

CONTRACT SUMMARY

CITY OF FORT LAUDERDALE
PROCUREMENT SERVICES DEPARTMENT

Period Covered:
12/7/10 – 12/6/11

Contract No.:
413-10569-1

Master Blanket:
N/A

Awarded Vendor:

Elster AMCO Water, Inc.
1100 SW 38 Avenue
Ocala, FL 34474

Delivery: 10 Days
Payment Terms: Net 30

Attn: Kathie Manning
800-874-0890
Fax 352-368-1950
Email: kathie.manning@us.elster.com

Insurance Coverage Required: Yes No
Authorized for Purchases: Under \$25,000 Over
City Commission Approval: 12/7/10 Pur-05 CAR 10-1661
Extension Options: Yes No Years: 3, 1 year extensions

WATER METERS – GROUP I AND V

Group I – Cold Water Positive Displacement Meter	
5/8"	\$ 31.92 / each
3/4"	\$ 41.92 / each
1"	\$ 71.92 / each
1-1/2"	\$ 177.00 / each
2"	\$ 244.00 / each
 Group V – Cold Water Meter, Fire Hydrant	
3"	\$ 439.22

Department Contract Co-Ordinator: Bob Bucher, Public Works, (954) 828-7877

Procurement Specialist: Robert McKenney, CPPB

IN WITNESS WHEREOF, the City and the Contractor execute this Contract as follows:

CITY OF FORT LAUDERDALE

By: [Signature]
Director of Procurement Services

ATTEST

CONTRACTOR

By: _____

By: [Signature]

Print Name: Ann Shannon

Print Name: Kathie Manning

Title: Bid ^proposals Coordinator
(If not president of corporation
please attach proof of authorization)

(CORPORATE SEAL)

STATE OF Florida
COUNTY OF Marion

The foregoing instrument was acknowledged before me this 22nd day of December, 2010, by Kathie Manning as (title): Bid ^Proposals Coordinator for Elster AMCO Water, Inc., a Florida corporation.

(SEAL)



ANN L. SHANNON
NOTARY PUBLIC
STATE OF FLORIDA
Comm# EE036541
Expires 1/2/2015

[Signature]
Notary Public, State of Florida
(Signature of Notary Public)

Ann L. Shannon
(Print, Type, or Stamp Commissioned Name
of Notary Public)

Personally Known X OR Produced Identification _____
Type of Identification Produced _____

CONTRACT COPY

Elster AMCO Water, Inc.

Bid Contact **Ann Shannon**
ann.shannon@us.elster.com
Ph 800-874-0890 x4618
Fax 352-369-6581

Address **P. O. Box 1852**
Ocala, FL 34478

Supplier Code 00018847

Item #	Line Item	Notes	Unit Price	Qty/Unit	Total Price	Attch.	Docs
413-10569-1-01	Group I: Cold Water Positive Displacement Meter, 5/8"	Supplier Product Code: Make and Model:	First Offer - \$31.92	1200 / each	\$38,304.00		Y
413-10569-1-02	Group I: Cold Water Positive Displacement Meters 3/4"	Supplier Product Code: Make and Model:	First Offer - \$41.92	500 / each	\$20,960.00		Y
413-10569-1-03	Group I: Cold Water Positive Displacement Meter 1"	Supplier Product Code: Make and Model:	First Offer - \$71.92	1200 / each	\$86,304.00		Y
413-10569-1-04	Group I: Cold Water Positive Displacement Meter 1 1/2"	Supplier Product Code: Make and Model:	First Offer - \$177.00	200 / each	\$35,400.00		Y
413-10569-1-05	Group I: Cold Water Positive Displacement Meter 2"	Supplier Product Code: Make and Model:	First Offer - \$244.00	200 / each	\$48,800.00		Y
Lot Total					\$229,768.00		

Item #	Line Item	Notes	Unit Price	Qty/Unit	Total Price	Attch.	Docs
413-10569-2-01	Group II: Cold Water Meter Compound Type, 4"				No Bids		
413-10569-2-02	Group II: Cold Water Meter Compound Type, 6"				No Bids		
413-10569-2-03	Group II: Cold Water Meter Compound Type, 8"				No Bids		

Item #	Line Item	Notes	Unit Price	Qty/Unit	Total Price	Attch.	Docs
413-10569-3-01	Group III: Cold Water Multi-Jet Meters	Supplier Product Code: Make and	First Offer - \$41.92	1200 / each	\$50,304.00		Y
Lot Total					\$0.00		

5/8" Model:						
413-10569-3-02	Group III: Cold Water Multi-Jet Meters 3/4"	Supplier Product Code: Make and Model:	First Offer - \$43.25	1200 / each	\$51,900.00	Y
413-10569-3-03	Group III: Cold Water Multi-Jet Meters 1"	Supplier Product Code: Make and Model:	First Offer - \$65.92	1200 / each	\$79,104.00	Y
413-10569-3-04	Group III: Cold Water Multi-Jet Meters 1 1/2"	Supplier Product Code: Make and Model:	First Offer - \$167.00	300 / each	\$50,100.00	Y
413-10569-3-05	Group III: Cold Water Multi-Jet Meters 2"	Supplier Product Code: Make and Model:	First Offer - \$224.00	300 / each	\$67,200.00	Y
Lot Total					\$298,608.00	

Item #	Line Item	Notes	Unit Price	Qty/Unit	Total Price	Attch.	Docs
413-10569-4-01	Group IV: Fire Service Water Meter Assemblies, 4"	Supplier Product Code: Make and Model:	Alt 2 - \$1,997.78	1 / each	\$1,997.78		Y
		Supplier Product Code: Make and Model:	First Offer - \$3,375.00	1 / each	\$3,375.00		Y
413-10569-4-02	Group IV: Fire Service Water Meter Assemblies, 6"	Supplier Product Code: Make and Model:	Alt 2 - \$3,377.65	8 / each	\$27,021.20		Y
		Supplier Product Code: Make and Model:	First Offer - \$4,865.00	8 / each	\$38,920.00		Y
413-10569-4-03	Group IV: Fire Service Water Meter Assemblies, 8"	Supplier Product Code: Make and Model:	Alt 2 - \$5,564.63	1 / each	\$5,564.63		Y
		Supplier Product Code: Make and Model:	First Offer - \$6,450.00	1 / each	\$6,450.00		Y

		Product Code: Make and Model:				
413-10569-4-04	Group IV: Fire Service Water Meter Assemblies, 10"	Supplier  Product Code: Make and Model:	First Offer - \$7,850.00	1 / each	\$7,850.00	Y
Lot Total					\$42,433.61	

Item #	Line Item	Notes	Unit Price	Qty/Unit	Total Price	Attch.	Docs
413-10569-5-01	Group V: Cold Water Meter, Fire Hydrant, 3"	Supplier  Product Code: Make and Model:	First Offer - \$439.22	100 / each	\$43,922.00		Y
Lot Total					\$43,922.00		

**ORIGINAL
BID**



elster

October 21, 2010

Elster AMCO Water Inc.
1100 SW 38th Ave
Ocala, FL 34474
United States
T +1 352 732 4670
F +1 352 368 1950
www.elster.com

**CONTRACT
COPY**

City of Fort Lauderdale, City Hall
Procurement Services Department
6th Floor, Room 619
100 N. Andrews Ave
Fort Lauderdale, FL 33301

RE: Bid 413-10569 – Water Meters, Groups I thru V (Annual Contract)
Due: October 25, 2010 at 2:00 pm

To Whom It May Concern:

We appreciate receiving your invitation to bid on cold water meters due October 25, 2010 at 2:00 pm. Our bid is enclosed on the forms provided.

We are bidding Elster AMCO Models C700 positive displacement, M700 multi-jet and F4000 fire service meters supplied to the City of Ft. Lauderdale. These meters completely comply with AWWA Standards C700, C708 and C703 latest revision. We are also bidding as an alternate our evoq4 FSM electromagnetic fire service meter.

In an effort to lead the industry in offering low lead water meter products, Elster AMCO can provide C700 meters with a low lead alloy as an alternative for an additional cost. This alloy exceeds AWWA Standards, is NSF61 and ASTM B584-98A approved. The low lead alloy has a .25% lead versus the 7% lead in the traditional alloy main case.

All prices are F.O.B. Ft Lauderdale with payment terms of net thirty (30) days. Delivery will be from stock or not to exceed (30) days after receipt of order.

Descriptive literature on all meters being proposed, including pressure drops, accuracy curves, parts/price lists and guarantee certificates are enclosed and made a part of our proposal.

Please be advised that Elster AMCO Water, Inc. will extend a twenty percent (20%) discount off all parts purchased under this proposal. All parts will be shipped F.O.B. Ft. Lauderdale.



Elster AMCO Water, Inc.
 1100 SW 38th Avenue
 Ocala, FL 34474
 United States
 T +1 352 732 4670
 F +1 352 368 1950
 www.elsteramcowater.com

AFFIDAVIT OF COMPLIANCE

This is to certify that Elster AMCO model C700 positive displacement, M700 multi-jet and F4000 fire service meters supplied to the City of Ft. Lauderdale, completely comply with AWWA Standards C700, C708 and C703 latest revision. We are also bidding as an alternate our evoq4 FSM electromagnetic fire service meter. The evoQ4 has been approved for use as a fire service meter according to FM1046.

Elster AMCO Water, Inc.

Kathie Manning
 Bid & Proposals Coordinator

STATE OF FLORIDA
 COUNTY OF MARION

Before me, an officer duly authorized to take acknowledgements, personally appears Kathie Manning, to me known and known to be the person who executed the foregoing affidavit and acknowledged that she executed the same for the purpose therein expressed.

WITNESS my hand and official seal this 21st day of October, 2010.

