

S-Series

SPT, SPX LOW FLOW METERS

Seametrics



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.

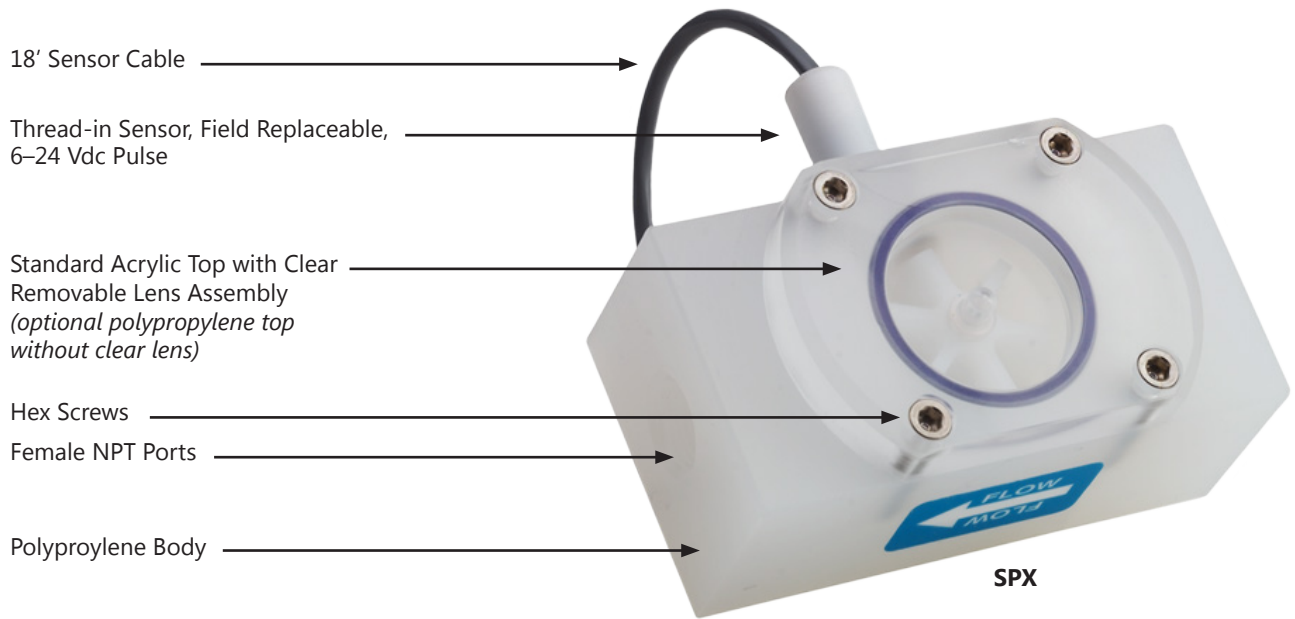
The **SPX**, with a body of polypropylene, is an economical choice for metering water or low corrosion fluids. The lens cover is available in a choice of materials: acrylic for visual flow indication of low-corrosion fluids; polypropylene when more corrosion resistance is needed. The standard rotor assembly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

