

Vacuum-Automation, Components

Product News

20-003 / February 2020

MWE

TOPIC: Electrical Vacuum Generator for lightweight robots CobotPump ECBPM

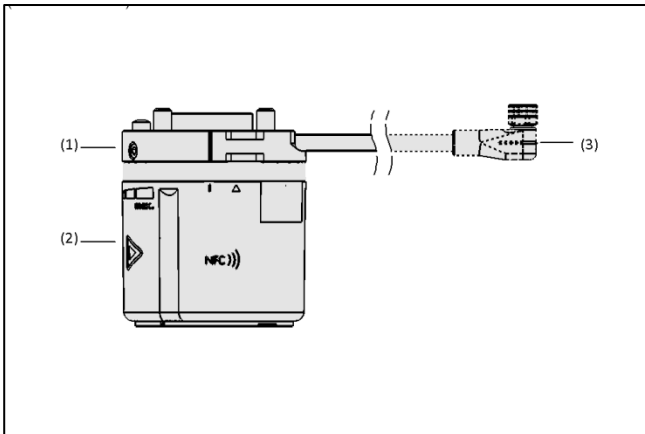
Application



Electrical Vacuum generator CobotPump ECBPM

- Electrical vacuum generator in smallest design for handling suction-tight workpieces
- Flexible application in lightweight robotics, human-robot collaboration (HRC environment) as well as in mobile robotics
- Simple and fast setup on lightweight robots thanks to intelligent software support
- Small dimensions and low weight for robots with payloads < 3kg
- Integration in machines with limited installation space
- Ideal for automated handling of small parts, e.g. bin-picking with a single suction cup

Design



System design CobotPump ECBPM

- Modular adapter flange (1) incl. cable strain relief
- Intuitive operation via user interface with capacitive keys (2) and status display
- Electrical connection cable (3)
- Interference-free design adapted to the size of the robot flange
- Available robot integration sets (incl. all necessary parts) for plug and work integration with common lightweight robot types

Highlights/Benefits



Vacuum generator ECBPM in use on a lightweight robot

Our Highlights...

- Electrical vacuum generator in miniature construction
- Mechanical connection via flange adapter plate
- Central electrical interface and simple control
- Electrical connection via external cable routing or internal pin connection
- Circumferential LED strip light for status indication and Display of setting values

Your Benefits...

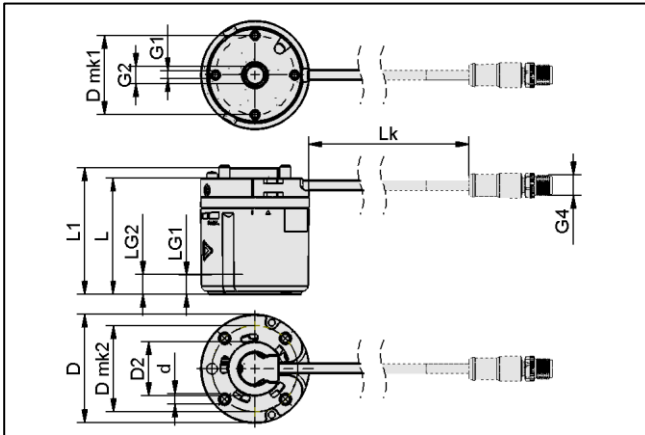
- Ideal for handling small workpieces with a single suction cup
- Universal integration into any lightweight robot or cobot
- Flexible use through simple and fast integration and commissioning (Plug & Work)
- No compressed air tubing required at the robot
- Clearly visible status display and intuitive 2-button operation

Technical Data

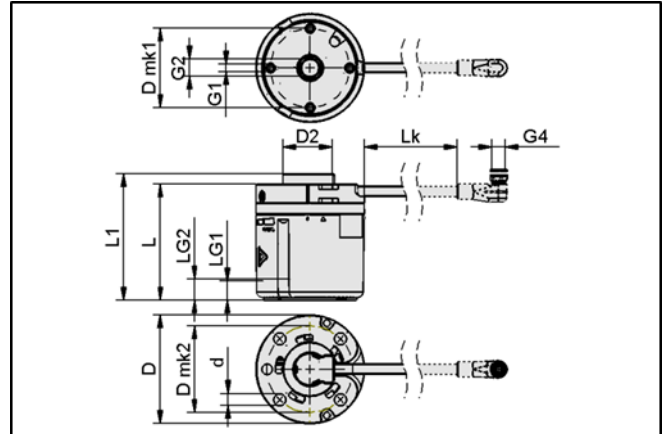
Type	Suction rate (max.) [l/min]	Max. Vacuum [%]	Rated Power [W]	Voltage
ECBPM...	1.6	60	7.2	24V – DC V

