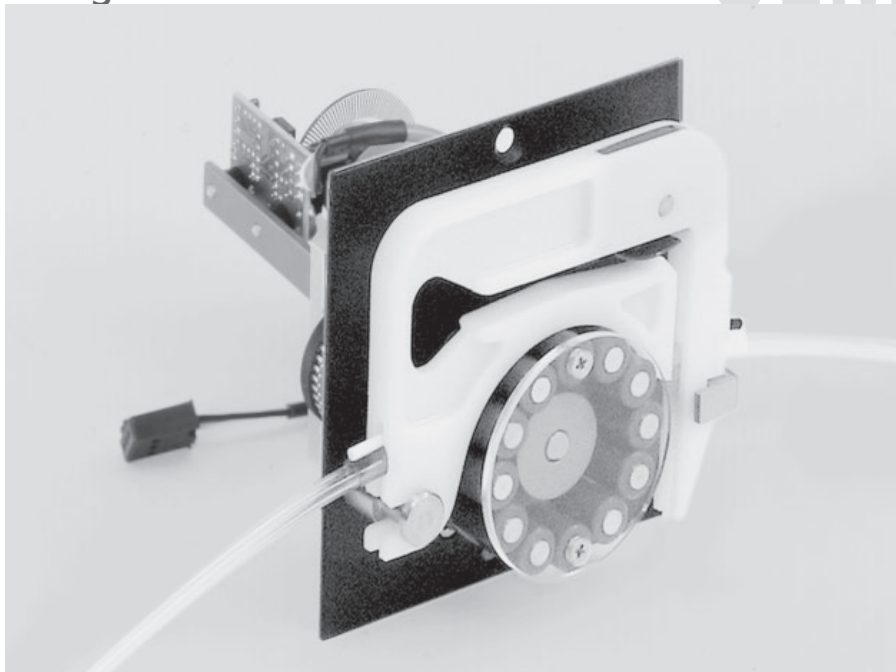
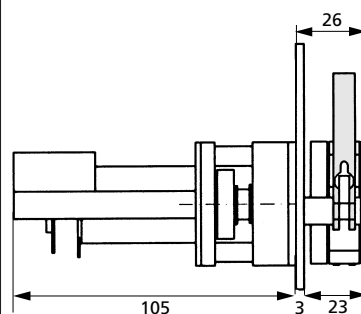


DC motor with optical encoder and gear box

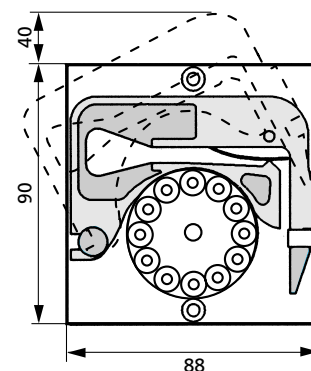
OEM



Side view (mm)



Front view (mm)



Mounting cut-out (mm)

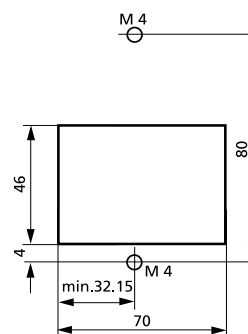
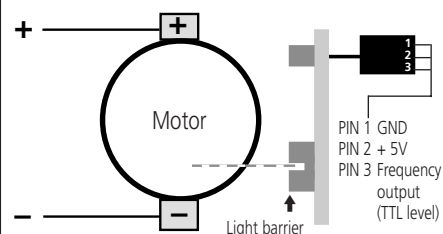


Diagram and electrical connections



*** Please note**

Specifications valid for the following ISMATEC® control units:

- a) REGLO-E Analog - see data sheet 08.1
- b) REGLO-E Digital - see data sheet 08.2

Technical specifications

Pump model	REGLO-E MS/CA1-12
Motor type	DC motor with encoder
Gear ratio	25:1
Rotation speed*	3.2–160 rpm ^{a)} 1.6–160 rpm ^{b)}
Flow rates*	0.002–38.4 ml/min
Motor control*	optional control unit
Power consumption max.	10 W
Optical encoder	120 impulses/motor rev.
Channels	1
Pump rollers	12
Weight	0.560 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
 160 x 0.24 = 38.4

Ask for the ISMATEC® Pump Tubing Selection Guide.

Ordering information

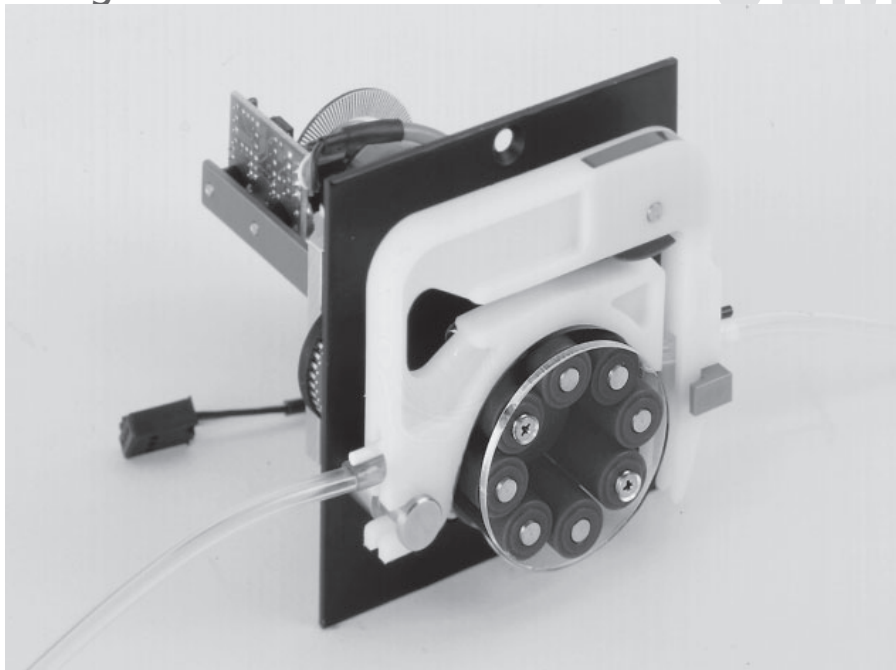
Nominal voltage	Type REGLO-E MS/CA1-12	Order No.
12 V _{DC}		IS 3258

Data sheet

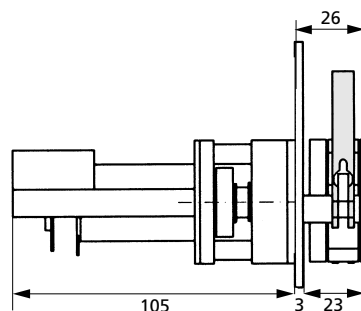
02.3.6
30.09.05

DC motor with optical encoder and gear box

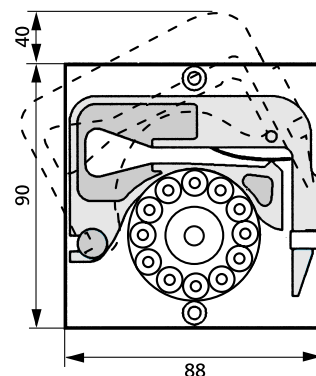
OEM



Side view (mm)



Front view (mm)



Mounting cut-out (mm)

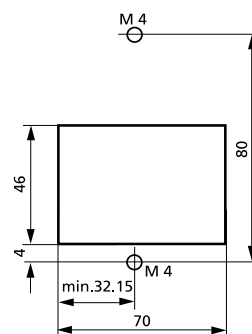
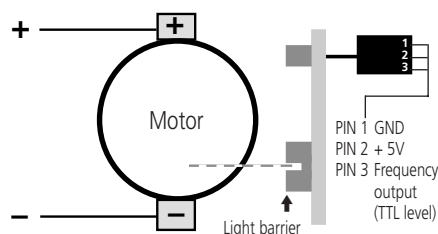


Diagram and electrical connections



*** Please note**

Specifications valid for the following ISMATEC® control units:
 a) REGLO-E Analog - see data sheet 08.1
 b) REGLO-E Digital - see data sheet 08.2

Technical specifications

Pump model	REGLO-E MS/CA1-08
Motor type	DC motor with encoder
Gear ratio	25:1
Rotation speed*	3.2–160 rpm ^{a)} 1.6–160 rpm ^{b)}
Flow rates*	0.002–56 ml/min
Motor control*	optional control unit
Power consumption	max. 10 W
Optical encoder	120 impulses/motor rev.
Channels	1
Pump rollers	8
Weight	0.560 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	0.0011	1.14	0.078
0.19	0.0023	1.22	0.088
0.25	0.0041	1.30	0.098
0.38	0.0094	1.42	0.11
0.44	0.013	1.52	0.13
0.51	0.017	1.65	0.15
0.57	0.021	1.75	0.16
0.64	0.026	1.85	0.17
0.76	0.036	2.06	0.20
0.89	0.049	2.29	0.24
0.95	0.056	2.54	0.27
1.02	0.063	2.79	0.31
1.09	0.072	3.17	0.35

¹⁾ Water, Tygon® tubing, without differential pressure

→ Calculation example for flow rate
 rpm x ml per revolution = ml/min
 160 x 0.35 = 56

Ask for the ISMATEC® Pump Tubing Selection Guide.

