Hersey[®]-Meters

500 Series IIS

Magnetic Drive Positive Displacement Disc Meters Sizes 1-1/2" and 2"

Features

APPLICATIONS: Measurement of cold water for residential, commercial and industrial applications where water volumes are low, and low flow sensitivity is important.

CONFORMANCE TO STANDARDS: Hersey Series 500 IIS Water Meters comply with ANSI/AWWA Standard C700. Meters which are manufactured with EnviroBrass[®] II maincase option meet the requirements of NSF Standard 61.Each meter is tested to ensure compliance.

CONSTRUCTION: Hersey Series 500 IIS Water Meters consist of three basic parts: maincase; measuring chamber; and permanently sealed register. The maincases and topcases are made of bronze. The measuring chamber, nutation disc and strainer are made of thermoplastic, which is dimensionally stable and will not corrode. A test port in the body permits in-line testing. Register box and lid are available in plastic or bronze.

The meter is designed so that the register, measuring chamber and strainer can be replaced without removing the meter from the line.

REGISTER: The permanently sealed register has a unique seal and heat-treated glass to eliminate dirt, moisture infiltration and lens fogging. An integral tamper-proof locking feature is provided to resist tampering with the register. The totalizing register has a straight-reading odometer type display, a 360° test circle with center sweep hand and a low flow (leak) detector. Standard gearing is used, making registers interchangeable by size.

All Hersey Meter Models have electronic meter reading systems available for increased reading efficiency (see Meter Reading Systems.)

OPERATION: Water flows through the meter's strainer where any debris that could adversely affect meter accuracy or free operation is screened out. As the water enters, it fills a known volume of the measuring chamber on one or the other side of a movable disc that separates the chamber into two sections. As water enters it moves the disc (nutates), forcing a known volume of water out of the meter from the opposite side of the disc. The process repeats as the sections refill and empty in turn. The nutating action of the disc is coupled magnetically to the register to indicate the volume of water that passes through the meter. The large measuring chamber requires fewer nutations of the disc for each gallon measured, which helps to limit wear, reduce pressure loss and extend the life of the meter.

MAINTENANCE: The Hersey Series 500 IIS Water Meters are designed and manufactured to provide long service life with virtually no maintenance required.

CONNECTIONS: Available with integral two-bolt oval flanges, integral NPT internal threads or integral straight external threads.



Materials and Specifications

MODEL NUMBER 562IIS and 572IIS
SIZES 1-1/2" and 2"
■ STANDARDS
SERVICE Cold water measurement with flow in only one direction
OPERATING FLOW RANGE See Chart on page 2.2
ACCURACY See Chart page 2.2
■ PRESSURE LOSS See Chart on page 2.2
■ MAXIMUM WORKING PRESSURE 150 PSI
TEMPERATURE RANGE
MEASURING ELEMENT Nutating Disc
DISC NUTATIONS (per Gallon) 562IIS: 6.47, 572IIS: 3.92
■ REGISTER TYPE Straight reading, permanently sealed, magnetic drive with low flow indicator. Remote reading units optional.
■ METER CONNECTIONS 1-1/2" size and 2" size available with two bolt flanged ends, internal threads or external threads (NPT - ANSI B1-20.1)
■ MATERIALS Maincase - bronze UNSC84400; Measuring Chamber - Thermoplastic; Magnets - ceramic; Strainer - Thermoplastic; Casing bolts - stainless steel ANSI B18; Register box and lid - thermoplastic.

OPTIONS Meter case - EnviroBrass[®] II UNSC89520 Register box and lid - bronze UNSC85700; AMR Reading Systems.

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Meter Registration

Meter Size	Initial Dial*	Capacity	Initial Dial*	Capacity
1-1/2"	100 Gallons	100 Million	10 Cubic Feet	10 Million
2"	100 Gallons	100 Million	10 Cubic Feet	10 Million

*Registration equal to one full revolution of the sweep hand.

Flow Characteristics

Meter Size	Typical Low Flow (95% Minimum)	Typical Operating Range (100% ± 1.5%)	Maximum Continuous Operation
1-1/2"	1-1/2 GPM	5 to 100 GPM	50
2"	2 GPM	8 to 160 GPM	80

PERCENT REGISTERED

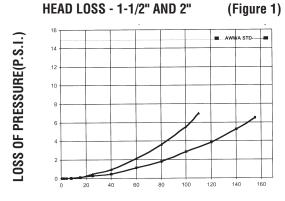
100

95

90 85 80

5

Performance



RATE OF FLOW - U.S. GPM

NOTE: Performance curves are typical only and NOT a guarantee of performance.

10 20 50 100 160 RATE OF FLOW - U.S. GPM

(Figure 2)

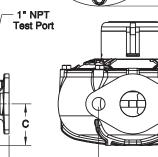
1-1/2

AWWA STD.

2"

ACCURACY - 1-1/2" AND 2"

AWWA STD



Dimensions and weights

Meter Size	1-1/2"	2"		
Ends	Flanged, Female & Male			
Model	562	572		
Dimension				
А	13"	17"		
В	7.250"	8.125"		
С	2.437"	3.00"		
D	8.750"	10.437"		
Е	4.00"	4.50"		
W	9-1/4"	10-1/2"		
Net weight	18	28		

NOTE: Meter couplings are optional and must be ordered separately. Weights are in pounds and are approximate.



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