

S-Series

SPT, SPX LOW FLOW METERS



SPX



SPT

APPLICATIONS

- Low flow monitoring
- Chemical batching
- Proportional chemical injection
- Fertilizer injection

Features

- Accurate at low flows
- Simple and durable
- Compatible with a variety of chemicals
- Visual flow monitoring (SPX Only)

These versatile impeller flowmeters are available in 3/8", 1/2", 3/4", and 1" nominal pipe sizes with female NPT threads. They employ jewel bearings to allow for very low minimum flow rates and superior life.

The **SPX**, with a body of polypropylene, is an economical choice for metering water or low corrosion fluids. The lens cover is available in a choice of materials: acrylic for visual flow indication of low-corrosion fluids; polypropylene when more corrosion resistance is needed. The standard rotor assembly is Kynar® with tungsten carbide shaft. The O-ring is EPDM.

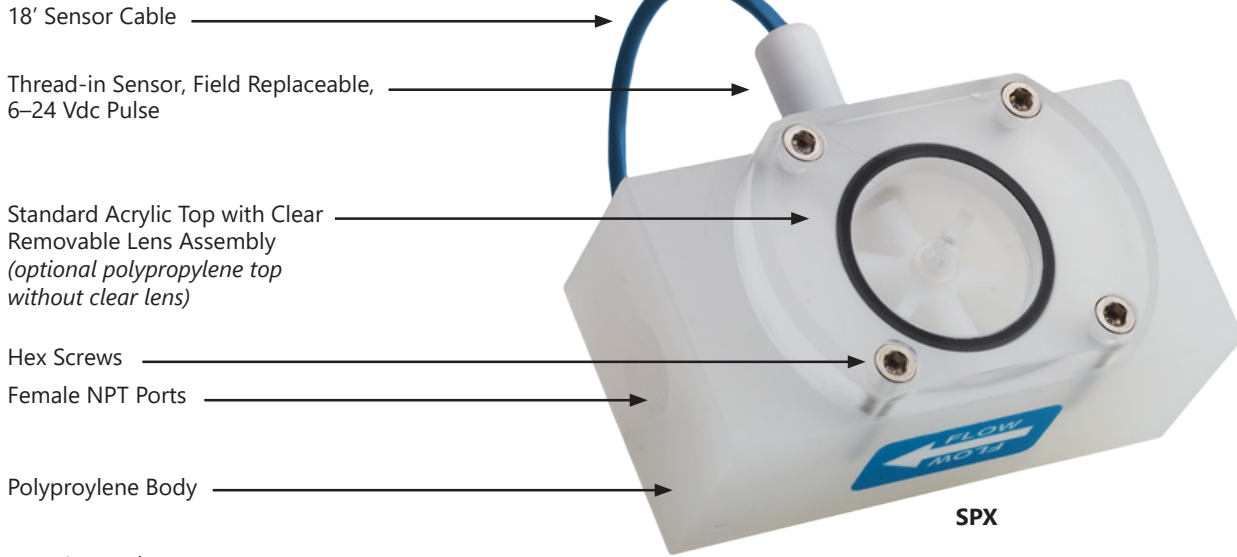
The **SPT** offers greater chemical resistance with a Teflon® body and cover, Teflon®-coated Viton® O-ring, and standard Kynar®/ceramic rotor assembly.

The pulse output of these meters is compatible with many different types of controls, including a full range of Seametrics rate displays and controls. The Seametrics FT430 and FT440 provide flow rate and total flow indication. The FT440 also includes 4-20 mA output capability. The FT450 is a battery-operated rate & total display. For metering pump pacing or interfacing with low speed counters, the PD10 pulse divider is recommended. The AO55 may be used for blind 4-20 mA transmission.

