

Datasheet robobrain.vision

Anwenderhandbuch Version 1.0

Inhaltsverzeichnis

- 1 Technisches Datenblatt Tabellarisch..... III**
 - 1.1 *robobrain.eye*..... III
 - 1.2 *robobrain.eye – Abbildungen*..... IV
 - 1.3 *Robobrain® IPC*..... V

- 2 Accessories VI**
 - 2.1 *Flange mounting plate (straight)*..... VI
 - 2.2 *Flange mounting plate (30°)*..... VI

- 3 AI-Skills..... i**

- 4 Kontaktinformationen ii**

1 Technisches Datenblatt Tabellarisch

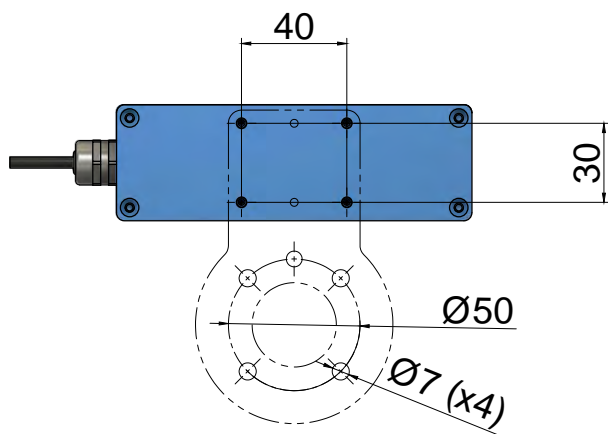
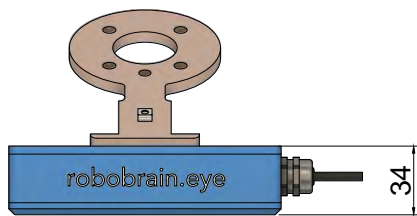
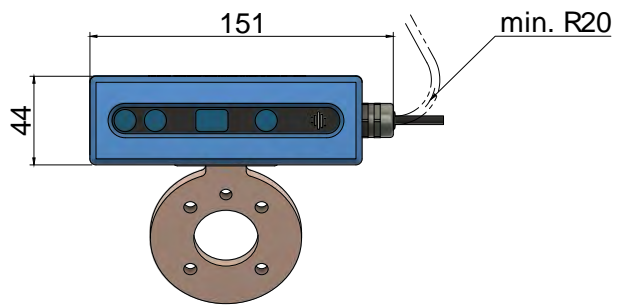


1.1 robobrain.eye

Dimensions	151 mm x 44 mm x 34 mm
Weight	<ul style="list-style-type: none">• 400g (Camera only)• 760g (cable included)
Cameratype	2D/3D-Camera
Measurement method (depth image)	Active IR Stereo
Resolution RGB	Up to FullHD (1280 x 720)
Resolution Depth Image	Up to FullHD (1280 x 720)
FOV (Angles)	$65^{\circ} \pm 2^{\circ} \times 40^{\circ} \pm 1^{\circ}$
Temperature	5°C - 40°C
Protection	Waterproof
Conforms to	<ul style="list-style-type: none">• CE• Laser Class 1
Mounting options	<ul style="list-style-type: none">• Static• Flange mount
Interface camera	industrialized USB 3.0
Power Consumption	max. 700mA @5V
Cable length	10m (up to 50m upon request)
Min. Bending radius (Cable)	20mm