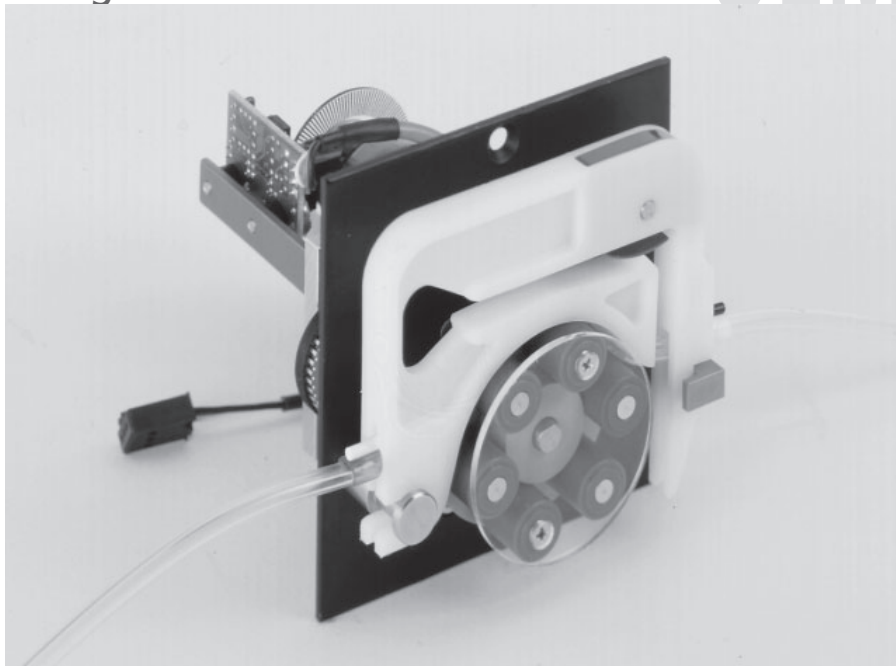
Ordering information

Nominal voltage	Type REGLO-E MS/CA1-08	Order No.
12 V _{DC}		IS 3206

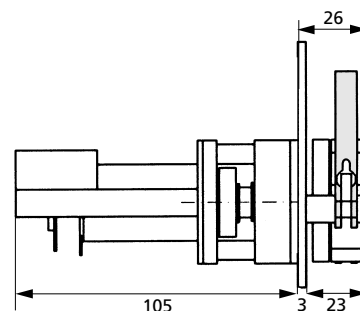
Data sheet
 02.3.5
 30.09.05

DC motor with optical encoder and gear box

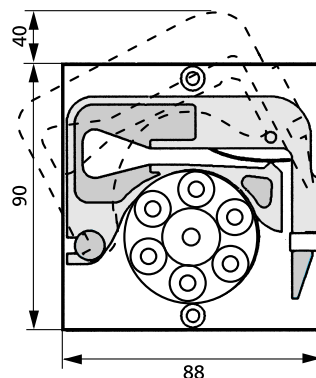
OEM



Side view (mm)



Front view (mm)



Mounting cut-out (mm)

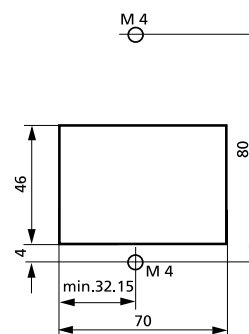
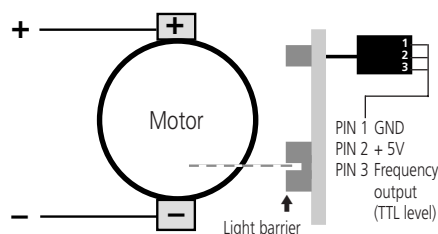


Diagram and electrical connections



*** Please note**

Specifications valid for the following ISMATEC® control units:

- a) REGLO-E Analog - see data sheet 08.1
- b) REGLO-E Digital - see data sheet 08.2

Technical specifications

Pump model	REGLO-E MS/CA1-06
Motor type	DC motor with encoder
Gear ratio	25:1
Rotation speed*	3.2–160 rpm ^{a)} 1.6–160 rpm ^{b)}
Flow rates*	0.003–68.8 ml/min
Motor control*	optional control unit
Power consumption	max. 10 W
Optical encoder	120 impulses/motor rev.
Channels	1
Pump rollers	6
Weight	0.560 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	0.0014	1.14	0.09
0.19	0.0028	1.22	0.10
0.25	0.0048	1.30	0.11
0.38	0.011	1.42	0.13
0.44	0.014	1.52	0.15
0.51	0.019	1.65	0.17
0.57	0.024	1.75	0.19
0.64	0.030	1.85	0.21
0.76	0.042	2.06	0.25
0.89	0.057	2.29	0.29
0.95	0.064	2.54	0.33
1.02	0.073	2.79	0.37
1.09	0.083	3.17	0.43

¹⁾ Water, Tygon® tubing, without differential pressure

➔ Calculation example for flow rate
 rpm x ml per revolution = ml/min
 160 x 0.43 = 68.8

Ask for the ISMATEC® Pump Tubing Selection Guide.

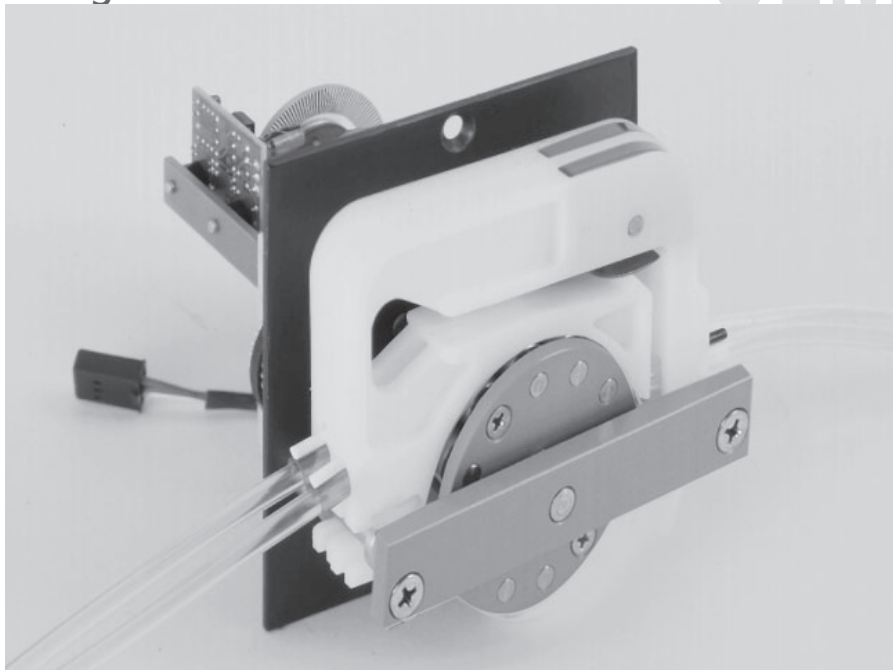
Ordering information

Nominal voltage	Type REGLO-E MS/CA1-06	Order No.
12 V _{DC}		IS 3205
24 V _{DC}		IS 3205A

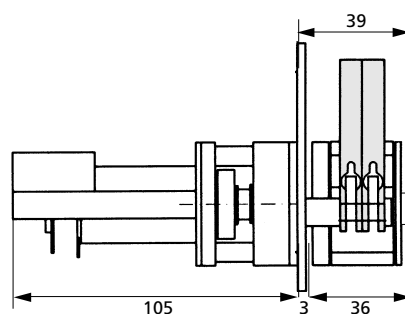
Data sheet
02.3.4
30.09.05

DC motor with optical encoder and gear box

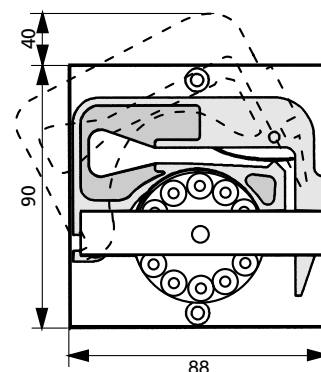
OEM



Side view (mm)



Front view (mm)



Mounting cut-out (mm)

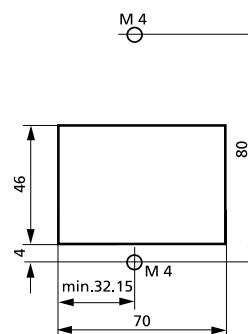
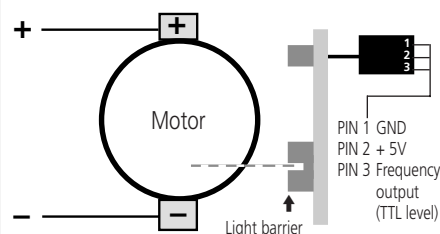


Diagram and electrical connections



*** Please note**

Specifications valid for the following ISMATEC® control units:

- a) REGLO-E Analog - see data sheet 08.1
- b) REGLO-E Digital - see data sheet 08.2

Technical specifications

Pump model	REGLO-E MS/CA2-12
Motor type	DC motor with encoder
Gear ratio	25:1
Rotation speed*	3.2–160 rpm ^{a)} 1.6–160 rpm ^{b)}
Flow rates*	0.002–38.4 ml/min
Motor control*	optional control unit
Power consumption max.	10 W
Optical encoder	120 impulses/motor rev.
Channels	2
Pump rollers	12
Weight	0.620 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
 160 x 0.24 = 38.4

Ask for the ISMATEC® Pump Tubing Selection Guide.

