90		138		207	
	RPM	L/m	Kw	L/m	Kw	L/m	Kw	L/m	Kw	L/m	Kw	L/m	Kw
	1000	7.9	0.7	7.9	1.2	7.9	1.5	7.9	1.7	7.6	2.1	7.6	3.0
1450	11.4	1.0	11.4	1.7	11.4	2.1	11.0	2.4	11.0	3.1	11.0	4.2	
1600	12.5	1.2	12.5	1.9	12.5	2.4	12.5	2.5	12.1	3.3	12.1	4.6	
1725	13.6	1.2	13.6	2.0	13.2	2.5	13.2	2.8	13.2	3.6	12.9	5.1	

Model 2351B-P	PSI	500		700		1000		1300		2000		3000	
	RPM	GPM	HP	GPM	HP	GPM	HP	GPM	HP	GPM	HP	GPM	HP
	1000	2.4	0.9	2.3	1.7	2.3	2.1	2.3	2.4	2.3	3.1	2.3	4.3
1450	3.4	1.4	3.4	2.4	3.4	3.0	3.3	3.4	3.3	4.4	3.2	6.3	
1600	3.8	1.6	3.7	2.7	3.7	3.3	3.7	3.7	3.6	4.8	3.6	7.0	
1725	4.0	1.7	4.0	2.9	4.0	3.5	4.0	4.0	3.9	5.1	3.8	7.4	

Model 2351B-P	BAR	34		48		69		90		138		207	
	RPM	L/m	Kw	L/m	Kw	L/m	Kw	L/m	Kw	L/m	Kw	L/m	Kw
	1000	9.1	0.7	8.7	1.3	8.7	1.6	8.7	1.8	8.7	2.3	8.7	3.2
1450	12.9	1.0	12.9	1.8	12.9	2.2	12.5	2.5	12.5	3.3	12.1	4.7	
1600	14.4	1.2	14.0	2.0	14.0	2.5	14.0	2.8	13.6	3.6	13.6	5.2	
1725	15.1	1.3	15.1	2.2	15.1	2.6	15.1	3.0	14.8	3.8	14.4	5.5	

## Pumps 2331B-CP, 2354B-CP



## English Standard

Model 2331B-CP	PSI	500		700		1000		1300		1500	
	RPM	GPM	HP	GPM	HP	GPM	HP	GPM	HP	GPM	HP
	1800	1.9	1.0	1.9	1.2	1.8	1.5	1.8	1.8	1.8	2.1
2600	2.7	1.4	2.6	1.7	2.6	2.2	2.6	2.7	2.5	3.0	
2875	2.9	1.5	2.9	1.9	2.8	2.4	2.8	2.8	2.8	3.2	
3450	3.4	1.9	3.4	2.2	3.3	2.8	3.3	3.4	3.3	3.8	

## Metric

Model 2331B-CP	BAR	34		48		69		90		103	
	RPM	L/m	Kw	L/m	Kw	L/m	Kw	L/m	Kw	L/m	Kw
	1800	7.2	0.7	7.2	0.9	6.8	1.1	6.8	1.3	6.8	1.6
2600	10.2	1.0	9.8	1.3	9.8	1.6	9.8	2.0	9.5	2.2	
2875	11.0	1.1	11.0	1.4	10.6	1.8	10.6	2.1	10.6	2.4	
3450	12.9	1.4	12.9	1.6	12.5	2.1	12.5	2.5	12.5	2.8	

Model 2345B-CP	PSI	500		1000		1500		2000	
	RPM	GPM	HP	GPM	HP	GPM	HP	GPM	HP
	2800	2.4	1.3	2.3	2.0	2.3	2.7	2.2	3.4
3000	2.6	1.4	2.5	2.2	2.4	2.9	2.3	3.7	
3200	2.7	1.6	2.6	2.4	2.6	3.2	2.5	3.9	
3400	2.9	1.6	2.8	2.4	2.7	3.3	2.6	4.0	

