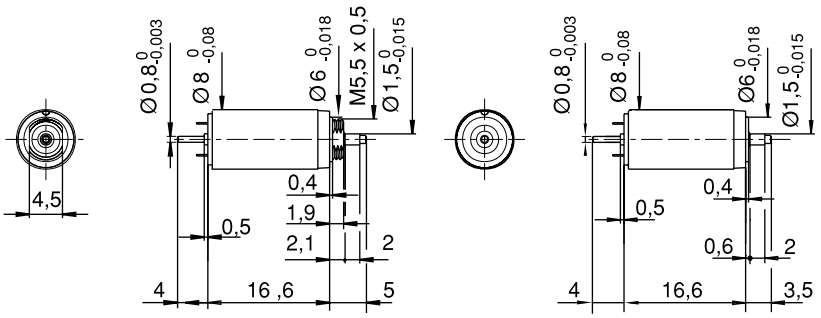
escap 08GS61

Precious metal commutation system - 5 segments

D.C. Motor 0.5 Watt



scale: 1:1
dimensions in mm
mass: 3.8 g

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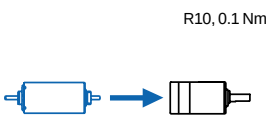
08GS61 •••• • 2

Winding types	••••	-107	-105	-105C	-204
Measured values					
1 Measuring voltage	V	2	4.5	6	9
2 No-load speed	rpm	9500	10700	11000	10700
3 Stall torque	mNm (oz-in)	0.3 (0.042)	0.59 (0.084)	0.59 (0.084)	0.63 (0.089)
4 Average no-load current	mA	8	4	3	2
5 Typical starting voltage	V	0.2	0.3	0.5	0.6
Max. recommended values					
6 Max. continuous current	A	0.25	0.168	0.128	0.087
7 Max. continuous torque	mNm (oz-in)	0.46 (0.065)	0.64 (0.091)	0.63 (0.089)	0.67 (0.095)
8 Max. angular acceleration	10^3 rad/s^2	641	859	849	889
Intrinsic parameters					
9 Back-EMF constant	V/1000 rpm	0.2	0.41	0.53	0.82
10 Torque constant	mNm/A (oz-in/A)	1.91 (0.27)	3.92 (0.55)	5.1 (0.72)	7.8 (1.11)
11 Terminal resistance	ohm	12.6	30	52	111
12 Motor regulation R/k^2	10^3/Nms	3500	2000	2000	1800
13 Rotor inductance	mH	0.05	0.11	0.2	0.45
14 Rotor inertia	kgm^2 . 10^{-7}	0.03	0.03	0.03	0.03
15 Mechanical time constant	ms	10	5.9	6.1	5.4



- Thermal resistance:
  rotor-body 20°C/W
  body-ambient 100°C/W
- Thermal time constant rotor/stator: 5 s/100s
- Max. rated coil temperature: 100°C
- Recom. ambient temperature range:
  -30°C to +65°C (-22°F to +150°F)
- Max. axial static force: 30 N
- End play: ≤ 100 µm
  Radial play: ≤ 15 µm
  Shaft runout: ≤ 10 µm
- Max. side load at 2 mm from mounting face:
  - sleeve bearings 0.5 N
- Motor fitted with sleeve bearings