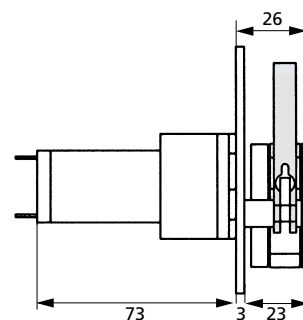


DC motor with gear box

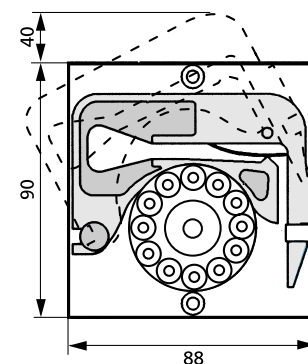
OEM



Side view (mm)



Front view (mm)



Mounting cut-out (mm)

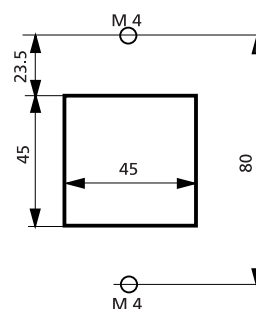
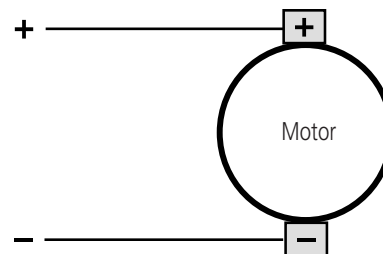


Diagram and electrical connections



Please note

The specifications depend on the **motor control** used by the customer.

Technical specifications

| | |
|----------------------|--------------------------|
| Pump model | MS/CA1-E/12/DC |
| Motor type | DC motor |
| Gear ratio | 100:1 60:1 |
| Rotation speed* max. | 50 80 rpm |
| Flow rates* max. | 12 19.2 ml/min |
| Motor control | possible, user-dependent |
| Power consumption | max. 7 W |
| Channels | 1 |
| Pump rollers | 12 |
| Weight | 0.350 kg |

| | |
|-------------|------------------------|
| Tubing type | 3-stop collared tubing |
| Tubing i.d. | 0.13–3.17 mm |
| Cassettes | MS/CA Click'n'go, POM |

*The specifications depend on the **motor control** used by the customer.

- 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
 80 x 0.24 = 19.2

Ask for the ISMATEC® Pump Tubing Selection Guide.

Ordering information

| | | | | |
|------------|--------------------|-----------------------------------|---------|---------|
| Data sheet | Nominal voltage | Type MS/CA1-E/12/DC/ . . . | 100:1 | 60:1 |
| | | Revolutions per minute (rpm) max. | 50 | 80 |
| | 12 V _{DC} | | 1EB 901 | 1EB 902 |
| | 24 V _{DC} | | 1EB 903 | 1EB 904 |

02.2.3
30.09.05