

R/12/11/6/86  
102

Carter

**CONTRACTOR'S SUBMITTAL TRANSMITTAL**  
LANTDIV NORFOLK 4-4355/3 (Rev. 11-80)

CONTRACT NO. 62470-85-C-3142      TRANSMITTAL NO. 10      DATE 12-18-87

FROM CONTRACTOR  
TESTIMONIA COMPANY  
P.O. Box 1167, JACKSONVILLE, N.C. 28540  
TO  
J.N. Phase Associates  
P.O. Box 18775, Charlotte, N.C. 28235

PROJECT TITLE AND LOCATION  
Bachelor Listedarters P-721-  
I.C.P.  
Camp Lejeune, N.C. 28542

**CONTRACTOR USE ONLY**

**REVIEWER USE ONLY**

\*List only one specification division per form.

List only one of the following categories on each transmittal form, and indicate which is being submitted

**\*\*ACTION CODES**  
A-Approved  
D-Disapproved  
AN-Approved as noted  
RA-Receipt acknowledged.  
C-Comments  
R-Resubmit

Contractor Approved

OICC Approval

Deviation/Substitution  
For OICC Approval

ITEM NO.	PROJ. SPEC. SECT. & PARA. and/or PROJ. DWG. NO. *	ITEM IDENTIFICATION (Type, size, model no., Mfg. name, dwg. or brochure number)	NO. OF COPIES	ACTION CODES **	REVIEWER'S INITIALS CODE AND DATE
	22713	EXTERIOR WATER DISTRIBUTION SYSTEM			
10a	2.3.5	Water Meters	4	A	12-18-87

CONTRACTOR'S COMMENTS

COPY OF TRANSMITTAL AND SUBMITTALS TO ROICC

CONTRACTOR REPRESENTATIVE (Signature)

DATE RECEIVED BY REVIEWER.

FROM (Reviewer)

TO

DEC 25 11 07

J.N. PHASE ASSOC.

ROICC CAMP LEJUNE

Submittals are returned with action indicated. Approval of an item does not include approval of any deviation from the contract requirements unless the contractor calls attention to and supports the deviation.

Submittals are forwarded to LANTDIV with A-E recommendations indicated in REVIEWER USE ONLY Section and in comments below on ONE COPY of the transmittal form.

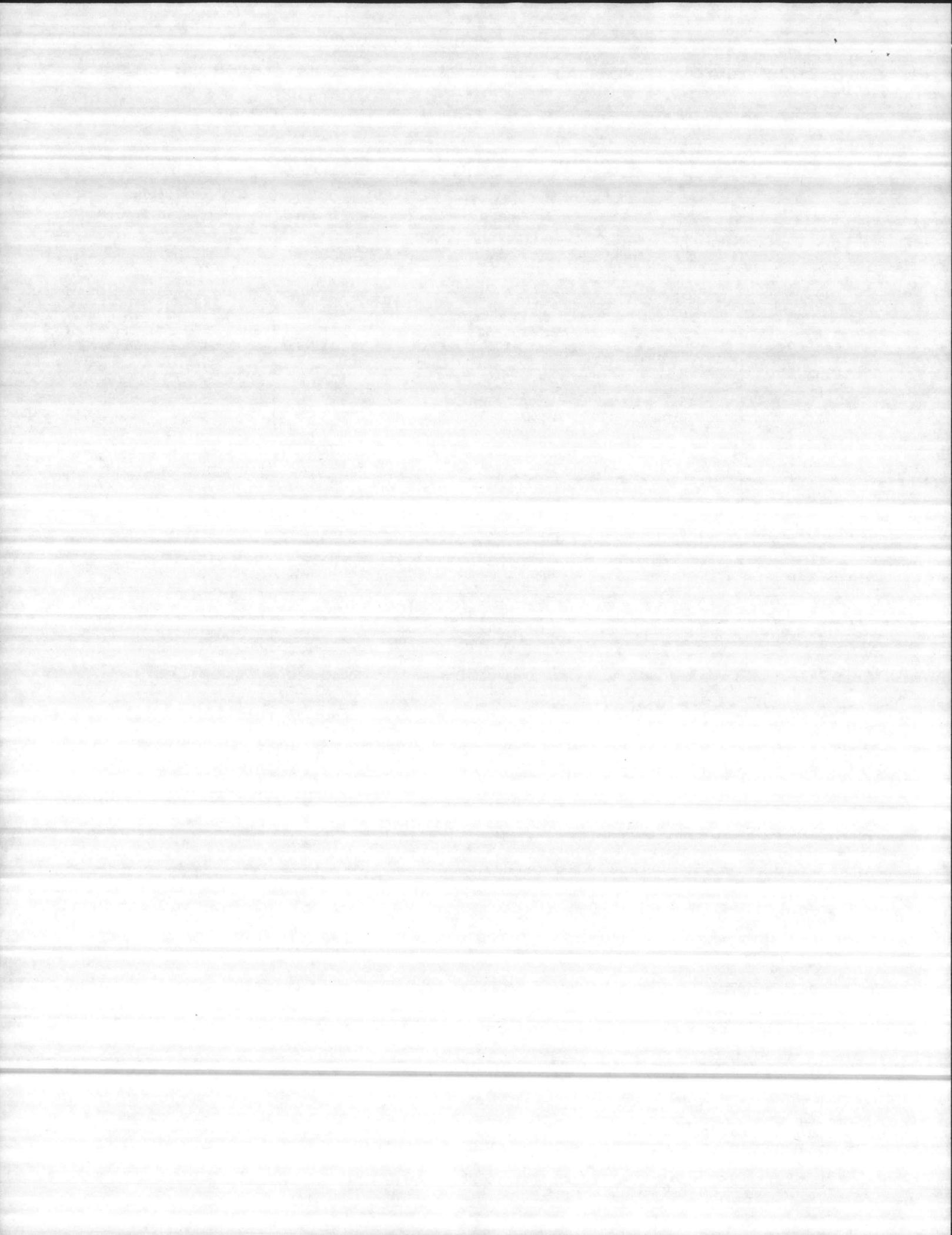
REVIEWER'S COMMENTS

MINOR CORRECTIONS WERE MADE TO THE SUBMITTAL. IT IS REQUESTED TO UPDATE ALL COPIES OF THIS SUBMITTAL. SEE ATTACHED CORRECTIONS FOR DETAILS.