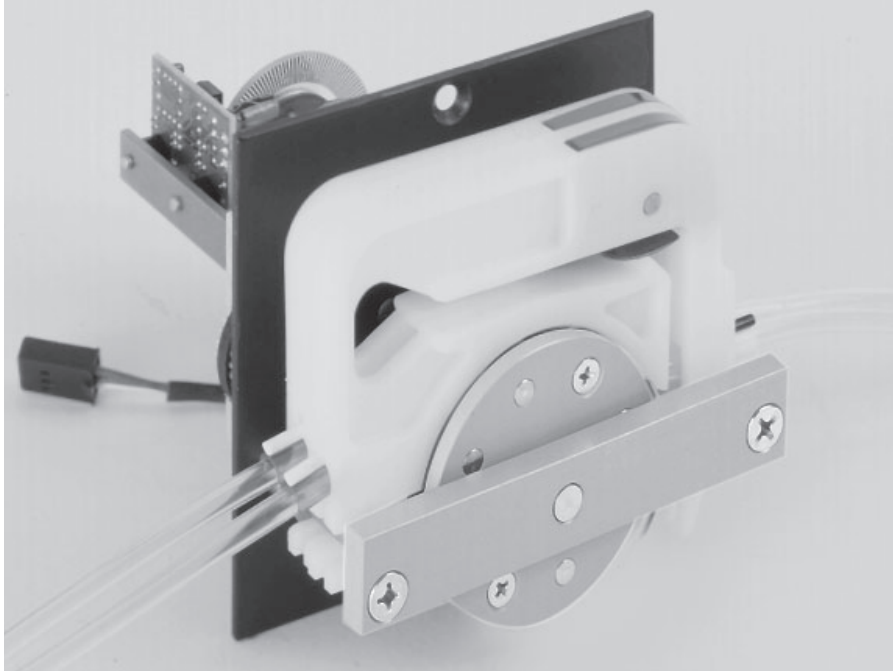
Ordering information

Nominal voltage	Type REGLO-E MS/CA2-12	Order No.
12 V _{DC}		IS 3124

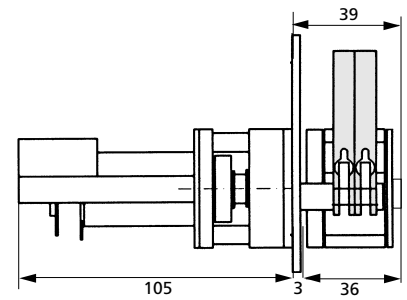
Data sheet
02.3.9
30.09.05

DC motor with optical encoder and gear box

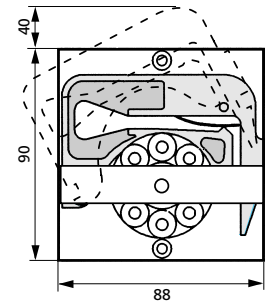
OEM



Side view (mm)



Front view (mm)



Mounting cut-out (mm)

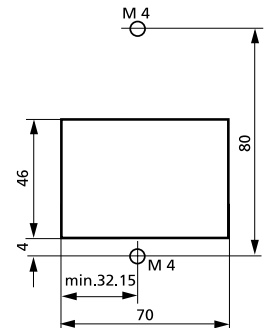
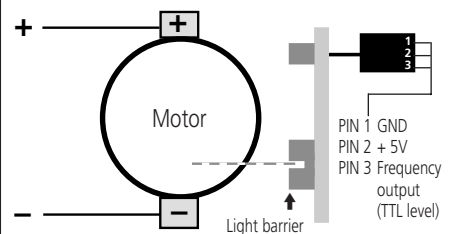


Diagram and electrical connections



Technical specifications	
Pump model	REGLO-E MS/CA2-08
Motor type	DC motor with encoder
Gear ratio	25:1
Rotation speed*	3.2–160 rpm ^{a)} 1.6–160 rpm ^{b)}
Flow rates*	0.002–56 ml/min
Motor control*	optional control unit
Power consumption	max. 10 W
Optical encoder	120 impulses/motor rev.
Channels	2
Pump rollers	8
Weight	0.620 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 rates ¹⁾			
Tubing i.d. mm	ml per revolution	Tubing i.d. mm	ml per revolution
0.13	0.0011	1.14	0.078
0.19	0.0023	1.22	0.088
0.25	0.0041	1.30	0.098
0.38	0.0094	1.42	0.11
0.44	0.013	1.52	0.13
0.51	0.017	1.65	0.15
0.57	0.021	1.75	0.16
0.64	0.026	1.85	0.17
0.76	0.036	2.06	0.20
0.89	0.049	2.29	0.24
0.95	0.056	2.54	0.27
1.02	0.063	2.79	0.31
1.09	0.072	3.17	0.35

¹⁾ Water, Tygon® tubing, without differential pressure

→ Calculation example for flow rate

rpm x ml per revolution = ml/min

160 x 0.35 = 56

Ask for the ISMATEC® Pump Tubing Selection Guide.

Ordering information

Data sheet	Nominal voltage	Type REGLO-E MS/CA2-08	Order No.
	02.3.8 30.09.05	12 V _{DC}	

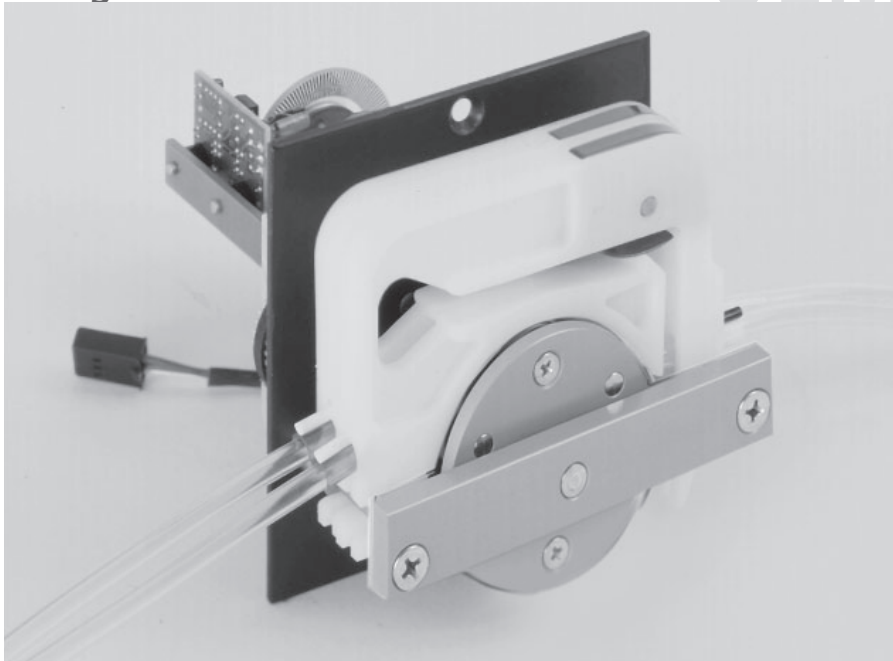
*** Please note**

Specifications valid for the following ISMATEC® control units:

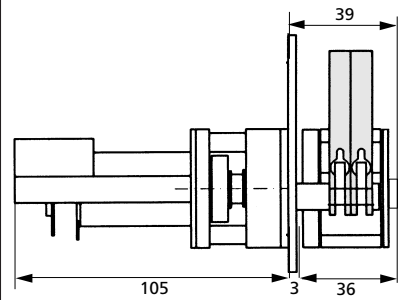
^{a)} REGLO-E Analog - see data sheet 08.1
^{b)} REGLO-E Digital - see data sheet 08.2

DC motor with optical encoder and gear box

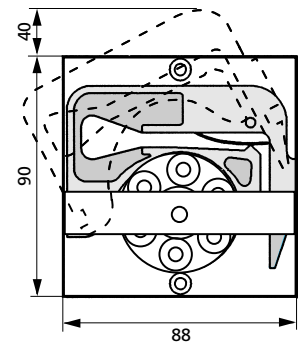
OEM



Side view (mm)



Front view (mm)



Mounting cut-out (mm)

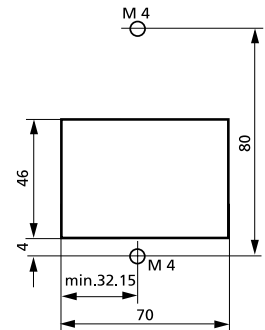
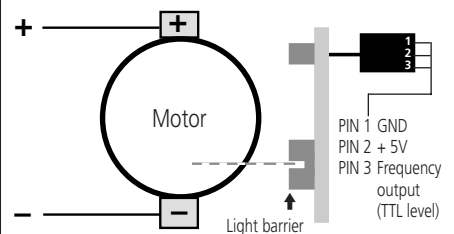


Diagram and electrical connections



Technical specifications	
Pump model	REGLO-E MS/CA2-06
Motor type	DC motor with encoder
Gear ratio	25:1
Rotation speed*	3.2–160 rpm ^{a)} 1.6–160 rpm ^{b)}
Flow rates*	0.003–68.8 ml/min
Motor control*	optional control unit
Power consumption	max. 10 W
Optical encoder	120 impulses/motor rev.
Channels	2
Pump rollers	6
Weight	0.620 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, <i>POM-C</i> ²⁾
IS 0649	MS/CA Pressure lever, <i>POM-C</i>
IS 3629	MS/CA Pressure lever, <i>PVDF</i>
²⁾ Standard equipment → Please see data sheet 09.1	

Flow rates ¹⁾			
Tubing i.d. mm	ml per revolution	Tubing i.d. mm	ml per revolution
0.13	0.0014	1.14	0.09
0.19	0.0028	1.22	0.10
0.25	0.0048	1.30	0.11
0.38	0.011	1.42	0.13
0.44	0.014	1.52	0.15
0.51	0.019	1.65	0.17
0.57	0.024	1.75	0.19
0.64	0.030	1.85	0.21
0.76	0.042	2.06	0.25
0.89	0.057	2.29	0.29
0.95	0.064	2.54	0.33
1.02	0.073	2.79	0.37
1.09	0.083	3.17	0.43

¹⁾ Water, Tygon® tubing, without differential pressure

→ Calculation example for flow rate

rpm x ml per revolution = ml/min

160 x 0.43 = 68.8

Ask for the ISMATEC®
Pump Tubing Selection Guide.

