



2" PETROLEUM AND LP-GAS TANK TRUCK METERS

2" 4-MT

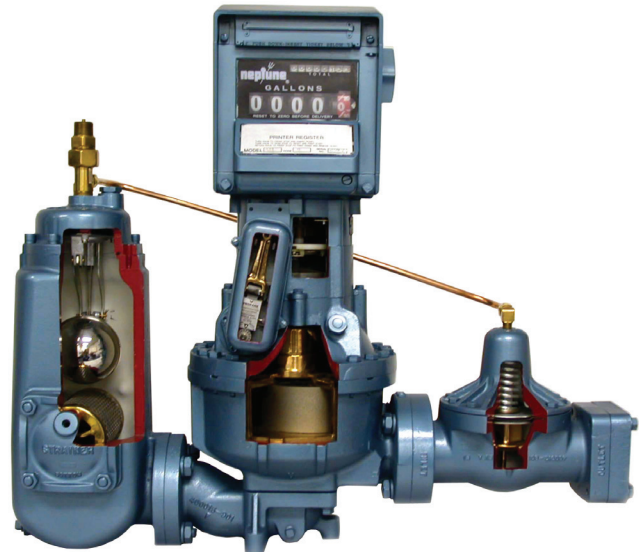
with Air Release, Strainer. Printing Register and Preset Valve



PETROLEUM APPLICATIONS

2" 4D-MT

with vapor Release, Strainer. Printing Register and A.T.C.



LP-GAS APPLICATIONS

ISO 9001 Certified Manufacturing Facility

DESCRIPTION

Red Seal Measurement 2" Refined Fuels Meters are an excellent choice for truck mounted metering. These 2" aluminum body flowmeters come complete and ready for installation and are ideal for both single meter and multi-meter applications.

The 2" Type 4-MT meter for petroleum products includes a new model air release that provides greater split compartment testing performance than previous models. The Air Release includes a fully adjustable float linkage for fine tuning the Air Release for various conditions. The float can be raised or lowered to increase or decrease the sensitivity of the unit. The 2" Type 4-MT meter is designed for use with a variety of petroleum based products such as Fuel Oil, Diesel Fuel, Gasoline, Kerosene and Lube Oil.

The 2" Type 4D-MT meter for Liquefied Propane Gas features a flanged outlet with ductile iron companion

