



For use in:
 Subsea Valves and Cylinders
 Oil and Gas Exploration
 PBOF Environments

**NO MAGNET
 REQUIRED!**

SS-7 Series

LVIT Linear Position Sensor for Subsea

Specifically designed for Subsea High Pressure PBOF Environments with No Magnet Required!!

The SS-7 series LVIT (Linear Variable Inductance Transducer) Position Sensors from Alliance Sensors Group have been designed to give cylinder position feedback in subsea environments with depths up to 12,000 ft or in a PBOF (pressure balanced oil filled) chamber. For oil and gas exploration, blow out preventers, ROVs, and relief valves.

The SS-7 requires no magnet and is based on a proprietary contactless inductive sensing technology that employs a 7 mm diameter probe with a with good stroke to length ratio to save space and a gun drilled hole in the cylinder rod. The SS housing 1-inch diameter 316 stainless steel and comes standard with a LSG-4-BC connector. They are offered in ranges from 25 to 600 mm (1 to 24 inches) full scale with a wide variety of analog I/Os. SS-7 sensors are also offered with ASG's proprietary SenSet™ feature whereby a sensor's analog output can be easily adjusted in the field after installation to match the range of motion of the cylinder rod.

Additional information can be found at www.alliancesensors.com.

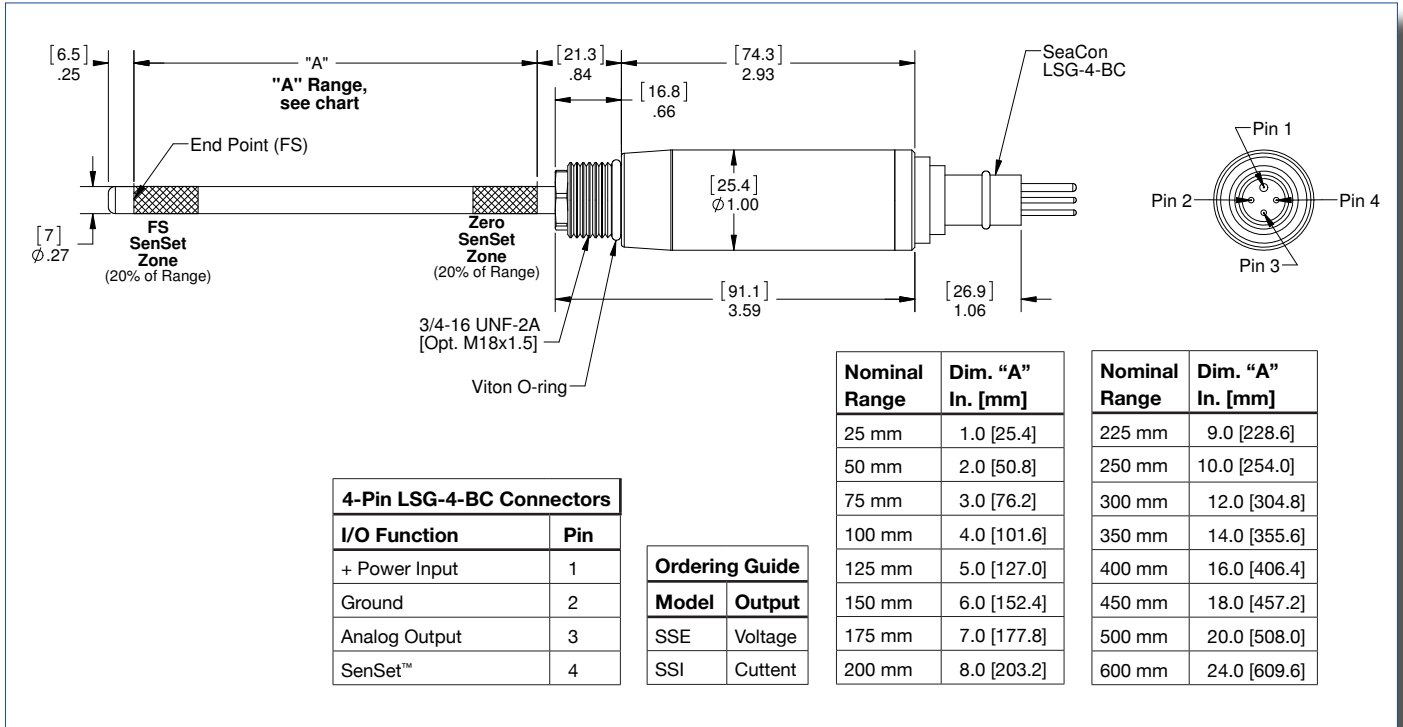
Features:

- LVIT Technology™ (Linear Variable Inductance Transducer)
- Contactless sensing for long sensing life
- Operational to 12,000 ft depth or 5200 psig (350 bar)
- Proprietary SenSet™ field adjustable range scaling
- Senses cylinder rod...no magnet required

Specifications:

Analog I/Os	0 – 5 V or 0.5 – 4.5 V output with 8 – 30 V input, 35 mA max. 0 – 10 V output with 12 – 30 V input, 35 mA max. 4 – 20 mA (3-wire) output with 18 – 30 V input, 60 mA max. (75 C max.)
Measuring Ranges	25 mm to 600 mm (1 to 24 inches) Full Scale (nominal)
Linearity Error	±0.15% of Full Scale Output (FSO) typical, ±0.25% of FSO max.
Resolution	0.025% of FSO
Update Rate	300 Hz nominal
Operating Temperature	-20 to 85 C (-40 C to 105 C Extended Range)
Temperature Coefficient	±0.015% of FS/deg C
Operating Pressure	5200 psig max. (350 bar)
Vibration	5-20 Hz 0.5 inch p-p; 20-2000 Hz 4.2 g p-p
Shock	1000g, 11 msec

SS-7 Series



Ordering information:

Series	Output Type	Probe Dia.	Range (mm)	Port Thread	Termination	Output	Housing Material	Bore Size (mm)	Bore Material
SS	X-	X-	XXX-	XX-	XX-	XX-	X	XX-	XX
	E - Voltage	7 - 7 mm	025 - 250	08 - 3/4-16 UNF	04 - Seacon LSG-4-BC	03 - 0-3 V DC	S - 316 SS	08 - 8	AS - Alloy Steel
	I - Current		(25 mm increments)	18 - M18 x 1.5		04 - 3-0 V DC		95 - 9.5	SS - Stainless Steel
						05 - 0.5-4.5 V DC		11 - 11	
			250 - 500			06 - 4.5-0.5 V DC			
			(50 mm increments)			10 - 0-10.0 V DC			
						11 - 10.0-0 V DC			
			500 - 600			20 - 4-20 mA			
			(100 mm increment)			21 - 20-4 mA			
						50 - 0-5 V DC			
						51 - 5-0 V DC			

ALLIANCE SENSORS GROUP
A DIVISION OF H.G. SCHAEVITZ LLC

Alliance Sensors Group
102 Commerce Drive, Unit 8
Moorestown, New Jersey 08057 USA
Ph: 856-727-0250
www.alliancesensors.com
info@alliancesensors.com