

### Functional description

The linear movement of a flexible steel cable, which can have a length of up to 2 m, is converted into an angular movement with the aid of a measuring drum. The measuring drum is coupled via a gear to a conductive plastic potentiometer.

The restoring force of the spring drive holds the measuring cable tight at all times and prevents any sagging which would otherwise induce an error. The measuring drum moves axially on a spindle ensuring that the cable is wound up precisely and reproducibly wrap for wrap in the helical groove of the drum. The cable entry contains a brush to remove dust.

### Technical data

#### Variants A and B with electronic circuit

- Current: 80 mA max.
- Supply voltage  $V_B$ : 20 - 30 V (polarity safe)
- Signal output:  
A: 0 ... 20 mA  
B: 4 ... 20 mA
- Linearity:  $\pm 0.2 \%$

#### Variant P without electronic circuit

- Resistancy: 5 k Ohm  $\pm 10 \%$
- Power dissipation: 1,5 W max.
- Linearity:  $\pm 0.2 \%$

### Mechanical data

- Measuring range: 1 or 2 m
- Force of spring:  $\sim 4 \text{ N}$  at the beginning
- Spring constant:  $\sim 2.5 \text{ N/m}$
- Speed: 10 m/s (max.)
- Diameter of cable: 0.55 mm
- Thermal coefficient: 0.01 mm/mK
- Acceleration: 70 m/s<sup>2</sup> max.
- Mass:  $\sim 0.6 \text{ kg}$

### Environmental data

- Temperature range: -20° to +50° C
- Protection class: IP 54
- Shock resistancy: 25 g
- Life expectancy: 2 Mio. cycles (typ.)

### Material

- Housing material: anodized aluminium
- Cable entry: stainless steel 1.4105
- Cap: durezza black
- Spring housing: durezza black
- Cable : stainless steel 1.4401

### Order code format

SWP 2 - 2000 - A 01

Special Variants

Variant

A = 0 - 20 mA

B = 4 - 20 mA

P = Potentiometer

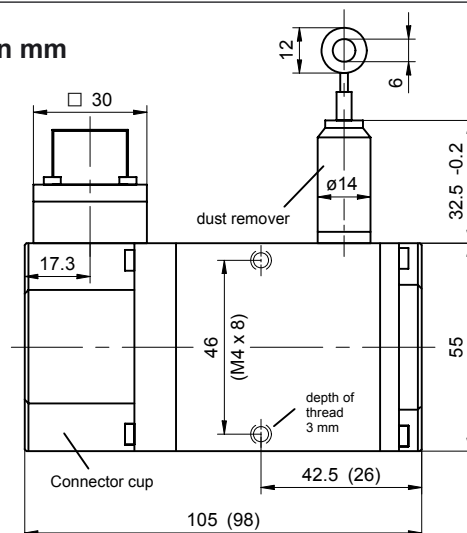
Calibrated range (mm)

Cable lengths (m)

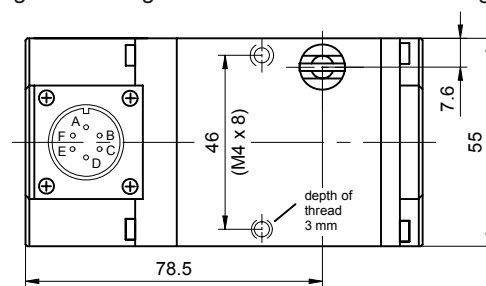
Model SWP



### Dimensions in mm

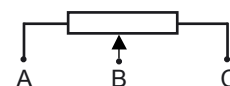


Values in drawing for 2 m range. Values in brackets for 1 m range.



Connector cup adjustable at 90° or 180°.

### Connections for variant P



### Connections for variants A and B

- contact A: +24 V supply
- contact B: 0V
- contact C: Output 0(4)...20 mA
- contact D: N.C.
- contact E: Screening not connected
- contact F: N.C.

**Counter plug:** (to be ordered separately)  
STR6GS03 (straight) □ STR6WS04 (angled)