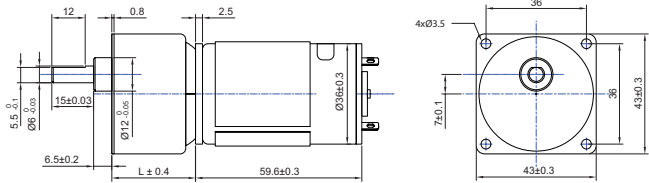


SDS4360 | □ 43 mm | 12 V | BRUSHED DC SPUR GEAR MOTOR



DRAWING (mm)



PHOTO



MODEL NO. DESIGNATION

SDS4360 - VOLTAGE - GEAR RATIO - F EC

Example: SDS4360-12-10-FEC

ACCESSORIES

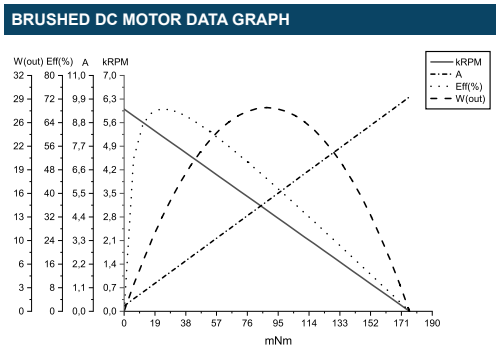


● C = customizations are offered on demand even for smaller quantities. Typical customizations are indicated with a green dot at column end. Please contact us for any customization request.

GEAR MOTOR DATA																					C
Gear ratio		10:1	15:1	18:1	25:1	30:1	36:1	50:1	60:1	75:1	90:1	100:1	120:1	150:1	180:1	200:1	250:1	300:1	360:1	400:1	500:1
Nominal torque ^ gearbox limit	mNm	98^	270^	290^	390^	390^	390^	490^	490^	490^	690^	690^	690^	690^	690^	690^	690^	690^	690^	690^	
Nominal speed	rpm	520	320	280	200	170	150	100	91	73	61	54	46	37	31	28	23	19	16	15	12
Peak torque	mNm	290	880	880	1200	1200	1200	1500	1500	1500	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	
Nominal power	W	5.3	9.0	8.5	8.2	6.9	6.1	5.1	4.7	3.7	4.4	3.9	3.3	2.7	2.2	2.0	1.7	1.4	1.2	1.1	0.87
Gearbox efficiency	%	81	73	73	73	73	73	66	66	66	66	66	66	66	59	59	59	59	59	59	
Gearbox length L	mm	23.9	26.4	26.4	26.4	26.4	26.4	28.9	28.9	28.9	28.9	29	28.9	28.9	31.4	31.4	31.4	31.4	31.4	31.4	
Weight	g	330	340	340	340	340	340	350	350	350	350	350	350	350	350	350	350	350	350	350	

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 ●

BRUSHED DC MOTOR DATA		C
Nominal voltage	V	12
No load speed	rpm	6000
No load current	mA	≤ 250
Nominal speed	rpm	4900
Nominal torque	mNm	25
Nominal current	mA	≤ 1600
Nominal power	W	13
Stall torque	mNm	180
Starting current	A	10
Motor commutation		Carb.b. ³
Motor rotor		Iron
Motor stator		Ferr.m. ⁴
Varistor EMC	V	13 - 18
Capacitor EMC	V	50
Resistance	Ω	1.2
Inductance	mH	1
Insulation class		F



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	None

- 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	OPTICAL SENSOR DATA		C
Pulses per revolution	7 x 2	●	(100 200 256 360 400 500) x 2		
Channels	2		2		
Phase shift	°	90 ± (1/6)T	90 ± (1/6)T		
Encoder rear cover material	ABS plastic		Zink alloy		
Sensor technical data	Refer externally to brand and part UTC-SK1816.		-		
Size	mm	Diameter 36 Length 13.5	Width 30 Height 40 Length 23.5		
Harness connector	JST PHR-6 P=2.0-6P	●	JST SMR-05V		●
Harness cable	AWG24 UL1007	●	AWG24 UL2464		●
Harness length	mm	100	195		●
Connection	1. BLK M- 2. RED M+ 3. BRN Vcc 4. GRN GND 5. BLU A 6. VIO B	●	1. BLK A 2. RED Vcc 3. WHT B 4. EMPTY 5. GRN GND		●
Supply voltage	V	Min. 5 Max. 20	5 ± 10%		
Supply current	mA	Ref. 5 Max. 10	-		
Open collector output		Requires external output resistors.	-		
Output current per channel	mA	-	± 20		