COPIES TO  
ROICC (2)  
LANTDIV (1)  
A-E (1)

DATE

SIGNATURE





PRODUCTS INC. Water Meter & Controls Group  
2131 Kingston Ct., S.E., Suite 102, Marietta, Ga. 30067 U.S.A. (404) 952-4424

November 2, 1987

METER SHALL REGISTER  
IN U.S. GALLONS.

Mr. Wilbert Jacobs  
Jacobs Builders Inc.  
P. O. Box 1399  
Jacksonville, N. C. 28541

BSJ/JWPA

Dear Mr. Jacobs:

This letter is to certify that the Hersey Model MVR-160 Turbine meter meets or exceeds American Water Works Association Standard C-701, Class 1.

We trust this is the information you require.

Very truly yours,

HERSEY PRODUCTS INC.

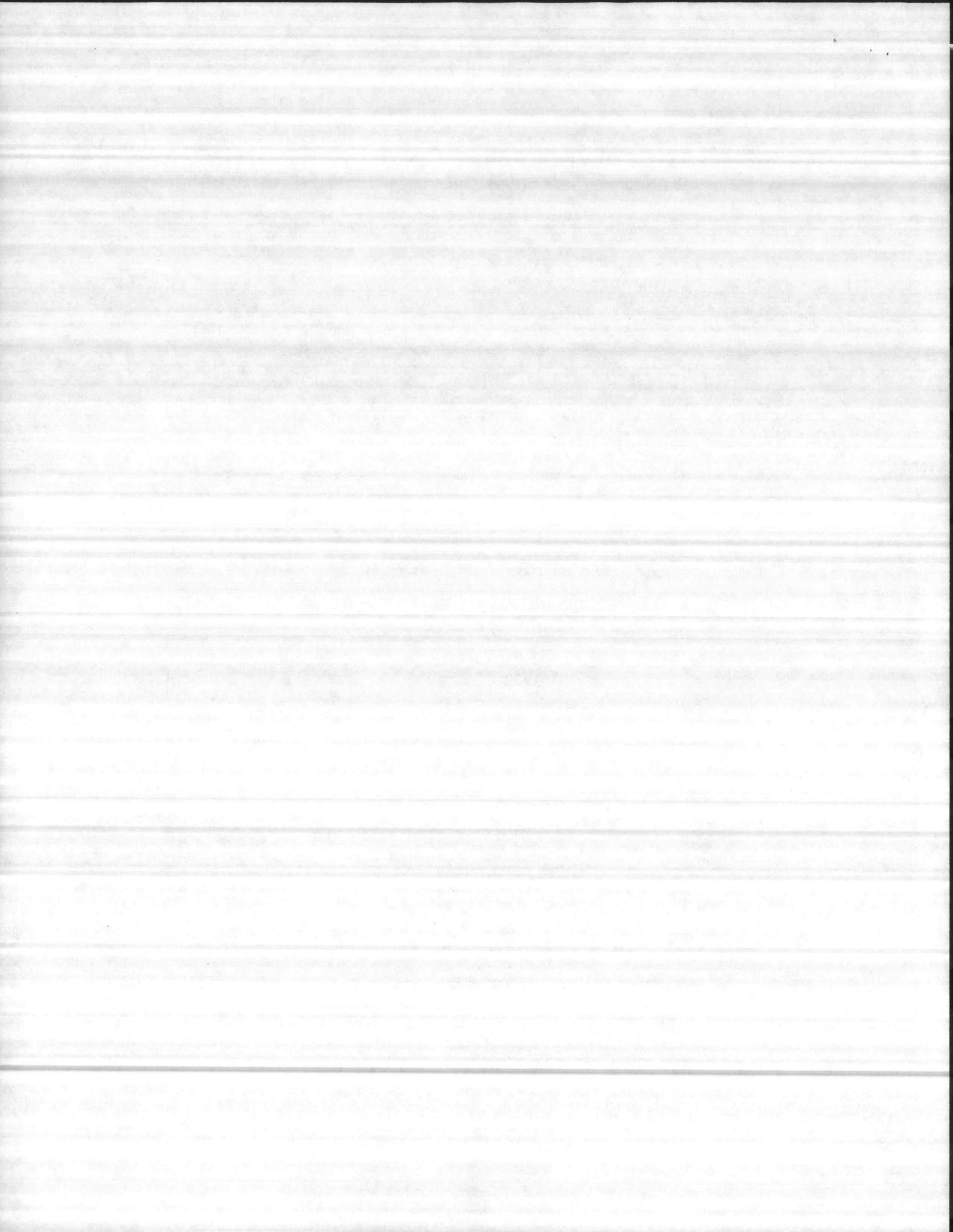
*Beckye Mosely*  
Beckye Mosely  
Customer Service Manager

rlm

"It is hereby certified that the (material) (equipment) shown and marked in this submittal, shop drawings, catalog cut(s), etc., and approved/proposed to be incorporated into Contract Number 85-C-5142, is in compliance with the contract drawings and specifications, and can be installed in the allocated space, and is  approved for use \_\_\_\_\_ submitted for Government approval. \_\_\_\_\_ approved for use subject to Government approval of specific deviation."

