# Signet 2536 Rotor-X Paddlewheel Flow Sensors $|CENTA|^{(1)}$



Simple to install with time-honored reliable performance, Signet 2536 Rotor-X Paddlewheel Flow Sensors are highly repeatable, rugged sensors that offer exceptional value with little or no maintenance. The Model 2536 has a process-ready open collector signal with a wide dynamic flow range of 0.1 to 6 m/s (0.3 to 20 ft/s). The sensor measures liquid flow rates in full pipes and can be used in low pressure systems.

The Signet 2536 sensors are offered in a variety of materials for a wide range of pipe sizes and insertion configurations. The many material choices including PP and PVDF make this model highly versatile and chemically compatible to many liquid process solutions.

Sensors can be installed in DN15 to DN900 (½ to 36 in.) pipes (except the 2536 PVC versions, which can be installed in DN15 to DN100 (½ to 4 in.) pipes), using Signet's comprehensive line of custom fittings. These custom fittings, which include tees, saddles, and weldolets, seat the sensor to the proper insertion depth into the process flow. The sensors are also offered in configurations for wet-tap installation requirements.

## **Features**

- Operating range 0.1 to 6 m/s (0.3 to 20 ft/s)
- Wide turndown ratio of 66:1
- Open-collector output
- Highly repeatable output
- Simple, economical design
- Installs into pipe sizes DN15 to DN900 (1/2 to 36 in.)
- PVC 2536 version DN15 to DN100 (1/2 to 4 in.) for concentrated Sodium Hypochlorite 12.5% applications
- High resolution and noise immunity
- Test certificate included for -X0, -X1
- Chemically resistant materials





(3-2536-PX version only)

# **Applications**

- Pure Water Production
- Filtration Systems
- Chemical Production
- Liquid Delivery Systems
- Pump Protection
- Scrubber/Gas Stacks
- Gravity Feed Lines
- Not suitable for gas
- Sodium Hypochlorite transfer/ injection/batching (3-2536-U0)

