

SONIC HYDRAULICS

STP-1000 SERIES HYDROSTATIC PISTON PUMPS Information Packet



US Patent: US7572114

Sonic Tractor Parts, Inc.

1780 NW 93rd Avenue

Miami, FL 33172

T: 305-594-0777 F: 305-594-7798

www.sonichydraulics.com

Serving the World Since 1989

Call Toll Free: 1-800-695-3948 (USA ONLY)

Updated : Jan/2010

WELCOME TO SONIC HYDRAULICS!

Sonic Hydraulics (A Division of Sonic Tractor Parts, Inc. (STP)) **Company Overview**

Established in 1989, Sonic Tractor Parts, Inc. (STP) has been manufacturing hydraulic pumps, providing quality parts suitable for Ford, Massey Ferguson, Case/IH tractors and much more. Over the years we have built a solid reputation for quality, superior customer service and competitive pricing. All of our pumps are manufactured and 100% tested in our facilities.

Sonic currently supplies its parts to over 350 dealer and distributors in the United States and 30+ distributors worldwide.

In 2000 Sonic started focusing heavily on research and development of hydrostatic transmissions systems. Soon after, Sonic built its STP-1000 series axial piston pump specifically for the hydrostatic transmission of lawn mowers and compact tractors. The STP-1000 series provides the same or better quality and performance as compared with leading competitors in the market and our pricing stands at 30-50% below current market prices!

In 2009, we received the USPTO Patent for the STP-1000 design.

Quality Control Systems

Since 1997 our manufacturing facilities have adopted ISO 9000 QC management principles and systems to ensure that the highest standards are implemented in our production processes. In 1999, certification was awarded for successfully implementing the requirements of ISO 9002 standards of management within the scope of pump manufacturing. All products undergo individual quality inspections and are run on professional test benches for a complete 100% performance and functionality check.

Lean Manufacturing

STP is a strong believer of the concept of lean manufacturing. In order to provide you with the lowest possible costs without sacrificing the quality of the product, Sonic implemented and actively practices lean manufacturing. Lean manufacturing is the process by which production is run in the most efficient manner.

Benefits of lean manufacturing include:

- Reduced lead time
- Optimized space usage
- Increased productivity
- Improved product quality
- Improved on-time shipments

Customer/ Technical Support

At STP, we believe that our customers find value in the service they receive as well as the relationship they have with us. Good customer support, thus, should include both. As such, STP provides one direct point of contact for Customer Support, to deal with all aspects of customer servicing. Your account is appointed to an Account Representative who takes full responsibility for supporting and logging problems and technical support queries. Their specific role is to ensure that all sales and support queries are answered and resolved as promptly as possible. Your Account Representative works simultaneously with engineers, marketing and management to provide the highest and most efficient level of service.

The customer support process is dictated by the principle that success is a result of collaborative efforts and communication.

Warranty

STP warrants the STP-1000 Series line of pumps to be free from defects in material and workmanship for a period of one year from date of purchase. We reserve the right to inspect any or all parts returned for warranty before warranty claims will be honored. The warranty shall be void in case of accident, abuse, misuse, negligence, application for which the products are not designed for, alteration, disassembly, dismantlement, etc..

Sonic Tractor Parts, Inc. is not liable for loss, damage or injury directly or indirectly arising from the use of the products. Before using, the user shall determine the suitability of the products for its intended use, and the user shall assume and be liable for all responsibility and risks in connection therewith. There are no warranties which extend beyond the description of the face hereof. There is no implied warranty of merchantability. For warranty returns, please contact your Account Representative.

Shipping and Delivery

All prices are ex-warehouse, Miami Florida. Your account representative will work with you to set up shipping details. Most truckload shipments are shipped through your carrier of choice and all other packages are customarily shipped through UPS Ground. Orders received prior to 4:00 pm EST are processed the same day.

Drop Shipments

In cooperation with our distributors, Sonic also provides "Drop Shipping" at no additional charge. Customers can place orders noting "Drop Shipment" on the order form or by indicating to your representative at the time the order is placed. Drop Shipments are packaged in individual neutral boxes and contain no packing slips. There are no markings on the package. Shipping labels contain your shipping address as the sender. Upon

STP-1000 Hydrostatic Piston Pump

completion , you will receive via fax a copy of the invoice and freight charges for your reference. All drop shipments are processed according to the shipping address provided. STP is not responsible for any shipping related issues that occur as a result of inaccuracies in the shipping address provided to your account representative.

