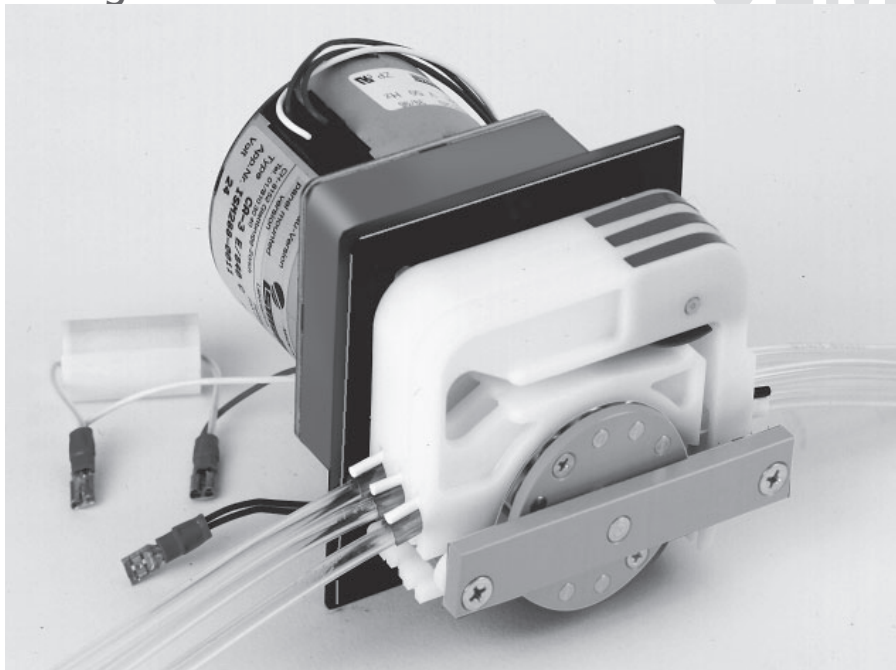
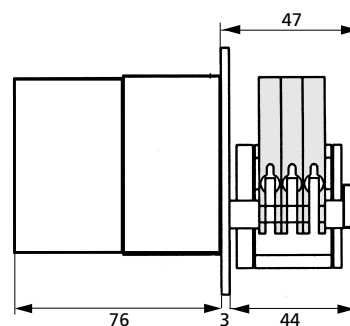


# Synchronous motor with gear box

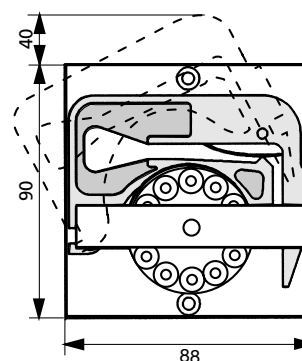
OEM



Side view (mm)



Front view (mm)



Mounting cut-out (mm)

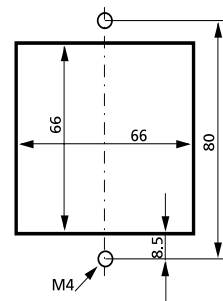
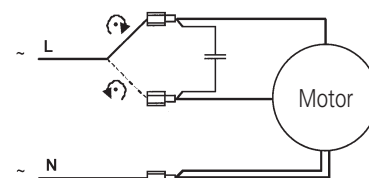


Diagram and electrical connections



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

## Technical specifications

Pump model	MS/CA3-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	3
Pump rollers	12
Weight	1.040 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**<sup>2)</sup>
- IS 0649 MS/CA Pressure lever, **POM-C**
- IS 3629 MS/CA Pressure lever, **PVDF**

<sup>2)</sup> Standard equipment

➔ Please see data sheet 09.1

## Flow rates<sup>1)</sup>

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

<sup>1)</sup> 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/CA3-E/12/Synchro/. .							
	Revolutions per minute (rpm)							
	6	8	10	12	20	40	60	
24 V <sub>AC</sub> /50 Hz	3EB 051	3EB 052	3EB 053	3EB 054	3EB 055	3EB 056	3EB 057	
24 V <sub>AC</sub> /60 Hz	3EB 058	3EB 059	3EB 060	3EB 061	3EB 062	3EB 063	3EB 064	
115 V <sub>AC</sub> /50 Hz*								
115 V <sub>AC</sub> /60 Hz	3EB 065	3EB 066	3EB 067	3EB 068	3EB 069	3EB 070	3EB 071	
230 V <sub>AC</sub> /50 Hz	3EB 072	3EB 073	3EB 074	3EB 075	3EB 076	3EB 077	3EB 078	
230 V <sub>AC</sub> /60 Hz*								

\*on request

Data sheet

02.1.9

30.09.05