

DC Gear Motor

1.61.046.XXX

Type 1.61.046.XXX

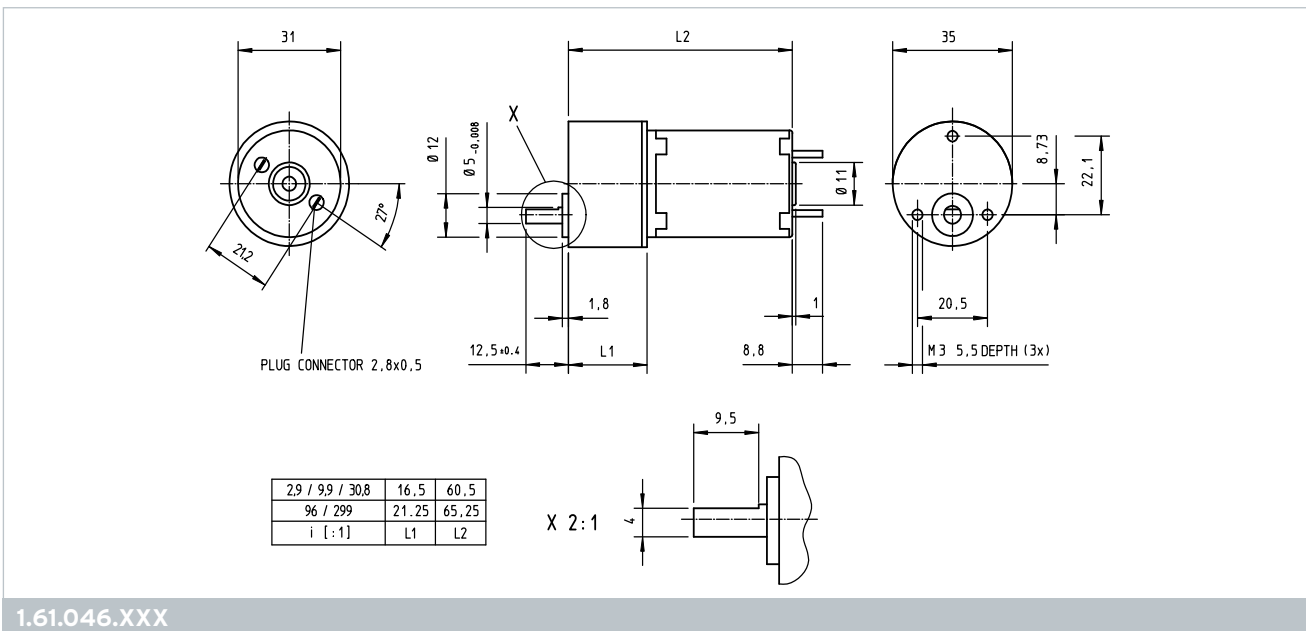
V =	XXX	Characteristics*				max.	Terminal	Stages	Gear
		Rated current	Rated torque	Rated speed	No load speed	Torque*	resistance		ratio
		I_N / A	T_N / mNm	n_N / rpm	n_o / rpm	T_{max} / mNm	R_a / Ω		
12 V	311	0.700	25	1040	1710	35	9	1	2.9
	312	0.600	70	335	500	98	9	2	9.9
	313	0.500	150	121	160	210	9	3	30.8
	314	0.390	300	43.5	52.0	420	9	4	96.0
	315	0.220	300	15.5	16.5	420	9	5	299.0
18 V	321	0.470	25	1040	1710	35	20	1	2.9
	323	0.400	70	335	500	98	20	2	9.9
	324	0.340	150	121	160	210	20	3	30.8
	325	0.260	300	43.5	52.0	420	20	4	96.0
	326	0.150	300	15.5	16.5	420	20	5	299.0
24 V	331	0.350	25	1040	1710	35	35	1	2.9
	332	0.300	70	335	500	98	35	2	9.9
	333	0.250	150	121	160	210	35	3	30.8
	334	0.195	300	43.5	52.0	420	35	4	96.0
	335	0.110	300	15.5	16.5	420	35	5	299.0

Operational conditions

Temperature range	T	°C	-10 - +70
Axial force	F_A	N	15
Radial force, 5 mm from mounting surface	F_R	N	40

* at 25° C

Design	
Weight	150 g
Gear housing	Zinc die-cast
Commutator	Copper / 7-segments
RFI protection	2 chokes
Insulation class	Winding H, otherwise A
Protection class	IP40
Commutation	carbon brushes
Armature	straight slot
Magnet system	Permanent magnets, 2-pole
Bearings	2 sintered bronze bearings
Motor housing	Steel, corrosion protected
Motor end shields	brush end plastic drive end zinc die-cast
Spur gear	Metal and plastic gears
Axial play output shaft	0.05 - 0.6 mm



Customized versions

The following modifications are available upon request:

- ▶ Encoder possible
- ▶ Internal chokes and/or capacitors
- ▶ Speed adjustment by winding change
- ▶ Addition of wire harnesses
- ▶ Modification of shaft length
- ▶ Modification of shaft configuration (flat, groove, etc.)
- ▶ Assembly of gears, pinions, etc.
- ▶ Assembly of adapters and mounting plates
- ▶ Gear ratios $i=20.1 / 64.3 / 200 / 621 / 927 / 1900$ and 2873 upon request