

JV-BB Positive Displacement Gear Flow Meter

Common Uses

We improved on our industry-leading JV-KG series of meters with 0.5% accuracy over the full range of the meter, higher resolution, and higher pressure ratings with the release of our JV-BB series. These PD meters 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 & 90BB</u> : 1-1/4" SAE code 62 flange pattern standard; NPT, JIC & SAE flanges available upon request. |
| Turndown | up to 150:1 |
| Calibration | 7-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

JV-BB Positive-Displacement Gear Flow Meter

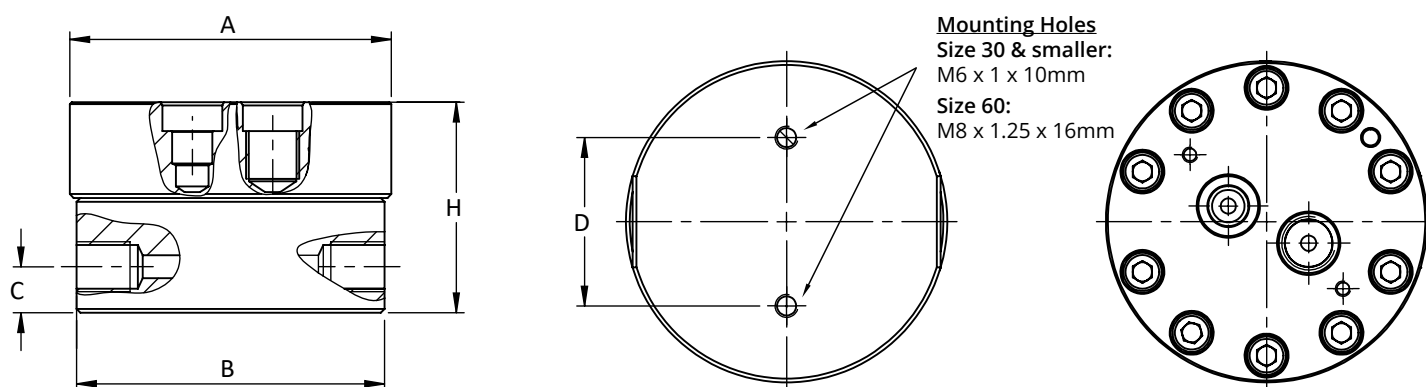
Meter Data

| 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.

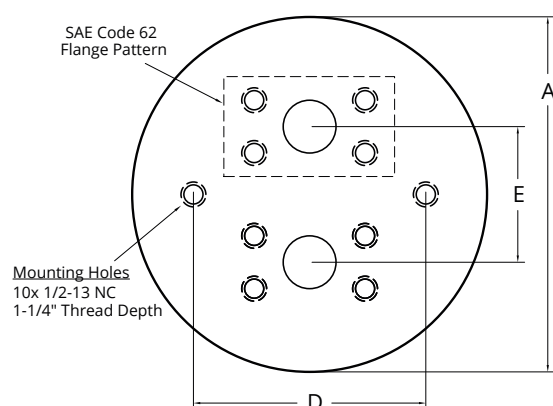
Meter Dimensions

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 |

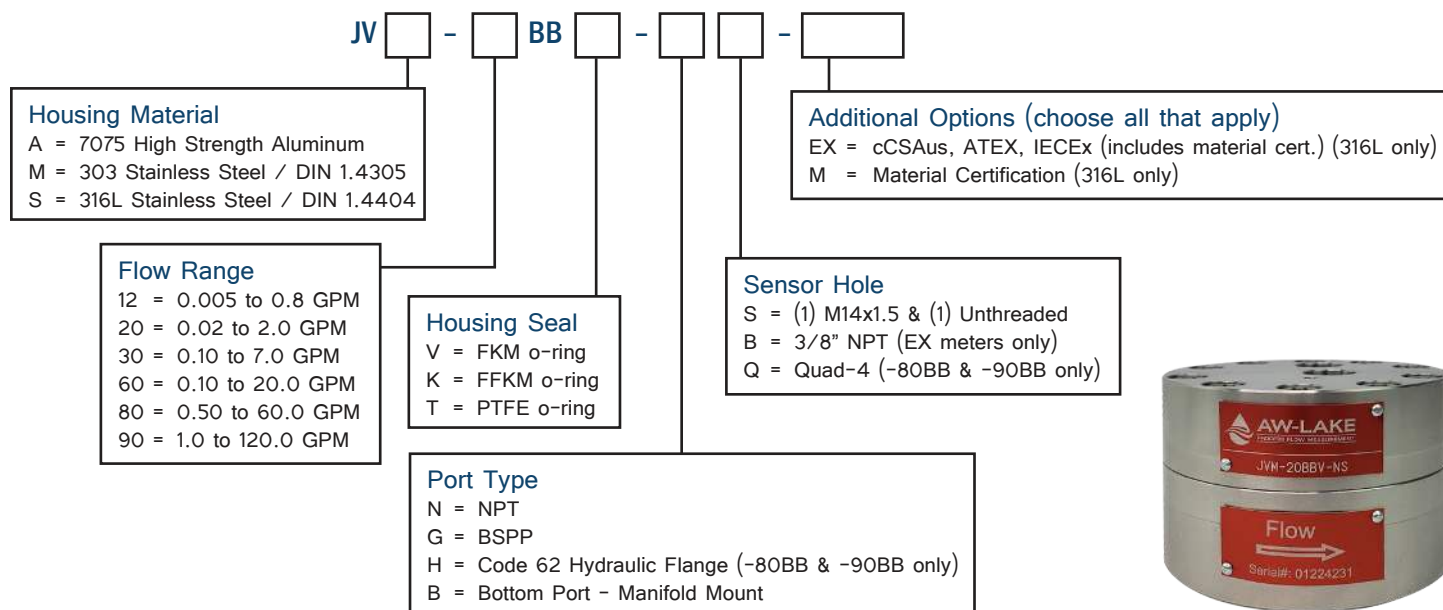
80BB & 90BB



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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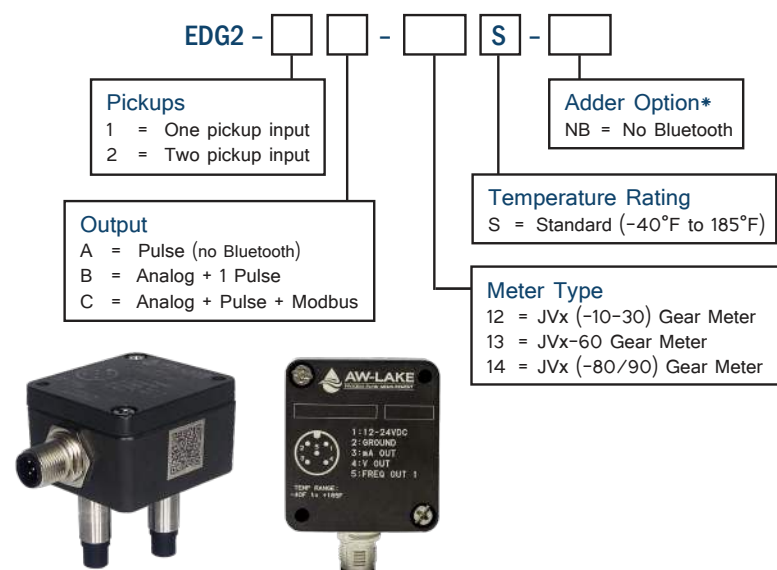
Part Number Guide



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 for more information.



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