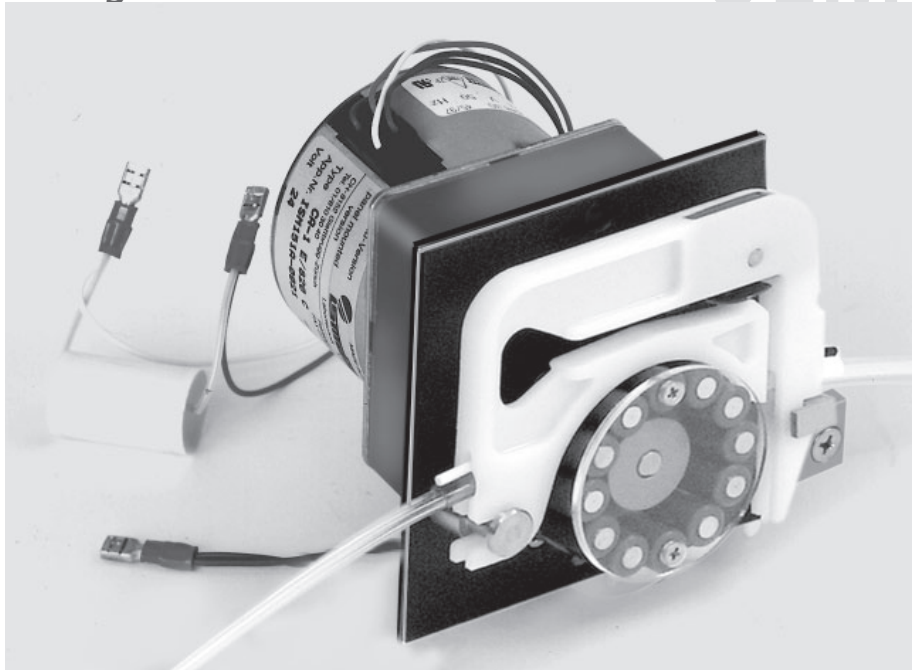
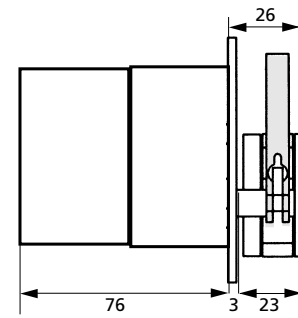


Synchronous motor with gear box

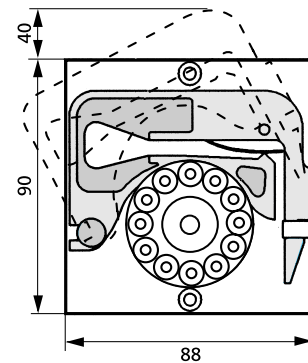
OEM



Side view (mm)



Front view (mm)



Mounting cut-out (mm)

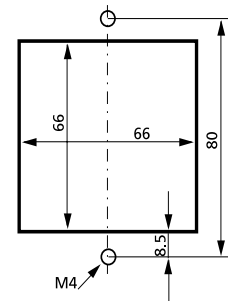
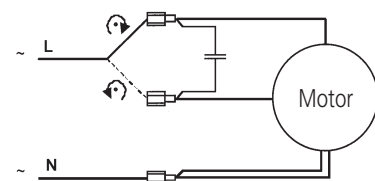


Diagram and electrical connections



The polarity of L and N has no effect on the rotation direction.

Technical specifications

Pump model	MS/CA1-E/12/Synchro
Motor type	Synchronous motor with reversible rotation
Rotation speed	fixed, available with: 6 8 10 12 20 40 60 (rpm)
Flow rates	0.006–14.4 ml/min
Power consumption	8 W
Channels	1
Pump rollers	12
Weight	0.890 kg
Tubing type	3-stop collared tubing
Tubing i.d.	0.13–3.17 mm
Cassettes	MS/CA Click'n'go, POM

Cassettes (Spare part / Option)

- IS 3510 MS/CA Click'n'go, **POM-C**²⁾
- IS 0649 MS/CA Pressure lever, **POM-C**
- IS 3629 MS/CA Pressure lever, **PVDF**

²⁾ Standard equipment

➔ Please see data sheet 09.1

Flow rates¹⁾

Tubing i.d. mm	ml per revolution	Tubing i.d. mm	ml per revolution
0.13	0.00093	1.14	0.067
0.19	0.0021	1.22	0.075
0.25	0.0038	1.30	0.083
0.38	0.0088	1.42	0.094
0.44	0.012	1.52	0.10
0.51	0.016	1.65	0.12
0.57	0.019	1.75	0.13
0.64	0.024	1.85	0.13
0.76	0.033	2.06	0.15
0.89	0.044	2.29	0.17
0.95	0.050	2.54	0.19
1.02	0.056	2.79	0.21
1.09	0.063	3.17	0.24

¹⁾ Water, Tygon® tubing, without differential pressure

➔ Calculation example for flow rate
rpm x ml per revolution = ml/min
60 x 0.24 = 14.4

Ask for the ISMATEC® Pump Tubing Selection Guide.

Ordering information

Voltage and frequency	Type MS/CA1-E/12/Synchro/. .							
	Revolutions per minute (rpm)							
	6	8	10	12	20	40	60	
24 V _{AC} /50 Hz	1EB 035	1EB 036	1EB 037	1EB 038	1EB 039	1EB 040	1EB 041	
24 V _{AC} /60 Hz	1EB 042	1EB 043	1EB 044	1EB 045	1EB 046	1EB 047	1EB 048	
115 V _{AC} /50 Hz*								
115 V _{AC} /60 Hz	1EB 049	1EB 050	1EB 051	1EB 052	1EB 053	1EB 054	1EB 055	
230 V _{AC} /50 Hz	1EB 056	1EB 057	1EB 058	1EB 059	1EB 060	1EB 061	1EB 062	
230 V _{AC} /60 Hz*								
	*on request							

Data sheet

02.1.3

30.09.05