



FLOW

FLOW SENSOR WITH INTEGRAL FLOW TRANSMITTER SDI SERIES

DESCRIPTION

The **SDI Series Flow Sensor with Integral Flow Transmitter** is Data Industrial's latest product in their dependable line of flow meters for liquids. The direct insertion models are available in either brass or stainless steel material and can be installed or removed in piping systems that are not pressurized. The hot tap stainless steel models include an isolation valve and mounting hardware that enables flow meter installation and removal while the piping system is pressurized; system shutdown is unnecessary. Hot tap stainless steel models are also available for bidirectional flow measurement.

The four-blade impeller is rugged and non-fouling and requires no custom calibration. The **SDI Series** is available with a frequency output, analog output, and scaled-pulse output. The display is optional. Stainless steel models are available with a PEEK (polyether ether ketone) tip for high (up to 300°F) fluid temperatures, or a PPS (polyphenylene sulfide) tip for more moderate fluid temperatures.

FEATURES

- **Direct insertion or hot tap installation**
- **Fits pipe sizes 1.5" to 36"+ (3.8 to 91+ cm)**
- **Mounts in 1" NPT tap, weld-on or pipe saddle**
- **1% accuracy**
- **Low pressure drop**
- **Optional 8 character 3/8" (0.95 cm) LCD**
- **NEMA 4X enclosure standard**
- **Bidirectional models available**
- **Field programmable with optional software**

SPECIFICATIONS

Operating voltage	8-35 VDC, 25 mA
Output impedance	750Ω @ 24 VDC
Accuracy	±1% of flow rate
Maximum pressure	
Stainless steel	1000 psig (6895 kPa)
Brass	600 psig (4137 kPa)
Maximum fluid temp	300°F (149°C) (PEEK tip) 180°F (82°C) (PPS tip)
Ambient temp range	14° to 150°F (20° to 65°C)
Design flow range	0.3 to 20 fps (0.09 to 6.1 mps)
Display	One-line eight-character 3/8" (0.95 cm) LCD
Pressure drop	0.5 psig (3.45 kPa) or less
Enclosure	NEMA 4X, polypropylene with Viton-sealed acrylic cover
Electrical connection	Screw terminals with 1/2" (1.27 cm) conduit connection
O-Ring	Viton (standard)
Shaft	Tungsten carbide (standard)
Impeller	Stainless steel (standard)
Bearing	Torlon (standard)
Warranty	1 year



SDI Insertion



ORDERING INFORMATION

MODEL	DESCRIPTION
SDI	Flow sensor with integral transmitter
MATERIAL	
0D1N	Stainless steel insertion with PPS tip for 1.5" to 10" pipes
0D2N	Stainless steel insertion with PPS tip for 12" to 36" pipes
0D3N	Stainless steel insertion with PPS tip for 36"+ pipes
1D1N	Brass insertion with PPS tip for 1.5" to 10" pipes
1D2N	Brass insertion with PPS tip for 12" to 36" pipes
1D3N	Brass insertion with PPS tip for 36"+ pipes
2D1N	Stainless steel insertion with PEEK tip for 1.5" to 10" pipes
2D2N	Stainless steel insertion with PEEK tip for 12" to 36" pipes
2D3N	Stainless steel insertion with PEEK tip for 36"+ pipes
0H1N	Stainless steel hot tap with PPS tip for 1.5" to 10" pipes
0H2N	Stainless steel hot tap with PPS tip for 12" to 36" pipes
0H3N	Stainless steel hot tap with PPS tip for 36"+ pipes
2H1N	Stainless steel hot tap with PEEK tip for 1.5" to 10" pipes
2H2N	Stainless steel hot tap with PEEK tip for 12" to 36" pipes
2H3N	Stainless steel hot tap with PEEK tip for 36"+ pipes
OUTPUT	
0	Standard frequency pulse
1	4-20 mA
2	Scaled pulse
5	Bidirectional, 4-20 mA + direction (hot tap, PPS tip only)
6	Bidirectional, scaled pulse (hot tap, PPS tip only)
DISPLAY	
0	No display
1	LCD option (not available with output option 0)
CONSTRUCTION	
0200	Viton O-ring, Carbide shaft, stainless steel impeller, Torlon bearing (std)
1200	EPDM O-ring, Carbide shaft, stainless steel impeller, Torlon bearing

SDI 2D1N 1 1 0200 Example: SDI2D1N11200 Flow sensor with integral transmitter, stainless steel insertion with PEEK tip, 4-20 mA output, display, standard construction.

RELATED PRODUCTS

A-SDI	Programming kit
A-1027	Hot tap adapter nipple
8132030	Ball valve for hot tap installation (required)