

North Atlantic Industries Model API-8025

DESCRIPTION

The North Atlantic Industries Model API-8025 Angle Position Indicator is a servo device that quickly and accurately displays the angular shaft position of remote data transmitters. Continuous digital readout in degrees and minutes is displayed on the front panel counter.

The rugged half-rack unit features plug-in modular solid-state components. The high stable components used allow rapid precise measurements without manipulation of operating controls.

DEFINITIONS AND CONVENTIONS

The API-8025 can be considered as though it were a synchro receiver for connection purposes, per MIL-S-20708A. Figure 3.3 shows a schematic diagram of a synchro receiver connected to a synchro transmitter both pictured at electrical zero. Electrical signals from the synchro transmitter are connected to the receiver's stator leads. The receiver's rotor is excited from the same source and of the same phase as the transmitter's rotor. Turning the synchro transmitter shaft counterclockwise (as viewed from the shaft end) results in increasing positive electrical data being fed to the receiver. The receiver shaft then turns counterclockwise to produce a corresponding, increasing positive shaft angle.

SPECIFICATIONS FOR MODEL 8025-S552, S654

Input Form	11.8 volts, line to line, 400~ synchro
Display	Digital counter reading degrees and minutes.
Range:	0° – 350° continuous rotation
Accuracy	±6 minutes of arc
Repeatability	±30 seconds of arc
Slew Speed	25 degrees per second
Power Requirements	115V, 400~ @ 200 ma slew 170 ma quiescent Internal 28 volts DC power supply
Physical Dimensions	Height: 1 ¾" Width: 9 ½" Depth: 9" Mounting: Half rack Weight 3 ½ lbs. approximate