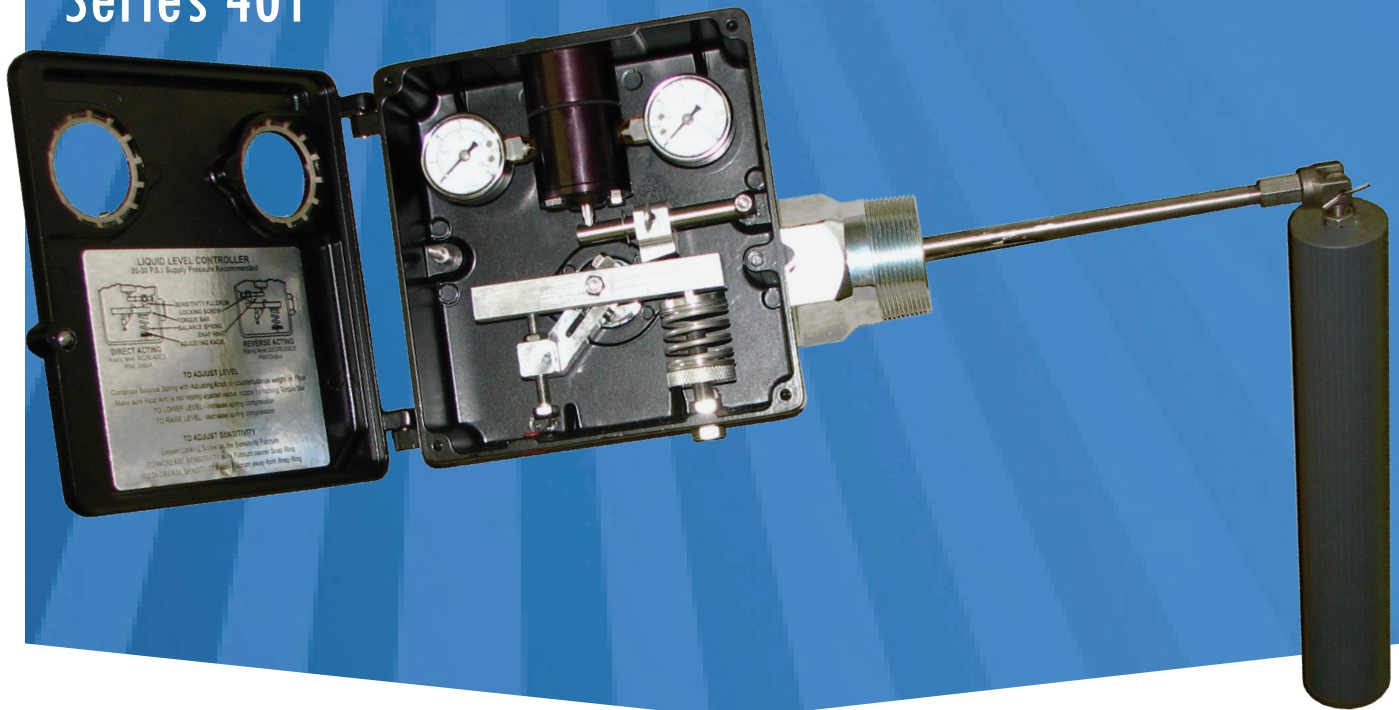


Liquid Level Controller

Series 401



Series 401 - Liquid Level Controller is suited for any oil field application where Top level or Interface control is needed. It is an economical and efficient way to maintain level with any control or dump valve combination.

FEATURES

**Field Reversible
with existing components**

Applications

- Top level
- Interface

Pneumatic Non-bleed Pilot

- Action: Snap for On/Off
Throttle for modulating

Displacers

- Standard material offering is PVC.
- Acrylic and 316SST available upon request.

