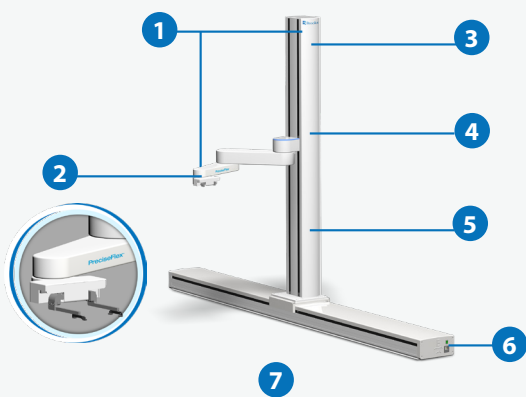


PreciseFlex 3400 Cobots

Energy Efficiency while Maximizing Workspace



1. Highest Workspace Density

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

2. Save Time and Increase Reliability

With a fully-integrated Servo Gripper (optional)

3. Range of Motion

(Vertical Reach) 400, 750, 1160 mm
(Horizontal Reach) 588 mm

4. Highest Throughput

Low collision forces enable without sacrificing safety

5. Save Valuable Floorspace

With compact footprint and embedded controller

6. Extend Robot's Reach

With a fully integrated Collaborative Linear Rail (optional)

7. Highest Reliability

With MTBF of 125,000 hours

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 and embedded controller saves valuable floor space
- Most reliable cobots with MTBF of 125,000 hours and design life of 40,000 hours
- Highest performance increases throughput
- Integrated options like Servo Grippers and Collaborative Linear Rails reduce deployment time

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, most energy efficient** cobots available.

Wide Range of Applications

The PreciseFlex 3400 cobot is well suited for PCBA Test and Handling, Machine Feeding (load/upload), Small Parts Handling, Kitting, Storage & Retrieval, Indoor Farming and Mobile applications.

Lowest power consumption

Reduced energy usage and extended runtime in mobile applications.

Highest Workspace Density

The PreciseFlex 3400 cobot has a unique configuration with horizontal articulation for the major axes and a tall Z-axis (up to 1,160 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 3400 Specifications

Performance

Payload	3 kg
Max Speed at TCP	1500 mm/sec (horizontal) 500 mm/sec ² (vertical)
Max Acceleration	2000 mm/sec ² with 1 kg payload
Repeatability	±0.090 mm at tool flange center

Range of Motion

Joint 1 (Z-axis)	400, 750, 1160 mm
Joint 2	±93°
Joint 3 (Elbow)	±168°
Joint 4	+100° to +470° (±960° with servo gripper)
Horizontal Reach	588 mm (666 mm with servo gripper)

Communications

General	100 Mb Ethernet, TCP/IP EtherNet/IP (optional) RS232 Modbus/TCP RS232, at end-of-arm
E-stop	Dual-channel E-stop
Operator Interface	Web-based operator interface
Digital I/O	12 inputs, 8 outputs at base of robot optically isolated, 24V @ 100ma 2 in, 4 out for end-of-arm-tooling Remote I/O available

Facilities

Power	90 to 132 VAC and 180 to 264 VAC Auto selecting, 50-60 Hz 100-250 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)
Operating Temp	0-50°C (32-122°F)
Relative Humidity	90% non-condensing
Controller Mounting	Embedded into robot base
Air Lines	Two, 3.2 mm OD, 1.6 mm ID Max pressure 500 kba (75 PSI)
Weight	25 kg (400 mm Z-axis) 30 kg (750 mm Z-axis) 35 kg (1160 mm Z-axis)

Software

Programming	Guidance Motion (web interface) Guidance Programming Language (GPL) TCP Command Server (TCS)
Enhanced Functions	Hand Guiding (standard) Horizontal Compensation Z-Height Detection

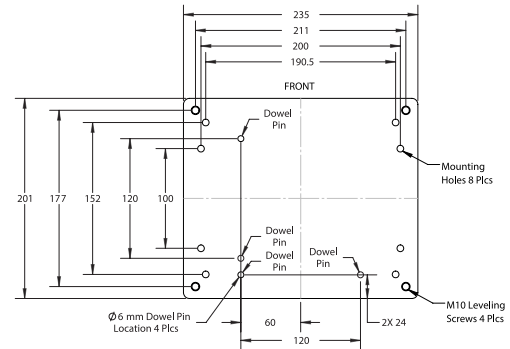
Peripherals and Accessories

General	23N Servo Gripper Dual 23N Servo Gripper 60N Servo Gripper Gripper Fingers Remote I/O (RIO)
Linear Rail	1.0, 1.5, and 2.0M travel Speed up to 750 mm/sec Repeatability: ±0.05 mm
Vision	PreciseVision Gripper, 23N PreciseVision Gripper, 60N

Certifications

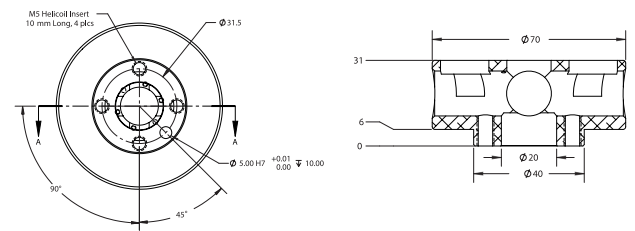
- EN 61326-1:2013
- CAN/CSA-C22.2 No. 61010-1-12 UPD1:2015, UPD2:2016, AMD1:2018
- CSA-C22.2 No. 61010-2-081:19
- UL 61010-1 (3rd Ed.), AMD1(2018)
- UL 61010-2-081 (3rd Ed.)

Robot Mounting

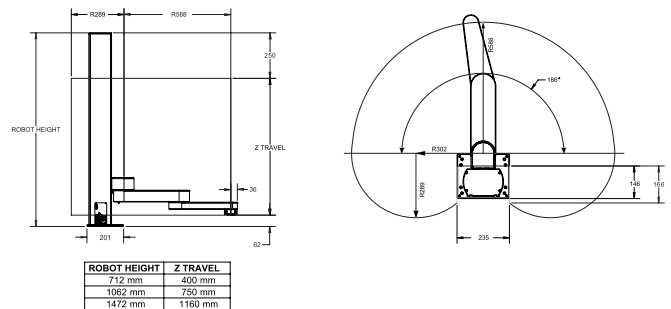


ISO Flange for End-of-Arm Tooling

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



Work Envelope



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