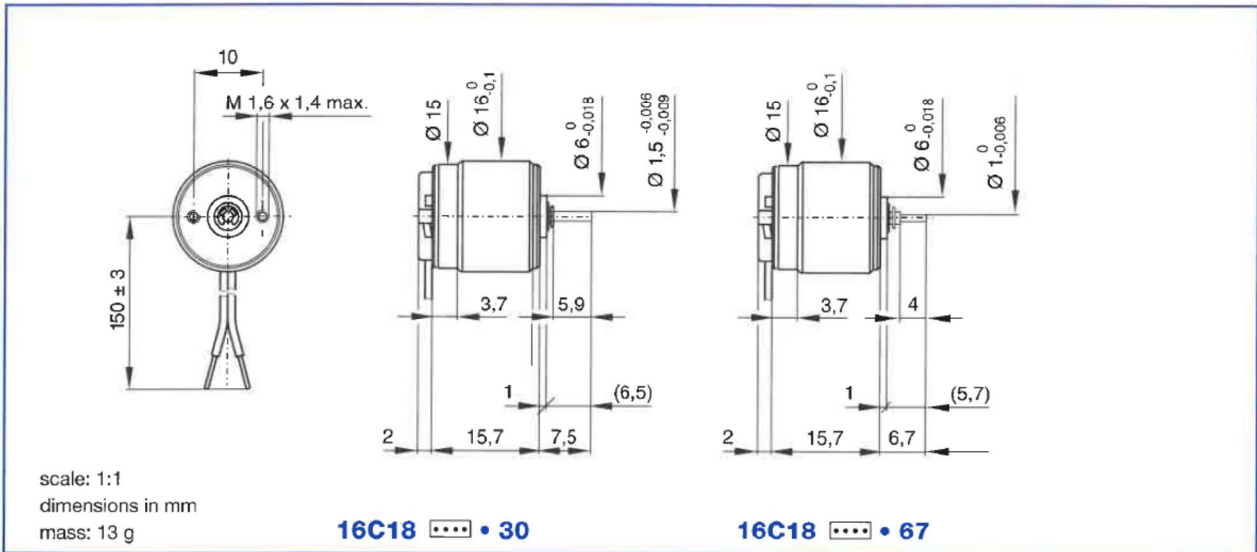


escap 16C18

Precious metal commutation system - 5 segments

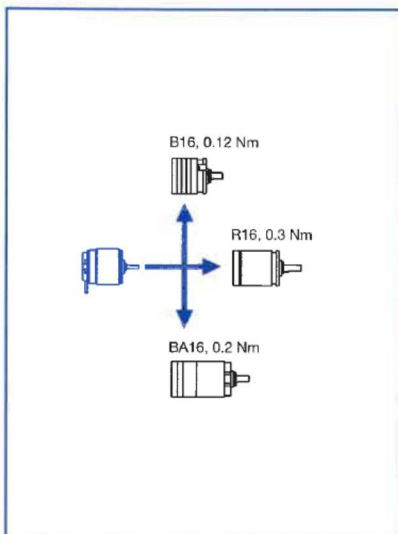
D.C. Motor
0.85 Watt



Winding types

	[dots]	-115	-210	-207	-205	-204
Measured values						
1 Measuring voltage	V	1.5	4.0	6.0	12.0	15.0
2 No-load speed	rpm	15300	14700	15700	16200	16000
3 Stall torque	mNm (oz-in)	1.1 (0.16)	1.3 (0.19)	1.1 (0.16)	1.2 (0.17)	0.8 (0.11)
4 Average no-load current	mA	74.8	23.0	18.4	10.4	6.9
5 Typical starting voltage	V	0.04	0.05	0.10	0.15	0.25
Max. recommended values						
6 Max. continuous current	A	1.19	0.48	0.31	0.16	0.10
7 Max. continuous torque	mNm (oz-in)	0.98 (0.14)	1.12 (0.16)	1.0 (0.14)	1.0 (0.14)	0.79 (0.11)
8 Max. angular acceleration	10 ³ rad/s ²	79	69	92	62	73
Intrinsic parameters						
9 Back-EMF constant	V/1000 rpm	0.092	0.26	0.36	0.70	0.87
10 Torque constant	mNm/A (oz-in/A)	0.88 (0.12)	2.48 (0.35)	3.44 (0.49)	6.68 (0.95)	8.3 (1.18)
11 Terminal resistance	ohm	1.20	7.5	18.0	65.0	162
12 Motor regulation R/k ²	10 ⁵ /Nms	1555	1217	1523	1455	2347
13 Rotor inductance	mH	0.02	0.15	0.25	1.00	2.00
14 Rotor inertia	kgm ² · 10 ⁻⁷	0.31	0.41	0.27	0.41	0.27
15 Mechanical time constant	ms	48	50	41	60	63

Availability: see enclosed document at the end of the catalogue



- Thermal resistance:
 - rotor-body 15°C/W
 - body-ambient 40°C/W
- Thermal time constant - rotor / stator: 4 s / 230 s
- Max. rated coil temperature: 100°C (210°F)
- Recom. ambient temperature range: -30°C to +65°C (-22°F to +150°F)
- Viscous damping constant: 0.04 x 10⁻⁶ Nms
- Max. axial static force for press-fit: 150 N
- End play: ≤ 150 μm
- Radial play: ≤ 30 μm
- Shaft runout: ≤ 10 μm
- Max. side load at 5 mm from mounting face:
 - sleeve bearings 0.5 N
 - ball bearings 3 N
- Motor fitted with sleeve bearings (ball bearings optional)