Ordering information

Data sheet	Nominal voltage	Type REGLO-E MS/CA2-06	Order No.
	02.3.7 30.09.05	12 V _{DC}	

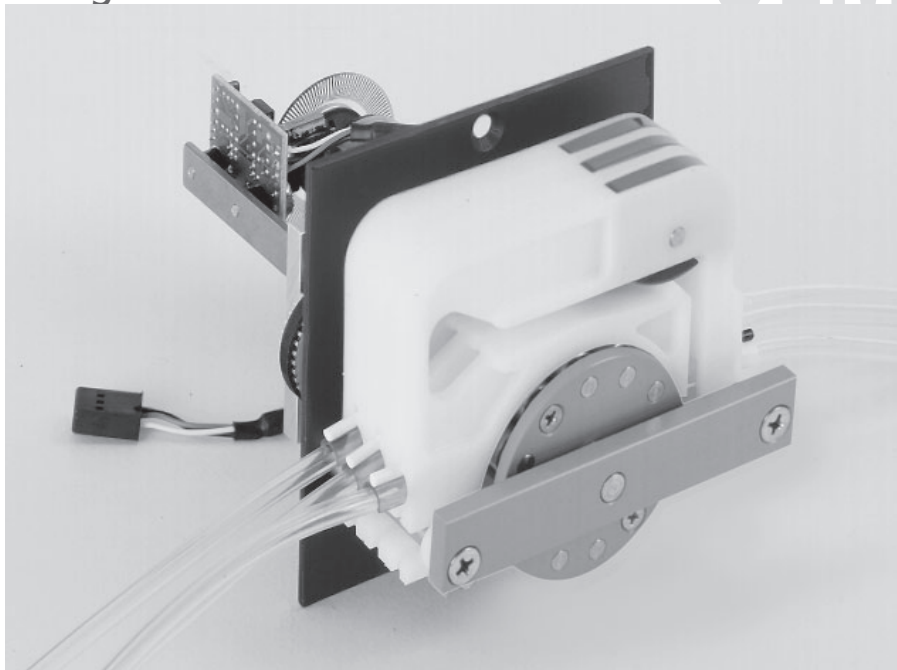
*** Please note**

Specifications valid for the following ISMATEC® control units:

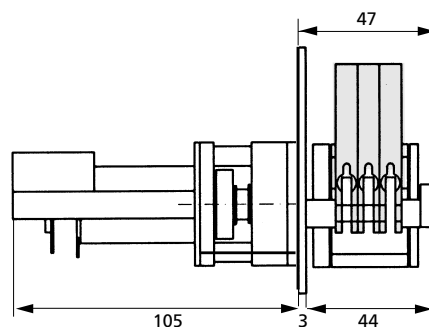
^{a)} REGLO-E *Analog* - see data sheet 08.1
^{b)} REGLO-E *Digital* - see data sheet 08.2

DC motor with optical encoder and gear box

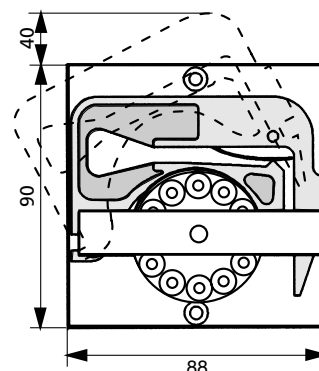
OEM



Side view (mm)



Front view (mm)



Mounting cut-out (mm)

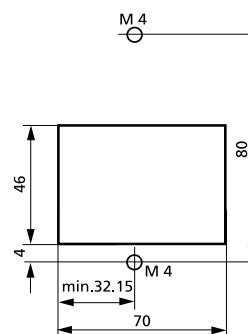
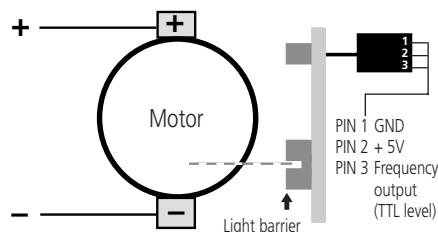


Diagram and electrical connections



*** Please note**

Specifications valid for the following ISMATEC® control units:

- a) REGLO-E Analog - see data sheet 08.1
- b) REGLO-E Digital - see data sheet 08.2

Technical specifications

Pump model	REGLO-E MS/CA3-12
Motor type	DC motor with encoder
Gear ratio	25:1
Rotation speed*	2–100 rpm ^{a)} 1–100 rpm ^{b)}
Flow rates*	0.001–24 ml/min
Motor control*	optional control unit
Power consumption	max. 10 W
Optical encoder	120 impulses/motor rev.
Channels	3
Pump rollers	12
Weight	0.700 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
 100 x 0.24 = 24

Ask for the ISMATEC® Pump Tubing Selection Guide.

Ordering information

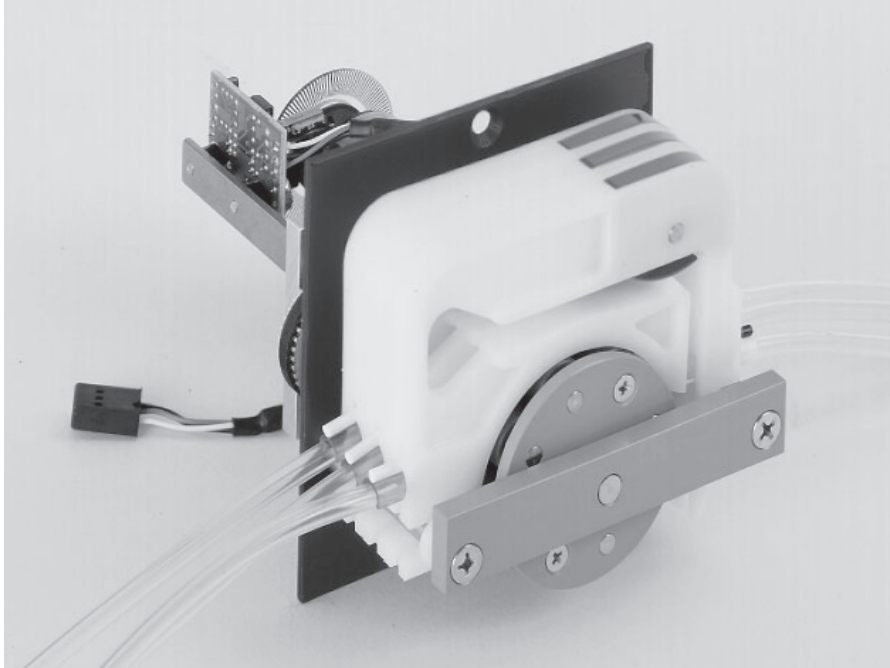
Nominal voltage	Type REGLO-E MS/CA3-12	Order No.
12 V _{DC}		IS 3266

Data sheet

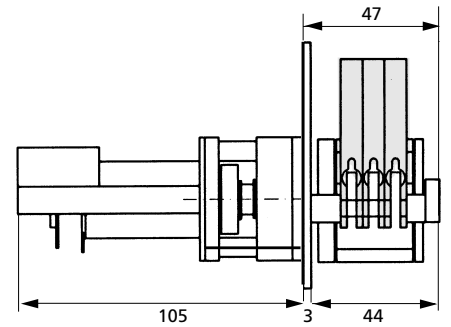
02.3.12
30.09.05

DC motor with optical encoder and gear box

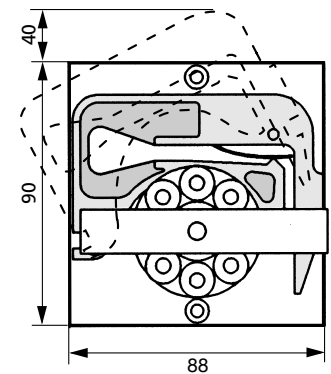
OEM



Side view (mm)



Front view (mm)



Mounting cut-out (mm)

