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TECHNICAL SPECIFICATIONS

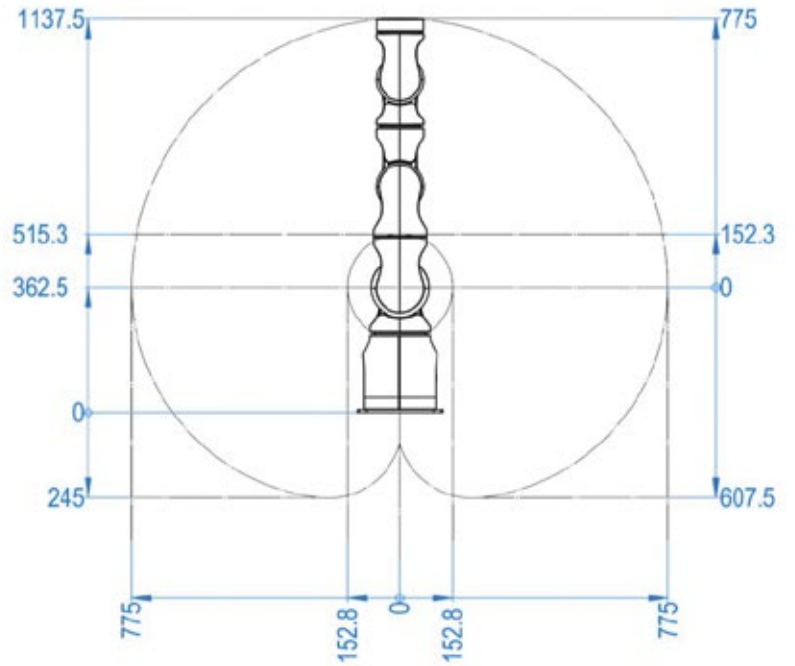
P-Arm[®] 2R

6-axis collaborative and
lightweight robot arm

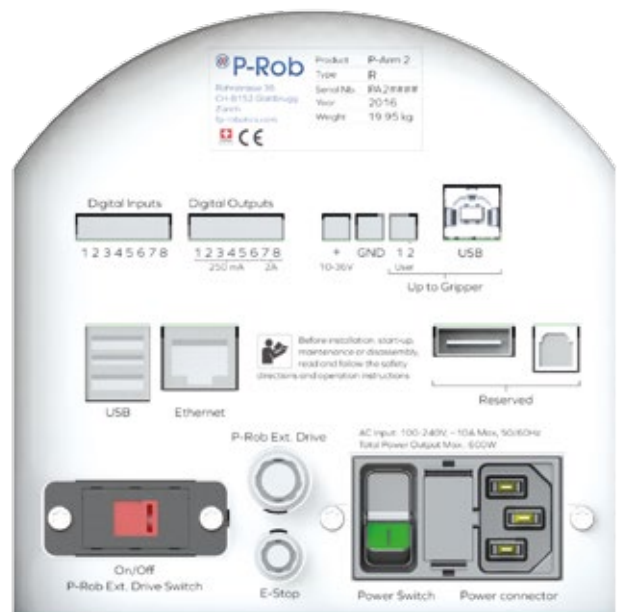
Technical Data

Weight	20 kg					
Payload	3 kg					
Footprint	290 mm x 250 mm					
Mounting position	Floor, table, wall, ceiling, linear axis, mobile platform					
Height	1137.5 mm					
Reach	775 mm					
Performance	Joint 1	Joint 2	Joint 3	Joint 4	Joint 5	Joint 6
Working range	±140°	±110°	±115°	±162°	±115°	±162°
Max. velocity	100 °/s	100 °/s	140 °/s	160 °/s	160 °/s	160 °/s
Max. acceleration	150 °/s ²	150 °/s ²	250 °/s ²	200 °/s ²	200 °/s ²	500 °/s ²
Position repeatability	±0.1mm					
Controller	Embedded PC and distributed controller in each joint using CAN2.0b					
Motors and gears	Maxon Brushless motors and Harmonic Drive gearboxes					
Skeleton and covers	Aluminum skeleton, polyamide stiff cover, Polyether foam and rubber, oil resistant and antimicrobial vinyl soft cover					
Power input	AC 100-240V, ~10A max., 50/60 Hz (DC input 24-48V, 12.5A on request)					
Integrated power supply	48V, 12.5A max. (24V, 36V supply optional)					
Power consumption	Approx. 350W using a typical program					
Communication	TCP/IP 100 Mbit: IEEE 802.3u, Ethernet socket & Modbus TCP (WIFI optional)					
Programming	Web browser interface using Python programming Web services (XML RPC, ROS package, HTML5, Javascript)					
Temperature	P-Arm can work in a temperature range of 0-50°C					
Noise	Approx. 65 dB using a typical program					
IP classification	IP40 (IP54 with protection cover on request)					
Hardware interface						
I/O	8 digital inputs 10-36V 8 digital outputs 10-36V (2x2A, 6x250mA)					
User lines	2 wires up to end effector, 0-48V, 1A max.					
USB	1 USB2 up to end effector, 2 USB2 to Embedded PC					
P-Rob Ext. Drive	P-Rob optional feature on request					

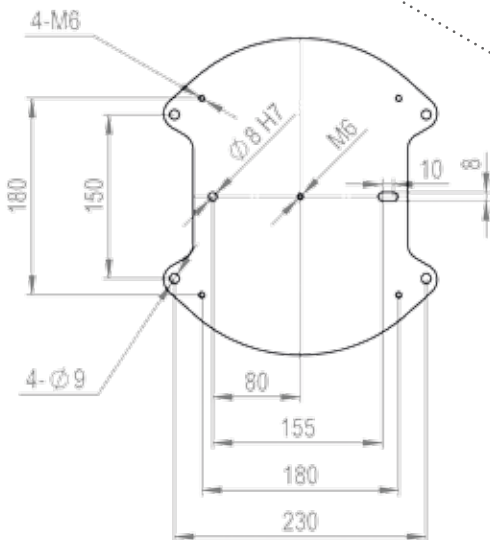
Product overview



Working range



Back panel



Mounting footprint

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.



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F&P Robotics AG is a member of



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