



TECHNICAL SPECIFICATIONS

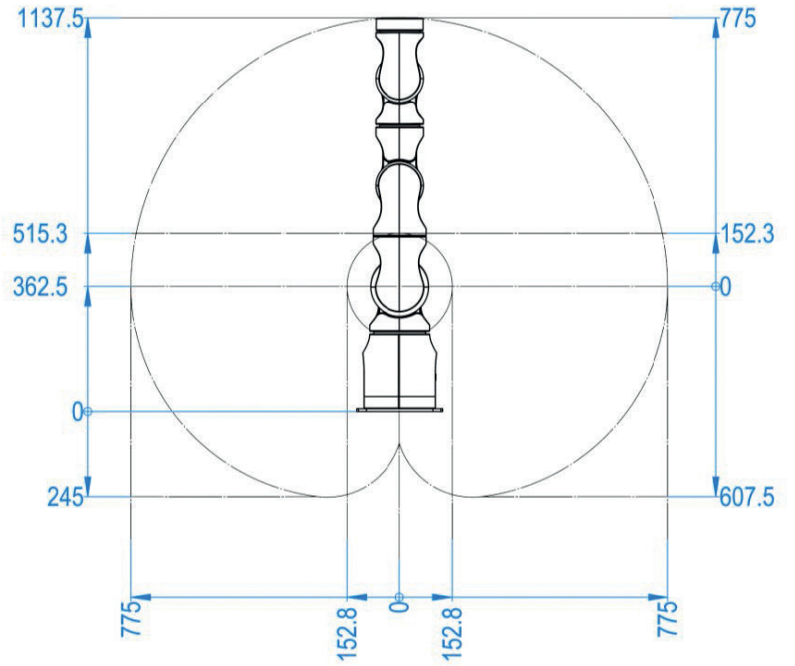
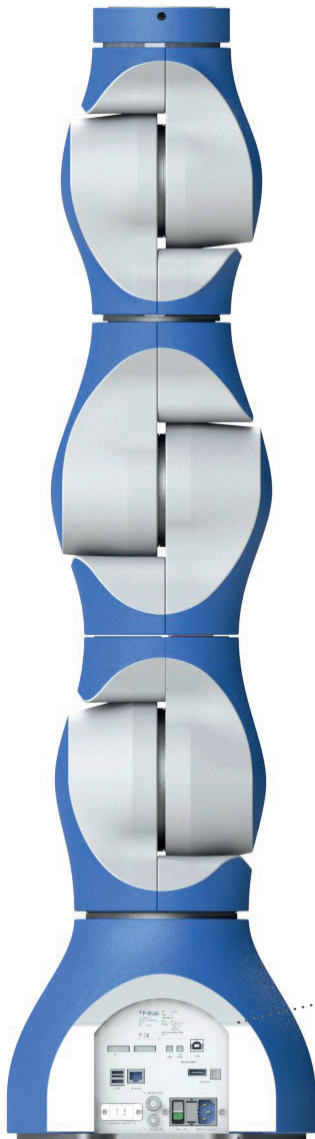
P-Prob[®] 2R

6-axis collaborative and
lightweight robot arm

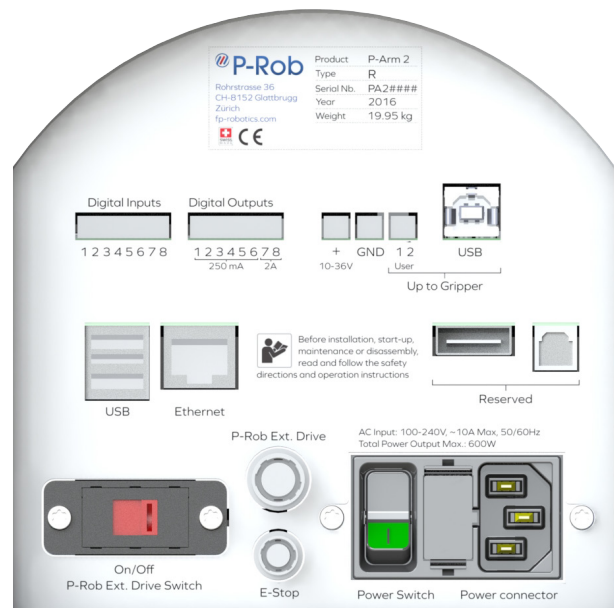
Technical Data

		P-Rob 2R - 24 V	P-Rob 2R - 48V
Weight		20kg	
Payload		3-5 kg	
Footprint		290 mm x 250 mm	
Mounting position		Floor, table, wall, ceiling, linear axis, mobile platform	
Height		1137.5 mm	
Reach		775 mm	
Degrees of Freedom		6	
Power Input	AC	100-240V, ~10A max., 50/60 Hz	
	DC	24-28VDC, 12.5A	48VDC, 12.5A
Power consumption		Less than 80W	Less than 100W
Joint ranges		±110° to ±170°	
Maximal joint velocities		50°/s to 100°/s	100°/s to 160°/s
Position repeatability		±0.1mm	
Controller		Embedded PC and distributed motor controllers in each joint using CAN2.0b	
Robot control software		myP® with web interface (HTML5, Javascript)	
Robot programming		myP® application programming	
API/Web services		Robotic Operating System (ROS) packages	
		XML RPC	
Communication protocol		TCP/IP & Modbus TCP	
Connectivity to base	Ethernet	2x Gigabit Ethernet RJ45 (WiFi upon request)	
	I/O	8x digital inputs 10-36V	
		8x digital outputs 10-36V (2x2A, 6x250mA)	
	USB	2x USB 2.0	
2x USB 3.0			
Connectivity to end tool	Power	24V, 1A max.	48V, 1.5A max.
		(other supply voltages upon request)	
	Data lines	CAN 2.0b, SPI, I2C UART, GPIO 3.3/5V upon request	
	Ethernet	1x Gbit Ethernet cable through the robot (alternatively used as 8 user signal lines 0-48V, 1A max.)	
IP classification		IP40 (IP54 or higher with protective cover upon request)	
Color combinations		DarkBlue-LightGrey, WhiteSmoke-SteelBlue, Black-WhiteSmoke (custom combination upon request)	
P-Rob Ext. Drive		Connectivity to combine P-Rob 2 with a linear axis or a mobile platform	
Standards		ISO 12100, ISO 10218-1, ISO 10218-2, ISO/TS 15066, ISO 13482	

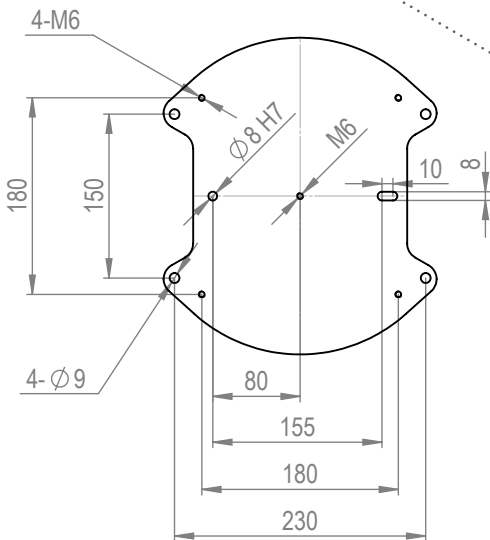
Product overview



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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