IntelliGuide™ Vision - *preliminary*

Vision Made Easy for PreciseFlex Robots in Structured and Unstructured Enviornments

*Gripper Fingers not included

Cameras embedded the gripper (forward and downward facing) enable less engineering effort, faster deployment, and shorter time-to-production.

Simplify Vision Applications

Factory calibrated and ready to use out of the box. Simply specify offset to gripper fingers.

Reduce Design, Eng. and Deployment Costs

Significantly reduces the time needed from system design to installation and deployment.

Auto-Recovery When Change Happens

Automatic recovery and reteaching of locations when things shift in the workspace.

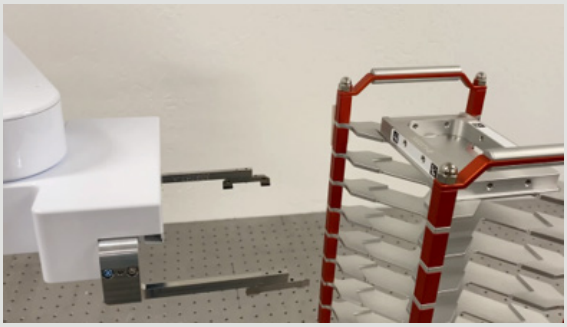
Ideal for Roll-up Carts and AMRs

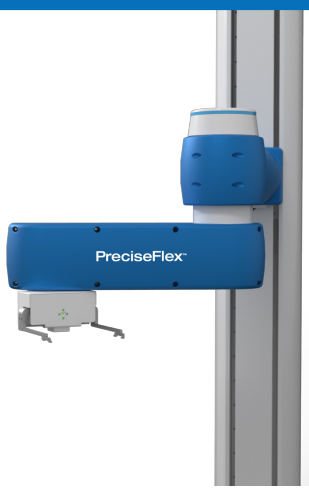
Easily locate objects in dynamic environments.

TCP Command Server (TCS) Compatible

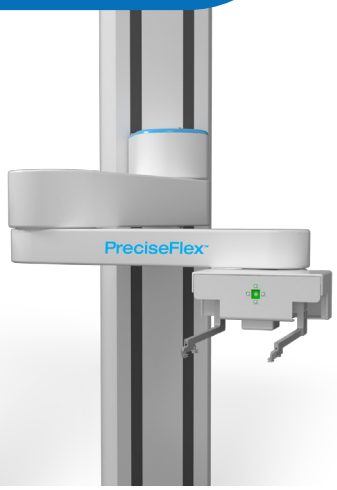
Key Benefits

- Fast and easy deployment unlocks the best ROI
- Automatically adapt to changes in workspace
- Eliminate time consuming teaching for simple and complex applications
- Higher reliability with no external cables





PreciseFlex c10 Robot with IntelliGuide v60



PreciseFlex 3400 Robot IntelliGuide v23

Auto-Teach

- Read ArUco Markers and determine offsets to hotels, instruments, magazines, fixtures etc.
- Quickly recover from changes in workcell without reteaching tens or hundreds of locations.

Barcode Reading

Read 1D and 2D barcodes. See specifications for complete list.

Object Locator

- Geometric part locator tool for locating objects in 2D space.
- Quickly train objects and start picking from trays, conveyors, nests, etc.

Image Sharpness

Returns image sharpness that enables focus adjustment by moving the robot closer to, or farther away from, the target.

Image Capture

Capture time-stamped images when an event occurs and transfer for further analysis. Useful for trouble shooting of chain of custody.

