# C35 PD Flow Meter (2")

The C35 is a sturdy, compact and highly accurate Positive Displacement Flow Meter. Proven design and material selection make it possible to use it extensively for almost every sector of industry and process control.

#### **DESIGN FEATURES**

- High accuracy
- · Low pressure drop
- · Stepless calibration adjustment
- · Wear compensating vane design
- Mechanical or electronic readout
- · Suitable for a wide variety of liquids

#### PRINCIPLE OF OPERATION

The product enters the meter through the inlet manifold and causes the rotor to revolve by pressure on the blades.

The proximity of the rotor to the casing forms an efficient seal, whilst the profile of the casing ensures that the blades are guided through the measuring crescent. The vane blades divide the liquid into segments, the liquid segments are counted as they are displaced, giving a positive rotary motion to the rotor.

The rotor spindle transmits the drive through a pressure tight lip seal in the meter front cover to the calibrating mechanism, which calibrates the meter output for a correct counter readout.

#### **APPLICATIONS**

- Batching, blending and dispensing in chemical and process industries, petroleum companies, paints, solvents, pharmaceutical and other fields
- Container filling
- Tank truck / Rail wagon unloading



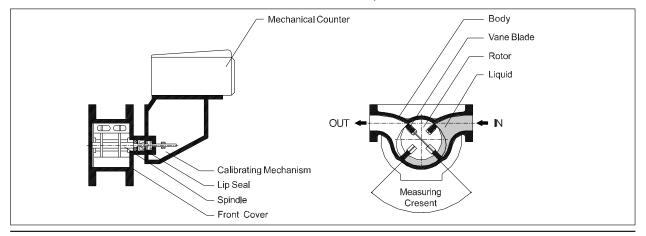


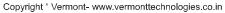
C35 Preset Meter with E type Mechanical Counter

#### **SPECIFICATIONS**

Type	: Positive displacement rotary vane
Size	: 50 mm NB (2")
Flow Range	: Up to 500 lpm (50 mm NB) (2")

(Maximum flow rate can be uprated by 30% for aircraft refuelling with ATF)

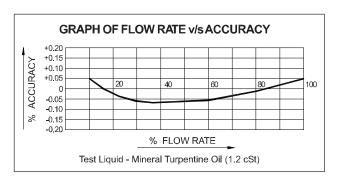






Meter Hand of Discharge <i>(when</i>	: Right hand entry, left hand delivery Left hand entry, right hand delivery			
facing the counter)				
Drive	: Positive gear train			
End Connections	: 2" / 150 class			
(Other standards are available on request)				
Accuracy	: Better than <u>+</u> 0.10%			
Repeatability	: Better than <u>+</u> 0.02%			
Rangeability	: 100% to 10% of max. flow range			
Pressure Rating	: 10.54 kg/cm²/ 150 PSI / 10.5 Bar			
Temperature	: Upto 70°C (Standard)			
	Upto 200°C (Special)			
Viscosity	: 0.5 CST to 200 CST			
(Consult factory, for liquid viscosity above 200 CST)				

#### MATERIALS OF CONSTRUCTION

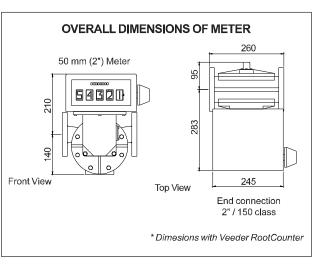


(A) Meter		
Housing	Cast Steel Stainless Steel	
Rotor	Aluminium Alloy Stainless Steel	
Vanes	Resin impregnated Morganite CY10C	
Bearings	Stainless Steel	
Rubber Parts	Buna-N (Nitrile), Viton, EPDM	
(B) Preset Valve		
Housing	Aluminium Cast Steel Stainless Steel	
Other Wetted Parts	Aluminium Alloy Stainless Steel	
(C) Strainer / Air Eliminator		
Housing	Carbon Steel Stainless Steel	

Counter Options		
Veeder Root 7887	5 digit resettable & 8 digit non-resettable	
Vermont V01	5 digit resettable & 8 digit non-resettable	
E type	Only 5 digit resettable or non-resettable	
Veeder Root EMR3		
Electronic Digital Readout		



C-35 Electronic Meter for Distillery Application



#### **METER ACCESSORIES**

#### A. Counters

Veeder Root 7887 or Vermont V01 for volume indication, 5 digit large numerical Reset with 8 digit nonreset totalizer. Liters, Decaliters, Gallons indication.

Veeder Root 7889 or Vermont V02

volume for precise batch control.

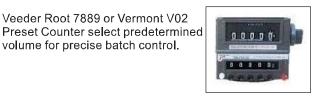


Electronic Registration Ex proof as well as Panel mounted WP options to perform multiple functions and pulse output, RS232/ 485 communication.

**B.** Pulse Transmitter

acquisition.





VeederRoor EMR3 Electronic display counter with remote indication, 4-20 mA output, data logging facility.



### C. Strainer and Air Eliminator

The electronic pulse signal output, to

transmit to other electronic device for indication, flow control or data

For efficient operation of meter, removes free air or vapour and protection from debris entering into the flow meter.



Mechanical Economic E type Totalizers provide 5 digit resettable or 5 digit non-resettable totalization.



#### **D. Mechanical Preset Valve**

Preset valves provide an accurate and automatic control of a predetermined quantity of liquid to be delivered through the PD flow meter. A typical preset arrangement consists of a Preset Valve mounted on the PD flow meter outlet and connected by a mechanical linkage to the preset register fitted below the PD flow meter counter.



Veeder Root Ticket Printer 7888 provides an imprinted ticket for delivery transactions. Accumulative or Zero start options available.

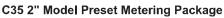


#### E. Two Stage Control Valve

Electrically actuated, hydraulically operated multifunction control valve. The valve also offers an in-built flow governing function.







#### **ORDERING INFORMATION**

Application	Batching, Loading, Blending, etc
Operating Conditions	Liquid : Name Flow Range Temperature Range Max Working Pressure Viscosity Range
Unit of Registration	Gallons, Liters Dekaliters
Direction of Flow	Left to right is standard and will be supplied unless right to left is specified
Accessories	As required



C35 Electronic Preset Package

Specifications are subject to change without notice.
All dimensions are in mm unless otherwise specified.

Pub. No. 003 Issue 3 Rev 3 11- 2017

## Vermont Technologies Pvt. Ltd.

Corporate Office & Operations:

Plot No: PAP- A-8/6, "A" Block, Phase IV, MIDC Chakan, Opp Mahindra Vehicle, Dist:Pune- 410501

- Tel. : +91 (2135) 690085/86
- Email : <u>ho@vermonttechnologies.co.in</u>

Website : www.vermonttechnologies.co.in

