Linear Position Sensors are ATEX Approved in Zone 1 and Zone 2 Classifications

Macro Sensors offers the HLR 750 Series of UL/ULC listed and ATEX-approved LVDT Linear Positions Sensors for use in the high temperature and highly volatile environments of gas turbines. Ideal applications for the HLR series LVDTs include monitoring fuel transfer valves, micro fuel valve openings and hydro turbine servo motor operation.

In addition to being UL/ULC listed for Class I, Division 2, Groups A, B, C, and D T3C Class I, Zone 2, AEx nC IIC T3Ex nC IIC T3, the highly rugged HLR Series of LVDT Linear Position Sensors are ATEX approved in Zone 1 and Zone 2 classifications, making them appropriate for use in potentially explosive environments such as gas turbines. As gaseous vapors are present in gas turbines, LVDTs installed on turbines must meet intrinsically safe parameters and be approved by these certifying agencies.

The ability to separate LVDT electronics, which are located in the turbine control system, from the LVDT coils, is one of the main reasons that these sensors survive so well in power plants. With electronics remotely located, these highly robust AC-operated LVDT Linear Position Sensors can withstand high temperatures of 300°F on the turbine. For added protection against environmental elements, electronics can be installed in explosion-proof enclosures and connected to LVDTs using a suitable conduit. Units feature a through-bore design along with lead wires that exit through a radially-mounted ½-14 NPT male threaded conduit for east attachment to an explosion-proof junction box as well as a conduit.

Available in full-scale measurement ranges from 1 inch to 10 inches, the highly

rugged HLR 750 Series of LVDT Linear Position Sensors are constructed entirely of stainless steel and are hermetically sealed for resistance against environmental elements. The LVDT Linear Position Sensors offer high resolution, excellent repeatability typically better than 0.01% of full scale and non-linearity of less than 0.25% of full range output.

To complete the measurement system, Macro Sensors supplies LVC Series Support Electronics for the HLR 750 series Position Sensors, which work well with either conventional differential input LVDT signal conditioners or ratiometric signal conditioning circuits.

For more information on pricing, please contact Macro Sensors at positionsensors@macrosensors.com [1] or go to their web site at http://www.macrosensors.com/HLR_750.html [2].

For more information on AST products and technology, visit the AST website at www.astsensors.com [3].

October 26, 2012

Source URL (retrieved on *07/30/2014 - 9:09pm*):
http://www.wirelessdesignmag.com/product-releases/2012/10/linear-position-sensors-are-atex-approved-zone-1-and-zone-2-classifications?qt-most_popular=0

Links:
[1] mailto:positionsensors@macrosensors.com
[2] http://www.macrosensors.com/HLR_750.html
[3] http://www.astsensors.com