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Find the *OMEGA FP-5300* at our website: *Click HERE*



Paddlewheel Flow Sensors

Item# FP-5300

- Accurate to ±0.2 fps
- Repeatability at ±0.1 fps
- Simple and Accurate Flow Measurement

Data Sheet (PDF)

Product info

Category
Meter

Velocity Range
1 to 20 FPS

Accuracy
±1%

Max Process Temperature
90 °C (194 °F)

Max Operating Pressure
180 psi

Wetted Materials
Titanium, PP, PVDF, FKM O-RING

Output Signal
Sinusoidal

Compatible Fittings
FP-5300 Sensor Installation Fittings, User Must Select

Pipe Size Range
1/2 to 4"

Display
No Display

PRODUCT SPECS

ALL MODELS

Product Number	Category	Velocity Range	Accuracy	Max Process Temperature	Max Operating Pressure	Wetted Materials	Output Signal	Compatible Fittings	Pipe Size Range	Display

Product Number		Category	Velocity Range	Accuracy	Max Process Temperature	Max Operating Pressure	Wetted Materials	Output Signal	Compatible Fittings	Pipe Size Range	Display
FP-5300 $339.69	Available in 7 days	Meter	1 to 20 FPS	±1%	90 °C (194 °F)	180 psi	Titanium, PP, PVDF, FKM O-RING	Sinusoidal	FP-5300 Sensor Installation Fittings, User Must Select	1/2 to 4"	No Display
FP-5301 $349.83	Available in 5 weeks	Meter	1 to 20 FPS	±1%	90 °C (194 °F)	180 psi	Titanium, PP, PVDF, FKM O-RING	Sinusoidal	FP-5300 Sensor Installation Fittings, User Must Select	5 to 8"	No Display
FP-5302 $380.25	Available in 5 weeks	Meter	1 to 20 FPS	±1%	90 °C (194 °F)	180 psi	Titanium, PP, PVDF, FKM O-RING	Sinusoidal	FP-5300 Sensor Installation Fittings, User Must Select	10 to 12"	No Display

PRODUCT DETAILS

Streamline your flow measurement operation with the FP-5100 Series flow sensor. Using this compact flow sensor, a matched sensor installation fitting, an OMEGA™ flow meter or controller, and ordinary handtools, you can assemble a complete flow monitoring or controlling system in minutes. Accurate to ±0.2 fps, with repeatability at ±0.1 fps, this insertion sensor operates on a simple electromechanical principle, proven in thousands of liquid flow applications worldwide. It all adds up to precision, dependability, and convenience– basic advantages that are quickly surpassing its in-line competition.

Convert your maintenance hours into minutes with the FP-5300. Should a sensor, rotor, or O-ring need to be replaced, it takes only seconds. Reduce your system downtime substantially with a stand-alone FP-5300 sensor, or simply add a Wet Tap Assembly and eliminate downtime completely. Combined with the FP-5300 during initial installation, the Wet Tap allows sensor removal without system shut-down. Optional local or remote capability lets you place your meter up to 200 feet away without signal amplification, and you can install the FP-5300 in pipe sizes ranging from 1/2 inch to 36 inches without a lot of additional cost, because the price of the FP-5300 increases only slightly for larger pipe sizes.

Available in a choice of chemically resistant, non-contaminating housing materials, the FP-5300 stands up to the harshest environments. The glass-filled polypropylene housing version is lightweight but strong, which makes it ideal for handling a wide range of liquids, including corrosive fluids in chemical processing. For processes involving acids and solvents, the PVDF (polyvinylidene fluoride) housing version is a tough fluorocarbon that is highly resistant to more severe fluids.

The sensor works on a simple but precise electromechanical principle based on measuring the rate and volume of flow in your pipe. Four permanent magnets, imbedded in the rotor blades, spin past a coil in the sensor body. As the fluid flow causes the rotor to move, a sine wave signal is produced, directly proportional to the flowrate. The patented “open cell” feature of the rotor ensures a linear, repeatable output, up to 20 fps, with accuracy of ±0.2 fps. The result is minimal head loss and no cavitation.

