

SDX

Analog Pressure Transducer

The Stevens SDX (Submersible Depth Transmitter) is a pressure sensor that delivers accurate results while still remaining very affordable for a wide range of level measurement applications.

High impact, corrosion-resistant PVC Type II housing and potted electronics make the SDX extremely durable for most water and hostile fluid environments. The SDX is also an excellent choice for level measurement application that may put more expensive sensors at risk for damage.

The SDX comes equipped with user specified vented cable lengths. The vent provides an atmospheric reference for the sensor, which is necessary for ensuring the highest possible accuracy when making a level measurement.

The SDX features one 4-20 mA analog output signal that corresponds linearly to range. Compatible with existing power and data logging instruments, the SDX can easily be deployed for data collection at remote monitoring sites.

The sensor housing integrates pipe threads for securely mounting the SDX into pipes, tanks, or other applications.



FEATURES

- Rugged housing and fully potted electronics—not damaged by freezing water
- Compact size
- Accuracy of $\pm 0.25\%$ full span
- Analog output (4-20 mA)
- Vented cable, 2 wire, with drain
- Weighted copper nose cone

APPLICATIONS

- Well Monitoring
- Ground water monitoring
- Surface water monitoring
- Tank level monitoring
- Soil & ground water remediation
- Lake, river, and wetland studies
- Environmental impact and research studies
- Water level for flow calculations



OPTIONAL DESICCANT CARTRIDGE

The SDX is a “Wet-Wet” device. While it is important to keep the SDX cable’s vent tube unobstructed for barometric pressure compensation, neither the pressure transducer nor internal electronics are damaged by condensation or moisture entering the vent tube. For best results, Stevens recommends the desiccant cartridge with vent tube adapter.

TECHNICAL SPECIFICATIONS

Power requirements	9 - 26 VDC
Output	4-20 mA current signal, linearly corresponding to range
Operating temperature	-40° F to 185° F (-40° C to 85° C)
Compensated temperature	32° F to 122° F (0° C to 50° C)
Linearity	0-2.5 ft range: 0.2% max. 0-5 ft range: 0.2% max. 0-10 ft range: 0.2% max. 0-35 ft range: 0.3% max. 0-50 ft range: 0.3% max. (0.1% typical for all ranges)
Repeatability & hysteresis	Typical: $\pm 0.2\%$ span
Reverse polarity protection	Built into sensor
Overpressure	0-2.5 ft: 20 psi max. (46 ft.) 0-5 ft: 20 psi max. (46 ft.) 0-10 ft: 20 psi max. (46 ft.) 0-35 ft: 45 psi max. (103 ft.) 0-50 ft: 45 psi max. (103 ft.)
Shock	Qualification tested to 150 g
Pipe threading	1/2-14 straight pipe thread (back of sensor housing near cable) 3/8-18 straight pipe thread (under removable copper nose-cone)
Dimensions	4.00" L x 0.84" \varnothing (101.6 mm L x 21.33 mm \varnothing)
Weight	Probe: 2.37 oz (61.19 g) Cable: 0.43 oz (12.19 g) per foot (.4 g per cm) (weights are approximate)

ORDERING INFORMATION

PART #	DESCRIPTION
93720-005	SDX Pressure Transducer, 0-5 ft range w/o cable
93720-010	SDX Pressure Transducer, 0-10 ft range w/o cable
93720-035	SDX Pressure Transducer, 0-35 ft range w/o cable
93720-050	SDX Pressure Transducer, 0-50 ft range w/o cable
44049	Vented cable, 2 wire, with drain
93030-010	Desiccant cartridge with vent tube adapter, 3.9" (10 cm) length
93030-001	Desiccant cartridge with vent tube adapter, 7.8" (20 cm) length