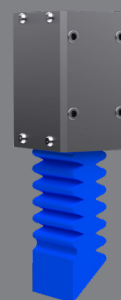


Flexible SMART GRIPPER® Module FSG-1

The Flexible **SMART GRIPPER**® Module is a fully electrically actuated finger module that allows to build custom soft gripper.

Advantages:

- Multiple mounting options for versatile integration into custom gripper designs
- Fully electric for easy process control
- Patented finger design with a soft body, flexible in gripping direction and rigid in all other degrees of freedom:
 - allows to softly, but firmly grip delicate objects;
 - allows to handle objects of varying size, shape, and weight.
- Fast action for high throughput
- Mobile/wireless setup for quick setup
- The external controller allows
 - Programmable Open/Close Finger Positions



SPECIFICATIONS

Model	Number of Fingers	Payload	Finger Weight	Gripping Time	Maximum Current (Idle)	Maximum Current (Load)	Maximum Current (Instantaneous)
FSG-1	1	Configuration specific	0.27 mm (0.6) in	50/50 ms/mm (50/2) ms/in	0.1 A	2 A	3 A

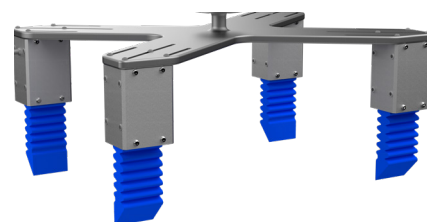
Rated Voltage: **15 VDC – 25 VDC**

Control Interface: **Digital I/Os**

Serial (ROS, socket) available on request

Operating Temperature: **5 - 60 °C (40 - 140 °F)**

Noise Emissions (Sound Pressure): **≤ 70 dB(A) in any direction**

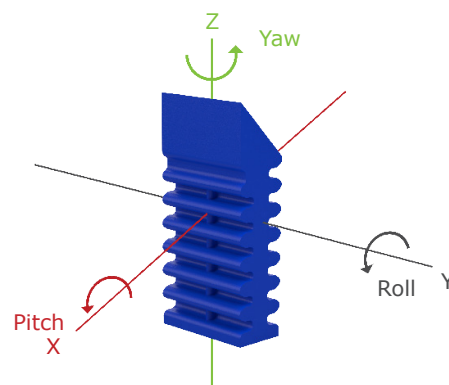


Example of configuration

PATENTED FLEXIBLE FINGER



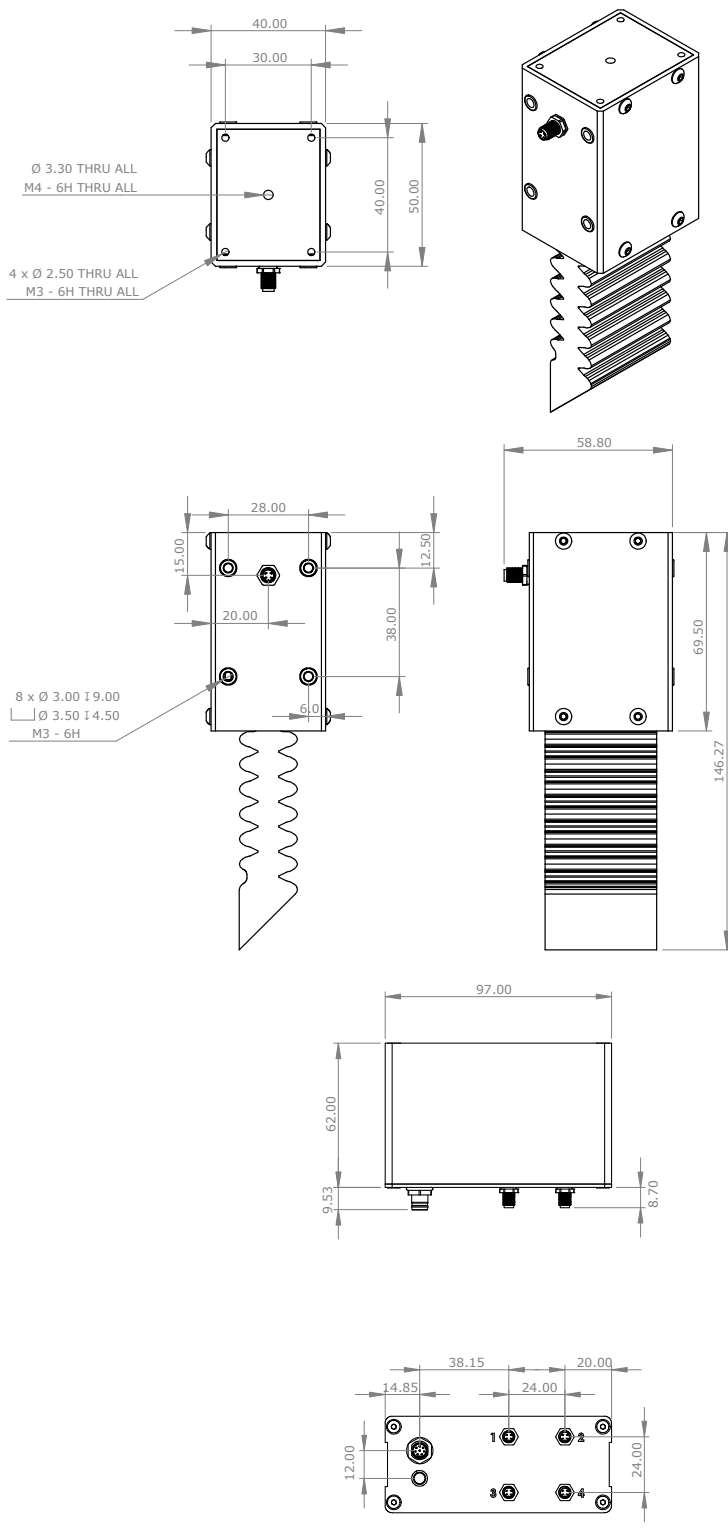
The Flexible **SMART GRIPPER**® (FSG) allows for the picking and placing of a multitude of shapes and sizes due to its patented, FDA approved silicone fingers, actuated by a fully electric system. The ability to rotate in the Roll degree of freedom, while keeping rigid in the Pitch and the Yaw degrees of freedom, allows for dependable, soft and flexible gripping of delicate



PRODUCT INFORMATION



02.25_Rev.04



* Dimensions are in millimeters.

Finger Positions	
Position 1 (00) = -3	Position 2 (01) = 3
< Go >	< Go >
Position 3 (10) = 4	Position 4 (11) = 5
< Go >	< Go >
Smart Functions	
High Power ☒	
Part Confirmation: 400 mA	Force Limitation: 2000 mA
Set Values	

Finger Adjustment	
Finger 1	Finger 2
< >	< >
Finger 3	Finger 4
< >	< >

The FSG can be easily programmed through a simple user interface that can be accessed with any Wi-Fi enabled device.



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