NOTARY PUBLIC

My Commission Expires: 1/2/2011



Quantity **1200 each**
 Unit Price **31.92**
 Make and Model **Elster ACOMO C700**
 Delivery Location **City of Fort Lauderdale**
Public Works Administration Building
 949 NW 38th Street
 Ft. Lauderdale FL 33309
Qty 1200

Description

See attached Bid Specifications.

Item **413-10569-1-02 - Group I: Cold Water Positive Displacement Meters 3/4"**
 Lot Description **COLD WATER METERS, SPLIT CASE, SIZES 5/8" TO 2"**
 Quantity **500 each**
 Unit Price **41.92**
 Make and Model **Elster ACOMO C700**
 Delivery Location **City of Fort Lauderdale**
Public Works Administration Building
 949 NW 38th Street
 Ft. Lauderdale FL 33309
Qty 500

Description

See attached Bid Specifications.

Item **413-10569-1-03 - Group I: Cold Water Positive Displacement Meter 1"**
 Lot Description **COLD WATER METERS, SPLIT CASE, SIZES 5/8" TO 2"**
 Quantity **1200 each**
 Unit Price **71.92**
 Make and Model **Elster ACOMO C700**
 Delivery Location **City of Fort Lauderdale**
Public Works Administration Building
 949 NW 38th Street
 Ft. Lauderdale FL 33309
Qty 1200

Description

See attached Bid Specifications.

Item **413-10569-1-04 - Group I: Cold Water Positive Displacement Meter 1 1/2"**
 Lot Description **COLD WATER METERS, SPLIT CASE, SIZES 5/8" TO 2"**
 Quantity **200 each**

Unit Price

Make and Model

Delivery Location **City of Fort Lauderdale**
Public Works Administration Building
 949 NW 38th Street
 Ft. Lauderdale FL 33309
Qty 5

Description

See attached Bid Specifications.

Item **413-10569-2-03 - Group II: Cold Water Meter Compound Type, 8"**

Lot Description **Cold Water Meters, Compound type**

Quantity **1 each**

Unit Price

Make and Model

Delivery Location **City of Fort Lauderdale**
Public Works Administration Building
 949 NW 38th Street
 Ft. Lauderdale FL 33309
Qty 1

Description

See attached Bid Specifications.

Item **413-10569-3-01 - Group III: Cold Water Multi-Jet Meters 5/8"**

Lot Description **COLD WATER METERS, MULTI-JET, 5/8" - 2"**

Quantity **1200 each**

Unit Price

Make and Model

Delivery Location **City of Fort Lauderdale**
Public Works Administration Building
 949 NW 38th Street
 Ft. Lauderdale FL 33309
Qty 1200

Description

See attached Bid Specifications.

Item **413-10569-3-02 - Group III: Cold Water Multi-Jet Meters 3/4"**

Lot Description **COLD WATER METERS, MULTI-JET, 5/8" - 2"**

Quantity **1200 each**

Unit Price

Make and Model

Delivery Location **City of Fort Lauderdale**
Public Works Administration Building
 949 NW 38th Street
 Ft. Lauderdale FL 33309

Lot Description **Fire Service Water Meter Assemblies (Compact Fireline Type) with TR/PL Registers.**
 Quantity **1 each**
 Unit Price **3,375.00**
 Make and Model **Elster AMCO F4000**
 Delivery Location **City of Fort Lauderdale**
Public Works Administration Building
 949 NW 38th Street
 Ft. Lauderdale FL 33309
Qty 1

Description

See attached Bid Specifications

Item **413-10569-4-02 - Group IV: Fire Service Water Meter Assemblies, 6"**
 Lot Description **Fire Service Water Meter Assemblies (Compact Fireline Type) with TR/PL Registers.**
 Quantity **8 each**
 Unit Price **4,865.00**
 Make and Model **Elster AMCO F4000**
 Delivery Location **City of Fort Lauderdale**
Public Works Administration Building
 949 NW 38th Street
 Ft. Lauderdale FL 33309
Qty 8

Description

See attached Bid Specifications.

Item **413-10569-4-03 - Group IV: Fire Service Water Meter Assemblies, 8"**
 Lot Description **Fire Service Water Meter Assemblies (Compact Fireline Type) with TR/PL Registers.**
 Quantity **1 each**
 Unit Price **6,450.00**
 Make and Model **Elster AMCO F4000**
 Delivery Location **City of Fort Lauderdale**
Public Works Administration Building
 949 NW 38th Street
 Ft. Lauderdale FL 33309
Qty 1

Description

See attached Bid Specifications.

Item **413-10569-4-04 - Group IV: Fire Service Water Meter Assemblies, 10"**
 Lot Description **Fire Service Water Meter Assemblies (Compact Fireline Type) with TR/PL Registers.**
 Quantity **1 each**
 Unit Price **7,850.00**
 Make and Model **Elster AMCO F4000**
 Delivery Location **City of Fort Lauderdale**
Public Works Administration Building

ALTERNATE BID

Lot Description **4" Fire Service Water Meter Assemblies (Compact Fireline Type) with TR/PL Registers.**
 Quantity **1 each**
 Unit Price **1,997.78**
 Make and Model **evoQ4 FSM**
 Delivery Location **City of Fort Lauderdale**
 Public Works Administration Building
 949 NW 38th Street
 Ft. Lauderdale FL 33309
 Qty 1

Description
 See attached Bid Specifications

Item **413-10569-4-02 - Group IV: Fire Service Water Meter Assemblies, 6"**
 Lot Description **Fire Service Water Meter Assemblies (Compact Fireline Type) with TR/PL Registers.**
 Quantity **8 each**
 Unit Price **3,377.65**
 Make and Model **evoQ4 FSM**
 Delivery Location **City of Fort Lauderdale**
 Public Works Administration Building
 949 NW 38th Street
 Ft. Lauderdale FL 33309
 Qty 8

Description
 See attached Bid Specifications.

Item **413-10569-4-03 - Group IV: Fire Service Water Meter Assemblies, 8"**
 Lot Description **Fire Service Water Meter Assemblies (Compact Fireline Type) with TR/PL Registers.**
 Quantity **1 each**
 Unit Price **5,564.63**
 Make and Model **evoQ4 FSM**
 Delivery Location **City of Fort Lauderdale**
 Public Works Administration Building
 949 NW 38th Street
 Ft. Lauderdale FL 33309
 Qty 1

Description
 See attached Bid Specifications.

Item **413-10569-4-04 - Group IV: Fire Service Water Meter Assemblies, 10"**
 Lot Description **Fire Service Water Meter Assemblies (Compact Fireline Type) with TR/PL Registers.**
 Quantity **1 each**
 Unit Price **No bid**
 Make and Model
 Delivery Location **City of Fort Lauderdale**
 Public Works Administration Building

NON-COLLUSION STATEMENT:

By signing this offer, the vendor/contractor certifies that this offer is made independently and *free* from collusion. Vendor shall disclose below any City of Fort Lauderdale, FL officer or employee, or any relative of any such officer or employee who is an officer or director of, or has a material interest in, the vendor's business, who is in a position to influence this procurement.

Any City of Fort Lauderdale, FL officer or employee who has any input into the writing of specifications or requirements, solicitation of offers, decision to award, evaluation of offers, or any other activity pertinent to this procurement is presumed, for purposes hereof, to be in a position to influence this procurement.

For purposes hereof, a person has a material interest if they directly or indirectly own more than 5 percent of the total assets or capital stock of any business entity, or if they otherwise stand to personally gain if the contract is awarded to this vendor.

In accordance with City of Fort Lauderdale, FL Policy and Standards Manual, 6.10.8.3,

3.3. City employees may not contract with the City through any corporation or business entity in which they or their immediate family members hold a controlling financial interest (e.g. ownership of five (5) percent or more).

3.4. Immediate family members (spouse, parents and children) are also prohibited from contracting with the City subject to the same general rules.

Failure of a vendor to disclose any relationship described herein shall be reason for debarment in accordance with the provisions of the City Procurement Code.

NAME

RELATIONSHIPS

NONE

In the event the vendor does not indicate any names, the City shall interpret this to mean that the vendor has indicated that no such relationships exist.

#2

October 12, 2010

VARIANCES: State any variations to specifications, terms and conditions in the space provided below or reference in the space provided below all variances contained on other pages of bid, attachments or bid pages. No variations or exceptions by the Proposer will be deemed to be part of the bid submitted unless such variation or exception is listed and contained within the bid documents and referenced in the space provided below. If no statement is contained in the below space, it is hereby implied that your bid/proposal complies with the full scope of this solicitation. HAVE YOU STATED ANY VARIANCES OR EXCEPTIONS BELOW? BIDDER MUST CLICK THE EXCEPTION LINK IF ANY VARIATION OR EXCEPTION IS TAKEN TO THE SPECIFICATIONS, TERMS AND CONDITIONS. If this section does not apply to your bid, simply mark N/A in the section below.

