

# Hydrostatic Water Test Pump

## User Manual



STP100.2L - 100 Bar - 2 l/min  
STP100.4L - 100 Bar - 4 l/min  
STP100.6L - 100 Bar - 6 l/min  
STP100.8L - 100 Bar - 8 l/min  
STP200.8L - 200 Bar - 8 l/min  
STP300.4L - 300 Bar - 4 l/min



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## A. Introduction

This manual has been prepared to ensure the safe, correct, and efficient operation of the hydrostatic water test pump. It must be provided to all personnel who will operate the device and should be carefully read before starting operation.

The unit provides a hydrostatic power source for pressure testing applications and is equipped with a pressure gauge to monitor the outlet pressure. The pump is designed for pressure testing of pipelines, boilers, valves, and booster systems.

For safety reasons, the machine described in this manual must be inspected at least once a year by authorized technical personnel. Inspection results should be properly documented and made available to the relevant authorities upon request.

## B. Safety Warnings

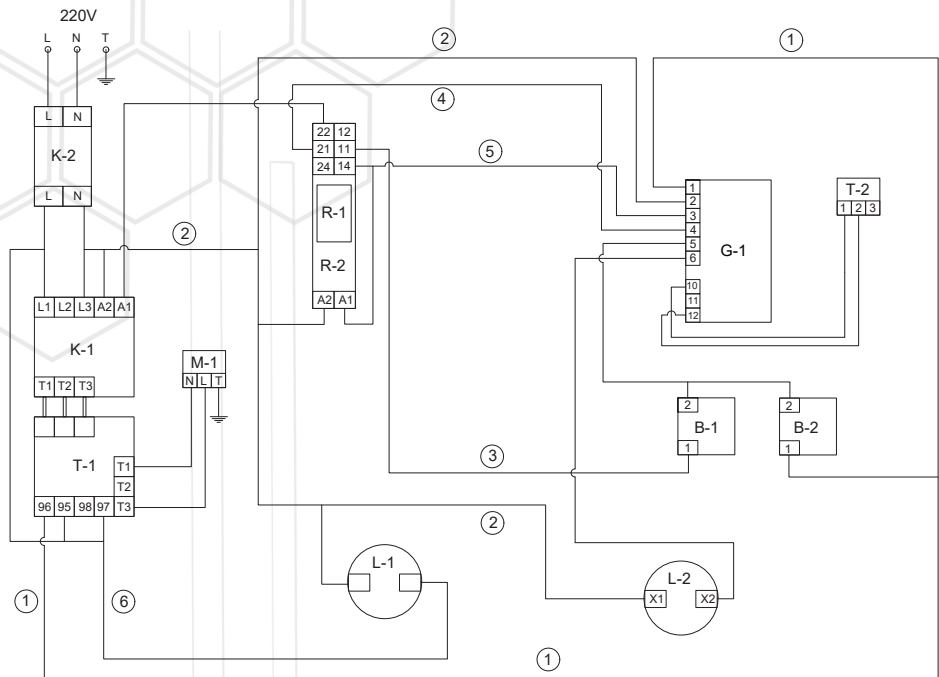
- » The device must be operated only by trained and authorized personnel.
- » Before first use, the operating instructions must be carefully read.
- » The pump's maximum operating pressure must not be exceeded.
- » During operation, appropriate personal protective equipment (gloves, safety glasses, etc.) must be worn.
- » Pump hoses and electrical cables should be inspected regularly.
- » Do not interfere with any connections while the pump is under pressure.
- » Unauthorized persons must not be allowed in the working area during operation.

