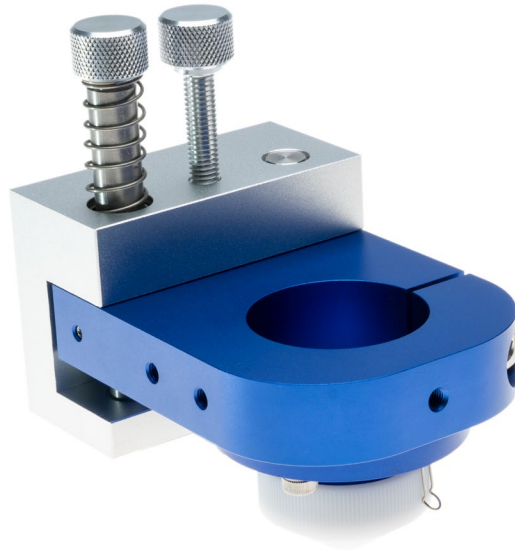


# SOROTEC

## Operation Manual Engraving Stop / Depth Regulator



## Description

Not every surface to be engraved is perfectly flat. On the contrary: Even the finest differences in the thickness of the material are magnified as fluctuations in the line width.

The depth regulator prevents this effect through continuous compensation and precise height tracking of the entire milling spindle. The white cap glides over the surface, pressed on by adjustable spring pressure, follows ups and downs and raises and lowers the unit consisting of regulator and spindle. The depth of the engraving always remains the same with a fluctuation in thickness of up to 10 mm, and the line pattern stays without waviness from start to finish.

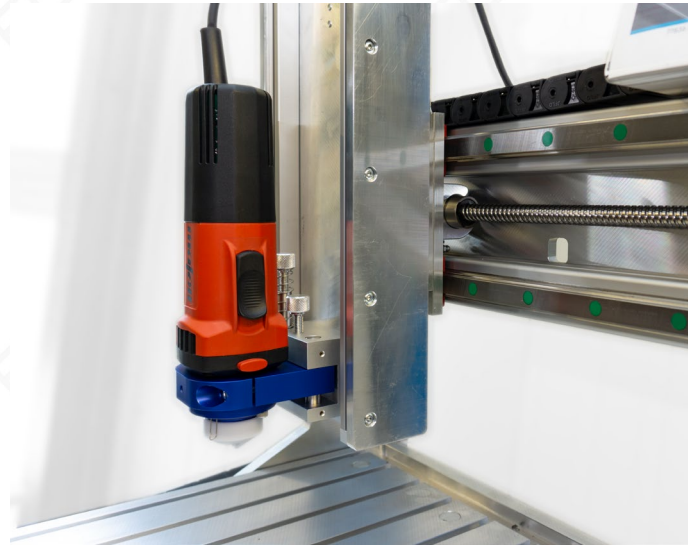


Fig. 1: Fully assembled on the Z-axis

## Mounting

The spindle holder previously installed on your milling machine will be exchanged for the depth regulator (see Fig. 1). To do this, proceed as follows:

- Loosen the collar clamp and remove the milling spindle.
- Dismantle the spindle holder.
- Screw the depth regulator to the Z-axis.
- Loosen the two screws 4 of the cap holder (see Fig. 3).
- Insert the spindle into the collet holder and tighten the clamping screw 3.
- Tighten the screws on the cap holder again.

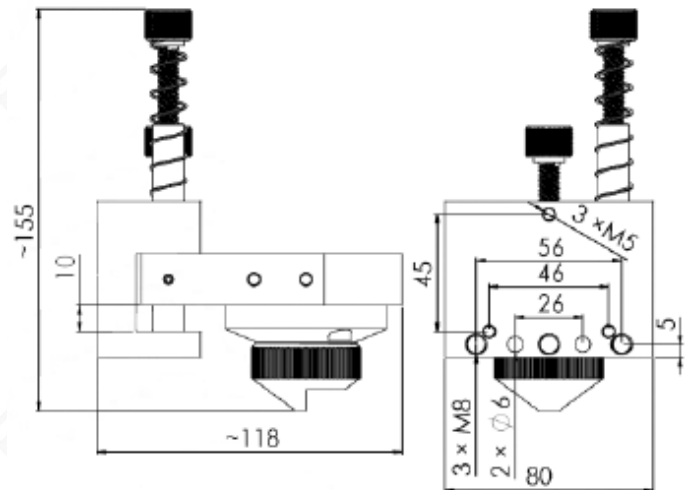


Fig. 2: Dimensions of the depth regulator

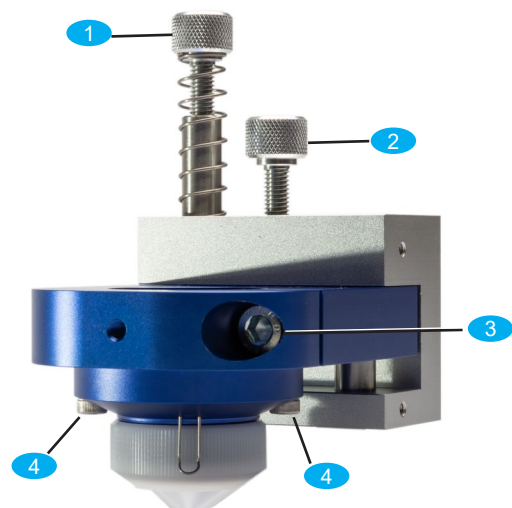


Fig. 3: Adjusting and fastening screws

## Operation

### Change cutter / engraving stylus

- To replace the milling cutter, first remove the glider cap or remove the spindle.
- Mount the milling cutter / engraving stylus. Make sure there is a free length of approx. 15 mm.
- Screw on the glider cap. The cutter should protrude from the cap just as far as the engraving should be deep.

### Engraving

The weight of the spindle can be balanced by turning the spring-loaded screw **1** to adjust the contact pressure of the milling cutter. The optimal force has to be determined by tests on a leftover piece. Sensitive surfaces usually require low contact pressure.

#### **i** Note:

*To avoid scratches and shiny spots on sensitive surfaces, an adhesive tape can be stuck on the areas to be engraved.*

*With soft material (e.g. Styrofoam), the flat glider cap (order no. WGS.FES43KAP2, see Fig. 4) helps to spread the pressure and prevent it from sinking into the material.*



Fig. 4: Flat probe cap Ø 42 mm for load spreading

### Milling

The depth regulator can remain mounted for milling, but should be locked. To do this, turn the screw **2** for the upper stop all the way down so that the depth regulator is held in the lower position.

The glider cap should be removed.

### Maintenance

If you do not have a suction device at your disposal, the key cap should be removed and cleaned at regular intervals to remove the chips. If the chips are not removed early, the friction can generate too much heat and damage the spindle.

The thread of the adjusting lug should be cleaned and greased regularly to ensure that it runs smoothly.



#### **Attention!**

Clean the guide shafts of the sliding bushes with a vacuum cleaner or a cloth only.

**The slide bushings of the depth regulator are maintenance-free and must not be lubricated. Oil and fat can cause the plastic to swell. Clamping of the guide would result.**

## Technical specifications:

<b>Dimensions:</b>	ca. 80 x 155 x 118 mm
<b>Weight (including packaging):</b>	1.07 kg
<b>Clamping diameter spindle flange:</b>	43 mm Euroneck
<b>Height adjustment:</b>	10 mm
<b>Adjustment path glider cap:</b>	5 mm, Pitch 0.012 mm / click
<b>Attachment Z-axis:</b>	2 x M8 / 3 x M5