# Flow Measurement Equipment Armored Purge Meters

#### **Features**

#### **Accurate Gas Metering**

A snubber on the float causes readings to steady out quickly, gives true readings down to atmospheric pressures.

# **Rugged Construction**

316 stainless steel body with Buna N, TFE or SS O-rings gives corrosion resistance and reliable operation to 1500 psi (100 bar) and 800°F (427°C) (600°F (316°C) with flow switch). A heavy stainless sheath encloses the scale tube, which is sealed at both ends by O-rings.

#### **Built-In Backcheck**

An O-ring at the top of the float seals against the seat to prevent backflow through the meter.

#### Easy To Clean

A port in the bottom of the meter body makes cleaning easy.

#### **Change Floats or Scales**

To change capacity, a different float is inserted without removing the meter from the line. Scale tubes have gallon and percent scales. Either can be exposed by loosening a cap screw and turning the tube.

#### Powerful Magnetic Linkage

An indicating follower ring slides on the precision inside bore of the scale tube. This low friction travel and a powerful bond between the ring and the float magnet makes for immediate response to flow changes.

#### Key Benefits:

- Reduced maintenance cost without removing meter from service.
- Stands up to extreme conditions with rugged construction.
- Reliable long term performance in gas or liquid service.
- Highly accurate and stable readings for precise measurement and control.
- Easily adaptable to fit your exact needs with standard options.



Armored Purge Meters



#### **Technical Data**

#### **Accuracy**

10% of full scale

#### Range

10 to 1.

#### **Scales**

1/2-inch meter has GPH and percent scales; 3/4-inch meter has GPM and percent scales. Scale length is 1-1/4". Flow switches have percent scales.

#### Fluid Temperature-Pressure Ratings

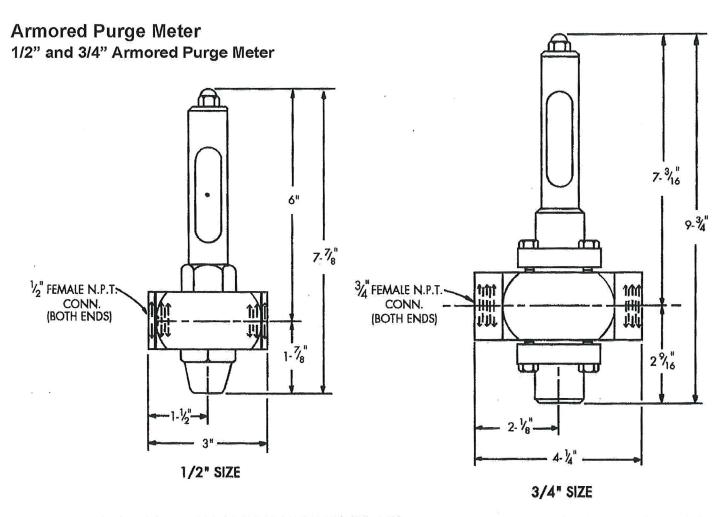
With Buna N O-rings, 250° F
TFE O-rings, 400° F
SS O-rings, 800° F (600° F with Switch)
1500 psi with all O-rings.
These temperature and pressure limits must not be exceeded.

# Weight and Shipping Weight

1/2-inch meter, 2 1/2 lb and 3 1/2 lb. 3/4-inch meter, 4 1/4 lb and 5 1/4 lb.

#### **Materials of Construction**

Body, 316 stainless; other wetted parts, 316 stainless; external parts, 303 and 304 stainless; scale tube, borosilicate glass; follower ring, 416 stainless; scale tube O-ring, silicone; body O-ring, Buna N, TFE or SS.



NOTE: SCALE TUBE AND GUARD MAY BE ROTATED 360°

CF.510.200.100.CN.0714

# Selection Procedure & Ordering Procedure

Determine the capacity range, temperature and pressure capability, materials of construction and options required for each meter. (See Technical Data section for pressure and temperature limits.)

Note: For fluids with SP. GR. other than 1.0 or viscosity other than 1.0 CSS, consult your local Equipment Distributor.

