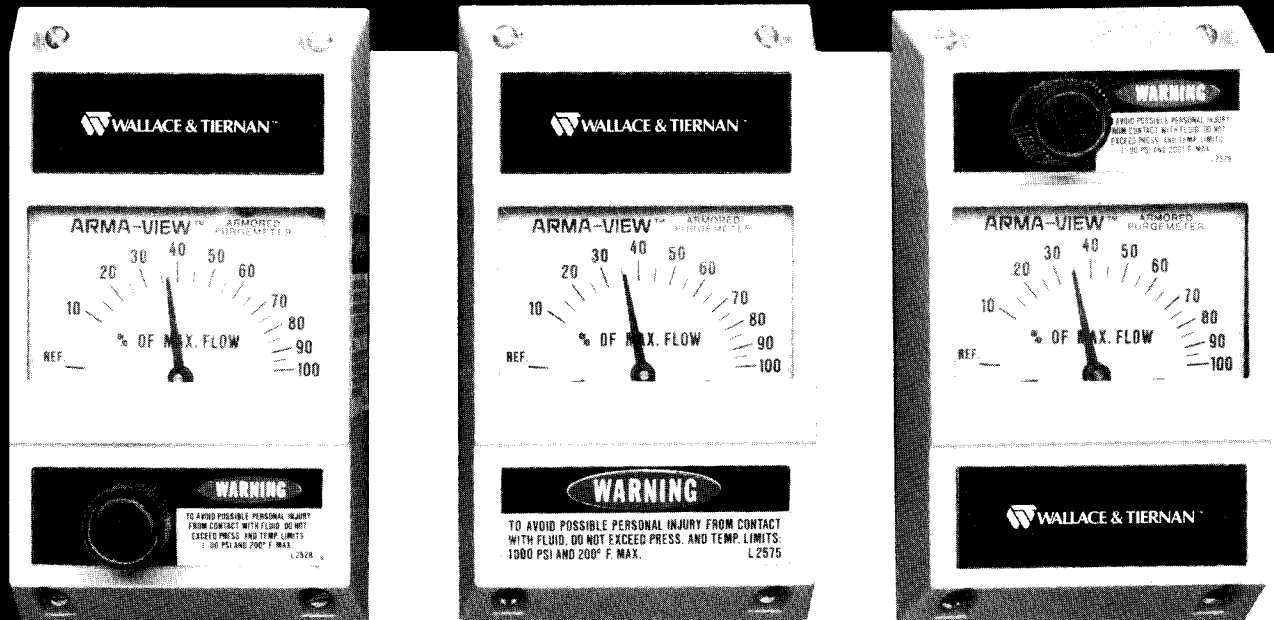


ARMA-VIEW® LOW FLOW ARMORED PURGE METERS SERIES 51-250



- *State-of-the-art technology in variable-area meter design.*
- *Excellent readability, sharply defined graduations on wide-arc dial.*
- *Reliable performance, accurate metering of low flows at high pressures.*
- *Convenient in-line servicing.*
- *Easy meter conversion to another range.*

CAPACITY: water: 1.0 gph to 40 gph

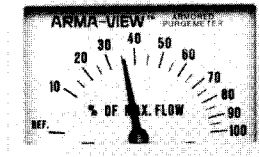
air: 5.7 scfh to 193 scfh

OPERATING RANGE: 10 to 1

TEMPERATURE and PRESSURE LIMITS: 275 F and 2000 psi, Max.
(SEE TECHNICAL DATA SECTION)

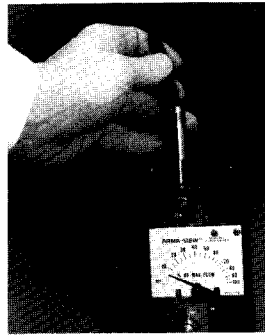
FEATURES

EASY READABILITY



Advanced state-of-the-art design provides easy visual readout. The dial has distinct black numbers on white background. Graduations are broadly spaced and clearly defined on 170-degree calibrated arc. Clear polycarbonate window facilitates reading.

