

# H4400 Hot Water Meter High Temp. Sizes 2", 3" & 4" Third-Party Products

From The Manufacturer of E-Mon D-Mon



## Description

**Low Flow Performance At Its Highest For Hot Water**  
This family of meters offers a wide measuring range with improved low flow performance.

**Operation.** The H4400 is a Woltman vertical impeller (inferential) meter. The impeller, shaft and magnet are the only moving parts in the measuring element. The magnetic coupling transfers the impeller movement to an o-ring sealed register.

**Installation.** The meter must be installed in a clean pipeline, free from foreign materials. The meter must be installed with the direction of flow as indicated by the arrow cast into the meter case. The meter must be installed in a horizontal line with the register facing upward. The meter requires 10 pipe diameters ahead of the meter and 5 pipe diameters after the meter, of straight pipe the same size as the meter, to insure proper flow through the meter.

**Applications.** The meter is for use with hot water up to 350°F (180°C) with working pressure to 195 psi (13.4 bar) or 250°F (120°C) with working pressure to 230 psi (16 bar). Both the pressure loss and accuracy tests are made before shipment. No adjustments need be made before installation.

**Construction.** The meter consists of a main case, a measuring chamber, an impeller, a removable top plate and o-ring with a magnetically driven register or register with reed switch or opto-electronic pulser.

## **Model Numbers**

Model	Size
H44002	2"
H44003	3"
H44004	4"

Note: Meters supplied as indoor version with pulse output.

## Specifications

	Size: 2"	3"	4"
Starting Flows	.66	1.10	1.76
Min Flow GPM ±5% Qmin	2.60	7.00	10.50
Slow Flow GPM ±2% Qt	9.90	26.00	39.60
Rec Cont Flow GPM Qn	66.00	176.00	254.00
Peak Flow GPM Qmax	110.00	308.00	440.00

Temperature:	350°F w/working pressure 195 psi 250°F w/working pressure 230 psi
Working Pressure:	195 psi at 350°F 230 psi at 250°F
Head Loss:	See back of page
Flange:	ASA 150 raised face

## Material of Construction

Meter Body	Cast Iron (Nodular)
Wetter Material	Polyetheretherketone (PEEK)
O-ring Seal	Tetrafluoroethylene-propylene (Aflas)
Magnet	Ferrite
Register	Polyphenylensulfide (PPS)

**Pulsers.** The H4400 Hot Water meters can be fitted with one of two pulsers.

The Reed Switch pulser is a plug-in assembly that fits without breaking the seal of the meter. Max. voltage of 48 VDC, switching current 0.2 A, reed switch rated 4 watt, 50 ohm resistance in series, two wire for in-series wiring and power from an external source.

<u>Contact Closure</u>	<u>Reed Switch (Arrows Up)</u>	<u>Reed Switch (Arrows Down)</u>
2"	1 contact = 10 USG	1 contact = 100 USG
3"	1 contact = 10 USG	1 contact = 100 USG
4"	1 contact = 10 USG	1 contact = 100 USG

The Inductive (Namur) Pulser is a plug-in assembly that fits the register/pulser without breaking the seal of the meter. The transmitting element is a proximity sensor. Nominal voltage 8 VDC, current without pulse (open) 1.0 mA and current with pulse (closed) 3.0 mA, two wire and power from an external source. The pulser is for interface with the R420, wiring diagram available, or other appropriate electronics compatible to the above specifications.

<u>Contact Closure</u>	<u>Inductive (Namur) Pulser</u>
2"	3.785 contacts = 1 USG
3"	3.785 contacts = 1 USG
4"	3.785 contacts = 1 USG

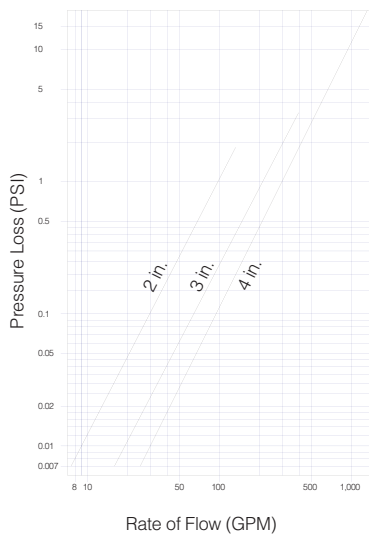
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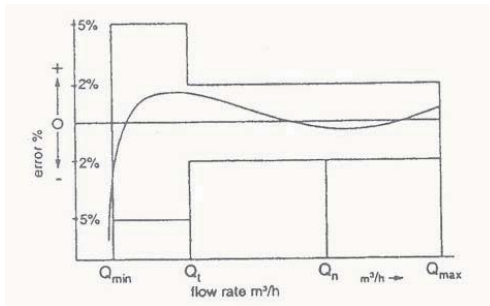
# H4400 Hot Water Meter Sizes 2", 3" & 4", 2.6 to 440 GPM

## Third-Party Products

From The Manufacturer of E-Mon D-Mon



Rate of Flow (GPM)  
H4400 Meters - Pressure Loss Curves (Typical)



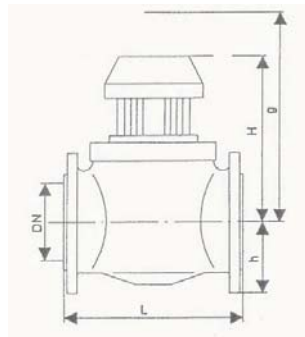
H4400 Meters - Accuracy Curves

### Dimensions & Net Weights

Meter Size	Dimensions (Inches)						Weight (lbs.)
	DN	L	g	H	h	W	
2"	10.6	10.8	7.7	3.2	6.7	30.9	
3"	11.8	12.0	8.0	3.9	7.9	44	
4"	14.2	13.6	9.3	4.3	10.2	72.8	

Note: The width is not shown on the drawing

Flanges. The meter body with the flanges drilled according to ISO 7005-2 is rated up to 16 Bar, 232 psi. This means that the flanges and the whole meter are rated and operational at 232 psi, just the drilling is according to ANSI 150/ASA 150.



Temp	-20 - 150	220	225	250	275	300	325	350
Min PSIG	----	6	25	45	72	112	154	194

\*MIN PSIG\* is the minimum line pressure required to prevent flashing within the meter body.

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