

# **GENERAL PURPOSE FLOW CONTROLLERS**

#### General,

The paddle type WFS series flow controllers are specifically designed for use on liquid lines such as water, ethylene glycol or any other fluid which is not harmful to brass, ss or phosphor bronze and which is not classified as a hazardous fluid.

When a WFS series flow controllers is used as an operating control device and where an operating control device failure would result in personal injury and/or loss of property, it is the responsibility of the user to add safety devices that protect against control device failure.

### Mounting.

The flow controller can be mounted in a horizontal or vertical pipeline but must be located in a section of pipe where there is a straight run of atleast 5 pipe diameters on each side of the switch.







## SPECIFICATIONS

Model Number	WFS-25P / 25S / 25T / 19S / 19T / 12S / 12T					
Pipe Connection	1" MPT / 1" BSP / ¾" BSP / ¾" NPT / ½" BSP / ½" NPT					
Materials	Brass / Stainless Steel - 304 / Engg. Plastic					
	Phosphor Bronze					
	Mild Steel					
	Neoprene					
Maximum Operating Pressure	10 bar (150 Psi)					
Liquid Temperature	1 to 100° C					
Setpoint Adjustment	Screw under cover.					
Ambient Temperature Limits	0 to 60° C					
Flow rates	See chart overleaf. Flow Rates m <sup>3</sup> /h, US GPM & LPM					
Bellow life	5,00,000 cycles					
Switch Action	SPDT, Snap-acting.					
Electrical Ratings	Upto 250VAC, 15(7.5) A, 50/60 Hz					
Wire Connections	Screw-down Terminals					
Paddles	Supplied in 5-piece package in sizes of 1", 2", 3", 5" and 6"					
Enclosure Protection Class	I.P 55					
Conduit Opening	22 mm diameter hole for 1/2" Conduit.					
Dimensions	See overleaf. Dimension in mm.					
Shipping Weight	0.7 kgs.					

The specifications above are normal and confirm to generally acceptable industry standards. Castle is not responsible for damages resulting from misapplication or misuse of it's products.

# **WFS SERIES FLOW CONTROLLERS**

Pipe Size*		Mm Inches	20 3/4	25 1	32 1-1/4	38 1-1/2	51 2	63 2-1/2	76 3	102 4	127 5	152 6
Minimum Adjustment (Factory Set)	Flow Increase	US GPM	5.50	6.00	9.80	12.70	18.80	24.30	30.00	39.70	58.70	79.20
		LPM	21	23	37	48	71	92	113	150	222	300
		m³/h	1.11	1.36	2.22	2.89	4.27	5.51	6.82	9.02	13.33	17.99
	Flow Decrease	US GPM	2.90	3.60	5.60	7.00	9.40	11.60	12.00	19.80	29.30	39.60
		LPM	10	13.62	21	26	35	44	45	75	110	150
		m <sup>3</sup> /h	0.66	0.82	1.27	1.59	2.13	2.63	2.72	4.49	6.65	8.99
Minimum Adjustment	Flow Increase	US GPM	8.80	10.20	16.80	23.00	32.80	42.40	52.10	73.50	115.00	166.00
		LPM	33	38	63	87	124	160	197	278	435	628
		m <sup>3</sup> /h	2.12	2.32	3.80	5.22	7.45	9.63	11.83	16.69	26.12	37.70
	Flow Decrease	US GPM	8.50	9.20	15.00	19.50	24.00	37.50	46.10	64.20	92.00	123.00
		LPM	32	35	56	74	91	142	174	243	348	465
		m³/h	1.82	2.09	3.41	4.43	5.45	8.51	10.47	14.58	20.89	27.94

\* Use or trim standard paddle size.

Flow Rates, m<sup>3</sup>/h, US GPM & LPM

## **Operating Instructions**

## Setting Adjustment.

- 1. Remove flow conroller cover.
- 2. For higher flow rate, turn range adjusting screw clockwise.
- 3. For lower flow rate, turn range adjusting screw counter-clockwise.
- 4. Be sure that flow controller cover is replaced before leaving jobsite.

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## Wiring Diagram

NC

RANGE ADJUSTING SCREW



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CAST