

Space-saving Dual Output Signal Conditioners *Mini-MW Series*

P/I TRANSDUCER

MODEL W2PV

MODEL & SUFFIX CODE SELECTION

MODEL _____ **W2PV-C** □ □ □ □ □ □

PNEUMATIC CONNECTION _____

C : 6 mm dia. (.24")

INPUT _____

1S : 19.6 – 98.1 kPa
2S : 20 – 100 kPa
3S : 20.7 – 103.4 kPa
1 : 0.2 – 1.0 kgf/cm²
2 : 0.2 – 1.0 bar
3 : 3 – 15 psig

OUTPUT 1 _____

Current	Voltage
A : 4 – 20mA DC	1 : 0 – 10mV DC
B : 2 – 10mA DC	2 : 0 – 100mV DC
C : 1 – 5mA DC	3 : 0 – 1V DC
D : 0 – 20mA DC	4 : 0 – 10V DC
E : 0 – 16mA DC	5 : 0 – 5V DC
F : 0 – 10mA DC	6 : 1 – 5V DC
G : 0 – 1mA DC	0 : Specify voltage

Z : Specify current

OUTPUT 2 _____

Same range availability as Output 1

Y : None

POWER INPUT _____

AC Power	DC Power
M2 : 100 – 240V AC	R : 24V DC
	R2 : 11 – 27V DC *1
	P : 110V DC

*1: Select 'N' for 'Standards & Approvals' code.

STANDARDS & APPROVALS _____

/N : Without CE or UL
/CE: CE marking
/UL: UL approval (CE marking)

ORDERING INFORMATION

Specify code number and variables. When the user requires a current and a voltage output, specify the current to be the Output 1 which allows a greater load.

- **Code number** (e.g. W2PV-C2SAA-M2/CE)
- **Special output ranges** (For codes Z & 0)

GENERAL SPECIFICATIONS

Construction: plug-in

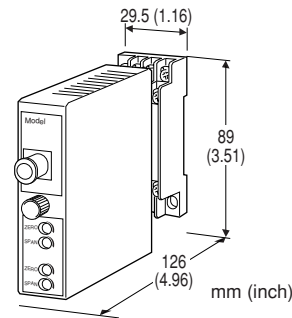
Connection

Output & power input: M3 screw terminals (torque 0.8 N·m)

Pneumatic: 6 mm dia (.24") tube

Housing material: flame-resistant resin (black)

Isolation: output 1 to output 2 to power



Functions & Features

- Converting a standard pneumatic signal
- Two independent output ranges
- Universal power input
- High-density mounting
- CE marking
- UL approval

Typical Applications

- Converting a pneumatic system into a 4 – 20mA for indicating and controlling in DCS system

Overrange output: approx. -10 – +120% at 1 – 5V

Front adjustments: zero and span; ±5%

INPUT & OUTPUT

■ **INPUT:** 19.6 – 98.1 kPa, 0.2 – 1.0 kgf/cm²
 20 – 100 kPa, 0.2 – 1.0 bar
 20.7 – 103.4 kPa, 3 – 15 psig

■ **OUTPUTS (two)**

• **DC Current:** 0 – 20mA DC

Minimum span: 1mA

Zero suppression/elevation: max. 1.5 times span

Load resistance: output drive 15V max. for Output 1; 7V max. for Output 2

Output	Ch.1 L.R.	Ch.2 L.R.
4 – 20mA	: 750	350 (Ω max.)
2 – 10mA	: 1500	700
1 – 5mA	: 3000	1400
0 – 20mA	: 750	350
0 – 16mA	: 900	430
0 – 10mA	: 1500	700
0 – 1mA	: 15k	7000

• **DC Voltage:** 0 – 12V DC (up to 10V for Out. 2)

Minimum span: 5mV

Zero suppression/elevation: max. 1.5 times span

Load resistance: output drive 1mA maximum at ≥0.5V

Output	Load Resistance
0 – 10mV	: 10k (Ω minimum)
0 – 100mV	: 100k
0 – 1V	: 1000
0 – 10V	: 10k
0 – 5V	: 5000
1 – 5V	: 5000

INSTALLATION

Power input

AC: operational voltage range 85 – 264V (90 – 264V for UL);
47 – 66 Hz; approx. 4VA at 100V
approx. 5VA at 200V
approx. 6VA at 264V

DC: operational voltage range for R: 24V ±10%, R2: 11 – 27V, or P: 85 – 150V (110V ±10% for UL);
ripple 10% p-p max.; approx. 3W

Operating temperature: -5 to +55°C (23 to 131°F)
Operating humidity: 30 to 90% RH (non-condensing)
Mounting: surface or DIN rail
Dimensions: W29.5×H89×D126 mm (1.16"×3.51"×4.96")
Weight: 200 g (0.44 lbs)

