

Data Sheet (EN)

Translation of the german original

Designation, Model:	Order number:
Diaphragm pumps, chemical resistant Models: MPC 303 Z 230v	415722

Figure:	Description:
	The diaphragm pump consists of a pump body and a drive motor. The pump casing contains the drive unit and two pump heads. Each pump head contains a moulded diaphragm and two work valves. Both pump heads are arranged opposite each other. The pump heads are driven via an eccentric shaft with a connecting rod.

Application:	Materials of the medium-affecting pump parts:
The Diaphragm pump MPC 303 Z is intended for: - Pumping and compressing neutral and aggressive gases and vapours according to the resistance of the indicated materials. - Generating a vacuum down to an ultimate pressure < 5 mbar. - Use in physical and chemical laboratories in trade and industry. - Use for vacuum filtration, vacuum distillation and vacuum drying, and other vacuum technology applications.	- PTFE - Form moulded diaphragms - PTFE - Pump heads - PTFE - Vacuum hose - PEEK - Valves - EPDM - Seals - PVDF - Screw fittings

Dimensional drawing:

Fig. 3-1. Front view of device

① The main dimensions are identical for all models listed here.

Fig. 3-2. Left view of device

Pos.	Parameters	Data
a	Width	≤ 250 mm
b	Depth	≤ 270 mm
c	Height	≤ 190 mm

Intake pressure-/Pumping speed - Diagram:

Pumping speed

Suction pressure (p) [mbar]	MPC 303 Z 50 Hz [S/m³h]	MPC 303 Z 60 Hz [S/m³h]	MPC 603 E 50 Hz [S/m³h]	MPC 603 E 60 Hz [S/m³h]
5	0.5	0.5	-	-
10	1.0	1.0	-	-
20	1.5	1.5	-	-
50	1.7	1.8	0.5	0.5
100	1.8	1.9	1.5	2.0
200	1.8	1.9	2.5	3.0
500	1.8	1.9	3.5	4.0
1000	1.8	1.9	4.0	4.5

Fig. 3-3. Pumping speed characteristics S(p)

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Technical data:		
Parameter	MPC 303 Z	Unit
Pump stages	2	-
Pumping speed DIN 28432	2.0 / 2.2	m³/h
	33 / 36	l / min
Ultimate pressure	< 5	mbar
Ultimate pressure with gas ballast	8	
Max. Inlet-/Outlet pressure	≤1100	mbar
Intake port	Small flange DN 16 KF <i>optionally enclosed</i> Hose nozzle DN 8 for hose inside diameter 8 mm	-
Exhaust port	Hose nozzle DN 8 for hose inside diameter 8 mm	
Ambient temperature	+ 10 to + 40	°C
Max. Operating gas temperature	≤ + 40	
Bearing	maintenance-free	-
Reference surface sound pressure level DIN EN ISO 2151	< 44	dB (A)
Voltage	230	V
Frequency	50/60	Hz
Rotation speed	1500	min⁻¹
Motor power	180	W
Operating mode	S 1	-
Type of protection DIN EN 60529	IP 54/40	
Class of insulation DIN EN 60034-1	F (160°C)	
Weight net/(gross)	11.2/(13.0)	kg
Dimensions W/D/H	250 / 270 / 190	mm

Accessories:			
	Vacuum Control Box Model: VCpro 601 for measuring and regulation of vacuum Order no. 600100		Vacuum Regulator with dial gauge Model: DBR-A with hose nozzle DN 8, Connection: G1/4" - M12 x 1 to pressure adjustment - suction side Order no. 700458
	Vacuum hose, Rubber 18 / 8 x 5 mm Order no. 828310-4		

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