





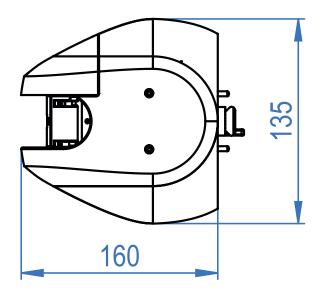
P-Grip®

Gripper for sensitive and safe grasping

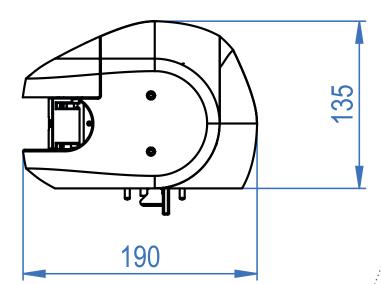
Technical Data

Weight	1.35 Kg
Payload	2 kg
Orientation	2 (1 straight, 1 perpendicular to P-Arm 2)
Dimension	Straight: 160x145x135 mm
	Perpendicular: 190x145x135 mm
Performance	
Opening range	80°
Max. velocity	200°/s
Max. acceleration	2000°/s²
Gripping torque	3 Nm
Controller	Embedded controller using CAN2.0b
Motor and gear	Brushless DC motor with planetary gearhead
Middle sensor	IR sensor (range 40 – 500 mm)
Skeleton and covers	Aluminum, polyamide stiff cover, Polyether foam and rubber, oil resistant and antimicrobial vinyl soft cover
Temperature	P-Grip 2 can work in a temperature range of 0-50°C
Noise	Approx. 60 dB using a typical program
IP classification	IP40 (IP54 with protection cover on request)
Power input	DC input 48V,1A (24V, 36V supply optional)
Power consumption	Approx. 10W using a typical program
Communication	CAN2.0b
Programming	Web browser interface using Python programming Web services (XML RPC, ROS package, HTML5, Javascript)
Hardware interface	
I/O	1 digital input, 1 digital output, 3.3/5V,10mA ; 2 analog inputs, 0-5V
Buses	UART, SPI, I2C
User lines	2 wires down to base of P-Arm 2, 0-48V, 1A max.
USB	2 USB2 down to the base of P-Arm 2, 1A (500mA per channel)
Fingers	
sensorless	Several shapes available on www.fp-robotics.com
	Able to grasp objects with a diameter up to 130mm
sensored	Several options available on www.fp-robotics.com
	F&P Robotics recommends to use P-Rob sensored fingers

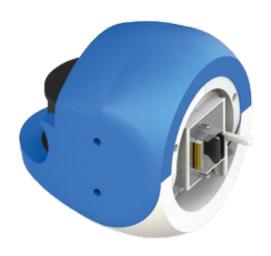
Product overview



Side view (straight mounting)



Side view (perpendicular mounting)



145

Front view



Connecting panel

Finger optionsAvailable on www.fp-robotics.com

Interactive Robots, Made Easy

F&P Robotics AG develops and produces innovative lightweight robot manipulators that cooperate with humans in their professional environment. The company focuses on reducing complexity in automation for the benefit of small, medium and large enterprises by providing all in one robotic solutions.

Investment with Short Payback Period

F&P robots and grippers are deployed in new as well as in existing working environments. Ready-to-use solutions including sensor-equipped end tools contribute to the reduction of costs in flexible automation. The payback period is typically 6 to 12 months. F&P robots are easy to redeploy or adapt to new tasks, so they fit to ever changing business requirements.

Intrinsically Safe and Context Aware

The design of the F&P robots is based on a consistent safety concept that enables direct human-robot collaboration. Soft materials, limited forces and collision detection allow operations without additional protection devices. As working environments are more and more dynamic, robots are equipped with Artificial Intelligence algorithms. They generate alternative solutions when the context changes or exceptions occur.

Swiss Company, International Talents



F&P Robotics AG is a Swiss company headquartered in Zurich, Switzerland and leverages very strong professional and academic worldwide networks. The company combines experienced high-tech and robotics professionals with a young team of international talents. Together we strive for continuous product innovations that create unique value for our customers.



F&P Robotics AG

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