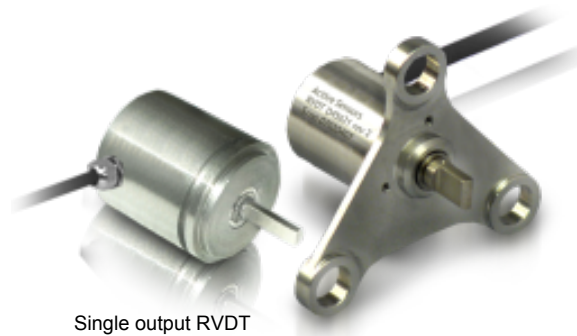


RVDT position sensors

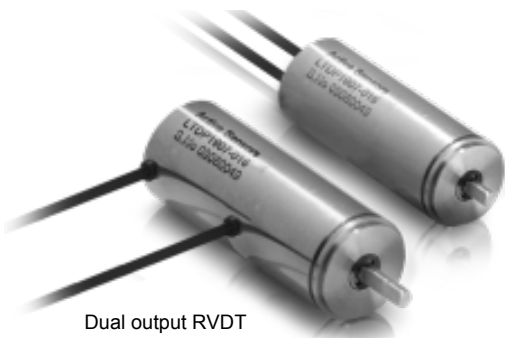
- Contactless technology
- Robust construction
- High temperature operation
- Long operational life
- Choice of measurement angles
- Environmentally sealed



Single output RVDT

Description

The RVDT is an angular position sensor that produces an output voltage proportional to the rotary displacement of an operating shaft. The sensor is constructed from stainless steel and has an operating shaft set within 'twin' ball-race shaft bearings for precision and integrity. Active Sensors RVDT's are manufactured to quality standards required for high performance, high cyclic control and measurement systems including flight control actuator or servo valve systems.



Dual output RVDT

Precision coil winding techniques provide the necessary environmental protection required to avoid dielectric breakdown and produce electrical output stability under vibration, acceleration, mechanical and thermal shock. The sensors are lightweight and robust with a measurement angle up to $\pm 80^\circ$ in single and duplex designs.

Environmental testing available to US and European aerospace and military standards: RTCA DO160, EUROCAE/ED-14 & MIL-STD-810 -Altitude, Temperature, Humidity, Icing, Freezing rain, Shock, Vibration, Sand and dust, Fluid susceptibility and Fungus resistance.

Typical specification

Supply voltage	3Vac to 30Vac
Supply frequency	400Hz to 3kHz
Angular displacement	up to $\pm 80^\circ$
Output sensitivity	10mV to 20mV/°
Operating mode	Ratiometric or differential
Linearity	$\pm 0.5\%$ to $\pm 1.0\%$ (dependant on electrical angle)
Resolution	Infinite

Environmental testing

Active Sensors can provide comprehensive environmental testing tailored to suit customer's verification programmes. Our sensor designs are robust in construction and we have developed our technology by the selection of the highest-grade materials. Every year our research and development division produces new sensor designs, which can be subjected to US and European environmental aerospace and military testing standards.

- Altitude
- Temperature
- Humidity
- Icing
- Freezing rain
- Shock
- Vibration
- Sand and dust
- Fluid susceptibility
- Fungus resistance

About us

Active Sensors has for 20 years designed and manufactured a wide range of linear and rotary position sensors for precision motion control and measurement systems. With the increasing cost of engineering development programs, technical managers need to identify reliable and cost-effective program partners. Active Sensors is an ISO9001 certified company providing a wide range of mission critical position sensors for aerospace applications.

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Additional product information

The information contained in this data sheet on product applications should be used by customers for guidance only. Active Sensors makes no warranty or representation in respect of product fitness or suitability for any particular design application, environment or otherwise except as may subsequently be agreed in the contract for the sale and purchase of products. Additionally, Active Sensors gives no guarantee or warranty for its products in critical control applications, typically in life support systems and the aviation and nuclear industries, where product failure may result in injury, loss of life or catastrophic property damage. Customers should therefore satisfy themselves of the actual performance requirements and subsequently the products suitability for any particular design application and the environment in which the product is to be used.
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