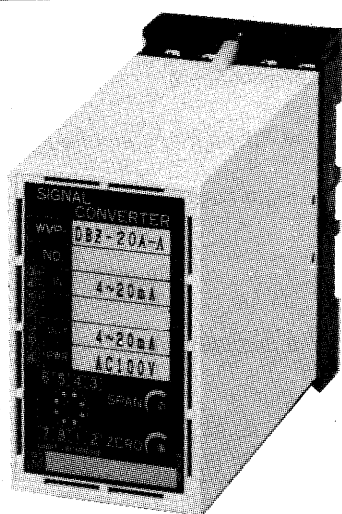


# ISOLATED DISTRIBUTOR AND ISOLATED DISTRIBUTOR WITH EXTRACTION OF SQUARE ROOT EXTRACTOR WVP-DBZ/DBT



50 (W) x 96 (H) x 125.5 (D) mm Approx. 400 g

These plug-in signal distributors can be employed in combination with a 2-wire transmitter. They not only supply the prescribed DC power to the transmitter in the field through signal lines, but also convert 4 mA to 20 mA standardized signals into signals suitable for output to supervisory and control equipment. They are also provided with isolators to isolate the input and output signals from each other.

Type DBRZ and type DBRT with square-root extractors are also available.

## Features

- Compact, plug-in design for easy handling
- Signals in excess of approximately 25 mA are not delivered, even when the output is short-circuited.

WVP - ☐ - ☐ ☐ - ☐

DBZ	Isolated distributor
DBT	Isolated distributor compatible with smart transmitter

Output Signal		
		Allowable Load Resistance
A	DC 4-20 mA	750 $\Omega$ or less
B	DC 1-5 mA	3 K $\Omega$ or less
C	DC 2-10mA	1.5 K $\Omega$ or less
D	DC 0-1 mA	15 K $\Omega$ or less
E	DC 0-10 mA	1.5 K $\Omega$ or less
F	DC 0-16 mA	937 $\Omega$ or less
G	DC 0-20 mA	750 $\Omega$ or less
H	DC 1-5 V	2.5 K $\Omega$ or more
J	DC 0-10 mV	10 K $\Omega$ or more
K	DC 0-100 mV	100 K $\Omega$ or more
L	DC 0-1 V	500 $\Omega$ or more
N	DC 0-5 V	2.5 K $\Omega$ or more
P	DC 0-10 V	5 K $\Omega$ or more

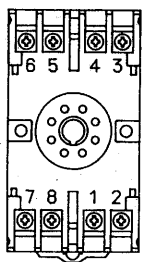
Supply Voltage		
20	AC 100 V $\pm$ 10%,	50/60 Hz
21	AC 200 V $\pm$ 10%,	50/60 Hz
22	AC 110 V $\pm$ 10%,	50/60 Hz
23	AC 220 V $\pm$ 10%,	50/60 Hz

Transmitter Power Supply	
A	DC 24 V
C	DC 30 V

## Specification

Transmitter signal:	4 to 20 mA, DC (input resistance 250 $\Omega$ )
Output signal:	Various DC signals
Accuracy:	$\pm 0.1\% \cdot fs$ (at 23°C)
Response time:	25 msec (time to reach 90% of the final value)
Allowable load resistance:	For 1 to 5 VDC output, 2.5 K $\Omega$ or more For 4 to 20 mA, DC, output, 750 $\Omega$ or less
Zero & span adjustment:	$\pm 20\% \cdot fs$ each (multi-turn trimmer)
Output voltage:	24 VDC $\pm 1$ V
Influence of load variation:	Variation in the output voltage is less than 2%
Output current:	Max. 22 mA for DBZ, and 40 mA for DBT (ripple less than 300 mVp-p)
Operating temperature and humidity:	-5 to +55°C, 90% RH or less (without condensation)
Influence of ambient temperature:	$\pm 0.2\% \cdot fs/10^\circ C$
Insulation resistance:	100 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
Dielectric strength:	2,000 VAC for 1 minute between the input/output terminal and power supply terminal, and between the input and output terminals
Power consumption:	Approx. 4 VA (AC)
Influence of supply voltage:	$\pm 0.1\% \cdot fs/\text{rated voltage} \pm 10\%$
Output shutdown:	This function forcibly cuts off the output when the output falls below 10% of the rating.

## Explanation of Terminals



No.	Symbol	Description
1	OUTPUT	+
2		-
3	TRANSMITTER	-
6		+
4	SHORT	
5		
7	POWER	U (+)
8		V (-)