

## RCD FLOWMETRING

RCD's are meant for storage and disbursal of High Speed Diesel Oil for utilization in Running of Diesel Locomotives in Indian Railways. The P D Flow Meters play vital role in measurement and control of fuels being supplied. It is an integral part of any RCD operation.



3" P D Flow meter in operation at one of the RCD location.



Since 1980

**Corporate office & Operations:**  
Plot No. PAP-A-8/6 "A" Block, Phase IV, MIDC Industrial Area,  
Chakan Dist. Pune- 410501, Maharashtra, INDIA.  
Tel: +91 (20) 32420419  
Email: [ho@vermonttechnologies.co.in](mailto:ho@vermonttechnologies.co.in)  
Website: [www.vermonttechnologies.co.in](http://www.vermonttechnologies.co.in)

**Salient features of Vermont RCD metering.**

- High Accuracy of better than +/- 0.1%:
- Low Pressure Drop
- Mechanical or Electronic Read-out
- Legal Metrology Certification (Weights & Measures)
- Modular Construction
- Ease in Calibration and Recertification.
- All India Service & after sales Support.

**Some of IOCL RCD locations where Vermont P D Flowmeters installed are:**

- RCD Gondia
- RCD CST, Mumbai
- RCD Bhusawal
- RCD Satna
- RCD New Katni
- RCD Nainpur
- RCD Coaching Depot, Habibganj
- RCD Coaching Depot, Indore
- RCD Itarsi
- RCD Daund, Pune
- RCD Dhone
- RCD Gooty
- RCD Kazipet
- RCD Vijayawada
- RCD Hazaribag
- RCD Samastipur
- RCD Muza farpur
- RCD Moradabad
- RCD Saharanpur
- RCD Purna
- RCD Nandurbar
- RCD Motibagh



Since 1980

**Corporate office & Operations:**

**Plot No. PAP-A-8/6 "A" Block, Phase IV, MIDC Industrial Area,  
Chakan Dist. Pune- 410501, Maharashtra, INDIA.**

**Tel: +91 (20) 32420419**

**Email: [ho@vermonttechnologies.co.in](mailto:ho@vermonttechnologies.co.in)**

**Website: [www.vermonttechnologies.co.in](http://www.vermonttechnologies.co.in)**

**SCOPE OF SUPPLY**

Each of the Mechanical Flow meter RCD Metering package will consist of each of the following:-

Sr. No.	DESCRIPTION
1.	3" Double Case Positive Displacement Flow Meter with calibration assembly
2.	Mechanical Veeder Root Counter 7887, with 5-digit reseta ble & 8-digit non-reseta ble totalizer.
3.	3" Mechanical Preset Valve
4.	Mechanical Veeder Root Preset Register 7889
5.	3" Strainer cum Air Eliminator with DP gauge
6.	3" Flow Governor



Since 1980

**Corporate office & Operations:**

Plot No. PAP-A-8/6 "A" Block, Phase IV, MIDC Industrial Area,  
Chakan Dist. Pune- 410501, Maharashtra, INDIA.  
Tel: +91 (20) 32420419

Email: [ho@vermonttechnologies.co.in](mailto:ho@vermonttechnologies.co.in)Website: [www.vermonttechnologies.co.in](http://www.vermonttechnologies.co.in)

**TECHNICAL SPECIFICATIONS****1) Double Case P.D. FLOWMETER**

MAKE	Vermont (TELTECH)
MODEL	TLD01/02
TYPE	Positive Displacement Rotary Vane
CASING	Double Case
SIZE	3 "
FLOW RANGE	136 to 1500 LPM
END CONNECTIONS	3" ANSI B 16.5 Flanged Class 150# FF
ACCURACY	Better than +/- 0.10 %
REPEATABILITY	Better than +/- 0.02%
RANGEABILITY	100% to 10% of maximum flow rate
MAXIMUM WORKING PRESSURE	10.54 Kg / cm <sup>2</sup>
TEMPERATURE	70 degC max.
HAND OF DISCHARGE	Left Hand Discharge (standard) Right Hand Discharge (optional)
CONFIGURATION	Mechanical
COUNTER	Veeder Root 7887, which has got 5 digit resettable, and 8 digit non-resettable totaliser.
COUNTER DRIVE	Positive Gear train

