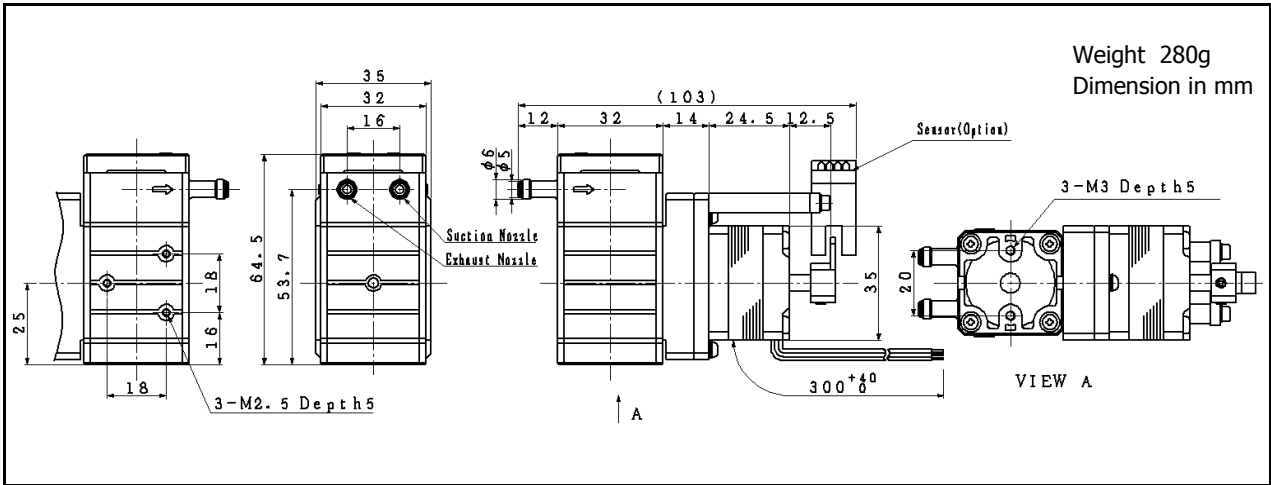


7039

Micro Diaphragm Liquid Pump



Features

- ◆ Flow rate fine adjustable by stepping drive circuit
- ◆ Diaphragm position control by optional sensors

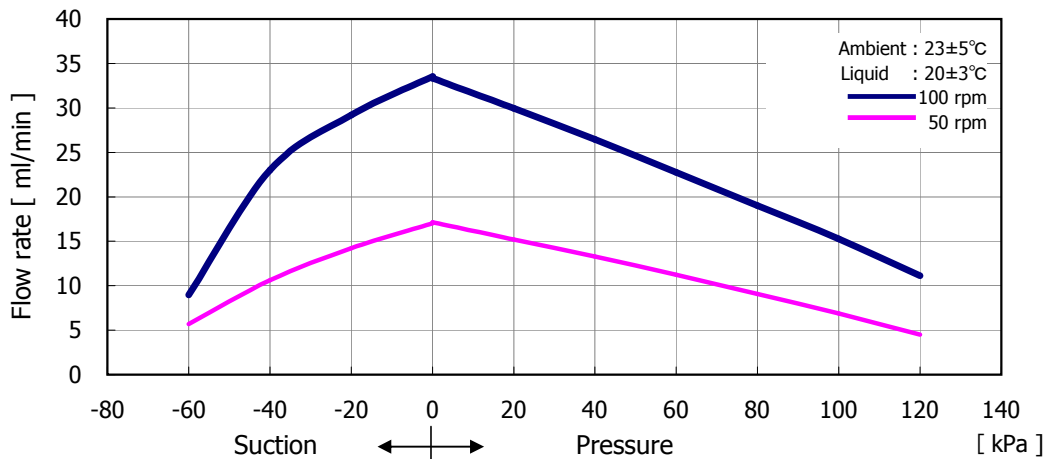
Ordering number

7039

Nominal voltage : Vcc	10.8	V
Motor type	3-Phase Stepping Motor	
Step Angle	1.2	deg./step
Flow range	0.32...100	ml/min
Nominal current consumption	0.3	A/2-phase
Nominal motor speed	100	rpm
Pressure range	0...+100	kPa
Suction range	-50...0	kPa

Performance characteristics

MODEL:7039



General Specifications

Ambient temperature range	+5...+50	°C
Fluid temperature	+5...+50	°C
Diaphragm	FKM	
Valve	FKM	
Other wetted materials	FKM,PFA,PTFE	

