

# JV-BB Positive Displacement Gear Flow Meter

## Common Uses

The JV-BB series of meters maintains 0.5% accuracy over the full range of the meter, high resolution, and has high pressure ratings up to 6,000 psi. These PD meters are available in three body materials and were designed for measuring lubricating and non-abrasive fluids with low or medium viscosity. Applications include:

- Chemical injection & dosing systems
- Fuel measurement
- Test stands
- Hydraulic positioning systems
- Coolant & lubrication monitoring



## Technical Specifications

6 Flow Ranges	0.005 to 120 gpm (across all meter sizes)
Measuring Accuracy	±0.5% M.V. over full range with 30cP fluid, ±0.25% M.V. optional with select sensors
Repeatability	± 0.1%
Temperature Range	-40°F to +356°F   -40°C to +180°C (see sensor datasheet for system temp. range)
Max. Operating Pressure	up to 6,000 psi
Ports	<u>60BB and smaller</u> : NPT standard, BSPP & bottom manifold mount optional <u>80BB &amp; 90BB</u> : 1-1/4" SAE code 62 flange pattern standard; NPT, JIC & SAE flanges available upon request.
Turndown	up to 150:1
Calibration	4-point calibration

## Materials of Construction

Body	JVA = 7075 Aluminum, JVM = 303 Stainless Steel, or JVS = 316L Stainless Steel
Gears & Bearings	Stainless Steel (DIN 1.4122)
O-Ring	FKM, FFKM, or PTFE
Shaft	402 Stainless Steel
Bolts	Zinc Flake Coated Carbon Steel (Inconel 718 optional)

## Output Options

Choose from a wide variety of pickups, sensors, monitors, and controllers to pair with your gear meter:

- Frequency
- Analog (voltage or 4-20mA)
- Battery, loop, or DC powered displays

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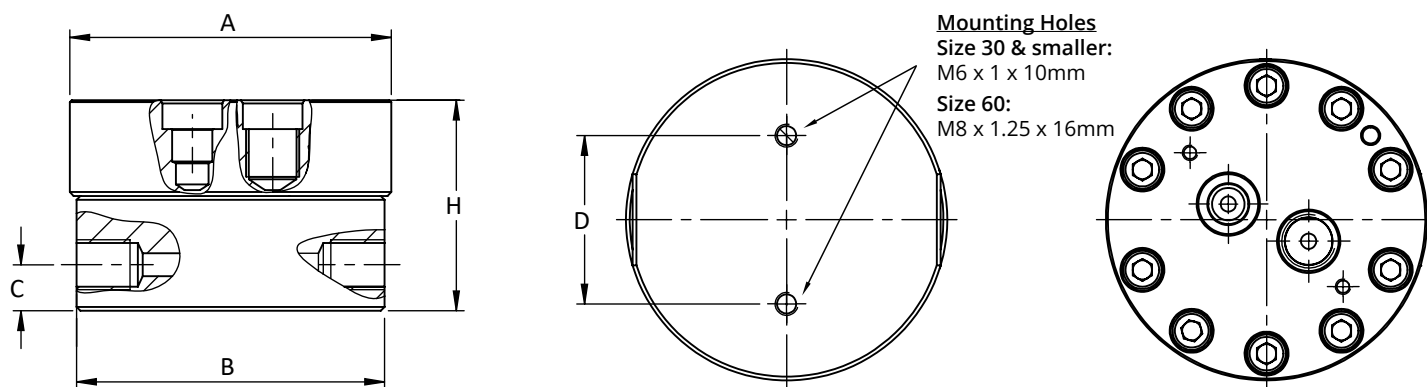
## Meter Data

Meter Size	Flow Range			Resolution*		Ports	Filtration (microns)	Pressure (psi/bar)
	(GPM)	(LPM)	(Gal/Day)	(Impulses/Gal)	(Impulses/CC)			
JV#-12BB	0.005-0.8	0.02-3.0	7.2-1152	106,000	28.0	1/4" NPT	30	6,000/420
JV#-20BB	0.02-2.0	0.1-7.6	28.8-2880	31,800	8.4	1/4" NPT	30	6,000/420
JV#-30BB	0.1-7.0	0.5-26.5	144-10,080	13,200	3.5	1/2" NPT	30	6,000/420
JV#-60BB	0.1-20.0	0.5-75.7	144-28,800	3,600	0.95	3/4" NPT	30	6,000/420
JV#-80BB	0.5-60.0	1.9-227	720-86,400	1,600	0.42	1-1/4" SAE Code 62	200	5,000/345
JV#-90BB	1.0-120.0	3.8-454	1440-172,800	800	0.21	1-1/4" SAE Code 62	200	5,000/345

# - Complete part # by selecting body material as follows: M=303 Stainless Steel, S=316 Stainless Steel, A= Aluminum. \* Figures shown represent resolution when using dual pickup sensor for 12BB to 60BB and x4 sensors for 80BB & 90BB.

