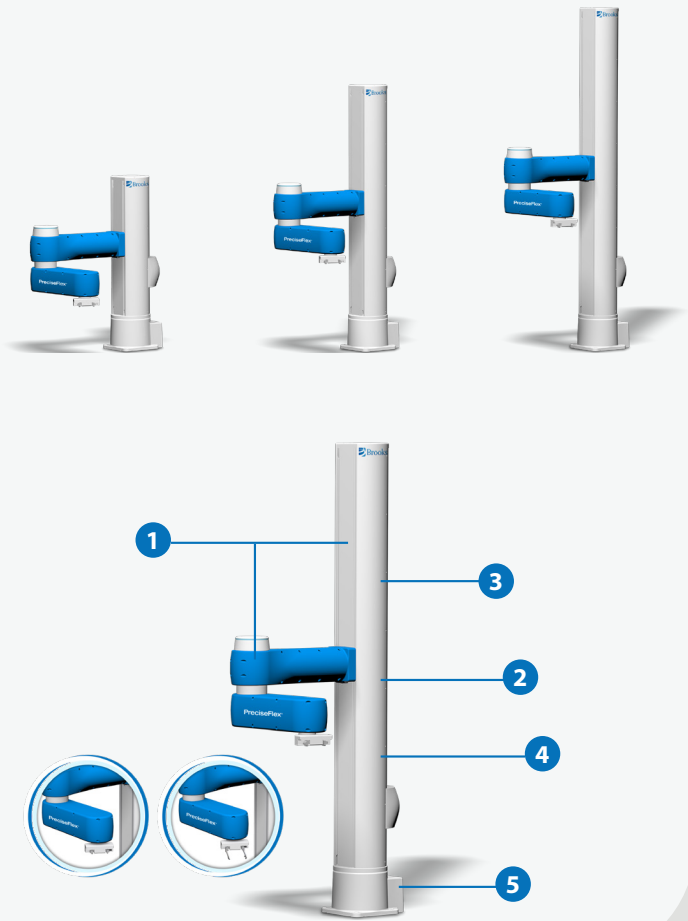


PreciseFlex™ c10 4-Axis Robot - preliminary

Energy Efficiency while Maximizing Workspace



1. Highest Workspace Density

Reach into machines and shelves with tall Z-axis and slim arm design

2. Highest Reliability

With an MTBF of 125,000 hours

3. Range of Motion

Z-Axis: 500, 1000, and 1420 mm
(Horizontal Reach) 896 mm

4. Highest Throughput

Low collision forces enable without sacrificing safety

5. Save Valuable Floorspace

With a compact footprint and embedded controller

Key Benefits

- Fast and easy deployment unlocks the best ROI
- Augments workforce and overcomes labor shortages
- Reduces repetitive stress injuries and frees employees for more meaningful work
- Highest workspace density saves valuable floor space
- Most reliable cobots with MTBF of 125,000 hours and design life of 100,000 hours
- Highest performance increases throughput
- Low maintenance

Always perform a risk assessment before putting any robot into production.

Collaborative robots working alongside people make automation accessible for a wide range of applications. However, accessibility has often come at the cost of reduced speed, reduced precision, higher prices for special sensors, and, in some cases substandard reliability.

PreciseFlex collaborative robots provide an unmatched return on investment (ROI) with the **highest throughput, highest workspace density,** and the **most reliable,** and **most energy-efficient** cobots available.

Wide Range of Applications

The PreciseFlex c10 is well suited for machine feeding (load/upload), small parts handling, kitting, storage and retrieval, sample handling, and mobile applications.

Lowest Power Consumption

Reduced energy usage and extended runtime in mobile applications.

Highest Workspace Density

The PreciseFlex c10 has a unique configuration with horizontal articulation for the major axes, and a tall Z-axis (up to 1,420 mm). The vertical column work envelope enables the robot to reach into racks, shelves, or stacked machines. The vertical column work envelope is much more efficient than the spherical work envelope used by most traditional cobots.



With the vertical column work envelope and embedded controls, PreciseFlex cobots offer the highest workspace density, saving valuable floorspace.



