AW-LAKE
PROCESS FLOW MEASUREMENT

POSITIVE DISPLACEMENT **FLOW METERS INSTRUMENTATION**

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

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	60BB and smaller: NPT standard, BSPP & bottom manifold mount optional 80BB & 90BB: 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 C 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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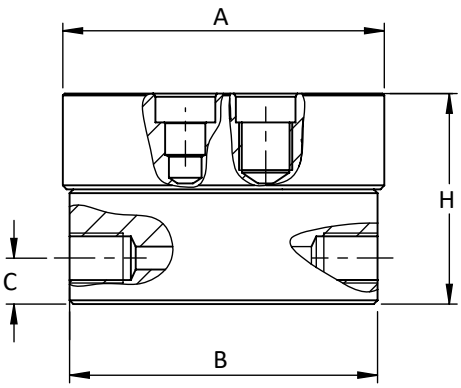
JV-BB Positive Displacement Gear Flow Meter

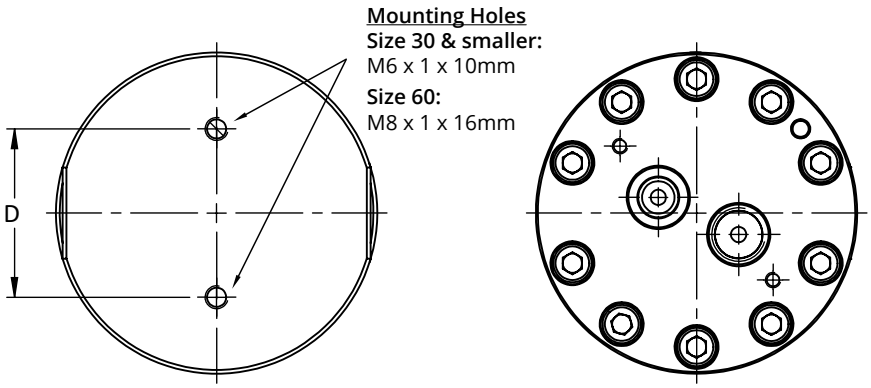
Meter Data

Meter Size	Flow Range			Resolution*		Ports	Filtration	Pressure
	(GPM)	(LPM)	(Gal/Day)	(Impulses/Gal)	(Impulses/CC)		(microns)	(psi/bar)
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.*

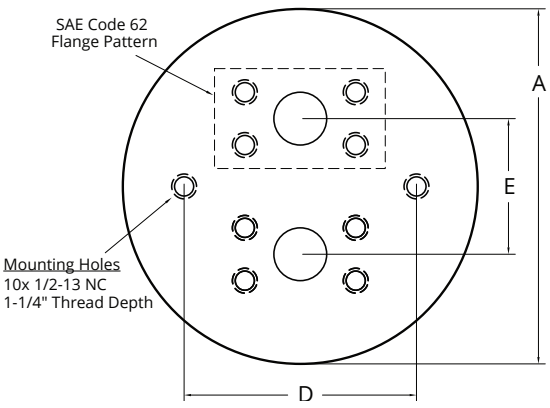
Meter Dimensions





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.

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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

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

Additional Options (choose all that apply)
EX = cCSAus, ATEX, IECEx (includes material cert.)
C = CRN (Canadian Registration Number)
M = Material Certification
N = NACE

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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JV-TC Positive Displacement Gear Flow Meter

Common Uses

JV-TC positive displacement flow meters build upon our 40+ years of excellence in measuring non-lubricating and filled fluids by improving gear/shaft design, increasing pressure ratings, and improving flushability. These improvements, along with the standard 7-point calibration and new EDGE sensor give you a 0.5% accurate meter across the full flow range. Practical applications include:

- Filling and dosing systems
- Paint shops and delivery systems
- Polyurethane systems
- Multiple-component mixing systems
- Adhesive dispensing systems
- Hydraulic systems

Technical Specifications

5 Flow Ranges	0.001 to 20 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	NPT standard, BSPP & bottom manifold mount optional
Turndown	up to 400:1
Calibration	7-point logarithmic calibration

Materials of Construction

Body	JVM = 303 Stainless Steel or JVS = 316L Stainless Steel
Gears	Stainless Steel (DIN 1.4122)
O-Ring	FKM, FFKM, or PTFE
Bearings & Shafts	Tungsten Carbide
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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PROCESS FLOW MEASUREMENT

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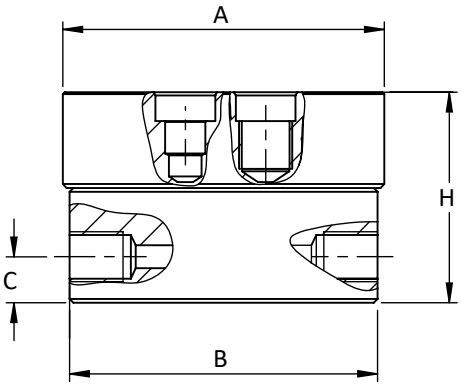
JV-TC Positive Displacement Gear Flow Meter

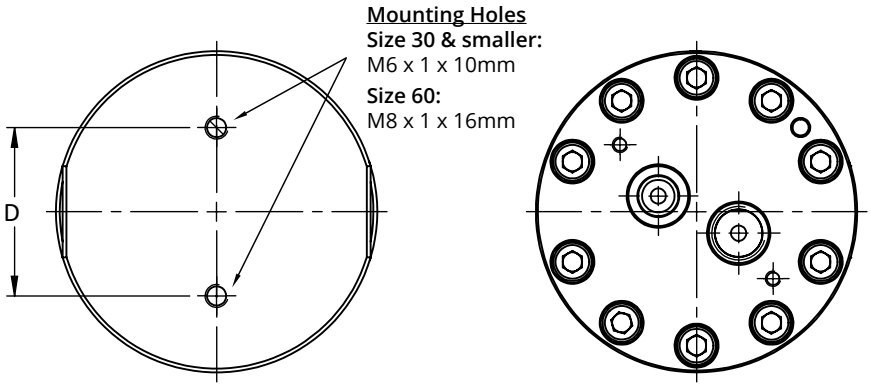
Meter Data

Meter Size	Flow Range			Resolution*		Ports	Filtration	Pressure
	(GPM)	(LPM)	(Gal/Day)	(Impulses/Gal)	(Impulses/CC)		(microns)	(psi/bar)
JV#-10TC	0.001-0.5	0.004-1.9	1.4-720	200,600	53.0	1/4" NPT	120	6,000/420
JV#-12TC	0.005-0.8	0.02-3.0	7.2-1152	106,000	28.0	1/4" NPT	120	6,000/420
JV#-20TC	0.02-2.0	0.08-7.6	28.8-2880	31,800	8.4	1/4" NPT	120	6,000/420
JV#-30TC	0.1-7.0	0.38-26.5	144-10,080	13,200	3.5	1/2" NPT	120	6,000/420
JV#-60TC	0.1-20.0	0.38-75.7	144-28,800	3,600	0.95	3/4" NPT	200	6,000/420