## C. Technical Specifications

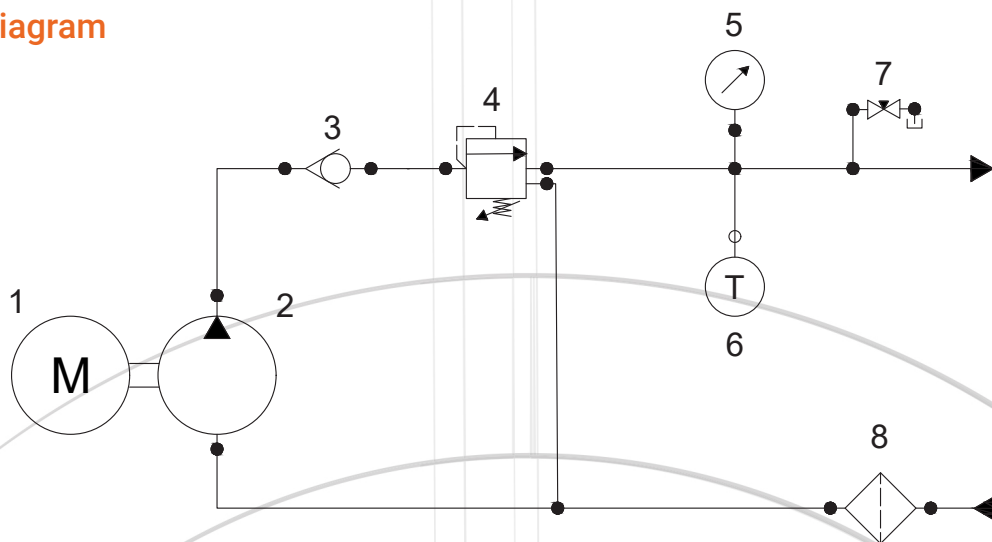
Model Cod		STP100.2L	STP100.4L	STP100.6L	STP100.8L	STP200.8L	STP300.4L
Test Pressure	Bar	100	100	100	100	200	300
Minimum Pressure	Bar	20	20	20	20	20	20
Motor Power	kW	0.55	0.75	1.1	1.5	3	3
Motor Voltage	V	220	220	220	220	220	220
Motor Frequency	Hz	50	50	50	50	50	50
Flow Rate	Min/Min	2	4	6	8	8	4
Fluid		Water	Water	Water	Water	Water	Water
Water Inlet Pressure	Bar	2 – 8	2 – 8	2 – 8	2 – 8	2 – 8	2 - 8
Pressure Line	Inch	1/2	1/2	1/2	1/2	1/2	1/2
Inlet Line	Inch	1/2	1/2	1/2	1/2	1/2	1/2
Oil Volume	Ltr	0,25	0,25	0,25	0,25	0,4	0,4
Oil Grade		SAE 75W90					
Dimensions	cm	60 x 60 x 50					
Weight	Kg	42	44	46	48	53	
Manufacturing Year		Türkiye / 2025					

## Electrical Diagram

- B-1: Start / Stop Button  
B-2: Emergency Stop Button  
G-1: Digital Display  
K-1: Contactor  
K-2: Residual Current Device (RCD)  
L-1: Phase  
I-2: Test Pressure  
M-1: Motor  
R-1: Relay  
R-2: Relay Socket  
T-1: Thermal Overload Relay  
T-2: Pressure Transmitter



## Hydraulic Diagram












1. Electric Motor
2. Pump Unit
3. Check Valve
4. Pressure Relief Valve
5. Analog Pressure Gauge
6. Pressure Transmitter
7. Needle Throttle Valve (or Needle Valve)
8. Water Filter

## D. Pump Contents

The pump is supplied with the following standard equipment:

- » Ready-to-use hydrostatic water test pump
- » 3 m (3/4") transparent water supply hose
- » 5 m (1/2") high-pressure hose rated for 200 bar, with swivel nut connection
- » Operating manual, pressure gauge calibration certificate, and pressure transmitter calibration certificate

STP220.01	Electric Motor: 220 V / 50 Hz	
STP220.02	High-pressure pump with nickel-plated head	
STP220.03	Adjustable pressure control valve	
STP220.04	Pressure relief valve	
STP220.05	Washable water filter	
STP220.06	Electrical control panel	
STP220.07	Pressure transmitter	
STP220.08	Digital indicator	
STP220.09	Panel-mounted pressure gauge (Ø160)	



## E. Installation

Before starting the installation of your hydrostatic test pump, please follow the steps below:

- » Place the pump on a flat, stable, and level surface.
- » Ensure that the 220 V power supply is properly grounded.
- » Check that the water source supplying the pump inlet is clean, filtered, and provides sufficient inlet pressure.
- » Do not operate the pump if any unauthorized intervention or modification has been made to the electrical or pressure components.
- » Turn the pressure adjustment valve on the control panel counterclockwise to set it to the minimum position.