#### Example:

To order a 1/2" Metal-Body Armored Purge Meter with 316 stainless steel body, Buna N O-rings, 54 GPH water capacity, and hazardous-service flow switch with two switch, two relays; standard gph scale; no tag, ask for: 5120M1 2 1 13 H X L X

# Product Sheet CF.510.200.100CN.0714 ARMORED PURGE METER

Selection Codes

5 1 2 0 M 1

Material Oring Capacity Switch Scale Tag

### Selection 1 - BODY MATERIAL

Code	Material	
2	316 Stainless Steel	

# Selection 2 - O-RING TYPE

Code	Material	Limits
1	Buna N	1500 PSI at 250° F
3	TFE	1500 PSI at 400° F
5	Stainless Steel	1500 PSI at 800° F*

<sup>\*</sup> Note: 600° F with Switch

#### Selection 3 - CAPACITY (code for tube & float)

Code	Size	Without Flow Switch	With Flow Switch
11	1/2"	6 GPH 30* SCFH	8.0 GPH 39* SCFH
12		16 GPH 75 SCFH	17.5 GPH 76.5 SCFH
13		50 GPH 250 SCFH	54 GPH 260 SCFH
14		100 GPH 420 SCFH	105 GPH 462 SCFH
31	3/4"	1.0 GPM 5.0* SCFM	1.03 GPM 5.0* SCFM
32		2.0 GPM 9.5* SCFM	2.04 GPM 9.5* SCFM
33		5.0 GPM 25 SCFM	5.3 GPM 24 SCFM
34		7.5 GPM 36 SCFM	7.7 GPM 36 SCFM
35		10.0 GPM 53 SCFM	10.3 GPM 53 SCFM

<sup>\*</sup> Not recommended for Gas service unless pressure exceeds 60 PSIG.

Capacities based on Water at 70° F and Air at STP

#### Selection 4 SWITCH

Code	Material	
Х	None	
Α	General Purpose 1 Switch	
В	General Purpose 2 Switch	
G	Haz 1 Switches 1 Relay	
Н	Haz 2 Switches 2 Relays	

#### Selection 6 - TAG

Gelection 0 - 170		
Code	Material	
Х	No Tag	
1	Stainless Steel(wired) on)	

#### Selection 5 SCALE

Code	Material	
E	Standard % Air	
L	Standard GPH or GPM Water	
K	Standard % Water	

# **Armored Purge Meter** With Flow Switch D1 D2 $C_2$ TOP VIEW 1/2" SIZE TOP VIEW female N.P.T.-CONNECTION (BOTH ENDS) FEMALE N.P.T. -CONNECTION (BOTH ENDS) FRONT VIEW 12 SIZE FRONT VIEW 3/4" SIZE 23/2 54

A<sub>1</sub>, B<sub>1</sub>, C<sub>1</sub>, D<sub>1</sub>, E<sub>1</sub>= SERIES 5600 GENERAL PURPOSE FLOW SWITCH
A<sub>2</sub>, B<sub>2</sub>, C<sub>2</sub>, D<sub>2</sub>, E<sub>2</sub>= SERIES 5500 HAZARDOUS LOCATION FLOW SWITCH

CF.510.200.102.CN.0714

#### Flow Switch Technical Data

Temperature Limits - Ambient, -20° to 120° F.
Actuating Time - Reed Switches open in one millisecond

#### **TECHNICAL DATA 5600 SERIES**

Range 0 to 100% of flow range Enclosure NEMA 4 Contacts are rated at 250 mA (at 48 Vdc or 120 Vac resistive) or 50 mA (at 48 Vdc or 120 Vac inductive).

#### **TECHNICAL DATA 5500 SERIES**

Range 0 to 100% of flow range

UL Listed for Class I, Group C & D or Class II, Groups E, F & G Hazardous Location.

An electrical supply of 120 volt single phase,

50/60 Hz must be brought into the enclosure to power the relay coils.

Each relay coil requires 50/60 Hz, 0.033 amperes.

The relay contacts have 10 ampere maximum ratings at 120 Vac for noninductive loads.

UGSI Chemical Feed, Inc.

1901 West Garden Road Vineland, NJ 08360 Toll Free: 855-669-3845 Local: 856-896-2160 Fax: 856-457-5920

Email: info@ugsichemicalfeed.com Website: www.ugsichemicalfeed.com © 2014 UGSI Chemical Feed, Inc. Subject to change without prior notice. Literature No. CF.510.200.000.PS.0116 Varea-Meter® is a trademark of UGSI Chemical Feed, Inc., UL is a trademark of Underwriters Laboratories, Inc. NEMA is a trademark of the National Electrical Manufacturers Association.

The information provided in this literature contains merely general descriptions or characteristics of performance which in actual case of use do not always apply as described or which may change as a result of further development of the products. An obligation to provide the respective characteristics shall only exist if expressly agreed in the terms of a written contract.