*# - 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.*

Meter Dimensions





Meter Size	Dimensions					Weights	
	A	B	C	D	H	(Lbs)	(Kg)
JV#-10TC	3.0"	2.9"	0.47"	1.7"	2.2"	2.9	1.3
JV#-12TC	3.0"	2.9"	0.47"	1.7"	2.2"	3.6	1.6
JV#-20TC	3.3"	3.2"	0.47"	1.7"	2.2"	4.9	2.2
JV#-30TC	3.3"	3.2"	0.51"	1.7"	2.7"	6.4	2.9
JV#-60TC	5.0"	4.8"	0.75"	2.4"	4.3"	18.8	8.5

3D STEP Models are available upon request of factory.
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JV-TC Positive Displacement Gear Flow Meter

Part Number Guide

JV ☐ - ☐ TC ☐ - ☐ ☐ - ☐

Housing Material
M = 303 Stainless Steel / DIN 1.4305
S = 316L Stainless Steel / DIN 1.4404

Flow Range
10 = 0.001 to 0.5 GPM
12 = 0.005 to 0.8 GPM
20 = 0.02 to 2.0 GPM
30 = 0.1 to 7.0 GPM
60 = 0.1 to 20.0 GPM

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

Port Type
N = NPT
G = BSPP
B = Bottom Port – Manifold Mount

Sensor Hole
S = 2x M14x1.5
B = 3/8" NPT (EX meters only)

Additional Options (choose all that apply)
EX = cCSAus, ATEX, IECEx (includes material cert.)
C = CRN (Canadian Registration Number)
M = Material Certification
N = NACE

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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JV-UF Positive Displacement Gear Flow Meter

Common Uses

A completely new Series for AW-Lake, the JV-UF is designed for low viscosity fluids (solvents, scale inhibitor, methanol, DEF) in Stainless Steel bodies (303 and 316SS). We reduced the clearances around the gears to prevent fluid from slipping past and now measure flows as low as 0.0005 gpm with a 5cP fluid (we can measure fluids below 1.0 cP) and as high as 20 gpm. The JV-UF meters pair with our existing sensors to provide you with the data you need. Common applications include:

- Chemical, methanol, and fuel injection & dosing systems
- Test stands
- Hydraulic positioning systems
- Coolant & lubrication monitoring

Technical Specifications

5 Flow Ranges	0.0005 to 20 gpm (across all meter sizes)
Measuring Accuracy	±1.5% over full range (viscosity ≥ 5cP), ±0.5% optional with select sensors; ±2.5% over full range (viscosity ≥ 5cP) for JV-01UF
Repeatability	± 0.05%
Max. Operating Pressure	up to 6,000 psi
Ports	NPT standard, BSPP optional
Turndown	up to 500:1
Calibration	7-point logarithmic calibration

Materials of Construction

Body	JVM = 303 Stainless Steel or JVS = 316L Stainless Steel
Gears & Bearings	Stainless Steel (DIN 1.4122)
O-Ring	FKM, FFKM, or PTFE
Shaft	402 C 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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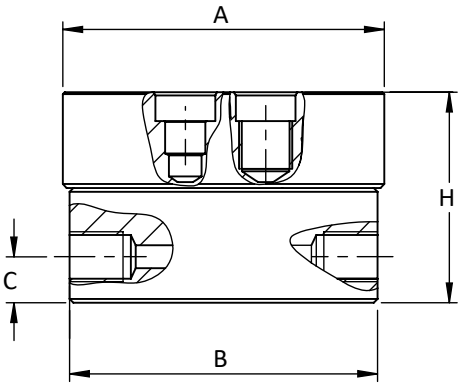
JV-UF Positive Displacement Gear Flow Meter

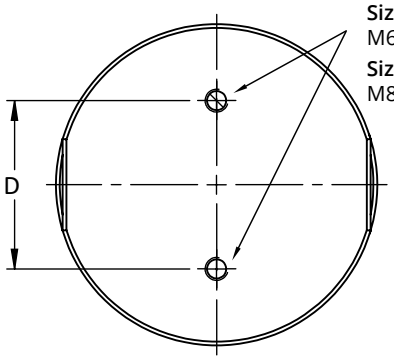
Meter Data

Meter Size	Flow Range			Resolution*		Ports	Filtration	Pressure
	(GPM)	(LPM)	(Gal/Day)	(Impulses/Gal)	(Impulses/CC)		(microns)	(psi/bar)
JV#-01UF	.0005-.25	0.002-1.0	0.72-360	302,600	80.0	1/4" NPT	15	5,000/345
JV#-12UF	0.005-0.8	0.02-3.0	7.2-1152	106,000	28.0	1/4" NPT	30	6,000/420
JV#-20UF	0.02-2.0	0.1-7.0	29-2880	31,800	8.4	1/4" NPT	30	6,000/420
JV#-30UF	0.1-7.0	0.5-25.0	144-10,080	13,200	3.5	1/2" NPT	30	6,000/420
JV#-60UF	0.1-20.0	0.5-75.0	144-28,800	3,600	0.95	3/4" NPT	30	6,000/420

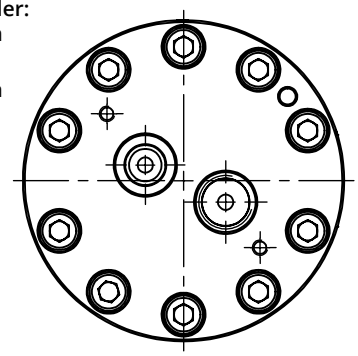
*# - Complete part # by selecting body material as follows: M=303 Stainless Steel, S=316 Stainless Steel. * Figures shown represent resolution when using dual pickup sensor.*

Meter Dimensions





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



Meter Size	Dimensions					Weights (Lbs)		
	A	B	C	D	H	JVS	JVM	JVA
JV#-01UF	3.3"	3.2"	0.47"	1.7"	2.2"	3.6	3.6	1.8
JV#-12UF	3.0"	2.8"	0.47"	1.7"	2.2"	4.9	4.9	2.7
JV#-20UF	3.3"	3.2"	0.47"	1.7"	2.2"	6.4	6.4	2.9
JV#-30UF	3.3"	3.2"	0.51"	1.7"	2.6"	18.8	18.8	9.1
JV#-60UF	4.9"	4.7"	0.75"	2.4"	4.2"	78.0	78.0	32.0

3D STEP Models are available upon request of factory.
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JV-UF Positive Displacement Gear Flow Meter

Part Number Guide

JV [ ] – [ ] UF [ ] – [ ] [ ] – [ ]

Housing Material
M = 303 Stainless Steel / DIN 1.4305
S = 316L Stainless Steel / DIN 1.4404

Flow Range
01 = 0.0005 to 0.25 GPM
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

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

Port Type
N = NPT
G = BSPP

Sensor Hole
S = 2x M14x1.5
B = 3/8" NPT (EX meters only)

Additional Options (choose all that apply)
EX = cCSAus, ATEX, IECEx (includes material cert.)
C = CRN (Canadian Registration Number)
M = Material Certification
N = NACE

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.

