

# KDP210

## Differential Pressure Transmitter

**KeramControls**®

### Description

KDP210 differential pressure transmitter has high precision, ultra-low & adjustable range, fast response characteristics, widely used in clean electronics and pharmaceutical factories, as well as large commercial buildings, medical centers and transportation hub.

### Features

- Ranges from -25/+25Pa to -10000/+10000Pa (according to models)
- Auto zero manual calibration
- Voltage, current, digital signal output
- Backlight LCD display
- Standard accuracy  $< \pm 1\%$  FS
- Adjusting measurement time by setting button
- External mounting holes
  - Mounting with closed cover
  - Easy & fast mounting
- IP65 house protection

### Applications

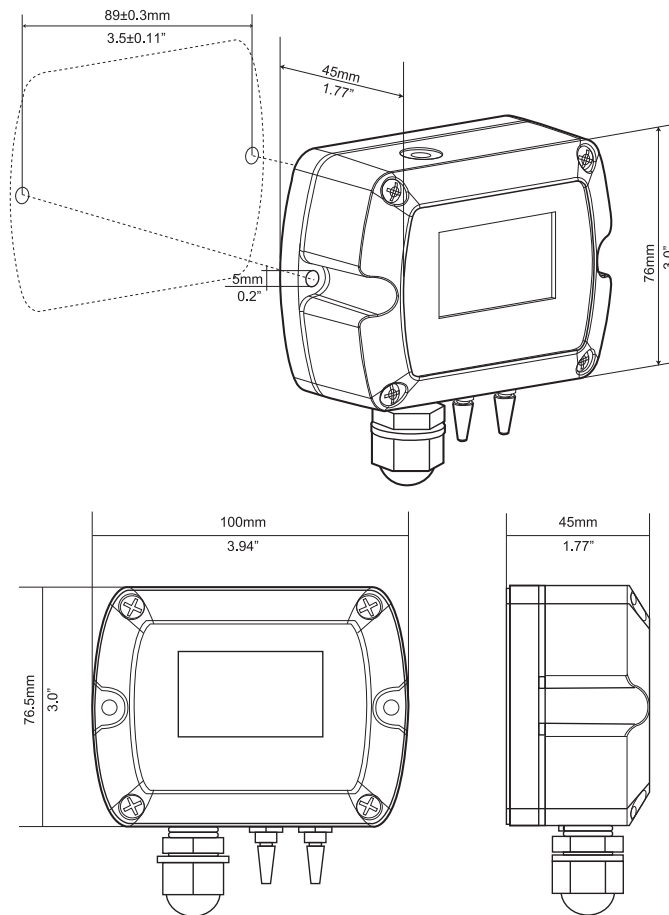
- HVAC system
- Pharmaceutical clean rooms
- Electronic clean rooms
- Medical clean rooms
- Commercial buildings
- Public transport hub

### Technical Data

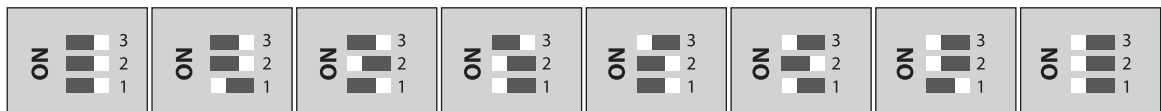
| Model                  | KDP210                                                  |
|------------------------|---------------------------------------------------------|
| Measurement units      | Pa, mmH <sub>2</sub> O, mmHG, mbar                      |
| Accuracy               | $< \pm 1\%$ FS@-5 to +65°C                              |
|                        | $< \pm 3\%$ FS $\pm 2$ Pa@-5 to +65°C                   |
| Response time          | 0.5s                                                    |
| Repeatbality           | $\pm 0.01\%$ at FS / year                               |
| Resolution             | 0.1 Pa; 0.1 mmH <sub>2</sub> O; 0.01 mbar; 0.01 mmHG    |
| Media                  | Air and neutral gases                                   |
| Operating temperature  | -20 ... +70°C                                           |
| Storage temperature    | -40 ... +60°C                                           |
| Power consumption      | $< 3$ W                                                 |
| Tolerated overpressure | $\times 15$                                             |
| Power Supply           | 16~30VAC/DC (3 wire) / 18-30VDC (2 wire)                |
| Output signal          | 4-20mA (2 wire)                                         |
|                        | 4-20mA (3 wire)                                         |
|                        | 0-5 / 0-10VDC (3 wire)                                  |
|                        | RS-485                                                  |
|                        | Customized                                              |
| Auto zero              | Manual calibration                                      |
| Housing material       | Polycarbonate & ABS, UL94V-0                            |
| Protection class       | IP65 / NEMA4                                            |
| Display                | Backlight LCD display (4-20mA 2 wire without backlight) |
| Cable Gland            | M16*1.5                                                 |



