

Datasheet robobrain.vision 2.0

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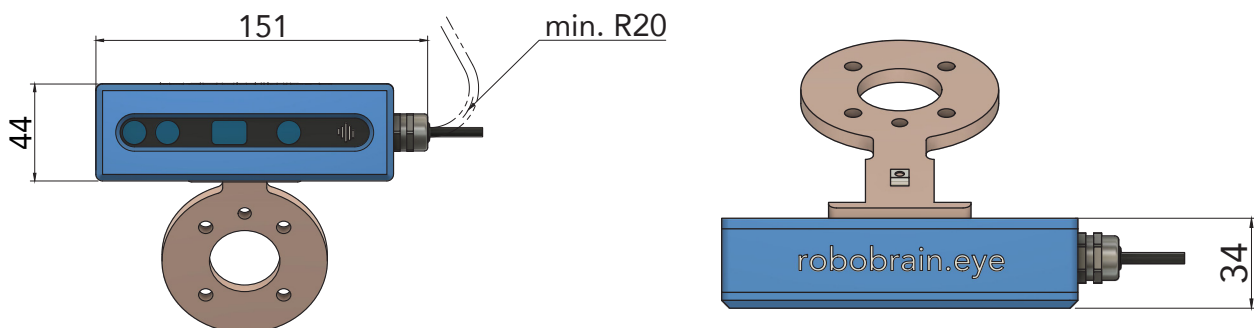
1 robobrain.vision



1.1 robobrain.eye - technical data tabular

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 - illustrations



1.3 robobrain® IPC - technical data

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

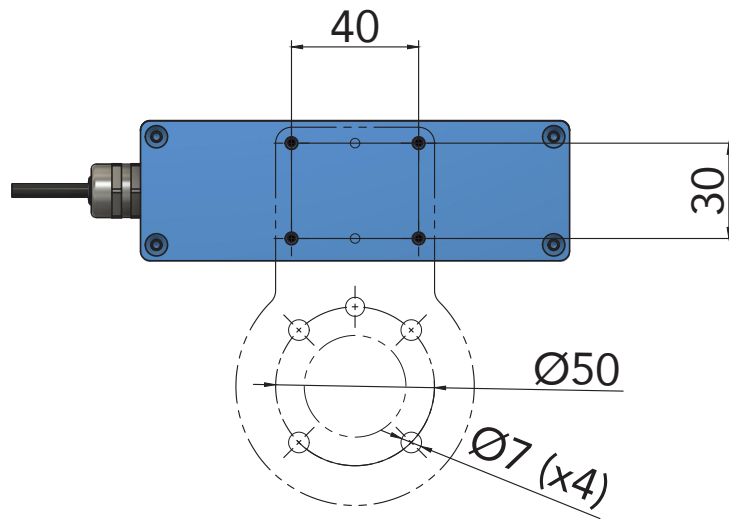
1.4 robobrain® illustrations



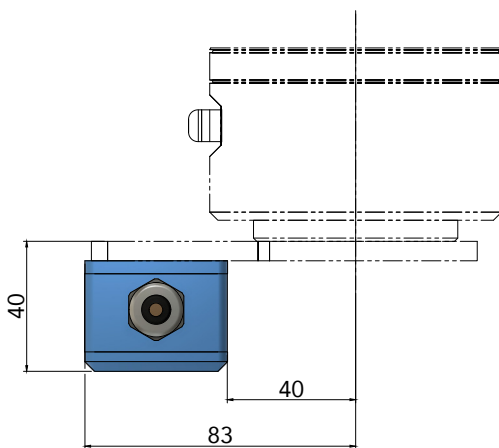
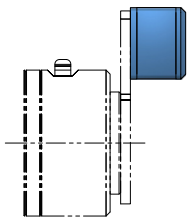
2 Accessories

2.1 Flange mounting plate - technical data

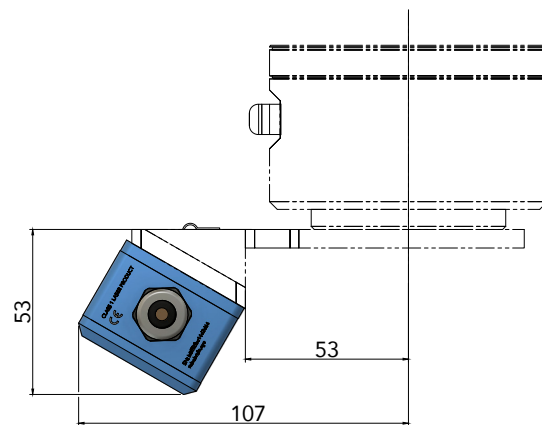
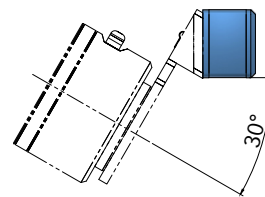
Hole pattern: ISO 9409-1-50-4-M6



2.2 Flange mounting plate (straight)

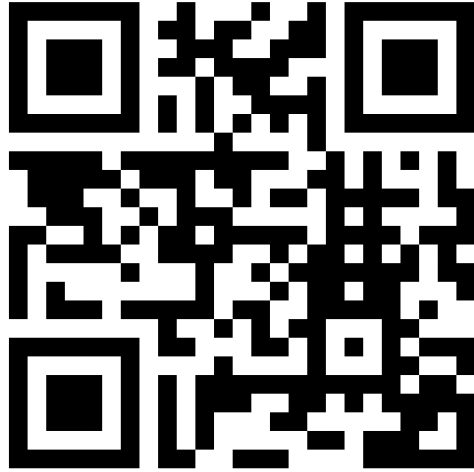


2.3 Flange mounting plate (30°)



3 AI-Skills - technical data

	Smart Vacuum Picking Skill	Smart Parallel Picking Skill	Smart Bin-detection Skill
Optimal camera distance	400mm - 700mm	400mm - 600mm	400mm - 1800mm
Resolution	640 x 480px	640 x 480px	640 x 480px
FOV (d=600mm)	763 x 436mm	350 x 200mm	763 x 436mm
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
Optimal object sizes	2cm - 20cm	2cm - 12cm	200mm x 300mm - 600mm x 800mm
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 reference bin (for validation of results)
Accuracy	n.A.	n.A.	< 5mm
Pick point calculation time (default settings)	< 400ms	< 850ms	< 700ms
Compatible grippers	<ul style="list-style-type: none"> - single suction cup vacuum grippers (Piab, Schmalz, ...) 	<ul style="list-style-type: none"> - Schunk - Robotiq - Weiss - On-Robot - Zimmer 	<ul style="list-style-type: none"> - robobrain.Boxpicker - Vacuum gripper - Parallel gripper



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