Products may be subject to change without notice.
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PROCESS FLOW MEASUREMENT

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JVH High Pressure Positive Displacement Flow Meter

Common Uses

Designed for use in systems rated up to 15,000 psi (1035 bar), the JVH meters are well suited for oils, fuels, additives, and chemicals in hazardous areas. JVH meters come standard with inconel bolts for added strength and better corrosion resistance. The internal design has reduced space between the gears and measuring chamber to reduce slippage and improve the low flow performance of the meter. Practical applications include:

- Offshore production platforms, i.e. chemical injection
- Hydraulic power units
- Gas dehydration systems
- Chemical processing plants

Technical Specifications

5 Flow Ranges	0.001 to 20 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 15,000 psi | 1035 bar
Ports	Autoclave, Medium Pressure
Turndown	up to 400:1
Calibration	7-point logarithmic calibration

Materials of Construction

Body	316L Stainless Steel
Gears	Stainless Steel (DIN 1.4122)
Bearings	Stainless Steel Ball Bearings or Tungsten Carbide Sleeve Bushing
O-Ring	FKM or FFKM
Shafts	402 C Stainless Steel or Tungsten Carbide
Bolts	Inconel 718

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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PROCESS FLOW MEASUREMENT

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JVH High Pressure Positive Displacement Flow Meter

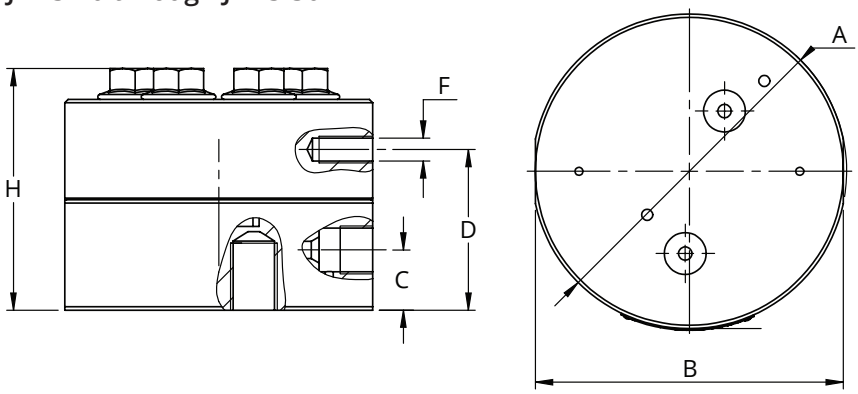
Meter Data

Meter Size	Flow Range			Resolution*		Ports	Filtration (microns)		Pressure
	(GPM)	(LPM)	(Gal/Day)	(Impulses/Gal)	(Impulses/CC)	(Med Pres Autoclave)	BB	TC	(psi/bar)
JVHS-10	0.001-0.5	0.005-2.0	1.4-720	200,600	53.0	3/8”	30	120	15,000/1035
JVHS-12	0.005-0.8	0.02-3.0	7.2-1152	106,000	28.0	3/8”	30	120	15,000/1035
JVHS-20	0.02-2.0	0.1-7.0	28.8-2880	31,800	8.4	3/8”	30	120	15,000/1035
JVHS-30	0.1-7.0	0.5-25.0	144-10,080	13,200	3.5	3/8”	30	120	15,000/1035
JVHS-60	0.1-20.0	0.5-75.0	144-28,800	3,600	0.95	3/4”	30	200	7,500/520

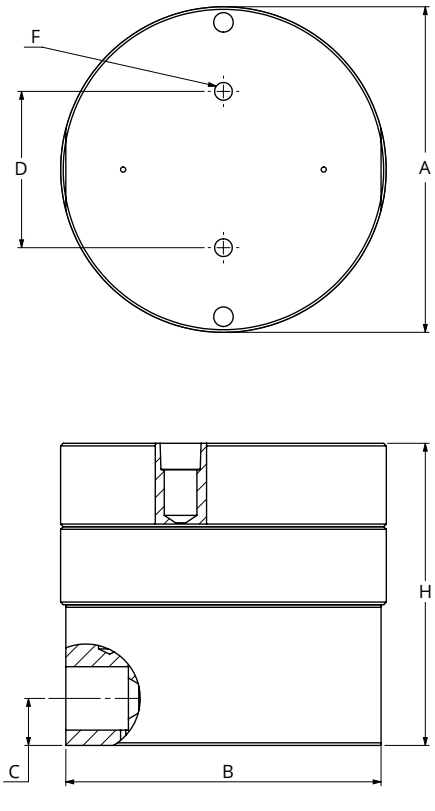
** Figures shown represent resolution when using dual pickup sensor.*

Meter Dimensions

JVHS-10 through JVHS-30



JVHS-60



Meter Size	Dimensions						Weights	
	A	B	C	D	F (mounting hole)	H	(Lbs)	(Kg)
JVHS-10	3.7”	3.6”	0.71”	1.9”	M6x1x10mm	2.8”	7.5	3.4
JVHS-12	3.7”	3.6”	0.71”	1.9”	M6x1x10mm	2.8”	7.5	3.4
JVHS-20	3.7”	3.6”	0.71”	1.9”	M6x1x10mm	2.8”	7.5	3.4
JVHS-30	3.7”	3.6”	0.71”	2.4”	M6x1x10mm	3.3”	8.6	3.9
JVHS-60	5.0”	4.8”	0.71”	2.4”	M8x1x16mm	4.6”	24.5	11.1

3D STEP Models are available upon request of factory.
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PROCESS FLOW MEASUREMENT

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JVH High Pressure Positive Displacement Flow Meter

Part Number Guide

JVH □ - □ □ □ - □ □ - □

Housing Material
S = 316 Stainless Steel / DIN 1.4404

Flow Range
10* = 0.001 to 0.5 GPM
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

Bearing Type
BB = Ball Bearing
TC = Tungsten Carbide Bushing

Housing Seal
V = FKM o-ring
K = FFKM o-ring

Port Type
A = Autoclave, Medium Pressure

Sensor Hole
S = 2x M14x1.5
B = 3/8" NPT (EX meters only)

Additional Options (choose all that apply)
EX = cCSAus, ATEX, IECEx (includes material cert.)
C = CRN (Canadian Registration Number)
M = Material Certification
N = NACE

** JVHS-10 size meter only available with Tungsten Carbide Bushing.*

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.

