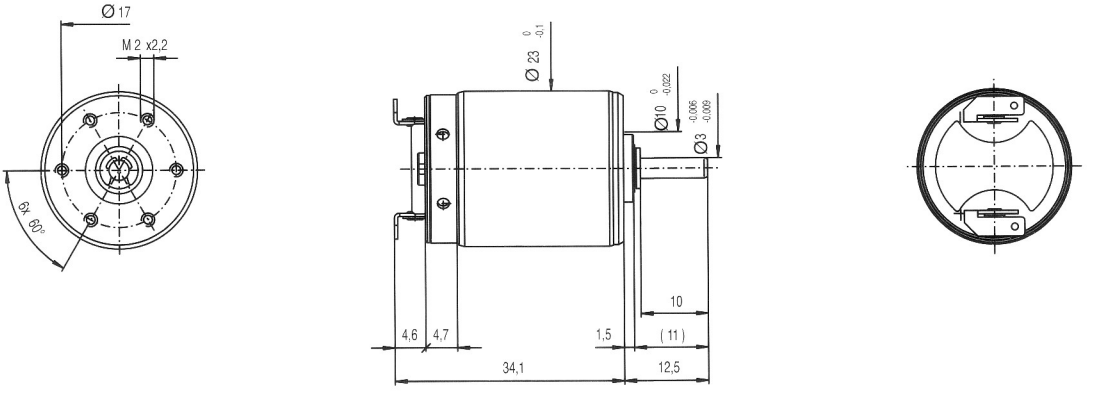
Portescap
A Danaher Motion Company

23L21

Precious Metal Commutation System - 9 Segments

4.2 Watt



dimensions in mm
mass: 70 g

23L21 ⊙⊙ • 1

Winding Type	⊙⊙	-216E	-213E	-208E
Measured Values				
Measuring voltage	V	9.0	12	24
No-load speed	rpm	6800	7500	6400
Stall torque	mNm (oz-in)	16.9 (2.39)	14.9 (2.11)	11.1 (1.57)
Average No-load current	mA	30	28	11
Typical starting voltage	V	0.1	0.2	0.5
Max. Recommended Values				
Max. continuous current	A	0.77	0.58	0.23
Max. continuous torque	mNm (oz-in)	9.2 (1.30)	8.2 (1.16)	7.6 (1.08)
Max. angular acceleration	10^3 rad/s²	82	91	87
Intrinsic Parameters				
Back-EMF constant	V/1000 rpm	1.30	1.55	3.62
Torque constant	mNm/A (oz-in/A)	12.4 (1.76)	14.8 (2.10)	34.6
Terminal resistance	ohm	6.6	11.9	75
Motor regulation R/k²	10^3/Nms	43	54	63
Rotor inductance	mH	0.4	0.55	3.3
Rotor inertia	kgm² 10^{-7}	4.5	3.6	3.5
Mechanical time constant	ms	19	20	22

- Thermal resistance:
  rotor-body 7°C/W
  body-ambient 16°C/W
- Thermal time constant - rotor / stator:
  12 s / 460 s
- Max. rated coil temperature: 100°C
- Recom. ambient temperature range:
  -30°C to +85°C (-22°F to 285°F)
- Max. axial static force for press-fit: 250 N
- End play: ≤ 150 µm
  Radial play: ≤ 18 µm
  Shaft runout: ≤ 10 µm
- Max. side load at 5 mm from mounting face:
  - sleeve bearings 6 N
  - ball bearings 8 N
- Motor exec. • 1 fitted with sleeve bearings
  (ball bearings optional)

Max. Recommended Speed