

# H4000

## Industrial bulk water meter

Sizes 1 1/2", 2", 3", 4", 6", 8", 10", 12"



Size			1 1/2"	2"	3"	4"
Qmin	Min. flow (gpm)	±5%	1.5	1.5	2.2	2.6
Qt	Low flow (gpm)	±2%	4.4	4.4	8.8	8.8
Qn	Cont. flow (gpm)	±2%	220	220	528	792
Qmax	Peak flow (gpm)	±2%	396	396	880	1,100
Operating pressure (psi)			230			
Operating temperature (°F)			120			

Size			6"	8"	10"	12"
Qmin	Min. flow (gpm)	±5%	7.9	17.0	26.4	52.8
Qt	Low flow (gpm)	±2%	17.6	26.4	48.4	66.0
Qn	Cont. flow (gpm)	±2%	1,981	3,082	4,402	6,604
Qmax	Peak flow (gpm)	±2%	2,642	4,402	7,044	8,805
Operating pressure (psi)			230			
Operating temperature (°F)			120			

Register reading smallest quantity - no sweep hand	1 1/2" - 4"	6" - 12"
US gallons	1	10

Capacity of register	1 1/2" - 4"	6" - 12"
US gallons (millions)	1,000	10,000

Pulse output	1 1/2" - 4"		6" - 12"	
PR7 pulse device (optional)	Channel 1	Channel 2	Channel 1	Channel 2
US gallons	1 pulse = 1 USG	1 pulse = 10 USG	1 pulse = 10 USG	1 pulse = 100 USG

### Register type

Copper can enclosed direct read with inductive interface for use with PR7

### Description

#### Operation

The H4000 is a horizontal Woltmann-type meter designed for installation where occasional low and moderate to high sustained flows are demanded. Accuracy is maintained in both forward and reverse flow directions and there are various register/pulser options to suit the application.

#### Compliance and standards

The H4000 complies with all performance requirements of ISO 4064 BS 5728 and EC Specifications Class B for forward flow.

#### Installation

The meter must be installed in a clean pipeline, free from any foreign materials. Install the meter with direction of flow as indicated by the arrow cast in the meter case. The meter may be installed in horizontal, inclined or vertical lines.

#### Application

The meter is for use only with POTABLE COLD WATER up to 120°F (50°C) and working pressure up to 230 psi (16 bar). The meter will perform with accuracy registration of 100% ±2% within normal flow. Both pressure loss and accuracy tests are made before shipment. No adjustments need to be made before installation.

#### Construction

The meter consists of a main case, measuring element, a case cover and a magnetically driven register/pulse assembly (pulse assembly sold as an option). The main case is epoxy coated cast iron with raised characters showing size and direction of flow.

The case has a throated inlet. The measuring element assembly consists of the rotor, straightening vanes, accuracy regulator, spindless and gears. The measuring element is attached to the underside of the cover with three stainless steel screws and washers.

The main case and cover are assembled with an o-ring gasket and stainless steel nuts, bolts and washers. The register/pulser assembly is secured to the cover with a lock wire and a lead seal.

## Materials

Main case  
Top cover case  
Body & cover coating  
O-ring  
Case nuts & bolts  
Measuring element  
Rotor  
Rotor support assembly  
Rotor thrust bearing  
Spindles  
Register  
Register housing & lid

Cast iron  
Cast iron  
Epoxy powder  
Neoprene rubber  
Stainless steel  
Polyphenylene oxide  
Glass-loaded polypropylene  
Glass-loaded noryl  
Ceramic jewel  
Tungsten carbide  
Glass lens sealed, copper can  
Polymer

## Pulser

- PR7 module
- 10 year battery life
- IP68 rating
- 5-158°F operating temperature
- Output load 30 VDC @ 30 mA maximum
- 75Hz maximum
- CH1 pulse width min. 5ms, typical 8-12ms
- CH2 pulse width min 50ms
- CH1 is forward flow only
- CH2 is forward minus reverse
- For full explanations, see PR7 spec sheet

## Register

The register includes easy to read roller bank, sweep hands for test volumes and a leak detector.

## Connections

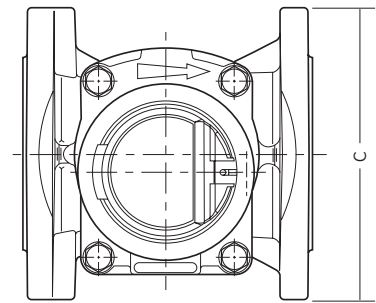
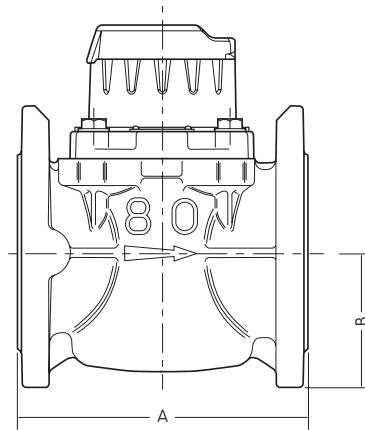
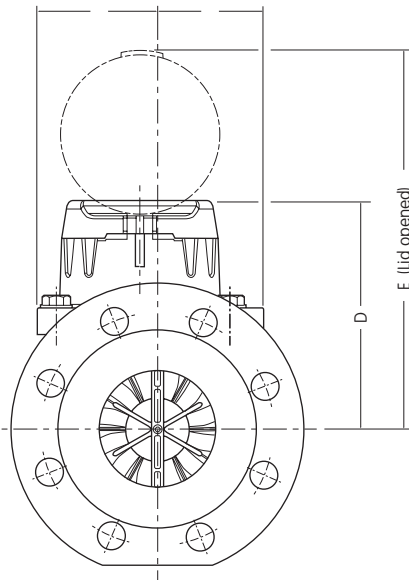
Connection ANSI B16.1 class 125 raised face flange.

Bolt hole patterns are as follows:

1 1/2" - 3"	four bolt round raised face
4" - 8"	eight bolt round raised face
10" - 12"	twelve bolt round raised face

## Dimensions and net weights

Meter size (inches)	1 1/2"	2"	3"	4"	6"	8"	10"	12"
A	12.25	12.25	16.25	19	19.01	20.47	20.47	20.47
B	3.06	3.06	3.69	4.19	5.31	6.47	7.79	8.85
C	3.31	3.38	4.13	4.81	11.25	13.42	16.1	18.14
D	8.13	8.13	9.19	9.69	7.87	8.74	9.44	9.44
E	5.9	6.88	7.81	9.06	12.12	12.99	13.7	13.7
Weight (lbs)	26.5	28.8	38.6	52	52	119	119	119



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