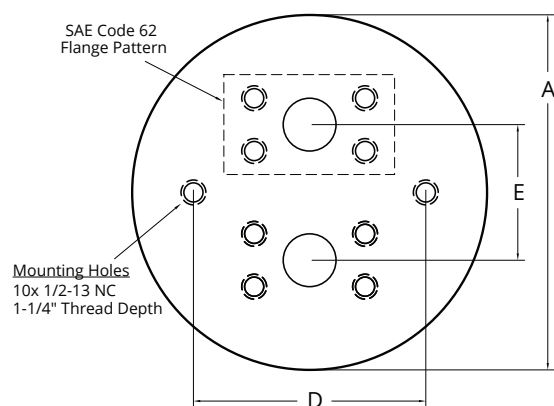
## Meter Dimensions

### 12BB through 60BB



Meter Size	Dimensions						Weights (Lbs)		
	A	B	C	D	E	H	JVS	JVM	JVA
JV#-12BB	3.0"	2.9"	0.47"	1.7"	--	2.2"	3.6	3.6	1.8
JV#-20BB	3.3"	3.2"	0.47"	1.7"	--	2.2"	4.9	4.9	2.7
JV#-30BB	3.3"	3.2"	0.59"	1.7"	--	2.7"	6.4	6.4	2.9
JV#-60BB	5.0"	4.9"	0.75"	2.4"	--	4.3"	18.8	18.8	9.1
JV#-80BB	8.4"	8.4"	--	5.5"	3.2"	5.5"	78.0	78.0	31.0
JV#-90BB	8.4"	8.4"	--	5.5"	3.2"	7.0"	97.0	97.0	66.0

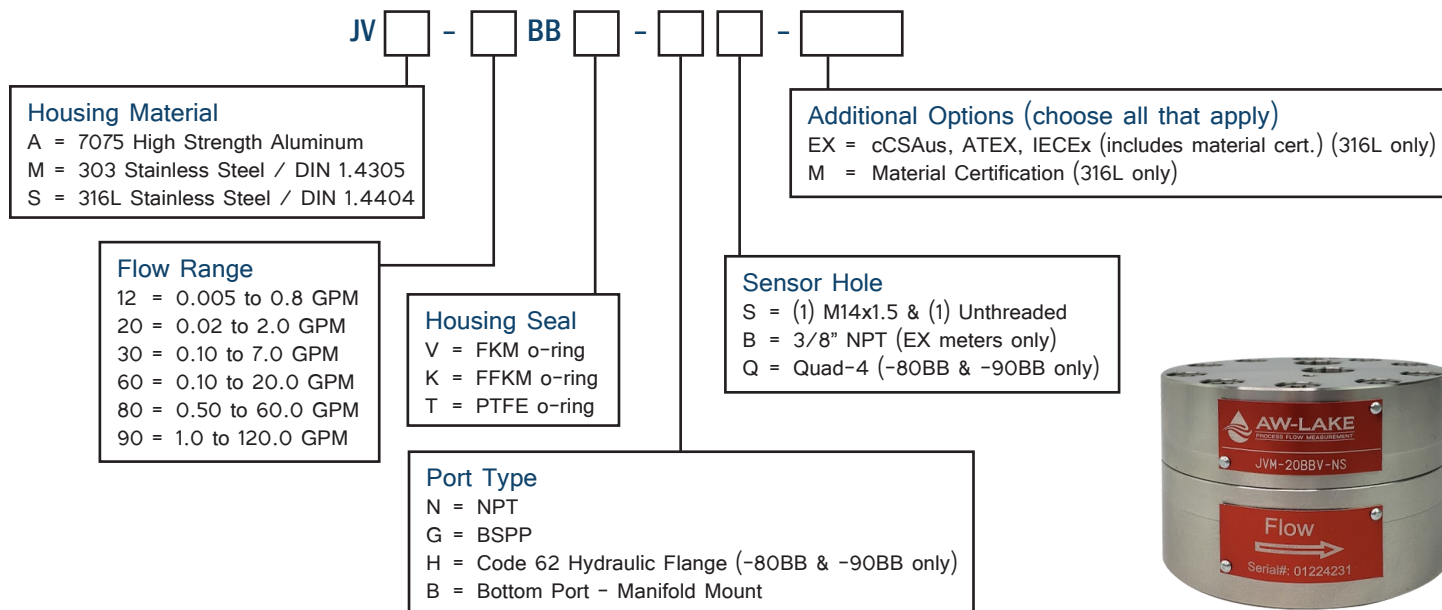
### 80BB & 90BB



3D STEP Models are available upon request of factory.  
Products may be subject to change without notice. Contact factory for the most up-to-date product information.

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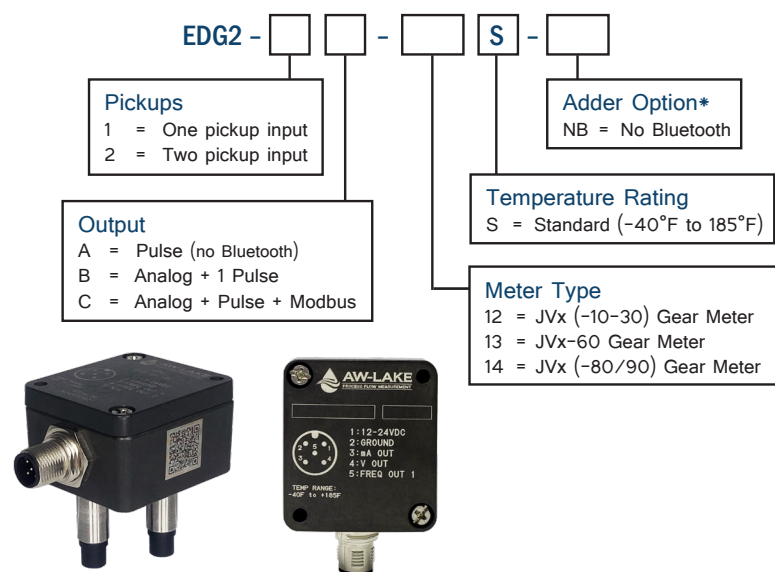
## Part Number Guide



## Recommended Sensors

AW-Lake offers a wide selection of Sensors/Pickups and Monitors/Controllers to optimize flow measurement and deliver your flow data where you need it and in the format you need it.

### JV-BB Standard Sensor: EDGE Sensor



### Additional Electronics Options:

JV-BB meters are also compatible with a range of other pickups, displays, and controllers for high temperature and EX-rated environments.

Visit [AW-Lake.com](http://AW-Lake.com) for more information.



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