Model 2345B-CP	BAR	34		69		103		138	
	RPM	L/m	Kw	L/m	Kw	L/m	Kw	L/m	Kw
	2800	9.1	1.0	8.7	1.5	8.7	2.0	8.3	2.5
3000	9.8	1.0	9.5	1.6	9.1	2.2	8.7	2.8	
3200	10.2	1.2	9.8	1.8	9.8	2.4	9.5	2.9	
3400	11.0	1.2	10.6	1.8	10.2	2.5	9.8	3.0	



**English Standard**

<b>Model 2432B-P</b>	PSI	1000			2000			3000			3600		
	RPM	GPM	HP	GPM	HP	GPM	HP	GPM	HP	GPM	HP		
	1000	3.6	2.6	3.5	4.7	3.4	6.9	3.4	7.8				
	1150	4.1	2.9	4.0	5.3	4.0	7.5	3.9	8.8				
	1450	5.2	3.6	5.0	6.6	4.9	9.4	4.8	11.0				
1725	6.0	4.2	5.8	7.6	5.7	10.9	5.6	12.8					

<b>Model 2433B-P</b>	PSI	1000			1500			2000			2500		
	RPM	GPM	HP	GPM	HP	GPM	HP	GPM	HP	GPM	HP		
	1000	4.4	3.0	4.3	4.2	4.3	5.5	4.3	6.7				
	1150	5.0	3.3	5.0	4.8	4.9	6.2	4.9	7.6				
	1450	6.2	4.2	6.1	5.9	6.1	7.7	6.0	9.4				
1725	7.1	4.9	7.0	6.8	7.0	8.9	6.9	10.8					

<b>Model 2434B-P</b>	PSI	1000			1500			2000			2500		
	RPM	GPM	HP	GPM	HP	GPM	HP	GPM	HP	GPM	HP		
	1000	4.9	3.4	4.9	4.8	4.8	6.2	4.8	7.6				
	1150	5.6	3.8	5.6	5.4	5.5	7.1	5.5	8.5				
	1450	7.0	4.5	6.9	6.5	6.8	8.6	6.8	10.5				
1725	7.9	5.3	7.8	7.7	7.8	10.0	7.7	12.1					

**Metric**

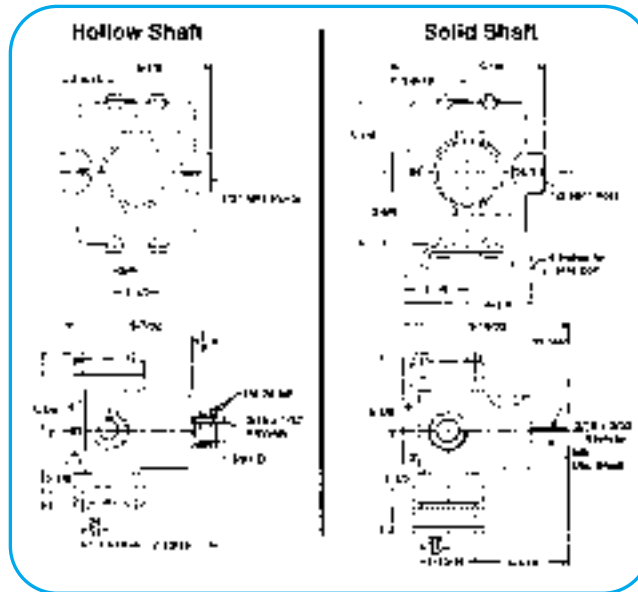
<b>BAR</b>	69		138		207		248		
	RPM	L/m	Kw	L/m	Kw	L/m	Kw	L/m	Kw
	1000	13.6	1.9	13.2	3.5	12.9	5.1	12.9	5.8
	1150	15.5	2.2	15.1	4.0	15.1	5.6	14.8	6.6
	1450	19.7	2.7	18.9	4.9	18.5	7.0	18.2	8.2
1725	22.7	3.1	22.0	5.7	21.6	8.1	21.2	9.5	

