Brooks

IntelliGuide™ Vision

Vision Made Easy for PreciseFlex Robots

Simplify Vision Applications

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

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

Additional Vision Tools Available.

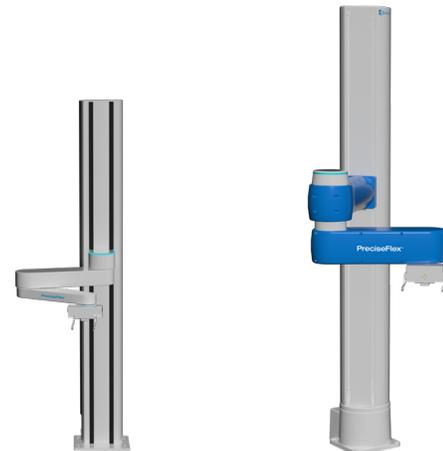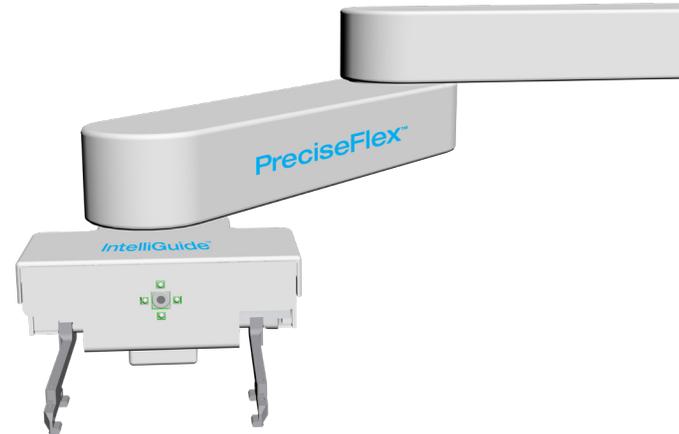### Reduce Design, Eng. and Deployment Costs

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

Traceability with Barcode Reading

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

1D
UPC Code
Code 128
Code 39
Codebar

2D
QR Code
Data Matrix
PDF417
Aztec

*Gripper Fingers not included

PreciseFlex™

IntelliGuide

PreciseFlex 3400 Robot
with IntelliGuide v23

PreciseFlex c10 Robot
with IntelliGuide v60

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

Key Features

Auto-Recovery When Change Happens
Automatic recovery and reteaching of locations when things shift in the workspace.

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.

Ideal for Roll-up Carts and AMRs
Easily locate objects in dynamic environments.

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

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

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

IntelliGuide™ Vision
Technical Specifications

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)
Weight	
IntelliGuide v23 **IntelliGuide v60**	0.67 kg 1.07 kg

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)
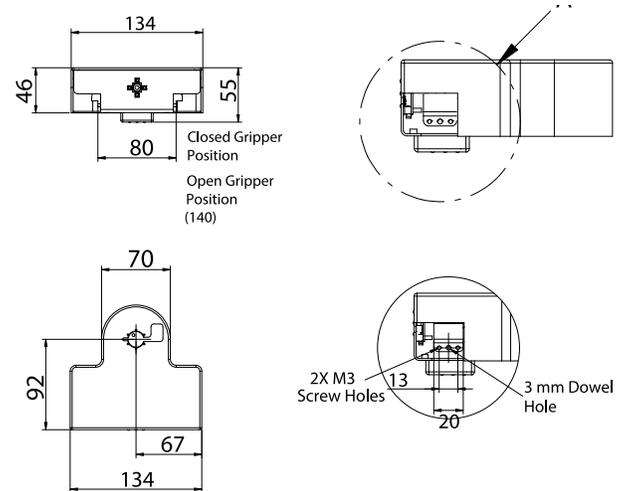Robot payload capacity must also be considered

Options

See IntelliGuide Accessories Datasheet
ArUco labels for quick start
Calibration plate
SBS Plate fingers (for 23N IntelliGuide)

Software

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

Dimensions, IntelliGuide v23

Dimensions, IntelliGuide v60

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