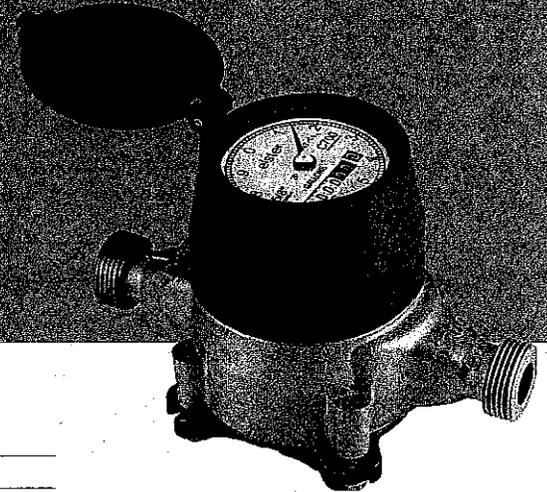
7.09 - Elser/sF4000 Fire service meters and EvoQ4's are FM approved

Variances:
revised 3-23-10

C700 Positive Displacement Meter

*Waterworks or Low-Lead Bronze, Magnetic Drive,
External Threaded Spuds*

Size: 5/8" x 1/2" & 5/8" x 3/4"



Size:	5/8" x 1/2"	5/8" x 3/4"
Performance:		
95%-101% Accuracy GPM	1/8	1/8
97%- 101% Accuracy GPM	1/4	1/4
98.5% -101.5% Accuracy GPM	1-20	1-20
Continuous Flow GPM	15	15
Maximum Flow GPM	20	20
Head Loss at 20 GPM psi	8.5	8.5
Operating Pressure psi	150	150
Operating Temperature °F	120	120

Sweep Hand Registers:

US Gallons	10	10
Cubic Feet	1	1
Cubic Meters (Canada)	1/10	1/10
Cubic Meters (Intl.)	1/100	1/100

Capacity of Register (millions):

US Gallons	10	10
Cubic Feet	1	1
Cubic Meters (Canada)	1/10	1/10
Cubic Meters (Intl.)	1/10	1/10

Register Type: Permanently sealed direct reading

Materials:

Main Case	Standard waterworks or optional low lead Bronze
Bottom Plate Options	Waterworks or low-lead Bronze, Cast Iron or Polymer
Bottom Gasket-Liner	Nitrile
Body Bolts	Stainless Steel
Measuring Chamber	Compounded Polymer
Division Plate	Loaded Nylon
Piston	High Impact Polymer
Thrust Bearing Insert	Loaded Nylon
Driving Bar	Loaded Nylon
Strainer	Polypropylene
Register Can	90% Copper Alloy
Register Lens	Tempered Glass
Register Housing and Lid	Polymer or Bronze

Operation. The C700 is an oscillating piston style, positive displacement water meter. The product utilizes a piston that water use rotates in a measuring chamber, each piston revolution being equivalent to a known volume of water. The piston movement is transferred by a magnetic drive to a straight reading sealed register which contains the appropriate reduction gearing.

Compliance to Standards. The C700 fully complies with American Water Works Association Standard C700, latest revision, and is California Department of Weights and Measures approved. C700 low-lead bronze models are NSF-61 certified and comply with California Proposition 65.

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, vertical or inclined lines.

Application. The meter is for use only with POTABLE COLD WATER up to 120°F (50°C) and

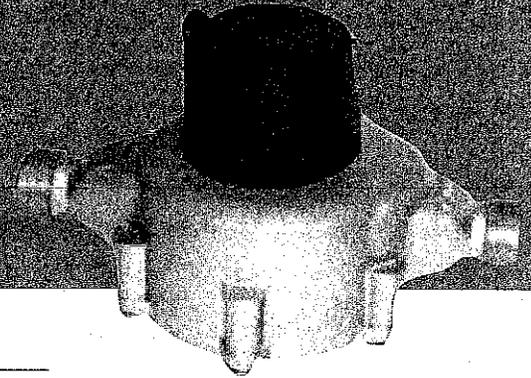


elster

C700 Positive Displacement Meter

*Waterworks or Low-Lead Bronze, Magnetic Drive,
External Threaded Spuds*

Size: 1"



<u>Size:</u>	<u>1"</u>
95%-101% Accuracy GPM	3/4
98.5% -101.5% Accuracy GPM	3-50
Continuous Flow GPM	25
Maximum Flow GPM	50
Operating Pressure psi	150
Operating Temperature °F	120

Sweep Hand Registers:

US Gallons	10
Cubic Feet	1
Cubic Meters (Canada)	1/10
Cubic Meters (Intl.)	1/10

Capacity of Register (millions):

US Gallons (millions)	10
Cubic Feet (millions)	10
Cubic Meters (Canada)	1/10
Cubic Meters (Intl.)	1

Register Type: Permanently sealed direct reading

Materials:

Main Case	Standard waterworks or optional low-lead Bronze
Bottom Plate Options	Waterworks or low-lead Bronze or Cast Iron
Bottom Gasket-Liner	Nitrile
Body Bolts	Stainless Steel
Measuring Chamber	Compounded Polymer
Division Plate	Loaded Nylon
Piston	High Impact Polymer
Thrust Bearing Insert	Loaded Nylon
Driving Bar	Loaded Nylon
Strainer	Polypropylene
Register Can	90% Copper Alloy
Register Lens	Tempered Glass
Register Housing and Lid	Polymer or Bronze

Operation. The C700 is an oscillating piston style, positive displacement water meter. The product utilizes a piston that water use rotates in a measuring chamber, each piston revolution being equivalent to a known volume of water. The piston movement is transferred by a magnetic drive to a straight reading sealed register which contains the appropriate reduction gearing.

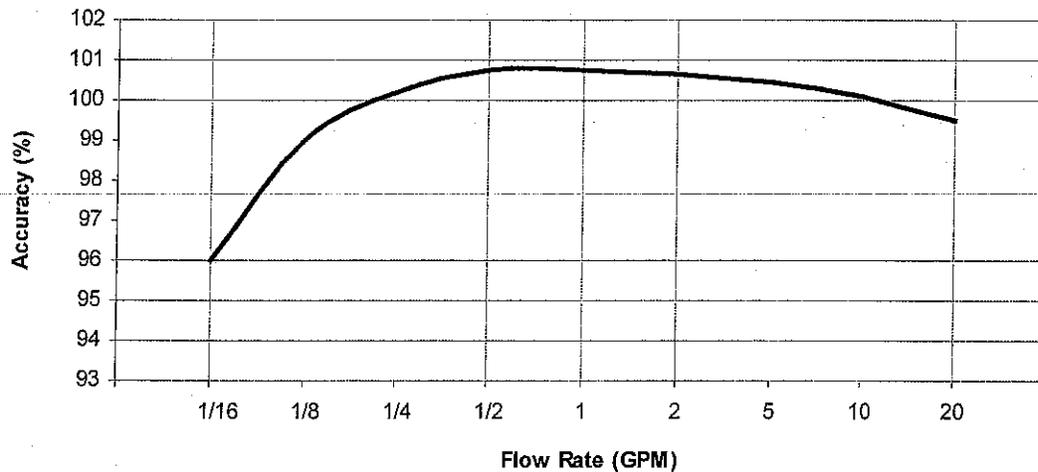
Compliance to Standards. The C700 fully complies with American Water Works Association Standard C700, latest revision, and is California Department of Weights and Measures approved. C700 low-lead bronze models are NSF-61 certified and comply with California Proposition 65.

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, vertical or inclined lines.

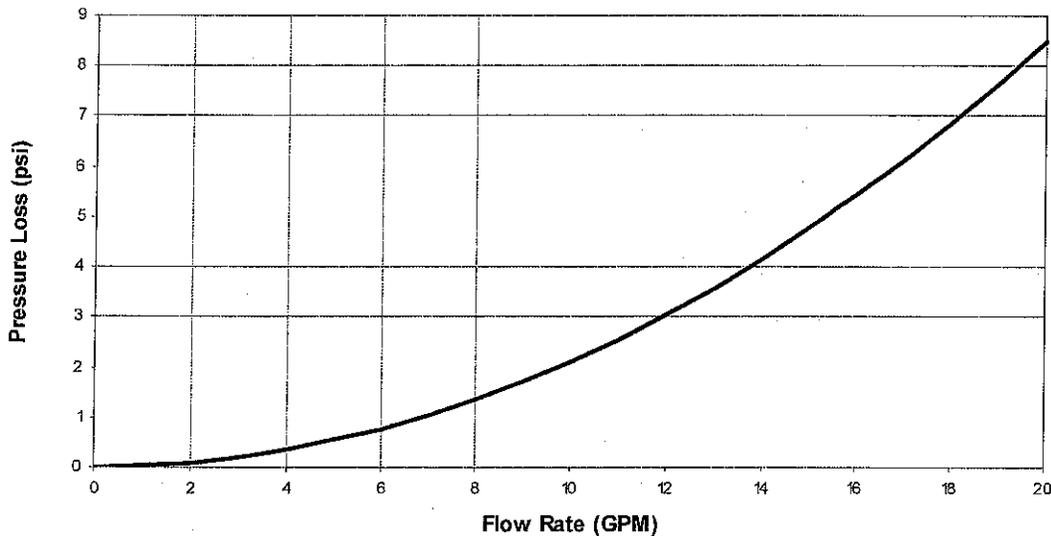
Application. The meter is for use only with POTABLE COLD WATER up to 120°F (50°C) and

C700 Positive Displacement Meters 5/8" x 1/2" and 5/8" x 3/4"

ACCURACY



PRESSURE LOSS



Elster AMCO Water, Inc.
PO Box 1852
Ocala, FL 34478-1852
United States

T +1 800 874 0890
F +1 352 368 1950

watermeters@us.elster.com
www.elster.com

© 2007 by Elster. All rights reserved.

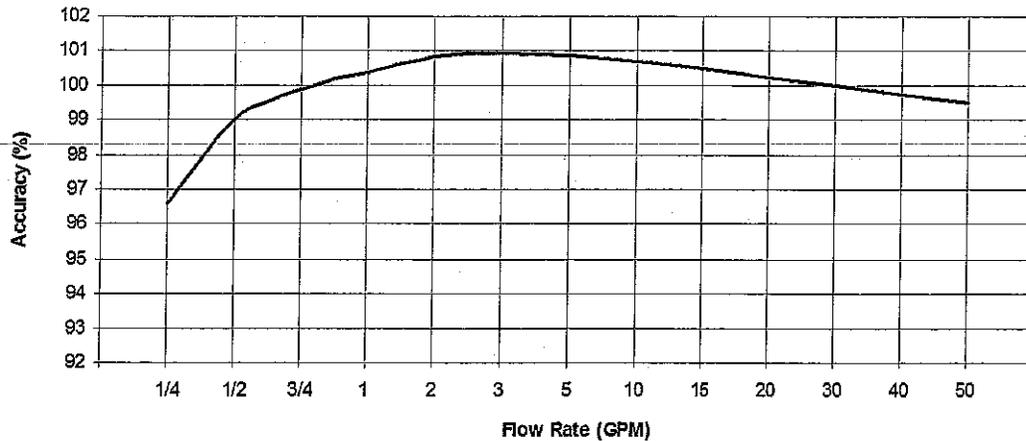
The company's policy is one of continuous product improvement and the right is reserved to modify the specifications contained herein without notice. These products have been manufactured with current technology and in accordance with applicable AWWA Standards.