Additional Vision Tools Available

Brooks

IntelliGuide™ Vision - Specifications- preliminary

Robot Compatibility

intelliGuide v23	PreciseFlex 400*, PreciseFlex 3400*, PreciseFlex c10
IntelliGuide v60	PreciseFlex 3400*, PreciseFlex c10

*Also compatible with these robots on Collaborative Linear Rail

Specifications

Cameras	Forward Looking and Downward Looking
Resolution	5MP, H:2592, V:1944
Pixel Size	H:1.4 µ, V: 1.4 µ
Lens	6 mm Manual adjustment requires re-calibration
Working Distance	150 mm (as configured)
Focal Length	2.8 mm
FOV (H):	72°
Lighting	PWM Controlled LED lighting (White)
Precision, Typical from static position at Working Distance	±0.18 mm in X/Y/Z, ±0.19° in Rotation (results can vary with application)
Barcode Formats 1D	Code39 (standard and extended) Code128 (standard and short Code25 (ITF) Codebar (Codabar) EAN_8 EAN_13 UPC_E UPC_A CODE39Checksum Code39StartStop Code25Checksum Code93
Barcode Formats 2D	PDF_417 (standard and Micro) DATA_MATRIX DATABAR PATCH_CODES Aztec QR Code
IntelliGuide v23	23N Gripping Force 60 mm Stroke 1.0 kg Payload (when friction is the only gripping force) Robot payload capacity must also be considered Picks SBS plates in portrait and landscape orientation
IntelliGuide v60	60N Gripping Force 40 mm Stroke 3.0 kg Payload (when friction is the only gripping force) Robot payload capacity must also be considered

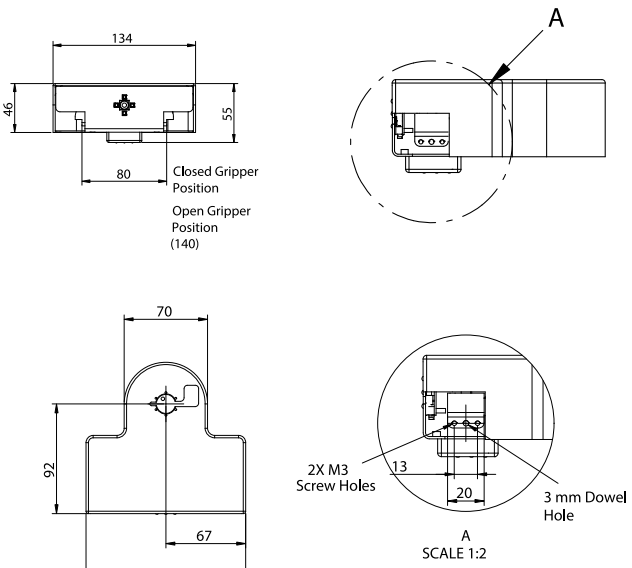
Options

See IntelliGuide Accessories Datasheet
ArUco labels for quick start
Calibration plate
SBS Plate fingers (for IntelliGuide v23)

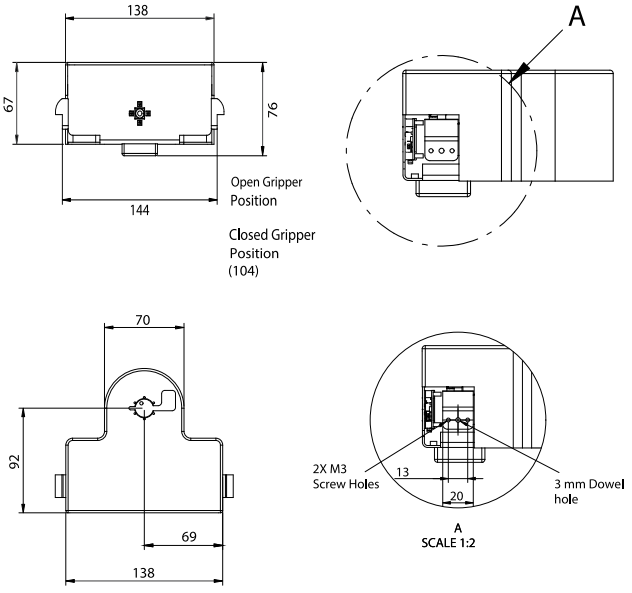
Software

Programming via Guidance Development Studio (GDS)
Compatible with Guidance Programming Language (GPL)
Compatible with TCS API

Dimensions, IntelliGuide



Dimensions, IntelliGuide



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