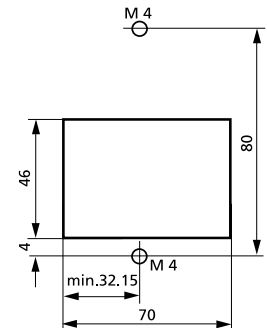
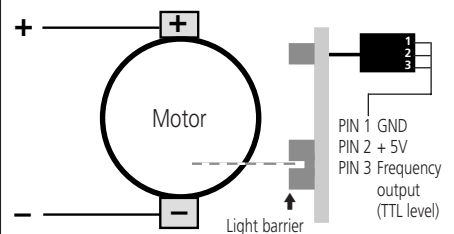


Diagram and electrical connections



Technical specifications

Pump model	REGLO-E MS/CA3-08
Motor type	DC motor with encoder
Gear ratio	25:1
Rotation speed*	2–100 rpm ^{a)} 1–100 rpm ^{b)}
Flow rates*	0.002–35 ml/min
Motor control*	optional control unit
Power consumption	max. 10 W
Optical encoder	120 impulses/motor rev.
Channels	3
Pump rollers	8
Weight	0.700 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	0.0011	1.14	0.078
0.19	0.0023	1.22	0.088
0.25	0.0041	1.30	0.098
0.38	0.0094	1.42	0.11
0.44	0.013	1.52	0.13
0.51	0.017	1.65	0.15
0.57	0.021	1.75	0.16
0.64	0.026	1.85	0.17
0.76	0.036	2.06	0.20
0.89	0.049	2.29	0.24
0.95	0.056	2.54	0.27
1.02	0.063	2.79	0.31
1.09	0.072	3.17	0.35

¹⁾ Water, Tygon® tubing, without differential pressure

➔ Calculation example for flow rate
 rpm x ml per revolution = ml/min
 100 x 0.35 = 35

Ask for the ISMATEC® Pump Tubing Selection Guide.

Ordering information

Nominal voltage	Type REGLO-E MS/CA3-08	Order No.
12 V _{DC}		IS 2872

Data sheet
 02.3.11
 30.09.05

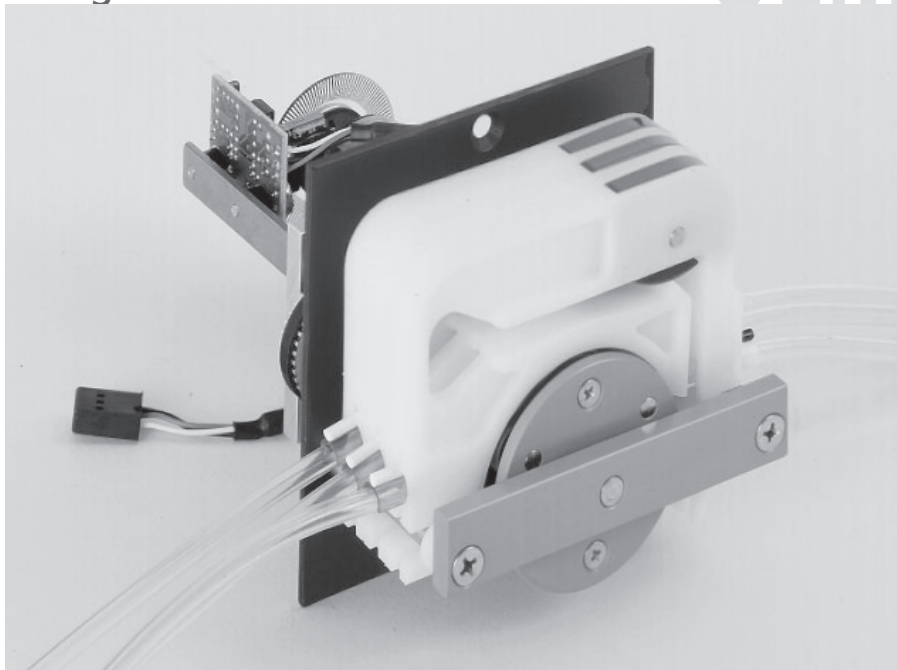
* Please note

Specifications valid for the following ISMATEC® control units:

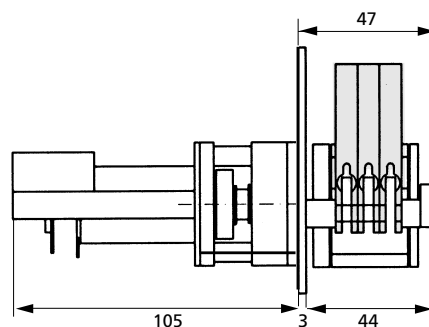
- ^{a)} REGLO-E Analog - see data sheet 08.1
- ^{b)} REGLO-E Digital - see data sheet 08.2

DC motor with optical encoder and gear box

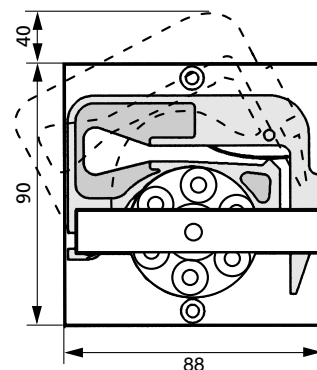
OEM



Side view (mm)



Front view (mm)



Mounting cut-out (mm)

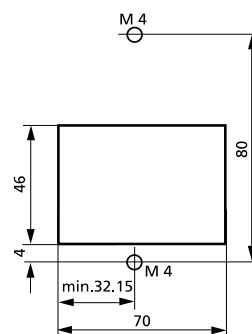
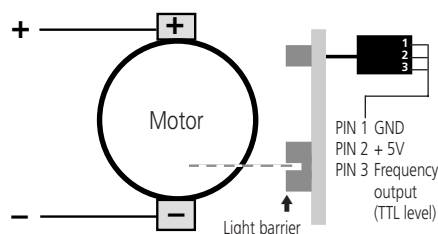


Diagram and electrical connections



*** Please note**

Specifications valid for the following ISMATEC® control units:

- a) REGLO-E Analog - see data sheet 08.1
- b) REGLO-E Digital - see data sheet 08.2

Technical specifications

Pump model	REGLO-E MS/CA3-06
Motor type	DC motor with encoder
Gear ratio	25:1
Rotation speed*	2–100 rpm ^{a)} 1–100 rpm ^{b)}
Flow rates*	0.002–43 ml/min
Motor control*	optional control unit
Power consumption max.	10 W
Optical encoder	120 impulses/motor rev.
Channels	3
Pump rollers	6
Weight	0.700 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	0.0014	1.14	0.09
0.19	0.0028	1.22	0.10
0.25	0.0048	1.30	0.11
0.38	0.011	1.42	0.13
0.44	0.014	1.52	0.15
0.51	0.019	1.65	0.17
0.57	0.024	1.75	0.19
0.64	0.030	1.85	0.21
0.76	0.042	2.06	0.25
0.89	0.057	2.29	0.29
0.95	0.064	2.54	0.33
1.02	0.073	2.79	0.37
1.09	0.083	3.17	0.43

¹⁾ Water, Tygon® tubing, without differential pressure

→ Calculation example for flow rate
 rpm x ml per revolution = ml/min
 100 x 0.43 = 43

Ask for the ISMATEC® Pump Tubing Selection Guide.

Ordering information

Nominal voltage	Type REGLO-E MS/CA3-06	Order No.
12 V _{DC}		IS 2871

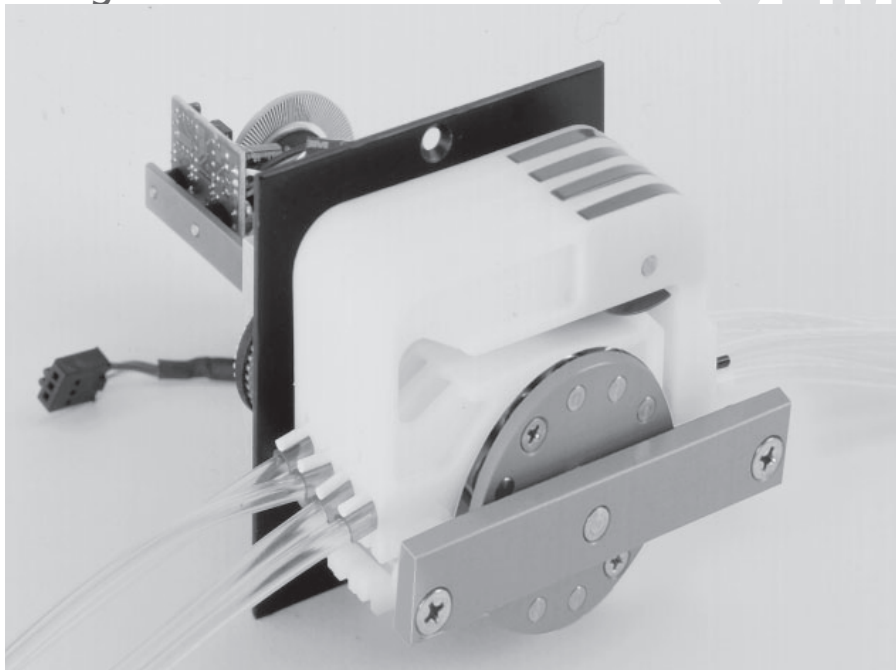
Data sheet

02.3.10

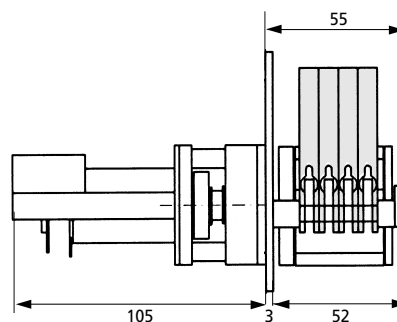
30.09.05

DC motor with optical encoder and gear box

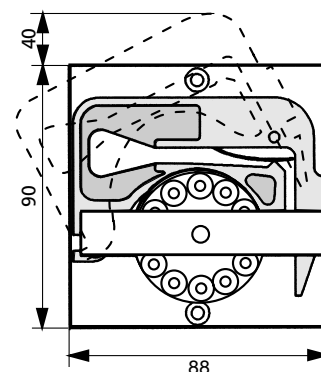
OEM



Side view (mm)