<b>BAR</b>	69		103		138		172		
	RPM	L/m	Kw	L/m	Kw	L/m	Kw	L/m	Kw
	1000	16.7	2.2	16.3	3.1	16.3	4.1	16.3	5.0
	1150	18.9	2.5	18.9	3.6	18.5	4.6	18.5	5.7
	1450	23.5	3.1	23.1	4.4	23.1	5.7	22.7	7.0
1725	26.9	3.7	26.5	5.1	26.5	6.6	26.1	8.1	

<b>BAR</b>	69		103		138		172		
	RPM	L/m	Kw	L/m	Kw	L/m	Kw	L/m	Kw
	1000	18.5	2.5	18.5	3.6	18.2	4.6	18.2	5.7
	1150	21.2	2.8	21.2	4.0	20.8	5.3	20.8	6.3
	1450	26.5	3.4	26.1	4.8	25.7	6.4	25.7	7.8
1725	29.9	4.0	29.5	5.7	29.5	7.5	29.1	9.0	

**Pumps 5315, 5320, 5325, 5330**

**Pump 5315C, 5315C-H, 5320C, 5320C-H, 5325C, 5325C-H, 5330C, 5330C-H**



**English Standard**

<b>Model 5315</b>	PSI	100		200		300		400		500	
	RPM	GPM	HP	GPM	HP	GPM	HP	GPM	HP	GPM	HP
	1725	1.5	0.2	1.5	0.3	1.5	0.4	1.5	0.4	1.4	0.6

<b>Model 5320</b>	PSI	100		200		300		400		500	
	RPM	GPM	HP	GPM	HP	GPM	HP	GPM	HP	GPM	HP
	1725	2.2	0.3	2.2	0.4	2.1	0.6	2.1	0.7	2.1	0.8

<b>Model 5325</b>	PSI	100		200		300		400		500	
	RPM	GPM	HP	GPM	HP	GPM	HP	GPM	HP	GPM	HP
	1725	2.5	0.4	2.5	0.5	2.5	0.7	2.5	0.8	2.4	1.0

<b>Model 5330</b>	PSI	100		200		300		400		500	
	RPM	GPM	HP	GPM	HP	GPM	HP	GPM	HP	GPM	HP
	1725	3.0	0.5	3.0	0.7	3.0	0.9	3.0	1.1	2.9	1.2

**Metric**

<b>BAR</b>	7		14		21		27.5		34.5		
	RPM	L/m	Kw	L/m	Kw	L/m	Kw	L/m	Kw	L/m	Kw
	1725	5.8	0.1	5.7	0.2	5.6	0.3	5.5	0.3	5.5	0.4

