



Vortex Flow Monitor

Eggs DELTA Pulse



- Made of PPS resin: compact, lightweight, and economical.
- Ideal for consumption management of energy-fluids or coolant, as well as end-of-process flow monitoring via installation to various equipment.
- Capable of measuring wide range of liquid and gas.
- Resistant to dust and mist. Capable of wet-gas measurement.
- Maintenance free due to absence of moving parts.
- ATEX, TIIS compliant.

GENERAL SPECIFICATIONS

Item	Description			
Nominal size	4mm	8mm	15mm	25mm
Flow range (L/min)	Water	0.4 to 4	1.1 to 15	2.8 to 45
	Air	7.2 to 17	18 to 90	55 to 283
Process connection	R male (resin), NPT male (resin), Rc female (metal)			
Enclosure	Non-explosionproof or explosionproof			
Accuracy	Liquid: ±2% of full scale or better		Gas: ±3% of full scale or better	
Max. operating pressure	0.98MPa			
Fluid temp. range	Standard: -20 to +80°C Explosionproof: -20 to +60°C			
Ambient temp. range	-20 to +60°C			
Major Materials	Meter body, Transmitter housing: PPS resin (Polyphenylene sulfide) O-ring: Viton			
Power supply	12 to 24VDC			
Output	Flow pulse: Open collector (Capacity: 30VDC, 20mA), Pulse width: Duty ratio 1:1 approx.			
Dusttight/waterproof rating	IP65 (*1)			
Installation location	Free from rain and water with minimal temperature variation, not exposed to the sun.			

*1: IP ratings vary according to structures.

UNFACTORED PULSE UNITS OF MEASUREMENT (NOMINAL VALUES)

Nominal size (mm)	Pulse units mL/P		Freq. at max. flowrate (Hz)	
	Liquid	Gas	Liquid	Gas
4	0.0890	0.890	750	320
8	0.5406	5.406	460	280
15	2.363	23.63	320	200
25	12.66	126.6	180	120

EXPLOSIONPROOF RATINGS

Exp. ratings	Flowmeter		Barrier
	TIIS	Exia IIB T4	(Exia) IIB
	ATEX	Exia IIB T4 Ga/Gb	(Exia Ga) IIB

* Barrier to be installed in a nonhazardous area.

EMC SPECIFICATIONS

Applicable EU directives	EMC directives: 2014/30/EU
Applicable standards, etc.	EMC directives: EN61326-1 Class A

PRODUCT CODE EXPLANATION

Item	Code No.										Description
	①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩	
Model	F	L	P								Eggs DELTA Pulse
Nominal size	0	4	-								4mm
	0	8	-								8mm
	1	5	-								15mm
	2	5	-								25mm
Acceptable fluids					L	1					Liquid
					G	2					Gas
Process connection							P				R (male thread) Process connection material : PPS
							S				Rc (female thread) Process connection material : SCS14A
							N				NPT (male thread) Process connection material : PPS
Version								B			Always "B"
Construction									0		Non-explosionproof
									1	TIIS	Intrinsically safe enclosure: Sensor + barrier
									2	ATEX	Intrinsically safe enclosure: Sensor + barrier

BARRIER

Item	Description
Power	12 to 24VDC
Current drain	10mA max.
Pulse output	Open collector pulse (Capacity: 30VDC, 20mA)
Operating temp. range	-20 to +50°C
Major parts material	Housing : Polycarbonate
Dusttight, waterproof enclosure	IP30

OUTLINE DIMENSIONS

● R/NPT Thread

Nom. size (mm)	φD	R	L	W	H1	H2	Approx. weight (g)
4	8.5	R3/8 NPT3/8	80	32	29	68	270
8	13	R1/2 NPT1/2	80	32	29	68	270
15	14	R3/4 NPT3/4	85	32	29	68	280
25	24.5	R1-1/4 NPT1-1/4	120	46	46	85	410

● Metal connection

NOTE: Meter body fitting screws cannot be used for model FLP25.

Nom. size (mm)	φD	Rc	L	W	H1	H2	Approx. weight (g)
4	8.5	Rc1/4	91	50	29	68	650
8	10.7	Rc1/4	91	50	29	68	650
15	14	Rc1/2	91	50	29	68	650
25	24.5	Rc1	126	46	46	85	950

● Barrier

Unit: mm

Approx. weight : 60g

The specification as of January, 2021 is stated in this catalog. Specifications and design are subject to change without notice.



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