Type	Rated current [A]	Operating temperature [°C]	Weight [g]	Load limit horizontal mounting position [N]	Load limit vertical mounting position (l = 100 mm) [N]
ECBPM...	0.3	0...50	225	max. 30	max. 10

⊗ Design Data



ECBPM 24V-DC M12-8



ROB-SET ECBPM...

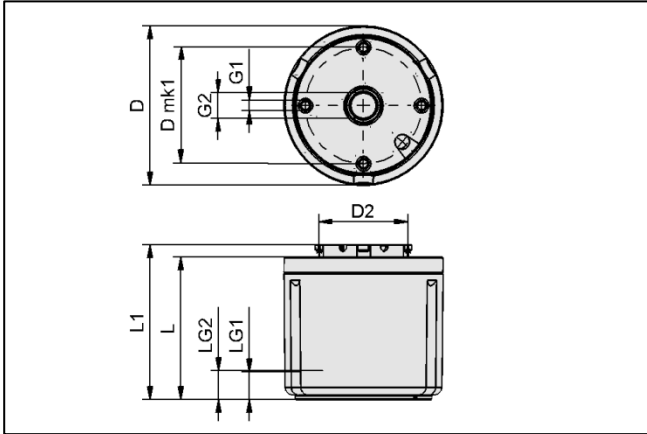
Type	Description	D	Dmk1	Dmk2	D2	d	G1	G2
ECBPM 24V-DC M12-8	Standard type	63	46	50	31.5	7	M4-F	G1/4"-F
ROB-SET ECBPM UR*	Plug and work version for Universal Robots Type: UR(e)3, UR(e)5	63	46	50	31.5	7	M4-F	G1/4"-F

Type	G4	L	L1	Lk	LG1	LG2
ECBPM 24V-DC M12-8	M12-8 socket, straight	67.4	73.4	500	6	11
ROB-SET ECBPM UR*	M8-8 socket, angled	67.4	73.4	120.5	6	11

Dimensions in mm

* Contains plug and work CobotPump ECBPM incl. screws, suction cups, software (if available) and a Quick-Start Guide

⊗ Design Data Spare Parts



ECBPM...UNI

Type	Description	D	Dmk1	D2	G1	G2	L	L1	LG1	LG2
ECBPM...UNI	Spare part ECBPM without flange	63	46	35.5	M4-F	G1/4"-F	67.4	73.4	6	11

Dimensions in mm

Ordering Data vacuum generator ECBPM

Type	Description	Part number
ECBPM 24V-DC M12-8	Standard version	10.03.01.00556
ROB-SET ECBPM UR*	Robot set for UR Type: UR(e)3, UR(e)5	10.03.01.00512

* Robot sets contain ready-to-connect CobotPump ECBPM incl. screws, suction cups, software and assembly instructions, if necessary



Example: Illustration Robot set

Ordering Data Spare Parts

Type	Description	Part number
ECBPM 24V-DC FK UNI	Spare part ECBPM without flange	10.03.01.00500
ERS-SET ECBPM*	Spare parts set ECBPM	10.03.01.00573

* Contains screws for fixing the ECBPM to the flange, screws for flange mounting and a positioning pin

Ordering Data Accessories

Type	Description	Part number
FLAN-PL 63x14-ROH ECBPM	Flange plate ISO9409-1-50-4-M6 to 31.5-4-M5	10.03.01.00535
SPB1 30 ED-65 G1/4-AG	Bellows suction cup (round)	10.01.06.04530
SFF 20 SI-55 G1/4-AG	Flat suction cup (round)	10.01.01.14621

Availability: Available for order as of now; Delivery from week 8/2020