QUICK START GUIDE

Installation of ASG's Embeddable In-cylinder Position Sensors

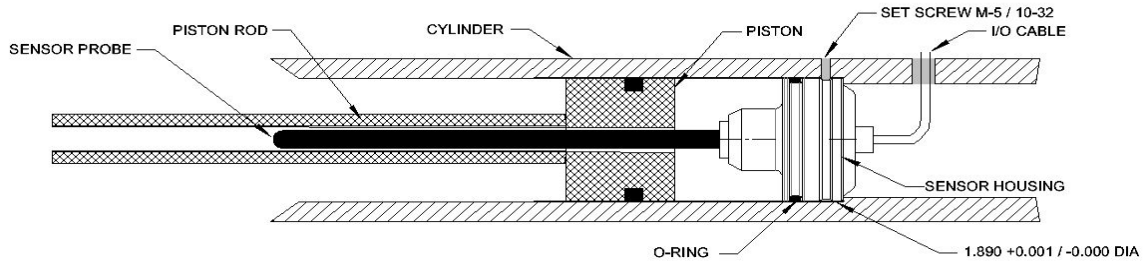
Mechanical installation: ASG's embeddable in-cylinder position sensors are designed to be inserted into a 48 mm diameter cavity in the rear endcap of a hydraulic cylinder. It may be inserted from the front of an unassembled cylinder or from the rear of a cylinder with a two-piece endcap having a separate end cover.

As the drawings below show, the sensor is retained in the endcap with three set screws 120 degrees apart that fit the groove on the sensor, or with a retaining ring that is inserted next to the mounted sensor body. Besides providing clearance for the sensor's back and an exit hole for the I/O cable, a clearance zone of 1 inch (25 mm) diameter by 1 inch (25 mm) long for the front nose of the sensor's body is also necessary.

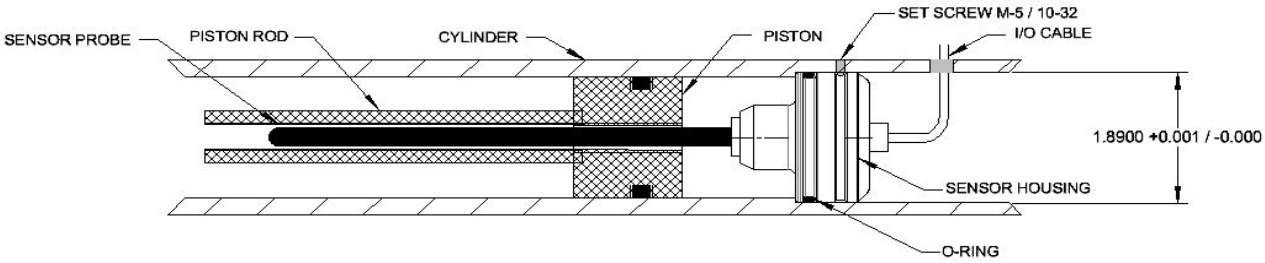
Before insertion of the sensor, the cylinder rod must have a 5/16-inch (8 mm) diameter or larger blind hole gun-drilled into it from the piston end that is 1 inch (25 mm) deeper than the nominal measuring range of the sensor. Be sure the hole size and material of the cylinder rod were given to ASG for proper calibration.

If the mechanical details are correct, the sensor may be inserted into the 48 mm cavity with the I/O cable being routed through its exit hole, being careful not to nick or cut the Viton o-ring installed on the sensor. Fasten the sensor in place with the three set screws or with a retaining ring.

Front Installation



Rear Installation



Electrical installation: Connect an ASG sensor to the electrical system according to the following chart:

4- Conductor Cable	
I/O Function	**Color**
+DC power input	Red
Ground	Black
Analog output	Green
SenSet™	White

SenSet: Instructions for the SenSet™ procedure can be found on ASG's website: alliancesensors.com. If the SenSet feature is not being used, trim and insulate the end of the white wire or cut it off completely.