

## SRI986 Electro-Pneumatic Positioner



The SRI986 Positioner is designed to control pneumatic valve actuators from control systems and electrical controllers with electric control signals.

It is used to reduce the adverse effects of valve friction, for higher thrust and shorter positioning time.

It offers an easy adjustment by two mechanical screws.

*For complete specification, refer to Product Specification Sheet PSS EVE0102 A-(en)*

- Independent adjustment of stroke range and zero
- Adjustable amplification and damping
- Split range up to 3-fold possible
- Input Signal from 0 to 20 mA or 4 to 20 mA
- Supply pressure up to 6 bar (90 psig)
- Single or double acting
- Low vibration effect in all directions
- Mounting on linear actuators according to NAMUR: IEC 534 Part 6  
Stroke range 8 ... 100 mm (0.3 ... 4 in)  
(larger strokes on request)
- Mounting on rotary actuators acc. to VDI/VDE 3845 for rotation angles up to 120°
  - Angular range
    - linear . . . . . 30 ° ... 120 °
    - equal percentage 90 °; linear from 70 °
- Protection class IP54 or IP65
- Explosion protection:
  - II 2 G EEx i (intrinsic safety) according to ATEX
  - Intrinsic safety according to FM and CSA
- Ambient temperature \* -40 ... 80°C (-40 ... 176°F)
- EMC in accordance with the international standards and laws (CE)
- Additional Inputs / outputs (optional):
  - Position feedback 4 to 20 mA
  - Built-in independent inductive limit switches (2-/3-wire) or micro switches
- Accessories
  - Booster relay to minimize stroke time
  - Gauge Manifold

\*) dependent on Ambient Temperature classes

### Input

Signal range . . . . . 0 to 20 mA / 4 to 20 mA  
Input resistance . . . . . < 200 Ohms at 20 °C

### Supply

Supply air pressure . . . . . 1.4 ... 6 bar (20 ... 90 psig)  
Supply air. . . . . free of oil, dust, water  
according to IEC 654-2

### Pneumatic connection

Female threads . . . . . G 1/8 acc. to ISO 228

### Response characteristic

Amplification . . . . . adjustable  
Sensitivity . . . . . < 0.1 % F.S.  
Non-linearity (terminal  
based adjustment) . . . . . < 1.0 % F.S.  
Hysteresis . . . . . < 0.3 % F.S.  
Supply air dependency. . . . . < 0.3 % / 0.1 bar (1.5 psi)  
Temperature effect. . . . . < 0.5 % / 10 K  
Mechanical vibration  
10 - 60 Hz up to 0.14 mm,  
60 - 500 Hz up to 2 g . . . . . < 0.25 % of travel span