# **Specifications**

Sensor BodyGlass-filled PP (black), PVDF (natural) or PVC (gray)O-ringsFKM (std) optional EPR (EPDM) or FFKMRotor PinTitanium, Hastelloy-C or PVDF; optional Ceramic, Tantalum or Stainless SteelRotorBlack PVDF or Natural PVDF; optional ETFE, with or w/o carbon fiber reinforced PTFE sleeve for rotor pinElectricalFrequency49 Hz per m/s nominal15 Hz per ft/s nominalSupply Voltage5 to 24 VDC ±10%, regulated	General						
Pipe Size Range         DN15 to DN900         ½ to 3.4 in.           PVC         DN15 to DN100         ½ to 4 in.           Inearity         41% of max. range @ 25 °C (77 °F)           Repeatability         40.5% of max. range @ 25 °C (77 °F)           Min. Raynolds Number Required         4500           Watted Materias         Glass-filled PP (black). PVDF (natural or PVC (gray)           Orining S         FKM (std) optional EPR (EPDM or FKM           Rator Pin         Titanium, Hastelloy-C or PVDF: optional Caramic, Tantalum or Stainless Steel           Black PUDF or Natural PVDF: optional Caramic, Tantalum or Stainless Steel         Stainless Steel           Supply Voltage         5 to 24 VDC or Natural PVDF: optional Caramic, Tantalum or Stainless Steel           Supply Voltage         5 to 24 VDC or Natural PVDF: optional Caramic, Tantalum or Stainless Steel           Supply Voltage         5 to 24 VDC ared store store         <20 mA @ to 24 VDC           Supply Courrent         <1.5 mA @ 3.3 to 4 VDC         <20 mA @ to 24 VDC           Cable Lergth         7.6 m (25 fi) can be extended up to 305 m (1000 ft) maximum           Kattergeature/Pressure Rating         Vataral PVDF         100 pig @ d8 °F           PVDF         1.2 bar@ 20 °C         100 pig @ d8 °F           PVDF         1.2 bar@ 20 °C         25 pig @ 8°F           PVDF <td></td> <td>0.1 to 6 m/s</td> <td>0.3 to 20 ft/s</td> <td></td>		0.1 to 6 m/s	0.3 to 20 ft/s				
PVC         DN15 to DN100         ½ to 4 in.           Linearity         11% of max. range @ 25 °C (77 °F)           Min. Reynolds Number Required         4500           Wetted Materials         4500           Wetted Materials         FXX           Sensor Body         Glass-filled PP (black), PVDF (natural) or PVC (gray)           O-rings         FXX (std) optional EPR (EPDM) or FFKM           Rotor Pin         Titanium, Hastelov, Cor PVD: potional EFFE, with or w/o carbon fiber reinforced PTFE           Rotor Pin         Titanium, Hastelov, Cor PVD: potional EFFE, with or w/o carbon fiber reinforced PTFE           Supply Voltage         5 to 24 VDC 10%, regulated           Supply Voltage         5 to 24 VDC 10%, regulated           Supply Voltage         7.5 no (3 3 to 6 VDC         <20 mA @ 6 to 24 VDC		DN15 to DN900	½ to 36 in.				
Linearity         1% of max. range @ 25 °C (77 °F)           Repetability         20.5% of max. range @ 25 °C (77 °F)           Wetted Material         4500           Wetted Material         6 Gias-filled PP (black), PVDF (natural) or PVC (gray)           0-rings         Gias-filled PP (black), PVDF (natural) or PVC (gray)           0-rings         Titalium, Hastelloy-C or PVDF; optional Caranic, Tantalum or Stainless Steel           Rotor         Black PVDF or Natural PVDF; optional Caranic, Tantalum or Stainless Steel           Prequency         49 Hz per m/s nominal         15 Hz per ft/s nominal           Supply Voltage         5 to 24 VDC 10%, requited         20 mA @ 6 to 24 VDC           Supply Current         9 Den collector, sinking 10 mA max.         20 mA @ 6 to 24 VDC           Cable Lengt         7.6 m (25 ft loa be extended up to 305 m (1000 ft) maximum           Max.         Tot mag 85 °C         25 psi @ 100 ft) maximum           Max.         Tot mag 85 °C         25 psi @ 168 °F           PVDF         1.8 bar @ 80 °C         100 psi @ 68 °F           1.7 har @ 85 °C         25 psi @ 165 °F           PVC         1.25 bar@ 20 °C         180 psi @ 68 °F           1.7 har @ 85 °C         25 psi @ 165 °F           PVC         1.8 °C to 85 °C         0 °F to 185 °F           PVDF		DN15 to DN100	½ to 4 in.				
Repeatability          45% of max. range @ 25 °C (?7 °F)           Min. Reynolds Number Required         4500           Wetted Materia         Sensor Regulation (Regulation Regulation Regulatis Regulation Regulation							
Wetted Materials           Sensor Body         Glass-filled PP (black), PVDF (natural) or PVC (gray)           Orings         FKM (std) optional EPR (EPDM) or FFKM           Rotor Pin         Titanium, Hastelloy-C or PVDF; optional ETFE, with or w/o carbon fiber reinforced PTFE sleave for rotor pin           Frequency         49 Hz per m/s nominal         15 Hz per fl/s nominal           Supply Voltage         5 to 24 VDC ±10%, regulated         20 mA @ 6 to 24 VDC           Output Type         Open collector, sinking 10 mA max.         Cable Type           Output Type         Open collector, sinking 10 mA max.         Cable Type           Cable Type         2-conductor twisted pair with shield. 22 AWG         Cable Type           Cable Type         2-conductor twisted pair with shield. 92 AWG         Cable Type           Cable Type         12.5 bar @ 20 °C         180 psi@ 68 °F           PVDF         1.4 bar@ 20 °C         180 psi@ 68 °F           PVDF         1.4 bar@ 60 °C         20 psi@ 185 °F           PVC         12.5 bar @ 20 °C         180 psi@ 68 °F           PVC         12.5 bar @ 20 °C         180 psi@ 68 °F           PVC         12.5 bar @ 20 °C         100 psi@ 140 °F           PVDF         1.4 bar @ 50 °C         2°F to 185 °F           PVC         0 °C to 50 °C	-		· ·				
Wetted Materials           Sensor Body         Glass-filled PP (black), PVDF (natural) or PVC (gray)           Orings         FKM (std) optional EPR (EPDM) or FFKM           Rotor Pin         Titanium, Hastelloy-C or PVDF; optional ETFE, with or w/o carbon fiber reinforced PTFE sleave for rotor pin           Frequency         49 Hz per m/s nominal         15 Hz per fl/s nominal           Supply Voltage         5 to 24 VDC ±10%, regulated         20 mA @ 6 to 24 VDC           Output Type         Open collector, sinking 10 mA max.         Cable Type           Output Type         Open collector, sinking 10 mA max.         Cable Type           Cable Type         2-conductor twisted pair with shield. 22 AWG         Cable Type           Cable Type         2-conductor twisted pair with shield. 92 AWG         Cable Type           Cable Type         12.5 bar @ 20 °C         180 psi@ 68 °F           PVDF         1.4 bar@ 20 °C         180 psi@ 68 °F           PVDF         1.4 bar@ 60 °C         20 psi@ 185 °F           PVC         12.5 bar @ 20 °C         180 psi@ 68 °F           PVC         12.5 bar @ 20 °C         180 psi@ 68 °F           PVC         12.5 bar @ 20 °C         100 psi@ 140 °F           PVDF         1.4 bar @ 50 °C         2°F to 185 °F           PVC         0 °C to 50 °C	Min. Reynolds Numb	er Required 4500					
