DSSRIN

Electromagnetic Induction Sensor NS-CPC

A maintenance-free sensor which can be used long term in harsh environments.

The NS-CPC sensor continuously detects the strip (steel sheet and metal plate) edge positions using electromagnetic induction and outputs any discrepancy in the strip center position as a deviation signal.

Because it uses electromagnetic induction, it is not affected by dust, steam, oil or other materials and its simple and robust structure allows it to be used reliably over long periods.

Features

Electromagnetic Induction: the sensor does not use light.

Not affected by adhesion of dust, steam, oil or other materials.

Simple design and durable structure.

NPA-100

There are no consumable parts.

No changes in detection performance with time.

Truly maintenance free.

Signal Circuit and Cable Specifications

The NS-CPC sensor consists of a preamplifier and sensor (including 2 transmission coils, 2 reception coils and a specialized cable). The sensor straddles and is positioned facing the strip. The high-frequency magnetic field emitted from the transmission coils generates induced voltage in the receiving coils. This induced voltage changes with the strip position so the variances in the voltage at the receiving coils can be used to calculate the strip center position.



Specifications

Sensor

Sensor Type Detection range	NS-130A 500 to 1300 mm
	NS-160A 500 to 1600 mm
	NS-190A 500 to 1900 mm
	NS-220A 500 to 2200 mm
Cable length	25 mMAX
Transmission reception interval	400 mm(fixed)
Detection range	±100 mm
Installation air temperature	0 to 60 °C
Case material	Hard vinyl chloride (PVC)

Drawing number

Sensor	NS-130A	MD0002520-EA
	NS-160A	MD0002530-EA
	NS-190A	MD0002540-EA
	NS-220A	MD0002550-EA
Preamplifier	NPA-100	MP0000370-EA
Wiring connection diagram		MD0002520-EC

Preamplifier

Preamplifier type	NPA-100
Output signal	Strip variance ±5 VDC / ±100 mm
Installation method	Attachment
Installation air temperature	0 to 40 °C
Mass	10 kg
Power supply	AC85 to 264 V 200 VA
Earthing	D-type earth

Common items

Detection type	Electromagnetic guidance type
Detection accuracy	Within ±5 mm
Responsiveness	5 Hz

Information in this catalog may change without notice. Please check with us when planning to use the equipment listed herein



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