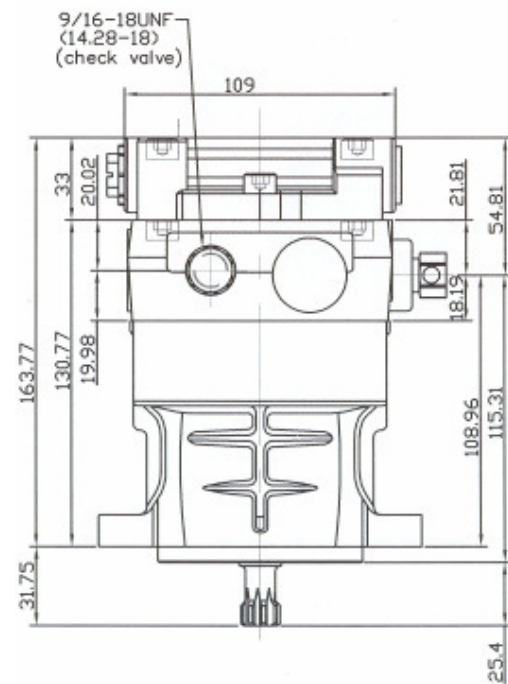
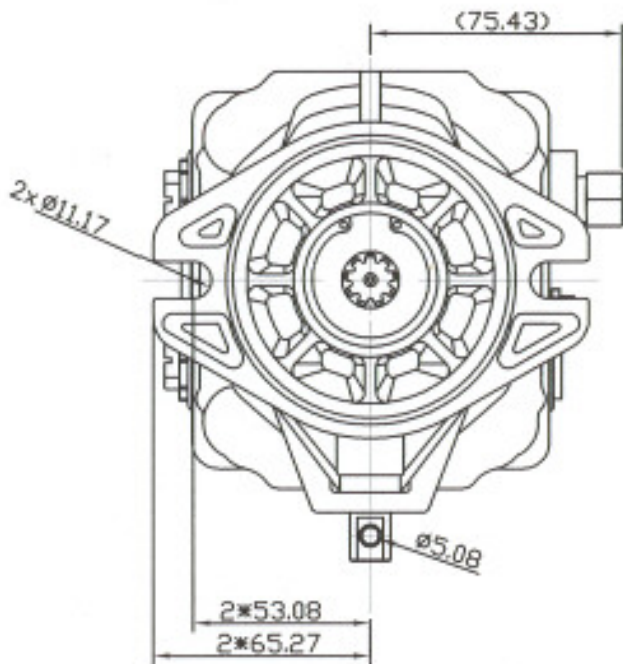
STP-1000

The STP-1000 consists of ten main models, four of which are the most popular and versatile (STP-1003-1010). The models serve to replace a wide variety of 10cc existing models in the market including applications from popular brands. With only a very minimal difference in housing height, the STP-1000 Series provides for a smooth installation matched by durability and power in performance.

STP-1000 (10cc)

Features:

1. Available for Left or Right Hand
2. 10cc displacement
3. Shaft (Straight Keyed, Splined)
4. Trunnion Arm
5. Standard Housing
6. Drain Port
7. Charge Pump
8. Bypass Valve
9. Shock Relief Valve
10. Inlet/Outlet
11. End Cap (Reversible)
12. Rotation (Clockwise, Counter Clockwise)
13. Possible Applications include: Ariens™, DixieChopper™, Exmark™, Encore™, Scag™, Hustler™, Wright™
14. Possible Replacement for Hydro-Gear™, Parker™, White™ pumps



* Items quoted herein are of Sonic's own design and manufacturing. Other part numbers are for reference only.

** Other models currently under production.

*** All models in the STP-1000 series are longer than other manufacturer's corresponding models by 16.44mm (0.647"). Sonic pumps are 12 lbs versus corresponding models of 8lbs.

STP-1000 Hydrostatic Piston Pump

SONIC HYDRAULICS

SONIC HYDRAULIC PUMPS

TECHNICAL SPECIFICATIONS

Model No.		STP-600	STP-1000	STP1200	STP1600	STP2100
Specification						
<i>Displacement in³/rev (cc/rev)</i>		0.37 (6.1)	0.62 (10.2)	0.73 (12)	0.97 (16)	1.33 (21.8)
<i>Input Speed rpm</i>		1800 rpm-3600 rpm				
<i>Operating Pressure Psi (bar)</i>		750 (51)	1000 (51)	1000 (70)	1250 (70)	1250 (86)
<i>Flow Capacity @1000psi gpm (l/min)</i>	2400rpm	3.6 (13.6)	6.1(23.1)	7.1 (26.8)	9.6 (36.3)	13.1 (49.6)
	3000rpm	4.5 (17.0)	7.6 (28.8)	8.9 (33.6)	12 (45.4)	16.4 (62.1)
	3600rpm	5.4 (20.4)	9.2 (34.8)	10.8 (40.8)	14.4 (54.5)	19.6 (74.2)
<i>Charge Pump Displacement in³ (cc)</i>		.13 (2.1)	.11 (1.9)	.19 (3.2)	.13 (2.1)	.13 (2.1)
<i>Pump Oil Temperature</i>		<p style="text-align: center;">Normal Range -10-200 °F (-23 to 93 °C)</p> <p style="text-align: center;">Maximum 230 °F (110°C)</p>				
<i>Fluid Viscosity (SUS/cSt)</i>		70 (13) to 55 (9)				
<i>Weight</i>	<i>lbs</i>	10	12	12	14	14

PRICING

SONIC. PART NO.	SONIC DISTRIBUTOR PRICE	SONIC DEALER PRICE	SUGGESTED RETAIL PRICE
STP-1003	Call for Pricing		
STP-1004			
STP-1005			
STP-1006			
STP-1009			
STP-1010			
STP-1082			
STP-1083			

Non-Disclosure-This file contains information proprietary to Sonic Tractor Parts, Inc. (STP) Sonic Hydraulics, or one of its subsidiaries or affiliates, and is intended solely for the use of the individual or entity to whom its given or addressed to, shall be maintained in confidence and not disclosed to third parties without the written consent of the sender. The recipient shall retain all such information in trust in a fiduciary capacity for the sole use and benefit of the STP.

