

## TECHNICAL DATA

### Possible Robot Configurations

Degrees of Freedom	1 to 8
Payload	up to 35 kg at 1500 mm (see configuration diagram for examples)*
Reach	200 - up to 2100 mm at 18 kg (see configuration diagram for examples)*
Repeatability	± 0,1 mm
Max. Velocity	180°/s or 2 m/s; depending on module selection
Working Range	± 270°
Floor Space	240 mm x 240 mm; can be mounted horizontally, vertically and on the ceiling
Power Consumption	approx. 250W nominal; depending on module selection
Noise Level	comparatively silent
Material	Aluminium, PC/ABS
Ambient Temperature	0°C to 50°C
Conformity	10218-1; EN ISO 13849-1, PL d, Cat. 3

### Control Unit

Dimensions	L 400 mm, W 200 mm, H 300 mm
Operating Voltage	100-240V AC / 50-60Hz; alternatively 48V DC
Protection Class	IP 54
Interfaces	8x digital I/O, Ethernet, Modbus TCP, OPC UA, Profibus/-net
Programming	Intuitive graphical user interface in web browser or on 12" operating panel with mounting device, MATLAB/Simulink or RobCo-ROS

### Drive Modules

	S (D86)	M (D116)	L (D148)	XL (D193)*
Diameter	86 mm	116 mm	148 mm	193 mm
Nominal Torque	51 Nm	140 Nm	281 Nm	638 Nm
Max. Torque	70 Nm	204 Nm	433 Nm	1200 Nm
Rated Power	102 W	220 W	441 W	501 W
Max. Velocity	230°/s	180°/s	180°/s	90°/s
Protection Class	IP 54			

### Link Modules

Diameter (mm)	86 mm	116 mm	148 mm	193 mm
I-Type Lengths (mm)	200, 300, 400	300, 450, 600, 750	400, 600, 800	600, 850, 1100
L-Type Lengths (mm)	240, 340, 440	350, 500, 650, 800	470, 670, 870	700, 950, 1200
Available Shapes	Straight or angled (e.g. I86-300: Straight link module with 86 mm diameter and 300 mm length or L148-870: Right-angled link module with 148 mm diameter and 870 mm length)			
Protection Class	IP 54			

\*The XL modules and the configurations with them (e.g. Sympathetic Sina, Strong Sepp and Energetic Ernst) will be available from mid-2024.