**S-SERIES
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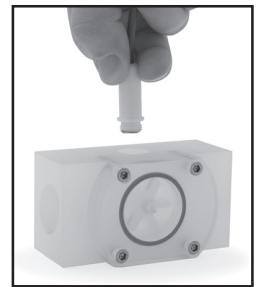
Features



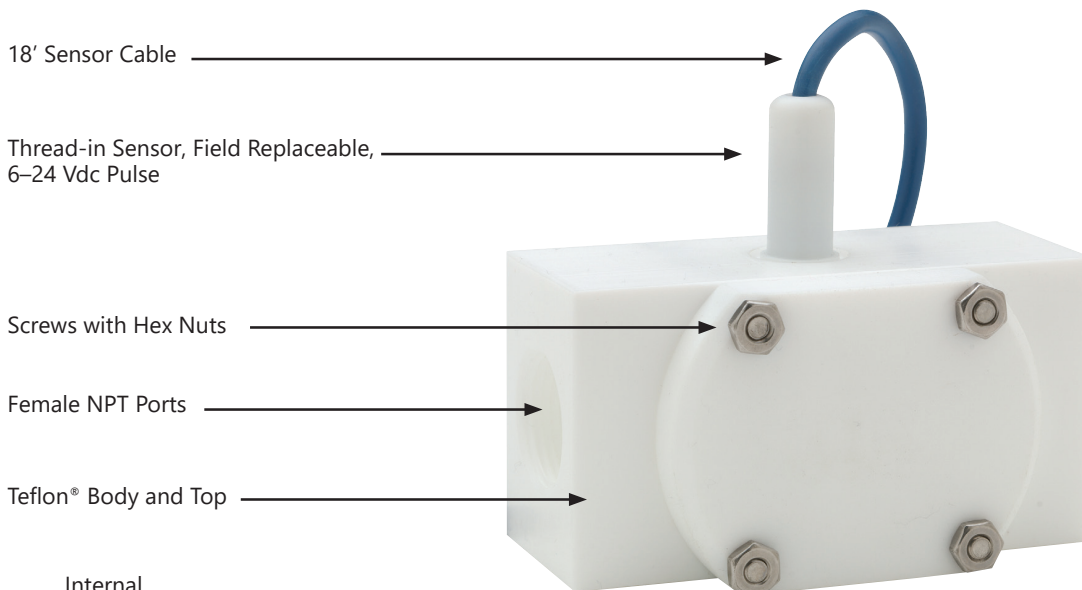
SPX

Internal

- Jewel Bearings—Ruby Ring and Ball
- Kynar®/Tungsten Carbide Rotor Assembly (*Kynar®/Ceramic or Kynar®/Silicon Carbide optional*)
- EPDM O-Ring (*Viton® or Teflon®-coated Viton® optional*)



Field Replacement of Sensor



SPT

Internal

- Jewel Bearings—Ruby Ring and Ball
- Kynar®/Ceramic Rotor Assembly (*Kynar®/Silicon Carbide optional*)
- Teflon®-coated Viton® O-Ring (*Viton® or EPDM optional*)

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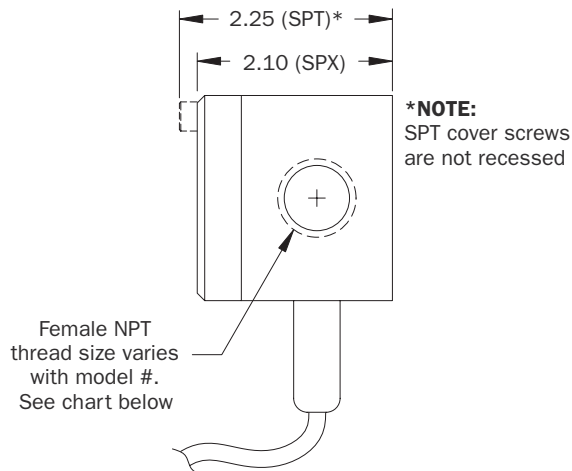
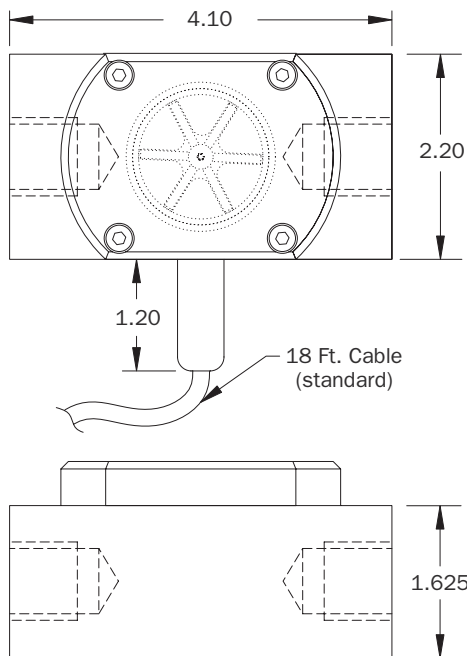
Specifications*

