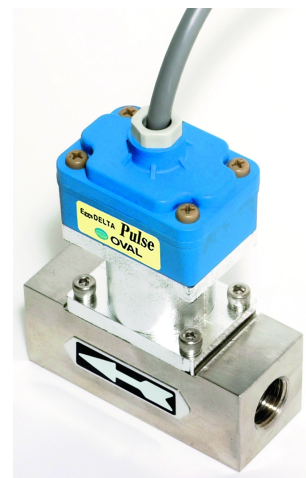


Product Data Sheet  
PDS-FLP  
2021-01-09

## Eggs Delta Pulse Vortex Flowmeter



### Description

Eggs Delta-Pulse is a light weight, small, low cost flow monitoring vortex meter made out of PPS resin. Its simple design and material makes it suitable for a wide variety of flow applications. It has no moving parts and the injection molded design provides a smooth surface for cleanliness and better chemical compatibility.

### Principle of Operation

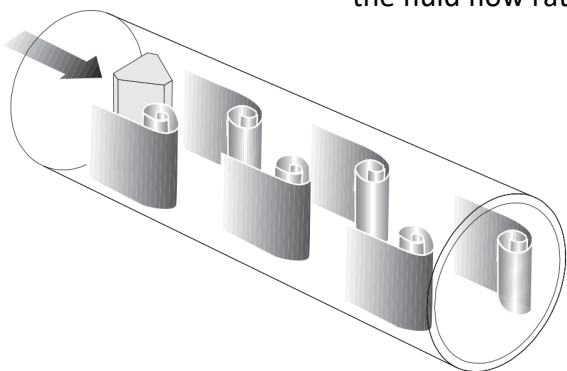
Sparling Vortex Meters measure flow rate based on Karman's vortex shedding principle. The stationary trapezoidal object (bluff body) placed into the path of the flow stream sheds vortices downstream at a frequency proportional to the velocity of flowing media. A piezoelectric sensor detects the vortices and creates electrical impulse signals which is proportional to the fluid flow rate.

### Applications

(PPS) polyphenylene sulphide material is compatible with nearly all gases & liquids.

Common Applications Include:

- Deionized Water(RO/DI skids)
- Ultra pure water distribution in medicare, biotech, semiconductor and pharmaceutical market segment
- Cooling Water
- Chemical Feed
- Alcohol
- Air consumption control in compressed air distribution systems
- Gas flow (nitrogen, oxygen, argon, etc) measurements and monitoring
- Sanitary Cleaning



## Features

- Sizes include: 0.125", 0.25", 0.5" and 1"
- Injection molded plastic construction
- Single molded one-piece meter and bluff body construction with no moving parts.
- NEMA 4X Enclosure
- NPT threaded connection for simple installation
- Open collector unsealed pulse output with 12-24VDC loop power.

## Standard Specifications

<b>Accuracy:</b>	0.5" - 1": $\pm 1\%$ of flow (Liquid Only) $\pm 3\%$ Full Scale
<b>Repeatability:</b>	$\pm 0.5\%$ of full scale
<b>Outputs:</b>	Three wire system requiring external power supply. Pulse Width 30 ms. Max. Current 20mA. Max. Voltage Impressed 30V.
<b>Cable:</b>	3 cores shield cable (36" std.)
<b>Transmission Length:</b>	3280 ft
<b>Enclosures:</b>	NEMA 4X
<b>Process Temp:</b>	-4°F to 176°F
<b>Max. Working Pressure:</b>	150 psi
<b>Flow Ranges:</b>	See Table
<b>Pressure Loss:</b>	Water: <ul style="list-style-type: none"> <li>• 0.05-4.56 psi (0.125")</li> <li>• 0.018-5.04 psi (0.25" - 1")</li> </ul> Air: <ul style="list-style-type: none"> <li>• 0.02-0.103 psi (0.125")</li> <li>• 0.009-0.22 psi (0.25" - 1")</li> </ul>
<b>Construction Material:</b>	PPS (Polyphenylene Sulphide)
<b>Ambient Temp:</b>	-4°F to 140°F
<b>Power Supply:</b>	12-24VDC
<b>Process Connections:</b>	NPT Threaded Adapters R 3/8 - 19..... 0.125" NPT Female R 1/2 - 14..... 0.25" NPT Female R 3/4 - 14..... 0.5" NPT Female R1 1/4 - 11..... 1" NPT Female

