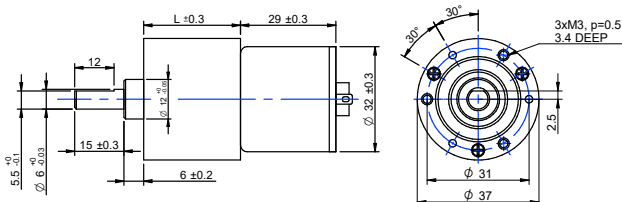


SDC3729 | Ø 37 mm | 12 V | BRUSHED DC SPUR GEAR MOTOR



DRAWING (mm)



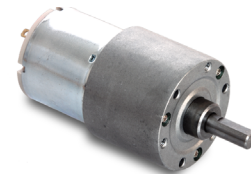
MODEL NO. DESIGNATION

SDC3729 - VOLTAGE - GEAR RATIO - F EC

Example: SDC3729-12-20-FEC

F = EMC Filter
EC = Encoder with cover

PHOTO



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		6:1	16:1	21:1	31:1	56:1	75:1	104:1	125:1	156:1	188:1	219:1	250:1	312:1	469:1	625:1	750:1	938:1	1875:1	3750:1	5625:1
Nominal torque ^ gearbox limit	mNm	29	69	90	120	220	260	360	440	540	590 ^A	590 ^A	590 ^A	590 ^A	590 ^A	590 ^A	590 ^A	590 ^A	590 ^A	590 ^A	590 ^A
Nominal speed	rpm	800	310	250	160	90	67	49	41	33	28	24	22	18	12	9.1	7.8	6.3	3.2	1.6	1
Peak torque	mNm	290	590	590	880	1200	1500	1500	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Nominal power	W	2.4	2.2	2.4	2.0	2.1	1.8	1.8	1.9	1.9	1.7	1.5	1.4	1.1	0.74	0.56	0.48	0.39	0.20	0.10	0.06
Gearbox efficiency	%	81	73	73	66	66	59	59	59	59	59	53	53	53	53	53	48	48	48	43	43
Gearbox length L	mm	21.8	24.6	24.6	27.1	27.1	29.5	29.5	29.5	29.5	29.5	32	32	32	32	32	34.5	34.5	34.5	37	37
Weight	g	170	180	180	180	180	190	190	190	190	190	200	200	200	200	200	200	200	210	210	210

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	●

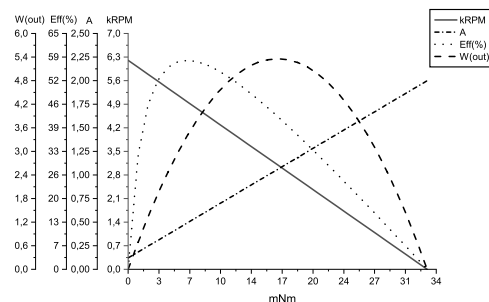
GEARBOX DATA

Backlash no load	°	≤ 2	
Radial load ¹	N	≤ 9.8	
Shaft axial load	N	≤ 6.9	
Shaft press fit force max.	N	≤ 49	
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	12
No load speed	rpm	6200
No load current	mA	≤ 120
Nominal speed	rpm	5100
Nominal torque	mNm	5.9
Nominal current	mA	≤ 470
Nominal power	W	3.1
Stall torque	mNm	33
Starting current	A	2
Motor commutation		Carb.b. ³
Motor rotor		Iron
Motor stator		Ferr.m. ⁴
Varistor EMC	V	13 - 18
Capacitor EMC	V	50
Resistance	Ω	6.6
Inductance	mH	7.2
Insulation class		B

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 30 Length 12.1	
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	-	