C7-A-P-58/06-07

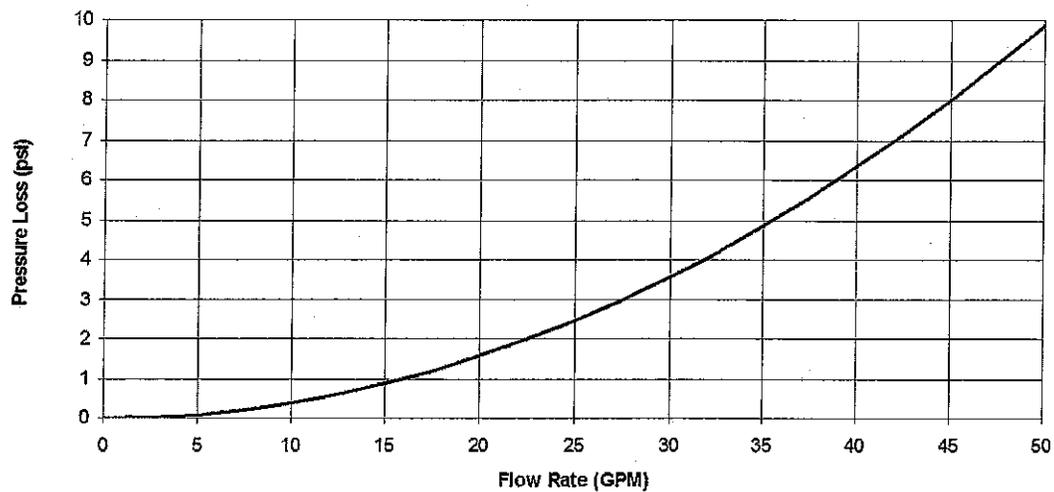


C700 Positive Displacement Meters 1"

ACCURACY



PRESSURE LOSS



Elster AMCO Water, Inc.
PO Box 1852
Ocala, FL 34478-1852
United States

T +1 800 874 0890
F +1 352 368 1950

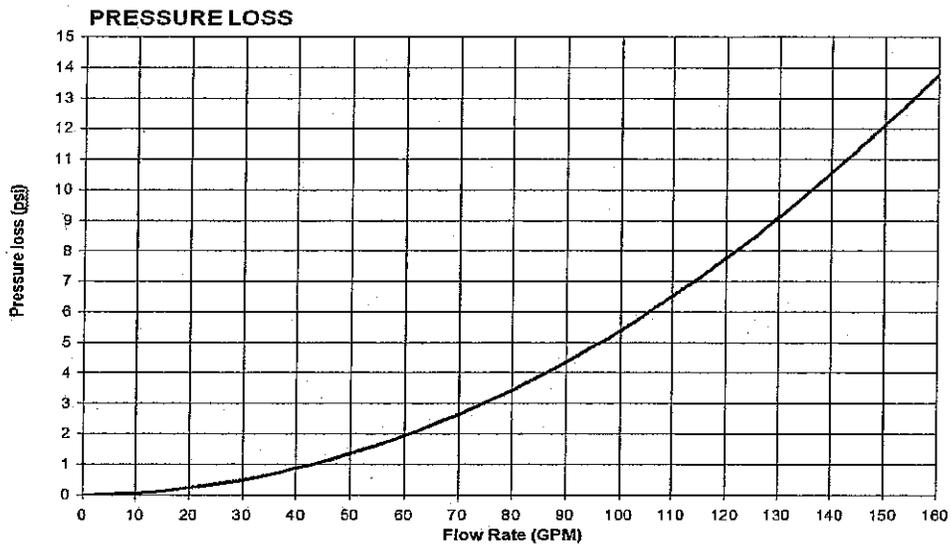
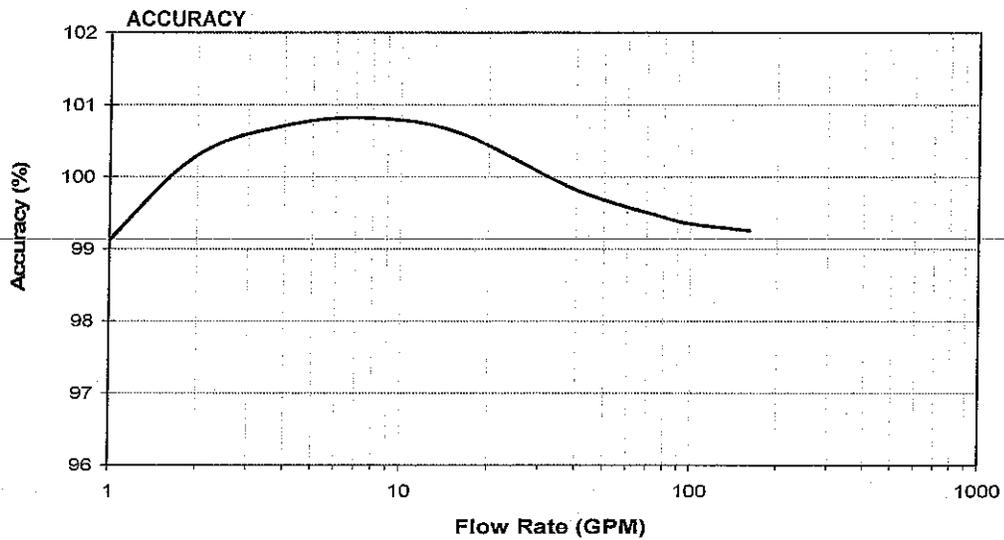
watermeters@us.elster.com
www.elster.com

© 2007 by Elster. All rights reserved.

The company's policy is one of continuous product improvement and the right is reserved to modify the specifications contained herein without notice. These products have been manufactured with current technology and in accordance with applicable AWWA Standards.



C700 Positive Displacement Meters 2"



Elster AMCO Water, Inc.
1100 SW 38th Avenue
Ocala, FL 34474
United States

T +1 800 874 0890
F +1 352 368 1950

watermeters@us.elster.com
www.elsteramcowater.com

© 2009 by Elster. All rights reserved.

The company's policy is one of continuous product improvement and the right is reserved to modify the specifications contained herein without notice. These products have been manufactured with current technology and in accordance with applicable AWWA Standards.

C7-A-P-2/08-09



**C700 Waterworks and Low-lead Bronze
Positive Displacement Cold Water Meters**

5/8", 3/4" and 1"

When ordering parts, please include:

Model: C700

Size:

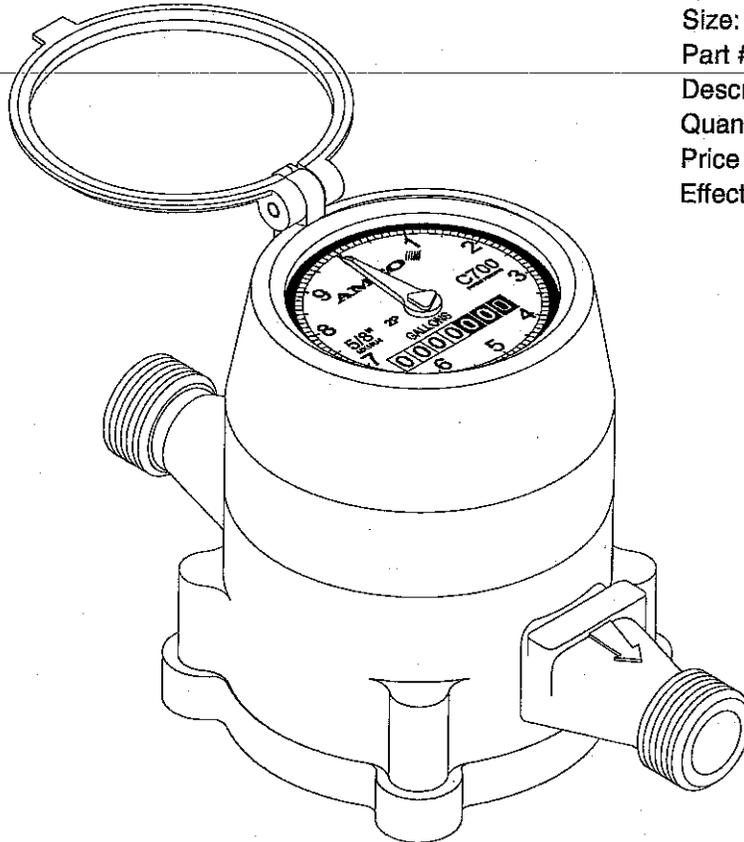
Part #

Description

Quantity of each part

Price of each part

Effective Date: January 15, 2003



AMCO Water Metering Systems Inc.
www.amcowater.com

United States – ISO 9002 Registered
AMCO Water Metering Systems
P.O. Box 1852
Ocala, FL 34478-1852
352-732-4670 FAX 352-368-1950
Outside Florida: 800-874-0890
Inside Florida: 800-356-6829
e-mail: watermeters@amcowater.com

Caribbean
AMCO Water Metering Systems
P.O. Box 225
Carretera 112 KM 2.3
Isabela, PR 00662
787-872-2006
FAX 787-872-5427
e-mail: prwatermeters@amcowater.com

