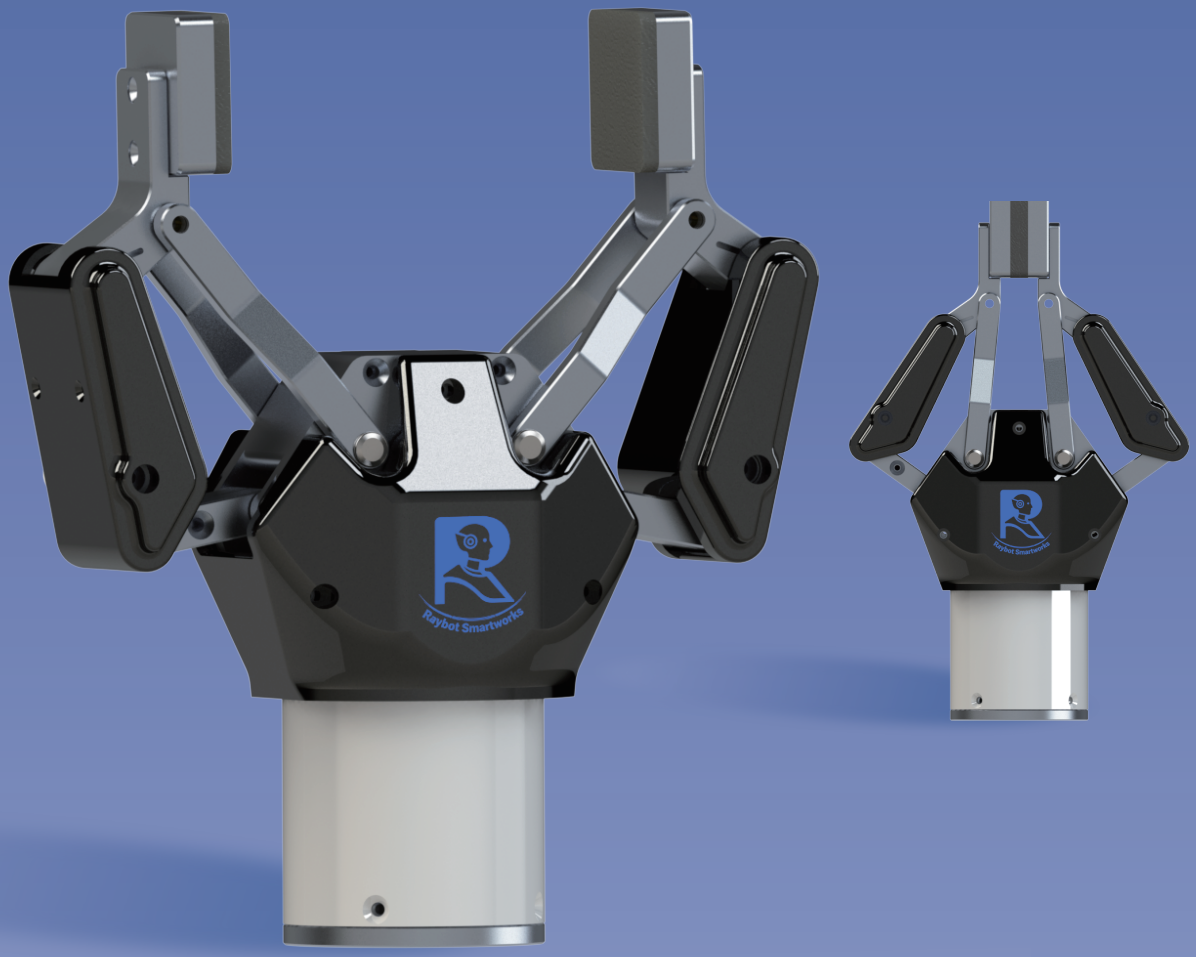
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Raybot Smartworks GP2-53-120-E Gripper

RAYBOT



01

Dexterous Adaptive Grasping

The innovative two-finger linkage spring mechanism automatically conforms to the object profile, enabling adaptive grasping of objects with different shapes without complex programming.

02

Programmable Force and Position

Both grasping position and force can be set independently. The gripper stably maintains the preset values during operation, achieving both secure and flexible gripping.