## Dimensions (mm)

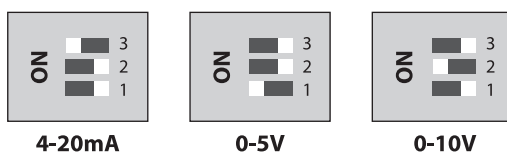


## Measuring Range Adjustment(Switch 2)

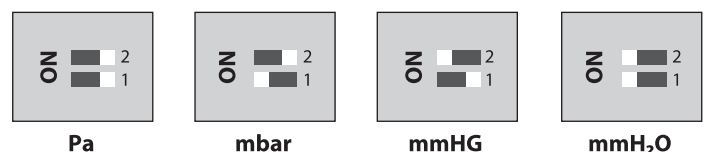


|          | 0~+100   | 0~+75   | 0~+50   | 0~+25   | -25~+25     | -50~+50     | -75~+75     | -100~+100     |
|----------|----------|---------|---------|---------|-------------|-------------|-------------|---------------|
| KDP210-1 | 0~+100   | 0~+75   | 0~+50   | 0~+25   | -25~+25     | -50~+50     | -75~+75     | -100~+100     |
| KDP210-2 | 0~+1000  | 0~+750  | 0~+500  | 0~+250  | -250~+250   | -500~+500   | -750~+750   | -1000~+1000   |
| KDP210-3 | 0~+2000  | 0~+1500 | 0~+1000 | 0~+500  | -500~+500   | -750~+750   | -1500~+1500 | -2000~+2000   |
| KDP210-4 | 0~+10000 | 0~+7500 | 0~+5000 | 0~+2500 | -2500~+2500 | -5000~+5000 | -7500~+7500 | -10000~+10000 |

## Output Setting (3-wire Model)(Switch 1)



## Unit Setting(Switch 3)



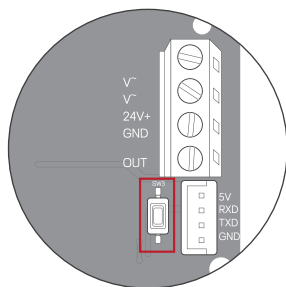
To configure the transmitter, it must not be energized. Then, you can make the settings required, with the DIP switches. When the transmitter is configured, you can power it up.

# KDP210

Differential Pressure Transmitter

**KeramControls**®

## Manual Zero-point Correction



In normal operation zero point correction should be executed every 12 months.

For executing zero point correction the power supply must be connected one hour before.

- Release both connection tubes from the pressure terminals + and –
- Press and hold the button for 3 seconds.
- Reinstall the connection tubes

## Ordering Guide

| KDP210 | Range           |     | Display |     | Output                 |     |
|--------|-----------------|-----|---------|-----|------------------------|-----|
| Model  | Ranges          |     | Display |     | Output                 |     |
| KDP210 | -100~+100Pa     | (1) | LCD     | (D) | 4-20mA (2 wire)        | (E) |
|        | -1000~+1000Pa   | (2) |         |     | 4-20mA (3 wire)        | (F) |
|        | -2000~+2000Pa   | (3) |         |     | 0-5 / 0-10VDC (3 wire) | (G) |
|        | -10000~+10000Pa | (4) |         |     | RS-485                 | (H) |
|        |                 |     |         |     | Customized             |     |

## Order Examples

### KDP210-2-D-E

|         |                                          |
|---------|------------------------------------------|
| Model   | KDP210 Differential Pressure Transmitter |
| Ranges  | -1000~+1000 Pa                           |
| Display | Display                                  |
| Output  | 4-20mA (2 wire)                          |

## Notes On Disposal



Most Keram Controls products may contain valuable materials that should be recycled rather than treated as domestic waste. Please pay attention to the relevant regulations of local disposal.

## Product Certification



Declaration of conformity

The declaration of conformity of the products can be found on our website [Https://: www.keramcontrols.com](https://www.keramcontrols.com)

## Accessories(OPTIONAL)



Pressure connection set:  
2 m PVC hose with 2 ABS pressure connection nipples.



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