DESIGNED FOR EASY MAINTENANCE



Meter body is mounted on a sturdy polycarbonate base plate with a molded polycarbonate cover. Cover is easily removed for in-line servicing without disturbing piping. A cap plug unscrews to provide easy access to the orifice and float for cleaning or changing capacity. A special tool to facilitate change is mounted inside the cover. Zero adjustment only requires loosening two screws, sliding carriage to zero and re-tightening screws.

SENSITIVE, TRUE MAGNETIC COUPLING

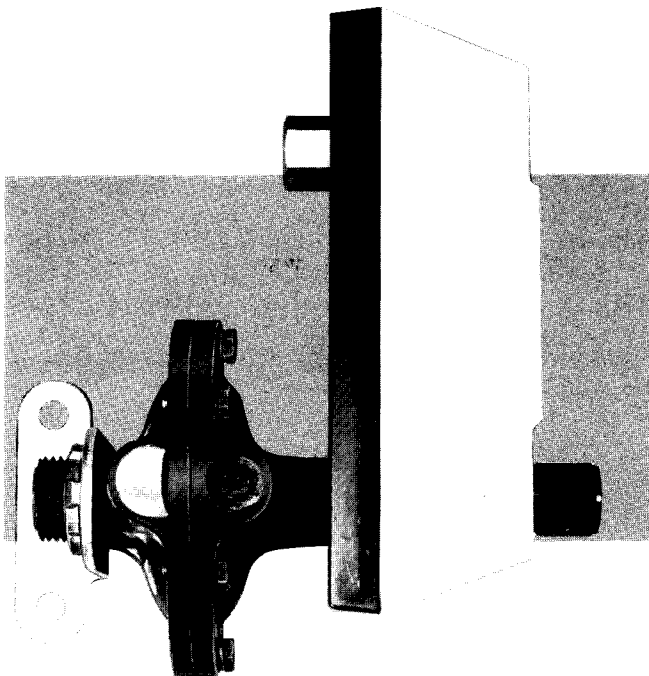
A powerful magnet encapsulated in the float forms a linkage with the rotating follower magnet of the indicating mechanism. Variations in flow are indicated directly on the calibrated dial. This strong, magnetic linkage is designed for reliable flow indication. Even sudden flow surges will not disrupt the coupling.

VERSATILITY AND CONVENIENCE

Inlet and outlet connections are horizontally oriented. An optional inlet or outlet control valve provides smooth manual control of flow rate. A knob, conveniently mounted on the front of the case, makes adjustments simple. The characterized valve stem helps assure positive shut-off.

RUGGED CONSTRUCTION

Meter body is machined from 1¼-inch stock, stainless steel; unit body construction. Except for O-rings, all wetted parts, valve stem, seat, float, orifice, plugs are 316 stainless steel. O-rings are Buna-N, EPR, or viton. Rugged polycarbonate case is suitable for harsh environments.



W&T FLOW CONTROLLER

Wallace & Tiernan's purge-type flow controller maintains a constant set flow regardless of variations in the supply pressure. The clean, straight-through design makes it simple to integrate these units with the Arma-View Low Flow Armored Purge meter. The ¼-inch male outlet connection of the controller threads directly into the meter body's female inlet, eliminating any need for pipe nipples or static piping. Flow controllers are designed for use with meters with control valves and can be used for liquid or gas service. They are available in inlet and outlet configurations.

For liquid service and for gas service with varying upstream and constant downstream pressures, specify inlet type. For gas service with constant upstream and varying downstream pressures, specify outlet type. Meters with flow controllers are tested and shipped assembled. Write for Catalog File 570.100.

SELECTION PROCEDURE

TO ORDER ARMA-VIEW ARMORED PURGE METERS

NOTE: Your order number should consist of **13**

- A. Determine ordering number from table below.
- B. Specify fluid, specific gravity, and viscosity.

