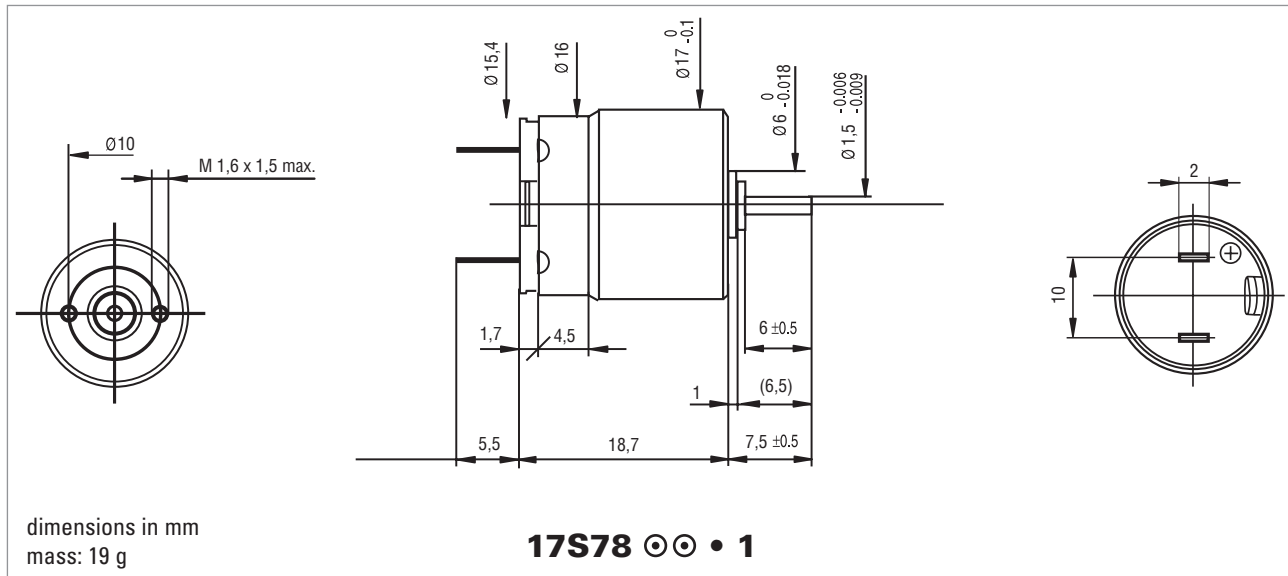


2.4 Watt

Precious Metal Commutation System - 9 Segments



Winding Type	○○	-208P	-210E	-209E
Measured Values				
Measuring voltage	V	6	7.5	12
No-load speed	rpm	10200	10700	12500
Stall torque	mNm (oz-in)	4.3 (0.61)	3.9 (0.55)	5.9 (0.84)
Average No-load current	mA	25	18	8.4
Typical starting voltage	V	0.09	0.09	0.16
Max. Recommended Values				
Max. continuous current	A	0.50	0.38	0.32
Max. continuous torque	mNm (oz-in)	2.6 (0.37)	2.4 (0.34)	2.8 (0.4)
Max. angular acceleration	10 ³ rad/s ²	204	190	224
Intrinsic Parameters				
Back-EMF constant	V/1000 rpm	0.57	0.68	0.95
Torque constant	mNm/A (oz-in/A)	5.4 (0.77)	6.4	9.1
Terminal resistance	ohm	6.9	12.2	18.6
Motor regulation R/k ²	10 ³ /Nms	250	300	230
Rotor inductance	mH	0.15		
Rotor inertia	kgm ² 10 ⁻⁷	0.50	0.5	0.50
Mechanical time constant	ms	13	15	11

Executions			
		Single Shaft	With F16
Gearbox	Page	17S78	17S78
B16	236	5	5
BA16	237	5	5
R16	238	1	1

- 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 +85°C (-22°F to +185°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

