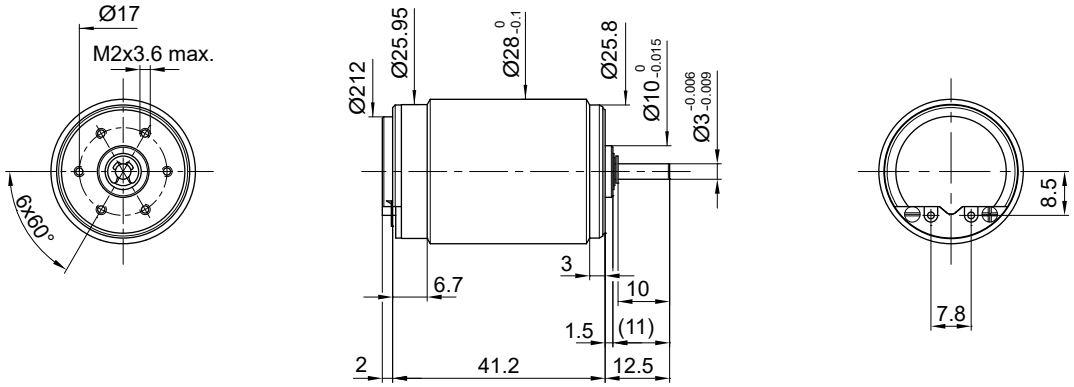
28LT12

Ø 28 mm • Graphite-Copper commutation • 24 mNm



Dimensions in mm.

Electrical Data	Symbol	28LT12 •••• .49 219	28LT12 •••• .49 416E	Unit
1 Nominal Voltage	V	18	32	Volt
2 No-Load Speed	n_0	7,860	7,345	rpm
3 No-Load Current	I_0	65.0	35.0	mA
4 Terminal Resistance	R	6.2	19.9	Ω
5 Output Power	$P_{2max.}$	19.0	20.0	W
6 Stall Torque	mNm	63 (8.93)	65 (9.21)	mNm (oz-in)
7 Efficiency	$h_{max.}$	72	73	%
8 Max Continuous Speed	$n_{e\ max.}$	10,000	10,000	rpm
9 Max Continuous Torque	$M_{e\ max.}$	23 (3.4)	24 (3.4)	mNm (oz-in)
10 Max Continuous Current	$I_{e\ max.}$	1.13	0.63	A
11 Back-EMF Constant	k_E	2.24	4.26	mV/rpm
12 Torque Constant	k_M	21.40	40.70	mNm/A
13 Motor Regulation	R/k^2	13.0	12.0	10^3/Nms
14 Friction Torque	T_F	1.39 (0.2)	1.42 (0.21)	mNm (oz-in)
15 Rotor Inductance	L	0.50	2.40	mH
16 Mechanical Time Constant	τ_m	13.9	21.4	ms
17 Rotor Inertia	J	10.70	17.80	g-cm²

General Data			
18 Thermal Resistance (rotor/body)	R_{th1}/R_{th2}	5/12	°C/W
19 Thermal Time Constant (rotor/stator)	t_{W1}/t_{W2}	27/760	S
20 Operating Temperature Range:	motor rotor	-30°C to 85°C (-22°F to 185°F) 100°C (212°F)	°C (°F) °C (°F)
21 Shaft Load Max.: (5 mm. from bearing)	 -radial -axial	With sleeve bearings 6.0 (21.6) 250 (899.2)	 N (oz) N (oz)
22 Shaft Play:	-radial -axial	<0.018 (0.0007) 0.15 (0.0059)	mm (inch) mm (inch)
23 Weight	g	135 (4.77)	g (oz)

Execution Table

Gearbox	Single Shaft	Double Shaft for E9
R22	164	319
R32	49	316

No Load Speed vs. Torque