## How to Order a Eggs Delta Pulse

Table 1: Base Model Number					
FLP - Eggs Delta Pulse					
	Table 2: Size				
	04 - 0.125"		08 - 0.25"		
	15 - 0.5"		25 - 1"		
	Table 3: Applicable Fluids				
	G - Gas L - Liquid				
	Table 4: Frequency Division				
	1 - 1/1: Liquid (Always "1") 2 - 1/10: Gas (Always "2")				
	Table 5: Material for Connection Adapters				
	P - NPT Threaded Adapters (PPS) V - NPT Threaded Adapters (PVC)				
	Table 6: Version				
	A - Always "A"				
Model	Size	Fluids	Freq.	Material	Version
FLP	04	G	1	P	A

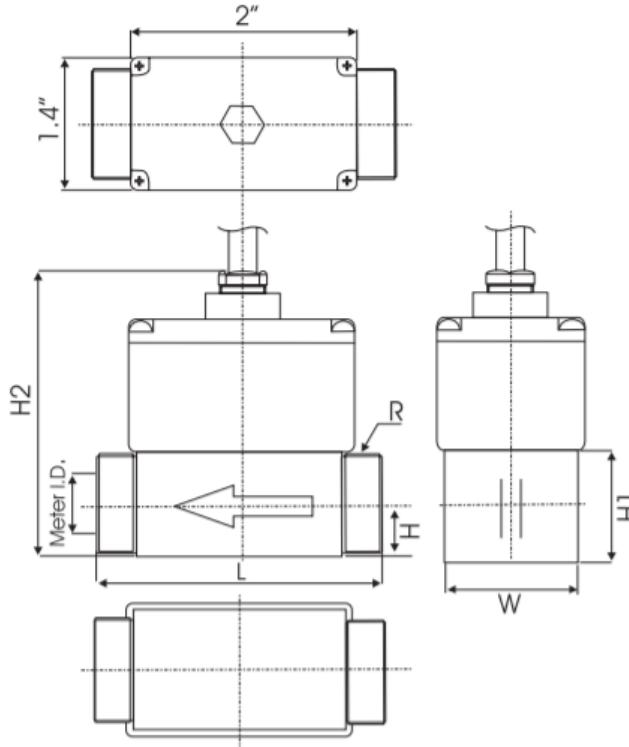
## Flow Ranges

Size (in)	Factored Pulse Units (ml/pulse)	Max. Frequency		Liquid Flow (GPM)		Gas Flow (scfm)	
		Liquid	Gas	Min	Max	Min	Max
0.125	0.090	749	3180	0.105	1.10	0.254	0.590
0.250	0.441	567	3400	0.310	4.00	0.650	3.20
0.500	2.36	306	2000	0.750	11.4	1.90	8.99
1.00	12.7	175	1120	2.20	35.1	5.99	30.2

Above table is based on air measurements at 68°F and atmospheric pressure (14.7 psi)

Above table is based on water measurements at 70°F

Flow range may vary under different process conditions such as density and viscosity of the process fluid.



Size (in)	Meter I.D. (in)	L (in)	W (in)	H1 (in)	H2 (in)	*L (in)	H (in)
0.125	0.157	3.15	1.26	1.14	2.70	5.12	0.570
0.250	0.315	3.15	1.26	1.14	2.70	5.12	0.570
0.500	0.591	3.35	1.26	1.14	2.70	5.12	0.570
1.00	0.984	4.72	1.81	1.81	3.30	7.48	0.906

\*L = with adapters