cleanwater

Flow Measurement Equipment Glass Tube Purge Meters Stainless Steel Frame

Purge Meters are low-capacity variable area meters that incorporate several improvements in basic design. They feature an unusually rigid, corrosion resistant stainless stell frame and a positive, easily controlled tube lock.

Purge Meters are specifically designed for such service as the purging instrument cases and control lines. They are readily adapted to liquid-level indication, sampling, liquid-specific gravity determination, and similar applications.

Features

Structurally Strong Frame

The side frames are heavy, channel-form stainless steel sections welded to stainless end fittings turned from bar stock. This produces a rigid until that resists pipe strains and protects tube alignment.

Choice of Corrosion Resistant Materials

The frame is made of 304 stainless steel and the end fittings are made of 316 stainless steel. The metering tube retainer is Krynar[®] vinylidene fluoride resin. O-rings come in a choice of Buna N or Viton[®] with Kalrez[®] and EPR (ethylene propylene rubber) optional. Valve trim (seat and stem) is 316 stainless.

Positive Tube Lock and a Tube Shield

A knurled tube-locking nut, extreme to the flow, positions the tube retainer and locks the tube firmly in place. Tube removal is quick and easy. O-rings seal the tube at both ends. A clear plastic shield covers the tube.

Integral Backcheck

An anti-backflow device is built into the discharge. It consists of a 316 stainless steel poppet with the selected O-ring seal.

High Interchangeability

All parts, except tubes, frames, and plastic shields are interchangeable regardless of scale length. Tubes have same size O-rings at each end. The tubes for all capacities fit one frame size. This and the one-piece frame make for design simplicity with simplified maintenance and spare parts stocking

Key Benefits

- All meters feature rigid, corrosion resistant Stainless-Steel Frames
- External threaded tube locking nut for easy tube removal
- Optional built-in flow-control valve, horizontal inlet and outlet connections
- An optional purge type flow controller is also available for inlet or outlet mounting



Glass Tube Purge Meters with Stainless Steel Frame

Versatile Flow Controller

An optional Flow Controller keeps flow constant regardless of pressure variations. It comes in 316 stainless steel, in inlet or outlet configurations and high or low capacities. Replaceable seat adapters make for easy capacity changes. Straight-through design means the controller can be threaded directly into the meter body, eliminating pipe nipples and static piping.



Technical Data

Accuracy 10% of full scale

Operating Range

10 to 1

Pipe Connections

1/4-inch female NPT at meter inlet and outlet, at control valve inlet, and at flow controller inlet and outlet; horizontal in and horizontal out.

Mounting

In-line; wall through mounting holes in the back of the frame; flush panel with optional bezel. Bezel available with the 3" meter only.

Scales

As indicated in Selection 2 of selection sheet

Pressure and Temperature Limits

Temperature and pressure are interdependent but these limits must not be exceeded

Tube Retainer	O Rings	Pressure	Temperature
		(PSIG)	(°F)
Kynar®	All	200	200
316 SS	Buna- N	250	200
316 SS	Viton®	250	200
316 SS	EPR	250	250
316 SS	Kalrez®	250	250

Versatile Control Valve

The optional control valve has a common stem with high or low capacity seats; all are 316 stainless. An O-ring in the seat makes it easy to change. The valve gives smooth adjustment and a fine degree of control.

Choice of Arrangements and Operating Positions

Purge Meters are available in 1-1/2 and 3-inch scale lengths. They can be supplied with an integral flow control valve with a screwdriver-slot stem or a knob for adjustment. Available options are a factory connected flow controller to maintain constant flows and a plastic bezel for flush panel mounting (on the 3-inch size). The meter can be inverted and its tube reversed to change the control valve from the inlet to the outlet connection and removal of integral back-checks.



Ordering Procedure

To order a low capacity purge meter and control valve with knob and 316 stainless trim, specify 22. To order a tube with 3-inch scale, capacity of 30 ccm water, and scale units in ccm add B083.

Add S for standard O-ring material.

Add S for standard Kynar® tube retainer.

Add X for no flow controller.

Add 2 for bezel to accommodate meter with control valve.

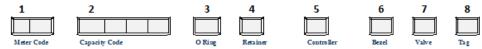
Add 2 for control valve at inlet, add X for no tag.

Thus the complete ordering number is: 22 BO83 S S X 2 2 X.