1.2 robobrain.eye – Abbildungen

Lochbild: ISO 9409-1

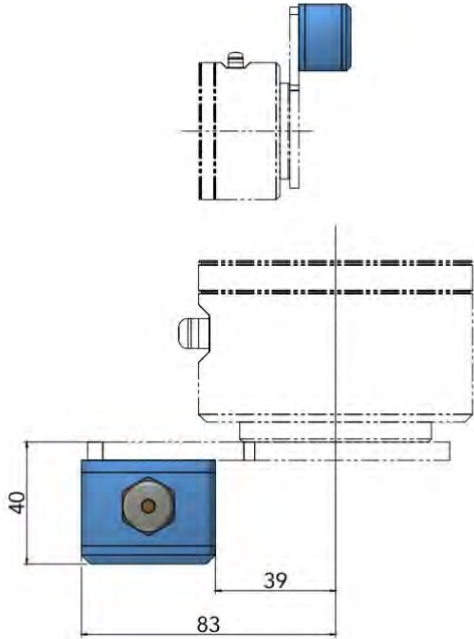


1.3 Robobrain® IPC

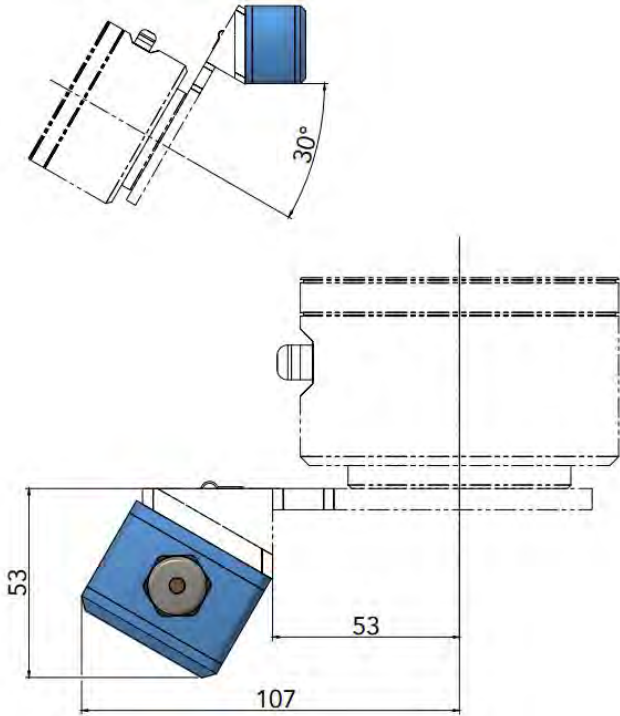
Dimensions	261 mm x 227 mm x 128 mm
Weight	6,25 kg
Power Consumption – computing	~ 80 W
Power Consumption - Idle	~ 25 W
Output included Power Supply	~ 220 W
Hardware Interfaces	USB-3.0 (Type A) Ethernet (RJ-45)
Temperature	5°C - 40°C
IP Protection Class	IP20
Conforms to	CE
Mounting options	Wall-mount
Supported interface protocols	<ul style="list-style-type: none">• JSON-RPC 2.0 (HTTP)• RAP 1.0 (robominds automation protocol) (RPC-Protokoll via TCP/IP)
Robot interfaces	<ul style="list-style-type: none">• UR Cap (for Universal Robots)• OPC UA

2 Accessories

2.1 Flange mounting plate (straight)



2.2 Flange mounting plate (30°)



3 AI-Skills

	Smart Vacuum Picking Skill	Smart Parallel Picking Skill	Smart Box-detection Skill	Human Detection Skill
Optimal camera distance	400mm – 700mm	400mm – 600mm	400mm – 1800mm	>1000mm
Resolution	640x480px	640x480px	640x480px	640x480px
FOV (d=600mm)	763 x 436 mm	350 x 200 mm	763 x 436 mm	763 x 436 mm
Object types	<ul style="list-style-type: none"> • Small parts • Bulk material 	<ul style="list-style-type: none"> • Small parts • Bulk material 	<ul style="list-style-type: none"> • KLT • Eurobox 	Humans
Optimal object sizes	2 cm – 20 cm	2cm – 12 cm	200mm x 300mm – 600mm x 800mm	n/A
Return values (Output)	<ul style="list-style-type: none"> • Gripping point • Quality 	<ul style="list-style-type: none"> • Gripping point • Width • Quality 	<ul style="list-style-type: none"> • Bin-Position • Bin empty (True/False) • Transformation to Referencebin (for validation of results) 	<ul style="list-style-type: none"> • Distance (m)
Accuracy	n.A.	n.A.	< 5 mm	n.A.
Picking Point calculation time (Default Settings)	< 400 ms	< 850 ms	< 700 ms	-
Compatible grippers	single suction cup vacuum grippers (Piab, Schmalz, ...)	Schunk Robotiq Weiss On-Robot Zimmer	robobrain.Boxpicker Vacuum-Gripper Parallel- Gripper	-



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