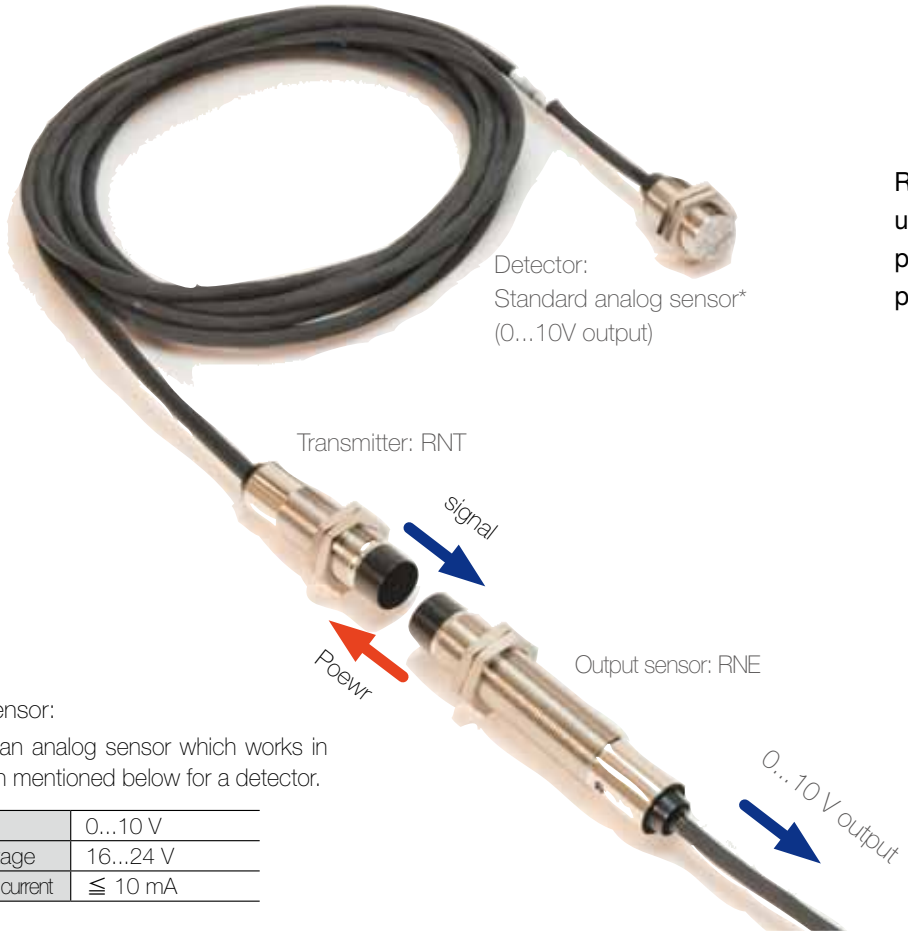
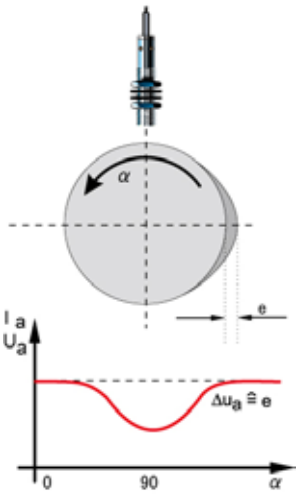
Transmit analog signal 0...10 V and power supply 20 V DC inductively

Analog signal transmission type for Analog sensor



RNT/RNE makes it possible to use an analog sensor on a moving part such as a palette to detect the position of the target.

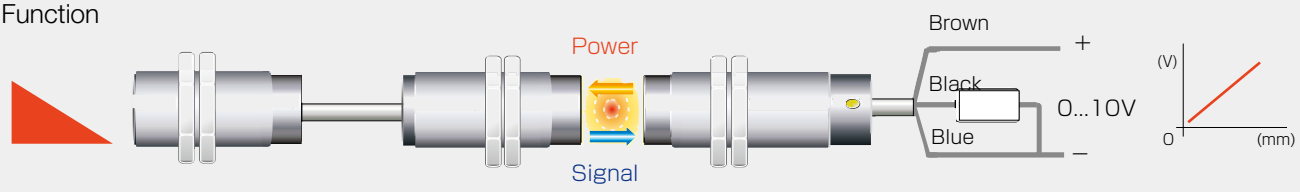


* Applicable sensor:

Please use an analog sensor which works in the condition mentioned below for a detector.

