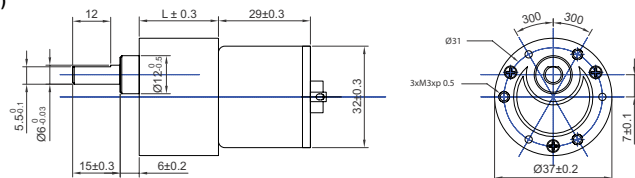


SD3729 | Ø 37 mm | 24 V | BRUSHED DC SPUR GEAR MOTOR



DRAWING (mm)



PHOTO



MODEL NO. DESIGNATION

SD3729

-

VOLTAGE

-

GEAR RATIO

-

F

EC

Example: SD3729-24-10-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

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	49	80	130	200	240	300	360	400	430	540	590 ^A	590 ^A	590 ^A	590 ^A	590 ^A	590 ^A	590 ^A	590 ^A	590 ^A	590 ^A	
Nominal speed	rpm	480	250	160	98	83	65	56	50	42	33	29	26	22	19	11	9.3	7.9	5.9	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	2.5	2.1	2.2	2.1	2.1	2.0	2.1	2.1	1.9	1.9	1.8	1.6	1.4	1.2	0.68	0.57	0.49	0.36	0.25	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	160	170	170	180	180	180	180	180	180	180	180	180	180	180	190	190	190	190	200	200	

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	●

GEARBOX DATA

C

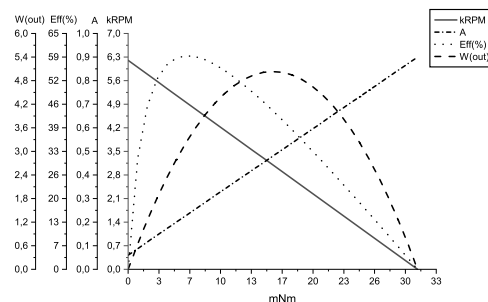
Backlash no load	°	≤ 2	
Radial load ¹	N	≤ 9.8	
Shaft axial load	N	≤ 6.9	
Shaft press fit force max.	N	≤ 200	
Radial play	mm	≤ 0.05	
Thrust play	mm	≤ 0.35	
Bearing type		Sleeve bearing	
Shaft material		Carbon steel AISI 1144	
Motor pinion material		Bronze	●
Motor pinion shape		Straight	
Material gear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

BRUSHED DC MOTOR DATA

C

Nominal voltage	V	24	
No load speed	rpm	6200	
No load current	mA	≤ 60	
Nominal speed	rpm	5000	
Nominal torque	mNm	6.1	
Nominal current	mA	≤ 210	
Nominal power	W	3.2	
Stall torque	mNm	31	
Starting current	A	0.9	
Motor commutation		Carb.b. ³	
Motor rotor		Iron	
Motor stator		Ferr.m. ⁴	
Varistor EMC	V	27 - 45	
Capacitor EMC	V	100	
Resistance	Ω	29	
Inductance	mH	34	
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

C

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	-	