

Neptune Liquid Meters, Neptune Registers

RL100108A12

Note: 3/4" and 1" meters are used in dispensers. Both have 3/4" FNPT flanges. The 1" meter is the newer version with higher volumn. Read the data plate to verify which meter you have.

neptune



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Neptune Liquid Meters

Part Number	In/Out Size	Min/Max Gal/Min	Register	Temp. Compensation
RL100108A12, 1"	3/4" FNPT	3-18 GPM	600 (AAAAD)	No
RL100118A23	3/4" FNPT	3-18 GPM	600 (AAAAF)	Yes
RL12521RGD1	1 1/4" FNPT	5-30 GPM	833-0	Yes
RL15021RGD1	1 1/2" FNPT	12-60 GPM	833-0	Yes
RL20021RGD2	2" FNPT	20-100 GPM	833-0	Yes
RL2002N21RGD2*	2" FNPT	20-100 GPM	833-0	Yes

* Ductile iron body, all others are aluminum

Common Neptune Replacement Parts

Meter Size	Gear Train	Chamber	Main Case Gasket	Differential Diaphragm	Strainer
3/4"	080905-012	042075-101	004861-016	100028-001*	087185-000
1"	080905-017	001748-001	004861-016	100028-001*	101738-001
1 1/4"	083501-000	043260-101	004862-008	1000624	101433-704
1 1/2"	084981-000	083271-101	004862-008	1000624	101433-704
2"	083502-000	045806-101	084806-000	1000624	101405-004

* Replacement differential valve

Note: More parts available, check with inside sales



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Veeder-Root, Neptune Registers

100498-016



Neptune 600 Series Mechanical Registers The 600 series Register is mechanically driven designed for easy adaptation to a local or remote batching and recording system. The 600 series register offers a 5 digit delivery quantity reset similar to the Models 831/841 and an 8 digit non-resettable totalizer. It is fully mechanical and does not offer mechanical preset or ticket printing options.

600 Series Register Features

- Five digit roller type reset wheels, with 3/4" numerals for ease in reading up to 10-15 feet away
- Eight small non-resettable totalizing wheels mounted at the top right of the register front serve as an odometer
- Low profile for ease in retro fit installations
- Light weight, heavy gauge steel outer casing
- Ability to mount all digital and analog pulse transmitters, calibrated output
- Available in US and Imperial gallons, litres, decalitres, pounds and kilograms

880030-000



Neptune 800 Series Mechanical Registers The 800 series register is the latest of four multi-function devices specifically designed for petroleum distribution and industrial process industries. Some models allow automatic preset deliveries via mechanical valve and Weights and Measures approved ticket printing.

Models

The 800 Series Registers consist of the Model 830 Series and the Model 840 Series. Model 830 Series registers are in tenths and the Model 840 Series registers are in units.

Models 831 and 841 are direct reading resettable registers with the basic non-resettable totalizer.

Models 832 and 842 are the basic 830 and 840 features plus a preset register that provides automatic deliveries. The operator sets the register for the desired quantity from the front panel. The flow will cut off automatically at the exact volume desired when used in conjunction with either a mechanical valve or a solenoid actuated valve. There are two preset models available, a single trip for one stage shutoff or a double trip for two stage shutoff (delivery decreases, then the final shutoff stops the delivery).

Models 833 and 843 are the basic 830 and 840 features plus a printer register that prints a receipt or ticket showing the readings before and after delivery. The register locks the ticket during delivery to prevent fraud. Providing two letter wheels in the register makes it possible to print a letter code on the ticket to identify the flowmeter or truck. These letter wheels can print any single letter or combination of two letters from A to J, omitting I. Additionally, three serial number wheels are provided in the register to number each ticket consecutively from 000 to 999. There are four printer models available:

- Accumulative Face Up (most commonly used): Prints beginning reading and the final reading
- Accumulative Face Down (for outside use): Prints beginning reading and the final reading
- Zero Start Face Up (for larger deliveries): Prints all zeros and the actual delivery
- Zero Start Face Down (for larger deliveries): Prints all zeros and the actual delivery

Models 834 and 844 are printer-preset registers that combine the features of the other registers. They contain the preset quantity control plus the printed ticket features.

800 Series Register Features

- Standard eight digit non-resettable totalizer, five digit delivery display, four preset and five or six digit printer
- Measurement in Gallons, tenths of gallons, litres, dekalitres, pounds and kilograms
- High visibility 3/4" wheels
- Long life, precision die cast Zamac printer wheels provide clear, sharp, easy to read tickets
- Exchange Register Program

Bergquist offers an exchange program where you can trade in an old 433, 600 or 800 series register for a rebuilt unit. This program is an economical way to refurbish your registers.

