LIGHTSPEED™ FIBER OPTIC PADDLEWHEEL FLOW SENSORS – INHERENTLY SAFE DESIGN

FP9001A
$225

1 YEAR WARRANTY · MADE IN USA · CE

- **Unique Fiber-Optic Design for Hazardous Areas**
- **Fiber-Optic Signal—Insensitive to Electrical Interference**
- **Non-Magnetic Design Resists Fouling from Rust**
- **Optical Interface**

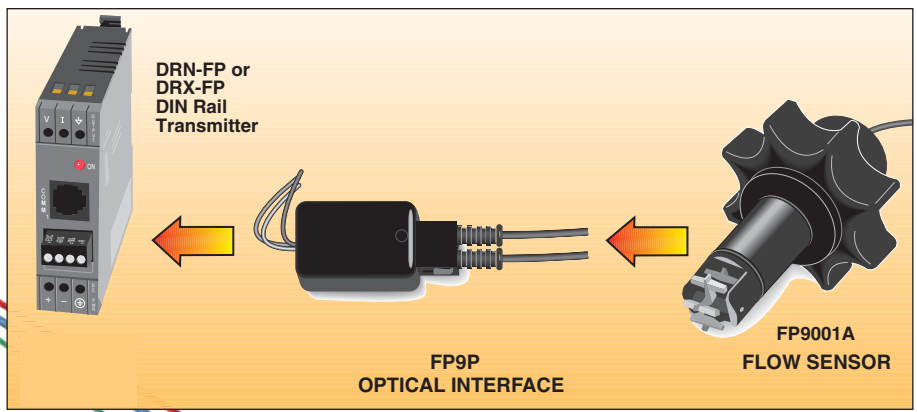
The FP9001 LIGHTSPEED™ paddlewheel flow sensors are ideal for applications with low viscosity solutions (like water) which are low in suspended solids.
A patented fiber-optic sensing mechanism makes these sensors especially well suited for applications in hazardous environments, where the paddlewheel electronics can be mounted in a non-hazardous location and the near-infrared light signal can be sent down an optic cable to the paddlewheel inside the hazardous location. This non-magnetic design tolerates some rust, often found in iron pipes. FP9001A flow sensors must be used with the companion FP9001A pipe installation fittings.
The high amplitude pulse output from the FP9P opto-electronic interface is ideally suited for hook up to the model INF7 ratemeter/totalizer. For 4 to 20 mA output, connect to FLSC90 Series signal conditioner. (Please specify fitting and calibration range for the 4 to 20 mA output.) The FLSC90 includes the required optical interface for the FP9000 sensor.

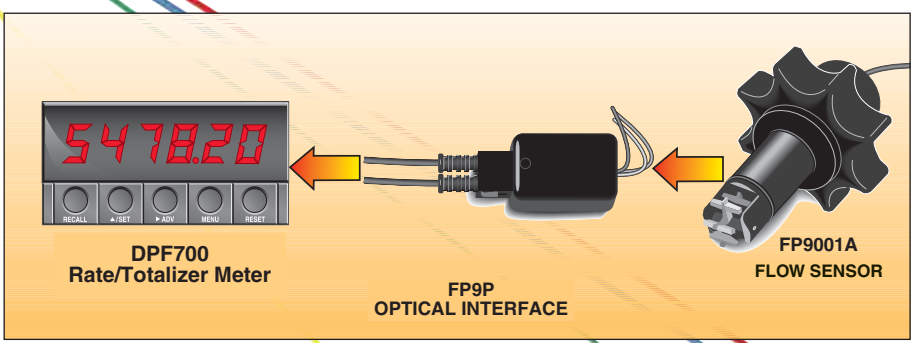
Flow Sensor Specifications

	Range (gpm)		Accuracy	Repeatability	Nominal	Nominal
Pipe Size	Min.	Max.	(% Full Scale)	(% of Full Scale)	K Factor	Hz @ 1 gpm
0.5"	1.0	20	±2%	±2%	938	15.6
0.75"	2.0	30	±2%	±2%	528	8.80
1.0"	4.0	55	±2%	±2%	322	5.37
1.25"	4.5	90	±2%	±2%	161	2.68
1.5"	8.0	125	±2%	±2%	112	1.87
2.0"	15.0	200	±2%	±2%	63.6	1.06
2.5"	20	300	±2%	±2%	48.4	0.807
3.0"	25	500	±3%	±3%	15.5	0.258

FP9001A Sensor, $225 shown with FP9P-T interface, $155.

PATENTED
Covered by U.S. and International patents and pending applications





FP9001A Sensor, $225 with FP9P-T interface, $155.

Model FP9001A Sensor
Wetted Parts: Polypropylene body and impeller, Hastelloy C shaft, Viton® O-rings, acrylic fiber-optic cable
Maximum Fluid Viscosity: 1 centipoise
Temperature/Pressure: ½" PVC fitting: 100 psi @ 23°C (73°F), 50 psi @ 60°C (140°F);
¾ through 1½": 200 psi @ 23°C (73°F), 100 psi @ 60°C (140°F);
2 through 3": 200 psi @ 23°C (73°F), 50 psi @ 60°C (140°F)
Fiber-Optic Cable Length: 2.7 m (9')
Sensor Weight: 0.45 kg (1 lb)

