

This is a plug-in converter that receives two analog input signals, and delivers a signal that is proportional to their mean value.

It provides a convenient means of monitoring a state based on the average of two changing signals.

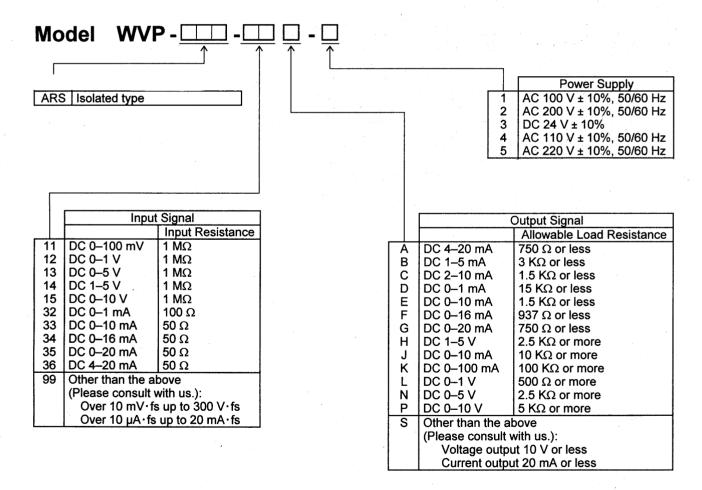
The ARS model has its input, output; and power supply isolated from each other; however, its input signals are not mutually isolated.

#### **Features**

- Highly reliable design that is hardly affected by signal source resistance or receiving resistance.
- High-speed response, with a 25 msec response time.
- The ABS model has a dielectric strength of 2,000 VAC between its input and output signals.<sup>1</sup>
- Plug-in design facilitates system installation and maintenance.

# **Major Applications**

- Measurement of average flow rate.
- Monitoring of average temperature.



#### **Specification**

Input signal:

DC voltage, DC current

**Output signal:** 

DC voltage, DC current

Number of input signals: Number of output signals: 2

Accuracy:

Allowable load resistance:

±0.1% · fs (at 23°C) For voltage output, use the unit with a load current of 2 mA or less (1 µA for an

output below 1 V·fs).

For current output, use the unit with a voltage drop of 15 V or less between

output terminals.

Response time:

25 msec (time needed to reach 90% of the final value)

Zero & span adjustment:

±20% · fs each (multi-turn trimmer)

Operating temperature and humidity: -5 to +55°C, 90% RH or less (without condensation)

Influence of ambient temperature:

±0.2% · fs/10°C

Insulation resistance:

100  $\mbox{M}\Omega$  or more with a 500 VDC megger between the input/output terminal and

power supply terminal, and between the input and output terminals (isolated

type)

Dielectric strength:

2,000 VAC for 1 minute between the input and output terminals (isolated type),

and between the input/output terminal and power supply terminal

Power consumption:

Approx. 4 VA (AC), approx. 120 mA (DC)

### **Operation Expression**

 $C = \frac{(A + B)}{2}$ 

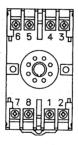
Where

C = Output signal

A = Input signal

B = Input signal

## **Explanation of Terminals**



No.	Symbol		Description
1	OUTPUT	+	Output signal
2	OUTPUT	-	Output signal
3	INPUT (A)	+	Input signal (A)
4		-	
5	INPUT (B)	+	Input signal (B)
6		-	
7	POWER	U (+)	Power supply
8		V (-)	