

This compact plug-in signal converter accepts signal with square-law characteristics and provides optically isolated signal output, corresponding to the square root. It amplifies and converts the selected DC input to the selected DC output. It can use for extraction of square root of differential pressure type / open-channel flowmeter (linearization).

Features

- ★ Dielectric strength of 2000Vac between input, output and power supply
- ★ Both AC and DC power supply are available
- ★ Accuracy at 0.1% FS, Response time 100ms
- ★ Easy to maintain by plug-in structure
- ★ CE approved, RoHS compliant

Ordering code

WSP- **RS** - [] - [] - []

Code	Input	Input Resistance
10	0 to 10mVdc	1MΩ
11	0 to 100mVdc	1MΩ
12	0 to 1Vdc	1MΩ
13	0 to 5Vdc	1MΩ
14	1 to 5Vdc	1MΩ
15	0 to 10Vdc	1MΩ
16	0 to 50mVdc	1MΩ
17	0 to 60mVdc	1MΩ
32	0 to 1mAdc	100Ω
33	0 to 10mAdc	50Ω
34	0 to 16mAdc	50Ω
35	0 to 20mAdc	50Ω
36	4 to 20mAdc	50Ω
99 * 1	Contact us for other than the above Full Scale Range: Current input 1mA to 20mA Voltage input 10mV to 10V	

Code	Output	Allowable Load
A	4 to 20mAdc	750Ω or less
D	0 to 1mAdc Accuracy at ±1.6%	15kΩ or less
G	0 to 20mAdc	750Ω or less
H	1 to 5Vdc	1kΩ or more
L	0 to 1Vdc	200Ω or more
N	0 to 5Vdc	1kΩ or more
P	0 to 10Vdc	2kΩ or more
S * 1	Contact us for other than the above Current output 20mA or less Voltage output 10V or less	

Code	Test Report
X	None
T	With Test report

Code	Power Supply
A	100 to 240Vac ±10% 50/60Hz
D	24Vdc ±10%
8	100 to 120Vdc ±10%

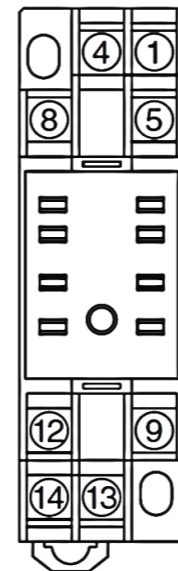
Applicable Directive (89/336/EEC)
EMI EN61000-6-4
EMS EN61000-6-2
Low voltage directive (73/23/EEC)
EN61010-1

* 1...CE approval do not adapt input range code 99 and output range code S.

Specifications

Accuracy	±0.1% FS (at 23°C) * Accuracy differs on Code '99' and 'S', depending on the range. * Out of warranty when the input is 1% or less.
Response time	Approx. 100ms (0 to 90%)
Allowable load resistance	Current output 15V or less of voltage drop between output terminal Voltage output Load current 2mA or less For 1V FS or less of output the current is 1mA or less
Zero & span adjustment	±10% FS (1 turn trimmer)
Output shutdown function	A function to output 0 forcibly, when the output is below 10% of rated value. Default : 10% (Able to change 0 to 20% when order)
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	For code 'A' : Approx. 5.5VA (100 to 240Vac ±10%) For code 'A' : Approx. 100mA (24Vdc ±10%) For code '8' : Approx. 25mA (100 to 120Vdc ±10%)
Power supply variation	±0.1% FS (within the range of rated voltage)
Dimensions	84(H) X 23(W) X 106.5(D)mm
Weight	Approx. 150g
Structure	Plug-in
Connection	M3 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
4	INPUT(-)	
5	NC	No connection
8	NC	
9	OUTPUT(+)	Output
12	OUTPUT(-)	
13	POWER U(+)	Power Supply
14	POWER V(-)	

* Specification is subject to change without notice