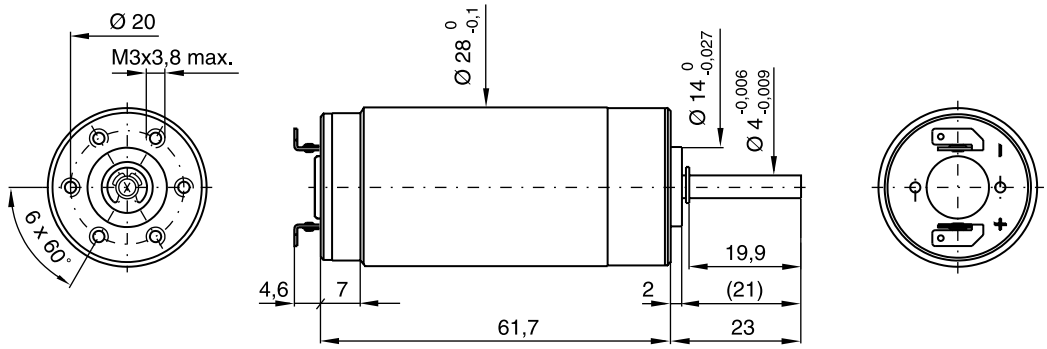
escap 28D11

Precious metal commutation system - 13 segments

D.C. Motor 15 Watt



scale: 3:4
dimensions in mm
mass: 190 g

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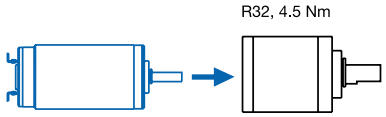
Winding types	••••	-222P	-219P	-222E	-219E
Measured values					
1 Measuring voltage	V	9.0	12.0	18.0	24.0
2 No-load speed	rpm	5300	5800	5200	6000
3 Stall torque	mNm (oz-in)	97 (13.75)	94 (13.27)	101 (14.26)	95 (13.47)
4 Average no-load current	mA	55.0	44.0	27.5	22.0
5 Typical starting voltage	V	0.10	0.15	0.20	0.30
Max. recommended values					
6 Max. continuous current	A	1.50	1.50	1.17	0.91
7 Max. continuous torque	mNm (oz-in)	23.4 (3.3)	28.4 (4.0)	37.1 (5.2)	33.6 (4.8)
8 Max. angular acceleration	10^3 rad/s^2	46	48	47	48
Intrinsic parameters					
9 Back-EMF constant	V/1000 rpm	1.70	2.05	3.40	3.95
10 Torque constant	mNm/A (oz-in/A)	16.2 (2.29)	19.5 (2.76)	32.5 (4.60)	37.7 (5.33)
11 Terminal resistance	ohm	1.50	2.50	5.8	9.5
12 Motor regulation R/k^2	10^3/Nms	5.73	6.56	5.50	6.69
13 Rotor inductance	mH	0.20	0.30	0.75	1.10
14 Rotor inertia	kgm^2 . 10^{-7}	19.80	17.60	19.80	17.60
15 Mechanical time constant	ms	11	12	11	12

Availability: see enclosed document at the end of the catalogue



- Thermal resistance:
  rotor-body 4°C/W
  body-ambient 8°C/W
- Thermal time constant - rotor / stator:
  18 s / 630 s
- Max. rated coil temperature: 100°C
- Recom. ambient temperature range:
  -30°C to +65°C (-22°F to +150°F)
- Viscous damping constant:
  1 x 10^{-6} Nms
- Max. axial static force for press-fit: 500 N
- End play: ≤ 150 µm
  Radial play: ≤ 25 µm
  Shaft runout: ≤ 10 µm
- Max. side load at 5 mm from mounting face
  - sleeve bearings 8 N
  - ball bearings 10 N
- Motor fitted with sleeve bearings
  (ball bearings optional)

Max. recommended speed