

CV Series 1.5–3” Inline Flow Meters

Engineered Flow Measurement Built Around Your Process



CV3040-15 1.5” Meter

- 1.5” inline meter suited for commercial/industrial applications
- Stainless steel construction
- Service flow range 0.5 to 75 gpm (2-284 lpm)
- Meter accuracy $\pm 5\%$
- Reliable and proven turbin design
- 15-foot cable included
- 1.5” male x female NPT

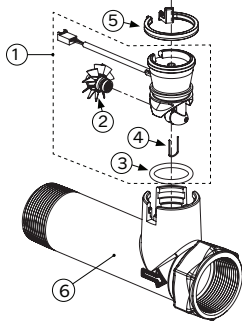
CV3094-15 2” Meter

- 2” inline meter suited for commercial/industrial applications
- Stainless steel construction
- Service flow range 1.5 to 150 gpm (5.7-568 lpm)
- Meter accuracy $\pm 5\%$
- Reliable and proven turbin design
- 15-foot cable included
- 2” male x female NPT

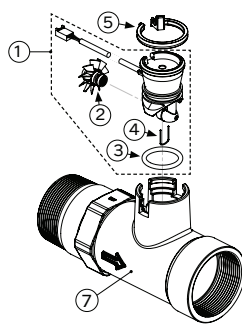
CV3095-15 3” Meter

- 3” inline meter suited for commercial/industrial applications
- Stainless steel construction
- Service flow range 3.5 to 350 gpm (13-1,325 lpm)
- Meter accuracy $\pm 5\%$
- Reliable and proven turbin design
- 15-foot cable included
- 3” male x female NPT

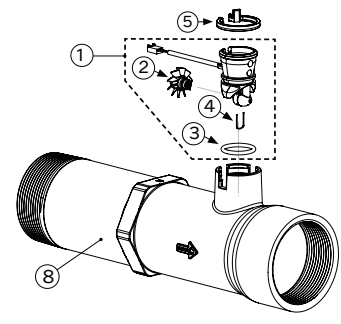
WS1.5 Meter Assembly
Order No: CV3040-15



WS2 Meter Assembly
Order No: CV3094-15



WS3 Meter Assembly
Order No: CV3095-15



37 pulses per gallon or 9.8 pulses per liter

20 pulses per gallon or 5.3 pulses per liter

8 pulses per gallon or 2.1 pulses per liter

Drawing No.	Order No.	Description	Quantity
COMMON PARTS			
1	CV3221	WS Remote Meter Asy 15 Ft Cord (includes CV3118-03, CV3501, and CV3105)	1
2	CV3118-03	WS1.5/2 Turbine Asy	1
3	CV3105	O-Ring 215	1
4	CV3501	WS1.5/2 Turbine Clip	1
5	CV3632	WS1.5/2/3 Meter Retaining Clip	1
WS1.5 METER ASSEMBLY PARTS			
6	CV3401-04	WS1.5 Meter Housing MxF NPT	1
Not Shown	CV3437	WS1.5 Flow Straightener (located inside meter housing)	1
WS2 METER ASSEMBLY PARTS			
7	CV3754-01	WS2 Meter NPT MxF Housing	1
Not Shown	CV3488	WS2 Flow Straightener (located inside meter housing)	1
WS3 METER ASSEMBLY PARTS			
8	CV3844-01	WS3 Meter NPT MxF Housing	1
Not Shown	CV3602	WS3 Flow Straightener (located inside meter housing)	1

Installation

WHEN INSTALLING THE METER, MAKE SURE THE ARROW ON THE METER BODY IS GOING THE SAME DIRECTION AS THE WATER FLOW. THE METER CAN BE INSTALLED IN HORIZONTAL OR VERTICAL APPLICATIONS.

THIS WATER METER SHOULD NOT BE USED AS THE PRIMARY MONITORING DEVICE FOR CRITICAL OR HEALTH EFFECT APPLICATIONS.

OPERATING PRESSURES: 20 PSI MINIMUM/125 PSI MAXIMUM (1.4 - 8.6 BAT) • OPERATING TEMPERATURES: 40°F MINIMUM/110°F MAXIMUM (4° - 43°C)

Wiring:

- The meter must be supplied with a DC voltage between 4 and 24 volts.
- The RED wire is positive. The BLACK wire is negative. The WHITE wire is the meter output.

Calibration Instructions for WS1.5 Meters:

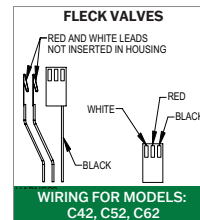
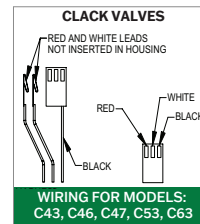
- For 1.5" valves select 1.5 if valve software records in gallons and 38 if valve software records in cubic meters.
- The calibration factor for the Meter Assembly is 37 pulses per gallon or 9.8 pulses per liter when used on applications other than A.O. Smith valves.
- The meter flow range is 0.5-75 gpm (2-284 lpm) + 5% (output signal 0.4 Hz to 47.5 Hz).
- Pressure drop at 75 gpm (284 lpm) is 2.7 PSI (0.2 bar)

Calibration Instructions for WS2 Meters:

- For 2" valves select 2.0 if valve software records in gallons and 50 if valve software records in cubic meters.
- The calibration factor for the 2" Meter Assembly is 20 pulses per gallon or 5.3 pulses per liter when used on applications other than A.O. Smith valves.
- The meter flow range is 1.5-150 gpm(5.7-568 lpm) +5% (output signal 0.4 Hz to 47.5 Hz).
- Pressure drop at 150 gpm (568 lpm) is 3.6 PSI (0.3 bar)

Calibration Instructions for WS3 Meters:

- The calibration factor for the 3" Meter Assembly is 8 pulses per gallon or 2.1 pulses per liter when used on applications other than A.O. Smith valves.
- The meter flow range is 3.5-350 gpm (13-1,325 lpm) +5% (output signal 0.46 Hz to 46.6 Hz).
- Pressure drop at 350 gpm (1,325 lpm) is 7.3 PSI (0.50 bar)



The 22 gauge wire crimp terminals are Molex Series 41572 or 40445. The housing connector is Molex Series 2695 White Housing, P/N 22-01-3037. The housing connector diagram shows the proper installation of the RED, WHITE, and BLACK wires for A. O. Smith control valves.

When connecting to other manufacturers control valves, please contact your original equipment manufacturer for proper wiring instructions.

NOTE: Not all flow monitors will register accurately at either the low or high flow range of this meter. Contact your flow monitor manufacturer for limitations.

