SCARA-Robot DOBOT M1. Multiflexible industrial robot for

pick and place. M1 **VARIOBOTIC** endless possibilities

The DOBOT M1 industrial robot is fast, precise and reliable. Whether for pick and place, dispensing, separating or sorting in a laboratory, with its 4 axes it is used in a wide variety of applications. Compared to multi-axis robots, the kinematics calculation in space is much simpler. It is robust, fast, requires little space, has a high repeat accuracy and, in addition to simple operation, is probably the most cost-effective start in this robot classification. With its reduced amortization period, it offers small and medium-sized businesses in particular the possibility of cost-efficient automation.

We are available for you by mail and during our opening hours by phone.

Monday - Friday 8:30 am - 4:30 pm



+49 731 850722 00



info@variobotic.de



www.variobotic.de











DOBOT M1.Technical specifications.

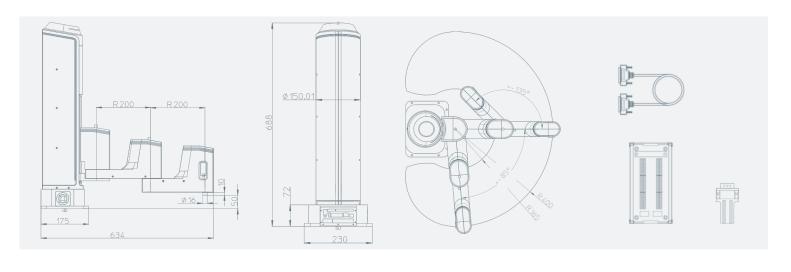
Number of Axis	4			
Payload	1.5 kg			
Reach	max. 400 mm			
Repeatability	+- 0.02 mm			
Working Temperature	5° C - 40° C			
Dimensions	230 × 634 × 688 mm			
Software	DobotStudio M1 (Windows) → Firmwareversion max. 0076 DobotStudio 2020 (Windows) → Firmwareversion at least 0086			
Control	Integrated in Base			
Power Input	100 V - 240 V 50/60 Hz - 48 V DC 10 A - 480 W max.			
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Joint Range	Z- axis screw		225 mm (max. 250 mm) Software limitation: 10-235 mm	
	Arm 1		+- 85° (max. +- 90°)	
			Software limitation: +- 85°	
	Arm 2		+- 135°	
	End-effector		+- 360°	
Max. Speed	Z- axis		Up to 1000 mm/sec	
	X-/Y- Linear motion		Up to 2000 mm/sec	
	Axis radial		180°/sec	
Base I/O Interface	VCC (Voltage at the common collector)		24 V DC / 2 A	
	Digital Input 0 V, 24 V / <100 mA		4	
	Digital Output 0 V, 24 V / 2 mA		2	
	Safety Stop 0 V, 24 V / <100 mA		4	
	Interfaces		RS-232, Ethernet RJ45	
Base I/O Occupation	Input	DIN_17 - DIN_20	Not occupied	
	Output	DOUT_17 - DOUT_18	Not occupied	
Forearm I/O Interface	Digital Input 0 V, 24 V / <100 mA 4			
	Digital Output 0 V, 24 V / 2 mA		4	
	Analogue-digital converter 0-10 V / 10 mA		2	
	Analogue digital	converter o to v / to the	-	
Forearm I/O Occupation	Input	DIN_21 - DIN_24	Not occupied*	
		AIN_5 - AIN_6	Not occupied*	
	Output	DOUT_19 - DOUT_22	Not occupied*	
	*When using the EGP-25 gripper kit or also in combination with the swivel axis of Variobot GmbH, DOUT_19 (rotation of swivel axis) and DOUT_21 - DOUT_22 (opening/closing of gripper) are preassigned.			

DIN_21 - DIN_24, DOUT_20 and AIN_5 - AIN_6 can thus no longer be used.

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External Expansion Interface. Technical specifications.

Expansion module I/O Expansion Kit (available separately)	Power supply for external devices	24 V DC / 3 A
	Digital Input 0 V, 24 V / <100 mA	16
	Digital Output 0 V, 24 V / 2 mA	16
	Analogue-digital converter 0-10 V / 10 mA	4
Input Occupation	DIN_1 - DIN_6	Not occupied
	DIN_7 - DIN_8	Safety stop contact (0 V door closed,
		24 V door open or cable break)
	DIN_9	Acknowledgement door closed
	DIN_10	Reset offline mode
	DIN_11	Activate offline functions
	DIN_12	Continue program
	DIN_13	Pause program
	DIN_14	Offline mode stop
	DIN_15	Offline mode start/program start
	DIN_16	Not occupied
	Note To activate the functions, DIN_11 must first be triggered to 0 V. Otherwise, inputs 10, 12, 13 14 and 15 can be used normally for sensors. Never use input 11 except in offline mode via a PLC/external control.	
Output Occupation	DOUT_1 - DOUT_6	Not occupied
	DOUT_7	Robot running
	DOUT_8	Status alarm
	DOUT_9	Switch relay 1
	DOUT_10	Switch relay 2
	DOUT_11 - DOUT_16	Not occupied
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