PreciseFlex c10 - Specifications- preliminary

Performance

Payload	10 kg
Max Cartesian Speed	X/Y Direction, 500 mm/sec Z Direction, 600 mm/sec
Max Joint Speed	
J1	200°/sec
J2	600 mm/sec
J3	360°/sec
J4	540°/sec
Max Acceleration	5000 mm/sec ² with 6 kg payload
Repeatability	±0.020 mm at tool flange center

Range of Motion

Joint 1 (Base)	±168°
Joint 2 (Z-axis)	500, 1000, 1420 mm
Joint 3 (Elbow)	+12° to +348°
Joint 4	±240°
Horizontal Reach	896 mm

Communications

General	100 Mb Ethernet, TCP/IP EtherNet/IP RS232 Modbus/TCP
Operator Interface	Web-based operator interface
Digital I/O	12 inputs, 8 outputs at base of robot optically isolated, 24V @ 100ma Remote I/O available

Facilities

Power	90 to 264 VAC, auto selecting, 50-60 Hz 70-175 watts typical operation DC Power Option Available
Pneumatics	Two 3.2 mm OD (1.7 mm ID) airlines provided for end-of-arm-tooling. 4.9 bar max (71 PSI)
E-Stop	Dual Channel
Controller Mounting	Embedded into robot base
Weight	44 kg (500 mm Z-axis) 53 kg (1000 mm Z-axis) 63 kg (1420 mm Z-axis)
Noise Level	< 50 dB(A)

Software

Programming	Programming via Guidance Development Studio (GDS) Guidance Programming Language (GPL) TCS API
Enhanced Functions	Hand Guiding (standard) XY Compliance (optional) Z-Height Detection (optional)

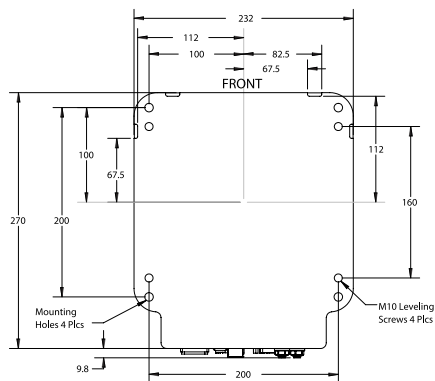
Peripherals and Accessories

General	Remote I/O (RIO)
Vision	IntelliGuide s23 gripper IntelliGuide s60 gripper IntelliGuide s23D gripper IntelliGuide s23 vision IntelliGuide v60 vision

Certifications

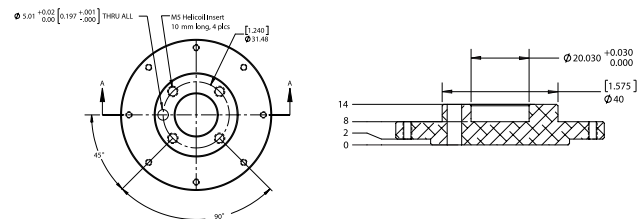
- ISO/TS 15066 / RIA TR R15.806

Robot Mounting

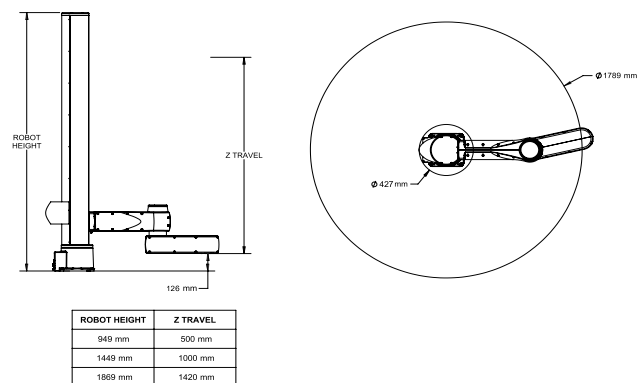


ISO Flange for End-of-Arm Tooling

- ISO-9409-1-31.5-4-M5



Work Envelope



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