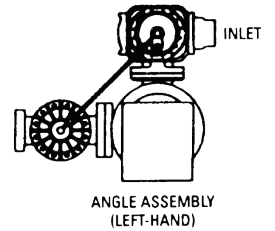
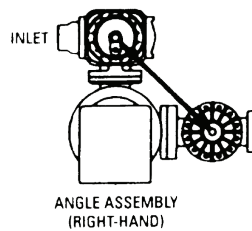
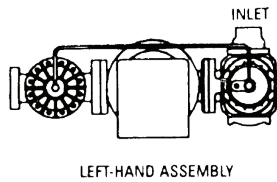
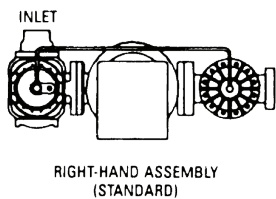
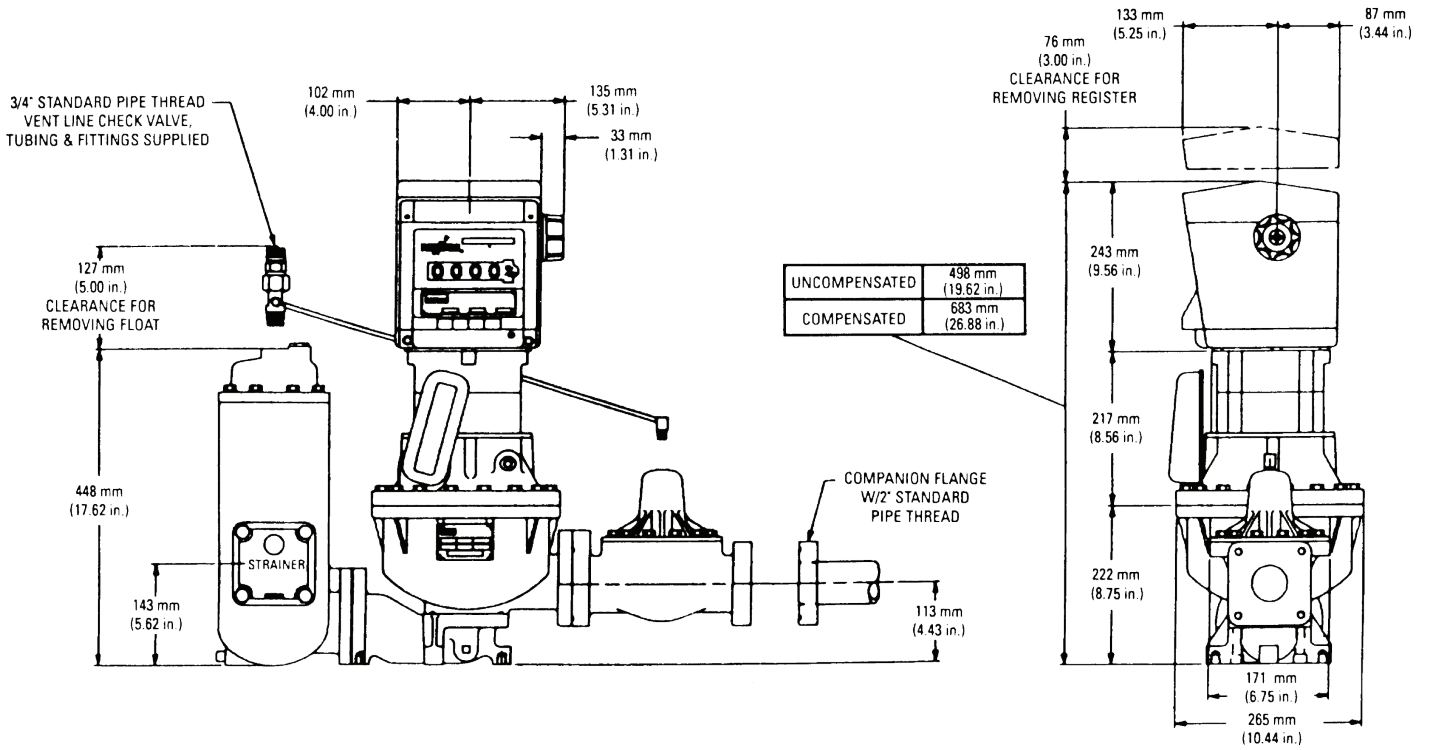
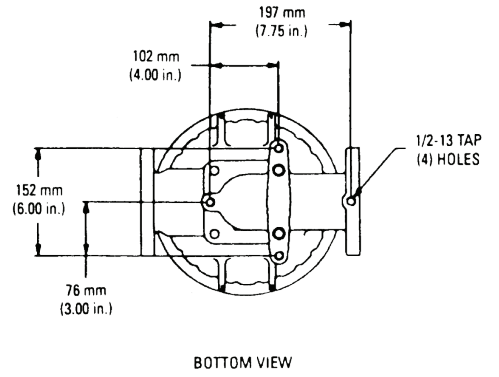
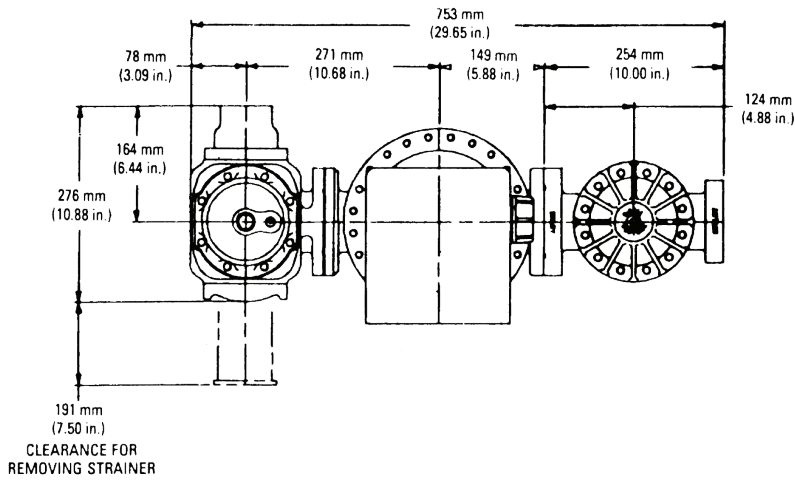
flange for easy installation and removal. The 2" Type 4D-MT boasts a 33% weight reduction compared to the old 2" Type 4D.

Both the 2" Type 4-MT and the 2" Type 4D-MT meters are backed by RSM's 3 year /3,000,000 gallon measuring chamber limited warranty.