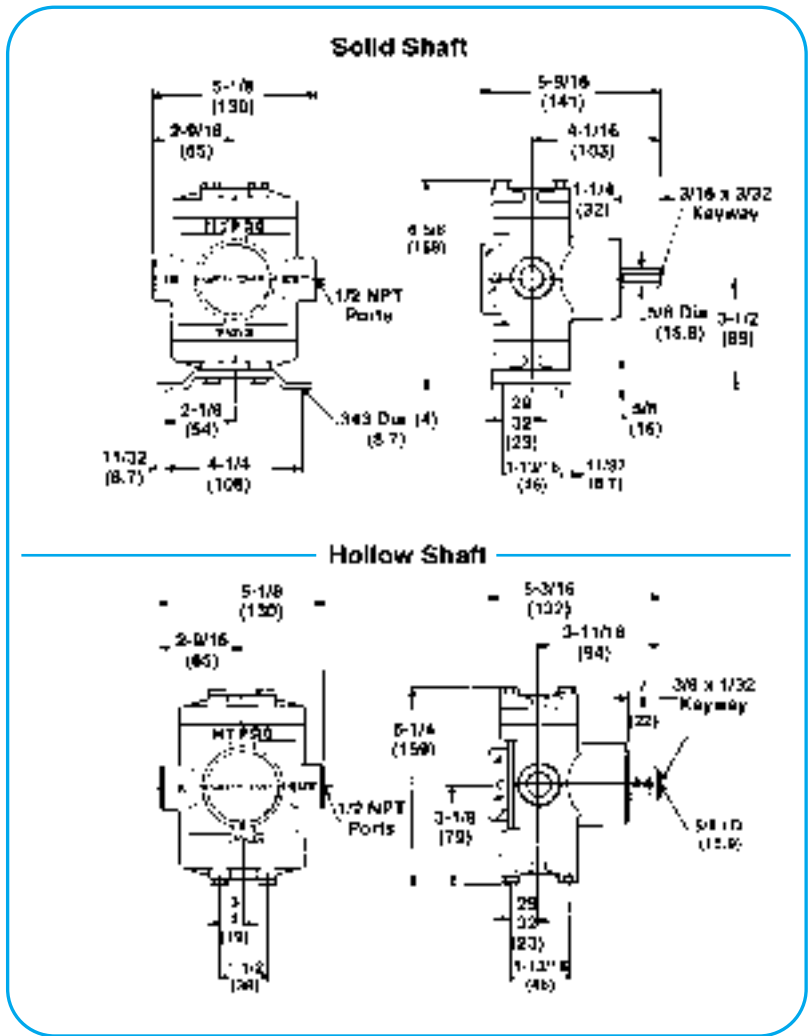
<b>BAR</b>	7		14		21		27.5		34.5		
	RPM	L/m	Kw	L/m	Kw	L/m	Kw	L/m	Kw	L/m	Kw
	1725	8.3	0.2	8.2	0.3	8.0	0.4	8.0	0.5	8.0	0.6

<b>BAR</b>	7		14		21		27.5		34.5		
	RPM	L/m	Kw	L/m	Kw	L/m	Kw	L/m	Kw	L/m	Kw
	1725	9.6	0.3	9.5	0.4	9.5	0.5	9.4	0.6	9.2	0.7

<b>BAR</b>	7		14		21		27.5		34.5		
	RPM	L/m	Kw	L/m	Kw	L/m	Kw	L/m	Kw	L/m	Kw
	1725	11.4	0.4	11.4	0.6	11.3	0.7	11.2	0.8	11.1	0.9

# Pumps 5321, 5322, 5324

## Pumps 5321C, 5321C-H, 5322C, 5322C-H, 5324C, 5324C-H



### English Standard

<b>Model 5321, 5322</b>	PSI	100		300		500		700		1000	
	RPM	GPM	HP	GPM	HP	GPM	HP	GPM	HP	GPM	HP
	900	1.1	0.2	1.1	0.4	1.1	0.5	1.1	0.6	1.1	0.8
	1200	1.5	0.3	1.5	0.5	1.5	0.6	1.5	0.8	1.4	1.0
	1450	1.8	0.4	1.8	0.6	1.8	0.7	1.8	0.9	1.8	1.2
	1725	2.2	0.4	2.1	0.7	2.1	0.8	2.1	1.1	2.1	1.4

