

# TTN Progressive Lubricator

## Series Progressive Systems, Electric, Grease



### General

TTN Progressive Lubricators are electrically driven piston pumps designed for use with series progressive systems. For high pressure injector systems refer to *Datasheet #35547* and for low pressure injector systems refer to *Datasheet #35564*. These lubricators can be fitted with up to three independent piston elements providing positive displacement output to series progressive divider valves. TTN Progressive Lubricators are available with an integral programmable controller, low level switch and various reservoir capacities. Operating voltages are either 12 or 24 VDC.

### Application

TTN Progressive Lubricators are ideally suited for off-road mobile machinery such as loaders, excavators, articulated trucks, graders, etc. These lubricators are designed to work in conditions found in the construction, mining and forestry industries. A unique reservoir design keeps out contamination and prevents condensation from forming, thus assuring reliable automatic lubrication of critical wear points such as bearings, bushings and pins.

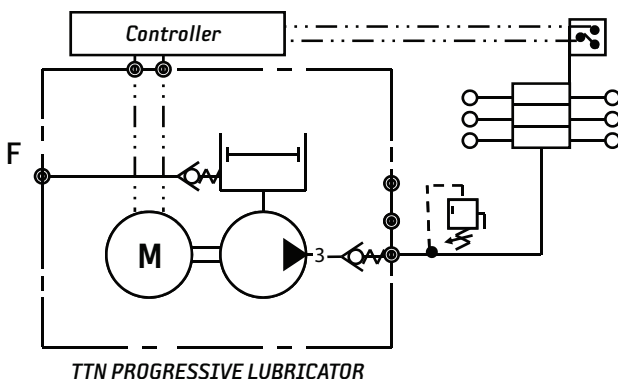
### Operation

Power supplied to a motor with gear box drives a precision eccentric cam which engages with up to three spring loaded piston elements. This action creates a suction and pressure stroke of the element(s), thereby displacing fixed volumes of lubricant through an outlet check valve. Lubricant is displaced through main line tubing or hose to a network of progressive divider valves. Each piston element comes with an adjustable external relief valve (relieves to atmosphere).

### Features

- + Large reservoir capacities allow for extended times between refills
- + Low grease level and system monitoring capabilities
- + Designed to handle a wide range of lubricants
- + Unique reservoir design keeps grease free from contaminants
- + Integral controller option facilitates quick installations

### ISO Schematic



Refer to the following datasheets:

- + *Datasheet #35479:*  
MVB Divider Valve
- + *Datasheet #46911:*  
SMDC Controller

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## Technical Data

### Lubricator

Reservoir Capacity	2, 4 and 8 liter (4, 8 and 16 lb)
Grease	NLGI grade 000-2
Relief Valve Setting	3600 psi (248 bar), adjustable
Discharge/min.	8cc (0.5 cu. in.) per element/outlet
Outlets	3 outlet maximum
Operating Temperature Range*	-13°F to 122°F (-25°C to 50°C)
Operating Voltage	12 or 24 VDC
Pump Cam Rotary Speed	42 rpm
Low Lubricant Level Switch	3 amp
Outlet Connection	1/4" NPT
Electrical Connections**	Binder RD24
Grease Fill Connector	Hydraulic quick disconnect
IP Enclosure Rating	IP-65

#### ATTENTION

\* Grease used in system must be pumpable at the temperatures referenced. Contact lubricant manufacturer with specific questions.

\*\* Number of contacts: 3+PE  
Wire gauge: AWG 20-14  
Cable diameter: 6-9.5mm  
Screw termination  
IP Enclosure Rating: IP-67

### Controller

Loading Power	70 W	
Fuse	12 VDC	8 amp
	24 VDC	5 amp

## How to Order

Name	Voltage	Reservoir Capacity	Options	Part #
TTN Progressive Lubricator <sup>1</sup>	12 VDC	2 liter (4 lb)	Low level switch	TTN2C1S12 <sup>3</sup>
			Low level switch & controller	TTN2C1SC12
	24 VDC	4 liter (8 lb)	Low level switch	TTN4C1S24 <sup>3</sup>
			Low level switch & controller	TTN4C1SC24
		8 liter (16 lb)	Low level switch	TTN8C1S24 <sup>3</sup>
			Low level switch & controller	TTN8C1SC24
Piston Elements <sup>2</sup>	---	---	---	52025-4

<sup>1</sup> Other configurations available upon request. Contact Bijur Delimon for details.