**MATERIALS OF CONSTRUCTION**

BODY	Cast Steel ASTM A 216 WCB / Cast Iron
ROTOR	Aluminium Alloy LM 25
VANES	Resin Impregnated Morganite CY 10C
BEARINGS	AISI 440 C
SEALS	Nitrile.

**2) VEEDER ROOT COUNTER (LARGE NUMERICAL COUNTER).**

Since 1980

**Corporate office & Operations:**  
 Plot No. PAP-A-8/6 "A" Block, Phase IV, MIDC Industrial Area,  
 Chakan Dist. Pune- 410501, Maharashtra, INDIA.  
 Tel: +91 (20) 32420419  
 Email: [ho@vermonttechnologies.co.in](mailto:ho@vermonttechnologies.co.in)  
 Website: [www.vermonttechnologies.co.in](http://www.vermonttechnologies.co.in)

MAKE	Veedor Root		
MODEL	VRC 7887		
TYPE	Mechanical		
TOTALISER	5-digit resettable & 8-digit non-resettable totalizer.		
SPEED	250 rpm		
OPERATING TEMPERATURE RANGE	-40° to +70° C		
SIZE OF FIGURES		<b>High</b>	<b>Wide</b>
	<b>Meter Register</b>	0.750" (19.05 mm)	0.4000" (10.16 mm)
	<b>Totalizer</b>	0.125" (3.175 mm)	0.078" (1.98 mm)
COLOR OF FIGURES	White on black, except right-hand totalizer wheel which is black on white when recording tenths of units, and white on black when recording whole units.		
STYLE OF FIGURES	Veeder-Root/Cornell for optimum read-ability.		
CHARACTER CONFIGURATION	0 to 9 (Standard)		
RESET	Single handle on register. Designed for one-handed operation.		
MOUNTING	Eight 1/4 x 28 tapped holes with steel inserts on a 6.625" (168.28 mm) diameter. Special adaptors are available for nearly all meters.		
CONSTRUCTION	<b>Cover</b>	<b>Case &amp; sub frame</b>	<b>Wheels, Pinions &amp; Clutch</b>
	Cast Aluminum	cast Zamak	Acetal Resin



Since 1980

**Corporate office & Operations:**  
 Plot No. PAP-A-8/6 "A" Block, Phase IV, MIDC Industrial Area,  
 Chakan Dist. Pune- 410501, Maharashtra, INDIA.  
 Tel: +91 (20) 32420419  
 Email: [ho@vermonttechnologies.co.in](mailto:ho@vermonttechnologies.co.in)  
 Website: [www.vermonttechnologies.co.in](http://www.vermonttechnologies.co.in)

**3) MECHANICAL PRESET VALVE ( MECH SET STOP VALVE)**

<b>PRESET VALVE</b>	
MAKE	Vermont (TELTECH)
TYPE	Pilot Operated Hydraulically Actuated
SIZE	3"
MAXIMUM FLOWRATE	1364 LPM
END CONNECTIONS	3" ANSI B16.5 Flanged Class 150#RF
MAXIMUM WORKING PRESSURE	10.54 Kg/cm <sup>2</sup>
CONTROL	Two stage cushioned shutdown
MOUNTING	At Bulk meter Outlet
<b>MATERIALS OF CONSTRUCTION</b>	
VALVE BODY	Cast Steel – ASTM A 216 WCB/ Alum Alloy
RUBBER PARTS	Nitrile
OTHER WETTED PARTS	Aluminium & SS 410

