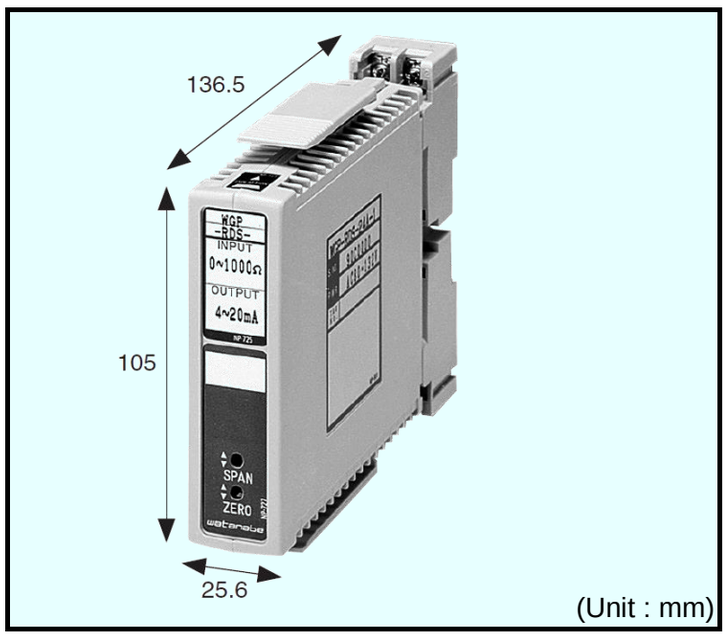
Resistance to DC Converter

WGP-RDS



This slim-type plug-in signal converter converts a signal detected as a change in the resistance value to a DC voltage or current signal. Measurement of float-type level sensor arm position / Alarm system for sharp change in resistance value / Enables measurement of low resistance and high resistance.

★ Measurement of float-type level sensor arm position
★ Alarm system for sharp change in resistance value
★ Enables measurement of low resistance and high resistance

Features

★ Wide Zero & span adjustment range
★ Both AC and DC power supply are available
★ Accuracy at 0.1% FS, Response time 25ms
★ Easy to maintain by plug-in structure

Ordering code

WGP-RDS - □□ □ - □

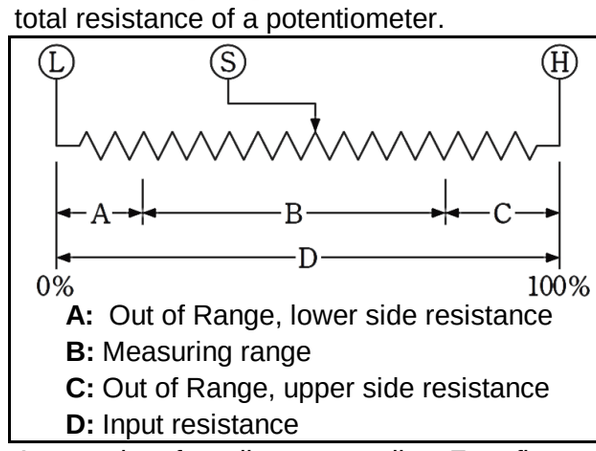
Code	Rated Input	Span Ad. Range	Zero Ad. Range
20	0 to 50Ω	25 to 50Ω	0 to 25Ω
21	0 to 100Ω	50 to 100Ω	0 to 50Ω
22	0 to 200Ω	100 to 200Ω	0 to 100Ω
23	0 to 500Ω	250 to 500Ω	0 to 250Ω
24	0 to 1kΩ	0.5 to 1kΩ	0 to 500Ω
25	0 to 2kΩ	1 to 2kΩ	0 to 1kΩ
26	0 to 5kΩ	2.5 to 5kΩ	0 to 2.5kΩ
27	0 to 10kΩ	5 to 10kΩ	0 to 5kΩ
99	Contact us for other than the above		

Code	Output	Allowable Load
A	4 to 20mAdc	750Ω or less
B	1 to 5mAdc	3kΩ or less
C	2 to 10mAdc	1.5kΩ or less
D	0 to 1mAdc	15kΩ or less
E	0 to 10mAdc	1.5kΩ or less
F	0 to 16mAdc	937Ω or less
G	0 to 20mAdc	750Ω or less
H	1 to 5Vdc	2.5kΩ or more
J	0 to 10mVdc	10kΩ or more
K	0 to 100mVdc	100kΩ or more
L	0 to 1Vdc	500Ω or more
N	0 to 5Vdc	2.5kΩ or more
P	0 to 10Vdc	5kΩ or more
R	±10Vdc	5kΩ or more
S	Contact us for other than the above Current output 20mA or less Voltage output 10V or less	

Code	Power Supply
1	80 to 132Vac 50/60Hz Rated voltage : 100 to 120V ±10%
2	170 to 264Vac 50/60Hz Rated voltage : 200 to 240V ±10%
3	24Vdc ±10%
7	48Vdc ±10%
8	110Vdc ±10%

★ Note: Zero & Span Adjustment

The measuring range must be 50% of total resistance of a potentiometer.



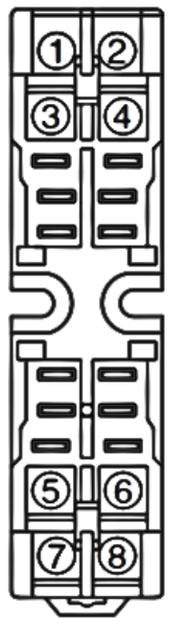
A: Out of Range, lower side resistance
B: Measuring range
C: Out of Range, upper side resistance
D: Input resistance

A procedure for adjustment, adjust Zero first, and then adjust the Span.

Specifications

Accuracy	±0.1% FS (at 23°C)
Response time	Approx. 25ms (0 to 90%)
Allowable load resistance	Current output 15V or less of voltage drop between output Voltage output Load current 2mA or less For 1V FS or less of output the current is 1μA or less
Span adjustment	50 to 100% of rated input
Zero adjustment	0 to 50% of span
Operating temperature	-5 to +55°C
Operating relative humidity	90% or less (non-condensing)
Temperature coefficient	±0.015% FS of span per °C
Isolation	Between input, output, and power supply
Insulation resistance	100MΩ or more with a 500Vdc megger Between input, output, and power supply terminal
Dielectric strength	2000Vac for 1 minute
Power consumption	Approx. 4.5VA (AC), Approx. 60mA (24Vdc)
Power supply variation	±0.1% FS (within the range of rated voltage)
Dimensions	105(H) X 25.6(W) X 136.5(D)mm
Weight	Approx. 200g
Structure	Plug-in
Connection	M3.5 SEMS screw part of the base socket
Material of terminal screw	Chromated iron
Case color and material	Ivory, heat-resistant ABS resin(94V-0)
Mounting	DIN rail or wall surface

Terminal connections



No	Signal	Description
1	INPUT(+)	Input
2	INPUT(-)	
3	NC	No connection
4	NC	No connection
5	OUTPUT(+)	Output
6	OUTPUT(-)	
7	POWER U(+)	Power Supply
8	POWER V(-)	

∗ **Specification is subject to change without notice**