<sup>2</sup> TTN Lubricators ship standard with one element. Additional elements can be purchased separately.

<sup>3</sup> Requires remote controller (see Datasheet #46911: SMDC Controller).

### Accessories

Name	Part #
Mounting plate (straight)	35455
Mounting plate (90°)	35456
Pressure gauge (5000 psi, 1/4" NPT, LM)	U902F
Pressure gauge (3000 psi, 1/4" NPT, LM)	U902D

When ordering, specify by name, voltage, reservoir capacity, options and part number, e.g. TTN Progressive Lubricator, 12 VDC, 2 liter (4 lb), low level switch, Part #TTN2C1S12.

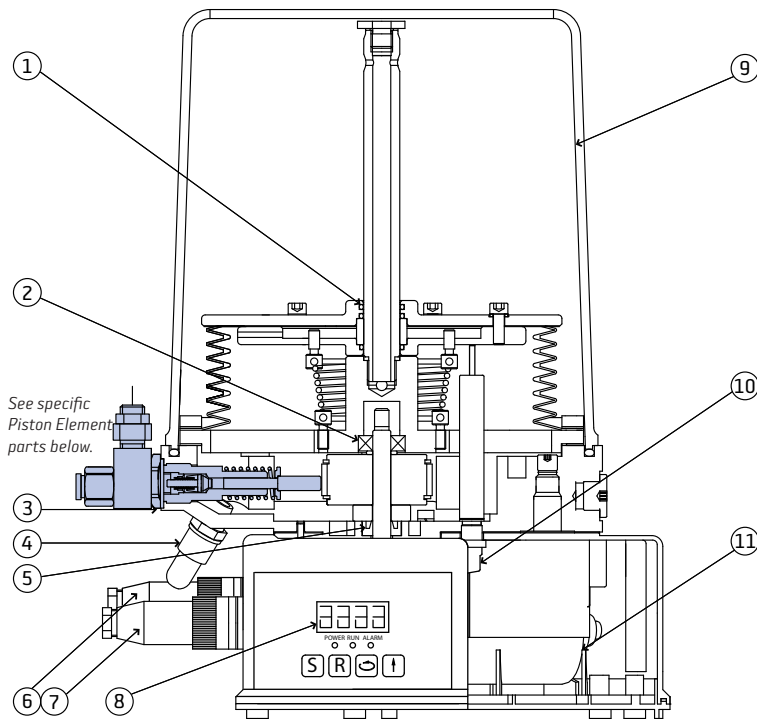
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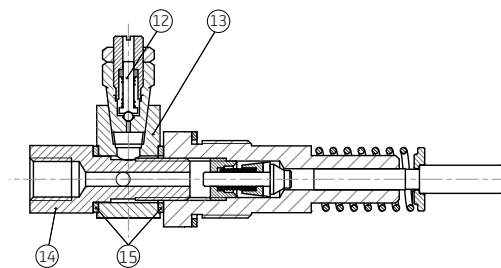
### Service Parts



Item #	Description	Part #	Qty.
1	O-ring	22100-38	3
2	Bearing	25101-2	1
3	Copper seal	25589-7	2
4	Fill connector	52043	1
5	Shaft seal	22178-6	1
6	Electrical plug (female)	52040-1	1
7	Electrical plug (male)	52041-1	1
8	Controller (24 VDC)	51896	1
	Controller (12 VDC)	51896-1	1
9	Reservoir: 2 liter (4 lb)	56683-1	1
	Reservoir: 4 liter (8 lb)	56683-2	1
	Reservoir: 8 liter (16 lb)	56683-4	1
10	Level switch	41834-2	1
11	Motor (24 VDC)	22450-4	1
	Motor (12 VDC)	22450-5	1
---	Fuse: 5 amp (12 VDC)	31076-2	1
	Fuse: 8 amp (24 VDC)	31076-4	1