DESIGN FEATURES

With their low pressure drop and high accuracy, these meters are ideally suited for custody transfer applications. Each meter is certified by the National Institute of Standards and Technology for conformance under the National Type Evaluation Program and complies with the applicable technical requirements of Handbook 44 for Weighing and Measuring Devices. Easily assembled and installed for either right hand, left hand or angle flow, these meters will fit practically any piping and space condition.

DIMENSIONAL DATA 2" 4D-MT LP-GAS APPLICATIONS



SPECIFICATIONS	2" TYPE 4-MT (PETROLEUM)	2" TYPE 4D-MT (LP-GAS)
FLOW RATE TEMPERATURE (OPERATIONAL) WORKING PRESSURE INLET CONNECTION OUTLET CALIBRATION	20 to 150 gpm (76 to 570 lpm) -23°C to 52°C (-10°F to 125°F) 150 psi (10 bar) max. (10.6 kg/cm ²) Companion Flange tapped 2" NPT 2" ANSI Type Flange Neptune positive drive change gears and patented gear shifter assembly.	20 to 100 gpm (76 to 380 lpm) -23°C to 52°C (-10° to 125°F) 350 psi (24 bar) max. (24.6 kg/cm ²) Inlet Check Valve with 2" NPT Companion Flange tapped for 1 1/2 or 2" NPT Neptune positive drive change gears and patented gear shifter assembly.
UNITS OF MEASURE RESET WHEEL CAPACITY PRESET SETTING CAPACITY PRINTING WHEEL CAPACITY TOTALIZER CAPACITY TEMPERATURE COMPENSATOR	U.S. Gallons, Imperial Gallons or Litres 9,999.9 gallons (99999 litres) 9,999 gallons (9990 litres) 9,999.9 gallons (99990 litres) 99,999,999 gallons (99,999,990 litres) Available with E4000 Electronic Register	U.S. Gallons, Imperial Gallons or Litres 9,999.9 gallons (99999 litres) Not Applicable 9,999.9 gallons (99990 litres) 99,999,999 gallons (99,999,990 litres) Range -23°C to 52°C (-10°F to 125°F) Compensates to 15°C (60°F)
MATERIALS		
STRAINER HOUSING MEASURING CHAMBER PISTON DYNAMIC SEALS STATIC SEALS	40 mesh stainless steel Aluminum Bronze Nituff® Teflon® Impregnation Coating* Viton Buna N	80 mesh stainless steel Aluminum Bronze Nituff® Teflon® Impregnation Coating* Buna N. Buna N
APPROVALS SAFETY CUSTODY TRANSFER	N.I.S.T./N.T.E.P. Handbook 44 C#02-046	UL N.I.S.T./N.T.E.P. Handbook 44 C#02-047

ACCESSORIES

MECHANICAL REGISTER, Model 800

- 831/841: Direct reading register with 5 digit reset and 8 digit non-resettable totalizer.
- 832/842: Direct read, plus preset (predetermined delivery quantity) when used with a 2-stage valve (preset available only with Type 4-MT).
- 833/843: Direct read with a 5 digit print out, face up ticket and zero start and final delivery.
- 834/844: (2" Type 4-MT Petroleum only) Direct read with both preset and ticket printer and two stage shut-off.

For additional data, refer to TS-301 or contact sales.

ELECTRONIC REGISTERS

- E4000: Neptune® E4000 Electronic Register. For more detailed information, request form TS-303.

MECHANICAL PRESET VALVES

Neptune Auto-Stop 2-stage valves are available for 2" Type 4-MT Petroleum flowmeters. Installed in accordance with the appropriate Operating & Maintenance Manual, they

meet N.I.S.T parameters.

The 2-stage double trip valve minimizes the impact of hydraulic shock on both the dispensing lines and the meter unit itself that may result from either high operating pressures or high flow rates (over 50 GPM/190 LPM). The operation of the 2-stage valve is simple and reliable.