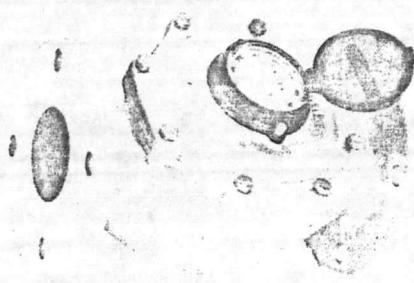
Authorized Reviewer *Eric Hendry* Date 12-17-87

Signature CQC Rep *Judy Mayan* Date 12-17-87

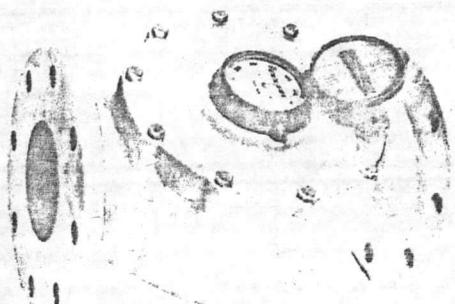


# HERSEY

# PRODUCTS INC.



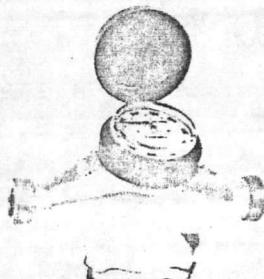
MVR-350 3"



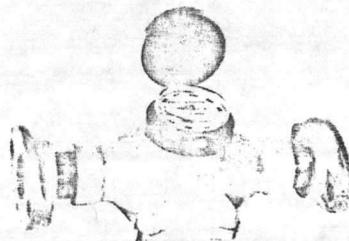
MVR-650 4"



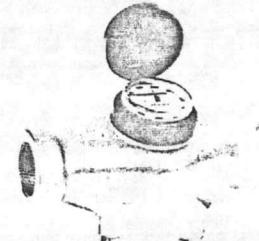
MVR-30 3/4"



MVR-50 1"



MVR-100 1 1/2"



MVR-160 2"

## DESCRIPTION

The Hersey Model MVR series Magnetic Drive Vertical Turbine Meters come equipped with an exclusive patented RETRO-THRUST® feature which provides for a longer life over a wider range of accuracies. At low flow rates the rotor's tungsten carbide thrust bearing floats against the sapphire bearing located in the meter casing. As flow rates increase the retro thrust feature allows the rotor to float away from the sapphire. At high flow rates the rotor's stainless steel shaft floats against the upstream sapphire bearing, thereby minimizing wear and thus assuring extended operating life.

The Dura-Dri™ register is permanently hermetically sealed between a glass dome and metal housing.

The register cover is constructed of cyclolac plastic. The register is held in place by a polypropylene clamp band which allows for positioning the register in the most convenient reading position. The register is available with center sweep hand, straight reading indicating cubic feet, U.S. gallons, or cubic metres.

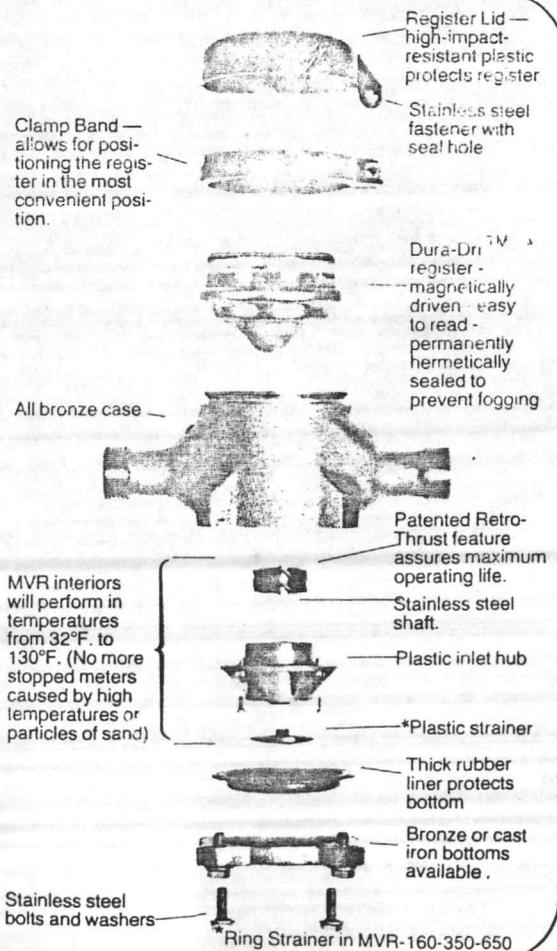
The measuring chamber is composed of a noryl plastic inlet hub, polypropylene rotor and strainer in the MVR-30-50 and 100. The measuring chambers in the MVR-160-350-650 are composed of a noryl plastic inlet hub, and polypropylene rotor and stainless steel ring strainer.

