

D-Bot Series

Technical Parameters



DC08







DC20



DC30



Specifications

Payload	6 kg (13.3 lbs)	8 kg (17.7 lbs)	10 kg (22.1 lbs)	16 kg (35.3 lbs)	20 kg (44.1 lbs)	30 kg (66.2 lbs)
Reach	800 mm (31.5 in)	1300 mm (51.2 in)	1200 mm (47.3 in)	1600 mm (63 in)	1800 mm (70.1 in)	1300 mm (51.2 in)
Degrees of Freedom	6 rotary joints	6 rotary joints	6 rotary joints	6 rotary joints	6 rotary joints	6 rotary joints

Environment & Safety

Ambient Temperature	Ambient temperature: 0° to 40°C (32° to 104°F)				Ambient temperature: 0° to 40°C (32° to 104°F)			
IP Classification	IP66 dust/waterproof	IP66 dust/waterproof	IP66 dust/waterproof	IP66 dust/waterproof	IP54 dust/splashproof	IP66 dust/waterproof		
Safety Rating	PLd	Cat3. / SIL 2 (Safe position, speed, toro	que limits, I/Os)	PLo	PLd Cat3. / SIL 2 (Safe position, speed, torque limits, I/Os)			
Safety Functions	20 configurable safety functions			20 configurable safety functions				

Performance

Max. TCP Speed	2 m/s		3 m/s		3 m/s		3 m/s		3 m/s		2 m/s	
Pose Repeatability	±0.02 mm		±0.02 mm		±0.02 mm		±0.03 mm		±0.03 mm		±0.05 mm	
Axis Movement	Working range	Maximum speed										
Axis 1	±180°	200°/s	±180°	130°/s	±180°	130°/s	±180°	120°/s	±180°	130°/s	±180°	130°/s
Axis 2	±180°	200°/s	±180°	130°/s	±180°	130°/s	±180°	120°/s	±180°	130°/s	±180°	130°/s
Axis 3	±120°	200°/s	±120°	200°/s	±120°	200°/s	±120°	130°/s	±120°	120°/s	±120°	120°/s
Axis 4	±150°	200°/s	±150°	200°/s	±150°	200°/s	±150°	130°/s	±150°	120°/s	±150°	120°/s
Axis 5	±180°	230°/s	±180°	220°/s	±180°	220°/s	±180°	200°/s	±180°	200°/s	±180°	200°/s
Axis 6	±180°	230°/s	±180°	220°/s	±180°	220°/s	±180°	200°/s	±180°	200°/s	±180°	200°/s

Interfaces & Programming

9		•						
Interfaces at the Flange		I/Os Ports, Modbus RT	J		I/Os Ports, Modbus RTU	I/Os Ports, Modbus RTU		
I/O Ports								
Digital In	3	3	3	3	3	3		
Digital Out	3	3	3	3	3	3		
Analog In	2	2	2	2	2	2		
I/O power supply voltage	24V	24V	24V	24V	24V	24V		
I/O power supply	1A	1A	1A	1A	1A	1A		
Programming Interface		Drag & Drop, Python, C# C++, R	OS 1 ROS 2		Drag & Drop, Python, C# C++, ROS	S 1 ROS 2		

Physical

Weight	24 kg (53 lbs)	40 kg (88 lbs)	39 kg (86 lbs)	70 kg (154 lbs)	101 kg (222 lbs)	98 kg (216 lbs)
Mounting	Omnidirec	ctional, including table mounting, wall r	nounting, and ceiling mounting	Omnidirectional, including table mounting, wall mounting, and ceiling mounting		
Material	Aluminum, plastic, steel				Aluminum, plastic, steel	



Control Box

Dimensions	493 mm x 470 mm x 243 mm
Weight	20 kg (44.1 lbs)
Power Supply	100-240 VAC, 50/60 Hz, max. 1 kW (for DC30 max. 2 kW)
Interface	EtherNet/IP, ModbusTCP, Profinet, USB 3.0, Safe I/Os
Additional Hardware (HW)	OPC UA, Profinet, EtherCAT



Teach Pendant

Dimensions	300 mm x 245 mm x 133 mm
Resolution	2560 x 1600 px
Cable Length	5 m (3.3 ft)