NACE

- NACE MR-01-75 specification for sour service



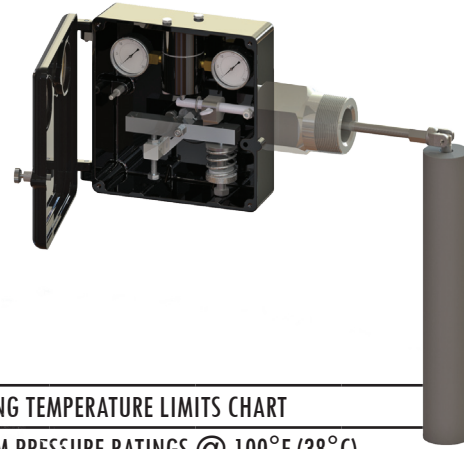
SERIES 401.SPECIFICATIONS

SPECIFICATIONS

END CONNECTION	2" MNPT
PRESSURE RATING	6000 PSIG (414 BAR)
PILOT	SNAP (On/Off), 0-20/0-30 psig OUTPUT THROTTLE (modulating), 3-15/6-30 psig OUTPUT
SUPPLY PRESSURE	3-15 or 0-20: 20-30 psig min. 6-30 or 0-30: 35-40 psig min.
SUPPLY & OUTPUT CONNECTIONS	1/4" FNPT
OPERATING TEMPERATURE LIMITS	SEE CHART
SEAL TEMPERATURE RATINGS	VITON: -20 TO 400°F (-29 TO 204°C)
DISPLACER PRESSURE RATINGS	SEE CHART
MINIMUM ALLOWABLE FLUID SPECIFIC GRAVITY	SEE CHART

MATERIALS OF CONSTRUCTION

BODY:	STEEL
CASE & COVER:	DIE CAST ALUMINUM
PILOTS:	ALUMINUM with SST Internals
PILOT GASKETS/DIAPH.	VITON
GAUGES	BRONZE BRONZE LF (optional) 316 SST (optional) 316 SST LF (optional)
SHAFT	316 SST (optional)
BEARING BLOCKS	316 SST (optional)
BEARINGS	440C SST
SEALS	VITON
DISPLACER	PVC ACRYLIC (optional) 316 SST (optional)
DISPLACER ARM	316 SST
WIVEL	316 SST
CHAIN	302 SST



OPERATING TEMPERATURE LIMITS CHART				
MAXIMUM PRESSURE RATINGS @ 100°F (38°C)				
BODY	SEALS	DISPLACER	TEMP. LIMITS	
			°F	°C
CS	BUNA	PVC	-20 TO 140°	-29 TO 60°
CS	BUNA	ACRYLIC	-20 TO 180°	-29 TO 82°
CS	BUNA	316 SST	-20 TO 180°	-29 TO 82°
CS	VITON	PVC	-20 TO 140°	-29 TO 60°
CS	VITON	ACRYLIC	-20 TO 200°	-29 TO 93°
CS	VITON	316 SST	-20 TO 400°	-29 TO 204°

DISPLACER PRESSURE RATINGS CHART		
MATERIAL	MAXIMUM PRESSURE	
	Psig	Bar
PVC	6170	426
ACRYLIC	6170	426
316 SST	2000@180°F 1595@400°F ¹	138@82°C 110@204°C ¹

¹ - PLEASE CONSULT UF FOR APPLICATION REQUIRING HIGHER PRESSURE RATING FOR SST DISPLACERS.

MINIMUM ALLOWABLE FLUID SPECIFIC GRAVITY CHART		
TOP LEVEL CONTROL		
PILOT	HORIZONTAL DISPLACER	VERTICAL DISPLACER
	STANDARD ¹	STANDARD ²
SNAP	0.28	0.21
THROTTLE	0.56	0.42

LIQUID-LIQUID INTERFACE LEVEL CONTROL				
PILOT	HORIZONTAL DISPLACER		VERTICAL DISPLACER	
	Std ¹	Special ³	Std ²	Special ³
SNAP	0.28	0.030	0.21	0.050
THROTTLE	0.56	0.060	0.42	0.100

¹ - Based on 1.88" dia. x 12" displacer with 12.5" displacer arm.
² - Based on 1.88" dia. x 12" displacer with 15" displacer arm.
³ - Please consult UF for special displacer and displacer arm configurations.