DIFFERENTIAL AIR-CONTROL VALVE

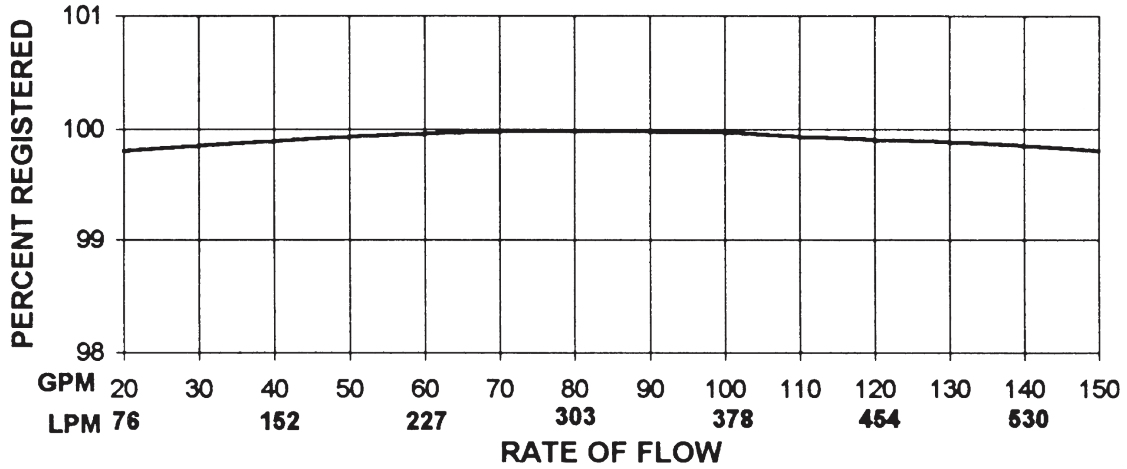
The Differential Air-Control Valve (DACV) is a high performance air elimination system that works with the air release of a 2" Type 4-MT Petroleum meter to substantially reduce measured air through the meter, and also reduce spitting. The DACV is designed to meet air elimination challenges presented when delivering from multiple compartments via common manifolds and high capacity pumps. Small accumulations, or large slugs of air, cause the flow to be shut off, preventing incorrect measurement. After the air has been vented and liquid supply restored, the flow automatically resumes.

ADJUSTABLE BACK PRESSURE VALVE

Neptune offers an adjustable two position (7.5 PSI cracking (standard) or 15 PSI cracking) back pressure valve for the 2" Type 4-MT Petroleum Meter. The compact valve which fits between the connector and maincase adds only 1/4" to the height of the meter. The valve is used to add back pressure to the meter to increase air elimination for systems with excess air present.

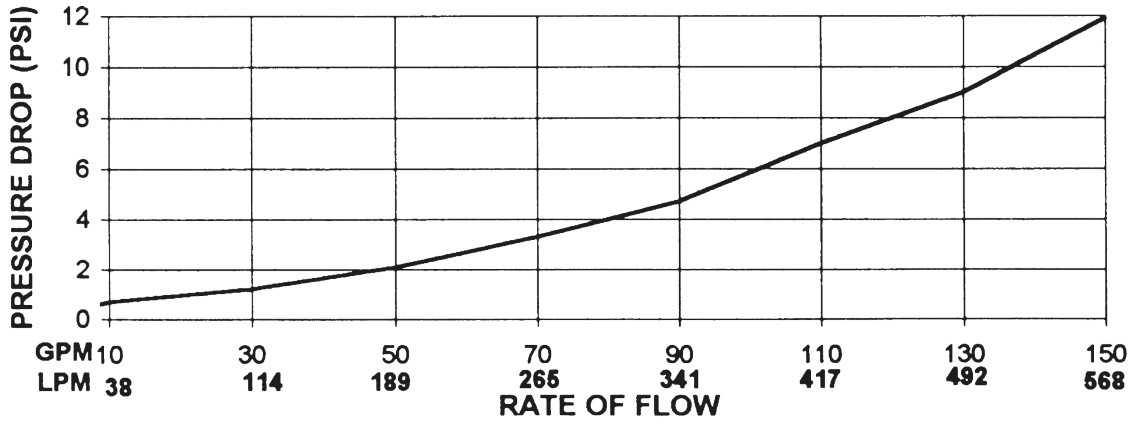
*Coatings may be similar material with the same performance criteria.

