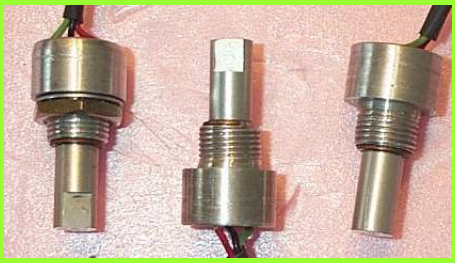
CUSTOM VERSIONS

Elweco, Inc makes versions that will fit your needs so that you do not need to modify your existing equipment to replace less reliable angle sensors with hallpot® angle sensors.

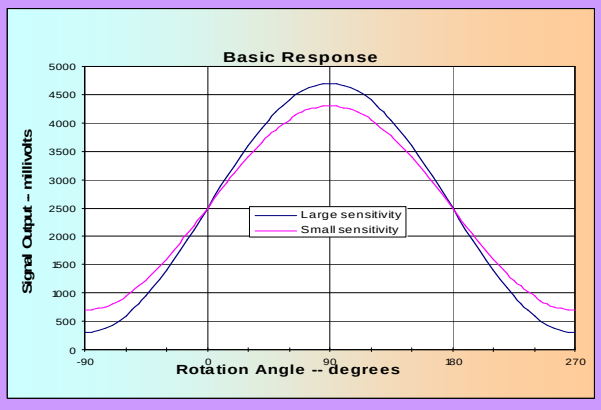
These various designs retain the electrical and mechanical features of the common standard versions. Variations usually consist of modifications to the shaft dimensions or addition of knurling to the shaft, O-rings may be put inside the journal bearings to prevent dirt and low pressure liquids from entering around the shaft. Metric standards can be used on the shaft or journal to permit proper mating with metric hardware such as flexible couplings or threaded fasteners or to fit into a metric-sized mounting hole.

Most of these customized designs are built around the size 75 Models and conform to the signal response of these common versions.



These are examples of small versions used in the handles of joysticks or control levers on electric vehicles. They have a body diameter of 0.55 inches, a threaded journal 0.375 inches diameter and 0.25 inches long. Leads are attached and there are)-rings inside to add friction so that controls that turn the shaft do not move from vibration. They do not contain calibration amplifiers because their diameter is too small for our standard amplifiers. Their signal response is basic in the order of twenty mv per degree rotation.

BASIC SIGNAL RESPONSE



hallpot® is the registered trademark of Elweco, Inc

Click here to Return to Home Page

Shown here are are size 75 models with customized shafts. Some are

very long, have slotted ends, have a cross-hole near the end or have knurled splines. Their signal response is specified by the user as well as the power voltage requirements. Leads may be attached by Elweco, Inc or by the user as wanted. Shafts may be sealed with O-rings and/or endcaps that cover the electrical end may be applied. Leads are normally used with endcaps and are attached at the factory. Versions with endcaps are shown in the file --- Severe Environment Models .

These are examples of customized versions. The two at the ends of the picture contain ball bearings with shafts that have a flat or are round with no flat. Their body diameter is 0.55 inches diameter and their signal response is basic with no amplifiers. These have leads attached.

A common Model 75TJ-24-[User ID - #] is shown in the second place with a neoprene O-ring to act as a seal when mounted. The third place is a Model 75SJ-V-[XX-X] servo groove and plain journal for servo-type mounting.

BASIC RESPONSE refers to the signals produced from the hall effect sensor inside the hallpot® as the magnetic field is rotated about it. These signals are large but because each sensor has a different sensitivity and each magnetic field has a different strength, the Signal Output will be different among the hallpots®. In order to get small devices, no amplifiers are built into small diameter hallpot® and therefore they have an uncalibrated, but stable, response. The user must supply his own amplification to determine his desired parameters of the signal.

The chart to the left shows the response of two different typical sensitivities.

Elweco, Inc ---- www.elweco.com , www.hallpot.com ,
Ph/Fx 440-254-1716, sales@hallpot.com
PO Box 909, Painesville, OH 44077 USA