

ALLIANCE SENSORS GROUP

A DIVISION OF H.G. SCHAEVITZ LLC

FOR IMMEDIATE RELEASE

RUGGIZED LVDT LINEAR POSITION SENSORS DESIGNED FOR STEAM TURBINE VALVE CONTROL SYSTEMS

MOORESTOWN, N.J.—November 1, 2012 The Alliance Sensors Group PG Series LVDT linear position sensors are designed and engineered specifically for valve position sensing applications for steam turbine control systems in electric power generation plants. Previously, the LVDTs used in the power generation industry were either designed by OEMs over 40 years ago, or are catalog LVDTs slightly modified for operation in a steam turbine environment. Over many years of using of these older products, inherent design flaws have come to light, notably the fact that the LVDT's core would break off of its operating rod under typical turbine vibrations. Many features of the Alliance Sensors Group PG series LVDT sensors were specifically requested by power gen controls engineers who had encountered these kinds of issues over time using traditional LVDTs.

Alliance Sensors Group's approach to their PG series LVDT design for the power generation industry started with the premise that the LVDT must be extremely rugged, so these units feature a large diameter housing with a very thick wall and a versatile mounting configuration. A PG series LVDT's 3/8 inch diameter operating rod captivates the LVDT's core so that it can *never* come out or vibrate loose. This rod is offered with either a rigid coupling or a ball joint coupling that can be helpful in installations where there is a minor misalignment with the attachment mechanism on the steam valves. PG series LVDTs utilize materials and manufacturing processes that can be certified for use in mild radiation environments found in boiling water reactor nuclear power plants.

Key features requested by the power gen marketplace embodied in the PG series LVDTs' design include:

- Cores that absolutely cannot break loose from the core's connecting / operating rod
- Installation features like standard body clamps, flange mounts, ball joint couplings, and rod eye ends
- Two double contact shaft seals prevent contaminants from getting inside the LVDT's bore
- No connector--- the sensor has screw clamping terminals that accept No. 24-14 AWG wire
- Continuous sensor operation in ambient temperature up to 350 degrees F (175 C)
- Two (2) year warranty and an over-temperature indicator built into sensor

Alliance Sensors Group PG Series LVDTs are available in five full scale ranges from 0-to-3 to 0-to-15 inches (75 to 380 mm). Models include the PGHD Heavy Duty series LVDT with a 1-1/16 inch body diameter and the PGSD Super Duty series LVDT with a 1-5/16 inch body diameter. Either series is available certified for operation in mild radiation environments at extra cost.

Technical Contact Ed Herceg eeh@alliancesensors.com
Sales Contact John R. Matlack jrm@alliancesensors.com