ACCURACY CURVE* 2" TYPE 4-MT & 4D-MT**

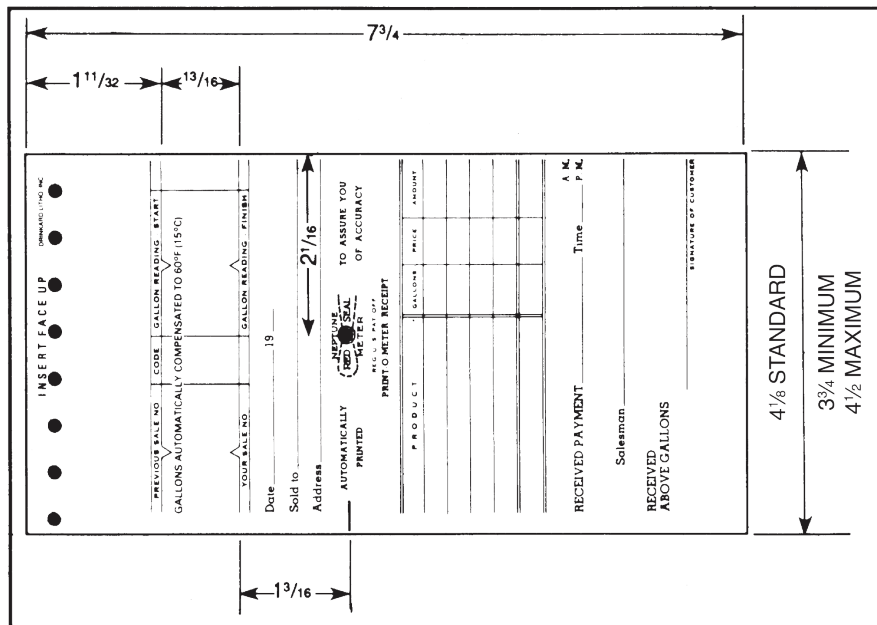


*Tested with Varnolene at 60° F. **Type 4D-MT rated to 100 GPM only.

PRESSURE DROP* 2" TYPE 4-MT (PETROLEUM) w/o Optional Back Pressure Valve



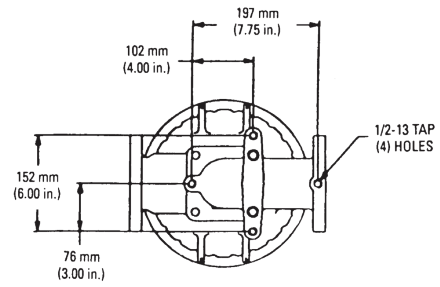
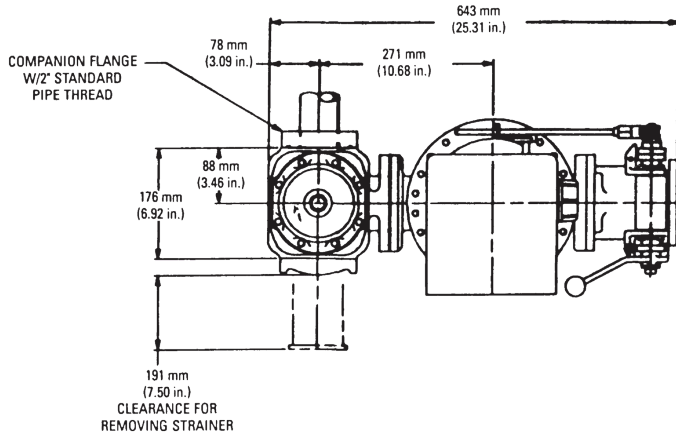
TICKET DIMENSIONS