Canada
Elster Water
3450 Harvester Road
Burlington, Ontario L7N 3W5
866-703-7582
905-634-4895
FAX 905-634-6705
e-mail: watermeters@ca.elster.com

Mexico
Elster Medidores
Lago Omega #281
Col. Modelo Pensil.
Del. Miguel Hidalgo
C P 11460
525 55 203 8002
FAX 525 55 203 8270
e-mail: amcowater@prodigy.net.mx

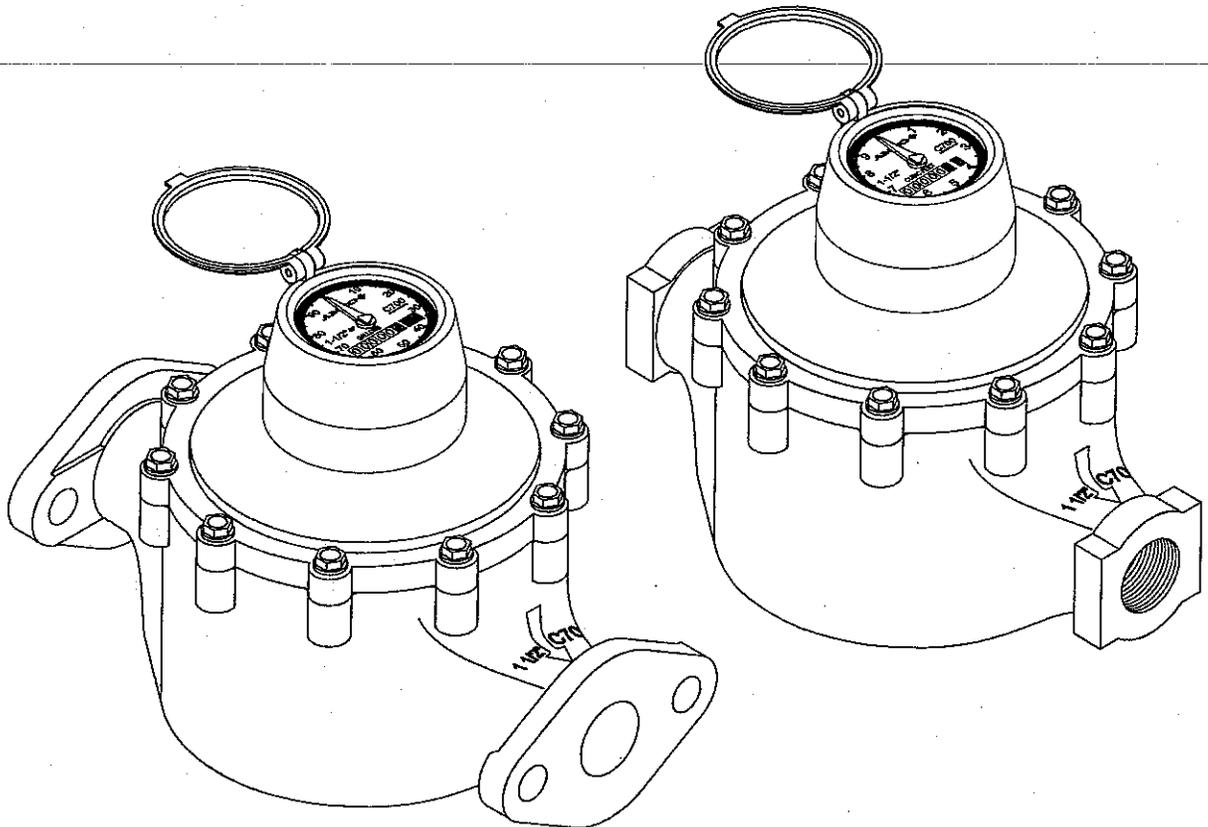
C7-PIP-58341/01-03

Parts/Prices

March 1, 2003

**C700 Waterworks and Low-lead Bronze
Positive Displacement Cold Water Meters**

1 1/2"



When ordering parts, please include:

Model: C700

Size: 1 1/2"

End Type

Part #

Description

Quantity of each part

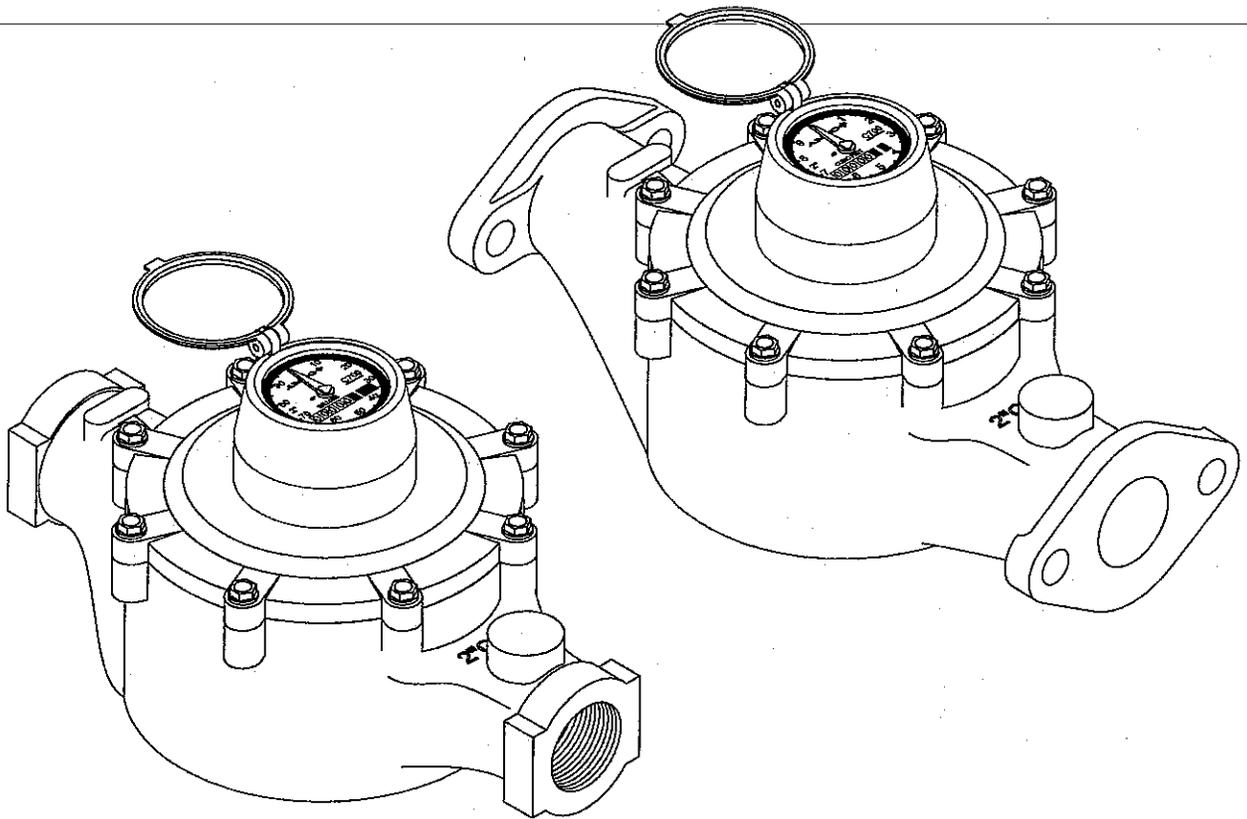
Price of each part

Effective Date: March 1, 2003

AMCO 

**C700 Waterworks and Low-lead Bronze
Positive Displacement Cold Water Meters**

2"



When ordering parts, please include:

Model: C700

Size: 2"

End Type

Part #

Description

Quantity of each part

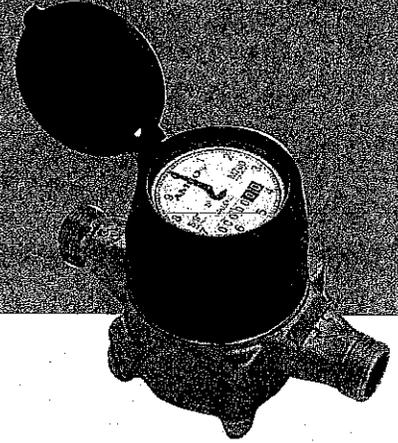
Price of each part

Effective Date: January 15, 2003

M700 Multijet Meter

*Waterworks or Low-Lead Bronze, Magnetic Drive,
External Threaded Spuds*

Size: 5/8" x 1/2" & 5/8" x 3/4"



Size:	5/8" x 1/2"	5/8" x 3/4"
Performance:		
95%-103% Accuracy GPM	1/4	1/4
98.5% -101.5% Accuracy GPM	1-20	1-20
Continuous Flow GPM	10	10
Maximum Flow GPM	20	20
Operating Pressure psi	150	150
Operating Temperature °F	120	120
Sweep Hand Registers:		
US Gallons	10	10
Cubic Feet	1	1
Capacity of Register (millions):		
US Gallons	10	10
Cubic Feet	1	1

Register Type: Permanently sealed direct reading

Materials:

Main Case	Standard waterworks or optional low lead Bronze
Bottom Plate Options	Waterworks or low-lead Bronze, Cast Iron or Polymer
Bottom Gasket-Liner	Nitrile
Body Bolts	Stainless Steel
Measuring Chamber	Polystyrene
Pivot	Stainless steel and tungsten carbide tip
Rotor	Loaded Nylon
Lower Bearing	Sapphire
Upper Bearing	Loaded Nylon
Hydraulic Cage	Polyphenylene Oxide
Finger Strainer	Polyethylene
Damping Plate	Polystyrene
Inner Sealings	EPDM
Upper Bearing Pin	Stainless Steel
Register Can	90% Copper Alloy
Register Lens	Tempered Glass
Register Housing and Lid	Polymer

Operation. The M700 is a dry top multijet water meter. The product utilizes a rotor that water use rotates in a measuring chamber. The rotor speed is transferred by a magnetic drive to a straight reading sealed register which contains the appropriate reduction gearing. The rotor speed can be calibrated by a bypass stream.