Product Sheet CF.510.100.100.CN.0723

Stainless Steel Frame Purge Meters

Selections



Selection 1 - METER CODE

Code	O-Ring Material	Meter Style
20		Meter Only
22	Buna-N	Low Capacity Meter with knob on control valve
26	Kalre z [@]	Low Capacity Meter with slotted control valve
24	EPR	High Capacity Meter with knob on control valve
28		High Capacity Meter with slotted control valve
30		Meter Only
32]	Low Capacity Meter with knob on control valve
36	Viton®	Low Capacity Meter with slotted control valve
34]	High Capacity Meter with knob on control valve
38		High Capacity Meter with slotted control valve

Selection 2 CAPACITY CODE - AIR

			-		
1-1/2" Meter			" Meter		
Code	Capacity	Scale	Code	Capacity	Scale
D021	50 SCCM	%	D013	30 SCCM	%
D041	105 SCCM	%	D033	46 SCCM	%
D061	145 SCCM	%	D053	87 SCCM	%
E071	1.0 SCFH	SCFH	E073	1.0 SOFH	SCFH
D071	1.0 SCFH	%	D073	1.0 SCFH	%
E081	2.5 SCFH	SCFH	E083	2.5 SCFH	SCFH
D081	2.5 SCFH	%	D083	2.5 SCFH	%
E091	6.0 SCFH	SCFH	E093	6.0 SCFH	SCFH
D091	6.0 SCFH	%	D093	6.0 SCFH	%
E101	12SCFH	SCFH	E103	12SCFH	SCFH
D101	12SCFH	%	D103	12SCFH	%
E121	20 SCFH	SCFH	E123	20 SCFH	SCFH
D121	20 SCFH	%	D123	20 SCFH	%
E111	30 SCFH	SCFH	E113	30 SCFH	SCFH
D131	36 SCFH	%	E133	36 SCFH	SCFH
E141	60 SCFH	SCFH	D133	36 SCFH	%
D141	60 SCFH	%	E143	60 SCFH	SCFH
E151	110 SCFH	SCFH	D143	60 SCFH	%
D151	110 SCFH	%	E153	110 SCFH	SCFH
			D153	110 SCFH	%

Selection 2 - CAPACITY CODE - WATER 1-1/2" Meter " Meter Code Code Capacity Scale Capacity C041 C033 0.95 CCM % 0.65 CCM C061 C053 1.75 CCM % 1.10 CCM C071 0.1 GPH % A073 0.1 GPH GPH A081 0.5 GPH GPH C073 0.1 GPH C081 A083 0.5 GPH 96 0.5 GPH A091 B083 1.0 GPH GPH 30 CCM B091 60 CCM CCM C083 0.5 GPH A093 C091 1.0 GPH % 1.0 GPH A101 3.0 GPH GPH B093 60 CCM B101 C093 180 CCM ССМ 1.0 GPH C101 3.0 GPH % A103 3.0 GPH B103 A111 5.0 GPH GPH 180 CCM CCM A121 C103 8.0 GPH GPH 3.0 GPH B121 500 CCM ССМ A113 5.0 GPH C121 8.0 GPH % A123 8.0 GPH A131 B123 15 GPH 500 CCM GPH B131 900 CCM ССМ C123 8.0 GPH C131 15 GPH % A133 15 GPH GPH A141 25 GPH GPH B133 900 CCM B141 1500 CCM ССМ C133 15 GPH C141 25 GPH % A143 25 GPH A151 40 GPH GPH B143 1500 CCM C151 C143 40 GPH 96 25 GPH A153 40 GPH

Scale

%

%

%

GPH

CCM

%

GPH

CCM

%

%

GPH

GPH

CCM

%

CCM

GPH

CCM

GPH

%

2500 CCM CCM

40 GPH

B153

C153

%

%

GPH

Literature Number: Internal Document Name CF.510.100.000.PS.0224
For more documents visit: https://documents.cleanwater1.com/



Selection 3 - O-RING MATERIAL

Code	Material*	
S	Buna-N or Viton	
1	EPR	
K	Kalrez 4079	

*For 1 & K, Use 20 Series codes in Selection

* Kalrez not available for meters with flow controllers

Selection 4 - RETAINER MATERIAL

Code	Material
S	Kynar (standard)
1	316 Stainless Steel

Selection 5 - FLOW CONTROLLER

Stretum 5 1200 controller				
Code	Model No.	Material of Construction	Capacity	Connection
S	5810		30 SCFH / 5 GPH	1/4"NPT Inlet
Т	5820	216 Chalada - Charl	30 SCFH / 5 GPH	1/4"NPT Outlet
U	5850	316 Stainless Steel	193 SCFH /40 GPH	1/4"NPT Inlet
Y	5860		193 SCFH /40 GPH	1/4"NPT Outlet
X	None		0	

Selection 6 - PANEL MOUNTING BEZEL

Code	Configuration
X	None
1	Without Control Valve
2	With Control Valve

Selection 7 - CONTROL VALVE LOCATION

Code	Valve Location	
X	No valve	
2	Inlet Valve	
3	Outlet Valve	

Selection 8 - TAG

Code	Material
X	No Tag
1	Stainless Steel(wired) on)

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