Products may be subject to change without notice.
Contact factory for the most up-to-date product information.

AW-LAKE
PROCESS FLOW MEASUREMENT

2440 W. Corporate Preserve Dr. #600, Oak Creek, WI 53154 | www.aw-lake.com

NJECT – CHEMICAL INJECTION FLOW METER

Specifically Designed for Chemical Injection Applications in Onshore Oil Fields.

TECHNICAL SPECIFICATIONS

Measuring Accuracy
± 0.5%

Repeatability
± 0.1%

Duty Cycle
Works with standard injection pumps from 50 to 200 gallons/day

Maximum Operating Pressure
Up to 2,500 psi (172 bar)*

*Consult factory for other pressures.

Fluid Temperature Range
-40 to 175˚F

Resolution
100,000 pulses/gal

Ports
1/4" female NPT

Weight
3.9 lbs

Filtration
120 microns, 120 mesh

BENEFITS

Assured Accuracy
Each flow meter is individually calibrated and shipped with a calibration certificate.

Sealed Electronics
Completely sealed integral sensor keeps electronics safe from environmental forces.

Economic Low Flow Meter
The meter produces good resolution and high accuracy at low flow rates, offering an affordable option for onshore chemical injection applications.

Rugged Construction
The sturdy 316 stainless steel construction of this gear meter provides superior corrosion resistance and a longer service life.

Fast Response Time
This meter can handle short pump shot times (<1 sec) and remain accurate.

MATERIALS OF CONSTRUCTION

Body	316L Stainless Steel
Gears	Stainless Steel
Bearing & Shaft	Tungsten Carbide
O-Ring	PTFE
Bolts	316 Stainless Steel
Cable Gland	Stainless Steel

INTEGRAL SENSOR

Supply Voltage
8 to 30 V DC, regulated

Frequency Range
2 to 1,000 Hz

Electrical Connection
Sheilded 10-foot PVC cable with flying leads for easy hookup

Protection Class
IP 67

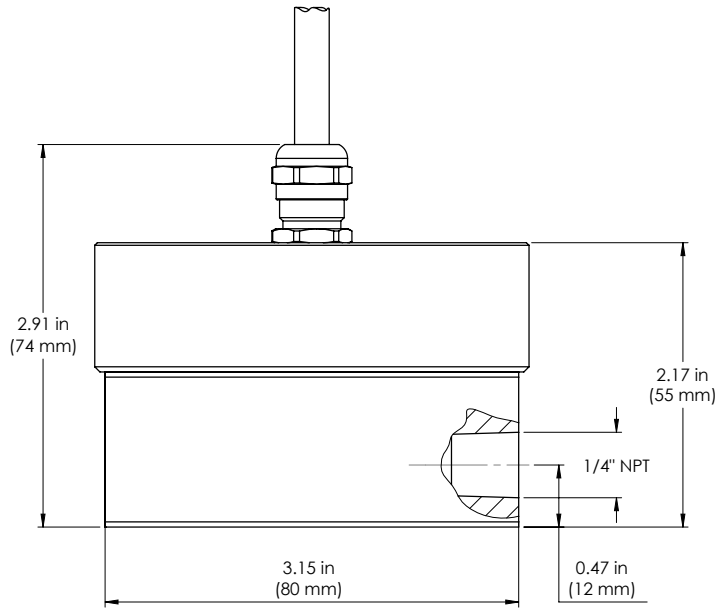
AW-LAKE
PROCESS FLOW MEASUREMENT

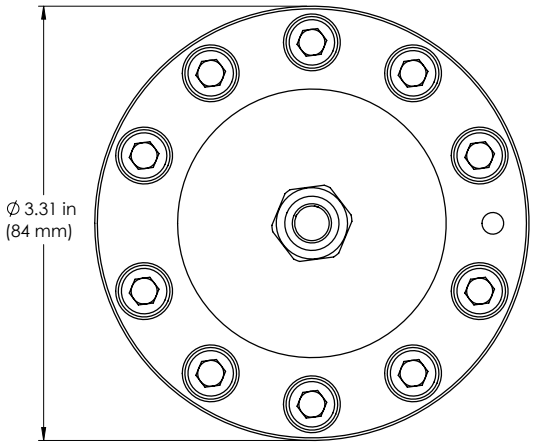
2440 W. Corporate Preserve Dr. #600, Oak Creek, WI 53154 | www.aw-lake.com

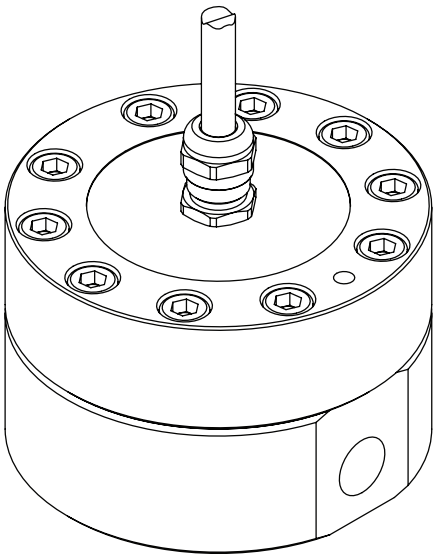
NJECT – CHEMICAL INJECTION FLOW METER

Specifically Designed for Chemical Injection Applications in Onshore Oil Fields.

METER DIMENSIONS







DUTY CYCLE LOOKUP CHART SAMPLE

Minimum Instantaneous Flow Rate: 5 gal/day

Pump Speed: 100 gal/day

Dosing Rate (gal/day)	Duty Cycle	Run Time (seconds/min)
0.1	0%	0.06
0.5	1%	0.3
1	1%	0.6
2	2%	1.2
3	3%	1.8
4	4%	2.4
5	5%	3.0

Products may be subject to change without notice - Contact factory for the most up-to-date product information.

AW-LAKE
PROCESS FLOW MEASUREMENT

2440 W. Corporate Preserve Dr. #600, Oak Creek, WI 53154 | www.aw-lake.com

SLG POSITIVE DISPLACEMENT SPUR GEAR METER

Ideal for measuring paints & coatings, especially where robotics are utilized or when space is limited.

APPLICATIONS

In production environments like the automotive industry, a lot of pressure is on line components. While performing under a variety of harsh, fast-paced conditions, flow meters in particular have to be rugged, accurate, and easy to install.