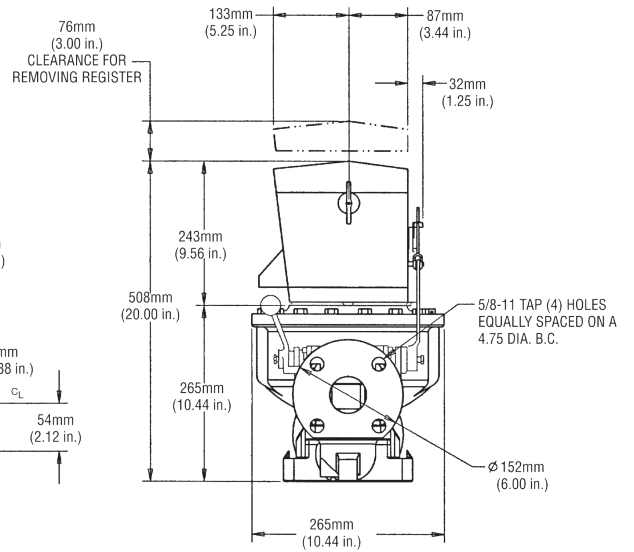
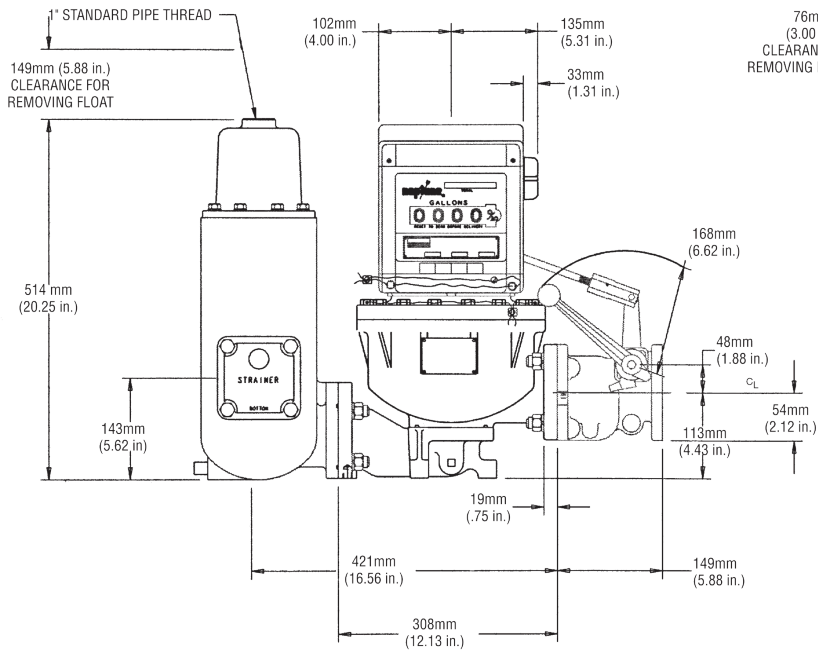
DIMENSIONAL DATA

2" 4-MT

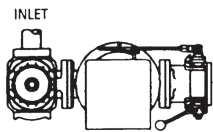
PETROLEUM APPLICATIONS



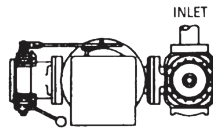
BOTTOM VIEW



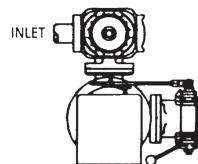
CL — Means Center Line



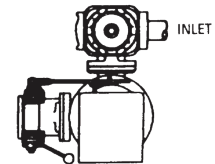
RIGHT-HAND ASSEMBLY (STANDARD)



LEFT-HAND ASSEMBLY



ANGLE ASSEMBLY (RIGHT-HAND)



ANGLE ASSEMBLY (LEFT-HAND)

ORDERING INFORMATION

Petroleum

2" TYPE 4-MT 150 PSI (20-150 GPM) Includes inlet companion flange and air release/strainer

PART NUMBER	DESCRIPTION	WEIGHT Kg (lbs.)
RP200114RGA00	2" Type 4-MT W/831-11 Reg 1 USG	49 (108)
RP200114RGC10	2" Type 4-MT W/832-20 Reg 1 USG 2-Trip Valve	56 (124)
RP200114RGD0	2" Type 4-MT W/833-0 Reg 1 USG	50 (111)
RP200114RGH10	2" Type 4-MT W/834-1 Reg 1 USG 2-Trip Valve	58 (127)
RP200114RGI10	2" Type 4-MT W/834-5 Reg 1 USG 2-Trip Valve	58 (127)
RP200114RLQ00	2" Type 4-MT W/843-L1 Reg 10 Litre	50 (111)
RP200214RGI10	2" Type 4-MT W/834-5 Reg 1 USG 2-Trip Valve W/ATC	59 (131)

LP-Gas

2" TYPE 4D-MT 350 PSI (20-100GPM) Includes outlet companion flange, vapor release/strainer and differential valve

PART NUMBER	DESCRIPTION	WEIGHT Kg (lbs.)
RL20011RGD2	2" Type 4D-MT W/833-0 Reg USG	49 (108)
RL20011RLK2	2" Type 4D-MT W/841-L28 Reg 10 Litre	56 (124)
RL20021RGD2	2" Type 4D-MT W/833-0 Reg 1 USG W/ATC	50 (111)
RL20021RLK2	2" Type 4D-MT W/841-L28 Reg 10 Litre W/ATC	58 (127)
RL20021RGA2	2" Type 4D-MT W/831-11 Reg 1 USG W/ATC	58 (127)
RL20021RLS2	2" Type 4D-MT W/843-L15 Reg 10 Litre W/ATC	50 (111)

NOTE: -- All 800 Series Registers used for custody transfer include gear shifter.

SPECIFY GENUINE NEPTUNE REPLACEMENT PARTS

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