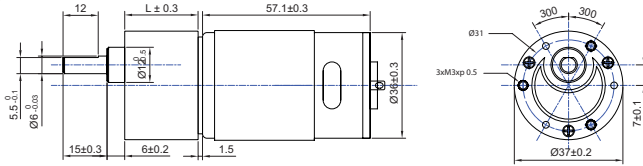


DRAWING (mm)



PHOTO



MODEL NO. DESIGNATION

SD3757 - VOLTAGE - GEAR RATIO - F EC

Example: SD3757-24-10-FEC

ACCESSORIES



● 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

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^	590^	
Nominal speed	rpm	530	320	190	110	69	77	64	56	48	36	32	30	23	20	12	9.9	8	6	4	2
Peak torque	mNm	290	290	590	880	880	1200	1200	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Nominal power	W	5.4	3.3	4.0	3.3	2.1	3.1	2.6	3.5	3.0	2.2	2.0	1.9	1.4	1.2	0.74	0.61	0.49	0.37	0.25	0.12
Gearbox efficiency	%	81	73	73	66	66	66	66	66	59	59	59	59	59	53	53	53	53	53	48	48
Gearbox length L	mm	19.5	22	22	24.5	24.5	24.5	24.5	27	27	27	27	27	27	29.5	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

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	●

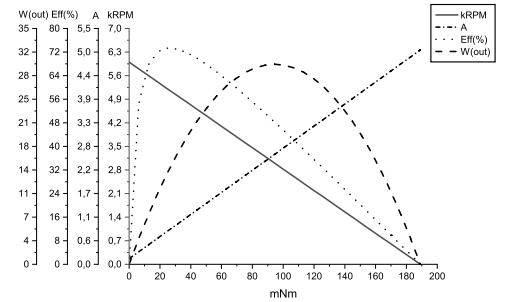
GEARBOX DATA

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	

BRUSHED DC MOTOR DATA

Nominal voltage	V	24
No load speed	rpm	6000
No load current	mA	≤ 130
Nominal speed	rpm	5200
Nominal torque	mNm	24
Nominal current	mA	≤ 750
Nominal power	W	13
Stall torque	mNm	189
Starting current	A	5
Motor commutation		Carb.b. ³
Motor rotor		Iron
Motor stator		Ferr.m. ³
Varistor EMC	V	27 - 45
Capacitor EMC	V	50
Resistance	Ω	5.3
Inductance	mH	9
Insulation class		F

BRUSHED DC MOTOR DATA GRAPH



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

Pulses per revolution		7 x 2	●
Channels		2	
Phase shift	°	90 ± (1/6)T	
Encoder rear cover material		ABS plastic	
Sensor technical data		Refer externally to brand and part UTC-SK1816.	
Size	mm	Diameter 36 Length 13.5	
Harness connector		JST PHR-6 P=2.0-6P	●
Harness cable		AWG24 UL1007	●
Harness length	mm	100	●
Connection		1. BLK M- 2. RED M+ 3. BRN Vcc 4. GRN GND 5. BLU A 6. VIO B	●
Supply voltage	V	Min. 5 Max. 20	
Supply current	mA	Ref. 5 Max. 10	
Open collector output		Requires external output resistors.	
Output current per channel	mA	-	

OPTICAL SENSOR DATA

		(100 200 256 360 400 500) x 2	
		2	
		90 ± (1/6)T	
		Zink alloy	
		-	
		Width 30 Height 40 Length 23.5	
		JST SMR-05V	●
		AWG24 UL2464	●
		195	●
		1. BLK A 2. RED Vcc 3. WHT B 4. EMPTY 5. GRN GND	●
		5 ± 10%	
		-	
		-	
		± 20	