





## **THE LEADING FORCE** behind liquids<sup>™</sup> since 1857

## **Rotary Positive Displacement Pumps**

## External Gear

### 3600 Series



General purpose pumps for transferring, mixing, blending and recirculating. Efficiently handles heavy, viscous materials such as: asphalt, molasses, chocolate, roofing compounds, and printing inks. Also suitable for fuel oil, gasoline, and similar thin liquids.

No. of Sizes	Theoretical Max Capacity	Differential Pressure	Viscosity	Max Temp.	Port Sizes	Housing Materials of Construction
8	360 GPM 81.8 M³/hr	125 PSI 8.6 Bar	Up to 55,000 cSt Up to 250,000 SSU	212°/450° F* 100°/232° C*		Cast Iron
	01.011711	0.0 54	op to 250,000 550	100 7252 0	2 1 1 5	

### Z Series



Easy maintenance, two-piece backplate for flexible sealing options (single, double or cartridge seals). Designed around our 3600 series pump with a more advanced seal chamber and optional ANSI flanges. Ideal for chemical and petroleum applications.

No. of Sizes	Theoretical Max Capacity	Differential Pressure	Viscosity	Max Temp.	Port Sizes	Housing Materials of Construction
7	360 GPM 81.8 M³/hr	125 PSI 8.6 Bar	Up to 55,000 cSt Up to 250,000 SSU	212°/450° F* 100°/232° C*	2" - 3" NPT 2" - 4" Flg	Cast Iron

### 3800 Series



Sealed outboard ball bearing pump created for harsh oilfield environments where internal bushings wear out prematurely. Commonly used on light and heavy crude oil transfer, dirty condensate, sludges and spent waste fluids.

No. of Sizes	Theoretical Max Capacity	Differential Pressure	Viscosity	Max Temp.	Port Sizes	Housing Materials of Construction
4	540 GPM 122.6 M <sup>3</sup> /hr	125 PSI 8.6 Bar	Up to 55,000 cSt Up to 250,000 SSU	250°/350° F* 121/176° C*	3" & 4" Flg	Cast Iron with sealed ball bearings

### 9600 Series



Heavy duty corrosion resistant stainless steel pump for chemical transfer. Typically used for corrosive liquids, polymers and petro-chemicals.

No. Size		Differential Pressure	Viscosity	Max Temp.	Port Sizes	Housing Materials of Construction
1	165 GPM 37.5 M³/hr	100 PSI 7 Bar	Up to 55,000 cSt Up to 250,000 SSU	350° F 176° C	3" Flg	316/17-4 PH Stainless Steel

### **BULK HANDLING** Series

High capacity transfer pumps designed for a wide variety of bulk liquids in loading and unloading applications: barges, railway tank cars and transport tankers.

No. of Sizes	Theoretical Max Capacity	Differential Pressure	Viscosity	Max Temp.	Port Sizes	Housing Materials of Construction
2	1045 GPM 237 M³/hr	125 PSI 8.6 Bar	Up to 55,000 cSt Up to 250,000 SSU	250°/500° F* 121°/260° C*	8" Flg	Ductile Iron, Cast Iron

### 5600 Series

Rubber gear pump specifically designed for handling liquids with high solid content and abrasives. Often used for oilfield service, hydro-seeding, waste oils, tallow and sludges.

No. of Sizes	Theoretical Max Capacity	Differential Pressure	Viscosity	Max Temp.	Port Sizes	Housing Materials of Construction
1	232 GPM 52.7 M <sup>3</sup> /hr	100 PSI 7 Bar	Up to 2,200 cSt Up to 10,000 SSU	160° F 71° C	3" Flg	Cast Iron NITRILE covered rotors

\*with high temperature options.

### A Series



General purpose pumps for pressure lubrications, hydraulic service, fuel supply and general transfer. Capable of operating at standard motor speeds. Pressures up to 300 PSI

No. of Sizes	Theoretical Max Capacity	Differential Pressure	Viscosity	Max Temp.	Port Sizes	Housing Materials of Construction
12	75.6 GPM 17.2 M³/hr	150/300 PSI** 10/20 Bar**	Up to 2,200 cSt Up to 10,000 SSU	212°/500°F* 100°/260°C*		Ductile Iron, Cast Iron

### 2835 Series



High viscosity pump designed to run at standard motor speeds with liquid viscosities up to 100,000 SSU. Commonly used for pumping molasses, feed supplements and roofing compounds.

