

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% over full range with 30cP fluid, ±0.25% optional with select sensors
Repeatability	± 0.1%
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 logarithmic 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

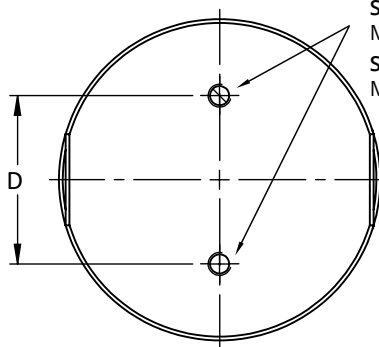
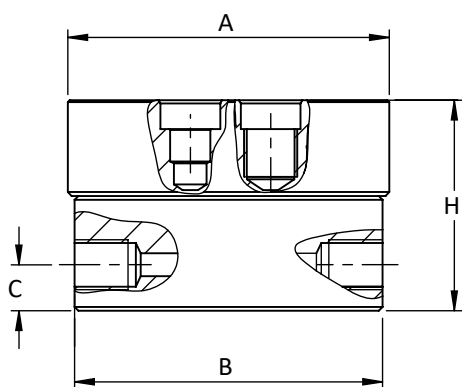
Meter Data

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

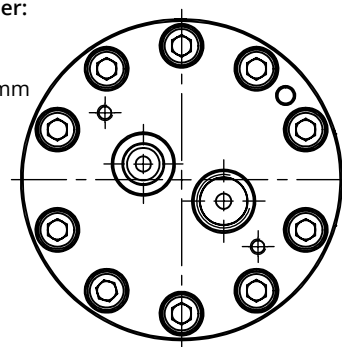
- Complete part # by selecting body material as follows: M=303 Stainless Steel, S=316 Stainless Steel, A= Aluminum. * Figures shown represent resolution when using dual pickup sensor for 12BB to 60BB and x4 sensors for 80BB & 90BB.

Meter Dimensions

12BB through 60BB

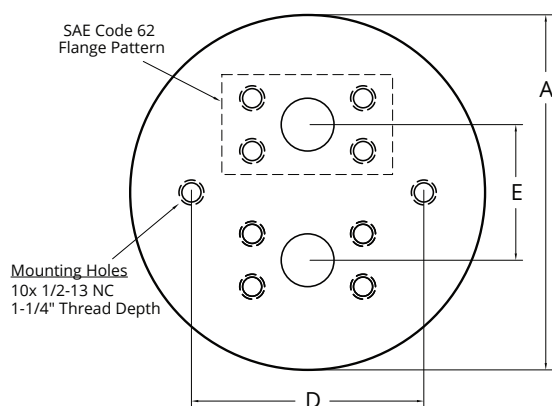


Mounting Holes
 Size 30 & smaller:
 M6 x 1 x 10mm
 Size 60:
 M8 x 1.25 x 16mm



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"	0.51"	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.

JV-BB Positive-Displacement Gear Flow Meter

Part Number Guide

JV - BB - -

Housing Material

A = 7075 High Strength Aluminum
 M = 303 Stainless Steel / DIN 1.4305
 S = 316L Stainless Steel / DIN 1.4404

Flow Range

12 = 0.005 to 0.8 GPM
 20 = 0.02 to 2.0 GPM
 30 = 0.10 to 7.0 GPM
 60 = 0.10 to 20.0 GPM
 80 = 0.50 to 60.0 GPM
 90 = 1.0 to 120.0 GPM

Housing Seal

V = FKM o-ring
 K = FFKM o-ring
 T = PTFE o-ring

Port Type

N = NPT
 G = BSPP
 H = Code 62 Hydraulic Flange (-80BB & -90BB only)
 B = Bottom Port - Manifold Mount

Additional Options (choose all that apply)

EX = cCSAus, ATEX, IECEx (includes material cert.)
 C = CRN (Canadian Registration Number)
 M = Material Certification
 N = NACE

Sensor Hole

S = 2x M14x1.5
 B = 3/8" NPT (EX meters only)
 Q = Quad-4 (-80BB & -90BB only)



Electronics Options

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:

- Analog (Voltage & 4-20mA available)
- Frequency
- Modbus®
- HART®
- Bluetooth®
- Electronic Displays (Local & Remote Mount)
- Certified Units (UL, cCSAus, ATEX, IECEx)
- Wireless Monitoring (Radio Frequency)

Refer to website for more information.



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