0-rings       FKM (std) optional EPR (EPDM) or FFKM         Rotor       Titanium, Hastelloy-C or PVDF; optional Ceramic, Tantalum or Stainless Steel         Rotor       Black PVDF or Natural PVDF; optional ETFE, with or w/o carbon fiber reinforced PTFE sleeve for rotor pin         Electrical       Frequency       49 Hz per m/s nominal       15 Hz per ft/s nominal         Supply Voltage       5 to 24 VDC ± 10%, regulated           Supply Uurrent       <1.5 mA @ 3.3 to 6 VDC	Wetted Materials	•					
Rotor Pin         Titanium, Hastelloy-C or PVDF; optional Ceramic, Tantalum or Stainless Steel           Rotor         Black PVDF or Natural PVDF; optional ETFE, with or w/o carbon fiber reinforced PTFE sleeve for totor pin sleeve for totor pin           Etectric         Vertex         15 Hz per ft/s nominal         15 Hz per ft/s nominal           Supply Voltage         5 to 24 VDC 10%, regulated          Vertex           Supply Voltage         5 to 24 VDC 10%, regulated             Supply Voltage         0 pen collector, sinking 10 mA max             Output Type         Open collector, sinking 10 mA max             Cable Leot         7 6 m (25 ft) can be extended up to 305 m (1000 ft) maximum           Max. Temperature/Pressure Rating         Standard and Integral Senor            PVDF         14 bar @ 20 °C         180 psi @ 68 °F           PVDF         14 bar @ 20 °C         20 psi @ 185 °F           PVDF         18 °C to 85 °C         25 psi @ 185 °F           PVDF         18 °C to 85 °C         0 °F to 185 °F           PVDF         18 °C to 85 °C         0 °F to 185 °F           PVDF         18 °C to 85 °C         0 °F to 185 °F           PVDF         18 °C to 85 °C         0 °F to 185 °F           PVDF	Sensor Body	Glass-filled PP (blac	ck), PVDF (natu	ral) or PVC (gray)			
Rotor Pin         Titanium, Hastelloy-C or PVDF; optional Ceramic, Tantalum or Stainless Steel           Rotor         Black PVDF or Natural PVDF; optional ETFE, with or w/o carbon fiber reinforced PTFE sleeve for totor pin sleeve for totor pin           Etectric         Vertex         15 Hz per ft/s nominal         15 Hz per ft/s nominal           Supply Voltage         5 to 24 VDC 10%, regulated          Vertex           Supply Voltage         5 to 24 VDC 10%, regulated             Supply Voltage         0 pen collector, sinking 10 mA max             Output Type         Open collector, sinking 10 mA max             Cable Leot         7 6 m (25 ft) can be extended up to 305 m (1000 ft) maximum           Max. Temperature/Pressure Rating         Standard and Integral Senor            PVDF         14 bar @ 20 °C         180 psi @ 68 °F           PVDF         14 bar @ 20 °C         20 psi @ 185 °F           PVDF         18 °C to 85 °C         25 psi @ 185 °F           PVDF         18 °C to 85 °C         0 °F to 185 °F           PVDF         18 °C to 85 °C         0 °F to 185 °F           PVDF         18 °C to 85 °C         0 °F to 185 °F           PVDF         18 °C to 85 °C         0 °F to 185 °F           PVDF	0-rings	FKM (std) optional E	PR (EPDM) or F	FKM			
Rotor         Black PVDF or Natural PVDF; optional ETFE, with or w/o carbon fiber reinforced PTFE sleeve for rotor pin           Electrical sleeve for rotor pin           Frequency         49 Hz per m/s nominal         15 Hz per ft/s nominal.           Supply Voltage         5 to 24 VDC 100%, regulated           Supply Current         <1.5 m A @ 3.3 to 6 VDC	Rotor Pin						
Electrical         49 Hz per m/s nominal         15 Hz per f/s nominal           Supply Voltage         5 to 24 VDC ±10%, regulated         <20 mA @ 6 to 24 VDC	Rotor						
Frequency     49 Hz per m/s nominal     15 Hz per ft/s nominal       Supply Voltage     5 to 24 VDC ±10%, regulated       Supply Current     4.15 mA @ 3.3 to 4 VDC     <20 mA @ 6 to 24 VDC		sleeve for rotor pin					
Supply Voltage         5 to 24 VDC ±10%, regulated           Supply Current         <1.5 m.& @ 3.3 to 6 VDC	Electrical						
Supply Current         <1.5 mA @ 3.3 to 6 VDC	Frequency	49 Hz per m/s nomi	inal	15 Hz per ft/s nominal			
Output TypeOpen collector, sinking 10 mA max.Cable Lengtrops2-conductor twisted pair with shield. 22 AWGCable Lengtrops7.6 m (25 ft) can be extended up to 305 m (1000 ft) maximumMax. Temperature/Pressure RatingStandard and Integral SensorPP12.5 bar @ 20 °C180 psi @ 68 °FPVDF14 bar @ 20 °C25 psi @ 185 °FPVDF14 bar @ 20 °C20 psi @ 68 °F0.7 bar @ 85 °C25 psi @ 185 °FPVC12.5 bar @ 20 °C180 psi @ 68 °F0.7 bar @ 60 °C100 psi @ 140 °F0.7 bar @ 60 °C0 °F to 185 °FPVC0 °C to 85 °C0 °F to 185 °FPVDF-18 °C to 85 °C0 °F to 185 °FPVDF0 °C to 50 °C32 °F to 122 °FMax. TemperatureVet-Tap SensorPP7 bar @ 20 °C100 psi @ 68 °FPVC0 °C to 50 °C32 °F to 122 °FMax. Temperature-18 °C to 60 °C20 psi @ 140 °FOperating Temperature-18 °C to 60 °C0 °F to 140 °FPP7 bar @ 20 °C100 psi @ 68 °F10 psi @ 68 °F-100 psi @ 68 °FShipping Weight-13 °C to 60 °C20 psi @ 140 °FShipping Temperature-18 °C to 80 °C0 °F to 140 °F3-2536-X10.454 kg1.00 tb3-2536-X20.680 kg1.50 tb3-2536-X30.780 kg1.50 tb3-2536-X40.800 kg1.72 tb3-2536-X40.800 kg1.74 tb3-2536-X50.880 kg1.94 tb3-2536-X40.800 kg<	Supply Voltage	5 to 24 VDC ±10%, r	egulated				
Output TypeOpen collector, sinking 10 mA max.Cable Lengtrops2-conductor twisted pair with shield. 22 AWGCable Lengtrops7.6 m (25 ft) can be extended up to 305 m (1000 ft) maximumMax. Temperature/Pressure RatingStandard and Integral SensorPP12.5 bar @ 20 °C180 psi @ 68 °FPVDF14 bar @ 20 °C25 psi @ 185 °FPVDF14 bar @ 20 °C20 psi @ 68 °F0.7 bar @ 85 °C25 psi @ 185 °FPVC12.5 bar @ 20 °C180 psi @ 68 °F0.7 bar @ 60 °C100 psi @ 140 °F0.7 bar @ 60 °C0 °F to 185 °FPVC0 °C to 85 °C0 °F to 185 °FPVDF-18 °C to 85 °C0 °F to 185 °FPVDF0 °C to 50 °C32 °F to 122 °FMax. TemperatureVet-Tap SensorPP7 bar @ 20 °C100 psi @ 68 °FPVC0 °C to 50 °C32 °F to 122 °FMax. Temperature-18 °C to 60 °C20 psi @ 140 °FOperating Temperature-18 °C to 60 °C0 °F to 140 °FPP7 bar @ 20 °C100 psi @ 68 °F10 psi @ 68 °F-100 psi @ 68 °FShipping Weight-13 °C to 60 °C20 psi @ 140 °FShipping Temperature-18 °C to 80 °C0 °F to 140 °F3-2536-X10.454 kg1.00 tb3-2536-X20.680 kg1.50 tb3-2536-X30.780 kg1.50 tb3-2536-X40.800 kg1.72 tb3-2536-X40.800 kg1.74 tb3-2536-X50.880 kg1.94 tb3-2536-X40.800 kg<	Supply Current	<1.5 mA @ 3.3 to 6	VDC	<20 mA @ 6 to 24 VDC			
Cable Lesition7.6 m (25 ft) can be extended up to 305 m (1000 ft) maximumMax. Temperature Pressure Rating - Standard and Integral SensorPVDF12.5 bar @ 20 °C180 psi @ 68 °FPVDF14 bar @ 20 °C20 psi @ 185 °FPVDF14 bar @ 20 °C180 psi @ 68 °FPVDF12.5 bar @ 20 °C180 psi @ 68 °FPVC2.5 bar @ 20 °C180 psi @ 68 °FPVC1.7 bar @ 85 °C0 °F to 185 °FPVDF-18 °C to 80 °C0 °F to 185 °FPVDF-18 °C to 60 °C0 °F to 185 °FShpiong2 °S stor 60 °C0 °F to 185 °FShpiong-10 psi @ 2 °C100 psi @ 68 °FShpiong-10 psi @ 20 °C100 psi @ 68 °F2 °S advat0.60 °C0 °F to 185 °F2 °S advat0.60 °C0 °F to 180 °F3 °S advat0.476 kg1.00 lb3 °S advat0.476 kg1.05 lb3 °S advat0.800 k							
