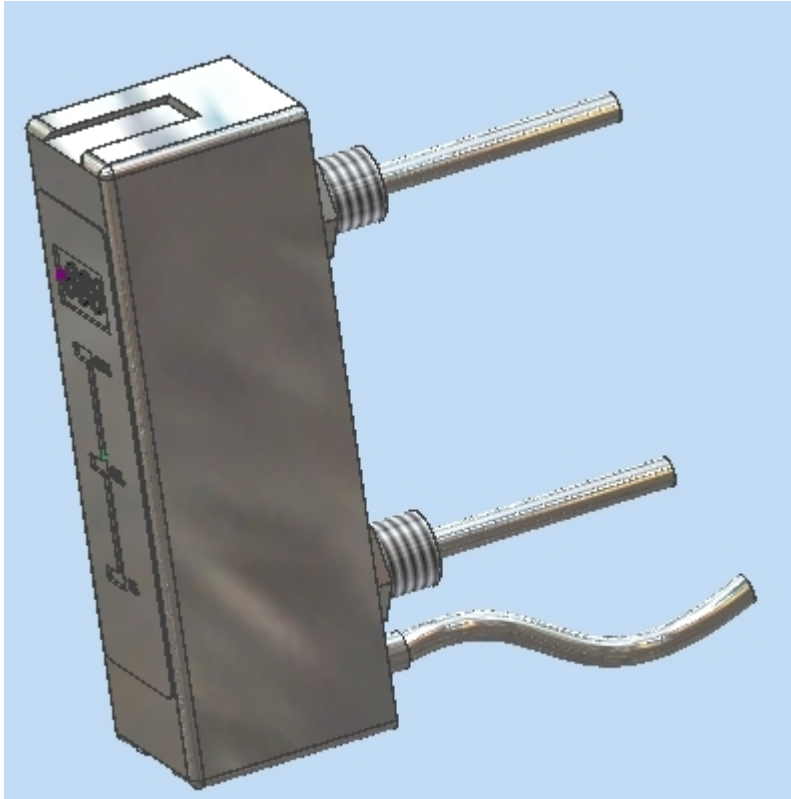


Ultrasonic Purge Meter Futurestar Sonic Series



Futurestar's Ultrasonic Purge Meter provides accurate and repeatable liquid measurement of critical process flows. This flowmeter has no moving parts and offers analog output, alarms and LED display of the flow rate in addition to a visual indication of % of flow. Ideal for chemical, slurry and DI H₂O metering.

Accurate and Reliable Performance

- Ultrasonic technology for liquid flow measurement.
- No moving parts
- Patented technology provides low cost flow measurement with digital display.
- Additional LED indication for % of flow
- Analog output: 4-20 mA.
- RS485 Communications
- Alarm output, end user configurable
- Zero reset, end user configurable

Operation

Combining patented ultrasonic sensing technology with built in LED display and analog outputs of flow. Opposing sound wave transit times are compared to determine the velocity of the liquid flow through the meter. The liquid flow is measured with no moving parts required. A field accessible zero reset is offered for calibration purposes. The Ultrasonic Purge meter should be mounted vertically with no bubbles in the flow as they may interfere with the sensing technology.

Specifications

MATERIALS

- Wetted parts: PFA
- Non-wetted parts: ABS, PVC, polypropylene and Viton.

OPERATING

- Accuracy:
 - +/- 1% FS for Flows \geq 500 ml/min.
 - +/- 5ml/min. for Flows < 500 ml/min.
- Repeatability: +/- 0.5%
- Maximum pressure: 60 PSIG
- Fluid Temperature: 10 to 60°C
- Amb. Temperature: 0 to 50°C
- Viscosity: 0.3 to 40 cST
 - Centistokes cST=
Centipoise (cp)/SG
- Consult factory for special applications

ELECTRICAL

- Input power: 24 VDC +/- 10%
- Analog output:
 - 4-20 mA
 - Alarm: 1 point, open Collector (30 VDC, 20 mA max.)
- Communications: RS485
- CE Compliant

CONFIGURATIONS

- Panel mount
- 1/4" tubing
- Enclosure: IP64 (indoor use)

Ordering Information

To order,

- 1) Select the Model and flow range from the following tables. (Note availability of connection options for each flow range.)
- 2) Select Connection size, configuration and cable length.
- 3) Example: 5UP005-21AA
- 4) Consult factory for availability of options and additional flow ranges.

