

**SERIES 300
IRRIGATION METERS AND
ACCESSORIES**

**LOW PRESSURE LINE METERS
4" THRU 14"**

PDS-312

Issue Date: August 1996
Supercedes: Dec. 1994

The Low Pressure Line Meters are specifically designed to provide accurate and reliable flow measurement to the irrigation market.

ACCURACY

Accuracy of the Low Pressure Line Meters is within 2% of actual flow. This is guaranteed by certified wet calibration.

FLOW

Total flow is shown on a 6-digit direct-reading register which can be furnished in any standard units, (i.e. gallons, cubic feet, acre feet, etc.). Flow rates are provided in Table 1 of the ordering instructions for each of the sizes.

STRAIGHTENING VANES (Optional)

All meters (except 4 inch) can be supplied with straightening vanes to eliminate errors due to flow swirl.

METER TUBES

Low pressure meters are available factory mounted and calibrated on plain end steel tubes, with pre-installed straightening vanes (except 4 inch), ready for welding or coupling to steel pipe.

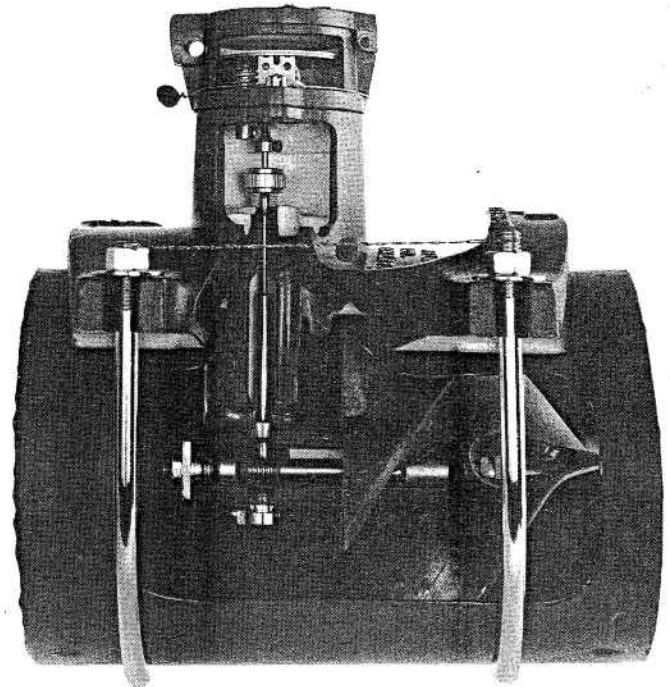
MATERIALS

The Low Pressure Line Meters are made of the following materials:

Saddle	Cast Iron (4" - 12")
	Cast Aluminum (14")
Gear Box	Cast Brass (4" - 14")
Propeller	Molded Polyethylene
Mechanical Parts	Stainless Steel

TEMPERATURE LIMITS

Liquid working temperature should not exceed 100°F.
Propellers may be stored in air temperatures up to 175°F.



INSTALLATION

The meter may be installed at any convenient angle in a full flowing suction or discharge line. Avoid a valve, fitting or obstruction directly upstream from the meter which might cause a jet or spiral flow into the meter propeller. At least five diameters of straight pipe upstream and one diameter downstream from the meter are recommended.


ACCESSORIES

A full line of accessories are available including:

