

Rack-mounted DCS Signal Conditioners 18-RACK

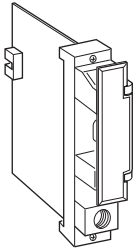
/A2: 0.2 – 1.0 bar

/A3: 3 – 15 psig

P/I TRANSDUCER

Functions & Features

- Converting a standard pneumatic signal into two proportional DC outputs
- Second channel output available at the front terminals and at the Standard Rack connector



MODEL: 18PV-[1]66-R[2]

ORDERING INFORMATION

- Code number: 18PV-[1]66-R[2]

Specify a code from below for each of [1] and [2].
(e.g. 18PV-266-R/A2S)

[1] PNEUMATIC CONNECTION

2: Rc 1/4"

7: 1/4" NPT fitting

OUTPUT 1

Voltage

6: 1 – 5 V DC (Load resistance 2000 Ω min.)

OUTPUT 2

Voltage

6: 1 – 5 V DC (Load resistance 2000 Ω min.)

POWER INPUT

DC Power

R: 24 V DC

(Operational voltage range 24 V ±10 %, ripple 10 % p-p max.)

[2] OPTIONS

Input

blank: 0.2 – 1.0 kgf/cm²

/A1S: 19.6 – 98.1 kPa

/A2S: 20 – 100 kPa

/A3S: 20.7 – 103.4 kPa

GENERAL SPECIFICATIONS

Construction: Rack-mounted; terminal access via screw terminals on the front and connector on the rear; terminal cover provided

Connection

Pneumatic: Rc 1/4" or 1/4" NPT female
(torque ≤ 12 N·m)

Output 1: Connector

Output 2: M3.5 screw terminals (torque 0.8 N·m) and connector

Power input: Supplied from connector

Screw terminal: Nickel-plated steel

Isolation: Output 1 to output 2 to power

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

Zero adjustment: -5 to +5 % (front)

Span adjustment: 95 to 105 % (front)

INPUT SPECIFICATIONS

■ 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

INSTALLATION

Current consumption: Approx. 35 mA

Operating temperature: -5 to +55°C (23 to 131°F)

Operating humidity: 30 to 90 %RH (non-condensing)

Mounting: Standard Rack 18BXx or 18KBXx

Weight: 250 g (0.55 lb)

PERFORMANCE in percentage of span

Accuracy: ±0.2 %

Temp. coefficient: ±0.03 %/°C (±0.02 %/°F)

Response time: ≤ 0.5 sec. (0 – 90 %)

Permissible overrange: 196 kPa (2.0 kgf/cm², 1.96 bar, 28 psig)

Line voltage effect: ±0.1 % over voltage range

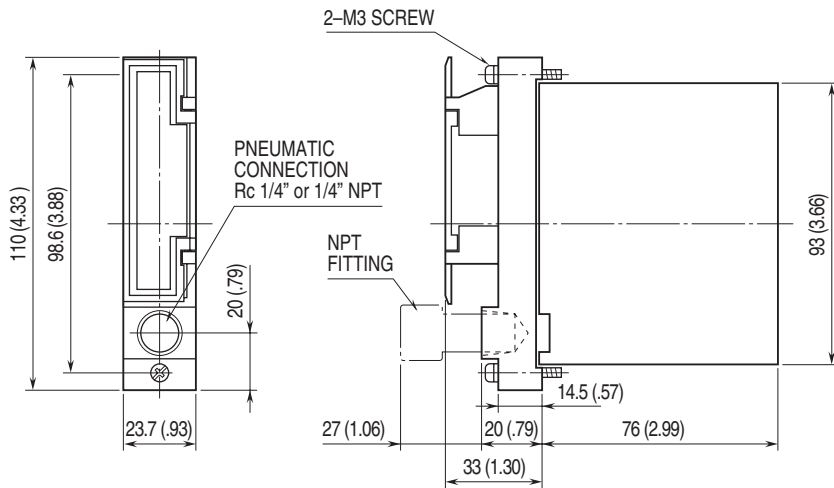
Insulation resistance: ≥ 100 MΩ with 500 V DC

Dielectric strength: 500 V AC @ 1 minute

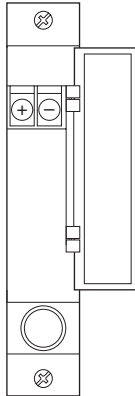
(output 1 to output 2 to power)

1500 V AC @ 1 minute (output or power to ground)

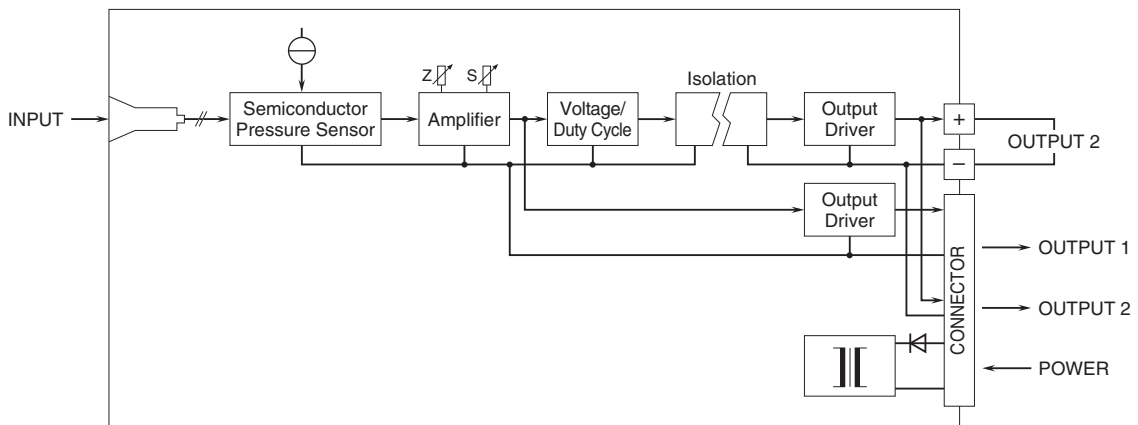
EXTERNAL DIMENSIONS unit: mm [inch]



TERMINAL ASSIGNMENTS



SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



Specifications are subject to change without notice.