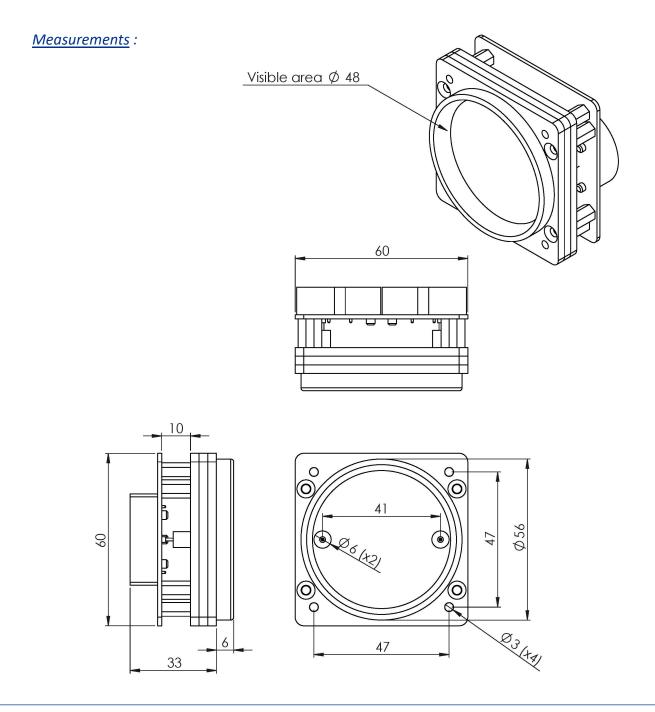


Model 60x60d dual needle

# 1- Overview

#### <u>Stepper</u> : Switec X27-589

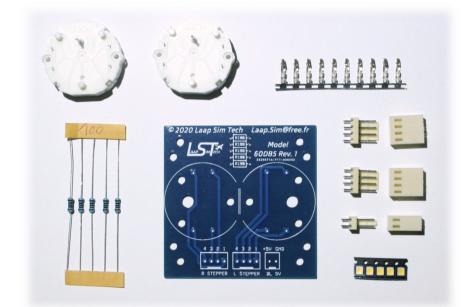
- Maximum operating speed : 600°/s
- 0,5° per full step
- Angle of rotation with internal stop :  $315^\circ$
- Operating voltage : 5V to 9V
- Coil resistance (per coil) : 260Ω @ 5V / 290Ω @ 9V





# 2- Kit content

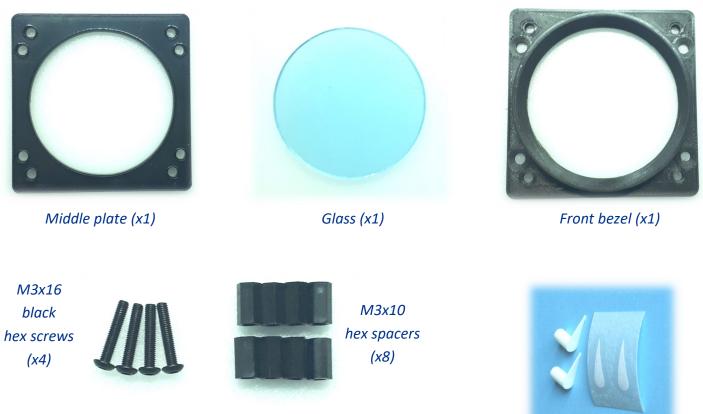






Diffusing PMMA sheet (x1)

PCB (x1) & Components set Differs depending backlight voltage Please refer to the PCB assembly manual



M3x14 countersunk screws (x4)



screws



Needles (x2)

White stickers (x2)

(x8)





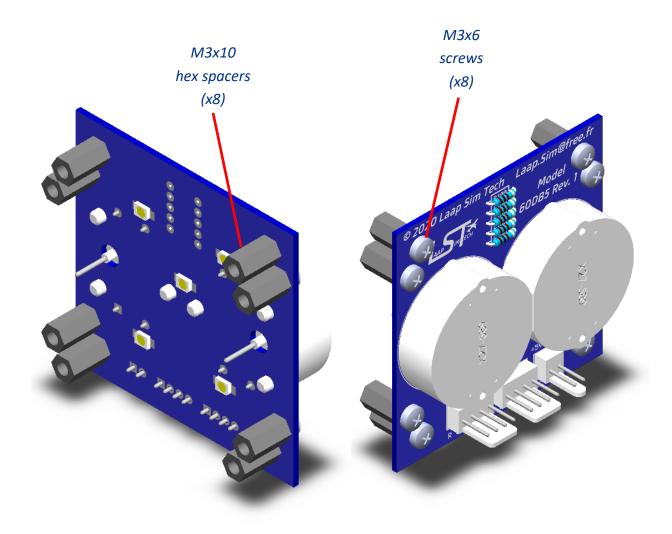
It's recommanded to follow these steps in the order of the manual.