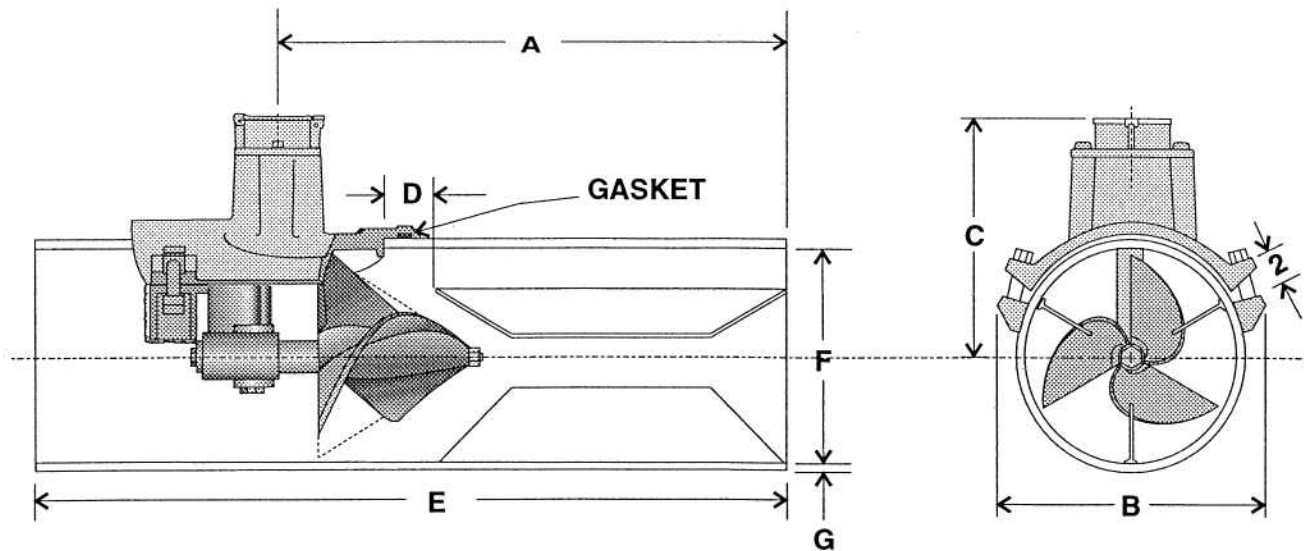
- Dummy Covers
- Rate-Indicators
- Register Extentions
- Transmitters
- Recorders

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See IDS-350—For instructions on installing the Low-Pressure Meterhead on existing pipe. Includes cutout template dimensions.

ORDERING INFORMATION & DIMENSIONS

Table 1 FM 312 Basic Model Number													
Table 2 Size		GENERAL - ALL METERS								WITH INTEGRAL TUBE			
		Flow Range		Standard Operating Pressure	Dimensions in Inches					Dimensions in Inches			
Standard	High	A	B		C	D	Weight	E	F	G	Weight		
04	4"	60-400 GPM	120-600 GPM	100 PSI	9.19	8.00	7.63	NA	20	16.0	4.03	.24	40
06	6"	100-900 GPM	200-1600 GPM	100 PSI	14.44	9.00	7.88	2.75	25	22.0	6.36	.13	45
08	8"	120-1200 GPM	240-2300 GPM	100 PSI	15.94	10.50	9.44	3.00	30	24.0	8.36	.13	65
10	10"	160-1600 GPM	320-3000 GPM	100 PSI	19.94	11.50	9.56	3.25	35	30.0	10.38	.19	80
12	12"	200-2000 GPM	400-4000 GPM	100 PSI	23.94	12.38	11.50	3.25	40	36.0	12.38	.19	125
14	14"	260-2500 GPM	520-5000 GPM	50 FT.	28.00	17.63	11.13	4.88	30	42.0	13.63	.19	140

Table 3 - Configuration	
0	Meterhead only with U-Bolts (4", 6", 8" & 14")
1	Meterhead only with Stainless Steel Straps (4" - 14")
2	Meterhead only with Anchor Bars (10" & 12")
3	With Plain End Steel Tube

Table 4 - Readout	
0	None
1	Standard Register
2	Rate Indicator Totalizer

Table 5 - Velocity	
1	Standard Velocity
2	High Velocity

Table 5 - Accessories	
0	None
1	Bolting Vanes

FM312-

When ordering specify:

- Units of registration
- Units of Indication
- Pipe ID and OD
- Actual minimum and maximum flow

NOTE:

- Register Extension - See PDS-146
- Totalizers - See PDS-190