

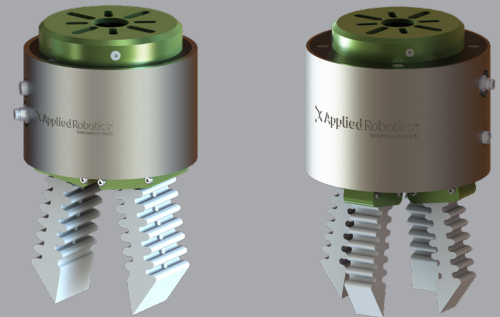
Flexible Smart Gripper™

FSG-2, FSG-4, FSG-2e, and FSG-4e

The Flexible Smart Gripper™ (FSG) is a fully electrically actuated gripper with flexible, soft bodied fingers for handling objects of varying size, shape, and weight.

Advantages:

- Fully electric
- Programmable Open/Close Finger Position settings
- Patented, FDA compliant silicone fingers
 - Allows for soft, flexible gripping of delicate objects
 - Flexible in gripping direction and rigid in all other degrees of freedom
- Enhanced Intelligence version
 - Part Confirmation
 - Force Control
- Compatible with collaborative robots



SPECIFICATIONS

Model	Number of Fingers	Rated Payload		Gripper Weight		Maximum Finger Opening at the Tip		Open/Close Speed	Maximum Current (Idle)	Maximum Current (Load)	Maximum Current (Instantaneous)
		kg (lb)	kg (lb)	mm(in)	mm/s (in/s)	A	A	A			
FSG-2	2	1.5	0.8	175	1450	0.03	2	3			
		(3.3)	(1.8)	(6.9)	(57)						
FSG-4	4	1.5	1.3	195	1450	0.08	3	5			
		(3.3)	(2.9)	(7.7)	(57)						
FSG-2e	2	1.5	0.8	175	1450	0.03	2	3			
		(3.3)	(1.8)	(6.9)	(57)						
FSG-4e	4	1.5	1.3	195	1450	0.08	3	5			
		(3.3)	(2.9)	(7.7)	(57)						

Rated Voltage: 15 VDC – 25 VDC

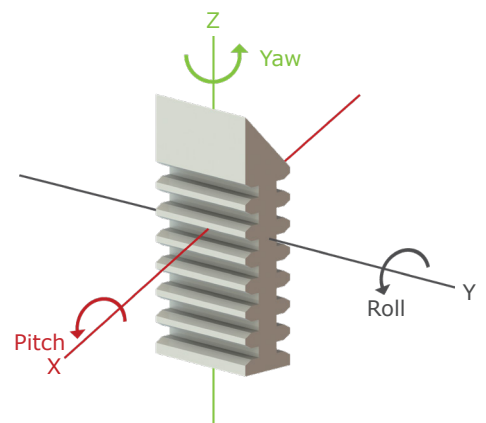
Operating Temperature: **5 - 60 °C (40 - 140 °F)**

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

PATENTED FLEXIBLE FINGER

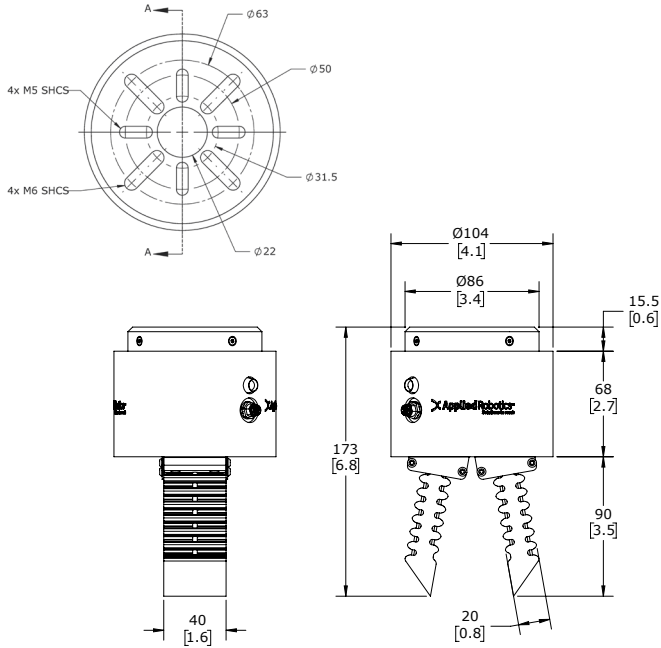


The Flexible Smart Gripper™ (FSG) allows for the picking and placing of a multitude of shapes and sizes due to its patented, FDA compliant silicone fingers, actuated by a fully electric system. The ability to rotate in the Roll degree of freedom, while keeping rigid in the Pitch and the Yaw degrees of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

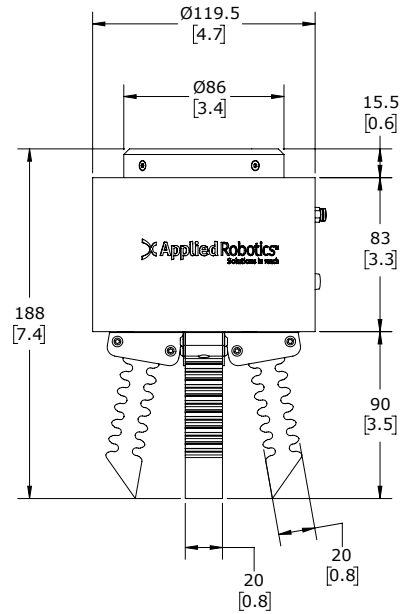


PRODUCT INFORMATION

FSG-2 / FSG-2e



FSG-4 / FSG-4e



* Dimensions are in millimeters (inches).
 ** Interface Plate has bolt circle patterns according to ISO 9409-1 specification: 31.5mm, 40mm, 50mm, and 63mm.

ENHANCED INTELLIGENCE VERSION



The Enhanced Intelligence version of the FSG provides additional finger positions for grip precision and efficiency, as well as force control, allowing the user to reliably handle delicate objects.

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

FSG-e Specific



Screenshot of the FSG-e user interface. The interface is divided into three main sections: Finger Positions, Force Control, and Finger Calibration. The Finger Positions section shows four positions: Position 1 (00) = 0, Position 2 (01) = 2, Position 3 (10) = -3, and Position 4 (11) = 6. The Force Control section shows Part Confirmation (400 mA) and Force Limitation (1500 mA). The Finger Calibration section shows Finger 1 and Finger 2 calibration buttons. A dashed green box highlights the Finger Positions and Force Control sections.



Applied Robotics
 648 Saratoga Road
 Glenville, NY 12302 USA
 Tel. +1 518 384 1000 Fax +1.5183841200
 info@appliedrobotics.com
 www.appliedrobotics.com



EFFECTO GROUP S.p.A.
 Via Roma, 141/143
 28017 San Maurizio d'Opaglio (NO) - Italy
 Tel. +39 0322 96142 Fax +39 0322 967453
 info@effecto.com
 www.effecto.com

