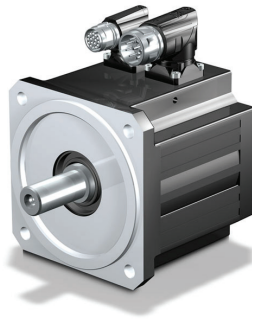
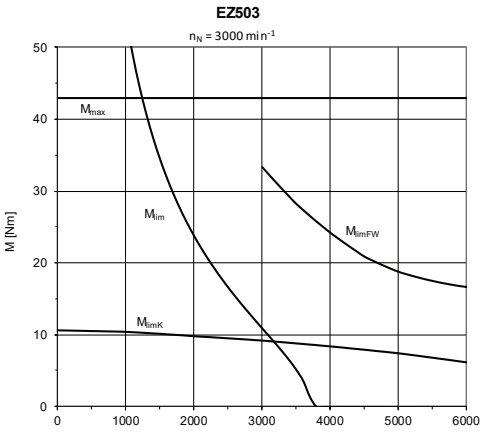
EZ503 Servo Motor

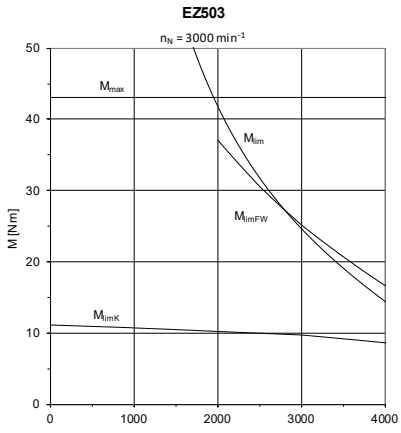
Technical Data Sheet



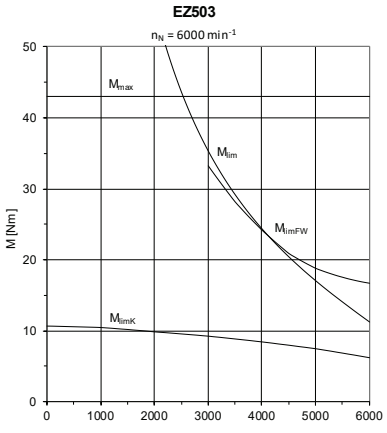
	3000 RPM		6000 RPM		
	Convection	Fan	Convection	Fan	Units
Model	**EZ503U_119**	**EZ503B_119**	**EZ503U_084**	**EZ503B_084**	
Max Bus Voltage	650	650	650	650	VDC
Number of Poles	14	14	14	14	
Back EMF	119	119	84	84	V/rpm
Nominal Torque	9.7	14.4	6.2	10.4	Nm
Nominal Current	6.9	10.9	7.64	13.5	A
Torque Factor	1.41	1.32	0.81	0.77	Nm/A
Rated Power	3.1	4.5	3.9	6.5	kW
Standstill Torque	11.1	11.8	10.6	15.9	Nm
Standstill Current	7.67	11.8	11.6	15.9	A
Torque Constant	1.46	1.35	0.92	1.07	Nm
Friction Torque	0.06	0.06	0.06	0.06	Nm
Max Torque	43	43	43	43	Nm
Max Current	41	41	63.5	63.5	A
Resistance	1.25	1.25	0.62	0.62	ohms
Inductance	10	10	5	5	mH
Electrical Time Constant	8	8	8.06	8.06	ms
Inertia	7.58	7.58	7.58	7.58	$kgcm^2$
Weight	8	10	8	10	kg



310 VDC



620 VDC



620 VDC

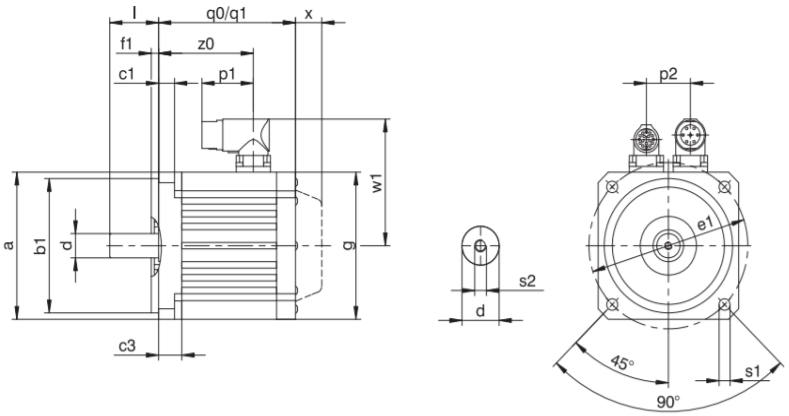


Table 1 EZ503 With Convection Cooling Dimensions (mm)

	a	b1	c1	c3	d	e1	f1	g	l	p1	p2	q0[1)]	q1[2)]	s1	s2	w1	x[3)]	z0
EZ503U	115	110_{j6}	10	16	24_{k6}	130	3.5	115	50	40	36	159	213.5	9	M8	100	22	124.5

1) q0 applies to motors without holding brake.
2) q1 applies to motors with holding brake.
3) x applies to encoders based on an optical measuring principle.

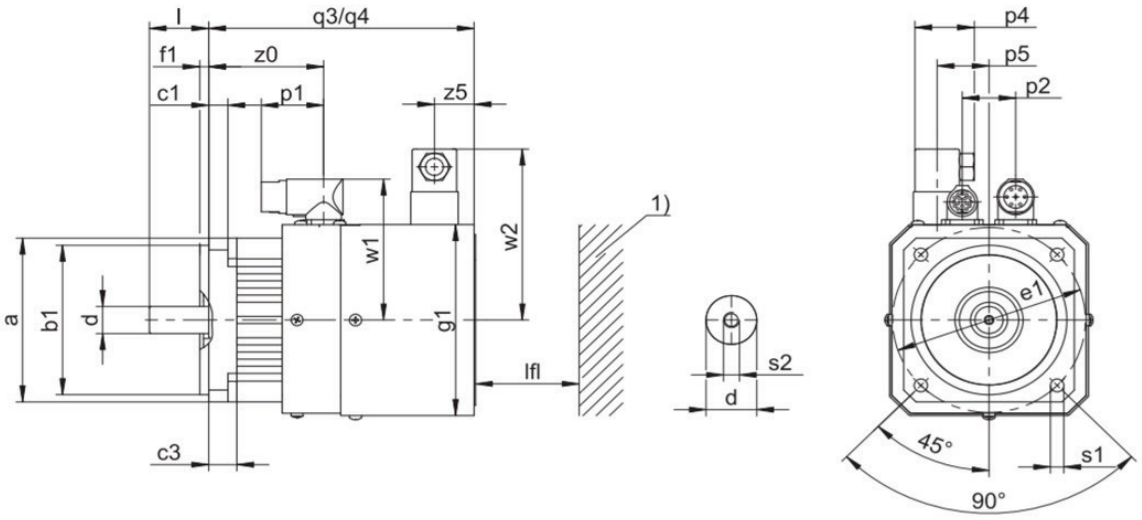


Table 2 EZ503 With Forced Ventilation Dimensions (mm)

	a	b1	c1	c3	d	e1	f1	g1	l	lfl_{min}	p1	p2	p4	p5	q3[1)]	q4[2)]	s1	s2	w1	w2	z0	z5
EZ503B	115	110_{j6}	10	16	24_{k6}	130	3.5	135	50	20	40	36	37.5	0	229	284	9	M8	100	120	124.5	25

1) q3 applies to motors without holding brake.
2) q4 applies to motors with holding brake.
3) 1) applies to machine wall