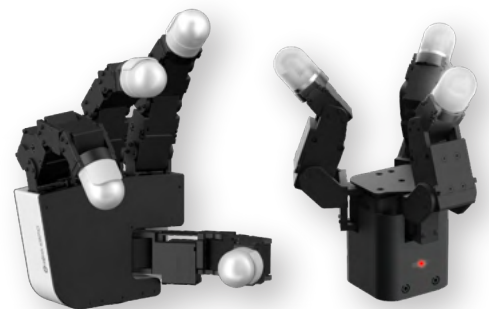


# Allegro Hand V5

- Multiple ready-to-use grasping algorithms capable of handling a variety of object geometries
- 360-degree omnidirectional pressure-sensitive tactile sensor in the shape of a finger





**Allegro Hand V5(3F)**

### Technical Specifications

Number of Fingers	3 Fingers	
Degrees of Freedom	3 Fingers x 3 = 9 (Active)	
Actuation	Type	DC Motor
	Gear Ratio	288.35:1 159.59:1 (2 <sup>nd</sup> joint of a finger)
	Stall Torque	0.92 Nm 1.6 Nm (2 <sup>nd</sup> joint of a finger)
	Nominal Torque	0.23 Nm 0.48 Nm (2 <sup>nd</sup> joint of a finger)
Payload	12 kg (Depending on the measurement method)	
Weight	1,050 g	
Joint Resolution	0.088 deg	
Communication	Type	CAN, RS-485
	Frequency	500 Hz (CAN)
Power Requirement	24.0 V / 5.0 A / 120 W	



**Allegro Hand V5(4F Plus)**

### Technical Specifications

Number of Fingers	3 Fingers + 1 Thumb = 4	
Degrees of Freedom	4 Fingers x 4 = 16 (Active)	
Actuation	Type	DC Motor
	Gear Ratio	288.35:1 576.7:1 (2 <sup>nd</sup> joint of the finger excluding the thumb)
	Stall Torque	0.92 Nm 1.84 Nm (2 <sup>nd</sup> joint of the finger excluding the thumb)
	Nominal Torque	0.23 Nm 0.46 Nm (2 <sup>nd</sup> joint of the finger excluding the thumb)
Payload	15 kg (Depending on the measurement method)	
Weight	1,024 g	
Joint Resolution	0.088 deg	
Communication	Type	CAN
	Frequency	500 Hz (CAN)
Power Requirement	24.0 V / 5.0 A / 120 W	

## Fingertip Type



### Type A(Default)

Standard attachment model, with an internal structure to support the external silicone surface, enabling a firm grip



### Type B

The supporting structure for the silicone surface is positioned externally, making it suitable for delicate object gripping



### Type C

The sensor length is reduced, and measurement is restricted to the upper part of the sensor, allowing for a strong grip



### Type D

A wide supporting structure is installed on the back of the sensor, enabling a strong lateral grip

## Fingertip Pressure Sensor

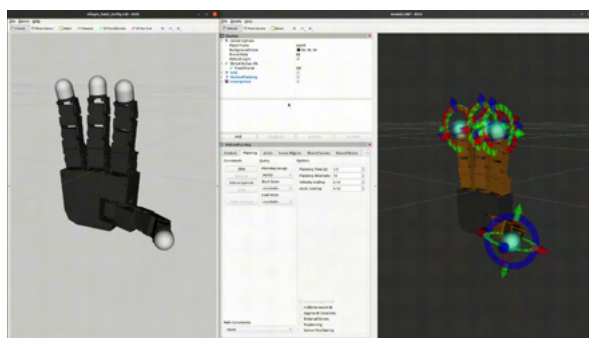
- Stiffness similar to a human finger
- Various fingertip optional provided(sold separately)
- The color changes based on tactile sensitivity
- Air pressure measurement method using a capacitive pressure sensor
- Capable of flexibly manipulating objects, from rigid to deformable soft materials



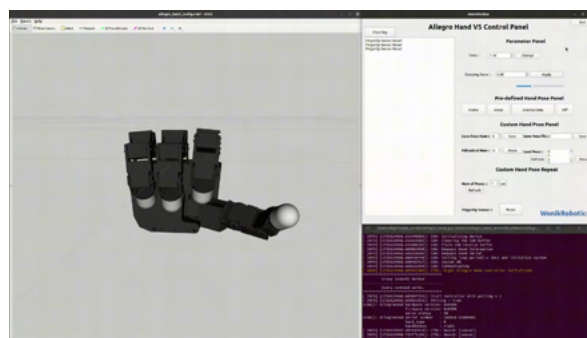
## Allegro Hand UXD

Comprehensive hand control system via Visualized Application

- Real-time hand status monitoring
- Effortless hand pose generation
- Versatile hand motion control via buttons



Hand Pose Generation with ROS



Hand Control with GUI



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L-AH V5-E(Rev.3,2505)