



PRODUCTS

Absolute Analogue Servo Encoder

10 bit Absolute Analogue Servo Encoder (A²SE) type NCP-307

Absolute Analogue Servo Encoder (A²SE) is operating on Hall's effect principle. There is no metallic moving wiper contacting to element and hence no wear and tear or sliding electrical noise. Shaft is rotating endlessly in double ball bearings giving very smooth movement. It has excellent mechanical response with no hysteresis in the output. A²SE is enclosed in anodized aluminium housing with IP-65 protection. It is ideal for harsh environment applications.

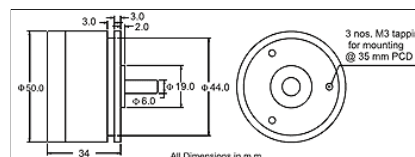
A²SE incorporates excellent concept of providing two simultaneous absolute analog outputs without any external device viz: 0-10 VDC, 4-20 mA and SSI corresponding to 0-360°. Voltage output can be utilized to monitor the position while at the same time current output can be used to transmit the signal at the remote for control. Various outputs can be factory programmed to suit the different use of angular position. Its 10 bit SSI output (optional) can be directly coupled with micro controller for further use.



A²SE can be used in numerous applications, few of which are: As a Feedback element in Dancer application, Tilt sensor, Angular Displacement Measurement, valve Positioning Controls, Robotics, Mobility services / Aids, Marine Instrumentation, CCTV, Camera Positioning, Medical Scanners, Construction Vehicles, Vending Machines, Industrial Power Tools, Workshop Equipments, Front Panel Rotary Controls, Automotive Applications, Wind Direction monitoring, Replacement of Conventional Servo Potentiometer for long maintenance free life.

Specifications

Angle of Rotation	0-360° (Endless)
Output	0-5 VDC (Load ≥ 2K ohm), and / or 4-20mA (Load ≤ 600 ohm), Where 5V ≤ Vs ≤ 30V (Both outputs can be used simultaneously)
Total Non-linearity error	≤ 0.7° max (with respect to best line fit and over full temperature range)
Output Sensitivity	27.77mV/°C
Auxiliary Supply	18-30 VDC, 50mA (for current output version) or ≥ Vs but > 35 VDC (Absolute max) or as specified
H.V. Test	250 VAC for 1 minute
Insulation Resistance	500 M Ω minimum at 500 VDC
External Magnetic Field Effect	Small due to Differential measuring technique & sensor conditioning circuitry (Product should be away from strong magnetic field)
Maximum Angular Shaft Speed	3000 RPM, Number of samples per revolution decreases as the speed of rotation increases. Accuracy of O/p is not affected by Speed
Operating Temperature Range	0° to 70°C
Temperature Compensation	No external compensation required
Casing	Aluminium, Black anodized
Protection	IP 65
Fixing Method	3mm, 3 holes at 35mm PCD for front mounting and servo mounting



Model No.	Outputs
NCP-307-S	0-10 VDC & 4-20 mA
NCP-307-V	0-10 VDC
NCP-307-SSI	SSI

Customised pre-programmed for other rotational angle output

Note: We reserve the right to make any kind of design, specifications or functional modification at any moment without prior notice



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