Max. Temperature/Pressure Rating - Standard and Integral Sensor         180 psi @ 68 °F           PP         12.5 bar @ 20 °C         180 psi @ 68 °F           1.7 bar @ 85 °C         25 psi @ 185 °F           PVDF         1.7 bar @ 85 °C         25 psi @ 185 °F           PVC         12.5 bar @ 20 °C         180 psi @ 68 °F           0.7 bar @ 80 °C         200 psi @ 68 °F           0.8 bar @ 60 °C         100 psi @ 140 °F           Operating Temperature         0 °C to 85 °C         0 °F to 185 °F           PVDF         -18 °C to 85 °C         0 °F to 185 °F           PVDF         -18 °C to 85 °C         0 °F to 185 °F           PVDF         -18 °C to 85 °C         0 °F to 185 °F           PVDF         -18 °C to 65 °C         0 °F to 185 °F           PVDF         -18 °C to 65 °C         0 °F to 185 °F           PVDF         -18 °C to 65 °C         0 °F to 185 °F           PVC         0 °C to 50 °C         3°F to 122 °F           Max. Met-Type Rature/Pressure Rating         Tab @ 20 °C         100 psi @ 68 °F           Stapping Weight         1.7 bar @ 22 °C         25 psi @ 72 °F           Shipping Seriel Secon         0 °F to 140 °F         25 psi @ 72 °F           Si @ 3.2536.X1         0.476 kg         1.50 lb	Cable Type	2-conductor twisted	l pair with shiel	ld, 22 AWG			
PP         12.5 bar @ 20 °C         180 psi @ 68 °F           1.7 bar @ 85 °C         25 psi @ 185 °F           PVDF         14 bar @ 20 °C         200 psi @ 68 °F           1.7 bar @ 85 °C         25 psi @ 185 °F           PVC         12.5 bar @ 20 °C         180 psi @ 68 °F           6.9 bar @ 60 °C         100 psi @ 140 °F           Operating Temperature         PP           PP         -18 °C to 85 °C         0 °F to 185 °F           PVDF         -18 °C to 85 °C         0 °F to 185 °F           PVC         0 °C to 50 °C         32 °F to 122 °F           Max. Temperature/Pressure Rating - Wet-Tap Sensor         PP           PP         7 bar @ 20 °C         100 psi @ 68 °F           1.4 bar @ 60 °C         20 psi @ 140 °F           Operating Temperature         -18 °C to 60 °C         20 psi @ 140 °F           Operating Temperature         -18 °C to 60 °C         25 psi @ 72 °F           Shipping Weight         1.7 bar @ 22 °C         25 psi @ 72 °F           Siadard         0.454 kg         1.00 lb           3-2536-X0         0.454 kg         1.00 lb           3-2536-X1         0.476 kg         1.50 lb           3-2536-X2         0.680 kg         1.50 lb           3-2536-X3 <td>Cable Length</td> <td>7.6 m (25 ft) can be</td> <td>extended up to</td> <td>305 m (1000 ft) maximum</td>	Cable Length	7.6 m (25 ft) can be	extended up to	305 m (1000 ft) maximum			
Image: Properties         1.7 bar @ 85 °C         25 psi @ 185 °F           PVDF         14 bar @ 20 °C         200 psi @ 68 °F           Image: PVC         12.5 bar @ 20 °C         180 psi @ 68 °F           0.7 bar @ 80 °C         100 psi @ 140 °F           Operating Temperature         0 °C to 55 °C         0 °F to 185 °F           PVDF         -18 °C to 85 °C         0 °F to 185 °F           PVDF         -18 °C to 85 °C         0 °F to 185 °F           PVC         0 °C to 50 °C         32 °F to 122 °F           Max. Temperature/Pressure Rating - Wet-Tap Sensor         PP         7 bar @ 20 °C         100 psi @ 68 °F           Max. Wet-Tap Sensor Removal Rating -         1.7 bar @ 22 °C         27 Sp si @ 140 °F         1.7 bar @ 22 °C           Shipping Temperature         -18 °C to 60 °C         0 °F to 140 °F         1.7 bar @ 22 °C         25 psi @ 72 °F           Shipping Sensor Removal Rating -         1.7 bar @ 22 °C         0 °F to 140 °F         1.7 bar @ 22 °C         25 psi @ 72 °F           Shipping Sensor Removal Rating -         1.8 °C to 60 °C         0 °F to 140 °F         1.7 bar @ 22 °C         25 psi @ 72 °F           Shipping Sensor Removal Rating -         1.8 °C to 60 °C         0 °F to 140 °F         1.7 bar @ 22 °C         25 psi @ 72 °F           Shipping Senser Removal Rating -	Max. Temperature/F	ressure Rating - Standard and Int	egral Sensor				
PVDF         14 bar @ 20 °C         200 psi @ 68 °F           1.7 bar @ 85 °C         25 psi @ 185 °F           PVC         12.5 bar @ 20 °C         180 psi @ 68 °F           PVC         12.5 bar @ 20 °C         180 psi @ 68 °F           Operating Temperature         6.9 bar @ 60 °C         100 psi @ 140 °F           PVDF         -18 °C to 85 °C         0 °F to 185 °F           PVDF         -18 °C to 85 °C         0 °F to 185 °F           PVDF         -18 °C to 85 °C         0 °F to 185 °F           PVDF         -18 °C to 85 °C         0 °F to 185 °F           PVDF         -18 °C to 85 °C         0 °F to 185 °F           PVDF         -18 °C to 85 °C         0 °F to 185 °F           PVDF         -18 °C to 60 °C         32 °F to 122 °F           Max. Temperature/Pressure Rating         -Wet-Tap Sensor         25 psi @ 72 °F           Max. Wet-Tap Sensor Removal         1.7 bar @ 22 °C         25 psi @ 72 °F           Shipping Weight         -         -         25 psi @ 72 °F           Stad         0.454 kg         1.00 lb         -           -2536-X1         0.476 kg         1.50 lb         -           -2536-X2         0.680 kg         1.74 lb         -           -2536-X3 <t< td=""><td>PP</td><td>12.5 bar @ 20 °C</td><td></td><td>180 psi @ 68 °F</td></t<>	PP	12.5 bar @ 20 °C		180 psi @ 68 °F			
In the second		1.7 bar @ 85 °C		25 psi @185°F			
PVC         12.5 bar @ 20 °C         180 psi @ 68 °F           6.9 bar @ 60 °C         100 psi @ 140 °F           Operating Temperature         PP         -18 °C to 85 °C         0 °F to 185 °F           PVDF         -18 °C to 85 °C         0 °F to 185 °F         PVC           PVC         0 °C to 50 °C         32 °F to 122 °F           Max. Temperature/Pressure Rating - Wet-Tap Sensor         PP         7 bar @ 20 °C         100 psi @ 68 °F           PP         7 bar @ 60 °C         20 psi @ 140 °F         0           Operating Temperature         -18 °C to 60 °C         0 °F to 140 °F           Max. Wet-Tap Sensor Removal         1.7 bar @ 22 °C         25 psi @ 72 °F           Shipping Weight         3-2536-X0         0.454 kg         1.00 lb           3-2536-X1         0.476 kg         1.05 lb         3-2536-X2           3-2536-X2         0.680 kg         1.72 lb         3-2536-X4           3-2536-X4         0.800 kg         1.74 lb         3-8512-X0           3-8512-X1         0.37 kg         0.81 lb           Standards         and pprovals         CE, FCC, NSF (3-2536-PX only)           RoHS compliant, China RoHS         Manufactured under ISO 9001 for Quality and ISO 14001 for Environmental Management and OHSAS 18001 for Occupational Health and Safety <td>PVDF</td> <td>14 bar @ 20 °C</td> <td></td> <td>200 psi @ 68 °F</td>	PVDF	14 bar @ 20 °C		200 psi @ 68 °F			