AW-Lake exceeds these demands with its SLG Series Positive Displacement Flow Meters. These stainless steel meters feature small, light bodies, perfect for installation on robotic arms and in other tight areas. Flow meter construction incorporates virtually no "dead space," which allows for extremely efficient flush cycles and worry-free color changes.

TECHNICAL SPECIFICATIONS

Measuring Accuracy
± 0.5% over 10:1 turndown with 30cP fluid

Repeatability
± 0.1%

Flow Measuring Range
0.003 to 0.5 gpm
0.01 to 1.0 gpm
0.02 to 2.0 gpm

Maximum Operating Pressure
up to 2,000 psi

Maximum Fluid Temperature
350°F (180°C)

Ports
Bottom ported through hole or 1/8" BSPP - specify upon ordering

BENEFITS

Strong, Compact Design
The SLG's solid stainless steel construction and compact size make this meter ideal for robotic applications where there is limited space, weight restrictions and vibration from movement.

Simple to Install & Use
These meters are easy to use and install, since there is no need for straight run piping upstream or downstream of the flow meter.

Accurate and Reliable
This meter has the ability to maintain consistent accuracy despite changing viscosity conditions, with accuracy of +0.5% of reading.

Flexible
Meter may be used in applications requiring bi-directional flow, and is offered in three different flow ranges (0.003 to 2.0 GPM).

MATERIALS OF CONSTRUCTION

Body	JVS: 316 stainless steel (2,000 psi max)
Gears	Stainless Steel, DIN 1.4122
Seals	JVS: PTFE O-ring
Bearings & Shaft	Tungsten Carbide

RECOMMENDED SENSORS

Sensor Type	Model	Sensor Features
Single sensor	CAPM-3o	Intrinsically safe, frequency output (when used with a barrier)
Fiber Optic System (includes the following:)	FOP 30/S	
Fiber optic sensor	FOP-30	Fully isolated optical signal, intrinsic safe
Light-to-frequency converter	OPTV-20	Converts optical output to frequency output
Standard heavy-duty fiber optic cable	Fiber optic cable	Available in 30, 40, 60 & 100 foot lengths

AW-LAKE
PROCESS FLOW MEASUREMENT

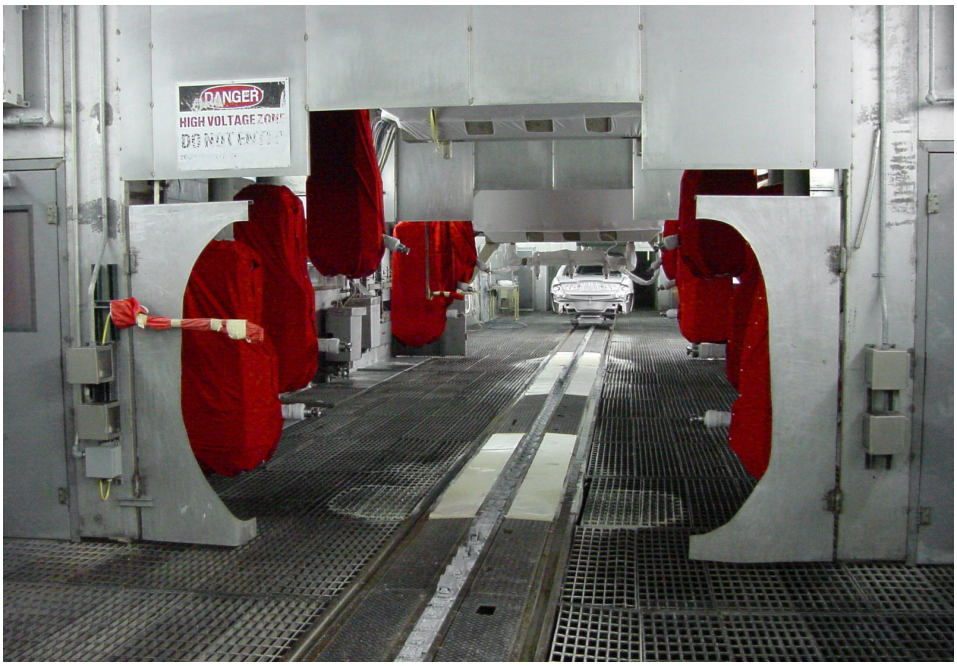
2440 W. Corporate Preserve Dr. #600, Oak Creek, WI 53154 | www.aw-lake.com

SLG POSITIVE DISPLACEMENT SPUR GEAR METER

Ideal for measuring paints & coatings, especially where robotics are utilized or when space is limited.

METER DATA

Meter Size	Flow Range (GPM)	Impulses/ Gallon	Impulses/ cc	Weight (Lbs / Kg)	Ports	Filtration (microns)	Pressure Rating
JVS-10SLGS	0.003-0.5	100,300	26.5	2.75 / 1.25	1/8" BSPP	120	2,000 psi
JVS-10SLGFS	0.003-0.5	100,300	26.5	2.75 / 1.25	6 mm (not threaded)	120	2,000 psi
JVS-15SLGS	0.01-1.0	31,000	8.2	2.75 / 1.25	1/8" BSPP	120	2,000 psi
JVS-15SLGFS	0.01-1.0	31,000	8.2	2.75 / 1.25	6 mm (not threaded)	120	2,000 psi
JVS-20SLGS	0.02-2.0	15,900	4.2	3.0 / 1.36	1/8" BSPP	120	2,000 psi
JVS-20SLGFS	0.02-2.0	15,900	4.2	3.0 / 1.36	6 mm (not threaded)	120	2,000 psi



A COMMON APPLICATION FOR THE SLG GEAR METER IS IN ROBOTIC PAINT LINES IN THE AUTOMOTIVE INDUSTRY.

Products may be subject to change without notice - Contact factory for the most up-to-date product information.

AW-LAKE
PROCESS FLOW MEASUREMENT

2440 W. Corporate Preserve Dr. #600, Oak Creek, WI 53154 | www.aw-lake.com

SRZ HELICAL GEAR FLOW METER

Ideal for highly filled and abrasive fluids, such as polyurethanes and polymers, glues and sealing materials, as well as heavy fuel oils.

APPLICATIONS

This series of flow meters from AW Gear Meters is a high-resolution answer to your metering needs. Made of stainless steel, the meters in the SRZ series offer wide measuring ranges and low pressure loss.

A helical-gear design gives these meters lower pressure drop compared to other meters and ideal for metering high viscosity polyurethanes, polymers, glues, sealants, and heavy fuel oils.

AW Gear Meters offers these specialized helical gear flow meters suitable for a variety of industrial applications, including:

- Sealant / Adhesive Dispensing Applications - Single and
- Multi-Component
- Paint Reclaim and Environmental Tracking
- Paint Circulation / Supply
- Paint Spray Operations-High Solids / Filled Materials
- Material Manufacturing - Monitoring / Batching
- Full body resin applications

BENEFITS

Affordable and Accurate

This meter has the ability to maintain consistent accuracy despite changing viscosity conditions, with accuracy of ±0.5% of reading.