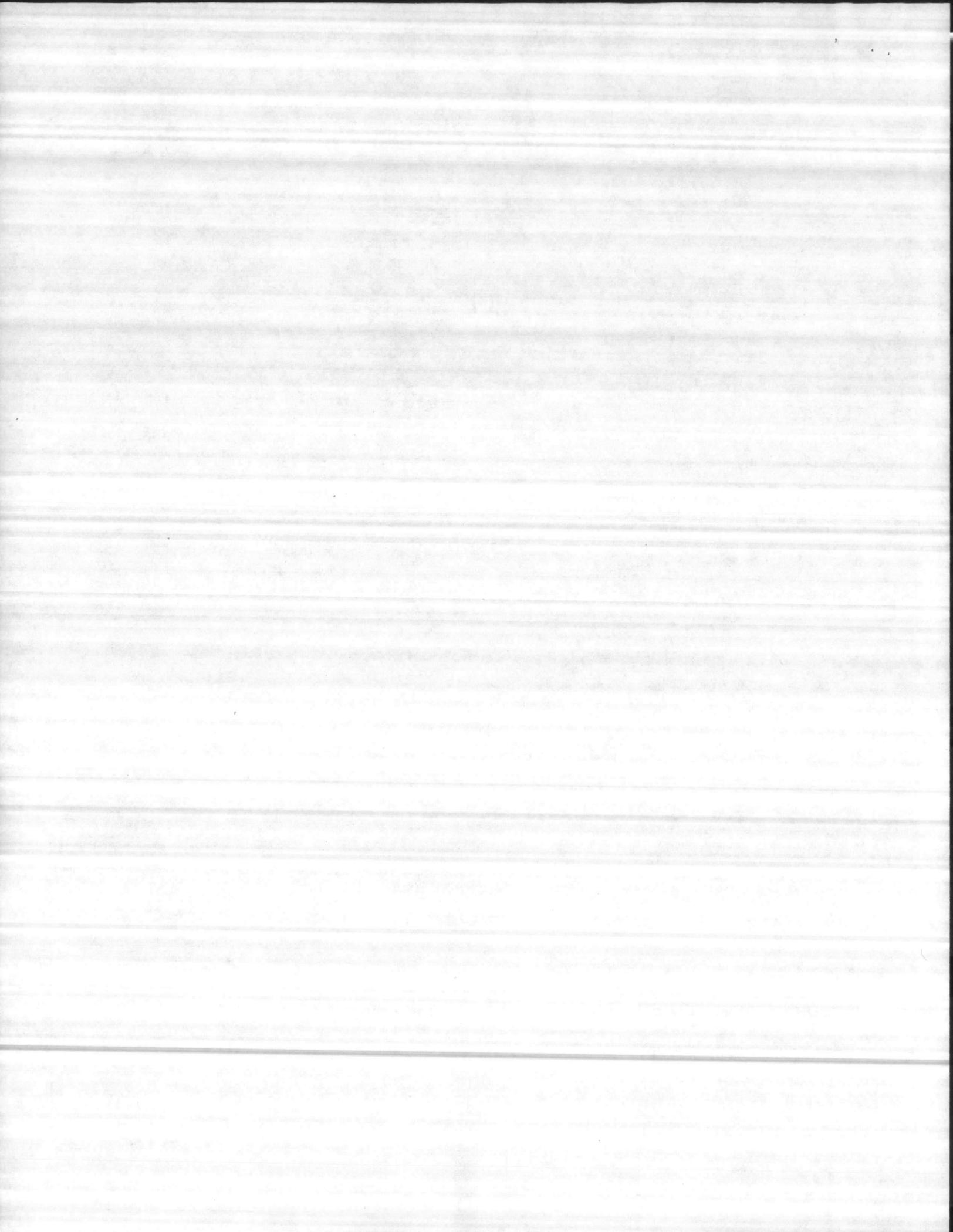
The MVR will operate at temperatures from 32° to 130°F. and will operate with particles of sand in the water. Outer cases are time-proven cast bronze.

Bottom plates are available in both bronze and enamel coated cast iron. Bronze only on the MVR-160-350-650.

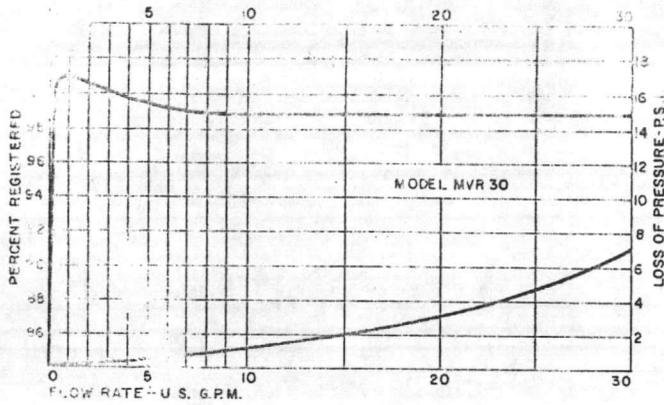
A full Buna-N rubber liner for the MVR 30-50 and 100 bottoms and an EPT liner for the MVR-160 are provided for corrosion protection.

The Hersey MVR Magnetic Drive Turbine Meters are also available in compact models with varying spud sizes.



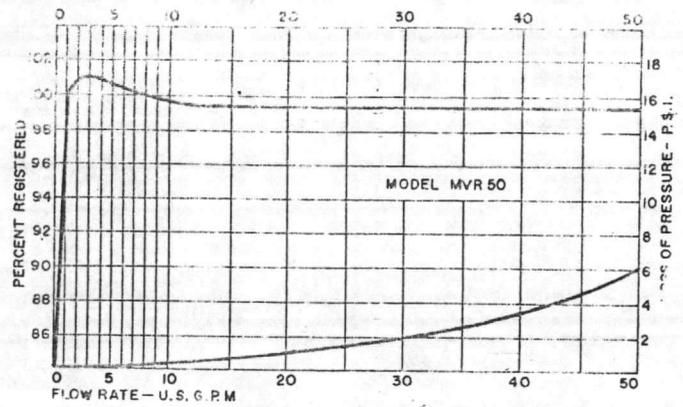


### MVR-30



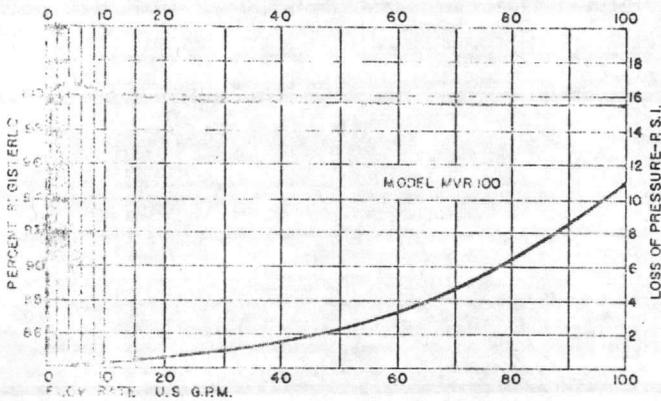
OPERATING RANGE: 1-30 GPM  
 LOW FLOW REGISTRATION: 95% @ .5 GPM