Compliance to Standards. The M700 fully complies with American Water Works Association Standard C708, latest revision.

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 must be installed in horizontal lines.

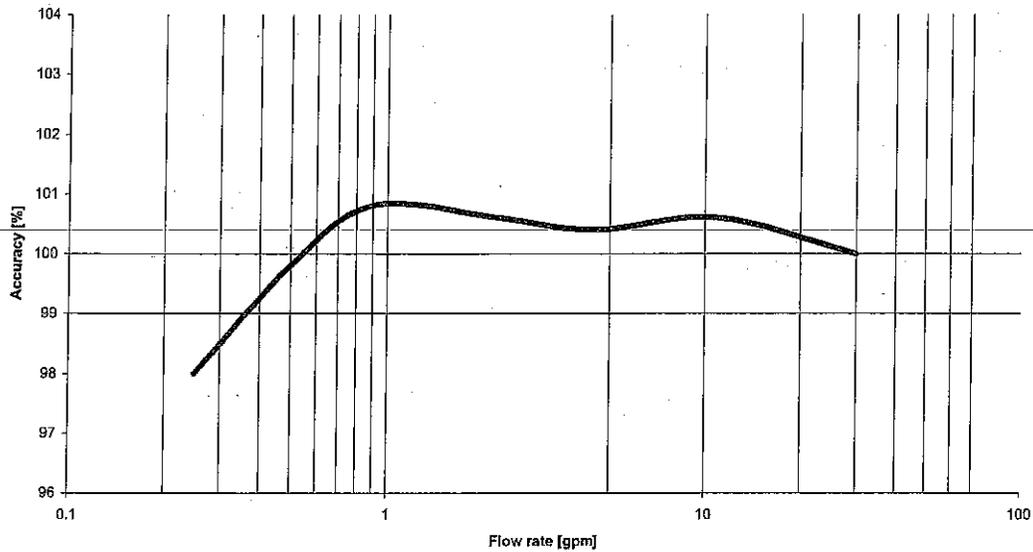
Application. The meter is for use only with POTABLE COLD WATER up to 120°F (50°C) and working pressures up to 150 psi. The meter will register between 98.5% and 101.5% at normal and high flows and between 97% and 103% at the AWWA specified low flow. Accuracy tests are made before shipment, so no adjustments need to be made before installation.



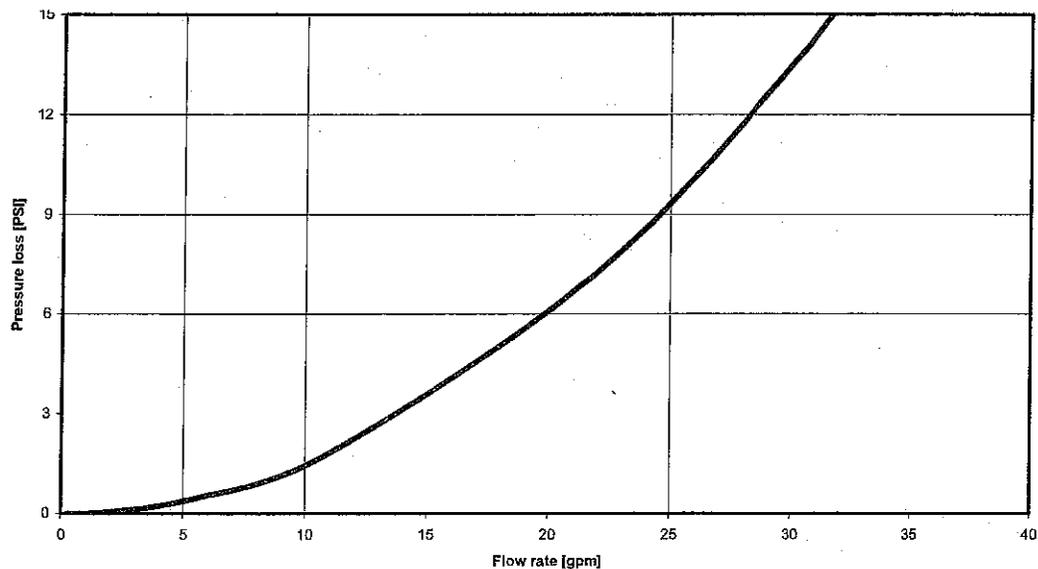
elster

M700 Multijet Meters 3/4" x 3/4" and 3/4" x 1"

Accuracy



Pressure Loss



Elster AMCO Water, Inc.
PO Box 1852
Ocala, FL 34478-1852
United States

T +1 800 874 0890

F +1 352 368 1950

watermeters@us.elster.com

www.elster.com

© 2007 by Elster. All rights reserved.

The company's policy is one of continuous product improvement and the right is reserved to modify the specifications contained herein without notice. These products have been manufactured with current technology and in accordance with applicable AWWA Standards.

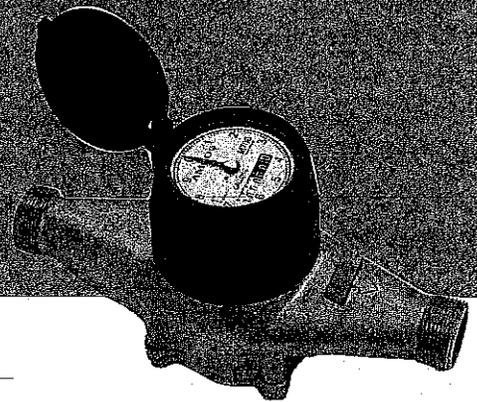
M700-A-P-34/09-07



M700 Multijet Meter

*Waterworks or Low-Lead Bronze, Magnetic Drive,
External Threaded Spuds*

Size: 1"



<u>Size:</u>	<u>1"</u>
97%-103% Accuracy GPM	3/4
98.5% -101.5% Accuracy GPM	3-50
Continuous Flow GPM	25
Maximum Flow GPM	50
Operating Pressure psi	150
Operating Temperature °F	120

Sweep Hand Registers:

US Gallons	10
Cubic Feet	1

Capacity of Register (millions):

US Gallons (millions)	10
Cubic Feet (millions)	10

Register Type: Permanently sealed direct reading

Materials:

Main Case	Standard waterworks or optional low lead Bronze
Bottom Plate Options	Waterworks or low-lead Bronze, Cast Iron or Polymer
Bottom Gasket-Liner	Nitrile
Body Bolts	Stainless Steel
Measuring Chamber	Polyphenylene Oxide
Pivot	Stainless steel
Rotor	Loaded Nylon
Lower Bearing	Loaded Nylon
Upper Bearing Bush	Loaded Nylon
Hydraulic Cage	Polyphenylene Oxide
Finger Strainer	Polyethylene
Damping Plate	Polystyrene
Inner Sealings	EPDM
Upper Bearing Pin	Stainless Steel
Register Can	90% Copper Alloy
Register Lens	Tempered Glass
Register Housing and Lid	Polymer

Operation. The M700 is a dry top multijet water meter. The product utilizes a rotor that water use rotates in a measuring chamber. The rotor speed is transferred by a magnetic drive to a straight reading sealed register which contains the appropriate reduction gearing. The rotor speed can be calibrated by a bypass stream.

Compliance to Standards. The M700 fully complies with American Water Works Association Standard C708, latest revision.

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 must be installed in horizontal lines.

Application. The meter is for use only with POTABLE COLD WATER up to 120°F (50°C) and working pressures up to 150 psi. The meter will register between 98.5% and 101.5% at normal and high flows and between 97% and 103% at the AWWA specified low flow. Accuracy tests are made before shipment, so no adjustments need to be made before installation.

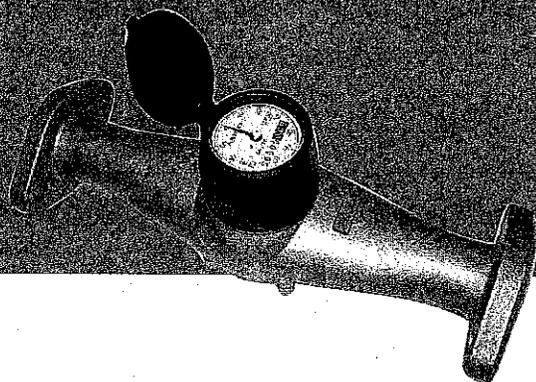


elster

M700 Multijet Meter

*Waterworks or Low-lead Bronze, Magnetic Drive,
Flanged or NPT Ends*

Sizes 1 1/2" and 2"



Sizes:	1 1/2"	2"
Accuracy (GPM):		
95% - 101%	1 1/2	2
98.5%-101.5%	5-100	8-160
Continuous Flow GPM	50	80
Maximum Flow GPM	100	160
Operating Pressure psi	150	150
Operating Temperature °F	120	120

Sweep Hand Registers:

US Gallons	100	100
Cubic Feet	10	10
Cubic Meters (Canada)	1/10	1
Cubic Meters (Intl.)	1/10	1/10

Capacity of Register (millions):

US Gallons	100	100
Cubic Feet	10	10
Cubic Meters (Canada)	1/10	1
Cubic Meters (Intl.)	1	1

Register Type: Permanently sealed direct reading

Materials:

Main Case	Standard waterworks or optional low-lead Bronze
Top Cover	Standard waterworks or optional low-lead Bronze
Body O-ring	Neoprene Rubber
Body Bolts	Stainless Steel
Measuring Chamber	Thermoplastic
Division Plate	Loaded Nylon
Piston	High Impact Polymer
Thrust Bearing Insert	Loaded Nylon
Driving Bar	Glass Bead Loaded Nylon
1 1/2" Strainer	Polypropylene
2" Strainer	Stainless Steel
Register Can	90% Copper Alloy
Register Lens	Tempered Glass
Register Housing and Lid	Polymer or Bronze
Test Plugs	1" NPT test plug

Operation. The M700 is a dry top multijet water meter. The product utilizes a rotor that water use rotates in a measuring chamber. The rotor speed is transferred by a magnetic drive to a straight reading sealed register which contains the appropriate reduction gearing. The rotor speed can be calibrated by a bypass stream.

