

Super-mini Signal Conditioners *Mini-M Series*

P/I TRANSDUCER

MODEL M2PV

MODEL & SUFFIX CODE SELECTION

MODEL _____ **M2PV-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 _____

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	

POWER INPUT _____

AC Power	DC Power
M : 85 – 264V AC *1	R : 24V DC
M2 : 100 – 240V AC	R2 : 11 – 27V DC *1
	P : 110V DC

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

STANDARDS & APPROVALS _____

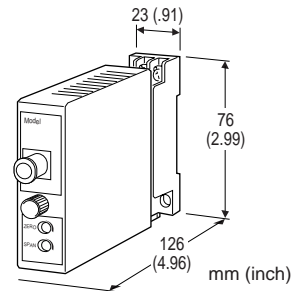
/N : Without CE or UL
/CE : CE marking
/UL : UL approval (CE marking)

ORDERING INFORMATION

Specify code number and variables.
 • **Code number** (e.g. M2PV-C2SA-M2/CE)
 • **Special output range** (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 to power
Overrange output: approx. -10 – +120% at 1 – 5V
Front adjustments: zero and span; ±5%



Functions & Features

- Converting a standard pneumatic signal into a proportional DC output
- 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

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

■ **OUTPUT**

- **DC Current:** 0 – 20mA DC
- Minimum span:** 1mA
- Zero suppression/elevation:** max. 1.5 times span
- Load resistance:** output drive 15V maximum

Output	Load Resistance
4 – 20mA	: 750 (Ω maximum)
2 – 10mA	: 1500
1 – 5mA	: 3000
0 – 20mA	: 750
0 – 16mA	: 900
0 – 10mA	: 1500
0 – 1mA	: 15k

- **DC Voltage:** 0 – 12V DC
- Minimum span:** 5mV
- Zero suppression/elevation:** max. 1.5 times span
- Load resistance:** output drive 1mA maximum at ≥1V

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. 3VA at 100V
approx. 4VA at 200V
approx. 5VA 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: W23×H76×D126 mm (0.91"×2.99"×4.96")

Weight: 150 g (0.33 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 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 to power – Reinforced insulation

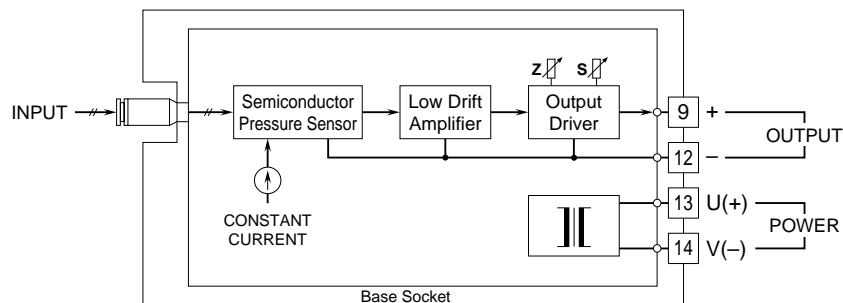
Approval: UL/C-UL nonincendive

Class I, Division 2, Groups A, B, C and D
(UL 1604, CAN/CSA-C22.2 No.213)

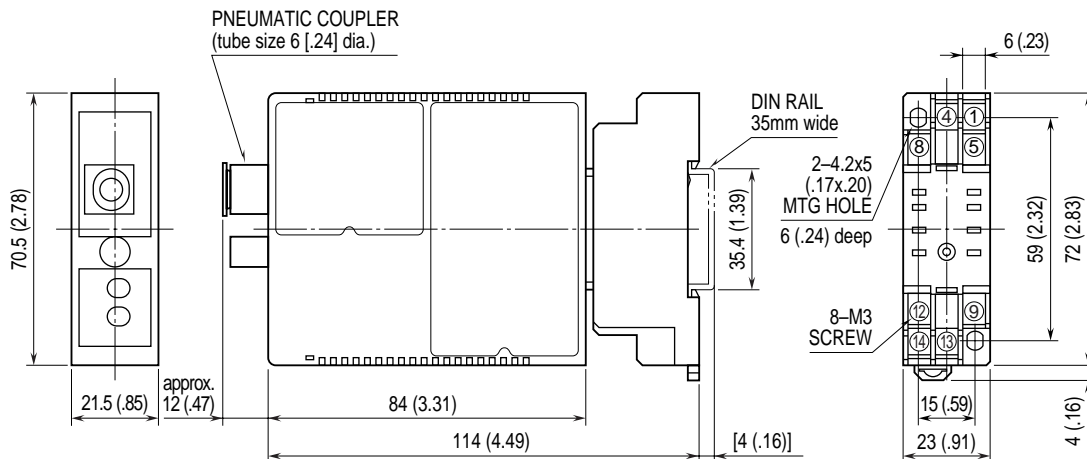
UL/C-UL general safety requirements

(UL 3111-1, CAN/CSA-C22.2 No.1010-1)

SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENT mm (inch)



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

Specifications subject to change without notice.