The pump must never be operated without water. Dry operation may cause serious damage to the pressure piston and result in pump failure.

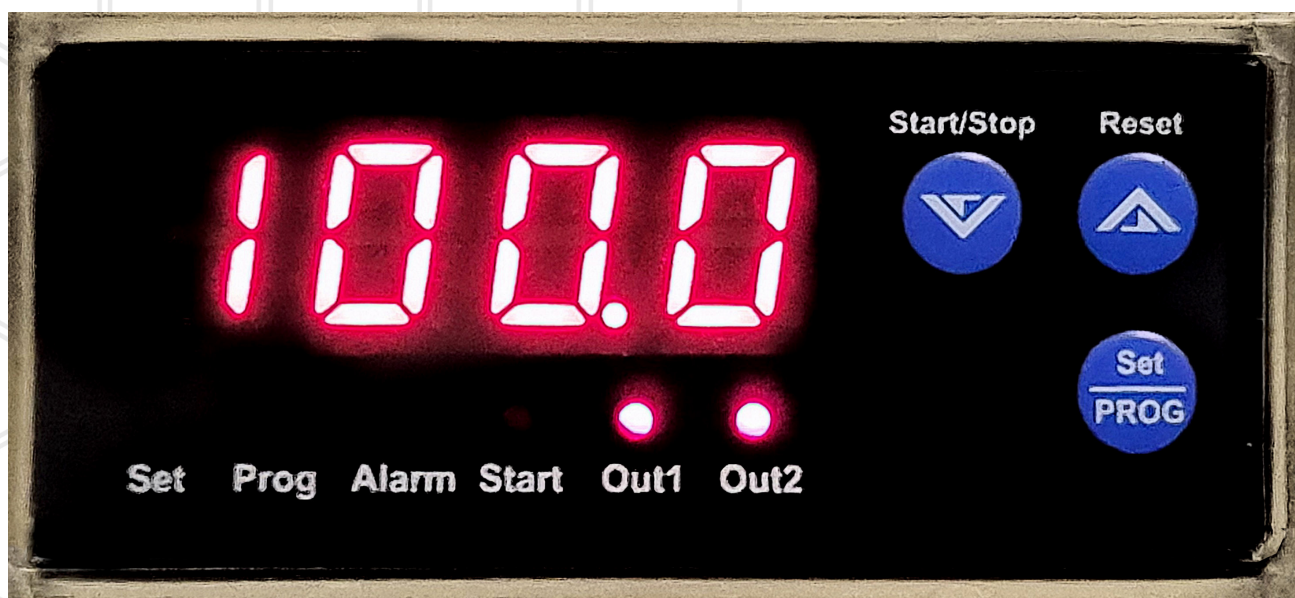
After each use, the pressure adjustment valve must be returned to the minimum position. Otherwise, during the next test operation, the pump pressure may rise rapidly, leading to sudden loading of pressure components and potential safety hazards.

## F. Operating Instructions

After completing the installation, follow the instructions below to start the test procedure:

- » Connect the transparent hose supplied with the unit between the pump water inlet and the water supply source.
- » For the connection between the pressure outlet and the equipment to be tested, use only the hydraulic hose provided with the delivery. Using a hose with a lower pressure rating may cause the hose to burst due to pump pressure, resulting in serious injury to personnel nearby.
- » Before starting the test, fill the equipment to be tested completely with water, ensuring that no air remains inside.
- » Turn the pressure adjustment valve on the pump counterclockwise to set the pressure to the minimum level.
- » The pressure relief valve is located on the control panel. If the valve is in the open position, turn it clockwise to set it to the closed position.