Rugged Construction

The SRZ's solid meter construction is made of 303 stainless steel with tungsten carbide bearings for corrosion resistance and durability. Optional hard-coat gear offerings available.

Flexible

May be used with a wide range of materials and viscosities with a low pressure drop than conventional meters and wide flow range/size selection. Models offered with either BSPP or NPT threaded ports.

Proven Reliability & Performance

With a proven industry record for reliable meter life and electronics, these meters are ready to be installed into your process today.

TECHNICAL SPECIFICATIONS

Measuring Accuracy

± 0.5% of reading with fluid viscosities >30 cP

Repeatability

± 0.1%

Flow Measuring Range

0.1 to 11 gpm
0.25 to 26 gpm
1 to 105 gpm

Maximum Operating Pressure

up to 6,000 psi

Maximum Fluid Temperature

Depends on sensor used, refer to sensor technical guide

Ports

NPT and BSPP available

Turn Down Ratio

Over 1:100

Line Sizes

from ¾" to 1½"

MATERIALS OF CONSTRUCTION

Body	303 Stainless Steel
Bearings	Tungsten Carbide
Gear	303 Stainless Steel (QPQ1 coating) *Note: Other coatings available*
Seals	PTFE Standard (FKM & EPDM also available)

AW-LAKE
PROCESS FLOW MEASUREMENT

2440 W. Corporate Preserve Dr. #600, Oak Creek, WI 53154 | www.aw-lake.com

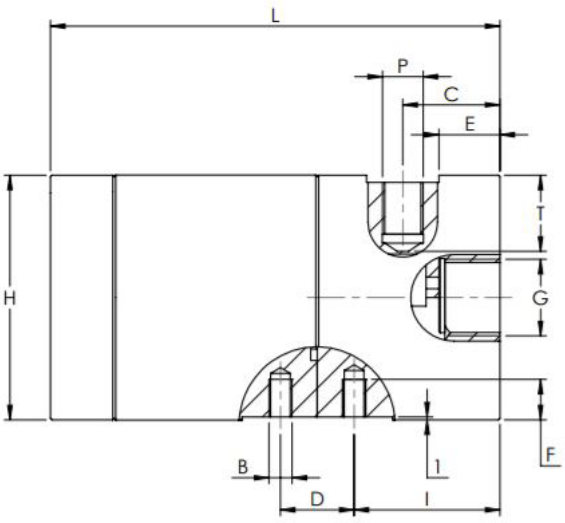
SRZ HELICAL GEAR FLOW METER

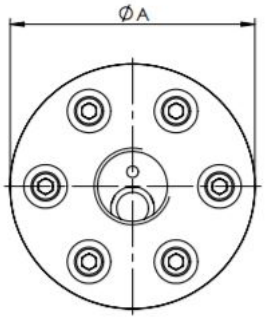
Ideal for highly filled and abrasive fluids, such as polyurethanes and polymers, glues and sealing materials, as well as heavy fuel oils.

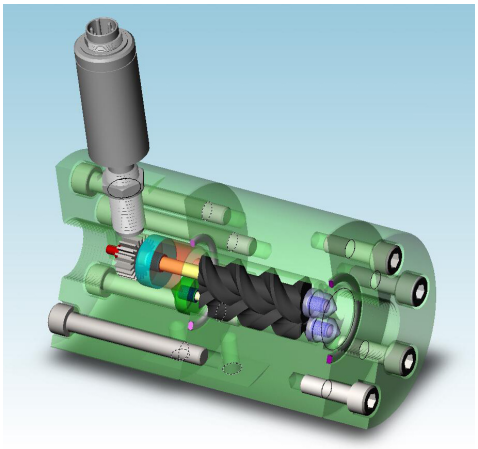
METER DATA

Meter Size	Flow Range (Gpm)	Nominal K-Factor* (pulses/cc)	(pulses/gal)	Port Size (Thread Size)	Filtration (Microns)	Weight (Llbs)	Pressure Rating
SRZ-40-xx	0.1 - 11.0	3.51	13,300	3/4”	200	14.0	6,000 psi
SRZ-100-xx	0.25 - 26.0	0.85	3,230	1”	300	32.0	6,000 psi
SRZ-400-xx	1.0 - 105	0.21	810	1-1/2”	300	70.0	6,000 psi

xx= B1 for NPT port thread, B2 for BSPP port thread
**A calibration sheet accompanies every meter sold with specific k-factor.*







METER DIMENSIONS

SRZ Type	A	B	C	D	E	F	G	H	I	L	P	T
SRZ-40-xx	3.35” (85mm)	M8	1.32” (33.5mm)	0.98” (25mm)	0.75” (19mm)	0.51” (13mm)	G 3/4” M22x1.5 3/4” NPT	3.19” (81mm)	2.00” (50mm)	6.10” (155mm)	M14x1.5	1.02” (26mm)
SRZ-100-xx	4.29” (109mm)	M10	2.09” (53mm)	1.73” (44mm)	0.91” (23mm)	0.71” (18mm)	G1” 1” NPT	4.17” (106mm)	2.56” (65mm)	8.70” (221mm)	M14x1.5	1.18” (30mm)
SRZ-400-xx	5.28” (134mm)	M12	2.36” (60mm)	-	1.18” (30mm)	-	G1-1/2”	5.20” (132mm)	-	12.52” (318mm)	M14x1.5	1.30” (33mm)

RECOMMENDED SENSORS

Sensor Type	Model	Sensor Features
Frequency Output; 5-pin screw-on connector	VTER/P	Works with SRZ-40
Frequency Output; 5-pin screw-on connector	VTEK/P	Works with SRZ-100, SRZ-400

EX Versions available, consult factory.

Products may be subject to change without notice - Contact factory for the most up-to-date product information.

AW-LAKE PROCESS FLOW MEASUREMENT

2440 W. Corporate Preserve Dr. #600, Oak Creek, WI 53154 | www.aw-lake.com

SRZ HR ULTRA HIGH RESOLUTION HELICAL GEAR FLOW METER WITH INTEGRAL PICKUP

Ideal for highly filled and abrasive fluids, such as polyurethanes and polymers, glues and sealing materials, as well as heavy fuel oils.