### MVR-50



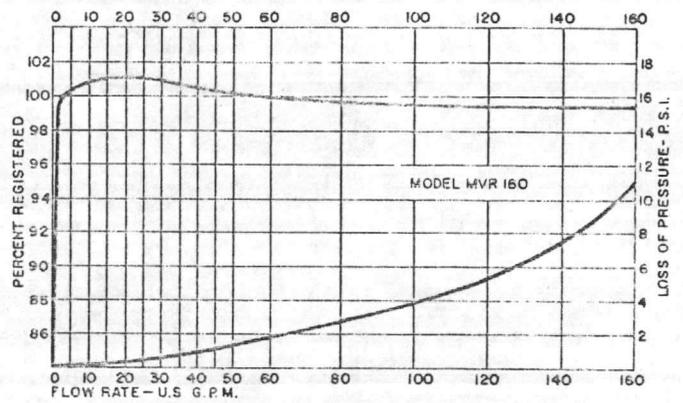
OPERATING RANGE: 1.5-50 GPM  
 LOW FLOW REGISTRATION: 95% @ 3/4 GPM

### MVR-100



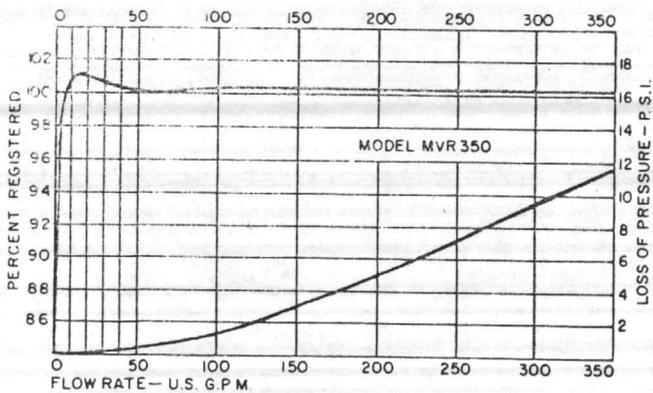
OPERATING RANGE: 2-100 GPM  
 LOW FLOW REGISTRATION: 95% @ 1.5 GPM

### MVR-160



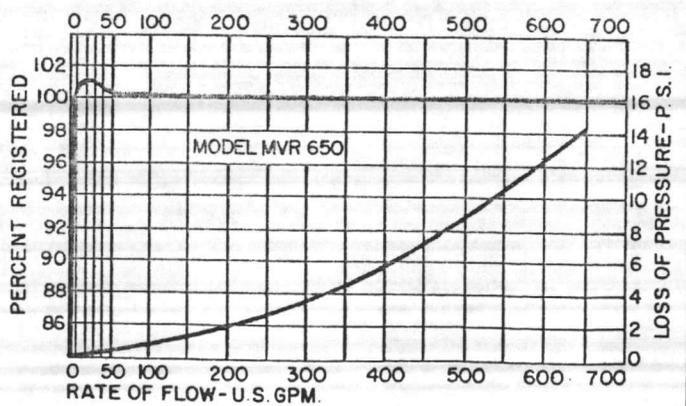
OPERATING RANGE: 3-160 GPM  
 LOW FLOW REGISTRATION: 95% @ 2 GPM

