

**The ring shape that can set up to an axis!**  
**Arrival of the 2 signals of thermo-**  
**couple transmission !!**

It is suitable for the temperature management of a fuser, agitator and an equipment that spins.

Two points of thermocouples is OK!  
 Type K : 0 ~ 1000°C  
 0 ~ 1000°C  
 Type J : 0 ~ 300°C

Possible to install on the axis!

Transmit the temperature during the spin as well.



**Because it is wireless, there is no problem in the blurring at the time of the turn!**

The turning equipment including a stirrer and the fuser have a big centrifugal force and may break a collector ring or a connector by the blurring at the time of the turn. Because it wirelessly transmits, there is no problem of the blurred in remote system. Of course, the thermometry is possible while turning and can also be continuously rotating to the same direction.

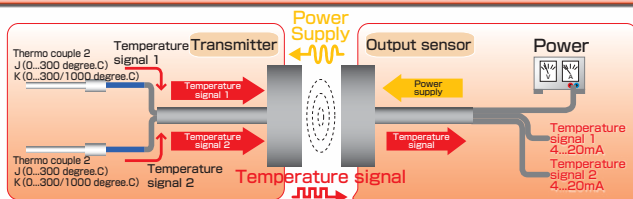
**Advantage of ring shape**

The temperature signal of the thermocouple transmits while spinning!

- Suitable for the substitution of the slip ring
- Because there is not a slide part, high-speed movement is possible!

Communications distance 15mm, axis gap +/-15mm\*  
 Two different kinds, inside diameter  $\phi$  50 and  $\phi$  100!  
 Please advice if it doesn't suit correctly.

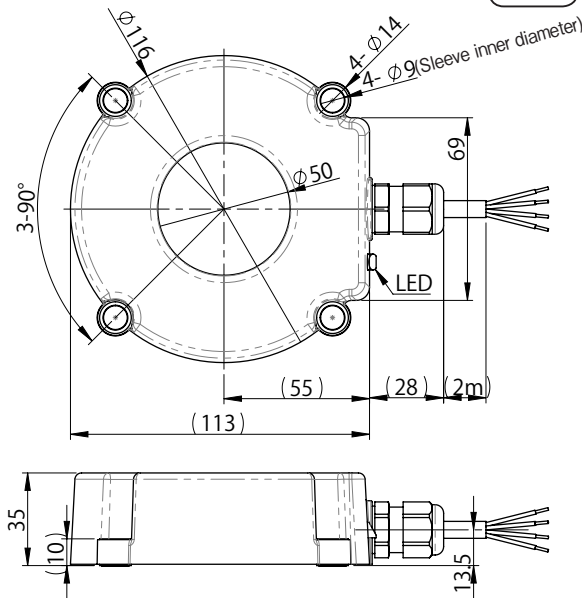
**Construction of the system**



The output sensor connects an input apparatus to a power supply and connects a temperature sensor to the transmission department. A transmitter is driven by wireless feeding when facing, and temperature signal of two points of thermocouples transmits to the output sensor. The output part signals temperature a current signal (4)...I output it in 20mA).

## Inside diameter $\phi$ 50 types

Operating distance  
0...8mm



The difference between output part and in the external form transmitter is presence and a cable of the LED. The other dimensions levels are the same.

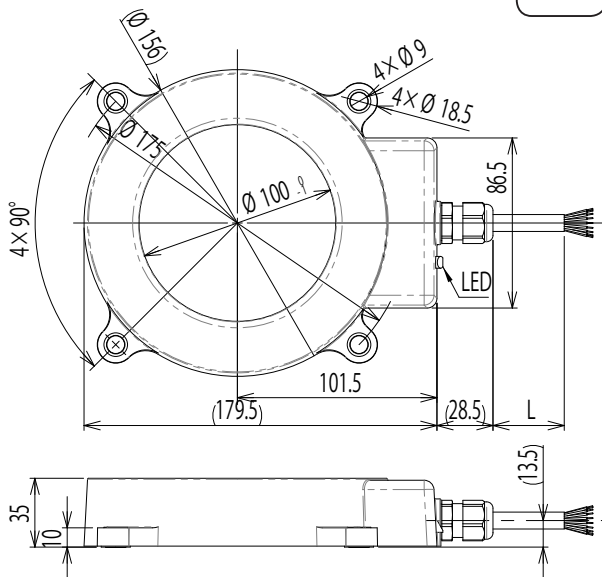
Output sensor	
Type code	RS02E-R01E-PU-02
Supply voltage	24V DC $\pm$ 5% (incl. ripple)
Current consumption	$\leq$ 150mA
LED (indication)	InZone (data valid)
Output	4...20mA x 2 signals
Load current	$\leq$ 400 $\Omega$
Resolution	0.04% Full-scale range
Response delay	$\leq$ 0.5 sec.
Cable	PUR / $\phi$ 5 , 4x0.25mm <sup>2</sup>

Transmitter				
Type code	Thermocouple	RS02T-R01-K1000	RS02T-R01-K300	RS02T-R01-J300
No. of Input signals	2 signals			
Operating distance	0...8mm			
Center offset	$\pm$ 8mm			
Applicable sensor	JIS Thermocouple K		JIS Thermocouple J	
Measuring range	0...1000°C	0...300°C	0...300°C	
Compensated cold junction	$\pm$ 0.5°C			
Cable	Compensating lead wire(JIS) 0.9mm x 2 All heat-resistant vinyl (90°C)			

Common specifications	
Operating temperature	0...+50°C
Remark	This product is the CE non-acquisition

## Inside diameter $\phi$ 100 types

Operating distance  
0...15mm



The difference between output part and in the external form transmitter is presence and a cable of the LED. The other dimensions levels are the same.

Output sensor	
Type code	RS02E-R03E-PU-02
Supply voltage	24V DC $\pm$ 5% (incl. ripple)
Current consumption	$\leq$ 150mA
LED (indication)	InZone (data valid)
Output	4...20mA x 2 signals
Load current	$\leq$ 400 $\Omega$
Resolution	0.04% Full-scale range
Response delay	$\leq$ 0.5 sec.
Cable	PUR / $\phi$ 5 , 4x0.25mm <sup>2</sup>

Transmitter		
Type code	Thermocouple	RS02T-R03-K300
No. of Input signals	2 signals	
Operating distance	0.. 9mm (with metal shaft)	0..15mm (No metal shaft)
Center offset	0.. 8mm (with metal shaft)	0..15mm (No metal shaft)
Applicable sensor	JIS Thermocouple K	
Measuring range	0...300°C	
Compensated cold junction	$\pm$ 0.5°C	
Cable	Compensating lead wire(JIS) 0.9mm x 2 All heat-resistant vinyl (90°C)	

Common specifications	
Operating temperature	0...+50°C
Remark	This product is the CE non-acquisition

### Installation notes

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.

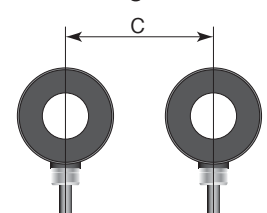
Type code	A	B	C
RS02T-R01-K1000, RS02T-R01-K300, RS02T-R01-J300	100	35	300
RS02E-R01E-PU-__			
RS02T-R03-K300	200	35	400
RS02E-R01E-PU-__			

(mm)

Surround Metal



Parallel Setting



Wireless Power Supply by  
**B & PLUS K.K.**

Mail : b-plus-usa@b-plus-kk.com

Web : http://www.b-plus-kk.com

\* Contents is subject to change without notice.