

sTEem-at-Work

Puzzle #12

Technician LVDT operation performance test

The linear variable differential transformer, LVDT, is a sensor that indicates the linear change in the horizontal (vertical) position of a robotic arm and sends an electrical signal to indicate how much differential movement has occurred. To increase their versatility and coincidentally emphasize the fact that the sensor makes differential distance measurements, the output signal provided by the LVDT is simply a % of the total output signal the sensor can deliver. In addition, the detected displacement is expressed as the percent of total possible translation of the sensor movement shaft from the null position. The technician routinely runs performance tests on the LVDT and compares that data to the LVDT's manufacturer provided standard test (red plot) data. Results of one of those tech tests (blue data plot) are provided.

Should the tech recommend that the LVDT for this robot system be replaced? (yes or no)

Linear variable differential transformer