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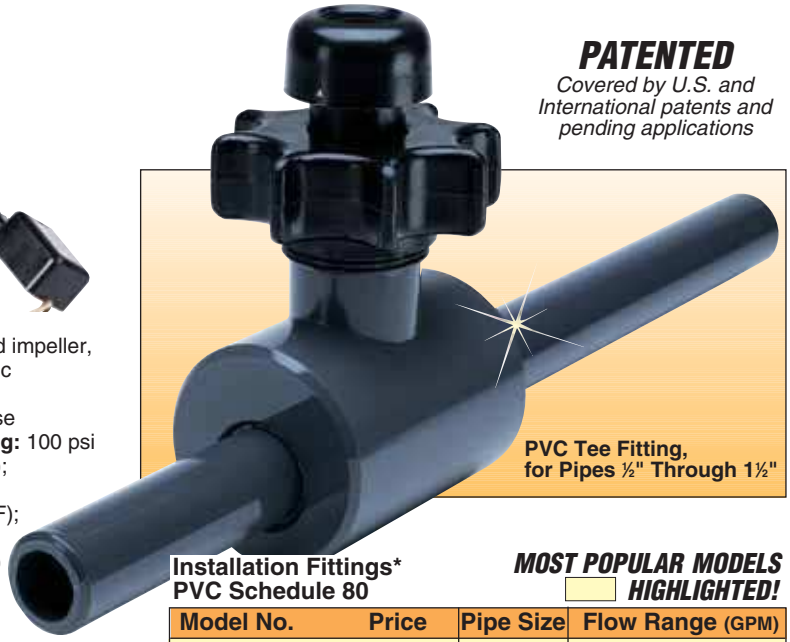


PVC Tee Fitting, for Pipes ½" Through 1½"

Flow Sensor Ordering Guide

AVAILABLE FOR FAST DELIVERY!

To Order *(Specify Model Number)*		
Model No.	**Price**	**Description**
FP9001A*	**$225**	Paddlewheel sensor for pipes ½ to 3"

**Must be used with FP9P-T, FP9010, or FLSC90-A optical interface. Please order separately below.*
Comes with complete operator's manual.

Works With:

FLSC-90A Signal Conditioner, $390. See Page F-21.

DP41-U Universal Panel Meter, $645.
Search DP41-U at newportUS.com

iDRN-FP/iDRX-FP, $295 Signal Conditioners.
Search iDRN-FP/iDRX-FP at newportUS.com

DPF403, $590 Digital Flow Meter. See page M-7.

DPF701, $260 Digital Flow Meter. See page F-80.

Installation Fittings*
PVC Schedule 80

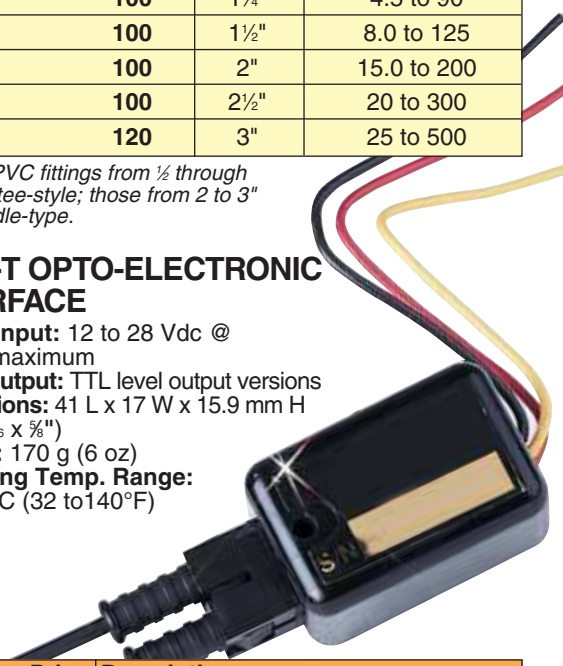
MOST POPULAR MODELS HIGHLIGHTED!

Model No.	Price	Pipe Size	Flow Range (GPM)
FP9005	**$80**	½"	1.0 to 20
FP9007	**90**	¾"	2.0 to 30
FP9010	**90**	1"	4.0 to 55
FP9012	**100**	1¼"	4.5 to 90
FP9015	**100**	1½"	8.0 to 125
FP9020	**100**	2"	15.0 to 200
FP9025	**100**	2½"	20 to 300
FP9030	**120**	3"	25 to 500

***Note:** PVC fittings from ½ through 1½" are tee-style; those from 2 to 3" are saddle-type.*

FP9P-T OPTO-ELECTRONIC INTERFACE

Power Input: 12 to 28 Vdc @ 25 mA maximum
Pulse Output: TTL level output versions
Dimensions: 41 L x 17 W x 15.9 mm H (1⅝ x ¹³⁄₁₆ x ⅝")
Weight: 170 g (6 oz)
Operating Temp. Range: 0 to 60°C (32 to140°F)



Model No.	Price	Description
FP9P-T	**$155.00**	Optical-to-TTL pulse interface
PSU-93	**40.00**	Wall socket plug-in transformer, 115 Vac in, 24 Vdc out on screw terminals
TX4-100	**28.50**	4-wire shielded cable, 30 m (100')
ME-2039	**175.00**	Reference Book: Fiber Optic Sensors

Ordering Example

Qty	Description	Price
1	**FP9001A,** sensor	**$225.00**
1	**FP9010,** fitting for 1" pipe	**90.00**
1	**FP9P-T,** DPF701, DPF700-A optical pulse interface	**155.00**
1	**TX4-100** 4-wire shielded cable, 30 m (100')	**28.50**
Total		**$498.50**

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