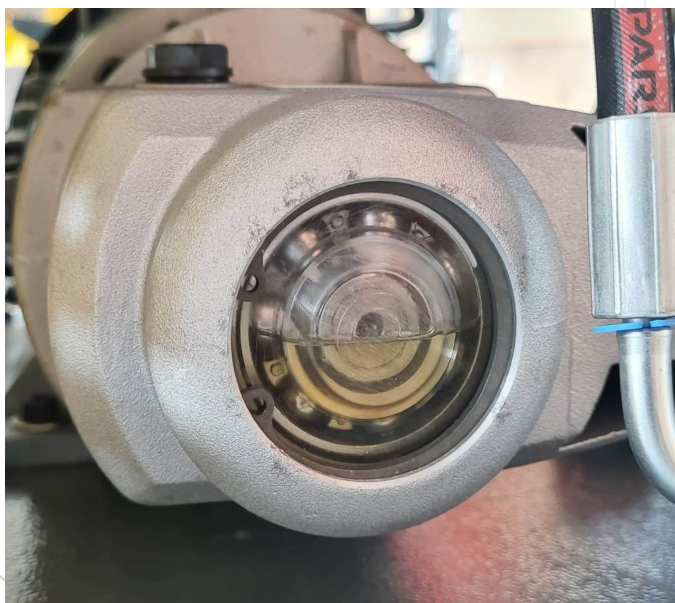
After completing the installation, the test procedure can be started. Before operating the pump, the water supply must be connected and activated. Once sufficient water flow into the pump is ensured, the test operation may begin. After the pump is started, the system pressure will increase gradually. To reach the required test pressure, turn the pressure adjustment valve clockwise to increase the pressure. The system pressure can be monitored via the analog pressure gauge and the digital indicator located on the pump control panel. Using the SET-1 and SET-2 settings on the digital indicator allows the test procedure to be carried out more safely and with better control. The configuration of these modes is described below:



- » To view and adjust the Set1 parameter, press either the increase (+) or decrease (–) button.
- » The current Set1 value will be shown on the display.
- » Use the increase (+) and decrease (–) buttons to set the Set1 value to the desired level.
- » Press the Set button to save the adjusted Set1 value. The value will be stored in memory and the display will automatically switch to “Set2” mode.
- » The Set2 parameter is viewed and adjusted by following the same procedure used for Set1.
- » After completing the Set2 adjustment, press the Set button again to save all settings and exit the setting mode.

## G. Maintenance and

- » After completing the test, drain the pump and the water remaining in the pressure line.
- » Flush the suction and pressure hoses with clean water.
- » Clean the cartridge in the water inlet filter at regular intervals depending on the level of contamination caused by usage.
- » Store the pump and pressure hoses in a clean, dry place. Keep them away from moisture and humidity.
- » Have the pressure gauge on the pump and the pressure transmitter connected to the pressure line calibrated at regular intervals.
- » Clean the electrical line and motor assembly after use. Protect them against dust accumulation.
- » Perform the first oil change after 50 operating hours; thereafter, change the oil every 500 operating hours.
- » The oil to be used for the pump unit is specified in the Technical Specifications table. The use of unsuitable oil will void the warranty.
- » Protect the pump against freezing during storage or transportation. Failure to do so may damage the pressure system and pose serious risks to the user.





## H. Troubleshooting

For possible malfunctions of main components such as the pump unit, pressure line, and electric motor, refer to the troubleshooting table below.

Problem	Possible Cause	Recommended Action
Motor does not operate	<ul style="list-style-type: none"><li>- Emergency stop button may be pressed.</li><li>- Machine may not be connected to the power supply.</li><li>- Residual current circuit breaker may have tripped.</li><li>- Power cable may be damaged or disconnected.</li></ul>	<ul style="list-style-type: none"><li>- Check the emergency stop button.</li><li>- Connect the unit to the power supply and switch on the main power switch.</li><li>- Reset the circuit breaker; if it trips again, contact authorized service.</li><li>- Check the cables using a measuring instrument.</li></ul>
Motor stops suddenly and the protection switch trips	<ul style="list-style-type: none"><li>- Fuse may be blown.</li><li>- Supply current may be insufficient.</li><li>- Protection switch may be faulty.</li><li>- System pressure may be too high.</li></ul>	<ul style="list-style-type: none"><li>- Replace the fuse. If the motor continues to run noisily, contact authorized service.</li><li>- Ensure the correct power supply.</li><li>- Contact authorized service.</li><li>- Clean the hose connection points.</li></ul>
Operating pressure cannot be achieved or pressure fluctuates	<ul style="list-style-type: none"><li>- Air may be trapped in the system.</li><li>- Hose connection points may be worn.</li><li>- Relief valve may be leaking.</li><li>- There may be leakage in the system under test.</li></ul>	<ul style="list-style-type: none"><li>- Keep the relief valve open until all air is discharged from the system.</li><li>- Replace unsuitable or worn hose connections.</li><li>- Contact authorized service.</li></ul>
Pressure gauge does not operate	<ul style="list-style-type: none"><li>- operate</li><li>- Pressure gauge connection hose may be damaged.</li><li>- Pressure gauge may be defective.</li></ul>	<ul style="list-style-type: none"><li>- Contact technical service.</li><li>- Check the pressure gauge and replace it if necessary.</li></ul>

