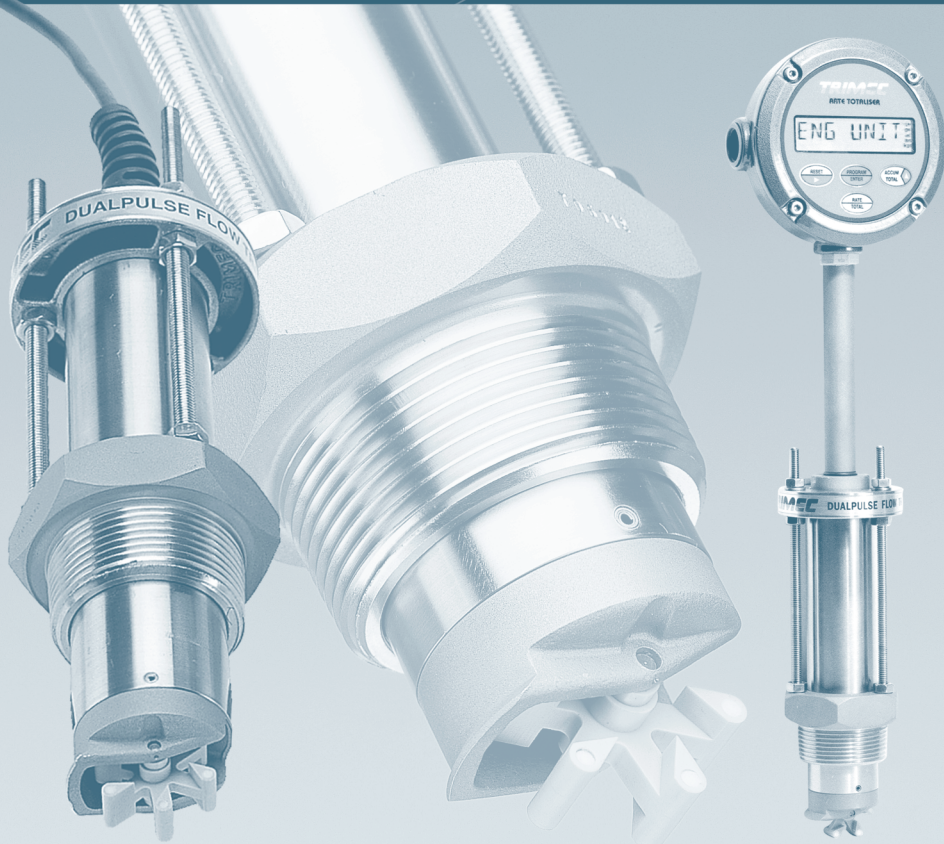


Dual Pulse Insertion Flow Transducers



Features

- IP68 (Nema 6)
316L stainless steel construction
- Suits pipes 40 to 2500mm NB (1½" to 100" nominal bore)
- Low installed cost
- Dual independent pulse outputs each with high noise immunity (CE compliant)
- High pressure submersible design
- Both open collector and a non powered voltage pulse output as standard
- DP525 series suitable for Hot Tap installations

Options

- High temperature to 204°C (400°F)
- Reed switch option for hazardous area operation (intrinsically safe)
- Integral or remote self powered flow rate-totaliser with scaled pulse, analog and flow alarm outputs (see separate data sheet)
- Integral or remote high speed preset batch controller (see separate data sheet)
- Non magnetic rotor option for liquids containing ferrous suspensions
- Optional I.S. Coil output or Bi-directional discriminator output
- Integral Data Logger.

Quality and Simplicity in Flow Measurement

Overview

The Dualpulse insertion flow transducer is an innovative design combining well proven technology with the performance enhanced by the use of modern engineering materials to provide a cost effective and reliable means of measuring the flow of a wide variety of low viscosity of liquids.

Robust Construction

A durable peek rotor with a graphite-PTFE impregnated peek bearing rotates around a precision ground tungsten carbide rotor shaft to promote longevity. The body is all 316 stainless steel.

The unique metering head & aerofoil shaped rotor are shaped to extend the linear measuring range to cover flow velocities from 0.3-10 m/sec (1-33ft/sec).

Wide Application

Typical industry applications include:

HVAC - Hot & chilled water, Fire system & Thermal energy monitoring.

Municipal - Water distribution, Water management and Water treatment.

Irrigation - Water management.

Water treatment - Chlorination, De-salination & mechanical filtration plants, Chemical injection systems.

Refineries - Primary flow additive injection, Fire & cooling systems.