INDICATE CODE

1. GIVE ORDER NUMBER FOR BASIC ARRANGEMENT

5125M

2. SPECIFY CONTROL VALVE LOCATION

X = NONE

2 = INLET

3 = OUTLET

3. GIVE ORDER NUMBER FOR METER BODY

2 = 316 SS

4. SELECT O-RING MATERIAL

1 = BUNA-N (OPTIONAL)

2 = VITON (STANDARD)

4 = EPR (OPTIONAL)

5. SELECT CAPACITY
(Based on: WATER at 70F AIR at STP)

	<u>GPH WATER</u>	<u>SCFH AIR</u>
03 =	1.0	5.7
04 =	3.0	17.5
05 =	5.0	26.0
06 =	8.0	39.0
07 =	15.0	73.0
08 =	25.0	116.0
09 =	40.0	193.0

NOTE: For gas service, minimum operating pressure is 10 psi for 5.7 through and including 73 scfh capacities, 15 psi for 116 scfh capacity, and 25 psi for 193 scfh capacity.

6. FLOW SWITCH (not available)

X = NONE

7. SELECT OPTIONAL FLOW CONTROLLER

	<u>SCFH</u>	<u>GPH</u>	<u>MODEL</u>
S =	30	5 INLET	5810
T =	30	5 OUTLET	5820
U =	193	40 INLET	5850
Y =	193	40 OUTLET	5860

N =	30	5 INLET	5830
P =	30	5 OUTLET	5840
Q =	193	40 INLET	5870
R =	193	40 OUTLET	5880

X =		NONE	

NOTE: Arma View Purge Meter with W&T Flow Controller is subject to capacity, temperature, and pressure limits as specified for FLOW CONTROLLER in Technical Data section.

8. SELECT DIAL CALIBRATION

GAS

B = SPECIAL

D = STANDARD (%)

LIQUID

I = SPECIAL

U = STANDARD (GPH WATER)

P = STANDARD (%)

5125M

-

2

-

0

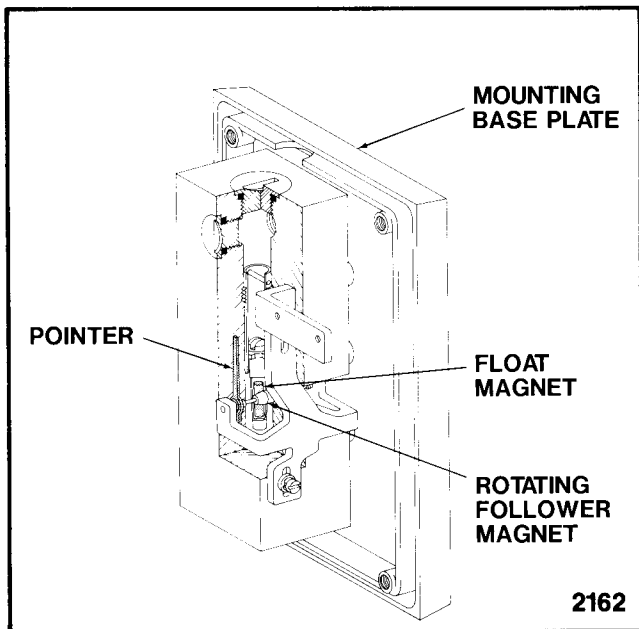
-

X

-

-

TECHNICAL DATA



range 10 to 1.
 accuracy 10% of full scale.
 capacities (Based on water at 70F; air at STP.)

gph water	scfh air	Pressure drop — inches water	
		w/o valve	with valve
1.0	5.7	6	14
3.0	17.5	8	64
5.0	26.0	8	14
8.0	39.0	10	25
15.0	73.0	12	12
25.0	116.0	26	28
40.0	193.0	65	78

Note: For gas service, minimum operating pressure is 10 psi for 5.7 through 73 scfh, 15 psi for 116 scfh, and 25 psi for the 193 scfh capacity.

pressure and temperature limits

Meter with valve: 1000 psi and 275° F*.
 Meter without valve: 2000 psi and 275° F*.

*with proper O-ring selection

Warning: (Temperature and pressure limits must not be exceeded under any conditions).

dials

water: calibrated to range for direct (percent or gph) reading.
 air: calibrated to percent.