### Piston Element (Part # 52025-4)

Item #	Part #	Description	Qty.
12	22474	Relief valve (3600 psi)	1
13	22490	Swivel connector	1
14	22491-9	Outlet adapter	1
15	25589-5	Copper seal	2



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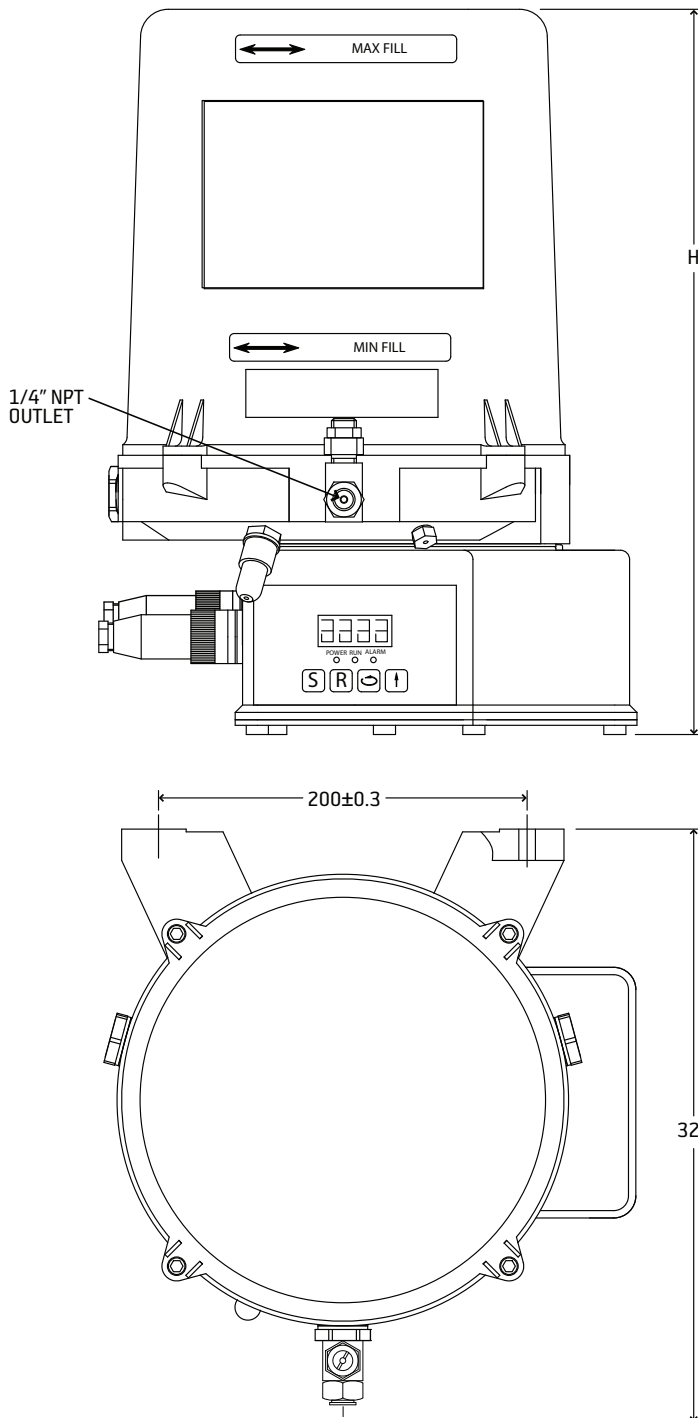
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## Dimensional Schematics

Measurements shown in millimeters.



Reservoir Capacity	H
2 liter (4 lb)	320mm (12.6")
4 liter (8 lb)	395mm (15.6")
8 liter (16 lb)	480mm (18.9")

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