

dimensions in mm
mass: 200 g

28DT12 ☉☉ • 1

28DT2R12 ☉☉ • 98

Winding Type

	☉☉	-222P	-219P	-222E	-219E
Measured Values					
Measuring voltage	V	12	15	24	28
No-load speed	rpm	6800	7100	6900	6900
Stall torque	mNm (oz-in)	102 (14.4)	101 (14.3)	126 (17.8)	107 (15.1)
Average No-load current	mA	210	180	110	90
Typical starting voltage	V	--	--	--	--

Max. Recommended Values

Max. continuous current	A	2.5	2	1.4	1.1
Max. continuous torque	mNm (oz-in)	37 (5.2)	35 (5.0)	41 (5.8)	37 (5.2)
Max. angular acceleration	10 ³ rad/s ²	91	98	102	104

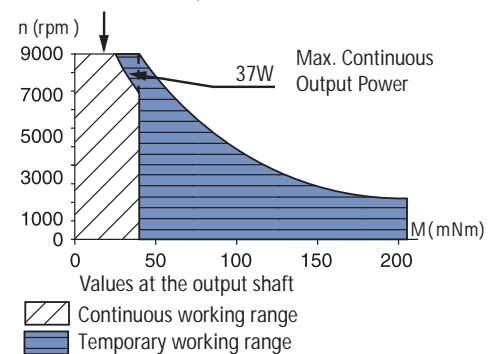
Intrinsic Parameters

Back-EMF constant	V/1000 rpm	1.70	2.05	3.40	3.95
Torque constant	mNm/A (oz-in/A)	16.2 (2.29)	19.5 (2.76)	32.5 (4.60)	37.7 (5.33)
Terminal resistance	ohm	1.9	2.9	6.2	9.9
Motor regulation R/k ²	10 ³ /Nms	7.3	7.6	5.9	7
Rotor inductance	mH	0.20	0.30	0.75	1.10
Rotor inertia	kgm ² 10 ⁻⁷	20	18	20	18
Mechanical time constant	ms	15	14	12	13

		Executions	
		Single Shaft	Double Shaft for E9
Gearbox	Page	28DT12--	28DT12--
R32	109	4	106
R40	114	1	98

- Thermal Resistance: rotor-body 4 °C/W, body-ambient 8 °C/W
- Thermal time constant - rotor / stator: 18s / 630 s
- Max. rated coil temperature: 155°C (210°F)
- Recom. ambient temperature range: -30°C to +125°C (-22°F to +257°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 10 mm from mounting face
 - sleeve bearings 8 N
 - ball bearings 10 N
- Motor fitted with sleeve bearings (ball bearings optional)
- Optional RFI filter

Max. Recommended Speed



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