

# LE3 LE3 Series Transmitter



## Description & Features:

- Developed for use in general industry and OEM applications, where versatility and economy are requirements
- Compact stainless steel construction with ceramic sensor
- Available ranges include in/Hg up to 5,000 psi
- Wide range of mechanical and electrical connections
- $\pm 0.5\%$  accuracy
- NEMA 4X / IP65 and IP67
- CE, CSA and RoHS compliant
- Approved for outdoor use
- Customizable
- 1 year warranty

## Applications:

- Suitable for all process and automation control, hydraulics and pneumatic sensing, pump and compressor monitoring, refrigeration and HVAC

## Specifications

|                                    |                                                                                                                                                                                                                                                                                                                             |
|------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Output Signal</b>               | Standard 2-wire: 4-20 mA / $V_s = 8-32$ Vdc<br>Optional 3-wire: 0-10 V / $V_s = 14-30$ Vdc<br>Optional 3-wire ratiometric: $V_{sig} = 0.5-4.5 V_s / V_s = 5 \pm 0.5$ Vdc                                                                                                                                                    |
| <b>Accuracy</b>                    | $\pm 0.5\%$ FSO                                                                                                                                                                                                                                                                                                             |
| <b>Permissible Load</b>            | 2-wire: $R_{max} = [(V_s - V_{s \text{ min}}) / 0.02]$ Ohm<br>3-wire: $R_{min} = 10$ kOhm                                                                                                                                                                                                                                   |
| <b>Influence Effects</b>           | Supply: 0.05% FSO / 10 V<br>Load: 0.05% FSO / kOhm                                                                                                                                                                                                                                                                          |
| <b>Response Time</b>               | 2-wire: <10 msec<br>3-wire: <3 msec                                                                                                                                                                                                                                                                                         |
| <b>Measuring Rate</b>              | 1 kHz                                                                                                                                                                                                                                                                                                                       |
| <b>Thermal Error</b>               | $< \pm 0.5\%$ FSO / 10K                                                                                                                                                                                                                                                                                                     |
| <b>Permissible Temperatures</b>    | Medium: $-13^\circ\text{F}$ to $257^\circ\text{F}$ ( $-25^\circ\text{C}$ to $125^\circ\text{C}$ )<br>Electronics environment: $-13^\circ\text{F}$ to $185^\circ\text{F}$ ( $-25^\circ\text{C}$ to $85^\circ\text{C}$ )<br>Storage: $-40^\circ\text{F}$ to $185^\circ\text{F}$ ( $-40^\circ\text{C}$ to $85^\circ\text{C}$ ) |
| <b>Short-circuit Protection</b>    | Permanent<br>3-wire ratiometric: None                                                                                                                                                                                                                                                                                       |
| <b>Reverse Polarity Protection</b> | No damage. No function.                                                                                                                                                                                                                                                                                                     |
| <b>Electromagnetic Protection</b>  | Emission and immunity according to EN 61326                                                                                                                                                                                                                                                                                 |
| <b>Stability</b>                   | Vibration: 10 g, 25 Hz to 2 kHz according to DIN EN 60068-2-6<br>Shock: 500 g / 1 msec according to DIN EN 60068-2-27                                                                                                                                                                                                       |
| <b>Pollution Degree</b>            | 4, electrical equipment for outdoor use                                                                                                                                                                                                                                                                                     |
| <b>Pressure Port / Housing</b>     | 304 SS                                                                                                                                                                                                                                                                                                                      |
| <b>Wetted Parts</b>                | Seals: FKM (Viton <sup>®</sup> standard). Others available upon request.<br>Diaphragm: Ceramic $\text{Al}_2\text{O}_3$ 96%                                                                                                                                                                                                  |
| <b>Weight</b>                      | 120 g                                                                                                                                                                                                                                                                                                                       |
| <b>Current Consumption</b>         | 2-wire: 25 mA max<br>3-wire ratiometric: 1.5 mA<br>3-wire voltage: 5 mA (short-circuit current 20 mA)                                                                                                                                                                                                                       |
| <b>Long-term Stability</b>         | $< \pm 0.3\%$ FSO/yr at reference conditions                                                                                                                                                                                                                                                                                |
| <b>Operation Life</b>              | $> 100 \times 10^6$ cycles                                                                                                                                                                                                                                                                                                  |
| <b>CE Conformity</b>               | EMC directive: 2004/108/EC<br>Pressure equipment directive: 97/23/EC (module A). Valid for devices with max permissible overpressure $> 3,000$ psi                                                                                                                                                                          |