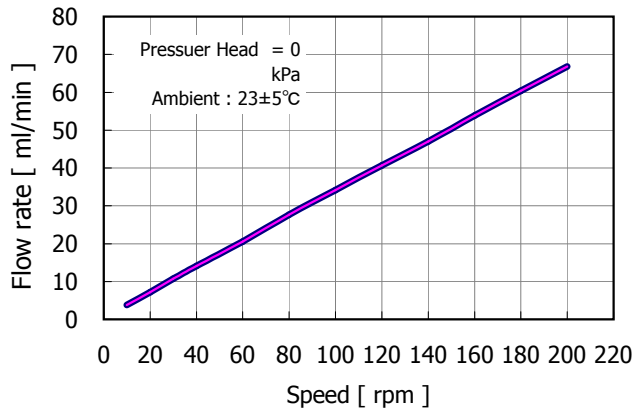
Conditions:

Data displayed in this datasheet are measured with purified water at 20°C using a Toalon-G tube of 4mm internal (6mm external) diameter and 160 cm length using Namiki standard test equipment.

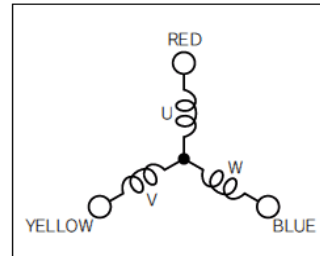
V01

Specifications subject to change without notice

Speed Characteristics



Connection Diagram:



Excitation Sequence

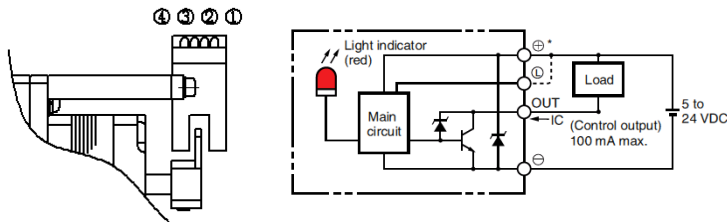
Phase \ Step	Step					
	1	2	3	4	5	6
U Phase	+		-	-		+
V Phase	-	-		+	+	
W phase		+	+		-	-

Options:

- Change of wetted material.
- Photomicrosensor : EE-SX672A (OMRON)
- Stepping motor driver : FTD3S2P24 (NIDEC SERVO CORP.)

Ordering number	7039D	7039S	7039SD	7049	7049D	7049S	7049SD
Diaphragm	FKM	FKM	FKM	PTFE	PTFE	PTFE	PTFE
Rubber materials	FKM	FKM	FKM	FFKM	FFKM	FFKM	FFKM
Photomicrosensor	×	○	○	×	×	○	○
Stepping motor driver	○	×	○	×	○	×	○

Photomicrosensor: EE-SX672X



Main Specification

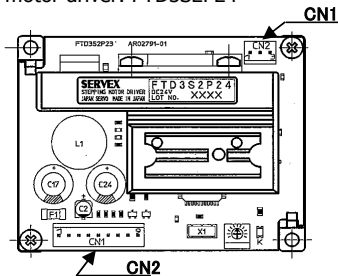
Supply voltage	5...24	V
Current consumption	35	mA
Max.load current	100	mA
Max.frequency	1	kHz

Electrical connections

Pin 1	Vcc
Pin 2	L
Pin 3	Output
Pin 4	GND

Important: For detailed information please refer OMRON specification.

Stepping motor driver: FTD3S2P24



Connector No.	Terminal No.	Name	Function					
CN2	1	VM	Motor power supply 12-24DC					
	2	COM	Motor power supply GND					
	3	5VDC	Logic circuit power supply +5V					
	4	GND	Logic circuit GND					
	5	CW	The CW direction drive pulse or the serial pulse signal input					
	6	CCW	The CCW direction drive pulse or the serial pulse signal input					
	Current %			120~150	100	0		
	7	C0	L	L	H			
	8	C1	L	H	Don't care			
CN1	9	GND	Signal GND					
	1	Motor W	To Motor phase - W	High input signal voltage			Min = 4.0 V	Max = 5.3 V
	2	Motor V	To Motor phase - V	Low input signal voltage			Min = -3.0 V	Max = 0.8 V

Important: For detailed information please refer NIDEC SERVO CORP. specification.