

## SUCO - 0705/0710/0720 PRESSURE SENSOR

High performance series

070540141B002  
0.5-4.5V, 0..40 bar, G1/4-E, M12

- Measuring range up to 600 bar
- Silicon-on-sapphire sensor
- Outstanding overpressure protection
- Outstanding repeatability



### PRODUCT DESCRIPTION

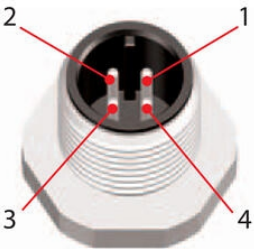
The SUCO 0705/0710/0720 series are precision pressure sensors built with silicon-on-sapphire (SOS) sensing elements housed in a fully welded stainless steel and titanium body, delivering exceptional durability and media compatibility. They support ten standard gauge pressure ranges and multiple output types, offering flexibility across various systems. Featuring rapid response times, repeatability of  $\pm 0.1$  % full scale, accuracy around  $\pm 0.5$  %, and shock/vibration resistance (500 m/s<sup>2</sup>, 20 g), these sensors ensure reliable performance in demanding environments. Overpressure protection is robust making them safe for high-pressure applications. IP67 (and IP6K9K for certain connectors) rating ensures resilience against water ingress and contaminants. Designed for rigorous industrial and mobile environments, these sensors are ideal for integration in hydraulic systems, construction and agricultural machinery, marine/offshore platforms, and other high-pressure systems. The variety of electrical connectors, alongside G1/4 or multiple thread patterns (NPT, M14, UNF), ensures compatibility with diverse installations. They excel in real-time monitoring scenarios, such as pump control, leak detection, safety shutdowns, where high accuracy, fast response, and overpressure safety are essential. With long-term stability and temperature compensation from  $-40$  °C to  $+100$  °C (media to  $+125$  °C), these units minimise downtime and maintenance for uses in heavy-duty and offshore sectors.

### TECHNICAL DATA

|                       |                       |
|-----------------------|-----------------------|
| Pressure range min    | 0 bar                 |
| Pressure range max    | 40 bar                |
| Signal type           | 0.5-4.5 V ratiometric |
| Electrical connection | M12x1 4-pole          |
| IP class              | IP67                  |
| Connection            | G1/4-E                |

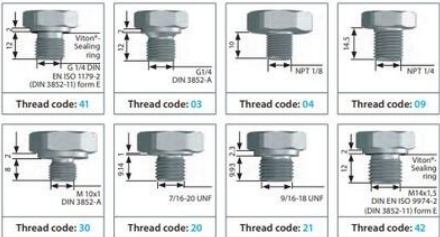
|                           |                                                                 |
|---------------------------|-----------------------------------------------------------------|
| Material of body          | Stainless steel 1.4305                                          |
| Material of wetted parts  | Stainless steel 1.4305, Titanium                                |
| Supply voltage dc min     | 5 V DC                                                          |
| Supply voltage dc max     | 6.5 V DC                                                        |
| Temperature ambient from  | -40 °C                                                          |
| Temperature ambient to    | 100 °C                                                          |
| Temperature of media from | -40 °C                                                          |
| Temperature of media to   | 125 °C                                                          |
| Shock resistance          | 500m / s <sup>2</sup> ; 11 ms half sine wave; DIN EN 60068-2-27 |
| Response time             | 2 ms                                                            |
| Pressure rise             | 5 bar/ms                                                        |
| Burst pressure            | 320 bar                                                         |
| Vibration resistance      | 20g; 4..2000 Hz sine wave, DIN EN 60068-2-6                     |
| Weight                    | 80 g                                                            |

|                         |               |
|-------------------------|---------------|
| Pressure reference      | Gauge         |
| Accuracy                | ±0.5% FS      |
| Repeatability           | ±0.1% FS      |
| Temperature error       | ±0.01% FS/°C  |
| Overpressure protection | 160 bar       |
| Long term stability     | ±0.1% FS p.a. |



|       |     |
|-------|-----|
| Pin 1 | Uv+ |
| Pin 2 | nc  |
| Pin 3 | Gnd |
| Pin 4 | Out |







|                        |                        |                        |                        |
|------------------------|------------------------|------------------------|------------------------|
| <p>Thread code: 41</p> | <p>Thread code: 03</p> | <p>Thread code: 04</p> | <p>Thread code: 09</p> |
| <p>Thread code: 30</p> | <p>Thread code: 20</p> | <p>Thread code: 21</p> | <p>Thread code: 42</p> |