

Contact less Angle Sensor Model ST 350

PROFILE

Model ST 350 is a low cost angle sensor developed for very precise measurements in the field of civil engineering, construction machineries, and industrial automation. The sensor utilize a new patented Hall technology and a thin ferromagnetic disk that make the sensor only sensitive to the magnetic flux density parallel to the chip surface . Its use is particularly recommended in high frequency applications, operating on small angles. The rotary sensor includes an hall effect sensor of high resistance and stability in temperature. The absence of sliding contacts warrants an high lifetime, which can not be obtained with the contact versions. Very easy and precise mounting can be achieved using the built-in flange. Typical applications in dancer arm tensioning , labelling machines , robots , fork lifters ,steering angle , throttle position , harvester , position detection of flaps , agriculture machines etc..

Main Characteristics

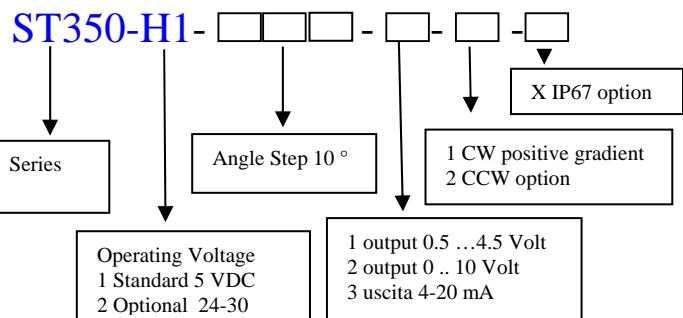
- High grade plastic case
- Angle Range: up to 360 programmable
- Input Voltage: 5±0.5 or 24..30 VDC
- Output: 0.5 – 4.5 Ratiometric (input voltage 5 V)
0-10 V (input voltage 24 V); 4-20 mA optional
- Operating Temperature: -20 °C +80 °C
- No wipers
- High life time
- Vibration resistance (DIN IEC 68T2/6 20g)
- High sensibility and repeatability
- Hall Effect Sensor
- IP54 protection (IP65 optional)



DESCRIPTION

- Plastic housing
- Wire exit (AWG 26 outer diameter 4,5 mm)
- Protection with isolating polymeric;
- 6 mm shaft in AISI303 steel;
- double inox miniature bearing

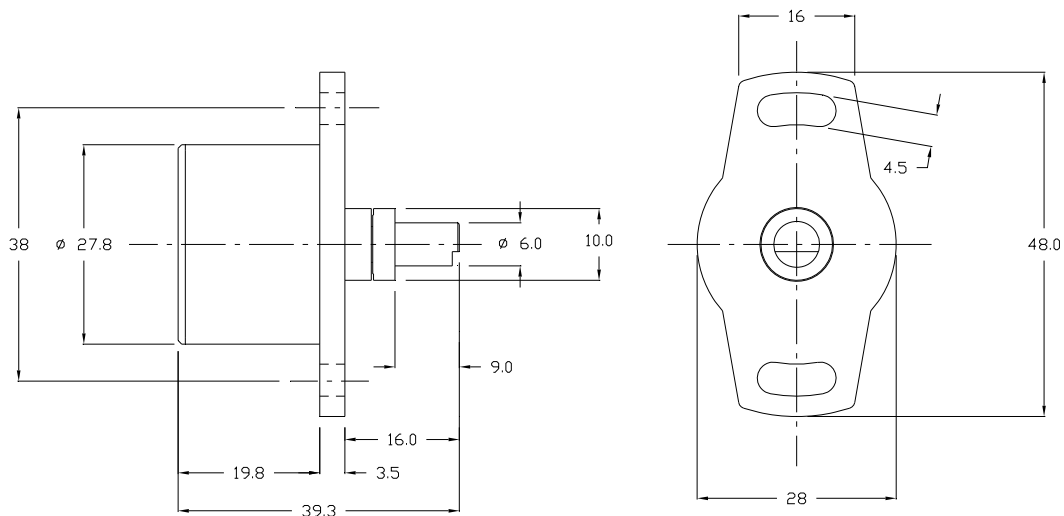
ORDERING SPECIFICATIONS



North Europe Office:

Nordic Transducer DK-9560 Hadsund Denmark web: www.ntt.dk e-mail: sensor@ntt.dk

TECHNICAL CHARACTERISTICS		
GENERAL		
Measuring Range	°	0 to 360
Mechanical angle	°	360 continuous
Linearity	% FS	0.5 % of the measuring range
Repeatability	% FS	0,03 % of the measuring range
Frequency response	Hz	> 250
ELECTRICAL DATA		
Power supply voltage	Volt	5 VDC± 10 % option 24...30 VDC
Current consumption	mA	20 max
Output Voltage	Volt	0.5....4.5 Volt (ratiometric) 0-10 Volt 4-20 mA
Dielectric strength to case	V	500 VDC 1 minute
Insulation Resistance to case	Mohm	>100 min at 50V
Ohmic load	Kohm	>10
ENVIRONMENTAL DATA		
Life time	Mil Cyc.	100 (mechanical)
Max permitted tensile shaft loading	Kg	4,5
Max permitted radial shaft loading	Kg	2,5
Torque	Ncm	0.05 (0,5 IP67 option)
Starting torque	Ncm	0.25
Operating temperature range	° C	-40 to +85
Storage temperature (no damage)	°C	-40 to +85
Temperature coefficient	ppm	100 ppm / K
Shock Resistance	MIL- STD 202 E 213 B	50 G
Vibration Resistance	MIL STD 202E 204 C	20 g (10 to 2000 Hertz)
Weight	g	50
Protection Class	IEC 529	IP 54 (IP 67 optional)



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