



#### **Features**

- +/- 1 % full-scale accuracy
- All PFA/PTFE wetted part construction
- No o-ring seals or fill fluids
- Choice of end fitting: Flare, Pillar, 20S, MNPT, or Tube

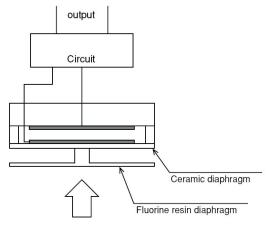
# KL-92 Series PFA/PTFE Pressure Transmitter

### **Description**

The KL-92 is a pressure transducer suitable for use in monitoring pressure of various high-purity and corrosive/ aggressive fluids. The superior design provides for minimal "dead volume" which reduces the potential for contamination of the measured fluid / process. The KL-92 is available in two construction types: inline or insertion. The body construction meets IP-54 requirements.

## **Operation**

The o-ring free design minimizes the generation of containment and the elution of metal, which makes it suitable for pressure monitoring in the semiconductor industry. All wetted parts are made of fluoropolymers ( PFA, PTFE ). The sensor is IP-54 rated to meet the application requirement for semiconductor's wet environments.



#### **Applications**

· High-purity DI water, slurry, and aggressive chemical monitoring

Pressure

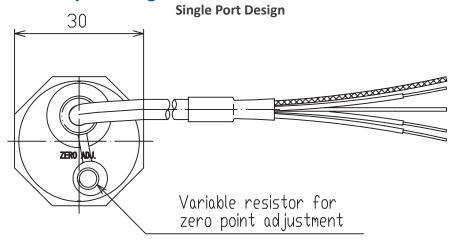
- Filtration condition monitoring
- · General pressure monitoring

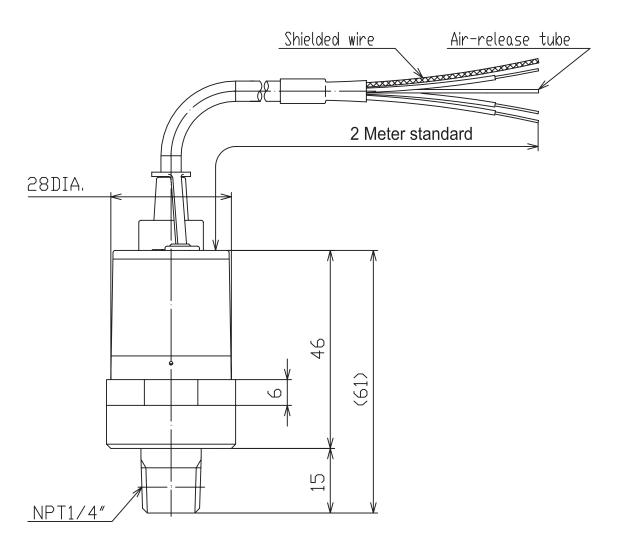
# **Measurement Specifications**

| Material of wetted parts       |                 | PFA / PTFE                                  |  |  |  |  |
|--------------------------------|-----------------|---|--|--|--|--|
| Pressure Range                 |                 | 0 to 50 psi, to 75 psi                      |  |  |  |  |
| Allowable maximum pressure     |                 | 120 psi                                     |  |  |  |  |
| Temperature coefficient        |                 | +/- 0.05 % F.S. / deg. C                    |  |  |  |  |
| Power and supply current       |                 | 12-24 VDC * +/-10% ( 30 mA DC max. )        |  |  |  |  |
|                                | Voltage output  | 0 to 10, 0 to 5, 1 to 5 VDC                 |  |  |  |  |
| Analaa autuut                  | Current output  | 4 to 20 mA ( 500 ohm max at 24 VDC )        |  |  |  |  |
| Analog output                  | Output accuracy | +/- 1 % F.S.                                |  |  |  |  |
|                                | Response time   | Within 5 ms                                 |  |  |  |  |
| Connection types               |                 | Flaretek, Super Pillar 300, Tube ends, MNPT |  |  |  |  |
| Connection sizes               |                 | 1/4", 3/8", 1/2", 3/4"                      |  |  |  |  |
| Operating fluid temperature ra | ange            | 10 to 80°C                                  |  |  |  |  |
| Operating humidity range       |                 | 35 to 85 % RH ( non-condensing )            |  |  |  |  |
| Protection                     |                 | IP-54 ( Splash Proof )                      |  |  |  |  |
| Cable length                   |                 | 2 m   |  |  |  |  |
| Weight                         |                 | 140 g ( with cable)                         |  |  |  |  |

<sup>\* 24</sup> VDC  $\pm 10\%$  power supply required for 0 to 10 VDC / 4-20 mA outputs

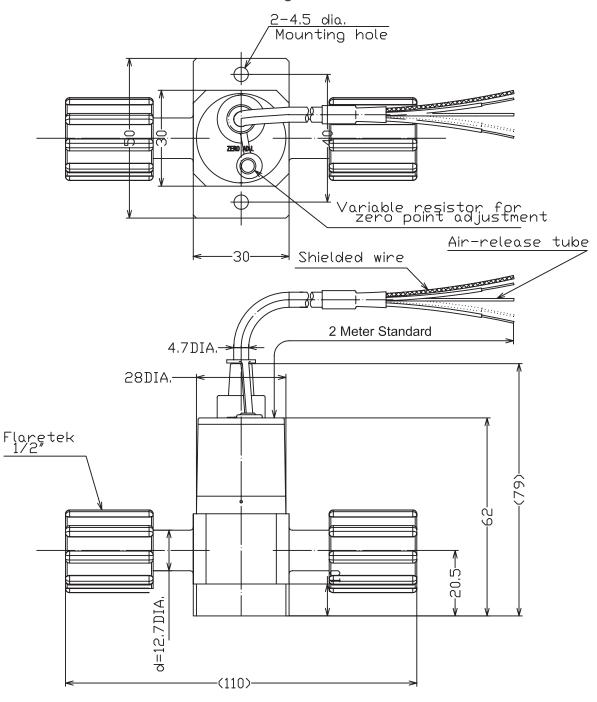
## **Dimensional and Cut-Away Drawings**





