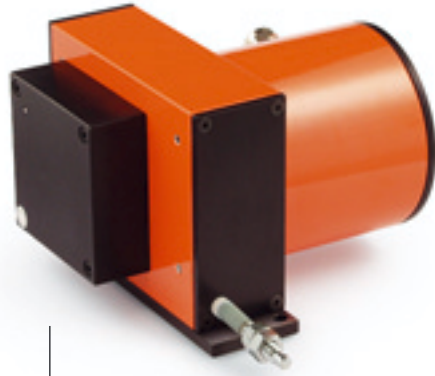


# Wire-actuated encoder SGP

Wire-actuated encoder with analog output, potentiometric or current source, up to 6 000 mm measurement length. Easy adaptation of potentiometer/resistance range to the actual measurement range via integrated gear.

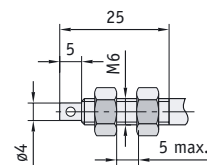
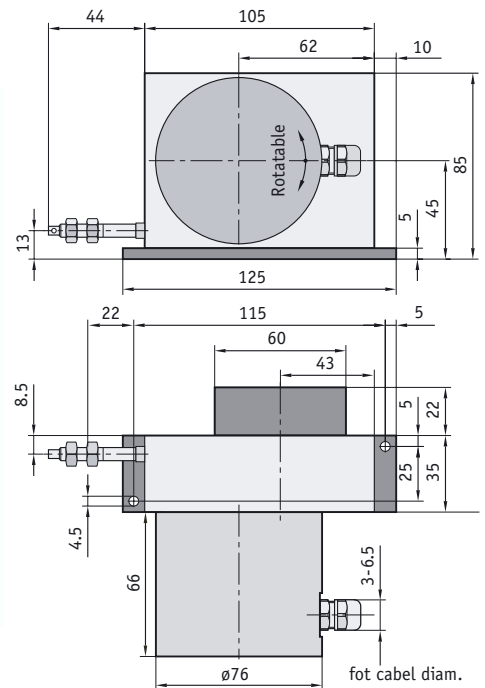


## Features:

- measurement lengths up to 6000 mm
- robust aluminium housing

## Options

- transducer interface 4 ... 20 mA
- choice of cable types:
  - (S) steel cable: stainless, standard design
  - (SK) steel cable with plastic sheath:
    - low surface wear, 2 times more tear-resistant than steel cable
  - (P) para-line: 4 times more tear-resistant than steel cable



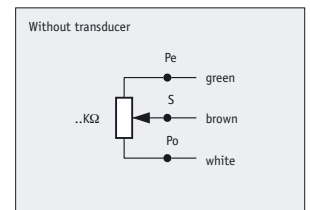
## Output circuits/interfaces



### Encoder type: Potentiometric

Resistance values 1, 2, 5, 10 kΩ  
 Extension length 0 mm : 0 Ω

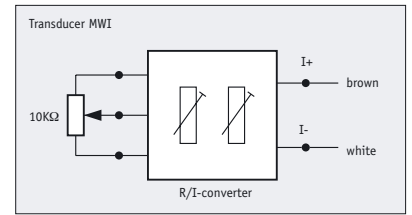
| Potentiometer option: | (Type 01) | (Type 02) | (Type 03) |
|-----------------------|-----------|-----------|-----------|
| Linearity             | ±1 %      | ±0.25 %   | ±0.25 %   |
| Resistance tolerance  | ±10 %     | ±5 %      | ±5 %      |
| Load rating           | 2 W       | 1 W       | 2 W       |
| Measurement length    | < 500 mm  | > 500 mm  | > 500 mm  |





### Encoder type: Current source (transducer)

|                      |                |
|----------------------|----------------|
| Output current       | 4 ... 20 mA    |
| Resistance value     | 10 kΩ          |
| Operating voltage    | 15 ... 28 V DC |
| Max. load resistance | < 500 Ω        |
| Power consumption    | max. 40 mA     |
| Working temperature  | 0 ... 50 °C    |



#### Transducers...

... enable maximum adjustment of the output current to the measurement range. The start and end points of the measurement range can be adjusted exactly to 4 ... 20 mA output current via trimming potentiometers.

|                          |     |      |     |      |      |      |      |      |      |      |      |      |      |      |          |
|--------------------------|-----|------|-----|------|------|------|------|------|------|------|------|------|------|------|----------|
| Measurement range [mm]   | 250 | 500  | 750 | 1000 | 1250 | 1500 | 1750 | 2000 | 2250 | 2500 | 2750 | 3000 | 3250 | 3500 | ... 6000 |
| Max. travel speed [mm/s] | 700 | 1000 | 200 | 300  | 300  | 400  | 490  | 500  | 600  | 700  | 800  | 800  | 900  | 1000 | ... 1000 |

| Feature                        | Ordering data      | Technical data                           | Additional information                              |
|--------------------------------|--------------------|--|---|
| Travel speed                   |                    | see table                                |   |
| Required cable extension force |                    | min. 8 N on cable                        |   |
| Drum circumference             |                    | 200 mm                                   |   |
| Extension length               |                    | measurement range +10 mm                 |   |
| Repeat accuracy                |                    | dependent on start direction, ~0.5 mm    |   |
| Type of protection             |                    | for potentiometer part: IP53             |   |
| Working temperature            |                    | approx. -20 °C ... +80 °C                |   |
| Housing                        |                    | aluminium                                |   |
| Colour                         |                    | orange, RAL 2004                         | others on request                                   |
| Weight                         |                    | approx. 950 g                            |   |
| Measurement range              | ... <b>A</b>       | measurement ranges [mm], see table       | max. travel speed length-dependent, see table above |
| Cable version*                 | <b>S</b> <b>B</b>  | stainless steel cable                    | measurement range max. 6000 mm, <b>standard</b>     |
|                                | SK                 | steel, plastic-sheathed                  | measurement range max. 4000 mm                      |
|                                | P                  | para-line, non-conducting, signal colour | measurement range max. 2750 mm                      |
| Potentiometer type             | <b>01</b> <b>C</b> | 1 turn                                   | measurement range ≤ 500 mm                          |
|                                | 02                 | 10 turn                                  | measurement range > 500 mm                          |
|                                | 03                 | 10 turn                                  | measurement range > 500 mm                          |
| Resistance value               | <b>1</b> <b>D</b>  | kΩ                                       | others on request                                   |
|                                | 2                  | kΩ                                       |   |
|                                | 5                  | kΩ                                       |   |
|                                | 10                 | kΩ                                       |   |
| Transducer                     | <b>X</b> <b>E</b>  | without                                  |   |
|                                | M                  | with transducer                          | 4 ... 20 mA   |

\*\* Cable thicknesses: S = diam. 0.54 mm, SK = diam. 0.87 mm, P = diam. 1.05 mm

Your order:  -  -  -  -  -