

**SERIES 100
METERS AND
ACCESSORIES**

**VERTI-FLO METERS
Model FM132**

Direct Drive - 150 psi - 250 psi Max. Working Pressure
4" 5" 6" 8" 10" 12" 14"

PDS-132-4

Issue Date: February 1996
Supersedes: July 1994
Supercedes: PDS-132-1
132-2
132-3

FUNCTION

Verti-flo 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.

ACCURACY

Accuracy is within 2% of actual flow for the specified meter range. This accuracy is guaranteed by certified wet calibration at three (3) 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.

TOTALFLOW

The cumulative total flow is shown on a 6-digit straight reading totalizer in any standard volumetric units.

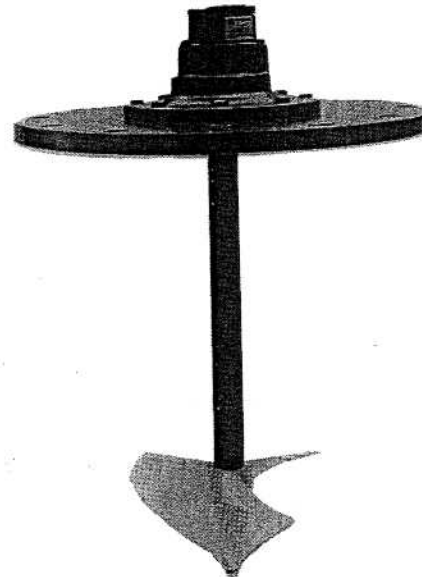
INSTALLATION

Verti-flo meterheads are drilled in accordance with standard 125 lb. or 250 lb. 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.



UP-FLOW

MATERIALS

Materials used in manufacture 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.

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.

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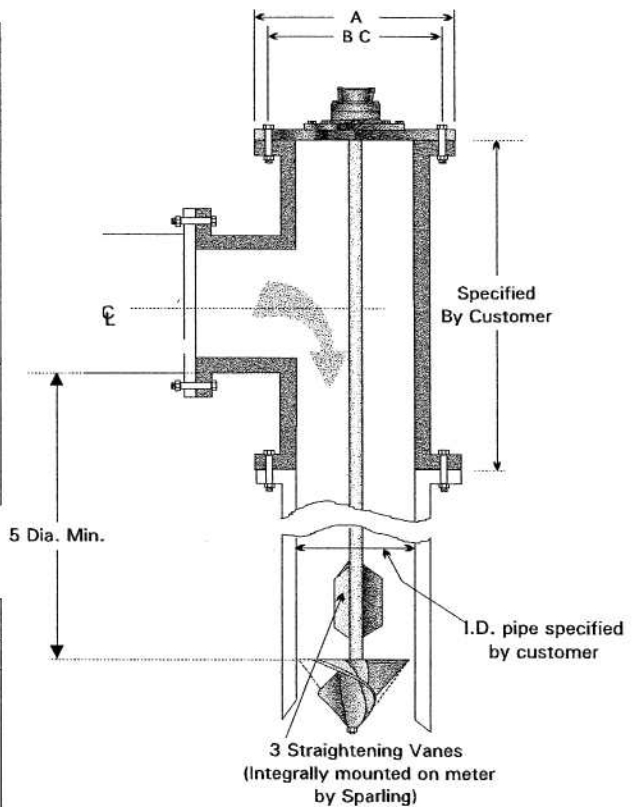


METERSPECIFICATIONS

Meter & Flange Size	4"	6"	8"	10"	12"	14"	
Std. Flow - U.S. GPM	Min.	60	100	120	160	200	260
	Max.	400	900	1,200	1,600	2,200	3,000
Hi-Velocity - U.S. GPM	Min.	120	200	240	320	400	520
	Max.	600	1,600	2,300	3,000	4,000	5,000
150 PSI	A	9	11	13-1/2	16	19	21
	BC	7-1/2	9-1/2	11-3/4	14-1/4	17	18-3/4
	No. of Bolts	8	8	8	12	12	12
	Size of Bolts	5/8	3/4	3/4	7/8	7/8	1
250 PSI	A	10	12-1/2	15	17-1/2	20-1/2	23
	BC	7-7/8	10-5/8	13	15-1/4	17-3/4	20-1/4
	No. of Bolts	8	12	12	16	16	20
	Size of Bolts	3/4	3/4	7/8	1	1-1/8	1-1/2

ORDERING INFORMATION SERIES 132 DIRECT DRIVE VERTI-FLO

SIZE INCHES	FLOW RANGES (U.S. GPM)	DROP PIPE LENGTH INCHES	
	STD. RANGE	UP-FLOW	DOWN-FLOW
4	60 to 400	18	28.5
6	100 to 900	21	41
8	120 to 1,200	23	53
10	160 to 1,600	27	66
12	200 to 2,250	29	78
14	260 to 3,000	34	91



DOWN-FLOW

Table 1 - Base Model Number

FM132- Direct Drive Verti-flow Meterheads

Table 2 - Size

-- 04=4", 10=10", etc.

Table 3 - Head Connections

- 1- 125 lbs. AWWA Flange (150 PSI MWP)
- 2- 250 lbs. AWWA Flange (300 PSI MWP)

Table 4 - Construction

- 4 Up-flow (Vaness not included)
- 5 Down-flow (Vaness included)

Table 5 - Flow Range

- 1 Standard Range
- 2 High Range

Table 6 - Readouts

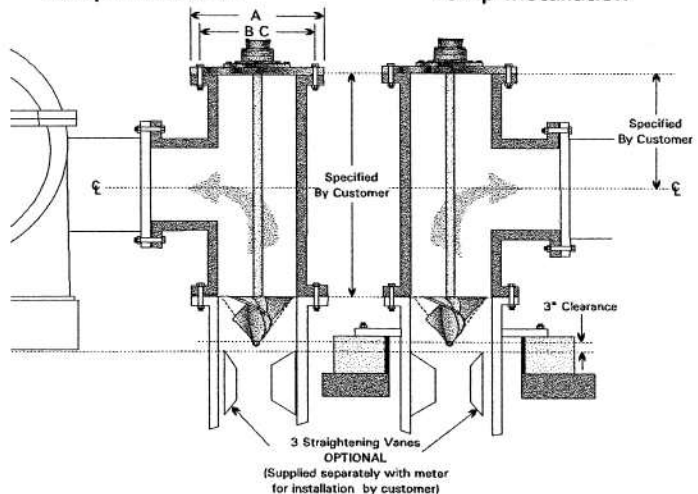
- 0- None - Totalizers, Indicators and Transmitters must be listed and Priced Separately -See Price Sheet 190-1

Table 7 - Accessories

- 0 None
- 1 Welding Vaness
- 2 Bolting Vaness
- 5 Additional Drop Pipe Length
- 6 1 and 5 above
- 7 2 and 5 above

Typical Centrifugal Pump Installation

Typical Submersible Pump Installation



UP-FLOW

Note: When ordering, customer must provide tee flange to flange dimensions.