| Electro-Pneumatic Positioner                                                                                                                                        |             | SRI986 | 011004 |           |             |          |             |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|--------|--------|-----------|-------------|----------|-------------|
| <b>Version</b>                                                                                                                                                      |             |        |        |           |             |          |             |
| Single Acting . . . . .                                                                                                                                             | -B          |        |        |           |             |          |             |
| Double Acting . . . . .                                                                                                                                             | -C          |        |        |           |             |          |             |
| <b>Input</b>                                                                                                                                                        |             |        |        |           |             |          |             |
| Signal Range 4 - 20 mA . . . . .                                                                                                                                    | -I          |        |        |           |             |          |             |
| <b>Mode of Action</b>                                                                                                                                               |             |        |        |           |             |          |             |
| Standard Version Increasing Input Increases Output . . . . .                                                                                                        | D           |        |        |           |             |          |             |
| Universal Version Set To Increasing Input Decreases Output . . . . .                                                                                                | R           |        |        |           |             |          |             |
| <b>Built-In Limit Switch/Position Transmitter</b>                                                                                                                   |             |        |        |           |             |          |             |
| Without . . . . .                                                                                                                                                   |             | S      |        |           |             |          |             |
| Inductive Limit Switch Three-Wire Technique, Without Explosion Protection (a) . . . . .                                                                             |             | R      |        |           |             |          |             |
| Inductive Limit Switch (Standard Version) . . . . . (a) . . . . .                                                                                                   |             | T      |        |           |             |          |             |
| Inductive Limit Switch (Security Version) . . . . . (a) . . . . .                                                                                                   |             | U      |        |           |             |          |             |
| Two Micro Switches, Without Explosion Protection . . . . . (a) . . . . .                                                                                            |             | V      |        |           |             |          |             |
| Position Transmitter 4-20 mA . . . . . (a) . . . . .                                                                                                                |             | F      |        |           |             |          |             |
| <b>Cable Entry</b>                                                                                                                                                  |             |        |        |           |             |          |             |
| 1/2"-14 NPT (with Adapter(s) M20x1.5 to 1/2"-14 NPT) . . . . .                                                                                                      |             | 6      |        |           |             |          |             |
| M20 x 1.5 With One Plastic Cable Gland, Color Gray . . . . .                                                                                                        |             | 7      |        |           |             |          |             |
| <b>Electrical Certification: (Only Standard Device)</b>                                                                                                             |             |        |        |           |             |          |             |
| II 2 G EEx ia IIC T6 according to ATEX . . . . . (d) . . . . .                                                                                                      |             | EAA    |        |           |             |          |             |
| FM Approved For Intrinsic Safety Class I, Division 1, Groups A,B,C,D Hazardous Locations Indoors . . . . .                                                          |             | FAA    |        |           |             |          |             |
| CSA Approved For Intrinsic Safety Class I, Division 1, Groups A,B,C,D Hazardous Locations Indoors . . . . .                                                         |             | CAA    |        |           |             |          |             |
| GOST Approved for Intrinsic Safety . . . . . (f). . . . .                                                                                                           |             | GAA    |        |           |             |          |             |
| Without . . . . .                                                                                                                                                   |             | ZZZ    |        |           |             |          |             |
| <b>Attachment Kit</b>                                                                                                                                               |             |        |        |           |             |          |             |
| Order as Auxiliary . . . . .                                                                                                                                        |             | N      |        |           |             |          |             |
| <b>Manifold</b>                                                                                                                                                     |             |        |        |           |             |          |             |
| Order as Auxiliary . . . . .                                                                                                                                        |             | A      |        |           |             |          |             |
| <b>Options</b>                                                                                                                                                      |             |        |        |           |             |          |             |
| Amplifier Free Of Nonferrous Metals . . . . . (a)(b) . . . . .                                                                                                      |             | -C     |        |           |             |          |             |
| Protection Class IP65 . . . . .                                                                                                                                     |             | -F     |        |           |             |          |             |
| Signal Range 0 - 20 mA instead of 4 - 20 mA . . . . .                                                                                                               |             | -I     |        |           |             |          |             |
| Designed For Auxiliary Energy Oxygen Max 6 Bar . . . . .                                                                                                            |             | -S     |        |           |             |          |             |
| <b>Tag No. Labeling</b>                                                                                                                                             |             |        |        |           |             |          |             |
| Stamped With Weather Resistant Color . . . . .                                                                                                                      |             | -G     |        |           |             |          |             |
| Stainless Steel Label Fixed With Wire . . . . .                                                                                                                     |             | -L     |        |           |             |          |             |
| <p>(a) Not available with FAA &amp; CAA</p> <p>(b) Only available with Version -B</p> <p>(d) Not available with Limit Switch Codes R, V</p> <p>(f) Not released</p> |             |        |        |           |             |          |             |
| <table border="1"> <tr> <td>Auxiliary</td> <td>see EVE9902</td> </tr> <tr> <td>Fittings</td> <td>see EOO9001</td> </tr> </table>                                    |             |        |        | Auxiliary | see EVE9902 | Fittings | see EOO9001 |
| Auxiliary                                                                                                                                                           | see EVE9902 |        |        |           |             |          |             |
| Fittings                                                                                                                                                            | see EOO9001 |        |        |           |             |          |             |