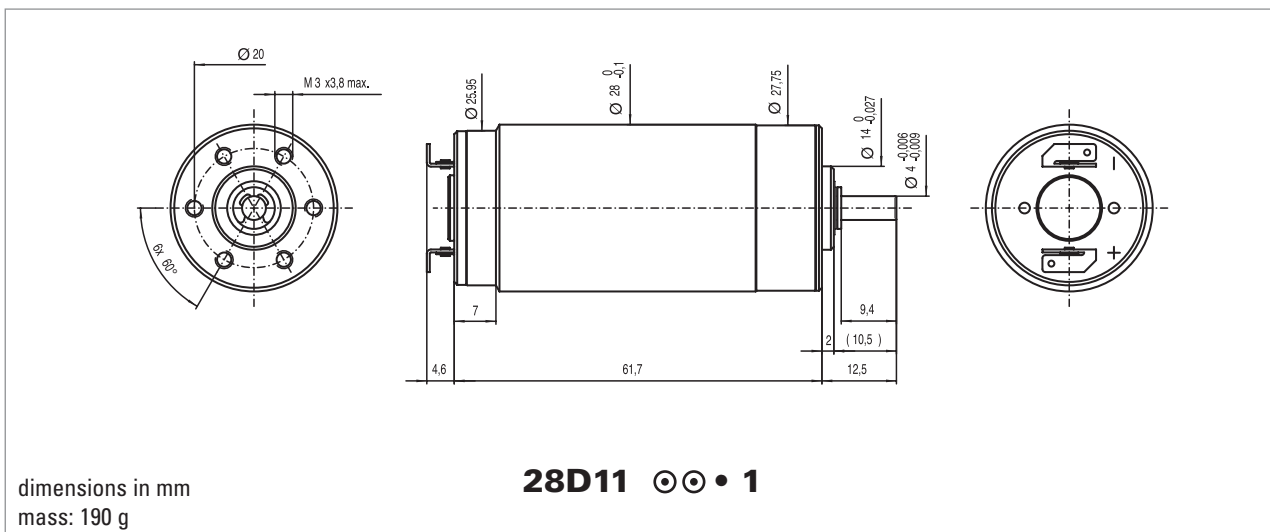


28D11

Precious Metal Commutation System - 13 Segments

15 Watt



Winding Type	☉☉	-219P	-219E
Measured Values			
Measuring voltage	V	12.0	24.0
No-load speed	rpm	5800	6000
Stall torque	mNm (oz-in)	94 (13.27)	95 (13.47)
Average No-load current	mA	44.0	22.0
Typical starting voltage	V	0.15	0.30
Max. Recommended Values			
Max. continuous current	A	1.50	0.91
Max. continuous torque	mNm (oz-in)	28.4 (4.0)	33.6 (4.8)
Max. angular acceleration	10 ³ rad/s ²	77	76
Intrinsic Parameters			
Back-EMF constant	V/1000 rpm	2.05	3.95
Torque constant	mNm/A (oz-in/A)	19.5 (2.76)	37.7 (5.33)
Terminal resistance	ohm	2.50	9.5
Motor regulation R/k ²	10 ³ /Nms	6.56	6.69
Rotor inductance	mH	0.30	1.10
Rotor inertia	kgm ² 10 ⁻⁷	17.60	17.60
Mechanical time constant	ms	12	12

Executions		
		Single Shaft
Gearbox	Page	28D11--
R32	243	4

- Thermal resistance: rotor-body 4 °C/W, body-ambient 8 °C/W
- Thermal time constant - rotor / stator: 18s / 630 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: 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)