6.9 bar @ 60 °C         100 psi @ 140 °F           Operating Temperature         PP         -18 °C to 85 °C         0 °F to 185 °F           PVDF         -18 °C to 85 °C         0 °F to 185 °F           PVC         0 °C to 50 °C         32 °F to 122 °F           Max. Temperature/Pressure Rating - Wet-Tap Sensor         PP         7 bar @ 20 °C         100 psi @ 68 °F           PP         7 bar @ 20 °C         100 psi @ 68 °F         1.4 bar @ 60 °C         20 psi @ 140 °F           Operating Temperature         -18 °C to 60 °C         0 °F to 180 °F         25 psi @ 72 °F           Max. Wet-Tap Sensor Removal Rating         1.7 bar @ 22 °C         25 psi @ 72 °F           Shipping Weight         Ja-2536-X1         0.476 kg         1.00 lb           3-2536-X2         0.680 kg         1.50 lb         3-2536-X2           3-2536-X3         0.780 kg         1.72 lb         3-2536-X4           3-2536-X4         0.800 kg         1.74 lb         3-2536-X4           3-8512-X0         0.35 kg         0.77 lb         3-8512-X1           3-8512-X1         0.37 kg         0.81 lb         Standards and Approvals           CE, FCC, NSF (3-2536-PX only)         RoHS compliant, China RoHS         Manufactured under ISO 9001 for Quality and ISO 14001 for Environmental Management and OHSAS 18001 f				25 psi @ 185 °F			
Operating Temperature         PP         -18 °C to 85 °C         0 °F to 185 °F           PVDF         -18 °C to 85 °C         0 °F to 185 °F           PVDF         -18 °C to 85 °C         0 °F to 185 °F           PVC         0 °C to 50 °C         32 °F to 122 °F           Max. Temperature/Pressure Rating - Wet-Tap Sensor         PP           PP         7 bar @ 20 °C         100 psi @ 68 °F           Operating Temperature         -18 °C to 60 °C         0 °F to 140 °F           Operating Temperature         -18 °C to 60 °C         0 °F to 140 °F           Max. Wet-Tap Sensor Removal Rating         1.7 bar @ 22 °C         25 psi @ 72 °F           Shipping Weight	PVC			•			
PP         -18 °C to 85 °C         0 °F to 185 °F           PVDF         -18 °C to 85 °C         0 °F to 185 °F           PVC         0 °C to 50 °C         32 °F to 122 °F           Max. Temperature/Pressure Rating - Wet-Tap Sensor         PP         7 bar © 20 °C         100 psi © 68 °F           PP         7 bar © 60 °C         20 psi © 140 °F         20 psi © 140 °F           Operating Temperature         -18 °C to 60 °C         0 °F to 140 °F           Max. Wet-Tap Sensor Removal Rating         1.7 bar © 22 °C         25 psi © 72 °F           Shipping Weight         -         1.00 lb         -           Shipping Sensor Removal Rating         0.454 kg         1.00 lb         -           3-2536-X1         0.457 kg         1.50 lb         -           3-2536-X2         0.680 kg         1.50 lb         -           3-2536-X3         0.780 kg         1.72 lb         -           3-2536-X3         0.780 kg         1.74 lb         -           3-2536-X3         0.880 kg         1.74 lb         -           3-2536-X3         0.37 kg         0.81 lb         -           Standard         Senterval         -         -           3-8512-X1         0.37 kg         0.81 lb         -		1		100 psi @ 140 °F			
PVDF         -18 °C to 85 °C         0 °F to 185 °F           PVC         0 °C to 50 °C         32 °F to 122 °F           Max. Temperature/Pressure Ratic				0.05 + 4.05 05			
PVC         0 °C to 50 °C         32 °F to 122 °F           Max. Terr         Pressure Rational Sensor         PP         7 bar @ 20 °C         100 psi @ 68 °F           PP         7 bar @ 20 °C         20 psi @ 140 °F         20 psi @ 140 °F           Operating Temperature         -18 °C to 60 °C         0 °F to 140 °F           Max. Wet-Tap Sensor Removal Rating         1.7 bar @ 22 °C         25 psi @ 72 °F           Shipping Veight           Shipping Sensor Removal Rating           3-2536-X0         0.454 kg         1.00 lb           3-2536-X1         0.476 kg         1.05 lb           3-2536-X2         0.680 kg         1.50 lb           3-2536-X3         0.780 kg         1.72 lb           3-2536-X4         0.800 kg         1.74 lb           3-2536-X5         0.880 kg         1.94 lb           3-2536-X5         0.880 kg         0.77 lb           3-8512-X0         0.37 kg         0.81 lb           Standards           CE, FCC, NSF (3-2536-PX orly)           RelS compliant, China Rols           Manufactured under ISV V01 for Quality and ISO 14001 for Environmental Management and OHSAS 18001 for Occurational Heatth and Safety							
Max. Temperature/Pressure Rating - Wet-Tap Sensor           PP         7 bar @ 20 °C         100 psi @ 68 °F           0         1.4 bar @ 60 °C         20 psi @ 140 °F           Operating Temperature         -18 °C to 60 °C         0 °F to 140 °F           Max. Wet-Tap Sensor Removal Rating         1.7 bar @ 22 °C         25 psi @ 72 °F           Shipping Weight							
PP         7 bar @ 20 °C         100 psi @ 68 °F           Image: Im	-			52 F 10 122 F			
I.4 bar @ 60 °C         20 psi @ 140 °F           Operating Temperature         -18 °C to 60 °C         0 °F to 140 °F           Max. Wet-Tap Sensor Removal         1.7 bar @ 22 °C         25 psi @ 72 °F           Shipping Weight         1.7 bar @ 22 °C         25 psi @ 72 °F           3-2536-X0         0.454 kg         1.00 lb           3-2536-X1         0.476 kg         1.05 lb           3-2536-X2         0.680 kg         1.50 lb           3-2536-X4         0.800 kg         1.72 lb           3-2536-X5         0.880 kg         1.74 lb           3-2536-X4         0.800 kg         1.74 lb           3-2536-X5         0.880 kg         1.94 lb           3-2536-X5         0.880 kg         1.94 lb           3-2536-X5         0.880 kg         0.77 lb           3-8512-X0         0.35 kg         0.77 lb           3-8512-X1         0.37 kg         0.81 lb           Standards         Manufactured under ISO 9001 for Quality and ISO 14001 for Environmental Management and OHSAS 18001 for Occupational Health and Safety	-			100 psi @ 68 °F			
