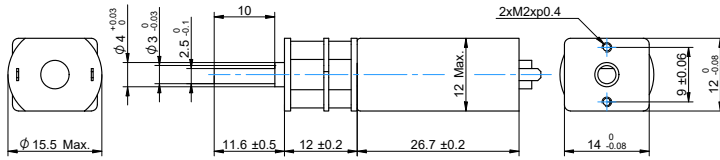
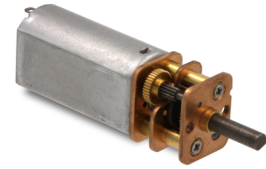


DRAWING (mm)



PHOTO



MODEL NO. DESIGNATION

SDS1427 - VOLTAGE - GEAR RATIO - F E

Example: SDS1427-12-10-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

		6:1	36:1	62:1	123:1	209:1
Gear ratio		6:1	36:1	62:1	123:1	209:1
Nominal torque ^ gearbox limit	mNm	2.9	14	24	43	74
Nominal speed	rpm	1000	170	100	50	29
Peak torque	mNm	59	88	150	240	290
Nominal power	W	0.3	0.25	0.25	0.23	0.22
Gearbox efficiency	%	81	66	66	59	59
Gearbox length L	mm	12	12	12	12	12
Weight	g	24	24	24	24	24

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	●

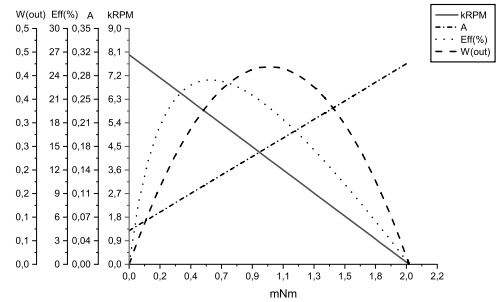
GEARBOX DATA

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	1.0	

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	0.60
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	17 - 26
Capacitor EMC	V	None
Resistance	Ω	56
Inductance	mH	9.6
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	-	