Designed to allow optional conduit installation, the FP-5300 easily lets you comply with local codes requiring conduit protection. For instance, pry off the plug on top of the sensor: underneath, you’ll find a 1/2 FNPT thread. Using an optional conduit adaptor fitting kit, you can connect your conduit FPM-5000-SCAK conduit adaptor kit), and an optional instrument back-cover kit will provide everything you need for quick conduit connection to a meter or controller. Additionally, you can adapt to both rigid and flexible liquid-tight conduits, protecting your system hookup from harsh elements and mechanical damage.

Flow Range

Pipe Size	½"	¾"	1"	1¼"	1½"	2"	2½"	3"	4"	5"	6"	8"	10"	12"
Range (gpm)	1 to 19	1.7 to 34	2.7 to 54	4.7 to 94	6.4 to 127	10.6 to 210	15 to 300	24 to 461	40 to 794	63 to 1247	91 to 1801	156 to 3119	246 to 4915	349 to 6977

SPECIFICATIONS

Accuracy: ±1% full scale
Output Signal: 1 V p-p/fps
Output Frequency: 6 Hz/fps nominal
Flow Rate Range: 1 to 20 fps
Source Impedance: 8 k?
Maximum Pressure:
FP-5300 Series: 180 psig max @ 20°C (68°F)
FP-5100 Series: 200 psig max @ 20°C (68°F)

Minimum Temperature: 0°C (32°F)
Maximum Temperature: See chart on spec sheet for complete temperature and pressure rating
Pressure Drop: Equal to 2.5 m (8') of straight pipe
Material:
Transducer Housing: glass-filled polypropylene or PVDF
O-Rings: FKM
Shaft: Titanium or Hastelloy C(PVDF optional)
Rotor: PVDF
Maximum % Solids: 1% of fluid volume, non-abrasive, nonmagnetic, <100 micron diameter and length
Standard Cable Length: 7.5 m (25')
Max Viscosity: 1 centipoise (water); up to 5 cp above 5 fps velocity

REVIEWS

Search topics and reviews

0 Reviews | 1 Question | 1 Answer

Reviews

Be the first to review this product

MANUALS

Manual (PDF)

QUESTIONS AND ANSWERS

Questions

ASK A QUESTION

Billz · 9 months ago

What is the NEMA or IP rating for paddle wheel flow meter FP-5307? Where can I obtain literature that states the rating?

1 answer

Answer this Question

Jane · 8 months ago

Hi, the FP-5307 does not have a NEMA or IP rating. The only standards/approvals it has is that it is CE rated and is manufactured under ISO 9001 and ISO 14001. Please contact us if you have any further questions. Thank you.

Helpful? Yes · 0 No · 0 Report

ACCESSORIES

FP-5340CS	Installation Fitting	$166.30	**0 In Stock**	QTY 1	ADD TO CART
DPF75	Frequency Input Ratemeter/Totalizer	$327.73	**3 In Stock**	QTY 1	ADD TO CART

FP-5307CU	Installation Fitting	$339.69	**4 In Stock**	QTY 1	ADD TO CART
FP-5320GI	Installation Fitting	$145.01	**2 In Stock**	QTY 1	ADD TO CART
Accessories					
DPF701	Rate or total panel meter		**0 In Stock**	QTY 1	ADD TO CART
FMK-51545-1	Replacement PVDF rotor and rotor pin	$117.63	**2 In Stock**	QTY 1	ADD TO CART
FP-5310M	1" Molded PVC SCH 40 installation fitting	$198.75	**5 In Stock**	QTY 1	ADD TO CART
Accessories for the FP-5600 and FP8500A Series					
FMK-1546-1	Titanium rotor pin	$43.89	**0 In Stock**	QTY 1	ADD TO CART
FPM-5000-SCAK	Conduit adaptor kit	$56.40	**0 In Stock**	QTY 1	ADD TO CART

COMPLIANCE

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