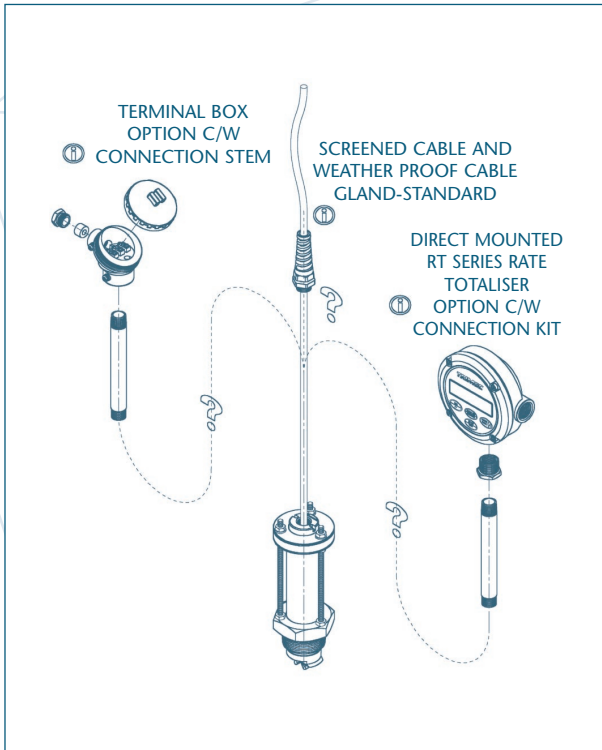
Power generation - Boiler feed water, Steam condensate, Process water & water balancing.

Chemical - Process & cooling tower water, Chemical & water batching.

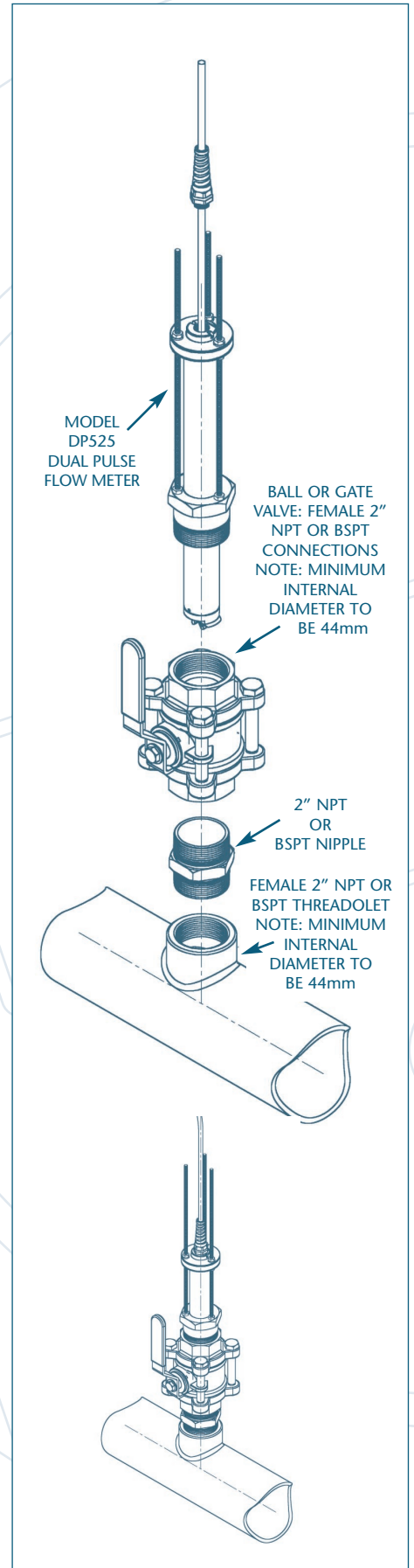
Others - Cement Mfg, Diesel fuel transferring, Flow testing, Fire truck & Hydrant flow monitoring, Food processing, Pulp/paper, Mining.