No. of Sizes	Theoretical Max Capacity	Differential Pressure	Viscosity	Max Temp.	Port Sizes	Housing Materials of Construction
1	11.3 GPM 2.57 M³/hr	75 PSI 5.2 Bar	Up to 22,000 cSt Up to 100,000 SSU	200°/450°F* 93°/232°C*	1 1/2" NPT	Cast Iron

### **ROC**<sup>®</sup> Series



Heavy duty stainless steel pumps for the chemical and pharmaceutical industries.
Used for dosing and transferring of acids and solvents. Available with magnetic drive on small sizes.

No. of Sizes	Theoretical Max Capacity	Differential Pressure	Viscosity	Max Temp.	Port Sizes	Housing Materials of Construction
8	32.4 GPM 7.36 M³/hr	300 PSI 20 Bar	Up to 55,000 cSt Up to 250,000 SSU	350° F 176° C	1/2" - 2" NPT	316/17-4 Stainless Steel

### **V** Series



Magnetic drive, seal-less helical gear pump designed for ultra-safe transfer of hazardous or toxic liquids. Ideal for environmental concerns or where "zero leakage" is an issue.

No. of Sizes	Theoretical Max Capacity	Differential Pressure	Viscosity	Max Temp.	Port Sizes	Housing Materials of Construction
4	5.4 GPM 1.2 M³/hr	150 PSI 10 Bar	Up to 2,200 cSt Up to 10,000 SSU	225° F 107° C	1/2" - 3/4" NPT	Ductile Iron Cast Iron

### F Series

A versatile high pressure pump commonly used to provide hydraulic power for positioning devices, lifts, and machine actuators. Well suited for liquid pressurization with fuel burners and blenders.

No. of Sizes	Theoretical Max Capacity	Differential Pressure	Viscosity	Max Temp.	Port Sizes	Housing Materials of Construction
13	403.2 GPM 91.6 M³/hr	425 PSI* 29 Bar*	Up to 22,000 cSt Up to 100,000 SSU	212°/250°F* 100°/121°C*	1/2"-21/2" NPT 3"-4" Flg	Cast Iron

### 2001 Type 10





Used for how now high pressure apprications such as dosing infection and high pressure spray nozzies										
No. of Sizes	Theoretical Max Capacity	Differential Pressure	Viscosity	Max Temp.	Port Sizes	Housing Materials of Construction				
1	2 GPM 0.5 M <sup>3</sup> /hr	1200 PSI 82.75 Bar	Up to 110,000 cSt Up to 500,000 SSU	350° F 176° C	3/4"- 3/8" NPT	Cast Iron				

# Performance Products

### PROGRESSING CAVITY PC



Pulseless, low shear, solids handling pump for viscous and abrasive liquids. Commonly used in transferring wastewater sludge, polymers, grouts, paints and adhesives.

No. of Sizes			Viscosity	Max Temp.	Port Sizes	Housing Materials of Construction		
15	1000 GPM 227 M³/hr	750 PSI 51.7 Bar	Up to 10 million CPS Up to 50 million SSU (approx.)	350° F 176° C	1" - 10" Flg plus hopper 3/4" NPT	Stainless Steel, Cast Iron Stator, Buna, Viton, EPDM, Nat. Rubber		

### **CUSTOM ENGINEERED PRODUCTS**



With over 150 years of experience we have designed and developed numerous custom pumps for unique and demand-
ing applications. Let us know what you need and our Engineers will design a pump specifically for you.

No. of Sizes	Theoretical Max Capacity	Differential Pressure	Viscosity	Max Temp.	Port Sizes	Housing Materials of Construction	
-	1200 GPM 272.5 M <sup>3</sup> /hr	1500 PSI 103 Bar	Up to 100,000 cSt Up to 455,000 SSU	500° F 260° C	Various	Various	

### LIQUID FUEL FLOW DIVIDERS



### **Corrosion-Resistant Flow Dividers**

Flow dividers for most sizes of liquid fuel fired gas turbines. Available in standard cast iron or stainless steel and bronze DuraFlow<sup>®</sup> versions.

- DuraFlow<sup>®</sup> Corrosion-Resistant Flow Dividers resist corrosion during standby, for reliable start-up of liquid fuel systems.
- DuraFlow<sup>®</sup> resists problems caused by fuel-borne particulate contamination.
- DuraFlow<sup>®</sup> offers dramatic savings on operation and maintenance.
- DuraFlow<sup>®</sup> is available new or retrofit, for most heavy industrial gas turbine makes and models.



### MUD MOTOR POWER SECTIONS



Available in a range of sizes, torque values, speed and materials to match your application.

Our optional DragonSlayer<sup>®</sup> high performance elastomer has been field tested to 425°F (218°C) and goes deeper, runs at higher temperatures and lasts longer in hazardous environments.