		SPX	SPT
Connection Ports		3/8", 1/2", 3/4", 1" —Female NPT thread	3/8", 1/2", 3/4", 1" —Female NPT thread
Sensor Cable		18 ft (6 m) standard—maximum cable run 2000 ft (607 m)	18 ft (6 m) standard—maximum cable run 2000 ft (607 m)
Materials	Body	Polypropylene	TFE Teflon®
	Rotor	PVDF (Kynar®)—2 magnet (6 magnet high resolution optional)	PVDF (Kynar®)—2 magnet (6 magnet high resolution optional)
	Shaft	Nickel tungsten carbide (ceramic or silicon carbide optional)	Zirconia ceramic (silicon carbide optional)
	O-Ring	EDPM (Viton® or Teflon®-coated Viton® optional)	Teflon®-coated Viton® (Viton® or EDPM optional)
	Bearings	Ruby ring and ball	Ruby ring and ball
	Cover	Acrylic with clear lens (polypropylene without clear lens optional)	TFE Teflon®
Maximum Temperature		160° F (70° C)	180° F (82° C)
Maximum Pressure		150 psi (10 bar)	150 psi (10 bar)
Accuracy		±1% of full scale	±1% of full scale
Power	Standard	6–36 Vdc, 2 mA min.	6–36 Vdc, 2 mA min.
	Micropower	3.1–16 Vdc (for use with FT450 and DL76 only)	3.1–16 Vdc (for use with FT450 and DL76 only)
Outputs		Current sinking pulse, 6–24 Vdc	Current sinking pulse, 6–24 Vdc

* Specifications subject to change. Please consult our website for current data (seametrics.com)

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Dimensions



Model #	NPT Thread Size
-038	3/8"
-050	1/2"
-075	3/4"
-100	1"



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How to Order

Model	Size	Options	
		SPX	SPT
SPX = Polypro/Acrylic SPT = TFE Teflon®	-038 = 3/8" (0.07–5 gpm) -050 = 1/2" (0.1–10 gpm) -075 = 3/4" (0.2–20 gpm) -100 = 1" (0.5–40 gpm)	-01 = Ceramic shaft -04 = Micropower pickup (for use with FT450 or DL76 only) -06 = Standard power, LMI 4-pin connector -07 = Standard power, Seametrics control connector -12 = Polypro cover -13 = High resolution rotor -25 = Teflon®-coated Viton® o-ring -60 = Viton® o-ring -68 = Silicon carbide shaft -70 = SAE threads -106 = Roytronic® Series A Pump 5-pin connector -116 = BSP threads	-04 = Micropower pickup (for use with FT450 or DL76 only) -06 = Standard power, LMI 4-pin connector -07 = Standard power, Seametrics control connector -13 = High resolution rotor -60 = Viton® o-ring -68 = Silicon carbide shaft -69 = EPDM o-ring -70 = SAE threads -106 = Roytronic® Series A Pump 5-pin connector -117 = BSP threads

Accessories

FT430 = Rate and Total Indicator, DC powered	DL76 = Data Logger
FT440 = Rate and Total Indicator, loop powered	PC3 = Plug-in Power Converter, 100–115 Vac, 24 Vdc
FT450 = Rate and Total Indicator, battery powered	PC12 = DIN or Wall Mount Power Converter, 100–115 Vac, 24 Vdc
AO55 = Blind Analog Transmitter (4–20 mA)	PD10 = Pulse Divider
FT520 = Batch Flow Processor	PS40 = Pulse Splitter

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Flow Range

Model #	K-Factor* (pulses/gal)		Gal/Min	Liter/Min
	SPT	SPX		
-038	1394	1417	0.07–5	0.27–18.9
-050	634	658	0.1–10	0.38–37.9
-075	476	468	0.2–20	0.75–75
-100	250	254	0.5–40	1.9–150

*Nominal K-factors (based on averages) for standard 2-magnet SPT and SPX. High resolution (6-magnet) K-factors are approximately tripled.

Pressure Drop Curves

