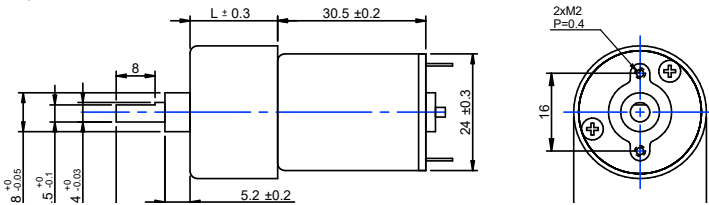
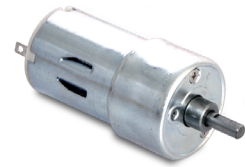


DRAWING (mm)



PHOTO



MODEL NO. DESIGNATION

SDC2730 - VOLTAGE - GEAR RATIO - F E

Example: SDC2730-12-10-F-E

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	15:1	21:1	30:1	44:1	60:1	77:1	100:1	112:1	150:1	170:1	200:1	250:1	320:1	360:1	500:1	700:1	800:1	900:1	1150:1	
Nominal torque ^ gearbox limit	mNm	16	22	31	39	57	78 [^]	78 [^]	98 [^]	98 [^]	120 [^]	120 [^]	120 [^]	120 [^]	120 [^]	150 [^]	150 [^]	150 [^]	150 [^]	150 [^]	
Nominal speed	rpm	340	230	160	110	80	59	46	36	33	22	20	18	15	12	11	7.5	5.7	5.1	4.5	3.7
Peak torque	mNm	88	120	120	180	180	240	240	290	290	350	350	350	350	350	440	440	440	440	440	
Nominal power	W	0.57	0.53	0.52	0.45	0.48	0.48	0.38	0.37	0.34	0.28	0.25	0.23	0.19	0.15	0.14	0.12	0.09	0.08	0.07	0.06
Gearbox efficiency	%	81	73	73	65	65	65	65	65	50	50	50	50	50	50	40	40	40	40	40	
Gearbox length L	mm	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17	17.3	17.3	17.3	17.3	19.3	19.3	19.3	19.3	19.3	
Weight	g	75	76	76	77	77	77	77	78	78	78	78	78	78	78	79	79	79	79	79	

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	●

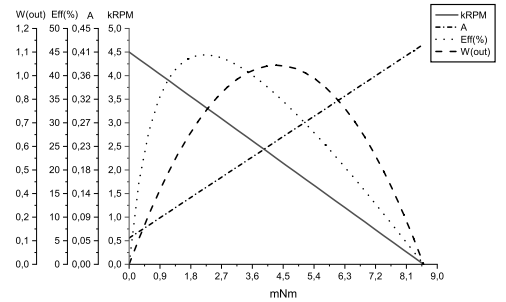
GEARBOX DATA

Backlash no load	°	≤ 2	
Radial load	N	≤ 2.9	
Shaft axial load	N	≤ 2	
Shaft press fit force max.	N	≤ 20	
Radial play ¹	mm	≤ 0.05	
Thrust play	mm	≤ 0.3	
Bearing type		Sleeve bearing	
Shaft material		Carbon steel AISI 1144	
Motor pinion material		Bronze	●
Motor pinion shape		Straight	
Material gear stage ²		Bronze, steel	●
Direction of rotation		CW or CCW by reversed V polarity	
Assembly front bell	mm	0.8	

BRUSHED DC MOTOR DATA

Nominal voltage	V	12
No load speed	rpm	4500
No load current	mA	≤ 50
Nominal speed	rpm	3600
Nominal torque	mNm	2
Nominal current	mA	≤ 150
Nominal power	W	0.75
Stall torque	mNm	8.6
Starting current	A	0.42
Motor commutation		Carb.b. ³
Motor rotor		Iron
Motor stator		Ferr.m. ⁴
Varistor EMC	V	13 - 18
Capacitor EMC	V	None
Resistance	Ω	32
Inductance	mH	12
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		3 x 2	●
Channels		2	
Phase shift	°	90 ± (1/6)T	
Encoder rear cover material		None	
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		BLK M- RED M+ BRN Vcc GRN GND BLU A 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	-	