**4) VEEDER ROOT PRESET REGISTER (PRESET COUNTER)**

<b>PRESET REGISTER</b>	
MAKE	Veeder Root
MODEL	VRC 7889
TYPE	Mechanical
DISPLAY	5 Digit Resettable
DIGIT SIZE	Height 12.7mm, Width 6.8mm
PUSH BUTTONS	Five (One for each wheel) One SET button on left side One STOP button on right side
CONTROLS	Mechanically linked with Preset Valve
MOUNTING	On Flow meter

**5) STRAINER CUM AIR ELIMINATOR**



**Corporate office & Operations:**  
 Plot No. PAP-A-8/6 "A" Block, Phase IV, MIDC Industrial Area,  
 Chakan Dist. Pune- 410501, Maharashtra, INDIA.  
 Tel: +91 (20) 32420419  
 Email: [ho@vermonttechnologies.co.in](mailto:ho@vermonttechnologies.co.in)  
 Website: [www.vermonttechnologies.co.in](http://www.vermonttechnologies.co.in)

MAKE	Vermont (TELTECH)
<b>STRAINER</b>	
TYPE	Wire mesh filter element
MESH	Min. 40/60
SIZE	3"
MOUNTING	At Bulk meter inlet
END CONNECTIONS	3" ANSI B 16.5 Flanged Class 150#RF
MAXIMUM WORKING PRESSURE	10.54 Kg/cm <sup>2</sup>
TEMPERATURE	Upto 70°C
<b>AIR ELIMINATOR</b>	
TYPE	Float actuated pilot operated
AIR DISCHARGE PORT	19mm
MAXIMUM WORKING PRESSURE	10.54 Kg/cm <sup>2</sup>
TEMPERATURE	Upto 70°C
<b>MATERIALS OF CONSTRUCTION</b>	
<b>STRAINER</b>	
BODY	Carbon Steel
BASKET	CS Reinforcement sheet & Stainless Steel AISI 304 mesh
SEALS	Nitrile.
<b>AIR ELIMINATOR</b>	
BODY	Carbon Steel
FLOAT	Stainless Steel AISI 304
LINKAGES	Aluminium
SEALS	Nitrile



Since 1980

**Corporate office & Operations:**  
 Plot No. PAP-A-8/6 "A" Block, Phase IV, MIDC Industrial Area,  
 Chakan Dist. Pune- 410501, Maharashtra, INDIA.  
 Tel: +91 (20) 32420419  
 Email: [ho@vermonttechnologies.co.in](mailto:ho@vermonttechnologies.co.in)  
 Website: [www.vermonttechnologies.co.in](http://www.vermonttechnologies.co.in)

**6) FLOW GOVERNOR**

TYPE	Variable Orifice Plate
SIZES	3"
SETTING FLOW RATES	1364 LPM
MAXIMUM WORKING PRESSURE	10.5 kg / cm <sup>2</sup>
END CONNECTIONS	3" ANSI B 16.5 Flanged Class 150# RF
MOUNTING	Downstream of Bulk meter

**MATERIALS OF CONSTRUCTION**

BODY	Cast Steel ASTM A 216 WCB/CI
PISTON	Electroplated Carbon Steel
BUTTERFLY VALVE	Aluminium Alloy LM-25
SPRINGS	Spring Steel
SEALS	Nitrile/Viton
OTHER WETTED PARTS	Stainless Steel AISI 410



Since 1980

**Corporate office & Operations:**  
 Plot No. PAP-A-8/6 "A" Block, Phase IV, MIDC Industrial Area,  
 Chakan Dist. Pune- 410501, Maharashtra, INDIA.  
 Tel: +91 (20) 32420419  
 Email: [ho@vermonttechnologies.co.in](mailto:ho@vermonttechnologies.co.in)  
 Website: [www.vermonttechnologies.co.in](http://www.vermonttechnologies.co.in)