

GEAR PUMP DRIVE MCP-Z Standard

1-7241 ml/min
(depends on pump-head)

Multi-purpose 사용자의 parameter를 4개까지 저장하여 사용 가능!

- Microprocessor controlled
- Dispensing and Filling에는 이상적임
- Pulse가 없는 pumping
- 견고하고 파워풀한 gear pump drive
- 5.2bar까지의 differential pressure



MCP-Z Standard
with interchangeable gear pump-head
(see page 53)
(material options, see page 47)



Interfaces



PC-controllable:
-RS232



Speed control (0-5 or 0-10 V, 0-20 or 4-20 mA)
Speed output (0-10VDC or 0-7.2 kHz)
Start/Stop, Rotation direction, Autostart
2 universal inputs/outputs

MCP-Z Standard

with dispensing functions

- 멤브레인 커넥트, LED display
- 사용하는 응용 parameter프로그램을 4개까지 저장하여 사용 가능
- Flow rate 및 differential pressure 요구에 따른 20가지 종류의 pump-heads를 교체 가능



Dispensing and calibrating function
See Page 45

Applications

- 대기압력 조건하에서 입자가 없는 액체의 단 채널 이송과 dispensing 과정
- 두 개의 다른 시약이 두 개의 펌프를 통해 다른 비율로 mixing valve와 반응기로 첨가 할 때 pulse 없이 dispensing 하는 응용

Specifications

Motor type	DC motor
Speed	60-6000 rpm
Speed setting	rpm, resolution 1 rpm
Flow rate setting	µl/min, ml/min, liters/min
Power consumption	150 W
Mains connection	230V _{AC} /50Hz, 115V _{AC} /60Hz adjustable
Depth/Width/Height	220 X 155 X 260 mm (without pump head)
Weight	6.4kg (without pump head)
Protection rating	IP 30

Ordering Information

The complete pump system MCP-Z Standard consists of:

Drive(magnet included)	ISM 405
Pump-head	Pages 53
2 Nozzles	Pages 53
Accessories	Page 65
-Foot switch	IS 10039

Interfaces



PC-controllable:
-RS232



Speed control (0-5 or 0-10 V, 0-20 or 4-20 mA)
Speed output (0-10VDC or 0-12 kHz)
Start/Stop
Auto start
2 universal inputs
2 universal outputs

1-7241 ml/min
(depends on pump-head)



ISMATEC gear pump는 오직 시계방향으로만 작동한다. 파티클이 포함된 용액에는 gear pump를 사용할 수 없음.

Ordering Information pump-heads for BVP-Z/MCP-Z

Pump-head >> Suction Shoe<<

- 증가하는 differential pressure에 강화된 pumping 성능
- 증가하는 temperature ranges에 적합

Suction Shoe	Pump-head No.	Order No.	Flow rate(ml/min)		Differential pressure max. bar	Gear material	Seals	Stainless steel housing	System pressure, max. (bar)	Temperature range °C	Internal Bypass
			min.	max.							
	GA-X21.CFS.B	82092	1	99	1.4	Graphite	PTFE	SS316	21	-46- +177	-
	GA-X21.JFS.B	L20820	1	99	2.3	PEEK™	PTFE	SS316	21	-46- +177	-
	GA-V21.CFS.B	82114	3	252	2.8	Graphite	PTFE	SS316	21	-46- +177	-
	GA-T23.CFS.B	82115	5	504	2.8	Graphite	PTFE	SS316	21	-46- +177	-
	GA-T23.PFS.B	81473	6	560	5.2	PPS	PTFE	SS316	21	-46- +177	-
	GA-T23.JFS.B	L18489	6	560	5.2	PEEK	PTFE	SS316	21	-46- +177	-
	GB-P25.PVS.A.B1	81281	35	3509	3.5	PPS	Viton	SS316	21	-29- +177	✓
	GB-P25.JVS.A	220004	35	3480	3.5	PEEK	Viton	SS316	21	-29- +177	-
Organic solvents	GB-P35.PVS.A.B1	81282	70	7020	3.5	PPS	Viton	SS316	21	-29- +177	✓
	GB-P35.JKS.A.B1	L22609	73	7241	3.5	PEEK	Kalrez®	SS316	21	-29- +177	✓
For corrosive media	GA-X21.CFC.B	L17164	1	99	1.4	Graphite	PTFE	Hastelloy®-C276	21	-46- +177	-
	GA-V23.CFC.B	L2383	5	504	2.8	Graphite	PTFE	Hastelloy®-C276	21	-46- +177	-

- Ports(internal thread)1/8"-27NPT - Flow rates without differential pressure
- operating temperature : with other seals up to 99°C possible



Service Kits
contain the wearing parts
(bushings, seals, gears)

Pump-head >> Cavity Style<<

- 점도가 있는 용액과 일정 흡입 높이가 있는 경우에 사용
- 화학적 내구성 우수
- 부드럽고 정밀한 유량

Cavity style	Pump-head No.	Order No.	Flow rate(ml/min)		Differential pressure max. bar	Gear material	Seals	Stainless steel housing	System pressure, max. (bar)	Temperature range °C	Internal Bypass
			min.	max.							
	GJ-N23.FFS.B.B1	82004	40	3950	3.5	PTFE	PTFE	SS316	21	-46-+54	✓
	GJ-N23.FFS.B	82001	40	3950	3.5	PTFE	PTFE	SS316	21	-46-+54	-
	GJ-N23.JFS.B	L19735	40	3950	5.6	PEEK	PTFE	SS316	21	-46-+54	-
	GJ-N25.FFS.B	82003	55	5460	3.5	PTFE	PTFE	SS316	21	-46-+54	-
	GJ-N23.PFS.B.B1	81529	40	3950	5.2	PPS	PTFE	SS316	21	-46-+54	✓
	GJ-N23.PFS.B	81531	40	3950	5.2	PPS	PTFE	SS316	22	-46-+54	-
For corrosive media	GJ-N23.FFC.B	L20284	40	3950	3.5	PTFE	PTFE	Hastelloy-C276	21	-46-+54	-
	GJ-N25.FFC.B	L21812	55	5480	3.5	PTFE	PTFE	Hastelloy-C276	21	-46-+54	-
For abrasive media	GJ-N23.9FD.B	M10265	40	3950	5.2	NiC	PTFE	Surface hardened	21	-46-+54	-

- Ports (internal thread) 1/8" -27NPT
- Flow rates without differential pressure
- Operating temperature : with other seals up to 99°C possible

* For applications with differential pressures exceeding 1 bar we recommend using the MCP-Z drive.



Delivery pump
BVP-Z Standard
ISM 446



Dosing pump
MCP-Z Standard
ISM 405



Programmed dosing
MCP-Z Process IP65
ISM 918

Tubing adaptors for gear pump-heads

Threaded stainless steel connectors		
Order No.	External thread Tubing adaptor	Tubing i.d. mm
AR0001	1/8" NPT Tube nozzle	6
AR0002	1/8" NPT Tube nozzle	3
AR0004	3/8" NPT Tube nozzle	12
AR0008	1/8" NPT Tube nozzle	8
AR0009	1/8" NPT Tube nozzle	9.5
AR0024	1/8" NPT Pipe connection	6 (outside)
Threaded connectors in Hastelloy®-C 276		
AR0001-HC	1/8" NPT Tube nozzle	6