

# Flow



## 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



C-35 PD METER WITH COUNTER



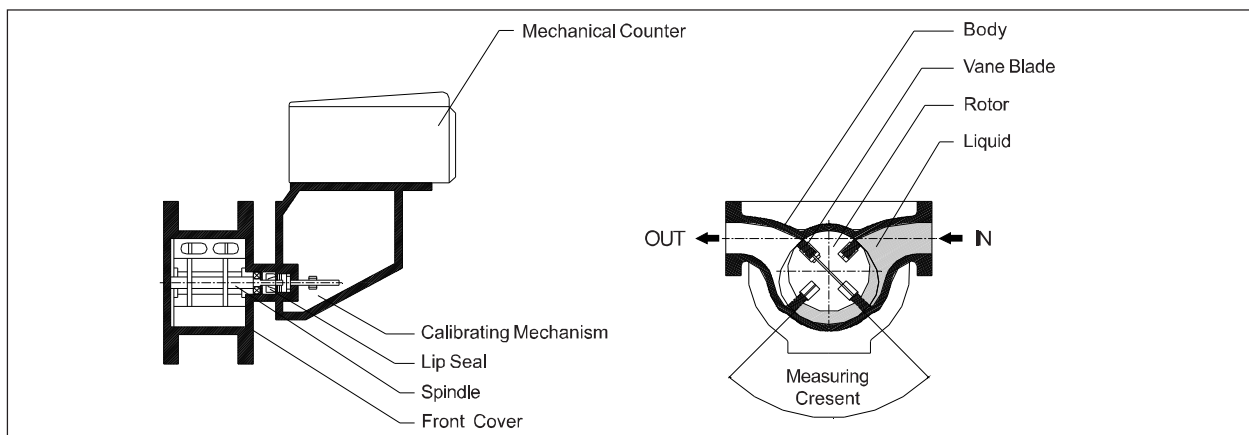
C35 Preset Meter with Mechanical Counter (5 digit / 8 digit)

### SPECIFICATIONS

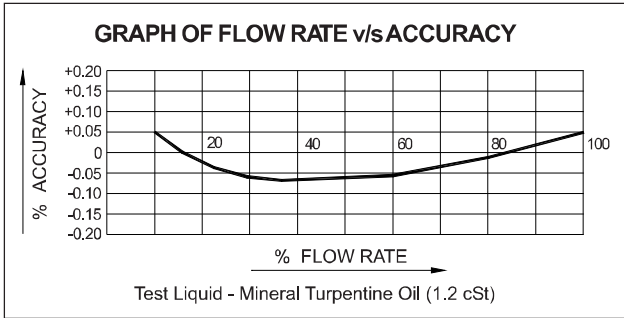
Type : Positive displacement rotary vane  
Size : 50 mm NB (2")

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 : Right hand entry, left hand delivery  
 Discharge (when facing the counter) : Left hand entry, right hand delivery  
 Drive : Positive gear train  
 End Connections : 2" / 150 class  
 (Other standards are available on request)  
 Accuracy : Better than  $\pm 0.10\%$   
 Repeatability : Better than  $\pm 0.02\%$   
 Rangeability : 100% to 10% of max. flow range  
 Pressure Rating : 10.54 kg/cm<sup>2</sup> / 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)

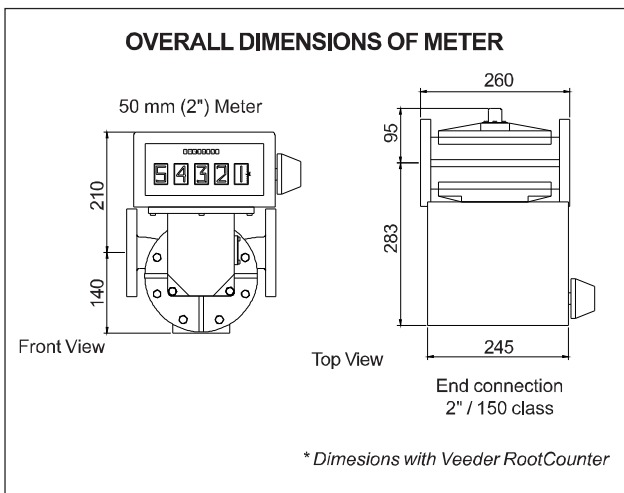


**MATERIALS OF CONSTRUCTION**

<b>(A) Meter</b>	
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>(B) Preset Valve</b>	
Housing	Aluminium Cast Steel Stainless Steel
Other Wetted Parts	Aluminium Alloy Stainless Steel
<b>(C) Strainer / Air Eliminator</b>	
Housing	Carbon Steel Stainless Steel



<b>Counter Options</b>	
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	



## **METER ACCESSORIES**

### **A. Counters**

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



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



Veeder Root 7889 or Vermont V02  
Preset Counter select predetermined  
volume for precise batch control.



### **B. Pulse Transmitter**

The electronic pulse signal output, to  
transmit to other electronic device for  
indication, flow control or data  
acquisition.



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



### **C. Strainer and Air Eliminator**

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



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

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



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.



### **E. Two Stage Control Valve**

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





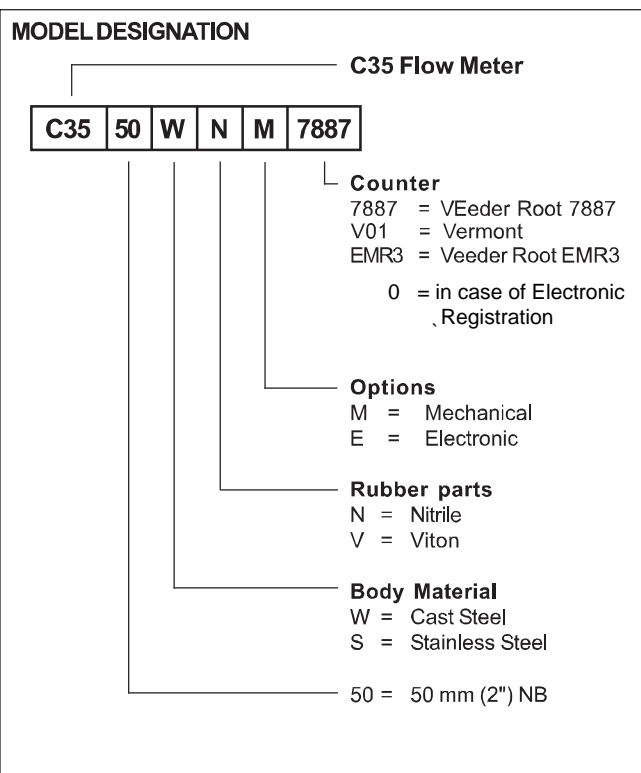
**C35 2" Model Preset Metering Package**

**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.

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