S-Series SPT, SPX LOW FLOW METERS



SPT

Seametrics

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.

Contact Your Supplier





Features

18' Sensor Cable	
Thread-in Sensor, Field Replaceable, 6–24 Vdc Pulse	
Standard Acrylic Top with Clear Removable Lens Assembly (optional polypropylene top without clear lens)	
Hex Screws Female NPT Ports	
Polyproylene Body 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)	
18' Sensor Cable)
Thread-in Sensor, Field Replaceable, Field Repla	ment r
Screws with Hex Nuts	
Female NPT Ports	
Teflon® Body and Top	
Internal • Jewel Bearings—Ruby Ring and Ball SPT	
 Kynar[®]/Ceramic Rotor Assembly (Kynar[®]/Silicon Carbide optional) Teflon[®]-coated Viton[®] O-Ring (Viton[®] or EPDM optional) 	

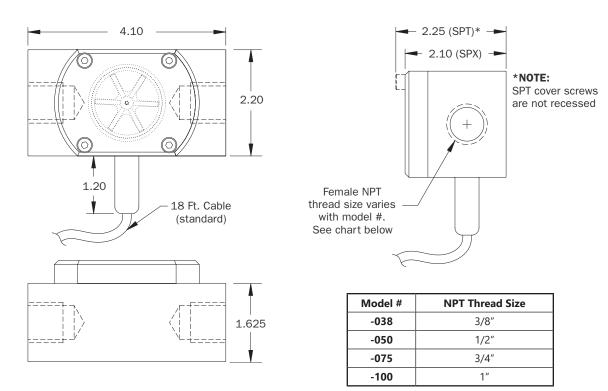


Specifications*

		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) Kynar is a registered trademark of Arkema, Inc., Teflon and Viton are registered trademarks for DuPont Corporation

Dimensions



S-SERIES SPT, SPX LOW FLOW METERS



How to Order

Model	Size	Options			
		SPX	SPT		
SPX = Polypro/Acrylic	-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 (Required for use with FT450)		
SPT = TFE Teflon®		 -04 = Micropower pickup (for use with FT450 or DL76 only) -06 = Standard power, LMI 4-pin connector 	-06 = Standard power, LMI 4-pin		
			connector -07 = Standard power, Seametrics		
		-07 = Standard power, Seametrics control connector	control connector -13 = High resolution rotor		
		-12 = Polypro cover	-60 = Viton [®] o-ring		
		-13 = High resolution rotor	-68 = Silicon carbide shaft		
		-25 = Teflon [®] -coated Viton [®] o-ring	-69 = EPDM o-ring		
		-60 = Viton [®] o-ring	-70 = SAE threads		
		-68 = Silicon carbide shaft	-106 = Roytronic [®] Series A Pump 5-pin connector		
		-70 = SAE threads -106 = Roytronic [®] Series A Pump 5-pin connector	-117 = BSP threads		
		-116 = BSP threads			
Accessories					
FT430 = Rate and To	tal Indicator, DC powered	DL76 = Data Logger			
FT440 = Rate and To	tal Indicator, loop powered	PC3 = Plug-in Power Converter, 100–115 Vac, 24 Vdc			
FT450 = Rate and To	tal Indicator, battery powered	PC12 = DIN or Wall Mount Power Converter, 100–115 Vac, 24 Vdc			

FT520 = Batch Flow Processor

- DIN or Wall Mount Power Converter, 100–115 Vac, 24 Vdc
- PS40 = Pulse Splitter

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Flow Range

Model #	K-Factor* (pulses/gal)		- Gal/Min	Liter/Min]
	SPT	SPX	Gai/Win	Liter/Win	*Nominal
-038	1394	1417	0.07–5	0.27–18.9	on average 2-magnet S High resolu K-factors a tripled.
-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	1

K-factors (based es) for standard SPT and SPX. ıtion (6-magnet) re approximately

Pressure Drop Curves