Model	
5UP	Ultrasonic Purge Meter

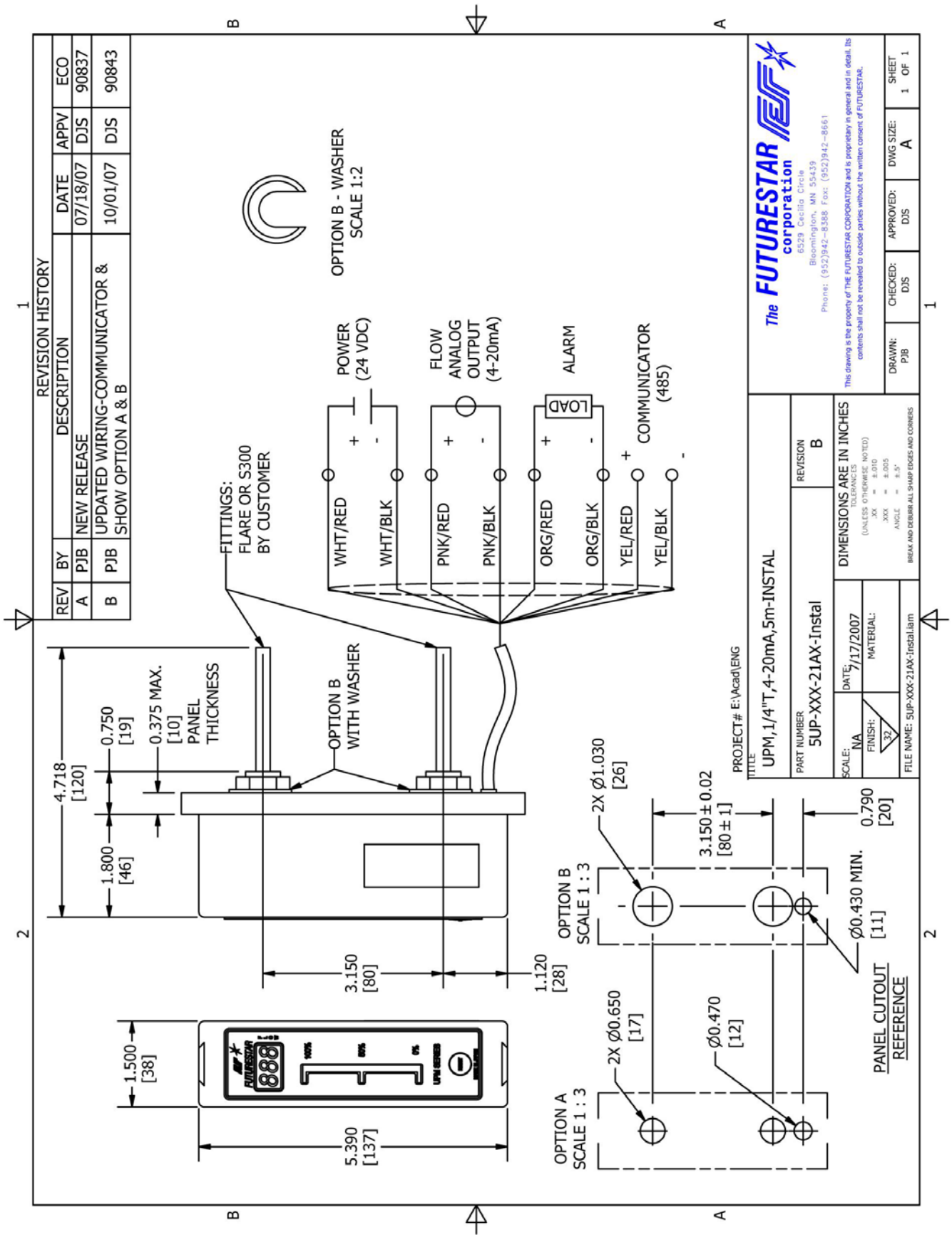
Flow Range (ml/min)		
	Connection (Type-Size)	
002	0-200	Tube-1/4"
005	0-500	Tube-1/4"
010	0-1000	Tube-1/4"
020	0-2000	Tube-1/4"
030	0-3000	Tube-1/4"

Connection Size	
2	1/4" Tube

Configuration - Panel Mount	
1	w/o valve

Cable length (meters) & Termination	
A	5 meters with tinned leads

Options	
A	None
B	Panel mounting washer (allows for prefabrication of flare or fitting onto tube) * See Drawing



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PROJECT #: E:\Acad\ENG
TITLE: UPM, 1/4" T, 4-20mA, 5m-Instal
PART NUMBER: 5UP-XXX-21AX-Instal
REVISION: B

SCALE: NA
DATE: /17/2007
FINISH: 32
MATERIAL:
FILE NAME: 5UP-XXX-21AX-Instal.dwg

DIMENSIONS ARE IN INCHES
 (UNLESS OTHERWISE NOTED)
 .XX = ±.010
 .XXX = ±.005
 ANGLE = ±.5°
 BREAK AND DEBURR ALL SHARP EDGES AND CORNERS

APPROVED: DJS
CHECKED: DJS
DRAWN: PJB
DATE: 10/01/07
DWG SIZE: A
SHEET: 1 OF 1