Output	0...10 V
Supply voltage	16...24 V
consumption current	≦ 10 mA

Function



Detector
Analog sensor
(0...10 V output)

Transmitter/RNT
supply power to an analog sensor and send the detected signal to RNE

Output sensor/RNT
Supply power to RNT and output of the detected signal to PLC.

Advantage of Remote system

The hard wiring is not necessary.

The trouble of the cable is settled.

Remote sensor transmitts

power and signal inductively.

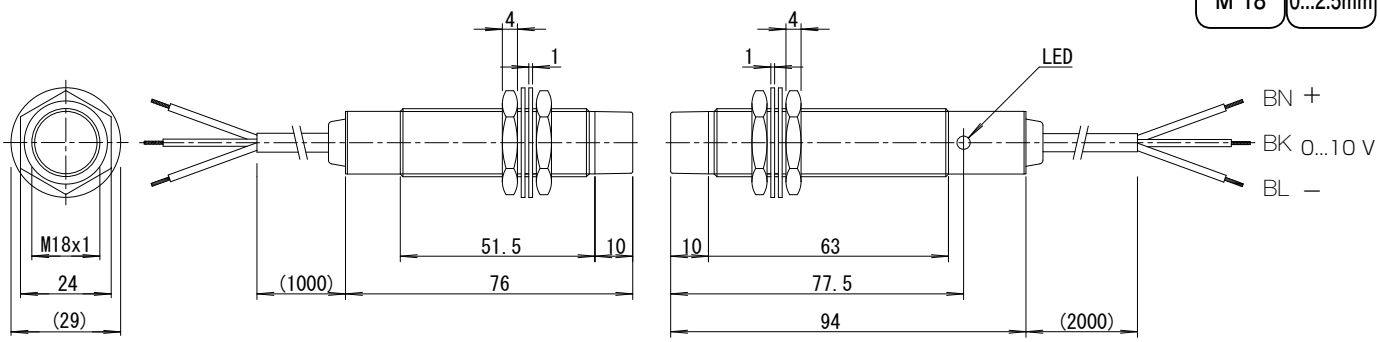
The Connector work for sensors is not necessary in jig exchange.

The work-time becomes shortened.

Analog Signal | 0...10V | Number of Signals 1

Analog sensor type

Size M 18 | Operating distance 0...2.5mm



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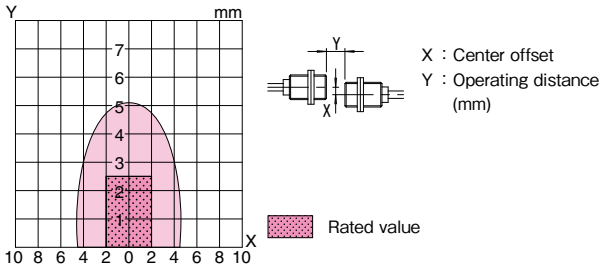
Transmitter		
Type code	Output 0...10V	RNT-1803-VS10-PU-01
Drive voltage		20 ± 4 V DC
Drive current		max.10 mA
Input signal		1
Operating distance		0...2.5 mm
Center offset		±2 mm
OperatingTemperature		0...+60 ℃
Protection class		IP 67
Cable		PUR / ϕ 5 , 3x0.34 mm^2
Material	Housing	Nickel plated brass
	Active surface	Nylon12
Applicable analog sensor		(1) Output voltage : 0...10 V (2) Operating voltage : 16...24 V DC (3) Current consumption : ≦ 10 mA

Output sensor		
Type code		RNE-1803A-PU-02
Operational voltage		24 V DC ± 5% (incl. ripple)
Current consumption		≦ 150 mA
Output signal		1
Output		0...10 V
Resolution		0.1 %
Frequency of operation		≦ 0.2 sec.
LED		IN ZONE
OperatingTemperature		0...+60 ℃
Protection class		IP 67
Cable		PUR / ϕ 5 , 3x0.34 mm^2
Material	Housing	Nickel plated brass
	Active surface	Nylon12
Note		

Typical Transmitting Diagram (Supply voltage ar 24 V / non-flush mount)

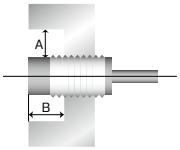
RNT-1803-VS10-PU-01 / RNE-1803A-PU-02



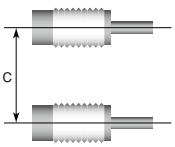
Mounting

In order to avoid influence of surrounding metal, or to avoid mutual influence between parallel-mounted sensors, keep the minimum free zone as described below.

Influence of surrounding metal



Mutual interference



Type code	A(mm)	B(mm)	C(mm)
RNT-1803-VS10-PU-_ _	20	15	110
RTE-1803A-PU-_ _			