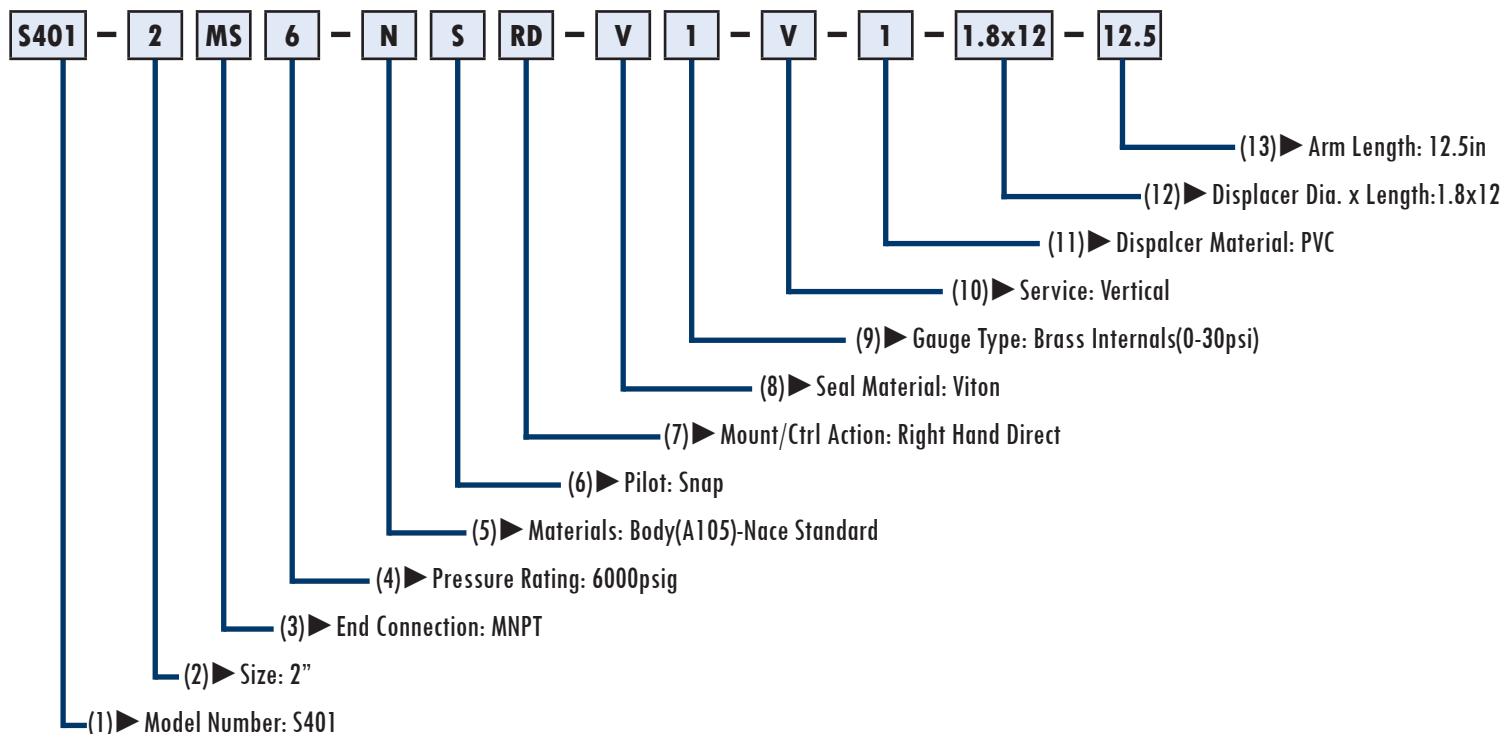
Universal Flow products are warranted to be free from defects in materials and workmanship for a period of eighteen months from the date of sale, provided said products are used according to Universal Flow recommended usages. Universal Flow liability is limited to the repair, purchase price refund, or replacement in kind, at Universal Flow's sole option, of any products proved defective. Universal Flow reserves the right to discontinue manufacture of any products or change products materials, designs or specifications without notice. Note: Universal Flow does not assume responsibility for the selection, use, or maintenance of any product. Responsibility for the proper selection, use, and maintenance of any Universal Flow product remains solely with the purchaser and end user.

SERIES 401.MODEL NUMBER

Model Number are designed to cover essential features.

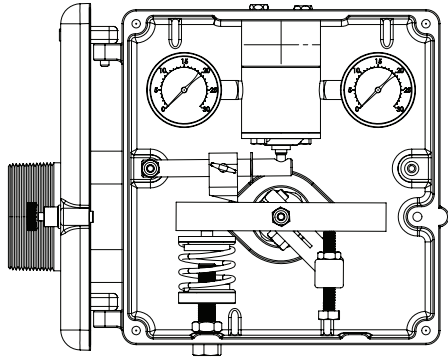
SERIES	SIZE	END CONNECTION TYPE	PRESSURE RATING	MATERIALS	PILOT	MOUNTING/ CONTROLLER ACTION	SEAL MATERIAL	GAUGE TYPE	SERVICE	DISPLACER MATERIAL
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
S401	2 2"	MS MNPT	6 MNPT (6000psig)	N Body(NACE) -1018/A105 Shaft -316 SST Brig Block -316 SST	S Snap Pneumatic on/off	LD Left Hand Direct	V VITON	1 0-30 psi Brass Internals	H Horizontal	1 PVC
					T Throttle Pneumatic Modulating	LR Left Hand Reverse	X SPECIAL (specified)	2 0-30 psi 316 SST Internals	V Vertical (Swivel)	2 ACRYLIC
						RD Right Hand Direct		3 0-30 psi Brass Internals Liquid-Filled		3 STAINLESS STEEL
						RR Right Hand Reverse		4 0-30 psi 316 SST Internals Liquid-Filled		

