

Allegro Hand V5

- $\cdot \, \text{Multiple ready-to-use grasping algorithms capable of handling a variety of object geometries} \\$
- \cdot 360-degree omnidirectional pressure-sensitive tactile sensor in the shape of a finger
- · 16 independent current-controlled joints (4 fingers x 4 DOF ea.)

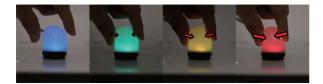


Tactile Sensor

A 360-degree omnidirectional pressure-sensitive tactile sensor in the shape of a robotic finger

LED Color Change Based on Pressure Variation

This tactile sensor, modeled after the rigidity and shape of a human finger, is designed as a robotic finger capable of flexibly handling a wide range of objects, from rigid to deformable soft materials



360-Degree 3D Pressure Sensing

When applied to 3D-shaped robotic fingers, this sensor effectively resolves signal distortion issues arising from various gripping directions, providing excellent performance and reliability in a stable and consistent manner



Technical Specifications



Allegro Hand V5(4F)

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
	Stall Torque	e 0.92 Nm
	Nominal Torque	0.23 Nm
Payload	12 kg (Depending on the measurement method)	
Weight	1,000 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	



Allegro Hand V5(4F) Plus

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, RS-485 (Planned support)
	Frequency 5	500 Hz (CAN)
Power Requirement	24.0 V / 5.0 A / 120 W	