Neptune Registers

Part Number	Model	Description
100498-009	600AEAAD	Reset register, 3/4" 4D only
100498-016	600AAAAD	Reset register, 3/4" 4D only
100198-018	600AAAAF	Reser register, 1" 4D with ATC only
601010-000	n/a	Electronic register, 1" RLI00
880010-025	831-00	Reset register 1 1/4" - 2"
880030-000	833-0	Reset register 1 1/4" - 2"
833EXCH	833-0	Reset register 1 1/4" - 2", Rebuilt

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Positive Displacement Meter, LectroCount Register

Positive Displacement Meter - MA7

A new standard for LPG custody transfer accuracy. No metal-to-metal contact provides the longest, most reliable service in the industry. Compact, cost efficient package offers greater mounting flexibility. Accessories include vapor eliminator and strainer with 100-mesh or 200-mesh screen, diaphragm valve, choice of mechanical or electronic registration with optional temperature/volume compensation.

MA-7 Meters in class 10 construction are designed for LPG truck and bulk loading applications (UL Listed):

- Capacity: 100 GPM (380 L/min.) Class 12 construction for NH₃ (Anhydrous Ammonia) service available upon request.
- Choice of 2" NPT standard, 1 1/2" optional companion flanges.



POSITIVE DISPLACEMENT METER MA-7



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LectroCount is an electronic register that replaces the mechanical register, calibration gears and/or adjuster mechanism traditionally used on many flow meters.

Weights & Measures (custody transfer) approved advanced microprocessor based electronic registration, presetting and printing control systems. LectroCount is designed to meet - even adapt to - your flow meter and process control instrumentation requirements. Units are rated NEMA-4 non-incendive Class 1, Division 2, Group C & D.

LectroCount accepts pulse input from most flow meters and includes RS232.485 communications capability.

Power Requirements

- LectroCount LC³, +10 - 18VDC
- LectroCount LCR-II, +9 - 28VDCik



LectroCount™ ELECTRONIC REGISTER

Bergquist

Veeder-Root, Neptune Electronic Registers

Veeder-Root Registers



VEEDER-ROOT
Petroleum Products

789002-002

Part No.	New/Remanufactured	Reset Knob Location
789002-002	New	Right
R789002-002	Remanufactured	Right
789022-701	New	Left
R789022-701	Remanufactured	Left

Remanufactured registers may be purchased or be part of the register exchange program; we send you a remanufactured register and you return the old register for a core credit.

Neptune — Veeder-Root Conversion Adapters

Part No.	Description
117900-233	Adapter for 1 1/4" thru 2" Neptune w/temperature Compensation
G310450-422	Gear Plate for 1 1/4" thru 2" Neptune Meter w/Temperature Compensation

A gear plate, adapter and register are needed for conversion

NEPTUNE E1000 E4000 ELECTRONIC REGISTERS



E1000

neptune



E4000

Neptune E1000 Electronic Register for Dispensers

Simple, reliable electronic registration for dispenser meters

- Direct retrofit to RL100
- Displays volume or flow rate in gallons, liters, or barrels
- Automatic reset with programmable timeout between deliveries
- Legible six digit display with up to three decimal places
- Two year replaceable 3.6V lithium battery
- No change gears needed - calibrated electronically with K factor
- Non-resettable totalizer
- 8.85 in. X 6.3 in. X 5.5 in. (225 mm x 160 mm x 140 mm)
- 6.5 Lbs (2.95 Kg)
- Operating temperature range -13–158°F (-25–70°C)
- NEMA 4x enclosure
- Intrinsically safe

Neptune E4000 Electronic Register

The Neptune E4000 electronic register automates transaction operations for deliveries of LPG, distillate fuels, and other commercially distributed liquids through flow meters on bulk delivery trucks. Designed for compatibility with emerging automation technologies, the E4000 offers the ability to modernize truck metering operations today and provides a platform for data collection technology tomorrow. Its improved accuracy and efficiency mean less loss, providing a fast return on investment and safeguarding future profits.

Smarter Today...

- Easy to use, menu driven display
- Start with simple pump and print (imitate your mechanical register)
- Electronic temperature compensation (accurate, rapid response)
- Stand-alone pricing (print invoices directly from the truck)
- Ten products, ten prices
- Configure register from laptop computer

Smarter Tomorrow...

- Add data collection devices (hand held, laptop, wireless) without the need for additional register hardware.
- No requirement for early commitment to proprietary technology.
- Interface with popular industry office software packages.



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