Example:

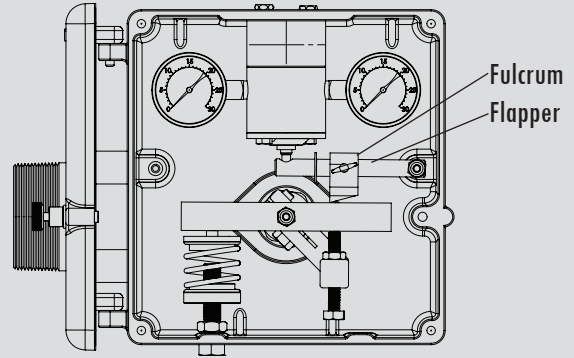


- Notes:
1. Design and construction details are subject to change without notice.
 2. Other materials available upon request.

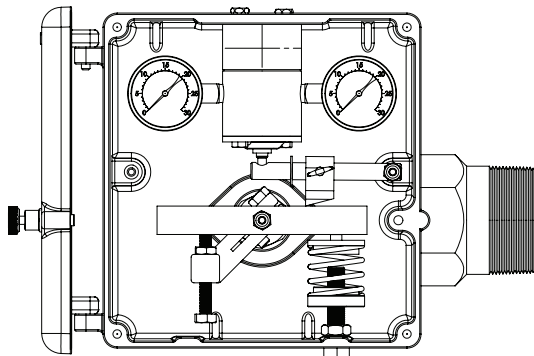
SERIES 401. ORIENTATION & MOUNTING



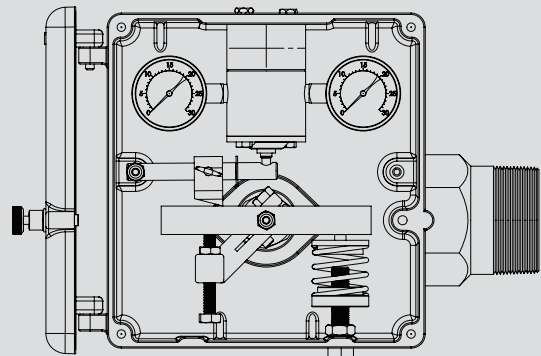
Left Hand Direct



Left Hand Reverse



Right Hand Direct



Right Hand Reverse

For **DIRECT ACTING** - the Flapper bar and Fulcrum are on the **SAME** side as the spring.

