

# P653S Centro-Matic oil pump

Provides performance, dependability and versatility



Suitable for multiple applications, the Lincoln P653S electrically driven oil pump simplifies the design of your lubrication system and delivers significant flexibility. A member of the Centro-Matic family, the pump comes complete with a reservoir, pressure switch/transducer, vent valve and controller in one compact unit.

- All-in-one construction reduces system design and installation costs
- Fully programmable operation
- Versatile – meets the needs of numerous applications across multiple markets

# Suitable for automation, heavy industry and machine tool applications



The fully integrated P653S pump is an example of our commitment to providing innovative, cost-effective solutions through industry-leading advances in technology. This next-generation, lower-cost pump package can be fitted with one of two reservoir sizes and easily adapts to many applications. Simply mount the pump, connect the power, install the supply line and injectors, and the system is ready for operation.

## Features

- Integrated pump supplies lubricant to a single-line parallel lubrication system
- Pumps oil and fluid grease up to NLGI 00
- Easily interfaces with telematics technology in today's precision and high-speed equipment
- Operating temperature range from 32 to 122 °F (0 to 50 °C)

## Benefits

- Integration of major system components reduces labor and overall costs
- Simplifies lubrication system design
- Reduces installation time via "plug-and-go" capability
- Minimizes lubricant consumption by running only when the machine is operating

# Full integration of system components and accessories

The P653S pump is simple to install, because all of the necessary components are packaged conveniently in one unit. Its high output capacity supplies lubrication for up to 35 bearings using SL-41 Injectors and up to 100 bearings using SL-42 Injectors, allowing for flexible system design.

## Flexibility meets the needs of larger applications

An additional pressure switch or transducer can be added to the end of the system's supply line for larger applications requiring up to 75 ft. (22.86 m) of 1/4 in. (6.35 mm) supply line. Monitoring at both ends of a larger system ensures all injectors dispense during the lubrication event.

## RemoteLinc™ satellite communication

Telematics technology in today's machines enables companies to remotely monitor their equipment to help manage maintenance costs and protect their investments. All P653S pumps can interface easily with mobile independent telematics systems. The pump's built-in RemoteLinc signaling capabilities can be set to alert operators of low oil level and system faults.

### Fully integrated system provides "plug-and-go" capability



### Internal components

- Telematics signaling capabilities for low level and system fault detection
- Pressure switch or transducer



# The heart of a Centro-Matic automatic lubrication system

The P653S is the central pump station that automatically delivers lubricant through a single supply line to each injector in a Centro-Matic system. Individual injectors serve only one lubrication point and may be accurately adjusted to deliver the precise amount of lubricant required. Consult a qualified Lincoln distributor or the Centro-Matic design guide to identify the correct family of injectors for your application.

## All Centro-Matic injectors have the following features:

- Easy installation
- Externally adjustable output
- Indicator pin permits visual check of injector operation
- Easy removal for inspection or replacement without affecting the rest of the system
- Dispenses oil-based lubricants with a viscosity up to NLGI 00
- System design can be modified simply by adding, changing or subtracting injectors or manifolds

## Benefits of a Lincoln automatic lubrication system

- Improves productivity due to gain of 30 to 45 minutes per day vs. manual lubrication
- Decreases installation costs and the potential for leaks via single supply line throughout the system
- Substantially improves bearing life by delivering frequent, smaller amounts of lubricant to each bearing
- Lowers maintenance costs by eliminating daily manual lubrication and reducing repairs
- Cuts lubricant consumption by delivering exact amount required to each bearing or lubrication point
- Improves safety by eliminating the daily practice of climbing over or under machinery to lubricate
- Delivers proper lubrication regardless of the environment or weather conditions
- Increases resale value of equipment

### P653S pump

Can be paired with any of Lincoln's Centro-Matic oil injectors (SL-41, SL-42, SL-43, SL-44)



#### SL-41

Output: min. 0.008 in.<sup>3</sup>  
(0.131 cm<sup>3</sup>)  
max. 0.080 in.<sup>3</sup>  
(1.310 cm<sup>3</sup>)



#### SL-42

Output: min. 0.001 in.<sup>3</sup>  
(0.016 cm<sup>3</sup>)  
max. 0.003 in.<sup>3</sup>  
(0.049 cm<sup>3</sup>)



#### SL-43

Output: min. 0.001 in.<sup>3</sup>  
(0.016 cm<sup>3</sup>)  
max. 0.008 in.<sup>3</sup>  
(0.131 cm<sup>3</sup>)



#### SL-44

Output: min. 0.008 in.<sup>3</sup>  
(0.131 cm<sup>3</sup>)  
max. 0.080 in.<sup>3</sup>  
(1.310 cm<sup>3</sup>)



# P653S specifications



Model	Description
80127	P653S oil pump, 1 gal. (4 liter)
80128	P653S oil pump, 2 gal. (8 liter)

Models are designed for oil and include stirring paddle and low-level detection. Pumps include remote signaling cable, relief valve and electrical connectors.

## Technical data

	P653S
Incoming voltage	120 /230 V AC
Maximum current	1.7 A
Frequency	47 to 63 Hz
Output voltage	24 V DC at 5 A
Minimum pause time	4 min.
Maximum pause time	59 hrs. 59 min.
Pause time increments	1 hr. or 1 min.
Maximum pumping time	12 min.
Operating pressure with pressure switch	3,500 psi (240 bar)
Operating pressure with pressure transducer	factory preset to 1,200 psi (82 bar)
Operating temperature	32 to 122 °F (0 to 50 °C)
Number of outlets	1
Lubricant	oil; minimum 40 mm <sup>2</sup> /s (cST)
Output	1.5 in <sup>3</sup> /min. (24.6 cm <sup>3</sup> /min.)
Reservoir capacity	80127: 1 gal. (4 liter) 80128: 2 gal. (8 liter)
Outlet size	G <sup>1</sup> / <sub>4</sub> in. (6.35 mm)
Piston diameter	0.3 in. (7 mm)
Number of pumping elements	3

## The Power of Knowledge Engineering

Combining products, people, and application-specific knowledge, SKF delivers innovative solutions to equipment manufacturers and production facilities in every major industry worldwide. Having expertise in multiple competence areas supports SKF Life Cycle Management, a proven approach to improving equipment reliability, optimizing operational and energy efficiency and reducing total cost of ownership.

These competence areas include bearings and units, seals, lubrication systems, mechatronics, and a wide range of services, from 3-D computer modelling to cloud-based condition monitoring and asset management services.

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SKF- and Lincoln-branded products, systems and services are available through a global network of distributor partners, supported by one unified sales organization committed to your success. Systems house distributors around the world offer turnkey solutions and extensive aftermarket support. In addition to maintaining a local inventory of system components and spare parts, these factory-trained lubrication specialists can provide:

- Customized lubrication system design
- System installation and start up
- Service and repair
- Lubrication analysis and testing
- Lubrication management training
- Warranty support
- System maintenance contracts
- Return-on-investment (ROI) analysis
- Guidance on safety and environmental issues

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