### Metric

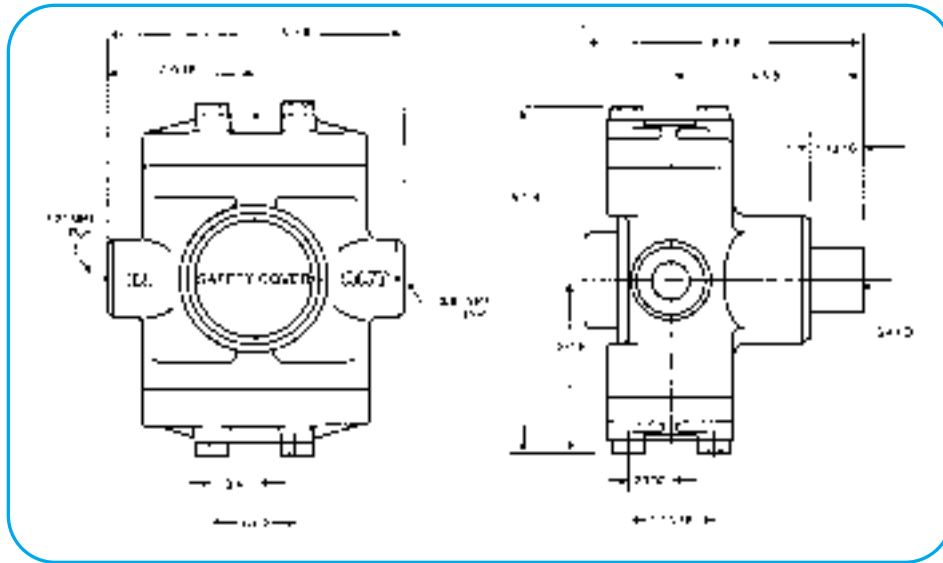
	BAR	7		20		40		50		69	
	RPM	L/m	Kw	L/m	Kw	L/m	Kw	L/m	Kw	L/m	Kw
	900	4.2	0.2	4.2	0.3	4.2	0.4	4.2	0.5	4.1	0.6
	1200	5.8	0.2	5.6	0.4	5.5	0.5	5.5	0.6	5.4	0.7
	1450	6.9	0.3	6.8	0.4	6.7	0.6	6.7	0.7	6.6	0.9
	1725	8.2	0.3	8.1	0.5	8.0	0.7	8.0	0.8	7.9	1.1

<b>Model 5324</b>	PSI	100		200		300		400		500		600		700		800	
	RPM	GPM	HP	GPM	HP	GPM	HP	GPM	HP	GPM	HP	GPM	HP	GPM	HP	GPM	HP
	600	1.0	0.1	0.9	0.2	0.9	0.3	1.0	0.3	0.9	0.4	0.9	0.5	0.9	0.5	0.9	0.6
	900	1.5	0.2	1.5	0.3	1.5	0.4	1.5	0.5	1.5	0.6	1.5	0.7	1.5	0.8	1.5	0.9
	1200	2.0	0.3	2.0	0.4	2.0	0.6	2.0	0.7	2.0	0.8	2.0	0.9	1.9	1.1	1.9	1.2
	1450	2.4	0.3	2.4	0.5	2.4	0.7	2.4	0.8	2.4	1.0	2.3	1.1	2.3	1.3	2.3	1.4
1725	2.9	0.4	3.0	0.6	2.9	0.8	2.9	1.0	2.8	1.2	2.8	1.4	2.8	1.5	2.8	1.7	

	BAR	7		21		34.5		48		55	
	RPM	L/m	Kw	L/m	Kw	L/m	Kw	L/m	Kw	L/m	Kw
	900	5.7	0.2	5.7	0.3	5.7	0.5	5.7	0.6	5.7	0.7
	1200	7.6	0.2	7.6	0.5	7.6	0.6	7.2	0.8	7.2	0.9
	1450	9.1	0.3	9.1	0.5	9.1	0.8	8.7	1.0	8.7	1.1
	1725	11.0	0.3	11.0	0.6	10.6	0.9	10.6	1.2	10.6	1.3

# Pumps 53702, 53703

## Pumps 53702, 53703



### English Standard

### Metric

Model  
53702

Pressure	100		300		500		700		1000	
RPM	GPM	HP	GPM	HP	GPM	HP	GPM	HP	GPM	HP
3450	2.2	0.4	2.2	0.7	2.1	0.9	2.1	1.2	2.0	1.5

Pressure	689.4 KPa		2000 KPa		4000 KPa		5000 KPa		6894 KPa	
RPM	L/m	Kw	L/m	Kw	L/m	Kw	L/m	Kw	L/m	Kw
3450	8.5	0.3	8.3	0.5	7.9	0.8	7.7	0.9	7.4	1.1

Model  
53703

Pressure	100		300		500		700		1000	
RPM	GPM	HP	GPM	HP	GPM	HP	GPM	HP	GPM	HP
3100	2.3	0.4	2.2	0.7	2.1	0.9	2.1	1.2	2.0	1.5

Pressure	689.4 KPa		2000 KPa		4000 KPa		5000 KPa		6894 KPa	
RPM	L/m	Kw	L/m	Kw	L/m	Kw	L/m	Kw	L/m	Kw
3100	8.5	0.3	8.3	0.5	8.0	0.8	7.9	0.9	7.7	1.1