TRIMEC

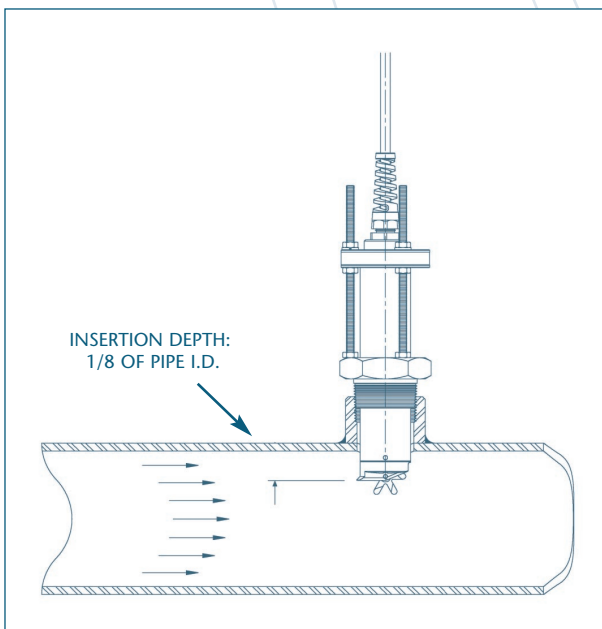
General Arrangement



Hot Tap Installation



Standard Installation



13mm

Dualpulse Specifications

	DP490	DP525
Model Prefix		
Suit Pipe Sizes	40 ~ 900 mm (1½ ~ 36")	50 ~ 2500 mm (2 ~ 100")
Process Connections	1½" BSPT (G1.5) or 1½" NPT	2" BSPT (G2) or 2" NPT
Body & O-ring Material	316L (1.4404) stainless steel body & rotor shaft, viton O-rings	
Rotor Material	PEEK (polyetheretherketone) with graphite-PTFE impregnated bearing	
Velocity Range	0.3 ~ 10 metres/sec. (1 ~ 33 ft/sec.)	
Flow Range	0.38 ~ 6300 litres/sec. (6 ~ 99600 USGPM)	
Linearity & Repeatability	Linearity typically ±1.5%, Repeatability ±1% with well established flow profile	
Maximum Pressure	80 bar (1200 PSI)	
Temperature Ranges	Standard -40°C ~ 100°C (-40°F ~ 212°F) plus 3 options up to 204°C (400°F)	
Outputs (standard) transmission to 1000m (3300 ft) max.	<ul style="list-style-type: none"> ▶ Voltage Pulse self generated 1.5V x 10µs (2 wire) 220~240hz max. ▶ Open Collector NPN 5~24VDC square wave (3 wire) 220~240hz max. 	
Outputs (optional)	<ul style="list-style-type: none"> ▶ Reed Switch (2 wire) 66 ~ 80hz max. [can be used as I.S. with barrier] ▶ Non magnetic rotor + Hall Effect output (for liquids with ferrous impurities) ▶ I.S. inductance coil (2 wire) 400 ~ 480hz max. ▶ High temperature voltage pulse output to 200°C (400°F). ▶ Quadrature output (dual Hall Effect output with 90° phase shift). 	
Conduit Entry	3/8" NPT or PG9 conduit thread (M16 x 1.5 on terminal box option)	
Cable	3 metres (10ft) screened 5 core as standard, longer lengths are optional.	
Mounting Requirements	BSP / NPT service saddle or thread-o-let	
Shipping Weights	1.3 kg (3lbs)	1.5 kg (3.3lbs)

Remote Mounting Options for 100 Series Electronics



Pipe Mount



Panel Mount



Wall Mount

Ordering Information

Size	
DP490	40-900mm pipes (1.5-36") - 1 1/2" BSP/NPT process connections
DP525	50-2500mm pipes (2-100") hot-tap version - 2" BSP/NPT process connections.
Body material	
S	316 Stainless Steel
Rotor material	
2	PEEK with a graphite-PTFE impregnated bearing
9	Special
O-ring materials	
1	Viton
9	Special
Maximum temperature	
2	125°C (258°F)
3	150°C (300°F) - NPN output only
5	100°C (185°F) - standard
6	-60 to +200°C (-80 to +400°F) - see output type 6
Process connections	
- 1	BSPT male thread
- 2	NPT male thread
- V	Victaulic Joint 50mm grooved
Output type	
1	NPN open collector & voltage pulse - standard
2	NPN open collector only
3	Reed switch only (can use with an I.S. barrier)
4	Non magnetic rotor with NPN output*
5	Intrinsically safe Coil output
6	High temp. voltage pulse to +200°C (+400°F)
<i>*for liquids with ferrous impurities (max. 85°C)</i>	
Electrical connections	
1	3 metres cable - standard
2	10 metres cable
3	20 metres cable
4	50 metres cable
5	Terminal box on stem kit
6	Stem kit for integral options R1, R2 & R3
9	Special
Integral options	
00	No options
QP	Quadrature pulse output
R1	RT11 (scaleable pulse output)
R2	RT12 (RT11+ 4-20mA & alarms)
R3	RT13 (RT12+data logger)

Model No. Example

DP490 S 2 1 5 - 1 1 1 00

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