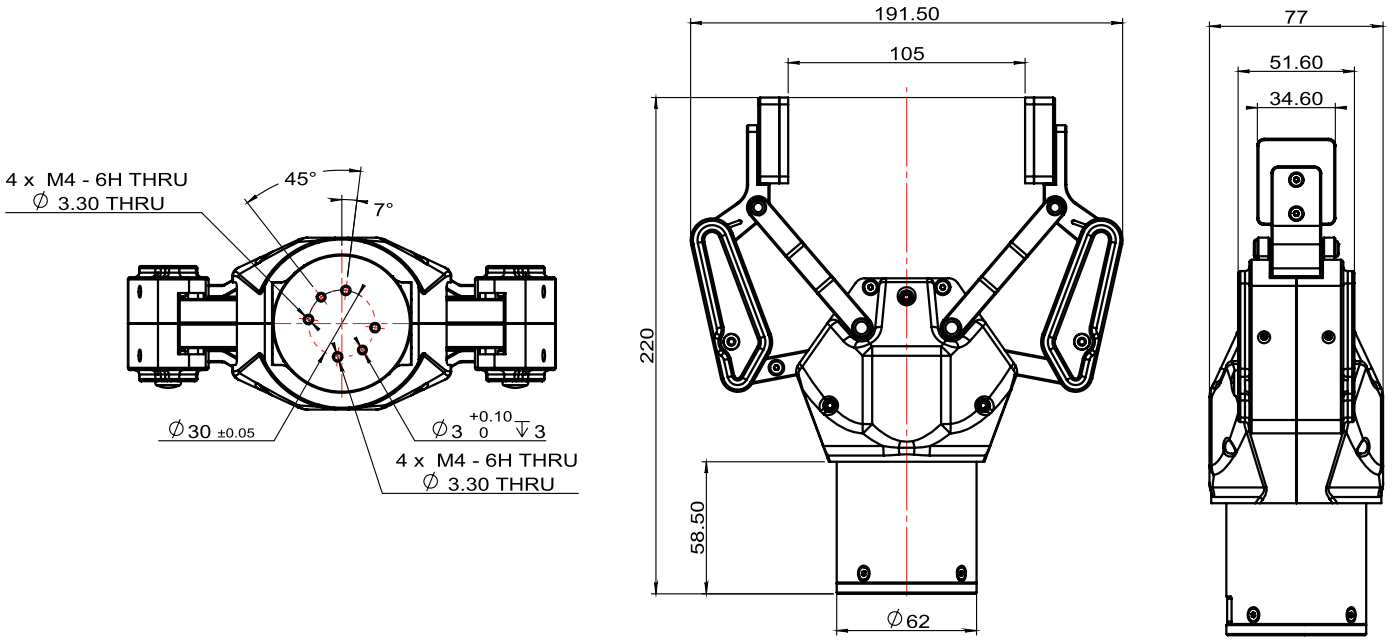
03

Intelligent Judgement, Easy Integration

Incorporates a force-position dual-control strategy to intelligently judge grasping status. Supports both CAN and EtherCAT communication protocols for plug-and-play integration.

GP2-53-120-E Gripper

This gripper features an innovative two-finger adaptive design. The two fingers integrate a ball screw, planetary gear reducer, and linkage mechanism internally, enabling high gripping force. This ingenious structure gives it a "dexterous" characteristic, allowing it to naturally conform to object surfaces like a human hand, automatically adapting to different shapes for simple and efficient grasping. During operation, the gripper intelligently maintains the set gripping force, ensuring each grasp is both secure and safe, avoiding damage to objects. It provides object drop detection functionality, enabling users to easily handle scenarios where grasped items are dropped. The gripper is equipped with both high-speed EtherCAT and CAN 2.0 communication interfaces, supporting communication frequencies up to 4kHz, allowing for easy integration into various automation systems for seamless connection and control.



Gripper Parameters	Value
Rated Grasping Force	120N
Peak Grasping Force	300N
Total Stroke	105mm
Operating Noise	<60dB
Weight	1.12kg
Transmission Method	Planetary Gear + Ball Screw Nut + Linkage Mechanism
Dimensions	191.5mm×220mm×77mm
Electrical Parameters	**Value**
Value	24~48V
Current (24V test)	0.36A (Rated) / 2A (Peak)
Rated Power (24V test)	14.4W
Communication Interface	CAN/EtherCAT

*Rated grasping force is tested with a gripping stroke of 90mm.