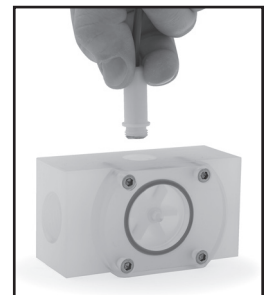
Contact Your Supplier

Features

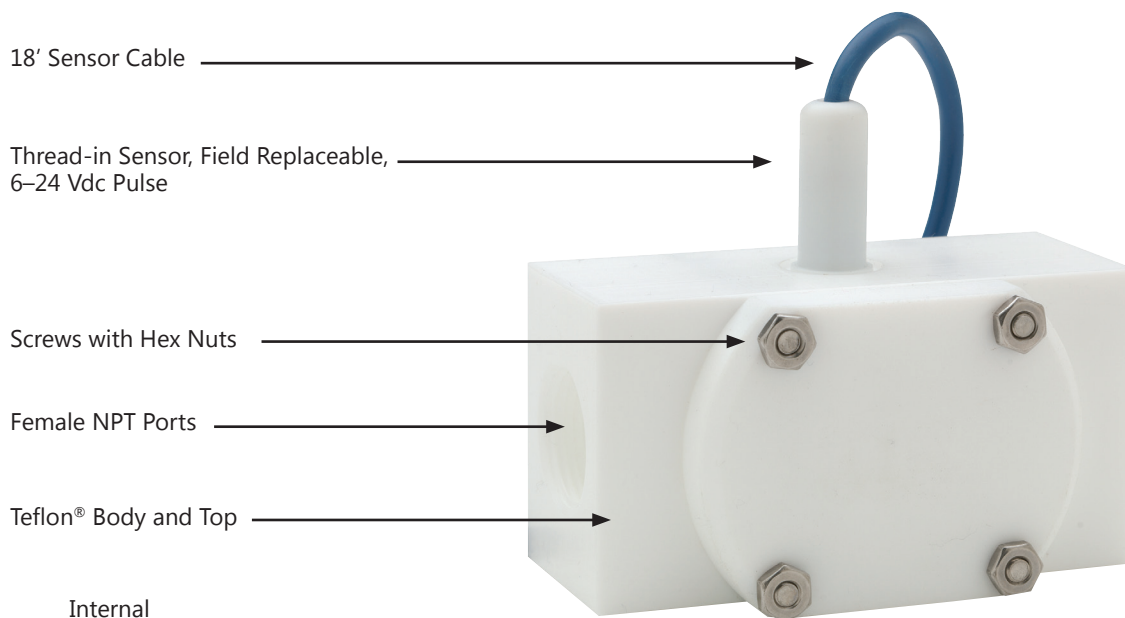


Internal

- 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*



Internal

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

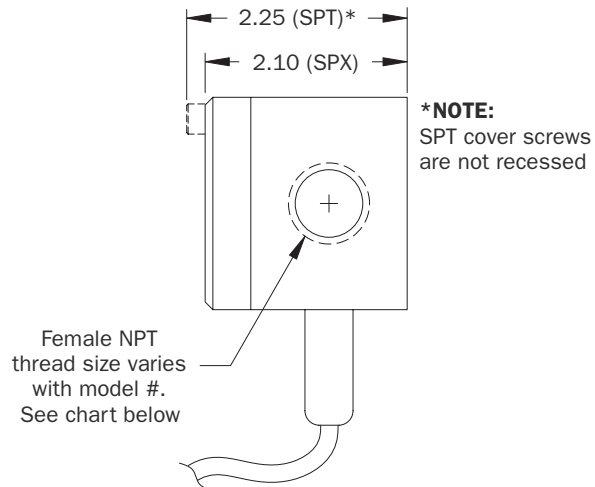
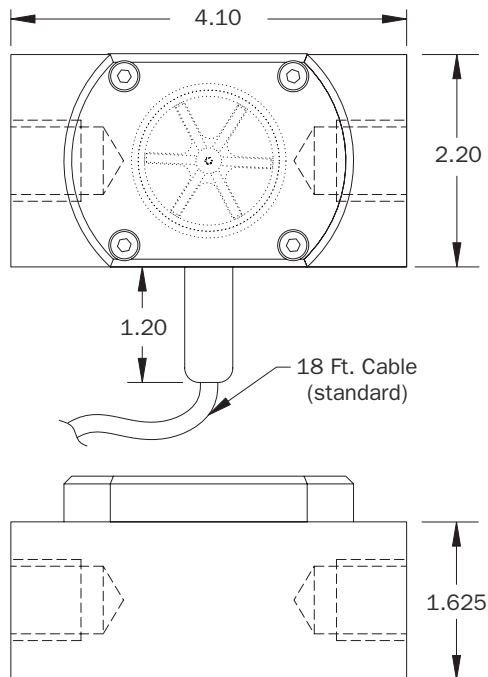
Specifications*

| | | 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 <i>(6 magnet high resolution optional)</i> | PVDF (Kynar®)—2 magnet <i>(6 magnet high resolution optional)</i> |
| | Shaft | Nickel tungsten carbide <i>(ceramic or silicon carbide optional)</i> | Zirconia ceramic <i>(silicon carbide optional)</i> |
| | 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 <i>(polypropylene without clear lens optional)</i> | 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" |

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 -116 = 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

