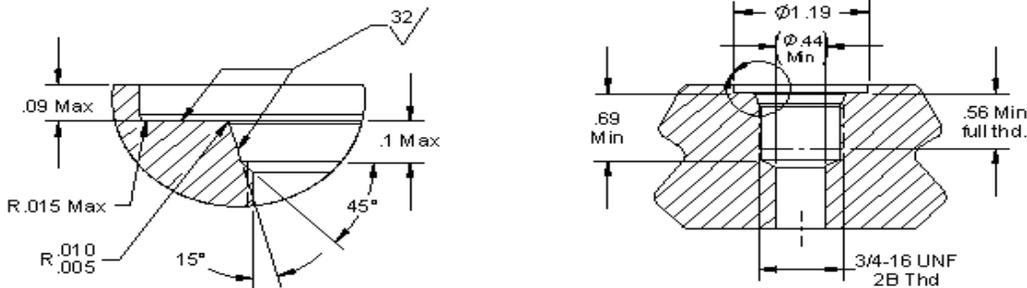


# QUICK START GUIDE

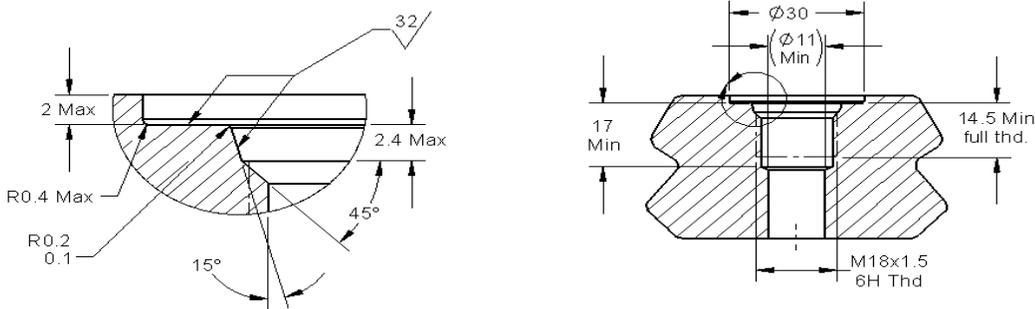
## Installation of ASG's Port Mounting In-cylinder Position Sensors

**Mechanical installation:** ASG's port mounting in-cylinder position sensors are inserted into an o-ring port machined into the rear endcap of the hydraulic cylinder. Standard units use an SAE J1926-1 -8 port with a 3/4-16 UNF thread. Metric threaded versions use an ISO 1649-1 port with an M18 x 1.5 thread. Details of both ports are shown below. For either size, a Viton o-ring has been installed on the sensor's male thread.

### SAE J1926-1 -8 O-ring Port



### ISO 1649-1 M18 O-ring Port



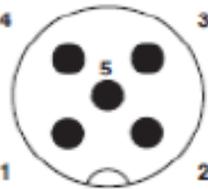
Before insertion of the sensor, the cylinder rod must have a 5/16-inch (8 mm) diameter or larger blind hole gun-drilled into it from the piston end that is 1 inch (25 mm) deeper than the nominal measuring range of the sensor. Be sure the hole size and the material of the cylinder rod were given to ASG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

If the mechanical details are correct, the cylinder rod should be moved to its fully retracted position. The sensor may then be inserted into the o-ring port and tightened down using a suitable wrench on its hex.

**Electrical installation:** Connect ASG sensors to the electrical system according to the following charts. If the termination or connection is not shown, consult the sensor's technical data sheet or contact ASG.

5-Pin M12 Connector		Cable Color *
I/O Function	Pin	
+DC Power input	1	Brown
Ground	2	White
Voltage output	3	Blue
Current output	4	Black
SenSet™	5	Grey

5-Pin M12 Connector



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

\*Cable colors shown are for mating plugs of industry-standard M12 cordsets

**NOTE: 4-20 mA current output is 3-wire sourcing  
Do not connect to a 2-wire loop-powered system**

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

### LIMITED WARRANTY (excerpt)

H.G. Schaevitz, LLC *dba* Alliance Sensors Group (ASG) products are warranted for a period of one (1) year, [two (2) years for LVDT signal conditioners, see exception below], commencing from the date of shipment to the original purchaser to be clear of title, free from defects in material and workmanship, and in conformity with ASG's specifications at time of shipment. ASG's liability under this warranty is limited to replacing or repairing any product returned by Buyer at Buyer's expense during the warranty period which does not meet these warranty terms. The decision to repair or replace a non-conforming product is solely within ASG's discretion, and does not include going into the field and replacing installed parts. For more warranty information please visit us on our web site [www.alliancesensors.com](http://www.alliancesensors.com), or contact customer service at: [sales@alliancesensors.com](mailto:sales@alliancesensors.com).