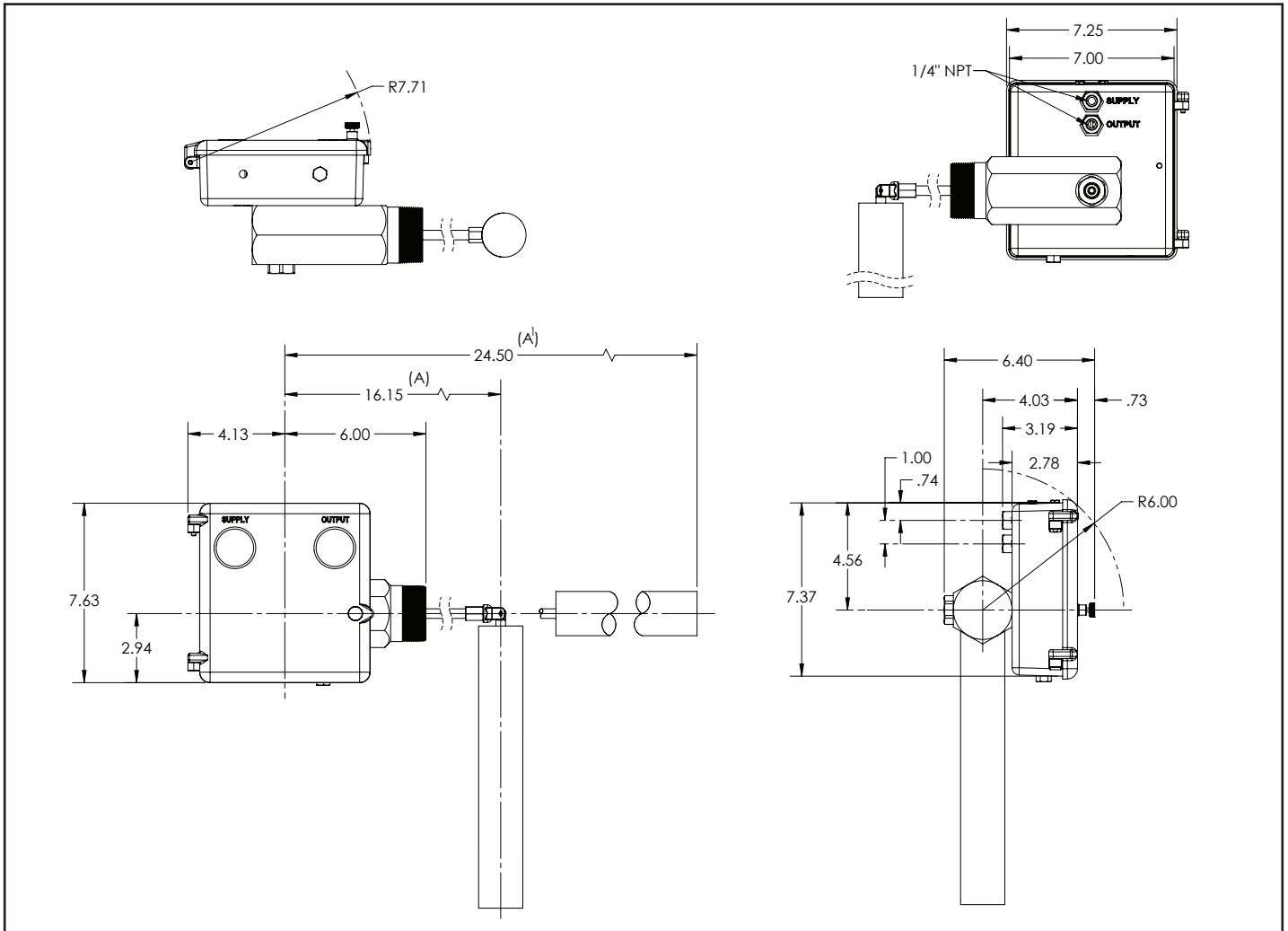
For **LEFT** hand mount the body is on the left side of the case.

For **REVERSE ACTING** - the Flapper bar and Fulcrum are on the **OPPOSITE** side as the spring.

For **RIGHT** hand mount the body is on the right side of the case.



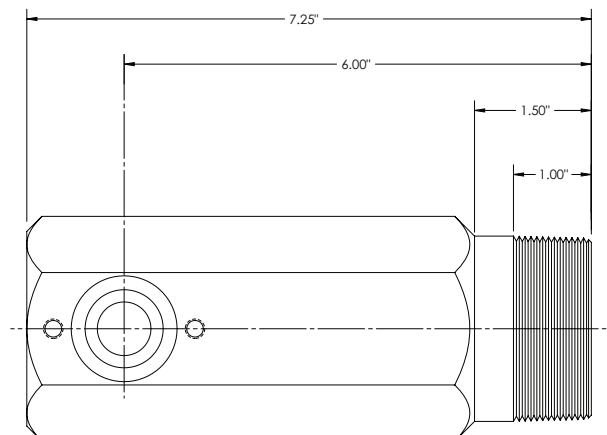
SERIES 401.DIMENSION



Different sizes for arms and displacers are available upon request.

(A) Dimension based on the vertical service configuration of 15" arm with a 12" lg. displacer.

(A¹) Dimension based on the horizontal service configuration of 12.5" arm with a 12" lg. displacer.



The logo consists of the letters 'U' and 'F' in a bold, blue, sans-serif font. The 'U' is positioned to the left of the 'F', and they are both contained within a yellow rounded rectangular shape with a white border.

Universal Flow Valve

www.ufvalve.com

Data provided is for informational purposes only. We cannot accept responsibility for any errors in this catalog, as technical advancements may result in improved designs and materials.