Front view (mm)



Mounting cut-out (mm)

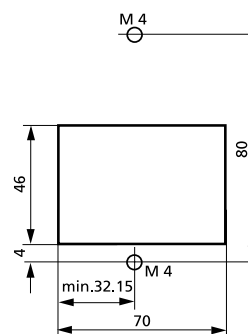
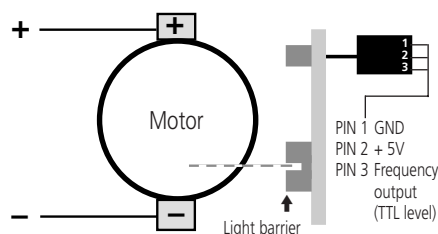


Diagram and electrical connections



*** Please note**

Specifications valid for the following ISMATEC® control units:
 a) REGLO-E Analog - see data sheet 08.1
 b) REGLO-E Digital - see data sheet 08.2

Technical specifications

Pump model	REGLO-E MS/CA4-12
Motor type	DC motor with encoder
Gear ratio	25:1
Rotation speed*	2–100 rpm ^{a)} 1–100 rpm ^{b)}
Flow rates*	0.001–24 ml/min
Motor control*	optional control unit
Power consumption max.	10 W
Optical encoder	120 impulses/motor rev.
Channels	4
Pump rollers	12
Weight	0.780 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
 100 x 0.24 = 24

Ask for the ISMATEC® Pump Tubing Selection Guide.

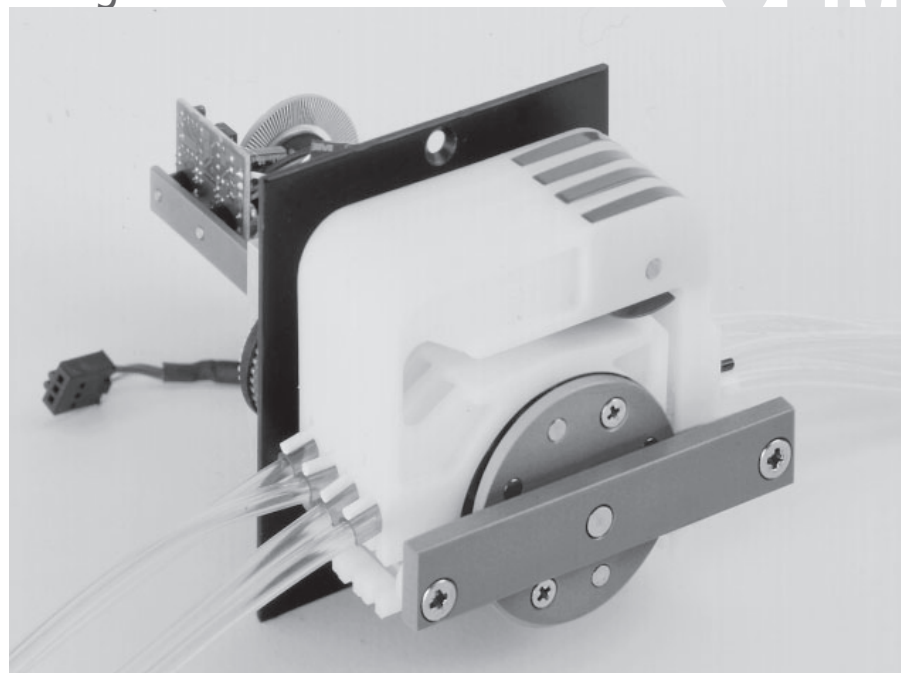
Ordering information

Nominal voltage	Type REGLO-E MS/CA4-12	Order No.
12 V _{DC}		IS 3135

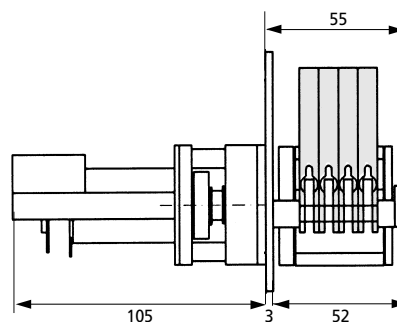
Data sheet
 02.3.15
 30.09.05

DC motor with optical encoder and gear box

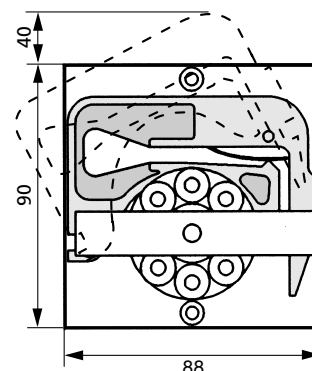
OEM



Side view (mm)



Front view (mm)



Mounting cut-out (mm)

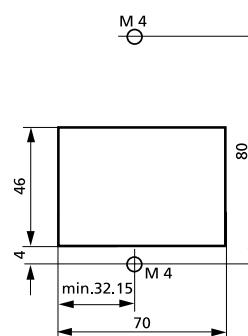
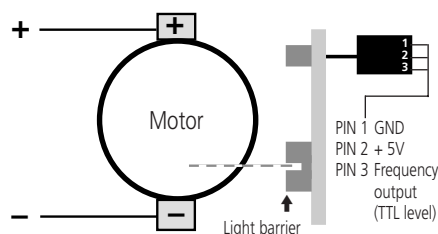


Diagram and electrical connections



*** Please note**

Specifications valid for the following ISMATEC® control units:
 a) REGLO-E Analog - see data sheet 08.1
 b) REGLO-E Digital - see data sheet 08.2

Technical specifications

Pump model	REGLO-E MS/CA4-08
Motor type	DC motor with encoder
Gear ratio	25:1
Rotation speed*	2–100 rpm ^{a)} 1–100 rpm ^{b)}
Flow rates*	0.002–35 ml/min
Motor control*	optional control unit
Power consumption max.	10 W
Optical encoder	120 impulses/motor rev.
Channels	4
Pump rollers	8
Weight	0.780 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	0.0011	1.14	0.078
0.19	0.0023	1.22	0.088
0.25	0.0041	1.30	0.098
0.38	0.0094	1.42	0.11
0.44	0.013	1.52	0.13
0.51	0.017	1.65	0.15
0.57	0.021	1.75	0.16
0.64	0.026	1.85	0.17
0.76	0.036	2.06	0.20
0.89	0.049	2.29	0.24
0.95	0.056	2.54	0.27
1.02	0.063	2.79	0.31
1.09	0.072	3.17	0.35

¹⁾ Water, Tygon® tubing, without differential pressure

➔ Calculation example for flow rate
 rpm x ml per revolution = ml/min
 100 x 0.35 = 35

Ask for the ISMATEC® Pump Tubing Selection Guide.

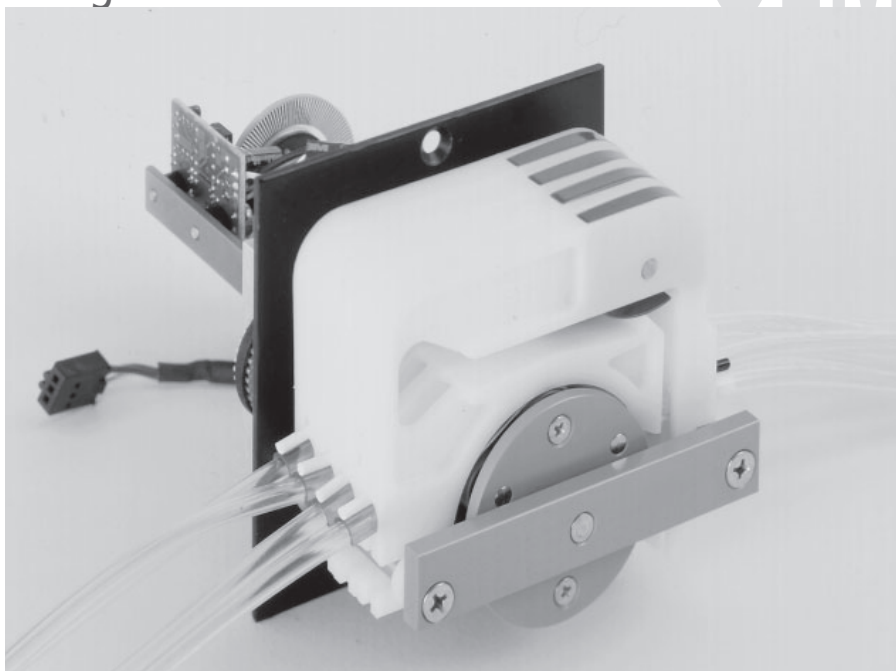
Ordering information

Nominal voltage	Type REGLO-E MS/CA4-08	Order No.
12 V _{DC}		IS 3183

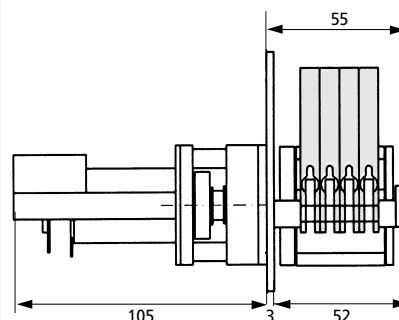
Data sheet
 02.3.14
 30.09.05

DC motor with optical encoder and gear box

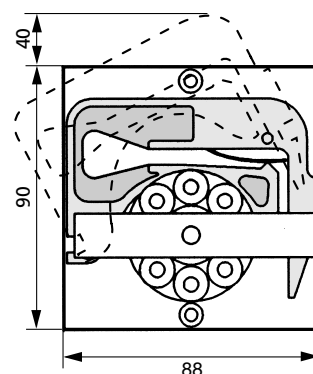
OEM



Side view (mm)



