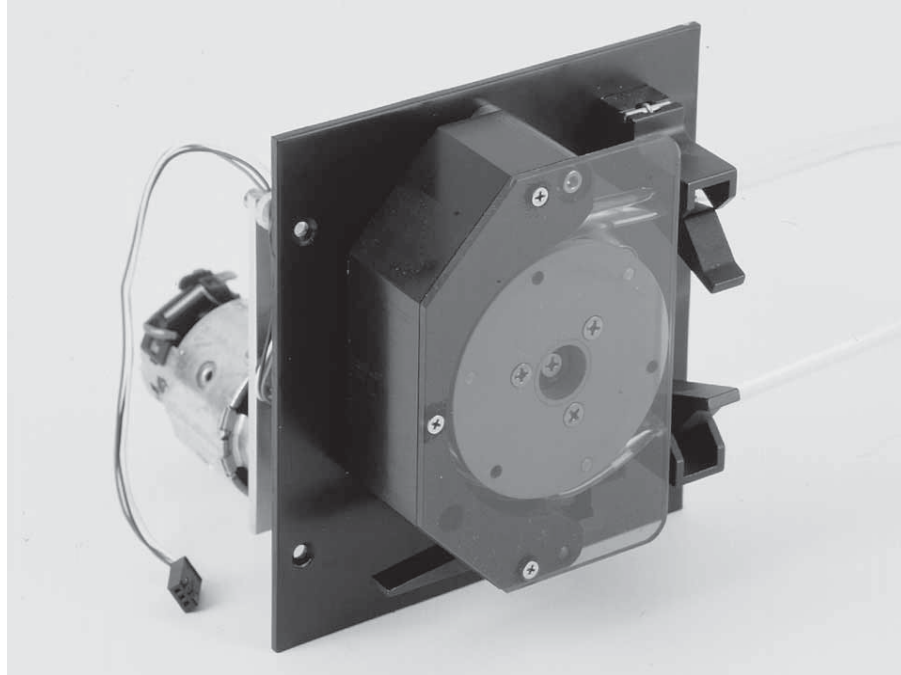
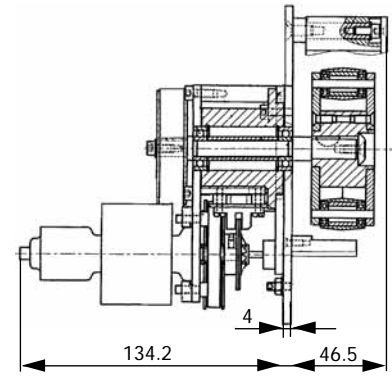


# DC motor with optical encoder and gear box

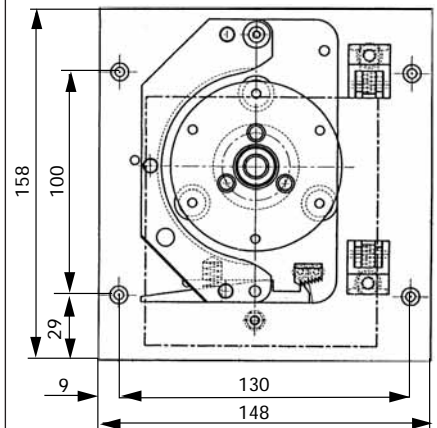
OEM



Side view (mm)



Front view (mm)



Mounting cut-out (mm)

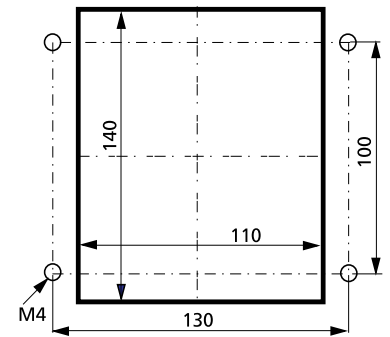
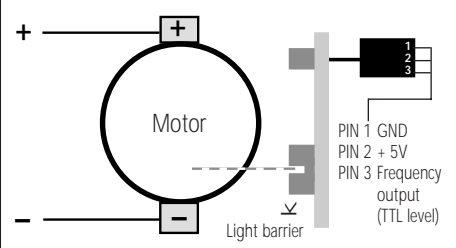


Diagram and electrical connections



Technical specifications	
Pump model	MCP-E 380
Motor type	DC motor with encoder
Gear ratio	25:1
Rotation speed*	2.4–240 rpm <sup>a)</sup> 1–240 rpm <sup>b)</sup>
Flow rates*	0.44–2800 ml/min
Motor control*	optional control unit
Power consumption	max. 67 W
Optical encoder	120 impulses/motor rev.
Channels	1
Pump rollers	3
Weight	2.0 kg
Tubing type	Standard tubing
Tubing i.d.	1.6–9.5 mm
*See 'Please note'	

Flow rates <sup>1)</sup>		
Tubing i.d. mm	Wall thickness mm	ml per revolution
1.6	1.6	0.44
3.2	1.6	1.7
4.8	1.6	3.6
6.4	1.6	6.0
8.0	1.6	8.8
9.5	1.6	12

<sup>1)</sup> Water, Tygon® tubing, without differential pressure

k Calculation example for flow rate  
 rpm x ml per revolution = ml/min  
 240 x 12 = 2880

Ask for the ISMATEC® Pump Tubing Selection Guide.

## Ordering information

Nominal voltage	Type MCP-E 380	Order No.
24 V <sub>DC</sub>		IS 3231

**\*** Please note

Specifications valid for the following ISMATEC® control units:

a) BVP-E - see data sheet 08.3  
 b) MCP-E - see data sheet 08.5

Data sheet  
04.2  
30.09.05