Special calibration available as option: scales calibrated in other than standard units; dials calibrated for specific fluid viscosities.

enclosure

Chemical-resistant polycarbonate NEMA 4 rating ICS-1-110.15 Type 4.

pipe connections 1/4-inch female NPT at meter inlet and outlet.

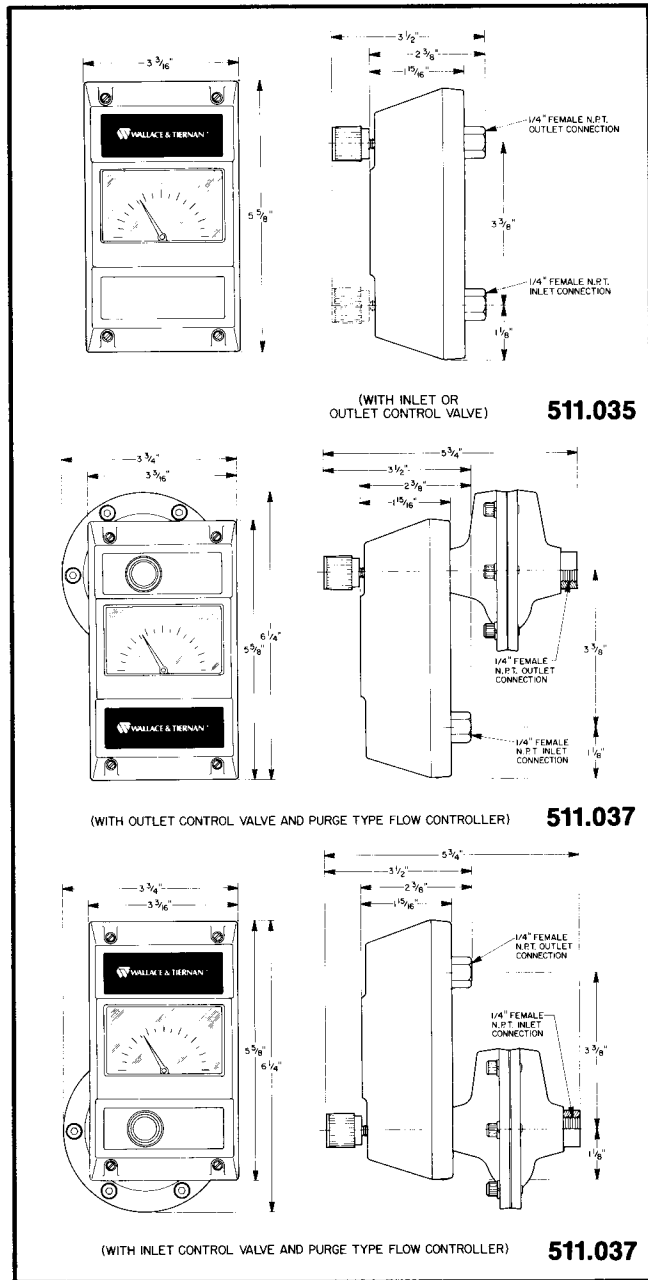
mounting Suitable for in-line mounting or surface mounting.

materials of construction

Meter body and all wetted parts (excluding O-rings) are 316 stainless steel. (Magnet encapsulated in float.) O-rings are Viton, Buna-N, or EPR. Base plate, cover, and window are chemical-resistant polycarbonate.

Shipping weights

Meter only	2.5 lb
Meter with control valve	3 lb
Meter with flow controller	5.5 lb



FLOW CONTROLLER TECHNICAL DATA

maximum capacity

gas (High Cap.) 193 SCFH; (Low Cap.) 30 SCFH
 liquid (High Cap.) 40 GPH; (Low Cap.) 5 GPH

maximum temperature and materials of construction

160 F—Brass (Black Paint Finish) with Buna-N Diaphragm,
 250 F—316 Stainless Steel with TFE Diaphragm

maximum inlet pressure 250 psi

minimum pressure drop 8 psi

connections inlet/outlet 1/4" NPT

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