



DUALPULSE – insertion flowmeters

DP490 & DP525 are cost effective stainless steel flowmeters for measuring the flow of water, fuels & other low viscosity liquids in pipes sizes 1.5"~100" (40~2500mm).

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 rate totalisers however some options such as high temperature & non-magnetic models require external power.

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

FEATURES :

- IP68 (NEMA6) submersible 316SS construction.
- Low cost of ownership, wide flow range.
- Rugged & compact design.
- Intrinsically safe hazardous area versions.
- Integral or remote pre-amplifiers & flow instruments.
- DP525 version suitable for "hot tap" installation.
- BI-Directional Flow Measurement

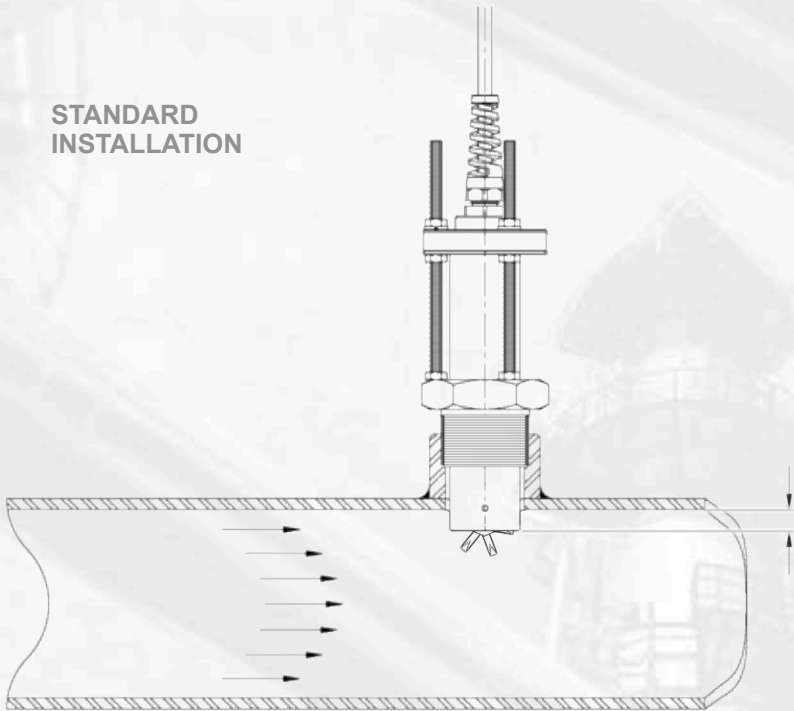
GENERAL SPECIFICATIONS

Model prefix :	DP490	DP525
<i>Suit pipe sizes</i>	40~900mm (1.5"~36")	50~2500mm (2"~100")
<i>Pipe connection</i>	1.5" BSP or NPT	2" BSP or NPT
<i>Flow range</i>	0.25 ~ 6300 litres/sec (4 ~ 99600 USGM)	0.4 ~ 49000 litres/sec (6 ~ 780000 USGM)
<i>Flow velocity range</i>	0.3 ~ 10 metres/sec (1 ~ 33 feet/sec)	
<i>Linearity</i>	typically ± 1.5% with well established flow profile	
<i>Temperature range</i>	-40°C ~ +100°C (-40°F ~ +212°F) 200°C max.	
<i>Maximum pressure</i>	80 bar (1200 psig)	
<i>Materials</i>	316SS body & rotor shaft, PVDF rotor	
<i>Pulse outputs</i>		
<i>* Reed switch</i>	30Vdc x 200mA max. Nom. 0~80hz	
<i>Hall effect</i>	3 wire NPN, 5~24Vdc, 20mA max. Nom. 0~240hz	
<i>Voltage Pulse</i>	self generated voltage. Nom. 0~240hz	
<i>Intrinsically safe coil</i>	self powered, generates 15~3000mV	
<i>High temperature coil</i>	self powered, 200°C (390°F) max.	
<i>Non magnetic sensor</i>	3 wire NPN, 5~24Vdc, 20mA max. Nom. 0~240hz	
<i>Analog</i>	loop powered 4 ~ 20mA	

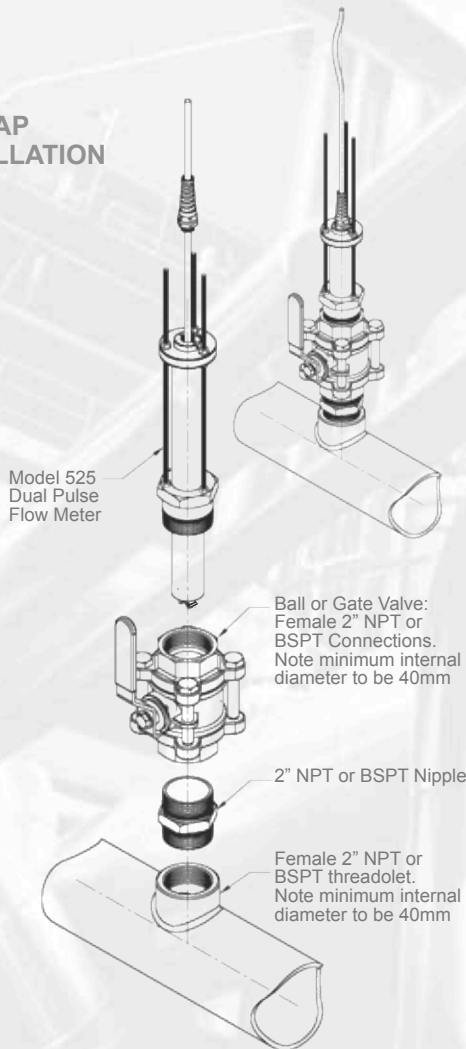
* Maximum thermal shock 10°C (50°F) / min. applies to the reed switch

TECHNICAL INFORMATION DUAL PULSE FLOWMETERS

STANDARD INSTALLATION



HOT TAP INSTALLATION



MODEL CODING

DP490	1.5 to 36" pipes (40 ~ 900mm)
DP525	2 to 100" pipes (50 ~ 2500mm) suitable for "hot-tap" installations

Body material	
S	316 Stainless Steel

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~+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~+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 coil & PEEK rotor

Process connections	
1	BSPT - 1½" M (DP490), 2" M (DP525)
2	NPT - 1½" M (DP490), 2" M (DP525)
3	2" BSPT male thread on the DP490
4	2" NPT male thread on the DP490

Pick-up 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 (std)
2	10 metre (33ft) cable
3	20 metre (66ft) cable
4	50 metre cable (164ft)
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 large LCD rate totaliser
E0	Batch controller
FI	Loop powered 4~20mA output
SB	Specific build requirement

with scaleable pulse output	IECEX & ATEX approved	scaled pulse, alarms & 4~20mA	IECEX & ATEX approved	scaled pulse + backlighting	dc powered 2 stage batch controller	Requires electrical connection 5
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Model No. Example

DP490	S	2	1	5	-	1	1	6	R2
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