Operating Temperature         -18 °C to 60 °C         0 °F to 140 °F           Max. Wet-Tap Sensor Removal Rating         1.7 bar @ 22 °C         25 psi @ 72 °F           Shipping Weight         3-2536-X0         0.454 kg         1.00 lb           3-2536-X1         0.476 kg         1.05 lb         3-2536-X2           3-2536-X2         0.680 kg         1.50 lb         3-2536-X3           3-2536-X3         0.780 kg         1.76 lb           3-2536-X4         0.800 kg         1.76 lb           3-2536-X5         0.880 kg         0.474 lb           3-2536-X4         0.800 kg         0.77 lb           3-8512-X0         0.35 kg         0.77 lb           3-8512-X1         0.37 kg         0.81 lb           Standards         Approvals           CE, FCC, NSF (3-2536-PX only)         RoHS compliant, China RoHS           Manufactured under ISO 9001 for Quality and ISO 14001 for Environmental Management and OHSAS 18001 for Occupational Health and Safety							
Max. Wet-Tap Sensor Removal Rating         1.7 bar @ 22 °C         25 psi @ 72 °F           Shipping Weight         3-2536-X0         0.454 kg         1.00 lb           3-2536-X1         0.476 kg         1.05 lb           3-2536-X2         0.680 kg         1.50 lb           3-2536-X3         0.780 kg         1.72 lb           3-2536-X4         0.800 kg         1.76 lb           3-2536-X5         0.880 kg         1.76 lb           3-2536-X5         0.880 kg         0.77 lb           3-8512-X0         0.35 kg         0.77 lb           3-8512-X1         0.37 kg         0.81 lb           Standards           CE, FCC, NSF (3-2536-FX only)           RoHS compliant, China RoHS           Manufactured under ISO 9001 for Quality and ISO 14001 for Environmental Management and OHSAS 18001 for Occupational Health and Safety							
RatingIndex of the second							
Shipping Weight         3-2536-X0         0.454 kg         1.00 lb           3-2536-X1         0.476 kg         1.05 lb           3-2536-X2         0.680 kg         1.50 lb           3-2536-X3         0.780 kg         1.72 lb           3-2536-X4         0.800 kg         1.76 lb           3-2536-X5         0.880 kg         1.94 lb           3-8512-X0         0.35 kg         0.77 lb           3-8512-X1         0.37 kg         0.81 lb           Standards           CE, FCC, NSF (3-2536-PX only)           RoHS compliant, China RoHS           Manufactured under ISO 9001 for Quality and ISO 14001 for Environmental Management and OHSAS 18001 for Occupational Health and Safety				25 þsí @ 72 F			
3-2536-X0         0.454 kg         1.00 lb           3-2536-X1         0.476 kg         1.05 lb           3-2536-X2         0.680 kg         1.50 lb           3-2536-X3         0.780 kg         1.72 lb           3-2536-X4         0.800 kg         1.76 lb           3-2536-X5         0.880 kg         1.74 lb           3-2536-X5         0.880 kg         0.77 lb           3-8512-X0         0.35 kg         0.77 lb           3-8512-X1         0.37 kg         0.81 lb           Standards and Approvals           CE, FCC, NSF (3-2536-PX only)           RoHS compliant, China RoHS           Manufactured under ISO 9001 for Quality and ISO 14001 for Environmental Management and OHSAS 18001 for Occupational Health and Safety							
3-2536-X1         0.476 kg         1.05 lb           3-2536-X2         0.680 kg         1.50 lb           3-2536-X3         0.780 kg         1.72 lb           3-2536-X4         0.800 kg         1.76 lb           3-2536-X5         0.880 kg         1.94 lb           3-2536-X5         0.880 kg         0.77 lb           3-8512-X0         0.35 kg         0.77 lb           3-8512-X1         0.37 kg         0.81 lb           Standards and Approvals           CE, FCC, NSF (3-2536-PX only)           RoHS compliant, China RoHS           Manufactured under ISO 9001 for Quality and ISO 14001 for Environmental Management and OHSAS 18001 for Occupational Health and Safety		0.454 kg		1.00 lb			
3-2536-X2         0.680 kg         1.50 lb           3-2536-X3         0.780 kg         1.72 lb           3-2536-X4         0.800 kg         1.76 lb           3-2536-X5         0.880 kg         1.94 lb           3-8512-X0         0.35 kg         0.77 lb           3-8512-X1         0.37 kg         0.81 lb           Standards and Approvals           CE, FCC, NSF (3-2536-PX only)           RoHS compliant, China RoHS           Manufactured under ISO 9001 for Quality and ISO 14001 for Environmental Management and OHSAS 18001 for Occupational Health and Safety							
3-2536-X3         0.780 kg         1.72 lb           3-2536-X4         0.800 kg         1.76 lb           3-2536-X5         0.880 kg         1.94 lb           3-8512-X0         0.35 kg         0.77 lb           3-8512-X1         0.37 kg         0.81 lb           Standards and Approvals           CE, FCC, NSF (3-2536-PX only)           RoHS compliant, China RoHS           Manufactured under ISO 9001 for Quality and ISO 14001 for Environmental Management and OHSAS 18001 for Occupational Health and Safety		5					
3-2536-X4         0.800 kg         1.76 lb           3-2536-X5         0.880 kg         1.94 lb           3-8512-X0         0.35 kg         0.77 lb           3-8512-X1         0.37 kg         0.81 lb   Standards and Approvals           CE, FCC, NSF (3-2536-PX only)           RoHS compliant, China RoHS           Manufactured under ISO 9001 for Quality and ISO 14001 for Environmental Management and OHSAS 18001 for Occupational Health and Safety		<b>y</b>					
3-8512-X0       0.35 kg       0.77 lb         3-8512-X1       0.37 kg       0.81 lb         Standards and Approvals         CE, FCC, NSF (3-2536-PX only)         RoHS compliant, China RoHS         Manufactured under ISO 9001 for Quality and ISO 14001 for Environmental Management and OHSAS 18001 for Occupational Health and Safety							
3-8512-X0       0.35 kg       0.77 lb         3-8512-X1       0.37 kg       0.81 lb         Standards and Approvals         CE, FCC, NSF (3-2536-PX only)         RoHS compliant, China RoHS         Manufactured under ISO 9001 for Quality and ISO 14001 for Environmental Management and OHSAS 18001 for Occupational Health and Safety	3-2536-X			1.94 lb			
Standards and Approvals         CE, FCC, NSF (3-2536-PX only)         RoHS compliant, China RoHS         Manufactured under ISO 9001 for Quality and ISO 14001 for Environmental Management and         OHSAS 18001 for Occupational Health and Safety	3-8512-X			0.77 lb			
CE, FCC, NSF (3-2536-PX only) RoHS compliant, China RoHS Manufactured under ISO 9001 for Quality and ISO 14001 for Environmental Management and OHSAS 18001 for Occupational Health and Safety	3-8512-X	0.37 kg	0.37 kg 0.81 lb				
RoHS compliant, China RoHS Manufactured under ISO 9001 for Quality and ISO 14001 for Environmental Management and OHSAS 18001 for Occupational Health and Safety	Standards and Appr	ovals					
Manufactured under ISO 9001 for Quality and ISO 14001 for Environmental Management and OHSAS 18001 for Occupational Health and Safety	CE, FCC, N	ISF (3-2536-PX only)					
OHSAS 18001 for Occupational Health and Safety	RoHS com	RoHS compliant, China RoHS					
				Environmental Management and			
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# Dimensions

