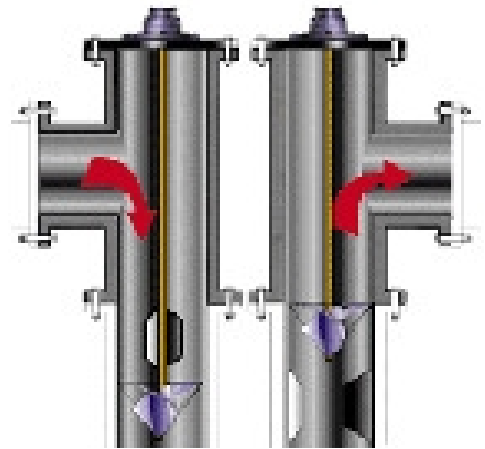


Product Data Sheet  
PDS-132  
2021-01-09

## VertiFlo

### Vertical Propeller Flow Meter



#### Description

VertiFlo meters provide an economical meter installation for accurately measuring flows from wells equipped with submersible pumps. Equally ideal applications are installations on the suction side of centrifugal pumps or similar installations where space limitations and piping configurations deem it inadvisable to utilize the Sparling tube-type or conventional saddle type meters. Special requirements for meter installation are reduced to a minimum because the meter is installed in a standard flanged tee.

#### Certified Accuracy

Accuracy is within 2% of actual flow for the specified meter range. This accuracy is guaranteed by certified wet calibration at three test points in Sparling's NIST traceable primary flow laboratory. Each meter is tested at low flow, mid-range, and high flow. A test certificate is provided with each meter.

#### Principle of Operation

Sparling propeller meters utilize the simple principle of the screw propeller to register the total flow, much as an odometer registers auto mileage. The rotation of the propeller affords a basis for indicating and recording gallons per minute or other rates.

#### Options

**High Velocity Flows** - For applications where continuous flow rates are above the mid-point standard flow range ratings, high velocity construction of the meters is recommended.

**Transmitters** - Electronic transmitters are available for installation on these meters. See PDS-190.

**Rate-of-Flow Indicators** - When continuous rate of flow indication is required, an optional rate-of-flow indicator and totalizer is available. See PDS-190.

#### Installation

Verti-flo meterheads are drilled in accordance with standard 125# or 250# cast iron flanged tee requirements, as specified on customer order, and are simply bolted into position. The length of the meter drop pipe is manufactured in accordance with overall dimensions as stated in the customer's order.

For down-flow installations, the straightening vanes are supplied integral with the meter and no further work is required.

For up-flow, three straightening vanes are recommended to be welded upstream of the meter.

Welding vanes, bolting type vanes and stainless-steel liner and vane assemblies are available at extra cost.

#### Materials

All materials used in manufacturing are highly resistant to normal water corrosion and recommended for water works application. Special materials are utilized for highly corrosive conditions. Liquid temperatures should not exceed 100°F.

#### Total Flow

The cumulative total flow is shown on a six digit straight reading totalizer in any standard volumetric units.

## Flow Rates & Dimensions

Size	4"	6"	8"	10"	12"	14"
Standard Flow						
Min	60	100	120	160	200	260
Max	400	900	1200	1600	2200	3000
High Flow						
Min	120	200	240	320	400	520
Max	600	1600	2300	3000	4000	5000
150 psi						
A	9	11	13 $\frac{1}{2}$	16	19	21
BC	7 $\frac{1}{2}$	9 $\frac{1}{2}$	11 $\frac{3}{4}$	14 $\frac{1}{4}$	17	18 $\frac{3}{4}$
# of Bolts	8	8	8	12	12	12
Size of Bolts	$\frac{5}{8}$	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{7}{8}$	$\frac{7}{8}$	1
300 psi						
A	10	12 $\frac{1}{2}$	15	17 $\frac{1}{2}$	20 $\frac{1}{2}$	23
BC	7 $\frac{7}{8}$	10 $\frac{5}{8}$	13	15 $\frac{1}{4}$	17 $\frac{3}{4}$	20 $\frac{1}{4}$
# of Bolts	8	12	12	16	16	20
Size of Bolts	$\frac{1}{2}$	$\frac{3}{4}$	$\frac{7}{8}$	1	1 $\frac{1}{8}$	1 $\frac{1}{2}$

## Ordering Information

Size (in)	Flow Range (GPM)	Drop Pipe Length (in)	
	Standard	Up-Flow	Down-Flow
4.00	60.0 - 400	18.0	28.5
6.00	100 - 900	21.0	41.0
8.00	120 - 1200	23.0	53.0
10.0	160 - 1600	27.0	66.0
12.0	200 - 2200	29.0	78.0
14.0	260 - 3000	34.0	91.0

## How to Order a FM132

Table 1: Base Model Number					
FM132 - Direct Drive Verti-flo Meterheads					
Model	Table 2: Size				
	04 - 4"		06 - 6"		08 - 8"
	10 - 10"		12 - 12"		14 - 14"
	Table 3: Head Connections				
Size	1 - 125# AWWA Flange (150 psi MWP)				
	2 - 250# AWWA Flange (300 psi MWP)				
	Table 4: Flow Range				
	1 - Standard Range				
Head	2 - High Range				
	Table 5: Readouts				
	0 - None				
	Table 6: Accessories				
Flow	0 - None				
	1 - Welding Vanes				
	2 - Bolting Vanes				
	5 - Add. Drop Pipe Length				
Read	6 - One and Five Above				
	7 - Two and Five Above				
	Access.				
	0				