PMMA laser cut parts may have a transparent protection film. Please ensure to remove it on both sides before assembly.

The components must be soldered, please refer to the PCB manual.

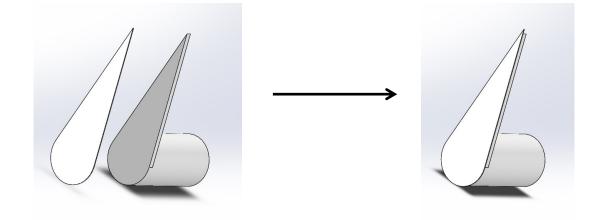
#### <u> 3a- Spacers</u>

Screw the 8 hex spacers on the PCB using M3x6 screws. Do not overtighten. <u>Note</u> : Screws head socket may differ from the picture below.



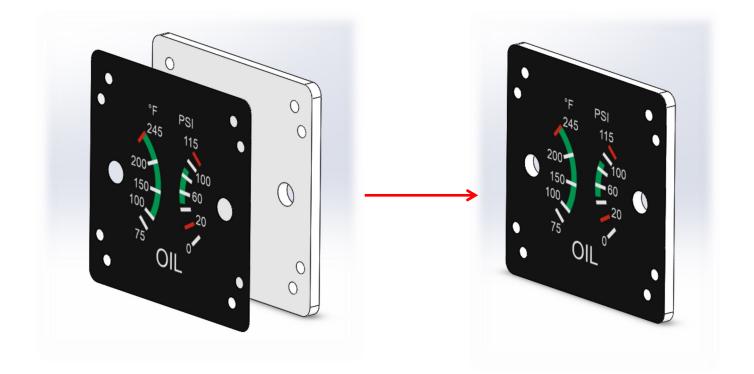


- Place the white sticker carefully on the needle, and remove the adhesive film.
- Repeat for the second needle.



### <u>3c- Printed pattern</u>

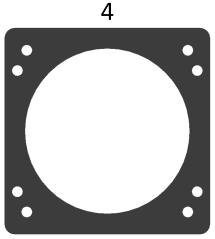
If you didn't order the optional pattern, you have to print, glue on diffusing plate and drill it. It's recommanded to use a glue spray to keep the pattern as dry as possible.

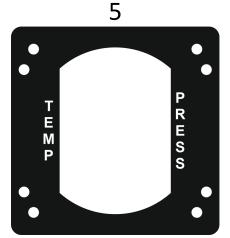


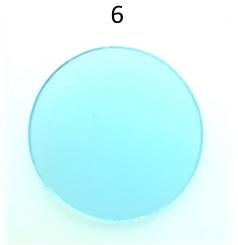
### 3d- Final assembly



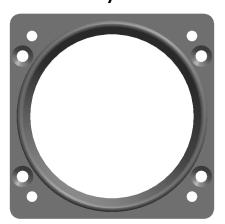
Make sure the left stepper shaft is turned at its rightmost position,and the right stepper shaft at its leftmost position.You can now assemble all the parts together, from back to front.Use the four M3x14 countersunk screws to fix all these parts on the hex spacers.Note : Screws head socket may differ from the picture below.







7



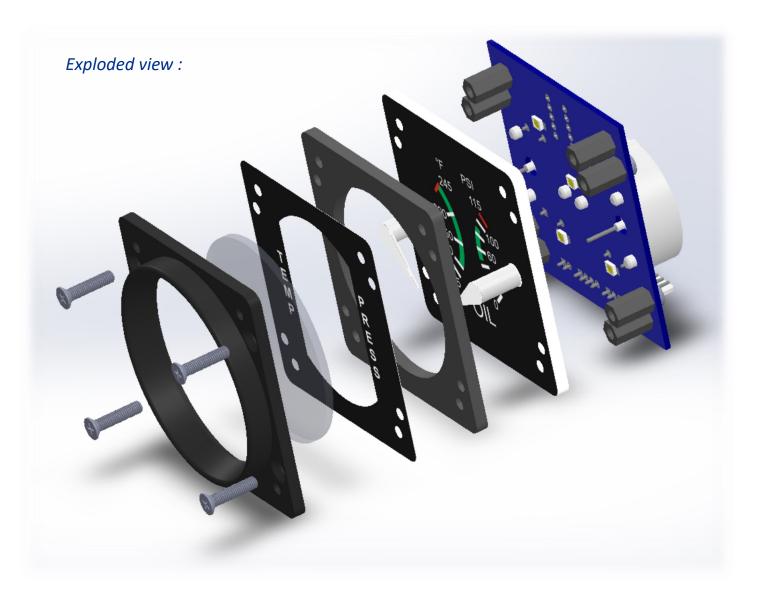


8

M3x14 countersunk screws (x4)













## M3x16 black hex screws are provided to mount the gauge on your own panel.