PERFORMANCE in percentage of span

Accuracy: ±0.3%
Temp. coefficient: ±0.03%/°C (±0.02%/°F)
Response time: ≤0.5 seconds (0 – 90%)
Permissible overrange: 196 kPa (2.0 kgf/cm², 1.96 bar, 28 psig)

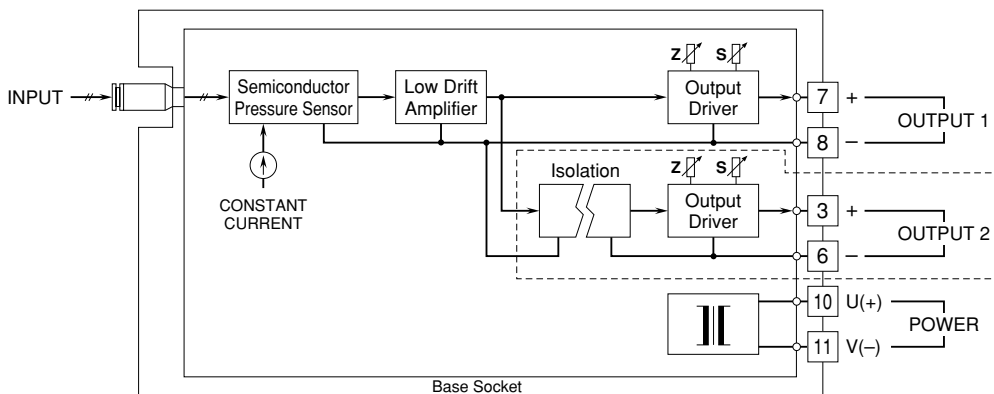
Line voltage effect: ±0.1% over voltage range
Insulation resistance: ≥100MΩ with 500V DC
Dielectric strength: 2000V AC @1 minute (output 1 to output 2 to power to ground)

STANDARDS & APPROVALS

CE conformity: EMC Directive (89/336/EEC)
EMI EN61000-6-4
EMS EN61000-6-2
Low Voltage Directive (73/23/EEC)
EN61010-1
Installation category II
Pollution degree 2
Max. operating voltage 300V
Output 1 or output 2 to power – Reinforced insulation
Output 1 to output 2 – Basic insulation

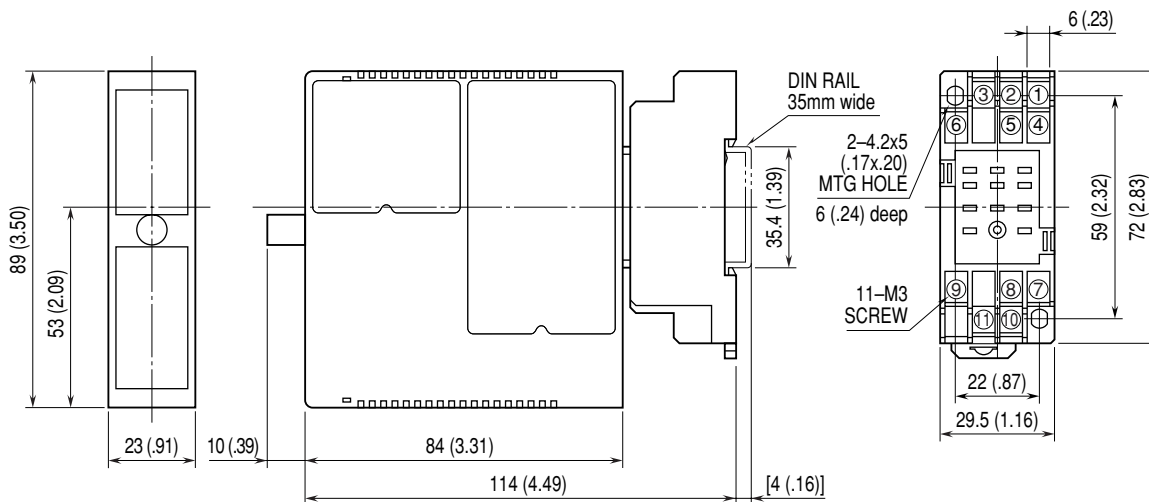
Approval: UL/C-UL nonincendive
Class I, Division 2, Groups A, B, C, and D (UL 1604, CAN/CSA-C22.2 No.213)
UL/C-UL general safety requirements (UL 3111-1, CAN/CSA-C22.2 No.1010-1)

SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



Remark: The section enclosed by broken line is only with 2nd output option.

EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENT mm (inch)



•When mounting, no extra space is needed between units.

Specifications subject to change without notice.