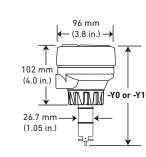
#### Standard Mount

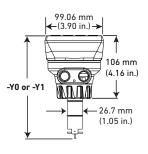
#### PVC Mount (0.5 to 4 in. pipe range only)

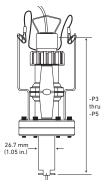
53.3 mm (2.1 in.) 26.7 mm (1.05 in.) -X0 thru -X2

Pipe range 0.5 to 4 in.

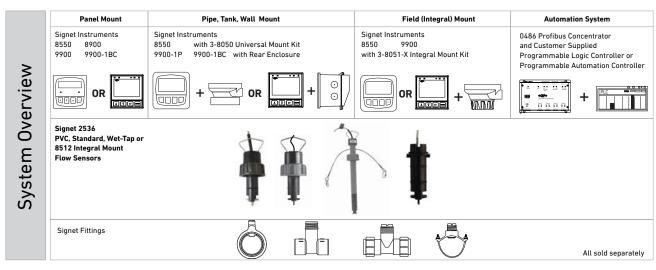
5 to 8 in. 10 in. and up Integral Mount (shown with Transmitter sold separately) Wet-Tap Mount Sensor with 3519 Wet-Tap Valve (See 3519 product page for more information).







	Pipe range		Pipe range	
-X0 = 104 mm (4.1 in.)	0.5 to 4 in.	-Y0 = 152 mm (6.0 in.)	0.5 to 4 in.	-P3 = 297 mm (11.7 in.)
-X1 = 137 mm (5.4 in.)	5 to 8 in.	-Y1 = 185 mm (7.3 in.)	5 to 8 in.	-P4 = 333 mm (13.1 in.)
-X2 = 213 mm (8.4 in.)			10 in. and up	-P5 = 409 mm (16.1 in.)



For overview of Wet-Tap System, see 3519 product page

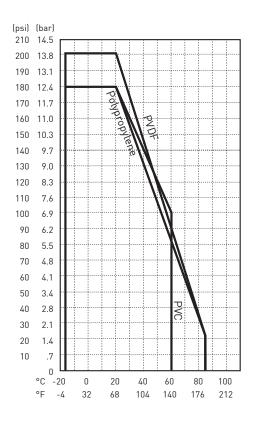
## **Application Tips**

- Use the Conduit Adapter Kit to protect the cable-to-sensor connection when used in outdoor environments. See Accessories section for more information.
- Use a sleeved rotor in abrasive liquids to reduce wear.
- Sensor plug can be used to plug installation fitting after extraction of sensor from pipe.
- For liquids containing ferrous particles, use Signet Magmeters.
- For systems with components of more than one material, the maximum temperature/pressure specification must always be referenced to the component with the lowest rating.

# **Temperature/Pressure Graphs**

### Note:

The pressure/temperature graphs are specifically for the Signet sensor. During system design the specifications of all components must be considered. In the case of a metal piping system, a plastic sensor will reduce the system specification. When using a PVDF sensor in a PVC piping system, the fitting will reduce the system specification.



#### **Ordering Notes**

- 1) Most common part number combinations shown. For all other combinations contact factory.
- 2) Other rotor and pin materials are available for purchase from the factory and can be easily replaced in the field. See Accessories section.

## **Ordering Information**

## Model 2536 Standard Mount Paddlewheel

When choosing this style of sensor, the instrument can be mounted nearby on a pipe or wall or in a remote location up to 305 m (1000 ft) by connecting the sensor through a standard 3-8050-1 universal junction box. Standard cable length is 7.6 m (25 ft). Use Signet fittings for proper seating of the sensor into the process flow.