APPLICATIONS

AW-Lake offers these specialized helical gear flow meters suitable for a variety of industrial applications, including:

- Sealant / Adhesive Dispensing Applications - Single and Multi-Component
- Paint Reclaim and Environmental Tracking
- Paint Circulation / Supply
- Paint Spray Operations-High Solids / Filled Materials
- Material Manufacturing - Monitoring / Batching
- Full body resin applications

TECHNICAL SPECIFICATIONS

Measuring Accuracy
±0.5% of reading with fluid viscosities >30cP

Linear Range
0.01 to 2.0 gpm*

Maximum Operating Pressure
up to 6,000 psi

Maximum Fluid Temperature
160° F

Low Pressure Loss

Ultra High Resolution

BENEFITS

Affordable and Accurate
This meter has the ability to maintain consistent accuracy despite changing viscosity conditions, with accuracy of ±0.5% of reading.

Rugged Construction/High Pressure
The SRZ's solid meter construction is made of 303 stainless steel with tungsten carbide bearings for corrosion resistance and durability. Optional hard-coat gear offerings available.

Flexible
May be used with a wide range of materials and viscosities with a low pressure drop than conventional meters and wide flow range/size selection. Models now offered in both NPT and BSPP threaded ports.

Proven Reliability & Performance
With a proven industry record for reliable meter life and electronics, these meters now offered in a low profile design with integrated sensor technology.

MATERIALS OF CONSTRUCTION

Body	303 Stainless Steel
Bearings	Tungsten Carbide
Gear	303 Stainless Steel (QPQ1 coating) *Note: Other coatings available*
Seals	PTFE Standard (FKM & EPDM also available)

METER DATA

Meter Size	Flow Range* (GPM)	Nominal K-Factor* (pulses/gal)	Port Size (Thread Size)	Filtration (Micron)	Frequency Range (Hz)	Pressure Rating
SRZ-40ST.HR.T-xx	0.01 - 2	124,900 pulses/gal 33 pulses/cc	3/4"	200	20 - 4,200	6,000 psi

xx= B1 for NPT port thread, B2 for BSPP port thread
** Operation down to 0.01 gpm with reduced accuracy.*
*** A calibration sheet accompanies every meter sold with specific K-factor.*

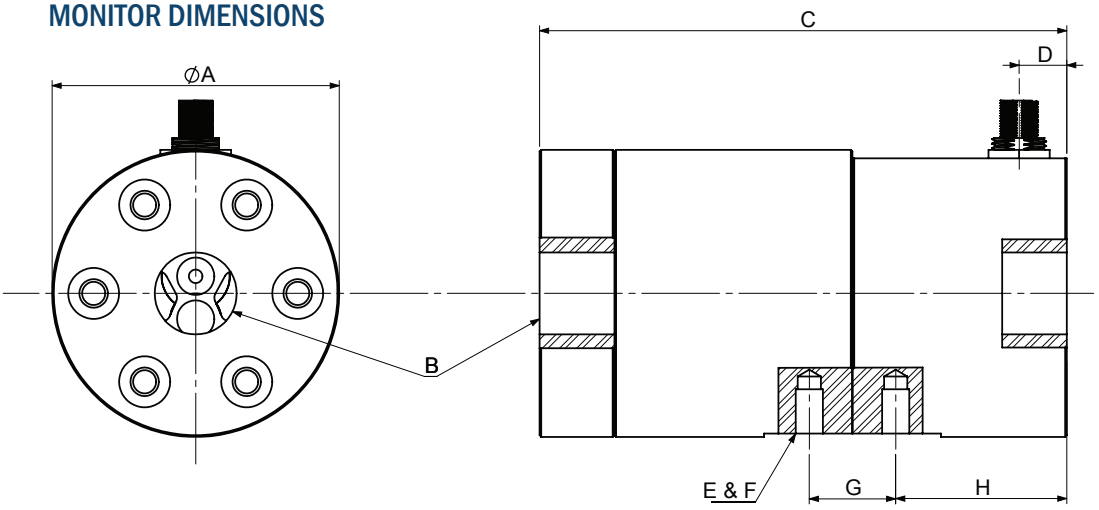
AW-LAKE
PROCESS FLOW MEASUREMENT

2440 W. Corporate Preserve Dr. #600, Oak Creek, WI 53154 | www.aw-lake.com

SRZ HR ULTRA HIGH RESOLUTION HELICAL GEAR FLOW METER WITH INTEGRAL PICKUP

Ideal for highly filled and abrasive fluids, such as polyurethanes and polymers, glues and sealing materials, as well as heavy fuel oils.

MONITOR DIMENSIONS



Meter Size	A	B (port size)	C	D	E (thread type)	F (thread depth)	G	H
SRZ-40ST. HR.T-xx	3.35"	3/4"	6.10"	0.55"	M8	0.51"	1.0"	1.98"

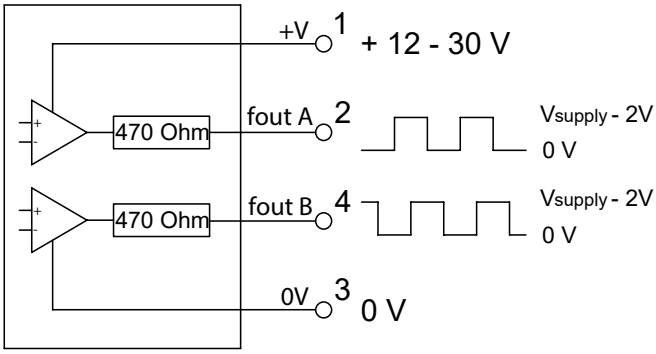
xx= B1 for NPT port thread, B2 for BSPP port thread

ELECTRICAL DATA

Supply Voltage: 12 up to 30 VDC

Frequency Output: Active push pull, square wave signal
out max. 20 mA
Duty cycle 50% nominal

Electrical Connection: Micro (M12)
1 = +Supply (12 up to 30 VDC)
2 = Output signal A
3 = 0V
4 = Output signal B
5 = n.c.
- All output signals are available simultaneously
- Signals 2 and 4 are 90° phase-shifted.



Ingress Protection: IP 67 when used with IP67 rated mating connector

Connector Pin-Out:

Note: Not for use with materials containing any ferromagnetic fillers or particles due to internal multi-pole magnet.

EX Versions available, consult factory. *Products may be subject to change without notice - Contact factory for the most up-to-date product information.*

AW-LAKE PROCESS FLOW MEASUREMENT

2440 W. Corporate Preserve Dr. #600, Oak Creek, WI 53154 | www.aw-lake.com

SRZ STAT HIGH RESOLUTION HELICAL GEAR FLOW METER WITH INTEGRAL PICKUP

Ideal for highly filled and abrasive fluids, such as polyurethanes and polymers, glues and sealing materials, as well as heavy fuel oils.