### MVR-350

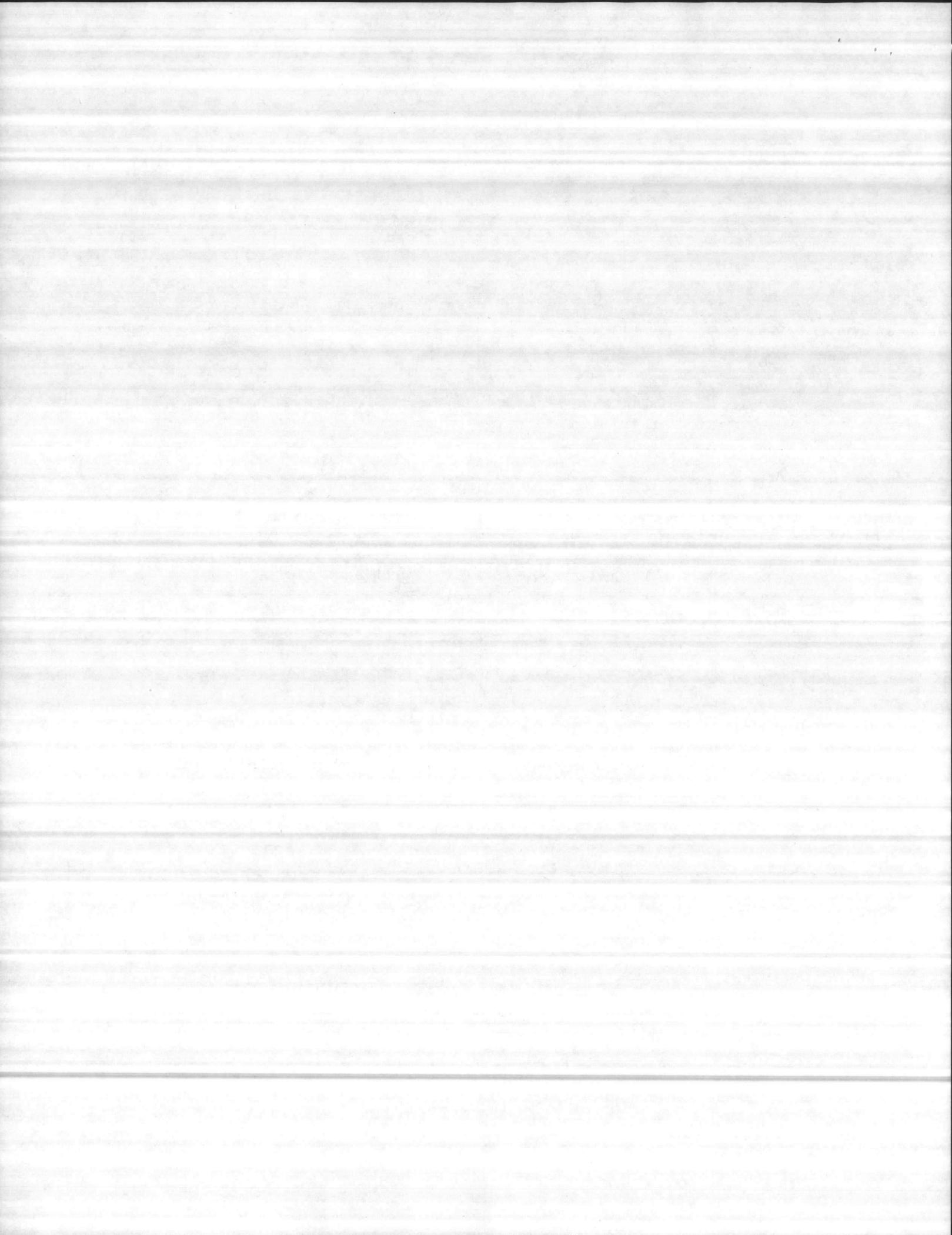


OPERATING RANGE: 4-350 GPM  
 LOW FLOW REGISTRATION: 95% @ 2.5 GPM

### MVR-650

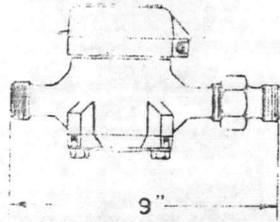


OPERATING RANGE: 5-650 GPM  
 LOW FLOW REGISTRATION: 95% @ 3.5 GPM

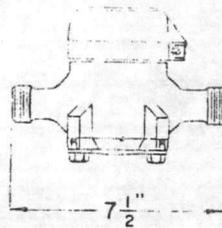


# Retro-Fit<sup>®</sup> feature

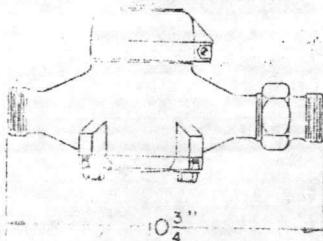
MVR-30 STANDARD



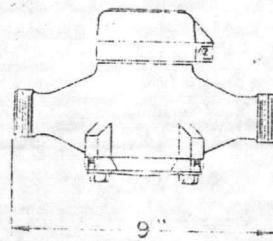
MVR-30 COMPACT



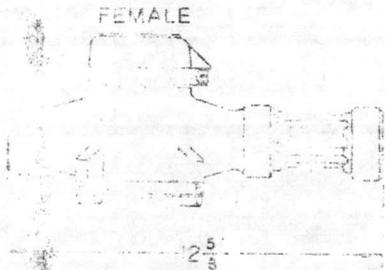
MVR-50 STANDARD



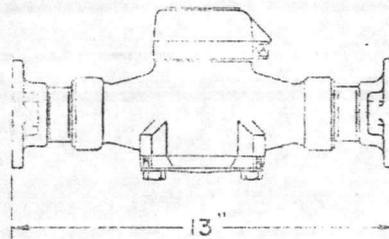
MVR-50 COMPACT



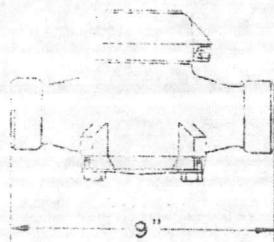
MVR-100 STANDARD



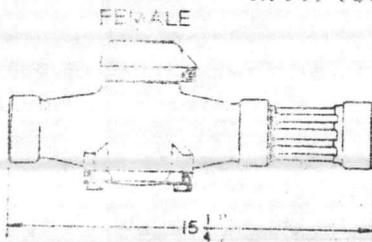
2 BOLT FLANGED



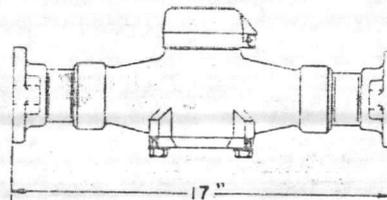
MVR-100 COMPACT



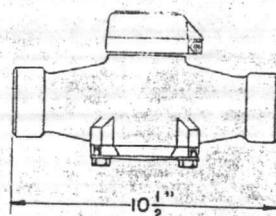
MVR-160 STANDARD



2 BOLT FLANGED



MVR-160 COMPACT



## MVR-30 3/4"

Length - 9" Std, 7 1/2" compact  
 Width - 3 3/4" Height - 5"  
 Net Weight - 5 lbs 9 oz Std, 5 lbs, Compact  
 Centerline to base of meter - 1 13/16"  
 Available spud size - 1/2", 3/4" and 1" Compact  
 Available spud size - 3/4", 1" Std.  
 Pressure loss (Maximum)  
 MVR 30 7.0 psi @ 30 GPM