Compliance to Standards. The M700 fully complies with American Water Works Association Standard C708, latest revision.

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 must be installed in horizontal lines.

Application. The meter is for use only with POTABLE COLD WATER up to 120°F (50°C) and working pressures up to 150 psi. The meter will register between 98.5% and 101.5% at normal and high flows and between 97% and 103% at the AWWA specified low flow. Accuracy tests are made before shipment, so no adjustments need to be made before installation.



elster

PARTS/PRICES

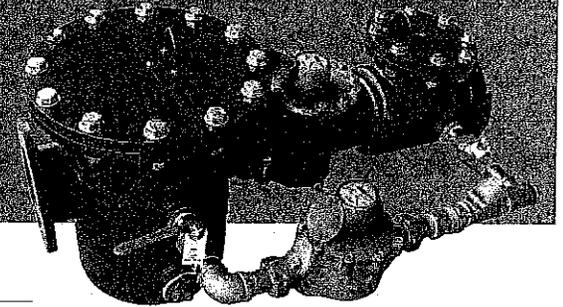
M700 WATERWORKS AND LOW LEAD BRONZE
MULTI-JET COLD WATER METERS

ILL. NO.	DESCRIPTION	5/8"x1/2"	5/8"x3/4"	3/4"	1"	1.5"	2"
	Hydraulic element and o-ring set	\$15.00	\$15.00	\$38.00	\$62.00	\$107.00	\$160.00
	Bottom liner	\$1.30	\$1.30	\$1.30	\$1.30	\$1.30	\$1.30
	Calibration screw	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50
	Cage	\$3.50	\$3.50	\$3.50	\$3.70	\$4.00	\$5.00
	Filter	\$1.80	\$2.00	\$2.30	\$2.60	\$2.80	\$3.20
	Mag shield	\$0.95	\$0.95	\$0.95	\$0.95	\$0.95	\$0.95
	Bolts (Full set with O-ring seal))	\$2.80	\$2.80	\$2.80	\$2.80	\$2.80	\$2.80
	Adapter Ring and retaining plug	\$2.30	\$2.30	\$2.30	\$2.30	\$2.30	\$2.30
	Direct Read Register Housing (Polymer)	\$3.10	\$3.10	\$3.10	\$3.10	\$3.10	\$3.10
	Tamper Resistant Plug	\$0.30	\$0.30	\$0.30	\$0.30	\$0.30	\$0.30
	Direct Read lid	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00
	Hinge Pin	\$0.10	\$0.10	\$0.10	\$0.10	\$0.10	\$0.10
	Direct Read Register	\$17.00	\$17.00	\$17.00	\$17.00	\$17.00	\$17.00

F4000 Fire Service Meters

High Velocity, Horizontal,
Magnetic Drive, Round Flanged Ends

Sizes 4", 6", 8", 10" & 12"



<u>Sizes:</u>	4"	6"	8"	10"	12"
Low Flow GPM	1/2	3/4	1 1/2	1 1/2	1 1/2
Normal Flow GPM	3/4-1200	1 1/2-2500	2-4000	2-6500	2-6500
Maximum Peak Flow GPM	1500	3100	5000	8000	8000

<u>Sweep Hand Registers:</u>	<u>Bypass/Main</u>				
US Gallons	10/100	100/1000	100/1000	100/1000	100/1000
Cubic Feet	1/10	10/100	10/100	10/100	10/100
Cubic Meters	0.1/10	0.1/10	1/10	1/10	1/10

<u>Capacity of Register:</u>	<u>Bypass/Main</u>				
US Gallons (millions)	10/100	100/1000	100/1000	100/1000	100/10000
Cubic Feet (millions)	1/10	10/100	10/100	10/100	10/1000
Cubic Meters (millions)	0.1/10	0.1/10	0.1/100	0.1/10	0.1/10

Register Type: Permanently sealed direct reading register

Materials:

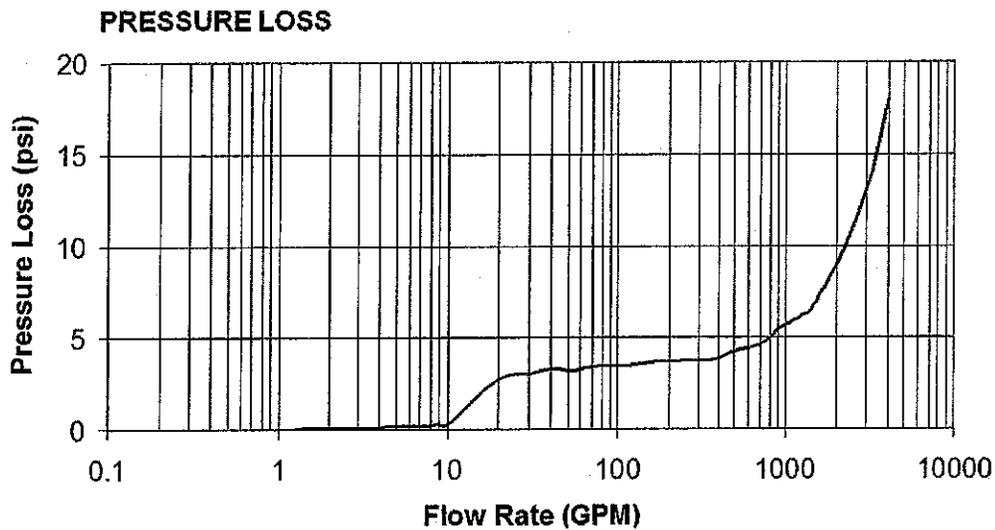
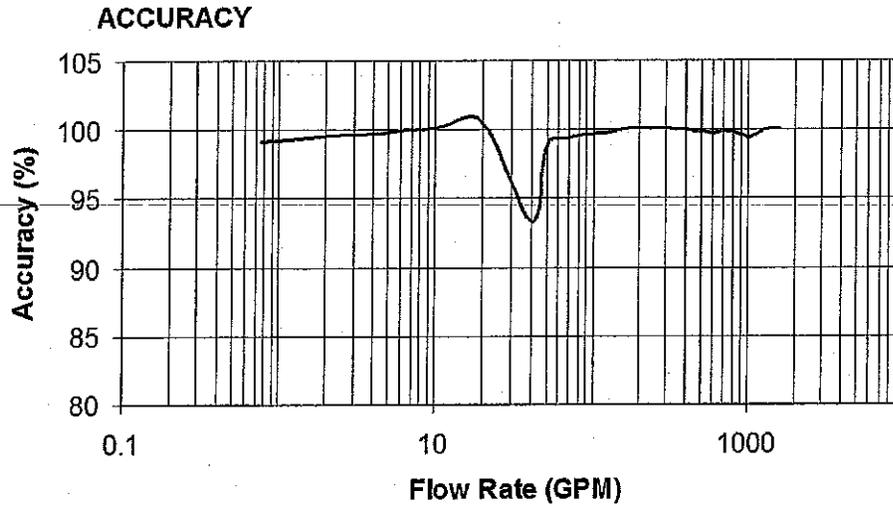
Turbine Main Case	Stainless Steel Epoxy Coated
Top Cover Plate	304 Stainless Steel
Measuring Chamber Housing	Glass-filled Noryl
Rotor	Polypropylene
Rotor Radial Bearings	Synthetic Sapphire
Rotor Thrust Bearings	Carbide
Rotor Spindle	Stainless Steel
Chamber Shafts and Screws	Stainless Steel
<u>Up-shaft Assembly:</u>	
Magnet	Cobalt
Gear	PPS
Magnet Holder	Noryl
Upshaft	Stainless Steel
Bearings	Lubricated Nylon
O-rings	EPDM
Register Gearing	Acetal Copolymer & Nylon
Register Cover & Housing	Brass
Register Lid	Brass
<u>Changeover Valve Assembly:</u>	
Clapper	Stainless Steel
Seat	Bronze
Seal	Vulcanized EPDM
Body	Fusion Bonded Epoxy Coated Stainless Steel
Strainer Body & Top Cover	Fusion Bonded Epoxy Coated Carbon Steel
Strainer Screen	Stainless Steel
Bypass Ball Valves	Bronze
Plugs	Bronze

Description. The F4000 incorporates Elster AMCO Water's T4000 turbine element within an assembly featuring a high performance check valve, a FM approved fire service strainer and a proven Elster AMCO Water C700 bypass meter. For convenient maintenance both the T4000 turbine element and the C700 bypass can be replaced without removing the meter from the line. Additionally, the check valve can be checked for proper maintenance without removing the meter from the meter setting.

Operation. The F4000 Fire Service Assembly is designed for use where water both for fire protection and domestic needs are combined into a single service. It is designed to measure flows ranging from very low to very high. Water passes through the strainer and meter without a change in flow direction at high flows, driving a helix rotor in direct proportion to the quantity of water passing through the meter. Rotor revolutions are transferred to a sealed register by appropriate reduction gearing and a magnetic drive. Low flows are diverted through the positive displacement meter on the bypass line.



