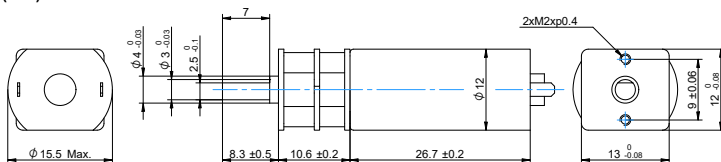
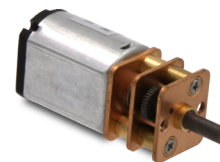


DRAWING (mm)



PHOTO



MODEL NO. DESIGNATION

SDS1327 - VOLTAGE - GEAR RATIO - F E

Example: SDS1327-12-10-FE

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

		10:1	21:1	34:1	59:1	75:1	105:1	146:1	203:1	257:1	294:1	360:1
Gear ratio		10:1	21:1	34:1	59:1	75:1	105:1	146:1	203:1	257:1	294:1	360:1
Nominal torque ^ gearbox limit	mNm	4.4	8.8	15	23	29	41	51	72	90	98 ^A	98 ^A
Nominal speed	rpm	620	290	180	100	82	59	42	30	24	21	18
Peak torque	mNm	59	88	88	150	150	240	240	290	290	290	290
Nominal power	W	0.29	0.27	0.27	0.24	0.24	0.24	0.22	0.22	0.22	0.22	0.18
Gearbox efficiency	%	81	73	73	66	66	66	59	59	59	59	59
Gearbox length L	mm	10.6	10.6	10.6	10.6	10.6	10.6	10.6	10.6	10.6	10.6	11
Weight	g	23	23	23	23	23	23	23	23	23	23	23

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	●

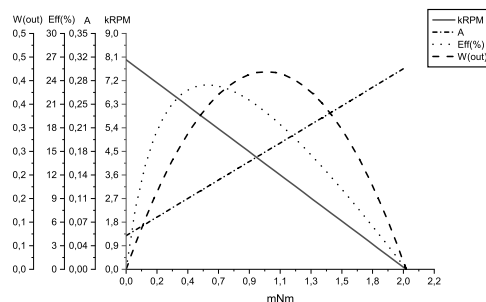
GEARBOX DATA

Backlash no load	°	≤ 1.5	
Radial load	N	≤ 3.9	
Shaft axial load	N	≤ 2	
Shaft press fit force max.	N	≤ 20	
Radial play ¹	mm	≤ 0.06	
Thrust play	mm	≤ 0.2	
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	8000
No load current	mA	≤ 50
Nominal speed	rpm	6200
Nominal torque	mNm	0.6
Nominal current	mA	≤ 85
Nominal power	W	0.39
Stall torque	mNm	2
Starting current	A	0.3
Motor commutation		Prec.m. ³
Motor rotor		Iron
Motor stator		Ferr.m. ⁴
Varistor EMC	V	15 - 22
Capacitor EMC	V	None
Resistance	Ω	55
Inductance	mH	9.3
Insulation class		B

BRUSHED DC MOTOR DATA GRAPH



NOTES

- 1.5 mm from gear flange.
- Contact us for information regarding gear stage material of a specific gear ratio.
- Precious metal.
- 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 7 Length 6	
Harness connector		JST ZHR-6 P=1.5-6P	●
Harness cable		AWG26 UL1061	●
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	-	