# Limited Warranty on Hypro Pumps and Other Hypro Products

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Hypro Corporation ("Hypro") warrants to the original purchaser of its products (the "Purchaser") that such products will be free from defects in material and workmanship under normal use for the period of one (1) year for all products except: oil crankcase plunger pumps will be free from defects in material and workmanship under normal use for the period of five (5) years, and accessories will be free from defects in material and workmanship under normal use for the period of ninety (90) days. In addition, Hypro warrants to the purchaser all forged brass pump manifolds will be free from defects in material and workmanship under normal use and from damage resulting from environmental conditions for the life of the pump.

Normal use" does not include use in excess of recommended maximum speeds, pressures, vacuums and temperatures, or use requiring handling of fluids not compatible with component materials, as noted in Hypro product catalogs, technical literature, and instructions. This warranty does not cover freight damage, freezing damage, normal wear and tear, or damage caused by misapplication, fault, negligence, alterations, or repair that affects the performance or reliability of the product.

**THIS WARRANTY IS EXCLUSIVE. HYPRO MAKES NO OTHER WARRANTY, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.**

Hypro's obligation under this warranty is, at Hypro's option, to either repair or replace the product upon return of the entire product to the Hypro factory in accordance with the return procedures set forth below. **THIS IS THE EXCLUSIVE REMEDY FOR ANY BREACH OF WARRANTY.**

**IN NO EVENT SHALL HYPRO BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY KIND, WHETHER FOR BREACH OF ANY WARRANTY, FOR NEGLIGENCE, ON THE BASIS OF STRICT LIABILITY, OR OTHERWISE.**

## Return Procedures

**All pumps or products *must* be flushed of *any* chemical (ref. OSHA Section 0910.1200 (d)(e)(f)(g)(h)) and hazardous chemicals *must* be labeled before being shipped\* to Hypro for service or warranty consideration.** Hypro reserves the right to request a Material Safety Data sheet from the Purchaser for any pump or product Hypro deems necessary. Hypro reserves the right to "disposition as scrap" pumps or products returned which contain unknown substances, or to charge for any and all costs incurred for chemical testing and proper disposal of components containing unknown substances. Hypro requests this in order to protect the environment and personnel from the hazards of handling unknown substances.

For technical or application assistance, call the **Hypro Technical/Application number: 1-800-445-8360.**  
To obtain service or warranty assistance, call the **Hypro Service and Warranty number: 1-800-468-3428;**  
or call the **Hypro Service and Warranty FAX: (651) 766-6618.**

Be prepared to give Hypro full details of the problem, including the following information:

1. Model number and the date and from whom you purchased your pump.
2. A brief description of the pump problem, including the following:
  - Liquid pumped. State the pH and any non-soluble materials, and give the generic or trade name.
  - Temperature of the liquid and ambient environment.
  - Suction lift or vacuum (measured at the pump).
  - Discharge pressure.
  - Size, type, and mesh of the suction strainer.
  - Drive type (gas engine/electric motor; direct/belt drive; tractor PTO) and rpm of pump.
  - Viscosity (of oil, or other than water weight liquid).
  - Elevation from the pump to the discharge point.
  - Size and material of suction and discharge line.
  - Type of spray gun, orifice size, unloader/relief valve.

Hypro may request additional information, and may require a sketch to illustrate the problem. Contact the factory to receive a return material authorization before sending the product. All pumps returned for warranty work should be sent shipping charges prepaid to:

HYPRO CORPORATION  
Attention: Service Department  
375 Fifth Avenue NW  
New Brighton, Minnesota 55112-3288

\* Carriers, including U.S.P.S., airlines, UPS, ground freight, etc., require specific identification of any hazardous materials being shipped. Failure to do so may result in a substantial fine and/or prison term. Check with your shipping company for specific instructions.



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