

# JV-KG-EX - POSITIVE DISPLACEMENT SPUR GEAR FLOW METER

Ideal for measuring oil, fuel, additives and chemicals in hazardous area rated environments, such as oil production platforms, land-based oil recovery sites, chemical processing plants and laboratories.



## BENEFITS

### 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.

### Rugged Construction

The solid construction of the JV-KG-EX is offered in 303 and 316 stainless steel bodies.

### Flexible

Meter may be used in applications requiring bi-directional flow, and is offered in six different flow ranges (0.003 to 120.0 GPM).

### Economic Low Flow Meter

The meters produce good resolution and high accuracy at low flow rates, offering an affordable replacement for older turbine technology.

\*Viscosities above 30cP only

## APPLICATIONS

The units in this line of AW Gear flow meters are designed to maintain consistent accuracy – even in changing viscosity conditions. They have a solid construction and excellent dynamic response and are suitable for a variety of industrial applications, including:

- Chemical injection skids
- Fuel & solvent measurement
- Cylinder position measurement
- Pipeline additives

## FEATURES

- Six flow ranges from 0.003 to 120 GPM
- Accuracy: up to 0.5% of reading (0.2% with linearization electronics)
- Pressure rating up to 5,000 PSI
- Available in 303 and 316 stainless steel bodies

## TECHNICAL SPECIFICATIONS

### Measuring Accuracy

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

### Repeatability

± 0.1%

### Flow Measuring Range

0.003 to 0.8 gpm / 4.32 to 1,152 gpd  
0.01 to 2.0 gpm / 14.4 to 2,880 gpd  
0.03 to 7.0 gpm / 43.2 to 10,080 gpd  
0.05 to 20 gpm / 72.0 to 28,800 gpd  
0.50 to 60 gpm / 720.0 to 86,400 gpd  
1.0 to 120 gpm / 1,440 to 172,800 gpd

### Maximum Operating Pressure

Up to 5,000 psi

### Maximum Fluid Temperature

185°F

### Ports

NPT; BSPP optional

### Sensor Port

3/8" NPT

## MATERIALS OF CONSTRUCTION

<b>Body</b>	JVM - 303 Stainless Steel JVS - 316 Stainless Steel
<b>Gears &amp; Ball Bearings</b>	Stainless Steel
<b>O-Ring</b>	PTFE, FKM Optional
<b>Shaft</b>	420 C Stainless Steel

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## METER DATA

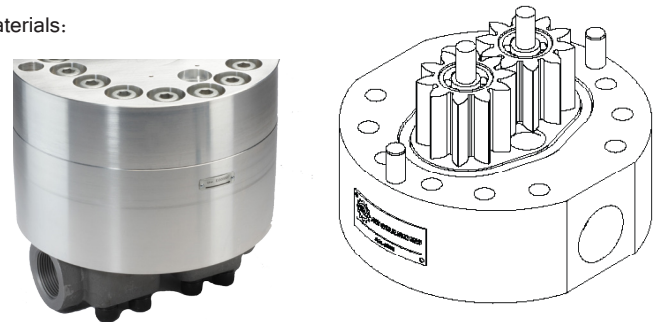
Meter Size	Flow Range	Impulses/ Gallons	Impulses/CC	Diameter (in)	Height (in)	Weight (Lbs/Kg)	Ports	Filtration (microns)	Pressure Rating
JV#-12KG-EX	0.003-0.8	53,000	14.0	3.0"	2.2"	3.9 / 1.77	1/4" NPT*	30	5,000 psi
JV#-20KG-EX	0.01-2.0	15,900	4.2	3.3"	2.2"	4.9 / 2.22	1/4" NPT*	30	5,000 psi
JV#-30KG-EX	0.03-7.0	6,600	1.7	3.3"	2.6"	5.8 / 2.63	1/2" NPT*	30	5,000 psi
JV#-60KG-EX	0.05-20.0	1,800	0.47	4.9"	4.25"	18 / 8.16	3/4" NPT*	30	5,000 psi
JV#-80KL-EX	0.5-60.0	1,600***	0.42***	8.4"	5.5"	78 / 35.38	1-1/4"***	200	5,000 psi
JV#-90KL-EX	1.0-120.0	800***	0.21***	8.4"	7.0"	97 / 44.91	1-1/4"***	200	5,000 psi

# - Complete part # by selecting body material as follows: M=303 Stainless Steel, S=316 Stainless Steel \* - NPT port is standard, BSPP is available \*\* - Through hole for 1-1/4" Code 62 flange connections \*\*\* - When configured for x4 sensor output

## OPTIONAL 1-1/4" CODE 62 FLANGES (NOT INCLUDED)

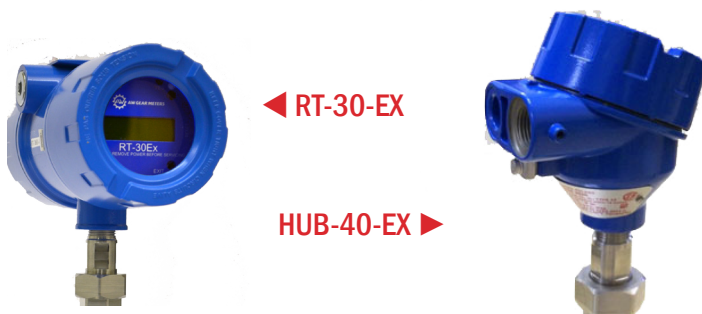
Code 62 flanges are available for the -80 KL and -90KL meters in 3 materials:

Flange	Weight (Lbs/Kg)
Carbon Steel	6 / 2.72
303 Stainless Steel	9 / 4.08
316 Stainless Steel	9 / 4.08



## RECOMMENDED ELECTRONICS

Sensor Type	Model	Sensor Features
Hazardous area rated sensor	HUB-40EX	cCSAus certified pulse output hall effect single sensor
Hazardous area rated sensor	HUB-41EX	ATEX and IECEx hazardous area certifications
Hazardous area rated flow transmitter	RT-30EX	cCSAus certified rate & total display, 4-20mA analog output, HART communication available



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\* For more information, see the RT-30EX data sheet.