Front view (mm)



Mounting cut-out (mm)

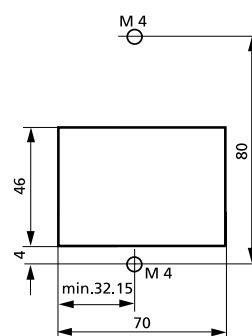
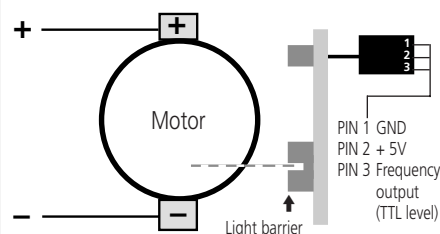


Diagram and electrical connections



*** Please note**

Specifications valid for the following ISMATEC® control units:
 a) REGLO-E Analog - see data sheet 08.1
 b) REGLO-E Digital - see data sheet 08.2

Technical specifications

Pump model	REGLO-E MS/CA4-06
Motor type	DC motor with encoder
Gear ratio	25:1
Rotation speed*	2–100 rpm ^{a)} 1–100 rpm ^{b)}
Flow rates*	0.002–43 ml/min
Motor control*	optional control unit
Power consumption	max. 10 W
Optical encoder	120 impulses/motor rev.
Channels	4
Pump rollers	6
Weight	0.780 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	0.0014	1.14	0.09
0.19	0.0028	1.22	0.10
0.25	0.0048	1.30	0.11
0.38	0.011	1.42	0.13
0.44	0.014	1.52	0.15
0.51	0.019	1.65	0.17
0.57	0.024	1.75	0.19
0.64	0.030	1.85	0.21
0.76	0.042	2.06	0.25
0.89	0.057	2.29	0.29
0.95	0.064	2.54	0.33
1.02	0.073	2.79	0.37
1.09	0.083	3.17	0.43

¹⁾ Water, Tygon® tubing, without differential pressure

➔ Calculation example for flow rate
 rpm x ml per revolution = ml/min
 100 x 0.43 = 43

Ask for the ISMATEC® Pump Tubing Selection Guide.

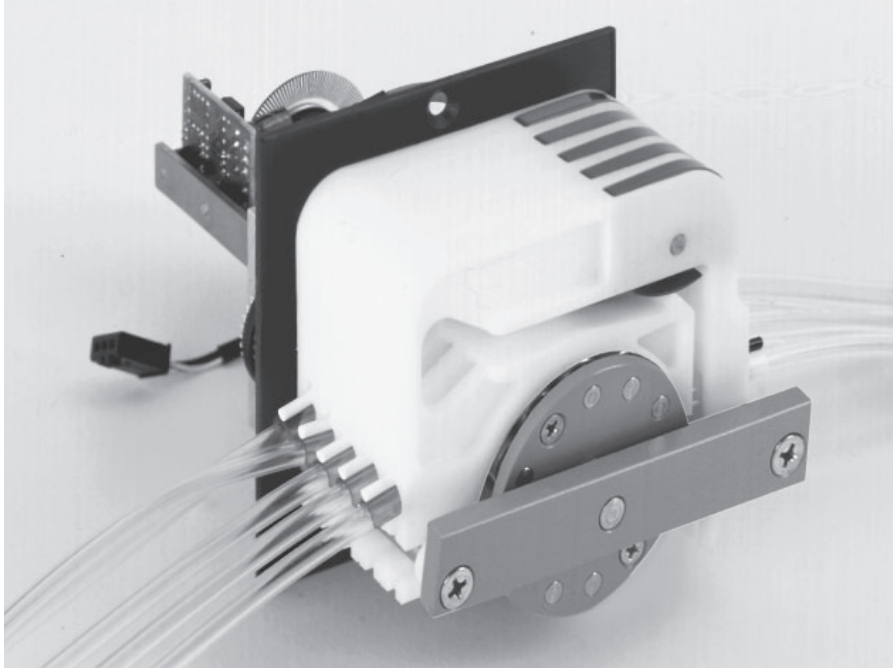
Ordering information

Nominal voltage	Type REGLO-E MS/CA4-06	Order No.
12 V _{DC}		IS 3182

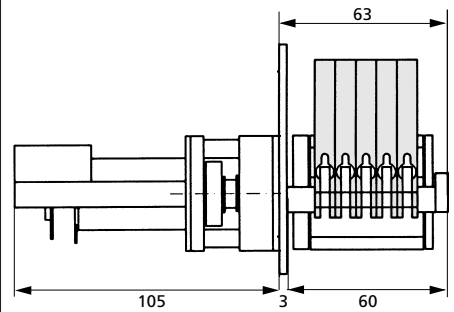
Data sheet
02.3.13
30.09.05

DC motor with optical encoder and gear box

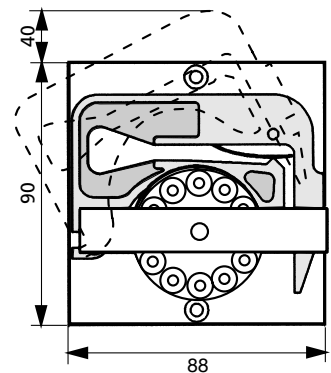
OEM



Side view (mm)



Front view (mm)



Mounting cut-out (mm)

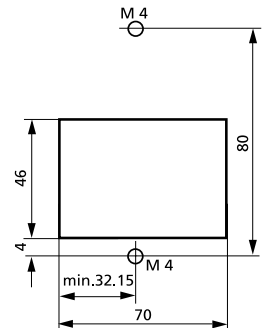
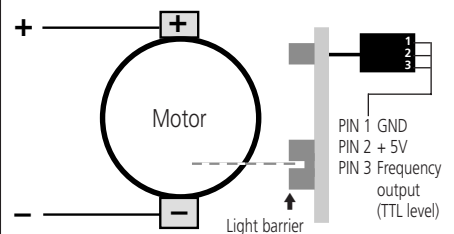


Diagram and electrical connections



Technical specifications	
Pump model	REGLO-E MS/CA5-12
Motor type	DC motor with encoder
Gear ratio	25:1
Rotation speed*	2–100 rpm ^{a)} 1–100 rpm ^{b)}
Flow rates*	0.001–24 ml/min
Motor control*	optional control unit
Power consumption	max. 10 W
Optical encoder	120 impulses/motor rev.
Channels	5
Pump rollers	12
Weight	0.860 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 rates ¹⁾			
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

100 x 0.24 = 24

Ask for the ISMATEC® Pump Tubing Selection Guide.

Ordering information

Nominal voltage	Type REGLO-E MS/CA5-12	Order No.
12 V _{DC}		IS 3347

Data sheet
02.3.18
30.09.05

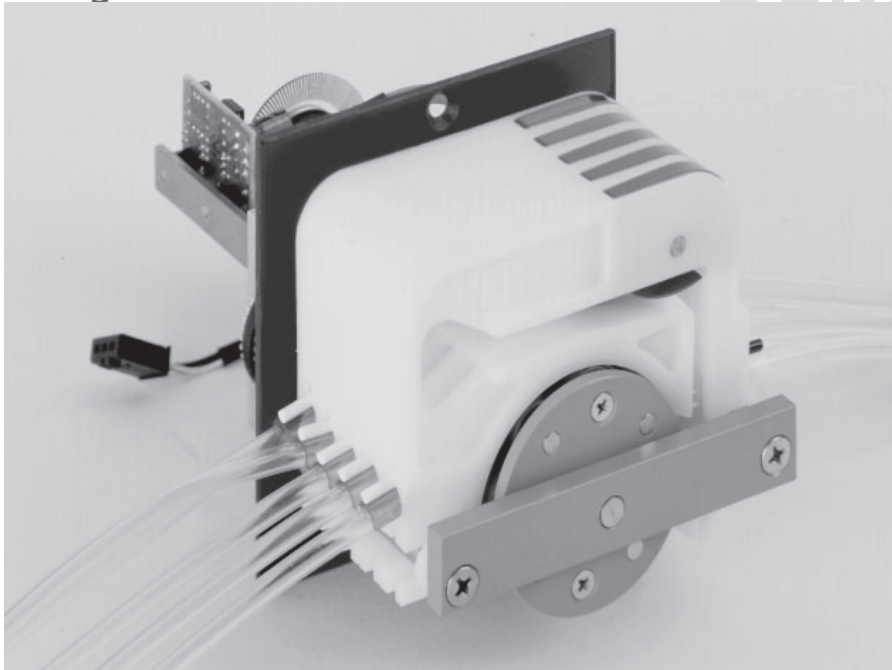
*** Please note**

Specifications valid for the following ISMATEC® control units:

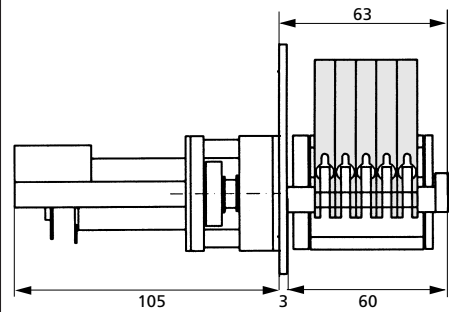
^{a)} REGLO-E Analog - see data sheet 08.1
^{b)} REGLO-E Digital - see data sheet 08.2

DC motor with optical encoder and gear box

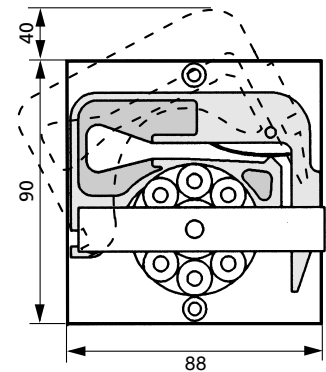
OEM



Side view (mm)



Front view (mm)



Mounting cut-out (mm)

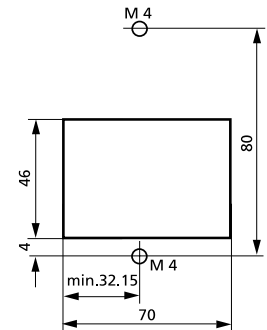
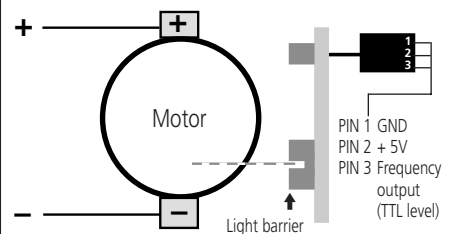


Diagram and electrical connections



Technical specifications

Pump model	REGLO-E MS/CA5-08
Motor type	DC motor with encoder
Gear ratio	25:1
Rotation speed*	2–100 rpm ^{a)} 1–100 rpm ^{b)}
Flow rates*	0.002 – 35 ml/min
Motor control*	optional control unit
Power consumption	max. 10 W
Optical encoder	120 impulses/motor rev.
Channels	5
Pump rollers	8
Weight	0.860 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	0.0011	1.14	0.078
0.19	0.0023	1.22	0.088
0.25	0.0041	1.30	0.098
0.38	0.0094	1.42	0.11
0.44	0.013	1.52	0.13
0.51	0.017	1.65	0.15
0.57	0.021	1.75	0.16
0.64	0.026	1.85	0.17
0.76	0.036	2.06	0.20
0.89	0.049	2.29	0.24
0.95	0.056	2.54	0.27
1.02	0.063	2.79	0.31
1.09	0.072	3.17	0.35

¹⁾ Water, Tygon® tubing, without differential pressure

➔ Calculation example for flow rate
 rpm x ml per revolution = ml/min
 100 x 0.35 = 35

Ask for the ISMATEC® Pump Tubing Selection Guide.

Ordering information

Nominal voltage	Type REGLO-E MS/CA5-08	Order No.
12 V _{DC}		IS 3185

Data sheet
 02.3.17
 30.09.05

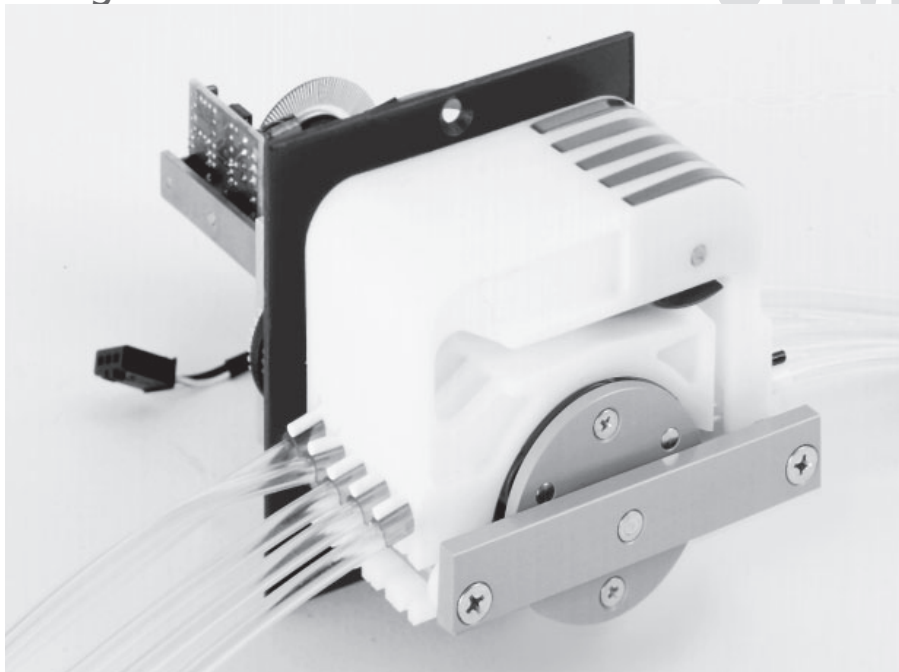
* Please note

Specifications valid for the following ISMATEC® control units:

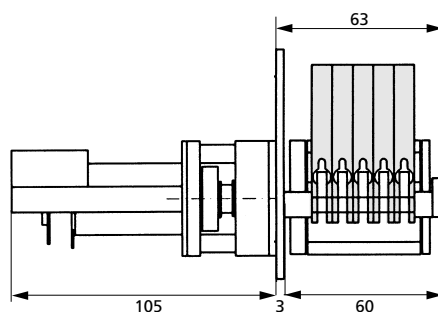
- a) REGLO-E Analog - see data sheet 08.1
- b) REGLO-E Digital - see data sheet 08.2

DC motor with optical encoder and gear box

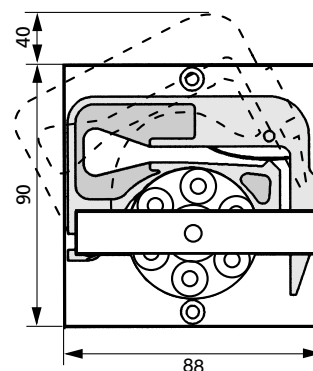
OEM



Side view (mm)



Front view (mm)



Mounting cut-out (mm)

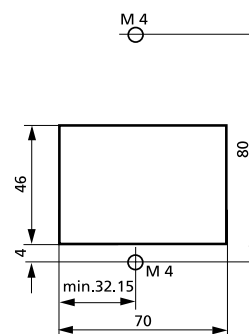
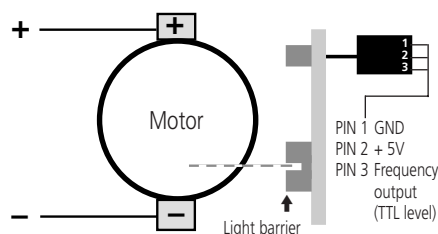


Diagram and electrical connections



*** Please note**

Specifications valid for the following ISMATEC® control units:

- a) REGLO-E Analog - see data sheet 08.1
- b) REGLO-E Digital - see data sheet 08.2

Technical specifications

Pump model	REGLO-E MS/CA5-06
Motor type	DC motor with encoder
Gear ratio	25:1
Rotation speed*	2–100 rpm ^{a)} 1–100 rpm ^{b)}
Flow rates*	0.002–43 ml/min
Motor control*	optional control unit
Power consumption	max. 10 W
Optical encoder	120 impulses/motor rev.
Channels	5
Pump rollers	6
Weight	0.860 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	0.0014	1.14	0.09
0.19	0.0028	1.22	0.10
0.25	0.0048	1.30	0.11
0.38	0.011	1.42	0.13
0.44	0.014	1.52	0.15
0.51	0.019	1.65	0.17
0.57	0.024	1.75	0.19
0.64	0.030	1.85	0.21
0.76	0.042	2.06	0.25
0.89	0.057	2.29	0.29
0.95	0.064	2.54	0.33
1.02	0.073	2.79	0.37
1.09	0.083	3.17	0.43

¹⁾ Water, Tygon® tubing, without differential pressure

➔ Calculation example for flow rate
 rpm x ml per revolution = ml/min
 100 x 0.43 = 43

Ask for the ISMATEC® Pump Tubing Selection Guide.

Ordering information

Data sheet 02.3.16 30.09.05	Nominal voltage	Type REGLO-E MS/CA5-06	Order No.
	12 V _{DC}		IS 3184