



This compact plug-in type converter (isolator) provides signal output which is mutually isolated between input, output and power-supply. It amplifies and converts various kinds of signal with isolation to use in the integrated instrumental control system. It is highly effective as noise countermeasures.

## Features

- ★ Fine zero & span adjustment by 15 turn trimmer
- ★ Zero & span adjustment  $\pm 10\%$  full scale
- ★ Safe design by dielectric strength of 3000Vac
- ★ Compatible with 30Vdc power supply voltage
- ★ 5 years warranty, long life
- ★ CE approved

## Ordering code

WSPF- **IS** - [ ] - [ ] - [ ]

Code	Input	Input Resistance
14	1 to 5Vdc	1M $\Omega$
15	0 to 10Vdc	1M $\Omega$
36	4 to 20mAdc	50 $\Omega$

Code	Output	Allowable Load Resistance
A	4 to 20mAdc	750 $\Omega$ or less
H	1 to 5Vdc	1k $\Omega$ or more
P	0 to 10Vdc	2k $\Omega$ or more

Code	Power Supply
A	100 to 240Vac $\pm 10\%$ 50/60Hz
D	24Vdc $\pm 10\%$
*1	10.8 to 30Vdc
8	110Vdc $\pm 10\%$

Code	Test Report
X	None
T	With Test report

\* 1...CE approval do not adapt when power supply is 10.8Vdc to 30Vdc.

## Specifications

<b>Input signal</b>	DC current / voltage
<b>Output signal</b>	DC current / voltage
<b>Accuracy</b>	$\pm 0.1\%$ FS (at 23°C)
<b>Response time</b>	Approx. 25ms ( 0 to 90%)
<b>Allowable load</b>	Current output 15V or less of voltage drop between output terminal Voltage output Load current 5mA or less *1 $\mu$ A or less if the output is less than 1V FS
<b>Zero &amp; span adjustment</b>	$\pm 10\%$ FS (15 turn trimmer)
<b>Operating temperature range</b>	-5 to +55°C
<b>Operating relative humidity</b>	90% or less (Non-condensing)
<b>Storage temperature range</b>	-10 to +60°C
<b>Temperature coefficient</b>	$\pm 0.015\%$ FS of span per °C
<b>Isolation</b>	Between input, output, and power supply
<b>Insulation resistance</b>	100M $\Omega$ or more with 500Vdc megger Between input, output, and power supply terminal
<b>Dielectric strength</b>	3000Vac for 1 minute between power supply and input/output terminal, 2000Vac for 1 minute between input and output terminal
<b>Power consumption</b>	Approx. 4.5VA (AC), Approx. 60mA (DC)
<b>Power supply variation</b>	$\pm 0.1\%$ FS (within the range of rated voltage)
<b>Dimensions</b>	84(H) X 23(W) X 106.5(D)mm
<b>Weight</b>	Approx. 130g
<b>Structure</b>	Plug-in (Body part and socket part)
<b>Connection</b>	M3 SEMS screw part of the base socket (Tightening torque 0.6N·m)
<b>Mounting</b>	DIN rail or wall surface
<b>Case color and material</b>	Ivory, ABS resin, flame retardant grade UL94V-0
<b>EMC directive</b>	EN61326-1, EN61010-1, EN50581 Installation category : II, Pollution degree : 2
<b>Rated altitude</b>	2000m or less

## Terminal connections



No	Symbol	Description
1	+	Input
4	-	Input
5	NC	No connection
8	NC	No connection
9	+	Output
12	-	Output
13	U(+)	Power Supply
14	V(-)	

\* Specification is subject to change without notice



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## Ordering code

WSPF- **DS** - **□□** - **□□** - **□□**

Code	Input	Input Resistance
11	0 to 100mVdc	1M $\Omega$
12	0 to 1Vdc	1M $\Omega$
13	0 to 5Vdc	1M $\Omega$
14	1 to 5Vdc	1M $\Omega$
15	0 to 10Vdc	1M $\Omega$
24	$\pm 5$ Vdc	1M $\Omega$
25	$\pm 10$ Vdc	1M $\Omega$
32	0 to 1mAdc	100 $\Omega$
33	0 to 10mAdc	50 $\Omega$
35	0 to 20mAdc	50 $\Omega$
36	4 to 20mAdc	50 $\Omega$
40	$\pm 1$ mAdc	100 $\Omega$
41	$\pm 20$ mAdc	50 $\Omega$
99	Contact us for other than the above	
*1	Current input : $\pm 20$ mA, Span : 1mA to 20mA Voltage input : $\pm 300$ V, Span : 100mV to 300V	

Code	Output	Allowable Load Resistance
A	4 to 20mAdc	750 $\Omega$ or less
B	1 to 5mAdc	3k $\Omega$ or less
D	0 to 1mAdc	15k $\Omega$ or less
E	0 to 10mAdc	1.5k $\Omega$ or less
G	0 to 20mAdc	750 $\Omega$ or less
H	1 to 5Vdc	1k $\Omega$ or more
J	0 to 10mVdc	10k $\Omega$ or more
K	0 to 100mVdc	100k $\Omega$ or more
L	0 to 1Vdc	1k $\Omega$ or more
N	0 to 5Vdc	1k $\Omega$ or more
P	0 to 10Vdc	2k $\Omega$ or more
R	$\pm 10$ Vdc	2k $\Omega$ or more
S	Contact us for other than the above	
*1	Current output 20mA or less Voltage output 10V or less	

Code	Test Report
X	None
T	With Test report

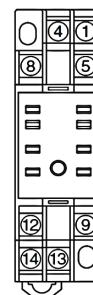
Code	Power Supply
A	100 to 240Vac $\pm 10\%$ 50/60Hz
D	24Vdc $\pm 10\%$
*2	10.8 to 30Vdc
8	110Vdc $\pm 10\%$

- \*1...CE approval do not adapt input range code 99 and output range code S.
- \*2...CE approval do not adapt when power supply is 10.8Vdc to 30Vdc.

## Specifications

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