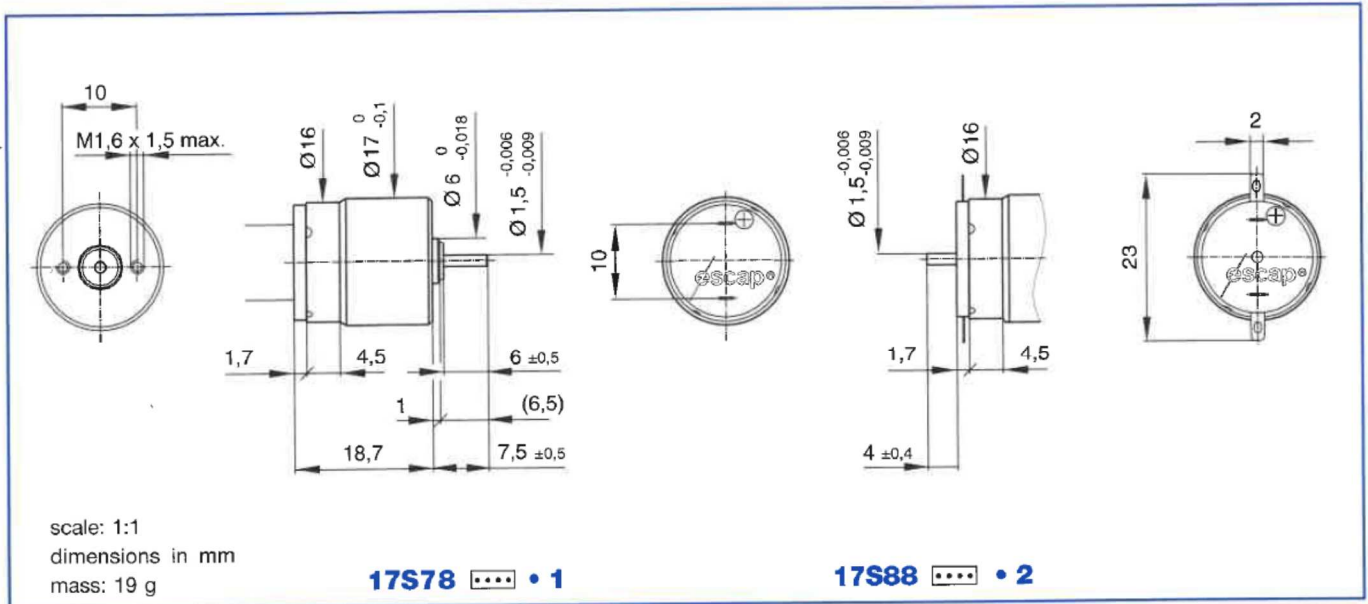


escap 17S78 & 17S88

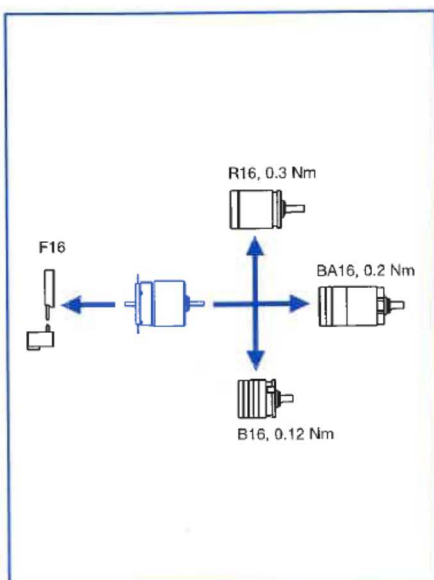
Precious metal commutation system - 9 segments

D.C. Motor
2.4 Watt



Winding types	[]	-213P	-208P	-209E
Measured values				
1 Measuring voltage	V	2.5	6	12
2 No-load speed	rpm	11900	10400	12400
3 Stall torque	mNm (oz-in)	5.2 (0.74)	4.6 (0.65)	5.9 (0.83)
4 Average no-load current	mA	70	25	15
5 Typical starting voltage	V	0.05	0.09	0.16
Max. recommended values				
6 Max. continuous current	A	1.41	0.52	0.32
7 Max. continuous torque	mNm (oz-in)	2.6 (0.37)	2.6 (0.37)	2.8 (0.4)
8 Max. angular acceleration	10 ³ rad/s ²	130	131	137
Intrinsic parameters				
9 Back-EMF constant	V/1000 rpm	0.20	0.56	0.95
10 Torque constant	mNm/A (oz-in/A)	1.95 (0.28)	5.3 (0.76)	9.1 (1.28)
11 Terminal resistance	ohm	0.94	6.9	18.6
12 Motor regulation R/k ²	10 ³ /Nms	250	240	230
13 Rotor inductance	mH	0.02	0.15	0.35
14 Rotor inertia	kgm ² · 10 ⁻⁷	0.50	0.50	0.50
15 Mechanical time constant	ms	12	12	12

Availability: see enclosed document at the end of the catalogue



- Thermal resistance:
rotor-body 13°C/W
body-ambient 38°C/W
- Thermal time constant - rotor / stator:
7 s / 350 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: 100 N
- End play: ≤ 150 μm
Radial play: ≤ 30 μm
Shaft runout: ≤ 10 μm
- Max. side load at 5 mm from mounting face:
- sleeve bearings 1.5 N
- ball bearings 3 N
- Motor fitted with sleeve bearings (ball bearings optional)
- With rear output shaft, the no-load current is 50% higher