## **Dimensional and Cut-Away Drawings**

#### **In-Line Design**



# **Ordering Information**

| Model Code      |   |   |   |                     |                       |          |                |                           | Description                |                     |  |  |
|-----------------|---|---|---|---------------------|-----------------------|----------|----------------|---------------------------|----------------------------|---------------------|--|--|
| KL-92           | - | М |   | -                   |                       |          |                | -                         |                            | Pressure Transducer |  |  |
|                 | - |   |   |                     |                       |          |                |                           |                            |                     |  |  |
|                 |   | М |   |                     |                       |          |                |                           |                            |                     |  |  |
| 1               |   |   |   |                     |                       |          |                | In-line                   |                            |                     |  |  |
|                 |   |   |   |                     |                       |          | Single port    |                           |                            |                     |  |  |
|                 |   |   |   |                     |                       | Flaretek |                |                           |                            |                     |  |  |
|                 |   |   |   |                     | Tube                  |          |                |                           |                            |                     |  |  |
| Connection Type |   |   | 2 |                     |                       |          |                | Pillar Super 300 (female) |                            |                     |  |  |
|                 |   |   | 3 | * Inline type only. |                       |          |                |                           | Pillar Super 300 ( male )* |                     |  |  |
|                 |   |   | 4 |                     |                       |          |                |                           | 20S                        |                     |  |  |
|                 |   |   | 5 | *                   | Single                | -        | (1/4"<br>only. | ',3/8'') type             | MNPT                       |                     |  |  |
|                 | 6 |   |   |                     |                       |          |                |                           |                            | Flaretek (Male)     |  |  |
|                 | 1 |   |   |                     |                       |          |                |                           |                            | 1/4 "               |  |  |
|                 |   |   |   |                     | 2                     | 2 3/8 "  |                |                           |                            |                     |  |  |
| Size            |   |   |   |                     | 3                     |          |                |                           | 1/2 "                      |                     |  |  |
|                 |   |   |   |                     | 4 * Inline type only. |          |                |                           |                            | 3/4"                |  |  |
|                 |   |   |   |                     | 5                     |          |                |                           |                            |                     |  |  |
|                 |   |   |   |                     |                       |          |                |                           |                            |                     |  |  |
|                 |   |   |   |                     |                       | -        |                |                           |                            |                     |  |  |
|                 |   |   |   |                     |                       |          | 1              |                           | 24 VDC                     | 0 ~ 10 VDC          |  |  |
|                 |   |   |   |                     |                       |          | 2              |                           | 24 VDC                     | 4 ~ 20 mA           |  |  |
| Input / Output  |   |   |   |                     |                       | 3        | 1              | 2 ~ 24 VDC                | 1~5 VDC                    |                     |  |  |
|                 |   |   |   |                     |                       |          | 4 12 ~ 2       |                           | 2 ~ 24 VDC                 | 0 ~ 5 VDC           |  |  |
|                 |   |   |   |                     |                       |          |                | -                         |                            |                     |  |  |
| Drossura Danga  |   |   |   |                     |                       |          |                | 50                        | 0 ~ 50 psi                 |                     |  |  |
| Pressure Range  |   |   |   |                     |                       |          |                |                           | 75                         | 0 ~ 75 psi          |  |  |
| Cable           |   |   |   |                     |                       |          |                | 1                         | Shielded Cable / 2m        |                     |  |  |
|                 |   |   |   |                     |                       |          |                | 2                         | Turck Cable / 1.2m         |                     |  |  |

#### **KL92 Available Combination**

| Installation TypeI |    |     |         | nline | Туре |      | Single Type |    |      |    |
|--------------------|----|-----|---------|-------|------|------|-------------|----|------|----|
| Port DIA           |    |     | 1/43    | /8    | 1/23 | /4   | 1/43        | /8 | 1/23 | /4 |
| Fittings           | •  |     | 5/32    | 1/43  | /8   | 5/85 | /321        | /4 | 3/85 | /8 |
| Flaretek           | FP | TFE | $\circ$ | 0     | 0    | 0    | 0           | 0  | 0    | -  |
| Tube               | -P | TFE | 0       | 0     | 0    | 0    | 0           | 0  | 0    | 1  |
| Pillar S300        | FP | TFE | $\circ$ | 0     | 0    | 0    | 0           | 0  | 0    | 1  |
| Pillar S300        | MP | FA  | $\circ$ | 0     | 0    | 0    | _           | ı  | _    | -  |
| S20                | FP | TFE | $\circ$ | 0     | 0    | 0    | $\bigcirc$  | 0  | 0    | ı  |
| MNPT               | MP | FA  | -       | -     | -    | -    | 0           | 0  | -    | _  |
| Flaretek           | MP | FA  | $\circ$ | 0     | 0    | 0    | _           | _  | -    | _  |

NB:- M is Male, F is Female (Nut Type)

-M ale fittings are welded.

(Sizes are the same as KL95.)

- -T ube stub or MNPT are machine drilled cut.
- -F or MNPT Single Port Stem Type, 1/4" and 3/8" are the MNPT thread sizes.

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