#### Applications:

- Directional horizontal and vertical drilling
- Coiled tubing
- Snubbing
- Utilities
- River crossing

All information and recommendations appearing in this bulletin concerning the use of products described herein are based on tests believed to be reliable. However, it is the user's responsibility to determine the suitability for his own use of such products. Since the actual use by others is beyond our control, no guarantee, expressed or implied, is made by Roper Pump Company as to the effects of such use or results to be obtained. Roper Pump Company assumes no liability arising out of the use by others of such products. Nor is the information herein to be construed as absolutely complete, since additional information may be necessary or desirable when particular or exceptional conditions or circumstances exist or because of applicable laws or government regulations.

# Industry Pump Selection

### This is a general guide and may not be relevant to your specific industry.

Review product selections and specific requirements with authorized Roper Pump representatives.

	Agriculture	Asphalt	Chemicals	Food & Beverage	Ink & Pigments	Marine	Mining	Oil & Gas	Personal Care	Pharmaceuticals	Power Generation	Pulp & Paper	Transportation	Wastewater
3600 Series													•	
Z Series	-													
3800 Series								-						
9600 Series														
Bulk Handling	•							•			•			
5600 Series								•					•	-
A Series	•				•						-			
2835 Series														
ROC <sup>®</sup> SERIES	•								•					
V Series														
F Series											-			
2001 Туре 10														
Progressing Cavity								•	•					
Custom Engineered Products	-	-		•		-	-	•	•	•	•	•	•	•

Cast Iron	Ductile	Steel	Stainless
ASTM A 48			
ASTM A 48			
ASTM A 48			
			CF-8M
ASTM A 48	ASTM A 395		
ASTM A 48			
ASTM A 48	ASTM A 395		
ASTM A 48	ASTM A 395		
			AISI 316
ASTM A 48	ASTM A 395		
ASTM A 48			
ASTM A 48			CF-8M
*		*	*
*	*	*	*

	PRESSURE AND FLOW					
		sure [Bar]		ıx Flow * [M³/hr]		
3600 Series	125	[8.6]	368	[1393]		
Z Series	125	[8.6]	165	[625]		
3800 Series	125	[8.6]	540	[2044]		
9600 Series	100	[6.9]	165	[625]		
Bulk Handling	125	[8.6]	1045	[3956]		
5600 Series	100	[6.9]	232	[878]		
A Series	300	[20.7]	75	[284]		
2835 Series	75	[5.2]	11	[42]		
ROC <sup>®</sup> Series	300	[20.7]	32	[121]		
V Series	150	[10.3]	5	[19]		
F Series	425	[29.3]	403	[1526]		
2001 Type 10	1200	[82.7]	2	[8]		
Progressing Cavity	750	[51.7]	1000	[3785]		
com Engineered Products	1500	[103.4]	1200	[4542]		

Cust

\*GPM = U.S. Gallons per Minute

\*Contact Factory for specific materials available



### **THE LEADING FORCE** behind liquids<sup>™</sup> since 1857



**Roper Pump Company** is a global supplier of high quality positive displacement pumps, designed to handle a broad range of industrial applications. In addition to helical gear pumps and progressing cavity pumps, we design and develop numerous custom pumps for customers with unique and demanding applications.

From a small pump company founded in 1857, Roper Pump Company has grown into a technological leader. With a large installed base, we have both the knowledge and experience to help you solve your most challenging pumping problems... and our strong global distribution network ensures that your needs are met on time, every time.

### **Our Markets**



#### INDUSTRIAL

Roper Pump Company's rugged and dependable range of positive displacement pumps provides versatile pumping solutions for even the most challenging industrial applications.



#### **TRANSPORT** With over a century of experience in liquid cargo transfer, Roper Pump Company has always been trusted to load and unload your tankers

quickly and safely



**POWER GENERATION** For reliable operation of engines, compressors and turbines, thousands of customers depend on Roper Pump Company fuel pumps, lube pumps and liquid fuel flow dividers.



OIL & GAS

Roper Pump Company has numerous pumping solutions from the well to the refi nery. Our industry leading DragonSlayer® Power Sections allow mud motors to run longer at unprecedented temperatures and depths.

Roper Pump Company PO Box 269, 3475 Old Maysville Road Commerce, GA 30529 USA

Customer Service: (706) 336-3359 Sales & Technical Support: (706) 336-3334 Fax: 706-335-5490

sales@roperpumps.com www.roperpumps.com

©2008 by Roper Pump Company Roper Pumps®, ROC®, DuraFlow® and DragonSlayer® are registered trademarks of Roper Pump Company. THE LEADING FORCE behind liquids™ is a trademark of Roper Pump Company

DOC# PB-IND-E-R2