## MVR-50 1"

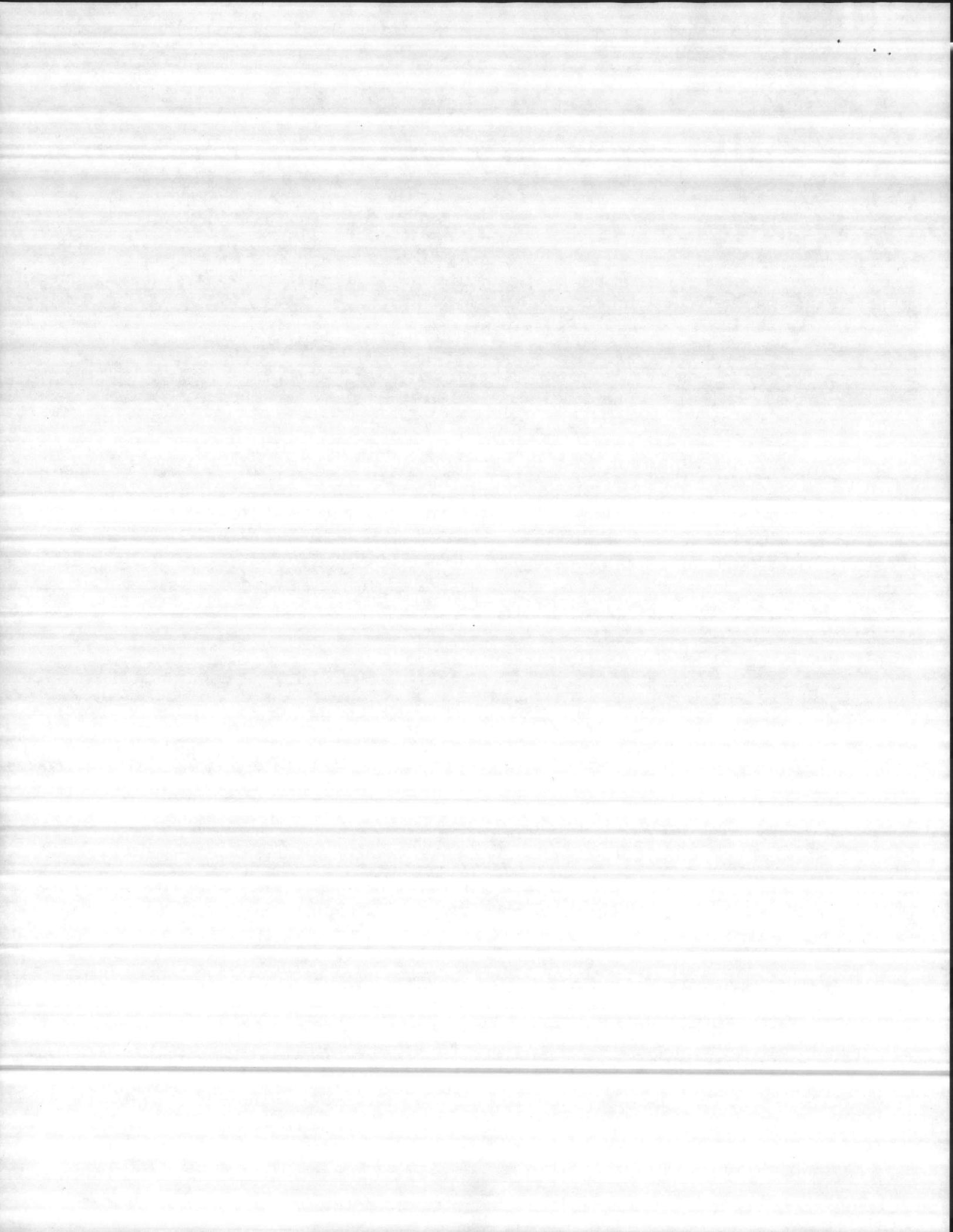
Length - 10 3/4" Std, 9" Compact  
 Width - 4 1/4" Height - 5 1/2"  
 Net Weight - 8 lbs 2 oz, Std -  
 7 lbs, 5 oz, Compact  
 Centerline to base of meter - 2 3/8"  
 Available spud sizes - 1" and 1 1/4"  
 Pressure loss (Maximum)  
 MVR 50 6.0 psi @ 50 GPM

## MVR-100 1 1/2"

Length - (female) - 12 5/8"  
 - (2-bolt flanged) - 13"  
 - (Compact) - 9"  
 Width - (female) 4 3/8"  
 - (2-bolt flanged) - 5 3/8"  
 Height - 5 3/4"  
 Net Weight - (female) - 10 lbs 11 oz  
 - (2-bolt flanged) 14 lbs 11 oz  
 - Compact 9 lbs  
 - Centerline to base of meter - 2 3/8"  
 - End detail screwed: internal (female) 1 1/2 NPT threads  
 - End detail flanged: 2-bolt oval type (may be ordered with either bronze or cast iron flanges)  
 Pressure loss (Maximum)  
 MVR 100 10.5 psi @ 100 GPM

## MVR-160 2"

Length - (female) - 15 1/4"  
 - (2-bolt flanged) - 17"  
 - (Compact) - 10 1/2"  
 Width - (female) - 5 3/8"  
 - (2-bolt flanged) - 5 15/16"  
 Height - 6 1/4"  
 Net Weight - (female) - 15 lbs  
 - (2-bolt flanged) - 20 lbs  
 - (Compact) - 14 lbs  
 Centerline to base of meter - 3"  
 End detail screwed: internal (female)  
 2" NPT threads  
 End detail flanged: 2-bolt oval type  
 (may be ordered with either bronze or cast iron flanges)  
 Pressure loss (Maximum)  
 MVR 160 11.0 psi @ 160 GPM



**SAVE MONEY THE NEXT TIME  
YOU ORDER METERS FOR:**

- New installations
- Where space is tight
- Where more flexibility is needed to fine tune meters to meet required flow ranges
- Where water temperatures are elevated to between 80°F and 130°F
- Where sand particles are a problem

