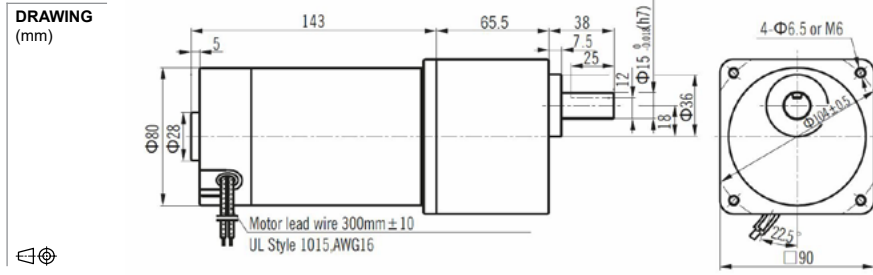


SDS90143C 120W



MODEL NO. DESIGNATION
 SDS90143C - VOLTAGE - REDUCTION

Torque unit: **Nm** (newton meter)
 Speed unit: **rpm** (revolutions per minute)

GEAR MOTOR DATA																								
Reduction	3	3,6	5	6	7,5	9	10	12,5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
Nominal torque 12V	1.1	1.3	1.9	2.2	2.8	3.3	3.3	4.2	5	6	6.1	7.6	9.1	10.9	12.1	15.1	18.1	20	20	20	20	20	20	20
Nominal speed 12V	833	694	500	417	333	278	250	200	167	139	125	100	83	69	63	50	42	33	28	25	21	17	14	13
Nominal torque 24V	1.1	1.3	1.8	2.1	2.7	3.2	3.2	4	4.8	5.8	5.8	7.2	8.7	10.4	11.6	14.5	17.4	20	20	20	20	20	20	20
Nominal speed 24V	867	722	520	433	347	289	260	208	173	144	130	104	87	72	65	52	53	35	29	26	22	17	14	13
Length (mm)	208.5																							
Weight (kg)	3.7																							

Torque unit: **Nm** (newton meter)

GEAR HEAD DATA																								
Reduction	3	3,6	5	6	7,5	9	10	12,5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
Max. continuous torque	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Efficiency (%)	81	81	81	81	81	81	73	73	73	73	66	66	66	66	66	66	66	66	59	59	59	59	59	53
Radial F 20 mm shaft N	350	350	350	350	350	350	350	350	350	350	450	450	450	450	450	450	450	450	450	450	450	450	450	450
Max. thrust load N	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Rotation when in cw	cw	cw	cw	cw	cw	cw	cw	cw	cw	cw	ccw	ccw	ccw	ccw	cw	cw	cw	cw	cw	cw	cw	cw	cw	cw
Length (mm)	65.5																							
Weight (kg)	1.5																							

GEAR MOTOR FEATURES	STANDARD	CUSTOMIZATION
Motor type	Spur geared brush DC motor	Voltage
Insulation Class	Class B (130°C)	Class F (155°C)
EMC filter	No	
Speed tolerance	± 5%	
Cables	AWG16, 300mm ± 10	Harness with connector
Housing materials	Aluminum	
Gears and shaft material	Metal, 40cr alloy steel	Shaft dimensions
Bearings type	Ball bearing	
Operating temperature	-10...+40 °C	-40...+40 °C
Manufacturing quality standards	ISO 9001	
RoHS compliance	Yes	
CE label	No	
UL approval	No	
IP rating	IP20	

Insulation Resistance
 20 MΩ or more when 500 VDC megger is applied between the windings and the case after rated operation under normal ambient temperature and humidity.

Temperature Rise
 The temperature rise should be lower than 80°C measured by resistance method when the motor is working.

Dielectric Strength
 In the circumstance of normal ambient temperature and humidity, there will be no problem to withstand 1.5kV at 50/60hz between the windings and the frame for 1 minute after rated motor operation.

MOTOR DATA		
Nominal voltage (V)	12	24
No load speed (rpm)	3100	3200
No load current (A)	2.0 Max.	1.0 Max.
Nominal speed (rpm)	2500	2600
Nominal torque (mNm)	458	441
Nominal current (A)	15	7
Output (W)	120	120
Length (mm)	143	
Weight (kg)	2.2	