	Mfr. Part No.	Code	Body	Rotor	Pin Material	
า	Flow Sensor fo	r use with remote	mount instrument			
, ,	DN15 to DN100	) - ½ to 4 in.				
	3-2536-P0	198 840 143	Polypropylene	Black PVDF	Titanium	
3	3-2536-T0	198 840 149	Natural PVDF	Natural PVDF	Natural PVDF	
	3-2536-U0	159 001 843	PVC	Sleeved ETFE	Titanium	
	3-2536-V0	198 840 146	Natural PVDF	Natural PVDF	Hastelloy-C	
	DN125 to DN 2	00 - 5 to 8 in				
	3-2536-P1	198 840 144	Polypropylene	Black PVDF	Titanium	
	3-2536-V1	198 840 147	Natural PVDF	Natural PVDF	Hastelloy-C	
	DN250 - DN900	) - 10 to 36 in.				
	3-2536-P2	198 840 145	Polypropylene	Black PVDF	Titanium	
		·				
+44	4 (0)1722 439	9880 Fm	ail: Sales@icent	ta.co.uk ww	w.icenta.co.uk	ICFN

# Ordering Information (continued)

## Model 2536 Integral Mount Paddlewheel

When choosing this style of sensor, the instrument is mounted directly onto the sensor for a local display. See guidelines below for instructions.

Mfr. Part No.	Code	Body	Rotor	Pin Material
Flow sensor for Mount Kit (sol	5	ing on the 8150 or 8	550 instrument us	sing the 3-8051-X Flow Sensor Integra
DN15 to DN10	0 - ½ to 4 in.			
3-8512-P0	198 864 513	Polypropylene	Black PVDF	Titanium
3-8512-T0	198 864 518	Natural PVDF**	Natural PVDF	Natural PVDF
3-8512-V0	198 864 516	Natural PVDF**	Natural PVDF	Hastelloy-C
DN125 to DN200 - 5 to 8 in. (PP only)				
3-8512-P1	198 864 514	Polypropylene	Black PVDF	Titanium

\*\*Natural PVDF available ½ in. to 4 in. only

## Guidelines: Combining a 2536 integral mount flow sensor with an integrally mounted instrument

## **Option 1**

Once an integral mount sensor is chosen, it can be mounted directly to a field mount transmitter by following these guidelines:

- c) Assembling the sensor with the integral adapter and instrument is quick and simple.
- a) Order the 3-8051-X flow sensor integral mounting kit (sold separately) to connect the sensor to an instrument.
- b) Order a field mount transmitter (sold separately). The following part numbers are compatible: 3-8550-3, 3-9900-1.

## Model 2536 Wet-Tap Mount Paddlewheel Flow Sensor

When choosing this style of sensor, the instrument can be mounted nearby on a pipe or wall or in a remote location up to 305 m (1000 ft) by connecting the sensor through a standard 3-8050-1 universal junction box. Standard cable length is 7.6 m (25 ft). This style of sensor uses the 3519 Wet-Tap valve only (see individual product page for more information).

	Mfr. Part No.	Code	Body	Rotor	Pin Material			
A	Flow Sensor for wet-tap mounting with the 3519 Wet-Tap Valve (sold separately)							
	DN15 to DN100 - ½ to 4 in.							
	3-2536-P3	159 000 758	Polypropylene	Black PVDF	Titanium			
	DN125 to DN200 - 5 to 8 in.							
	3-2536-P4	159 000 759	Polypropylene	Black PVDF	Titanium			
	DN250 to DN900 - 10 to 36 in.							
	3-2536-P5	159 000 760	Polypropylene	Black PVDF	Titanium			

## Guideline: Combining a 2536 Wet-Tap Sensor with a 3519 Wet-Tap Valve

- a) Once a sensor is chosen, it can be mounted in a 3519 Wet-Tap Valve (sold separately)
- b) Assembling a sensor with a 3519 Wet-Tap valve is quick and simple. These parts can also be ordered as complete assemblies. See 3519 product page.

## Model 2536 Ordering Notes

 Other rotor and pin materials are available for purchase from the factory and can be easily replaced in the field. See Accessories section.

Please refer to Wiring, Installation, Accessories and Fittings sections for more information.

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# **Accessories and Replacement Parts**

Mfr. Part No.	Code	Description
Rotors		
3-2536.320-1	198 820 052	Rotor, PVDF Black
3-2536.320-2	159 000 272	Rotor, PVDF Natural
3-2536.320-3	159 000 273	Rotor, ETFE
3-2536.322-1	198 820 056	Sleeved rotor, PVDF Black
3-2536.322-2	198 820 057	Sleeved rotor, PVDF Natural
3-2536.322-3	198 820 058	Sleeved rotor, ETFE
Rotor Pins		
M1546-1	198 801 182	Pin, Titanium
M1546-2	198 801 183	Pin, Hastelloy-C
M1546-3	198 820 014	Pin, Tantalum
M1546-4	198 820 015	Pin, Stainless Steel
P51545	198 820 016	Pin, Ceramic
0-Rings		
1220-0021	198 801 000	O-ring, FKM (2 required per sensor)
1224-0021	198 820 006	O-ring, EPR (EPDM) (2 required per sensor)
1228-0021	198 820 007	O-ring, FFKM (2 required per sensor)
Miscellaneous		
P31536	198 840 201	Sensor plug, Polypropylene
P31542-3	159 000 464	Sensor cap, Blue
3-2536.555	159 500 532	Sensor cap, Gray
P31934	159 000 466	Conduit cap
P51589	159 000 476	Conduit adapter kit
5523-0222	159 000 392	Cable (per foot), 2 cond. w/shield, 22 AWG
3-2536.321	198 820 054	PVDF Natural, Rotor kit (rotor and pin)
3-8050	159 000 184	Universal mount kit
3-8050-1	159 000 753	Universal junction box
3-8050.390-1	159 001 702	Retaining nut replacement kit, NPT, Valox (for use with 8510 and 8512)
3-8050.390-3	159 310 116	Retaining nut replacement kit, NPT, PP (for use with 8510 and 8512)
3-8050.390-4	159 310 117	Retaining nut replacement kit, NPT, PVDF (for use with 8510 and 8512)
3-8051	159 000 187	Transmitter integral adapter (for use with 8510 and 8512)
3-8051-1	159 001 755	Transmitter integral mounting kit, NPT, PP (for use with 8510 and 8512)
3-8051-2	159 001 756	Transmitter integral mounting kit, NPT, PVDF (for use with 8510 and 8512)



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