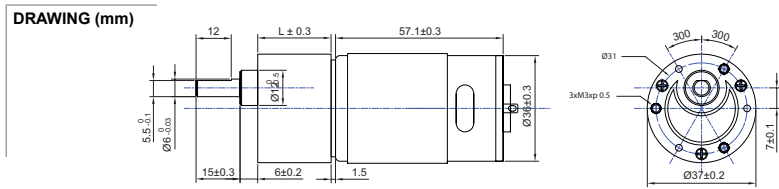


SD3757 | Ø 37 mm | 12 V | BRUSHED DC SPUR GEAR MOTOR



MODEL NO. DESIGNATION

SD3757

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VOLTAGE

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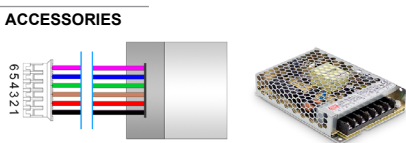
GEAR RATIO

 -

F

EC

Example: SD3757-12-10-FEC

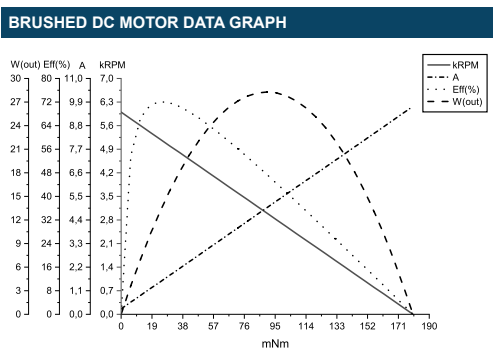


● C = customizations are offered on demand even for smaller quantities. Typical customizations are indicated with a green dot at column end. Please contact us for any customization request.

GEAR MOTOR DATA																						C
Gear ratio		10:1	18:1	30:1	50:1	60:1	75:1	90:1	100:1	120:1	150:1	180:1	200:1	250:1	300:1	500:1	600:1	750:1	1000:1	1500:1	3000:1	
Nominal torque ^ gearbox limit		mNm	98^	98^	200^	290^	290^	390^	390^	590^	590^	590^	590^	590^	590^	590^	590^	590^	590^	590^		
Nominal speed		rpm	530	310	190	110	95	76	63	55	47	36	32	29	23	20	12	9.8	8	5.9	3.9	2
Peak torque		mNm	290	290	590	880	880	1200	1200	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800		
Nominal power		W	5.4	3.2	4.0	3.3	2.9	3.1	2.6	3.4	2.9	2.2	2.0	1.8	1.4	1.2	0.74	0.61	0.49	0.36	0.24	0.12
Gearbox efficiency		%	81	73	73	66	66	66	66	66	59	59	59	59	59	59	53	53	53	53	48	48
Gearbox length L		mm	19.5	22	22	24.5	24.5	24.5	24.5	24.5	27	27	27	27	27	27	29.5	29.5	29.5	29.5	32	32
Weight		g	310	310	310	320	320	320	320	320	330	330	330	330	330	330	330	330	330	330	340	340

OTHER GEAR MOTOR DATA		C
Service life	h	500
Performance tolerances	%	±15
Operating temperature	°C	-10 to 60 ●
IP rating		IP20
Manufacturing standard		ISO 9001 ISO 14001 TS 16949
CE label UL label		No No ●

BRUSHED DC MOTOR DATA		C
Nominal voltage	V	12
No load speed	rpm	6000
No load current	mA	≤ 250
Nominal speed	rpm	4900
Nominal torque	mNm	25
Nominal current	mA	≤ 1600
Nominal power	W	13
Stall torque	mNm	180
Starting current	A	9.7
Motor commutation		Carb.b. ³
Motor rotor		Iron
Motor stator		Ferr.m. ⁴
Varistor EMC	V	13 - 18
Capacitor EMC	V	50
Resistance	Ω	1.2
Inductance	mH	1
Insulation class		F



GEARBOX DATA		C
Backlash no load	°	≤ 2
Radial load ¹	N	≤ 9.8
Shaft axial load	N	≤ 6.9
Shaft press fit force max.	N	≤ 200
Radial play	mm	≤ 0.05
Thrust play	mm	≤ 0.35
Bearing type		Sleeve bearing
Shaft material		Carbon steel AISI 1144
Motor pinion material		Bronze ●
Motor pinion shape		Straight
Material gear stage ²		Bakelite, steel ●
Direction of rotation		CW or CCW by reversed V polarity
Assembly front bell	mm	3.4

- NOTES
- 10 mm from gear flange.
 - Contact us for information regarding gear stage material of a specific gear ratio.
 - Carbon brush.
 - Ferrite magnet.

MAGNETIC ENCODER DATA		C	OPTICAL SENSOR DATA		C
Pulses per revolution	7 x 2	●	(100 200 256 360 400 500) x 2		
Channels	2		2		
Phase shift	90 ± (1/6)°		90 ± (1/6)°		
Encoder rear cover material	ABS plastic		Zink alloy		
Sensor technical data	Refer externally to brand and part UTC-SK1816.		-		
Size	mm Diameter 36 Length 13.5		Width 30 Height 40 Length 23.5		
Harness connector	JST PHR-6 P=2.0-6P	●	JST SMR-05V		●
Harness cable	AWG24 UL1007	●	AWG24 UL2464		●
Harness length	mm 100	●	195		●
Connection	1. BLK M- 2. RED M+ 3. BRN Vcc 4. GRN GND 5. BLU A 6. VIO B	●	1. BLK A 2. RED Vcc 3. WHT B 4. EMPTY 5. GRN GND		●
Supply voltage	V Min. 5 Max. 20		5 ± 10%		
Supply current	mA Ref. 5 Max. 10		-		
Open collector output	Requires external output resistors.		-		
Output current per channel	mA -		± 20		