F4000 Fire Service Meters 6"



Elster AMCO Water, Inc.
PO Box 1852
Ocala, FL 34478-1852
United States

T +1 800 874 0890
F +1 352 368 1950

watermeters@us.elster.com
www.elster.com

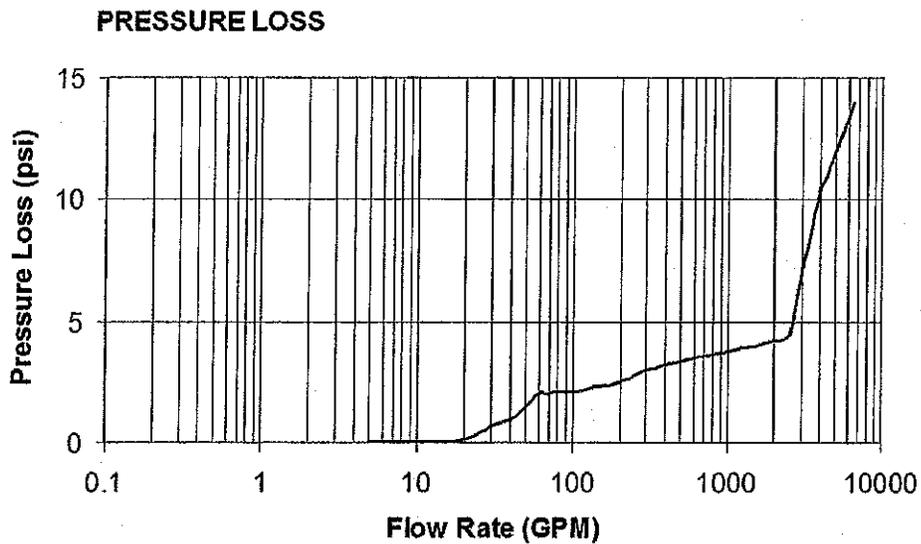
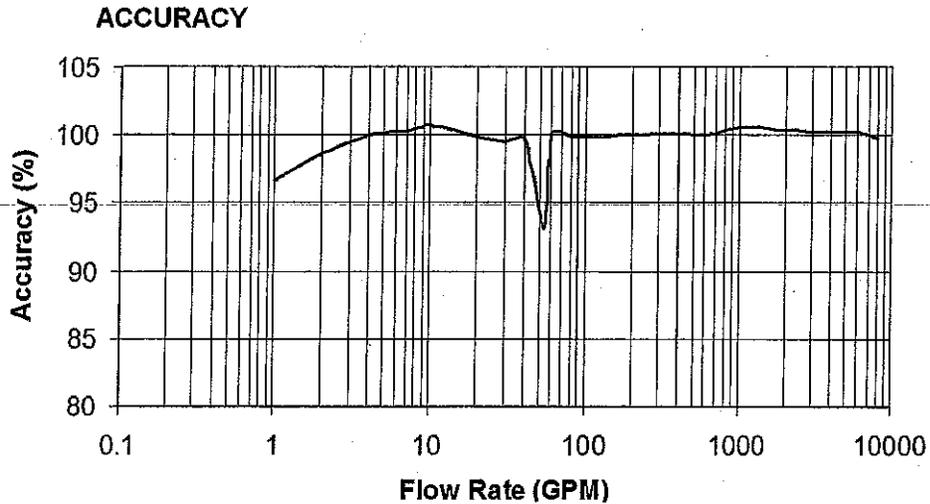
© 2007 by Elster. All rights reserved.

The company's policy is one of continuous product improvement and the right is reserved to modify the specifications contained herein without notice. These products have been manufactured with current technology and in accordance with applicable AWWA Standards.

F4000-AP-6/06-07



F4000 Fire Service Meters 10" and 12"



Elster AMCO Water, Inc.
PO Box 1852
Ocala, FL 34478-1852
United States

T +1 800 874 0890
F +1 352 368 1950

watermeters@us.elster.com
www.elster.com

© 2007 by Elster. All rights reserved.

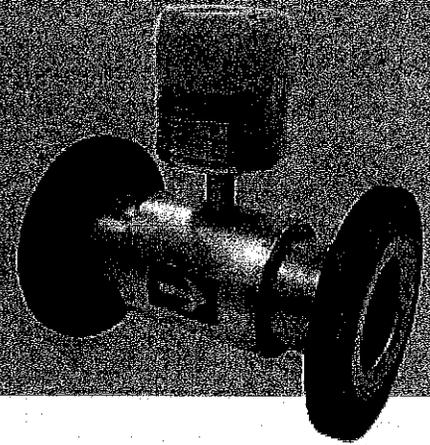
The company's policy is one of continuous product improvement and the right is reserved to modify the specifications contained herein without notice. These products have been manufactured with current technology and in accordance with applicable AWWA Standards.

F4000-AP-10/06-07



evoQ₄™ Electromagnetic Meter

Sizes 2" to 8"



	Size	2"	3"	4"	6"	8"
Performance						
Low flow GPM > 95%		0.25	0.6	1.7	4	8
Normal flow GPM ± 1.5%		1	2	4	8	16
Max. continuous flow GPM ± 1.5%		176	440	700	1100	2770
Max. flow GPM ± 1.5%		220	550	880	1400	3500
Max. operating pressure psi		230	230	230	230	230

Operation

The evoQ₄ is a battery powered electromagnetic water meter that is suitable for a wide range of metering applications. Using Faraday's law of electromagnetic induction, two magnets provide a magnetic field within the pipe that measures the flow of the conductive water. The meter does not contain any moving parts so regular maintenance is not required. The meter is designed for 10 years of continuous operation with no battery changes necessary. With the sampling rate of 0.5 sec, the evoQ₄ has excellent accuracy over a wide flow range.

The evoQ₄ is a single meter that meets the needs of traditional turbine, compound, single jet and magnetic meters.

Materials

Body	Stainless steel grade 304
Flow tube	Stainless steel grade 316
Liner	Polyethylene epoxy
Electrodes	Stainless steel grade 316
Flanges	Epoxy-coated cast iron
Register	Stainless steel with glass cover
Register housing/lid	UV-resistant plastic
Environmental class	IP68 hermitically sealed unit Waterproof to 30 ft depth

Application

The meter is for use only with potable cold water up to 120°F. The meter will typically register at +/-0.75% accuracy at normal and high flows and better than 95% accuracy at low flows. Accuracy tests are made before shipment, so no adjustments need to be made before installation.

Features

- 10 year continuous life
- No moving parts
- 0.5 second sampling rate
- Wide measuring range
- Simple installation
- Pulse or encoder connectivity
- AWWA lay lengths
- IP68 sealed
- NSF61 Annex G listed

Benefits

- No need for costly and time-consuming battery replacements
- Maintenance free
- Highest accuracy
- Suitable for all commercial applications
- No additional training required, no programming
- Pre-equipped or retro-fitted for your AMR and telemetry needs
- Simple change out
- Provides long, trouble-free life
- Zero lead contaminants

Pulse or encoder output

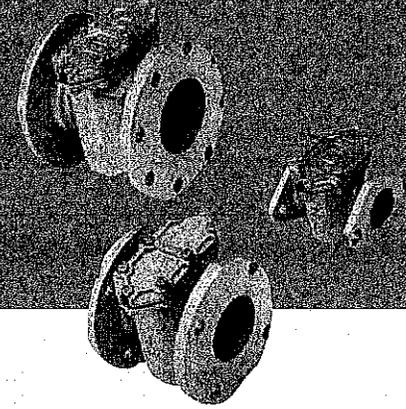
The meter can be fitted with a pulse output device that can be attached to a radio transceiver module or a data logger. The pulse output can be programmed in the factory to meet the needs of the utility. For utilities preferring encoded output technologies, an encoder module is available for interface with AMR systems.



elster

Z-Plate Strainers Bronze and Galvanized Plate Steel, Oval and Round Flanged Ends

Sizes 1 1/2" - 12"



Size:	1 1/2"-2"	3"	4-8"	10-12"
No. of Flange Bolt Holes	2	4	8	12
No. of Top Plate Bolts	6	8	8*	20*
Optional Drain Plug Inches	1/2	3/4	3/4	1
Operating Pressure psi	150	150	150	150
Operating Temperature °F	120	120	120	120
	* 6"=10,	8"=18,	12"=24	

Strainer Type: Z-Plate with top plate flushing feature

Strainer Performance: Protects turbine and compound meters from debris and cancels effects of velocity distortion

Removable Drain Plug: For sizes: 1 1/2" - 6" only

Materials:

1 1/2"-6" Main Case	Bronze
1 1/2"-6" Top Plate	Bronze
8"-12" Main Case	Coated Galvanized Plate Steel
8"-12" Top Plate	Coated Galvanized Plate Steel
Strainer Plate	304 Stainless Steel
Top Plate Gasket	Rubber
Top Plate Bolts	Stainless Steel

Elster AMCO Water Strainer/Meter Laying Lengths (Inches)

Size	T3000 Turbine			C3000 Compound		
	Meter	Strainer	Total	Meter	Strainer	Total
1 1/2"	10	5	15	-	-	-
2"	10	7	17	17	7	24
3"	12	6	18	17	6	23
4"	14	7 1/2	21 1/2	20	7 1/2	27 1/2
6"	18	9	27	24	9	33
8"	20	9	29	34	9	43
10"	17 3/4	10	27 3/4	-	-	-
12"	19 3/4	12	31 3/4	-	-	-

Operation. The strainer is a vertical Z-plate design to protect cold water meters from the damaging effects of debris and foreign matter. The strainer improves the velocity profile of the water being metered and minimizes the effects of velocity distortion caused by upstream valves and fittings. Consequently, the meter's accuracy is maximized by the elimination of debris and turbulence.

Compliance to Standards. The Z-plate strainer complies with all material and design requirements of the American Water Works Association Standards C701 and C702 as most recently revised.

Installation. The strainer should be installed immediately upstream from the meter it is protecting. It is preferable that the strainer be installed with the removable top plate vertically accessible for underpressure flushing and maintenance.

Application. The strainer is recommended for use with the Elster AMCO Water T3000 and C3000 meters. Its application ahead of these meters will maximize revenue and extend the