Viton<sup>®</sup> is a registered trademark of DuPont Performance Elastomers

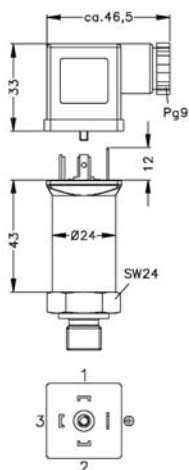
## Order Codes

| Range        | Overpressure | Burst Pressure | Code    |
|--------------|--------------|----------------|---------|
| 0-30" Hg vac | 58 psi       | 102 psi        | LE330VC |
| 0-15 psi     | 58 psi       | 102 psi        | LE315   |
| 0-25 psi     | 58 psi       | 102 psi        | LE325   |
| 0-50 psi     | 58 psi       | 102 psi        | LE350   |
| 0-60 psi     | 145 psi      | 218 psi        | LE360   |
| 0-100 psi    | 145 psi      | 218 psi        | LE3100  |
| 0-150 psi    | 290 psi      | 508 psi        | LE3150  |
| 0-200 psi    | 580 psi      | 1,015 psi      | LE3200  |
| 0-300 psi    | 580 psi      | 1,015 psi      | LE3300  |
| 0-500 psi    | 1,450 psi    | 2,176 psi      | LE3500  |
| 0-1,000 psi  | 1,450 psi    | 2,176 psi      | LE31000 |
| 0-2,000 psi  | 2,901 psi    | 3,626 psi      | LE32000 |
| 0-3,000 psi  | 5,802 psi    | 6,527 psi      | LE33000 |
| 0-5,000 psi  | 5,802 psi    | 6,527 psi      | LE35000 |

Note: Other connections available upon request

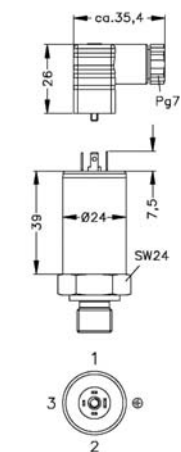
## Electrical Connection

## Standard

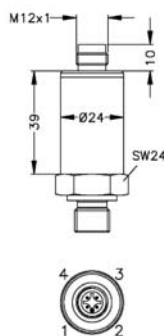


ISO 4400  
(IP 65)

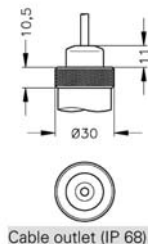
## Optional



Micro, contact  
distance 9.4 mm (IP 65)



M12x1, 4-pin  
(IP 67)

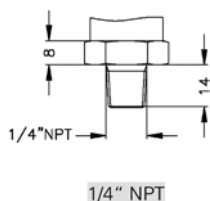


Cable outlet (IP 68) <sup>5</sup>

<sup>5</sup> Different cable types/lengths available

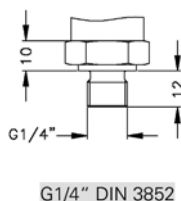
## Mechanical Connection

## Standard



1/4" NPT

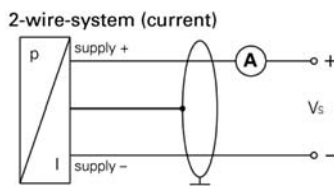
## Optional



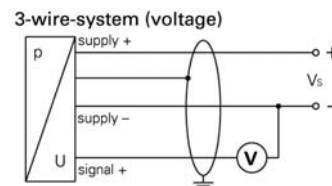
G1/4" DIN 3852

## Wiring Diagram

## Standard



## Optional



Note: Measurements are in mm

## Pin Configuration

| Electrical Connection | ISO 4400   | Micro (contact distance 9.4mm) | M12x1 (4 pin), plastic | Cable Colours (DIN 47100) |
|-----------------------|------------|--------------------------------|------------------------|---------------------------|
| Supply+               | 1          | 1                              | 1                      | White                     |
| Supply-               | 2          | 2                              | 2                      | Brown                     |
| Signal+ (for 3-wire)  | 3          | 3                              | 3                      | Green                     |
| Shield                | Ground pin | Ground pin                     | 4                      | Green/yellow              |