**MVR-350 3"**

Length - 12"  
Width - 7 7/8"  
Height - 8 7/16"  
Net Weight - 39 lbs  
Centerline to base of meter 3 7/8"  
End Detail - 150 lb ANSI Round Flange  
Pressure loss (Maximum)  
0.118 psi @ 350 GPM

**MVR-650 4"**

Length - 14"  
Width - 9 3/4"  
Height - 9 3/8"  
Net Weight - 65 lbs  
Centerline to base of meter 4 5/8"  
End Detail - 150 lb ANSI Round Flange  
Pressure loss (Maximum)  
MVR 650 14.3 psi @ 650 GPM

**Totalizing Register**

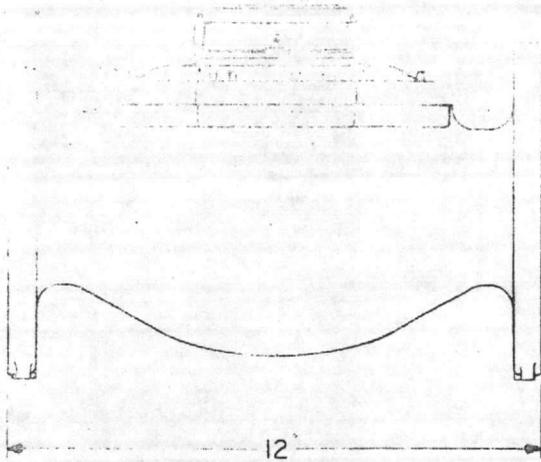
**MVR 30 and 50**

10,000,000 gallon capacity  
10 gallons/sweep hand revolution  
1,000,000 cubic feet capacity  
1 cubic foot/sweep hand revolution

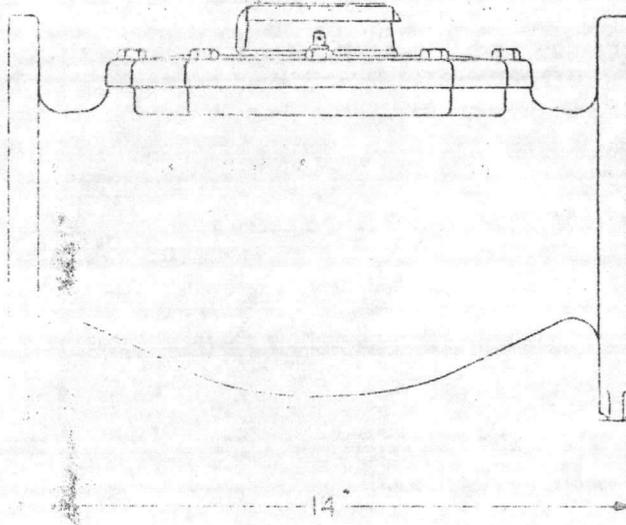
**MVR 100, 160, 350 and 650**

100,000,000 gallon capacity  
100 gallons/sweep hand revolution  
10,000,000 cubic feet capacity  
10 cubic feet/sweep hand revolution  
(Available in cubic metres  
litres or imperial gallons)

Maximum operating pressure: MVR 30, 50, 100,  
160 - 175 psi; MVR 350, 650 - 150 psi  
Temperature range 32°F. to 130°F.  
Accuracy 100% ± 1.5%  
MVR meters comply with or exceed all AWWA  
Class I Turbine meter performance and  
material standards.



**MVR-350**



**MVR-650**

**SPECIFICATIONS**

Magnetic Drive Turbine Meters, sizes 30-50-100-160-350-650 shall have bronze outer cases. The register lid and clamp band shall be made of high-impact-resistant plastic to protect the register. The clamp band shall hold the register and lid in place by means of one stainless steel fastener and nut. Both the fastener and clamp band shall be drilled to receive sealing wire. The clamp band shall allow for positioning the register in the most convenient reading position.

The register shall be completely separated from the water-way and shall be available with center sweep hand, straight reading indicating cubic feet, U.S. gallons or cubic metres. The register shall be permanently hermetically sealed between a glass dome and metal housing. The register shall be driven by a ceramic magnet.

The measuring chamber in MVR 30-50-100 shall be composed of a plastic inlet hub, rotor and strainer where as the measuring chamber in the MVR 160-350 and 650 shall be composed of a plastic inlet hub and rotor and a stainless steel ring strainer. The chamber shall be held in place with (4) four stainless steel screws. It shall not be adversely affected by temperatures from 32°F. to 130°F. or by particles of sand. The meter shall incorporate a patented Retro-Thrust® design to assure maximum operating life. The rotor thrust bearings shall be sapphires and the bushings, graphitar.

The bottom plate shall be either bronze or enamel coated cast iron on the MVR 30-50-100, bronze only on the MVR 160. The MVR 30-50-100 and 160 bottoms shall be protected with a thick rubber liner.

**SALES OFFICE**

**SOUTHEAST** — 2131 Kingston Court, S.E., Suite 102, Marietta, GA 30067 (404) 952-4424

**NEW ENGLAND** — 250 Elm St., Dedham, MA 02026-4598 (617) 326-9400

**NORTHEAST** — 320 Braen Ave., Wyckoff, NJ 07481 (201) 445-0373

**MIDWEST** — 1025 Criss Circle, Elk Grove Village, IL 60007 (312) 439-7700

**WESTERN** — 2425 So. Eastern Ave., Los Angeles, CA 90040 (213) 722-6870

**NORTHWEST** — 329 Primrose Rd., Burlingame, CA 94010 (415) 344-2575



**Water Meter & Controls Group**

250 Elm Street, Dedham, MA

U.S.A. 02026-4598

(617) 326-9400 Telex 92-4436

