

# SP 1601 Assembly Instruction

## 1. Safety notes

### 1.1 Installation and startup

The rotary sensor must be installed by qualified personnel in consideration of all relevant safety regulations.

In case of unauthorized modifications, non-permitted usage or non-observance of installation instructions, the warranty and liability claims will be lost.

All personal protection measures must be taken before startup in case of a sensor defect or failure.

### 1.2 Electrical connections

The specified supply voltage is to be applied only at the terminals provided.

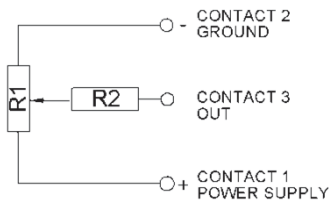
Non-observance of the pin configuration will result in destruction of the device and loss of warranty.

Please always check the connections carefully before turning on the system.

For a proper function the appropriate combination of male-/female contact material is to be observed.

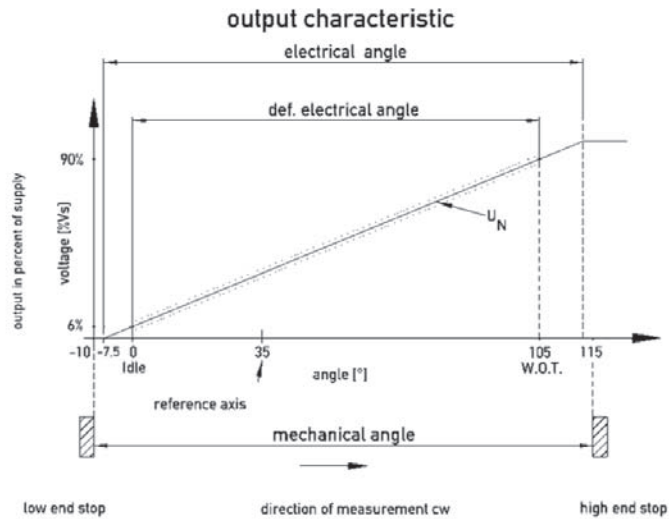
## 2. Installation

### 2.1 Terminal diagram



**Voltage divider free of load!**  
**Wiper current**  
≤

### 2.2 Output Signal



## 3. Types

| Article Code        | Resistance | Electrical Angle | Def. electrical Angle | max. Voltage | connector type                                  | Output connector |       |        |
|---------------------|------------|------------------|-----------------------|--------------|---|------------------|-------|--------|
|                     |            |                  |                       |              |   | PIN 1            | PIN 2 | PIN 3  |
| SP 1601 105 001 001 | 5 kOhm     | 120°             | 105°                  | 24 VDC       | AMP Tyco Micro Quadlock System (p/n 1-967642-1) | supply           | GND   | signal |
| SP 1601 105 001 002 | 5 kOhm     | 120°             | 105°                  | 24 VDC       | Yazaki Female (p/n 7283-8730-30)                | supply           | GND   | signal |

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## 4. Installation Instructions:

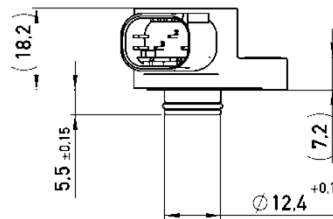
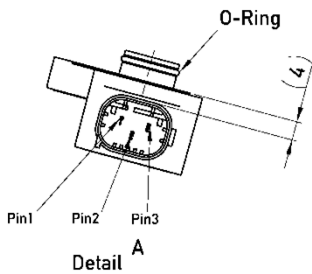
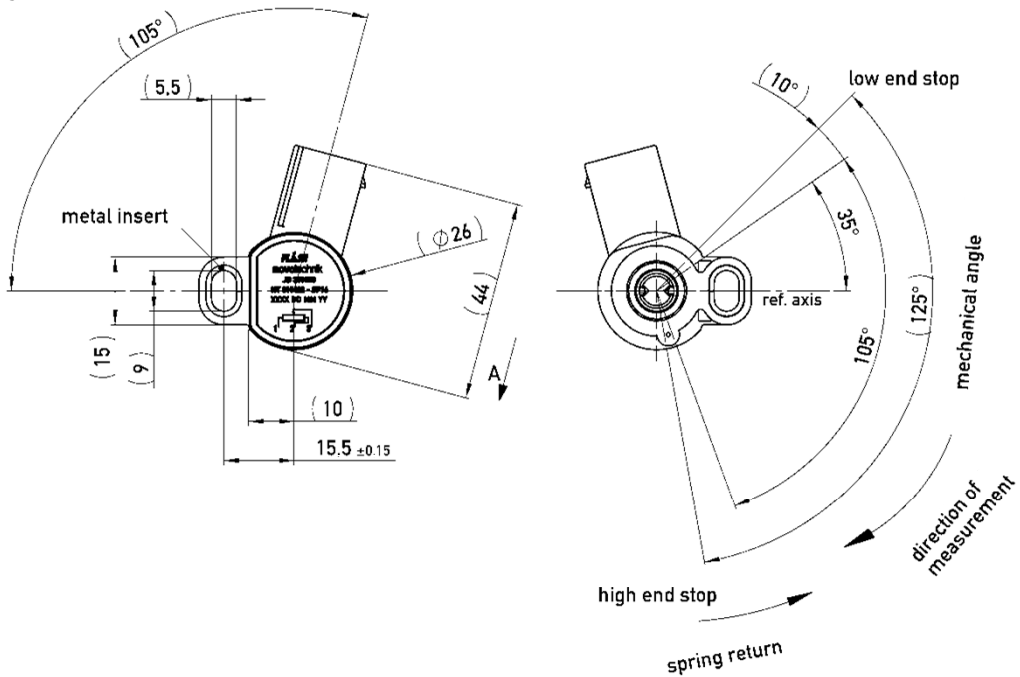
Pay attention to the maximum tightening torque of 5 Nm when fastening the mounting screws on the flange of the device.

Because of the brass bushings, washers are not required.

To ensure proper sealing, before installation of the sensor the presence and proper location of the sealing ring has to be checked.

After disassembly of the sensor the o-ring must be replaced, otherwise the sealing function can not be guaranteed.

## 5. Dimensions



## 6. Mounting Interface :