## G. Warranty and Technical

The hydrostatic water test pump is covered by a 2-year manufacturer's warranty against material and assembly defects. This warranty is valid provided that the device is used in accordance with the instructions specified in this manual. Damages resulting from user errors are repaired at the user's expense.

Technical support and spare parts are provided by the authorized service.

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# ATTESTATION OF COMPLIANCE

## UYGUNLUK ONAYI

INTERTURK ULUSLARARASI BELGELENDİRME - INTERTURK INTERNATIONAL CERTIFICATION

Referans Numarası Reference No	: INT-25-332SMS-01
Başvuru Sahibi Applicant	: SURKON MAKİNA SANAYİ VE TİCARET LİMİTED ŞİRKETİ SARAY MAH. AKSOY CAD. NO:1 KAHRAMANKAZAN/ ANKARA
Üretici Manufacturer	: SURKON MAKİNA SANAYİ VE TİCARET LİMİTED ŞİRKETİ SARAY MAH. AKSOY CAD. NO:1 KAHRAMANKAZAN/ ANKARA
Ürün Product	: HİDROSTATİK Su Test Pompası Hydro-Static Test Pump
Tip / Model Type / Model	: STP100.2L, STP100.4L, STP100.6L, STP100.8L, STP200.8L, STP300.4L
Referans Yönetmelik(ler) Reference Directive(s)	: Machinery Safety Directive (2006/42/EC) Makina Emniyet Yönetmeliği (2006/42/AT)
Referans Standart(lar) Reference Standard(s)	: EN ISO 12100:2010, TS EN 60204-1:2018
Onay Dayanağı Base of Attestation	: File of technical documentation, test report Ref. No. INT-25-332SMS-01 Teknik Dökümantasyon, INT-25-332SMS-01 numaralı test raporu

INTERTURK, sunulan teknik dokümantasyonun, yukarıda belirtilen ürünlerin AB Direktifleri 2006/42/EC Ek-I (Makine Emniyeti Yönetmeliği-Ek1) teknik gereksinimlerine uygunluğunu beyan ettiğini onaylar. Bu belge, şirketin talebi üzerine düzenlenmiştir. Ürün tasarımı veya teknik dokümantasyonda herhangi bir değişiklik yapılması halinde Interturk durumdan haberdar edilmelidir. Bu onay, üreticinin uygunluk beyanı düzenleme zorunluluğunu kaldırmaz. Bu onay, Avrupa Komisyonu'nun 14 Eylül 2022 tarihli, Ares (2022) 6342894 referans numaralı, bildirilmemiş prosedür ile yapılan gönüllü sertifikasyonlarla ilgili notuna uygun olarak düzenlenmiştir.

INTERTURK, hereby confirms, that the presented file of technical documentation declares conformity of the above mentioned product(s) with the technical requirements of Parliament and Council Directive(s) 2006/42/EC Annex-I (Machinery Directive), This attestation has been issued as per company required. In case of any changes to the product design or technical documentation, Interturk must be informed. This attestation does not abrogate the compulsory obligation of the manufacturer to issue the declaration of conformity. This document has been issued in accordance with the European Commission's note of 14 September 2022 ref. Ares (2022) 6342894 concerning voluntary certifications with a non-notified procedure.

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Date of Issue



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