

PLX SERIES

Related Information

- General terms and conditions..... P.1
- Sensor selection guide.....P.11~ / P.593~
- Glossary of terms / General precautions..... P.1000~ / P.1004
- PAD P.643~



SUNX website <http://www.sunx.com>

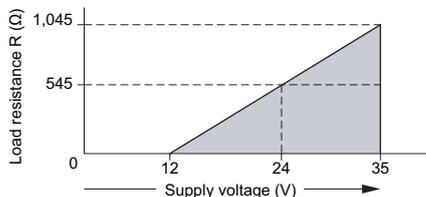
Both oil pressures and air pressures are OK

SPECIFICATIONS

The CAD data in the dimensions can be downloaded from the SUNX website: <http://www.sunx.com>

Type	100 kPa	1 MPa	2 MPa	10 MPa	50 MPa
Item Model No.	PLX-D1L	PLX-1L	PLX-2L	PLX-10L	PLX-50L
Type of pressure	Gauge pressure				
Rated / set pressure range	0 to 100 kPa	0 to 1 MPa	0 to 2 MPa	0 to 10 MPa	0 to 50 MPa
Pressure withstandability	200 kPa	2 MPa	4 MPa	15 MPa	75 MPa
Applicable fluid	Gas or liquid which does not corrode stainless steel (SUS302 and SUS304)				
Supply voltage	12 to 35 V DC (including ripple)				
Current consumption	4 to 20 mA (analog output current)				
Output	DC 2-wire analog current output • Output current: 4 to 20 mA (at rated pressure range) • Zero-point: within 4 mA ± 0.4 mA (at ambient temperature of +25 °C +77 °F) • Span: within 16 mA ± 0.32 mA (at ambient temperature of +25 °C +77 °F) • Precision: within ±1 % F.S. (including linearity and hysteresis) • Load resistance: refer to Note 2				
Response frequency	1 kHz or more				
Protection	IP40 (IEC) (Note 3)	IP66 (IEC) (Note 3)			
Ambient temperature	-15 to +100 °C +5 to +212 °F, Storage: -15 to +100 °C +5 to +212 °F				
Temperature characteristics	Zero point: within ±1 % F.S. (0 to +50 °C +32 to +122 °F), within ±3 % F.S. (-15 to +70 °C +5 to +158 °F), within ±5 % F.S. (-15 to +100 °C +5 to +212 °F) Span: within ±1 % F.S. (0 to +50 °C +32 to +122 °F), within ±3 % F.S. (-15 to +70 °C +5 to +158 °F), within ±5 % F.S. (-15 to +100 °C +5 to +212 °F)				
Pressure port	R (PT) 1/4 male thread				
Material	Enclosure: Stainless steel (SUS310) [PLX-10L and PLX-50L: Stainless steel (SUS304)], Pressure port: Stainless steel (SUS302), Diaphragm: Stainless steel (SUS304)				
Weight	Net weight: 200 g approx.				
Dimensions	ø40 × 53.6 mm ø1.575 × 2.110 in				
Accessory	Pressure port protection cap: 1 No.				

- Notes: 1) Where measurement conditions have not been specified precisely, the conditions used were an ambient temperature of +20 °C +68 °F.
 2) Set the load resistance and supply voltage so that the voltage produced between the +V and output terminals is maintained within 12 to 35 V. For this, set the load resistance within the range shown in the graph below.
 If the load resistance is set outside the indicated range, the voltage produced between the +V and output terminals will not meet the required rating due to voltage drop, and proper operation will not be obtainable.



<Calculation> $\frac{1,045}{23} \times \text{Supply voltage} - 545 \geq R$
 In case the power voltage is 24 V,
 $R \leq \frac{1,045}{23} \times 24 - 545 \approx 545 (\Omega)$

3) Refer to p.1001 for details of standards.

OPTIONS

Designation	Model No.	Applicable sensor	Description
Digital pressure controller (Note)	PAD-D1	PLX-D1L	Setting can be performed easily using the actual products. In addition, accurate measurement is possible, even if there are reference pressure fluctuations, since the controller has an auto-reference function. <ul style="list-style-type: none"> • Supply voltage: 12 to 24 V DC ± 10 % • Range of input current: 4 to 20 mA • Output: NPN open-collector transistor (3 outputs: HI, GO, LO) • Auto reference function is incorporated • Operation modes: Hysteresis mode Window comparator mode
	PAD-1	PLX-1L	
	PAD-2	PLX-2L	
	PAD-10	PLX-10L	
	PAD-50	PLX-50L	

Note: Refer to p.643~ for details of PAD series.

Digital pressure controller

• PAD-□



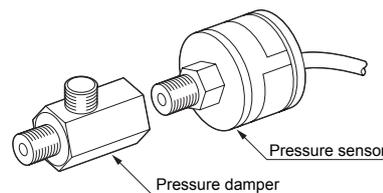
PRECAUTIONS FOR PROPER USE



- Never use this product as a sensing device for personnel protection.
- In case of using sensing devices for personnel protection, use products which meet laws and standards, such as OSHA, ANSI or IEC etc., for personnel protection applicable in each region or country.

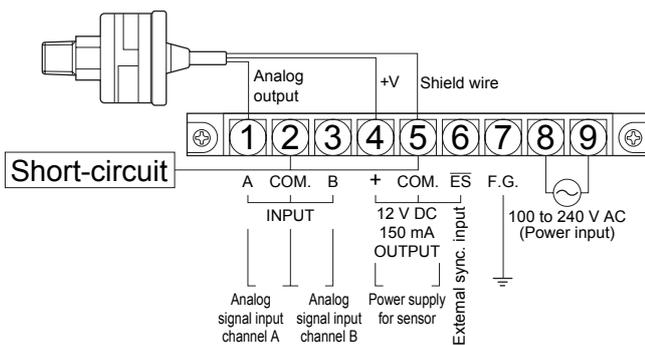
Countermeasure for pressure surge

- Install the sensor as far away as possible from the electromagnetic valve or actuator to protect the sensor from pressure surges, or use a pressure damper together.



Connection with digital panel controller CA series (lower terminal block)

- Since the shield wire of the **PLX** series is connected to the sensor body, in case the sensor body must be isolated from the ground (0 V), insulate the shield wire with a tape and keep it in the open state.



Others

- The **PLX** series and the **CA2** series cannot be used in combination.

FIBER SENSORS

LASER SENSORS

PHOTO-ELECTRIC SENSORS

MICRO PHOTO-ELECTRIC SENSORS

AREA SENSORS

SAFETY COMPONENTS

PRESSURE SENSORS

INDUCTIVE PROXIMITY SENSORS

PARTICULAR USE SENSORS

SENSOR OPTIONS

WIRE-SAVING SYSTEMS

MEASUREMENT SENSORS

STATIC CONTROL DEVICES

LASER MARKERS

Selection Guide

Digital Display

DP-100

DP4

DP-M

Head-separated

DPS / DPH

Other Products