

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)



Allegro Hand V5(4F Plus)

Technical Specifications

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

Technical Specifications

Number of Fingers	3 Fingers + 1 Thumb = 4	
Degrees of Freedom	4 Fingers x 4 = 16 (Active)	
Actuation	Туре	DC Motor
	Gear Ratio	288.35:1 576.7:1 (2 nd joint of the finger excluding the thumb)
	Stall Torque	0.92 Nm 1.84 Nm (2 nd joint of the finger excluding the thumb)
	Nominal Torque	0.23 Nm 0.46 Nm (2 nd 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	Туре	CAN
	Frequency 500 Hz (CAN)	
	24.01//5.0.0./12011/	

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 C



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

Fingertip Pressure Sensor

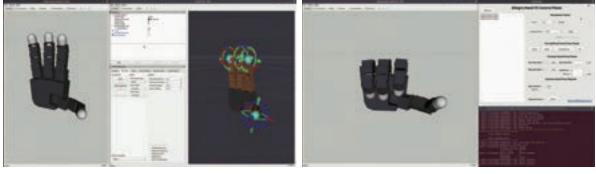
- Stiffness similar to a human finger
- Various fingertip optional provided(sold separately)
- The color changes based on tactile sensitivity
- Air pressure measurement method using a capacitive pressure sensor
- Capable of flexibly manipulating objects, from rigid to deformable soft materials



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



Type B

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



Type D

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



Hand Control with GUI



Contact Us. WONIK ROBOTICS CO., Ltd.Wonik Bldg. 4F, 20, Pangyo-ro 255beon-gil, Bundang-gu, Seongnam-si, Gyeonggi-do, Republic of Korea.Tel +82-31-8038-9180Fax +82-31-8038-9190Email robotics.biz@wonik.comWeb www.wonikrobotics.com, www.allegrohand.com