APPLICATIONS

AW-Lake offers these specialized helical gear flow meters suitable for a variety of industrial applications, including:

- Sealant / Adhesive Dispensing Applications – Single and Multi-Component
- Paint Reclaim and Environmental Tracking
- Paint Circulation / Supply
- Paint Spray Operations-High Solids / Filled Materials
- Material Manufacturing – Monitoring / Batching
- Full body resin applications

TECHNICAL SPECIFICATIONS

Measuring Accuracy
± 0.5% of reading with fluid viscosities >30cP

Flow Measuring Range
0.1 to 11 gpm
0.25 to 26 gpm
1 to 105 gpm

Maximum Operating Pressure
up to 6,000 psi

Maximum Fluid Temperature
160° F

Sizes from ¾" to 1½"

Low pressure loss

BENEFITS

Affordable and Accurate
This meter has the ability to maintain consistent accuracy despite changing viscosity conditions, with accuracy of ±0.5% of reading.

Rugged Construction
The SRZ's solid meter construction is made of 303 stainless steel with tungsten carbide bearings for corrosion resistance and durability. Optional hard-coat gear offerings available.

Flexible
May be used with a wide range of materials and viscosities with a low pressure drop than conventional meters and wide flow range/size selection. Models offered with either BSPP or NPT threaded ports.

Proven Reliability & Performance
With a proven industry record for reliable meter life and electronics, these meters are now offered in a low profile design with integrated sensor technology.

MATERIALS OF CONSTRUCTION

Body	303 Stainless Steel
Bearings	Tungsten Carbide
Gear	303 Stainless Steel (QPQ1 coating) *Note: Other coatings available*
Seals	PTFE Standard (FKM & EPDM also available)

METER DATA

Meter Size	Flow Range (GPM)	Nominal K-Factor* (pulses/gal)	Port Size (Thread Size)	Filtration (Micron)	Frequency Range (Hz)	Pressure Rating
SRZ-40-STAT-xx	0.1 - 11	26,500	3/4"	200	45 - 4,600	6,000 psi
SRZ-100-STAT-xx	.25 - 26	6,400	1"	300	28 - 2,800	6,000 psi
SRZ-400-STAT-xx	1.0 - 105	1,600	1-1/2"	300	28 - 2,850	6,000 psi

xx= B1 for NPT port thread, B2 for BSPP port thread
** A calibration sheet accompanies every meter sold with specific K-factor. K-factors shown are double frequency output value.*

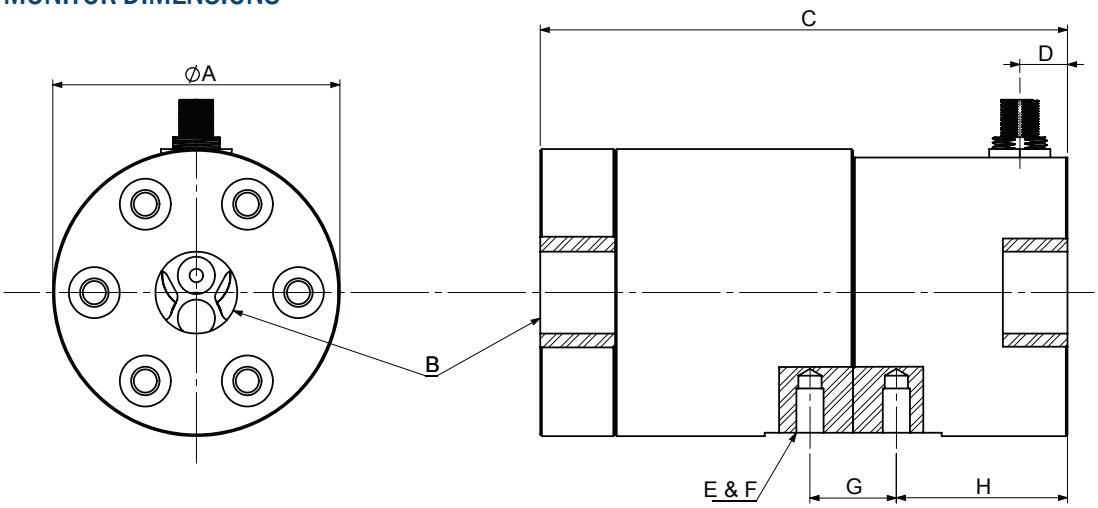
AW-LAKE
PROCESS FLOW MEASUREMENT

2440 W. Corporate Preserve Dr. #600, Oak Creek, WI 53154 | www.aw-lake.com

SRZ STAT HIGH RESOLUTION HELICAL GEAR FLOW METER WITH INTEGRAL PICKUP

Ideal for highly filled and abrasive fluids, such as polyurethanes and polymers, glues and sealing materials, as well as heavy fuel oils.

MONITOR DIMENSIONS



Meter Size	A	B (port size)	C	D	E (thread type)	F (thread depth)	G	H
SRZ-40-STAT-xx	3.35”	3/4”	6.10”	0.55”	M8	0.51”	1.0”	1.98”
SRZ-100-STAT-xx	4.33”	1”	8.70”	0.91”	M10	0.71”	1.73”	1.61”
SRZ-400-STAT-xx	5.28”	1-1/2”	12.52”	1.64”	n/a	n/a	n/a	n/a

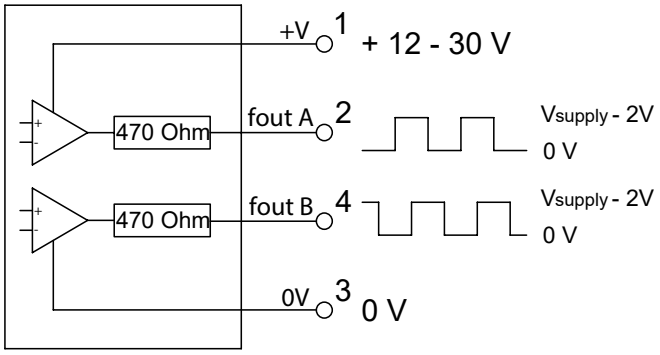
xx= B1 for NPT port thread, B2 for BSPP port thread

ELECTRICAL DATA

Supply Voltage: 12 up to 30 VDC

Frequency Output: Active push pull, square wave signal
Iout max. 20 mA
Duty cycle 50% nominal

Electrical Connection: Micro (M12)
1 = +Supply (12 up to 30 VDC)
2 = Output signal A
3 = 0V
4 = Output signal B
5 = n.c.
- All output signals are available simultaneously.
- Signals 2 and 4 are 90° phase-shifted.



Ingress Protection: IP 67 when used with IP67 rated mating connector

Connector Pin-Out:

Note: Not for use with materials containing any ferromagnetic fillers or particles due to internal multi-pole magnet.

EX Versions available, consult factory. *Products may be subject to change without notice - Contact factory for the most up-to-date product information.*

AW-LAKE PROCESS FLOW MEASUREMENT

2440 W. Corporate Preserve Dr. #600, Oak Creek, WI 53154 | www.aw-lake.com