

DUAL PULSE PADDLE WHEEL FLOWMETERS



Constructed
and
manufactured
for Customer
Value



IF500 and IF600 are cost effective stainless steel flowmeters for measuring the flow of water, fuels and other low viscosity liquids in pipe sizes 1.5" to 100" (40 to 2500mm).

The insertion flowmeters are installed with the metering head 1/8th into the pipe resulting in very little pressure drop. They do not require external power when used with the Trimec-FP rate totalisers, however some options such as high temperature and non-magnetic models require an external power source

Applications include HVAC, hot and chilled water, fire systems, water distribution (management and treatment), boiler feed water and hydrant flow testing.

FEATURES:

- IP68 (NEMA6) submersible 316SS construction
- Low cost of ownership
- Wide flow range
- Intrinsically safe hazardous area versions
- Integral or remote pre-amplifiers and flow instruments
- IF600 version suitable for "hot tap" installation
- Bi-directional flow measurement

TECHNICAL INFORMATION DUALPULSE PADDLE WHEEL FLOWMETERS

GENERAL SPECIFICATIONS

Model Prefix:	IF500	IF600
Suit Pipe Sizes	40-900mm (1.5"-36")	50-2500mm (2"-100")
Pipe Connection	1.5"BSP or NPT	2"BSP or NPT
Flow Range	0.25-6300 litres/sec (4-99600 USGPM)	0.4-49000 litres/sec (6-78000 USGPM)
Flow Velocity Range	0.3 - 10 metres/sec (1-33 feet/sec)	
Linearity	Typically +/- with well established flow profile	
Temperature Range	-40°C - +100°C (-40°F - +212°F) 200°C max.	
Maximum Pressure	80 bar (1200 psig)	
Materials	316 St St body & rotor shaft, PVDF rotor	

Pulse Outputs

*Reed Switch	30Vdc x 200mA max. Nom. 0-80Hz
Hall Effect	3 wire NPN, 5-24Vdc, 20mA max. Nom. 0-240Hz
Voltage Pulse	Self Generated Voltage. Nom. 0-240Hz
Intrinsically Safe Coil	Self Powered, generates 15-300mV
High Temperature Coil	Self Powered, 200°C (390°F) max.
Non Magnetic Sensor	3 wire NPN, 5-24Vdc, 20mA max. Nom. 0-240Hz
Analogue	Loop Powered 4-20mA

* Maximum thermal shock 10 °C (50°F) / min. applies to the reed switch

PADDLE WHEEL MODEL CODING

IF500	40 - 900mm Pipes (1.5" - 36")
IF600	50 - 2500mm Pipes (2 to 100")

Body Material

S	316 Stainless Steel
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Rotor & Bearing Materials

1	PEEK high temperature rotor - 200°C (390°F)
2	PVDF rotor - 100°C (212°F) max. (Standard)
3	PVDF rotor with Hastelloy Shaft (for chlorinated waters)

O-ring Materials

1	Viton (standard) -15°C - +204°C (5 - 400°F)
2	EPR (Ethylene Propylene Rubber) for ketones only
3	Teflon encapsulated Viton - Application Specific
4	Buna-N (Nitrile) -65 - +125°C (-53°F - +250°F)

Temperature Limits

5	100°C (212°F) - Standard
2	125°C (260°F) - PEEK rotor only
3	150°C (300°F) - NPN output & PEEK rotor only
6	200°C (390°F) with output type 6 & PEEK rotor

Process Connections

1	BSPT - 1 1/2" M (IF490), 2" M (IF600)
2	NPT - 1 1/2" M (IF490), 2" M (IF600)
3	2" BSPT male thread on the IF500
4	2" NPT male thread on the IF500

Pick-off Type

1	NPN hall effect & voltage pulse (standard)
2	NPN open collector(s)
3	Reed Switch only (I.S. applications)
4	Non magnetic rotor with NPN output
5	Non magnetic rotor with I.S. coil output
6	High temp. 200°C (390°F) coil output
7	Non magnetic rotor for 125°C (255°F)

Electrical Connections

1	3 metre (10ft) cable (standard)
2	10 metre (33ft) cable
3	20 metre (66ft) cable
4	50 metre (164ft) cable
5	Terminal box on stem kit
6	Stem Kit

Integral Options

QP	Quadrature pulse output
B2	BT11 Dual Totaliser
B3	I.S. Intrinsically Safe BT11
R2	RT12 Rate Totaliser
R3	I.S. Intrinsically Safe RT12
R4	RT20 Flow LCD Rate Totaliser
E0	Batch Controller
FI	Loop Powered 4-20mA output
SB	Specific Build Requirement

Model No. Example

IF500	S	2	1	5	-	1	1	6	R2
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STANDARD INSTALLATION

