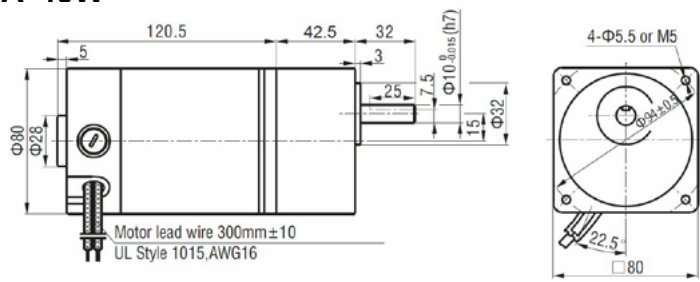


SDS80120A 40W

DRAWING
(mm)



PHOTO



MODEL NO. DESIGNATION

SDS80120A – VOLTAGE – REDUCTION

Torque unit: **mNm** (millinewton 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	250	300	500	600	750
Nominal torque 12V	330	400	550	660	830	990	990	1240	1490	1790	1800	2240	2690	3230	3590	4490	5390	6730	7220	8000	8000	8000	8000	8000	8000	8000	8000	8000	8000
Nominal speed 12V	933	778	560	467	373	311	280	224	187	156	140	112	93	78	70	56	47	37	31	28	23	19	16	14	12	10	6	5	4
Nominal torque 24V	310	370	520	620	770	930	1030	1290	1550	1860	2060	2320	2780	3340	3710	4640	5010	6270	7520	8000	8000	8000	8000	8000	8000	8000	8000	8000	8000
Nominal speed 24V	1000	833	600	500	400	333	300	240	200	167	150	120	100	83	75	60	50	40	33	30	25	20	17	15	12	10	6	5	4
Length (mm)	163																												
Weight (kg)	2.6																												

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	250	300	500	600	750
Max. continuous torque	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
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	53	53	53	53	53
Radial F 20 mm shaft N	150	150	150	150	150	150	150	150	150	150	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300
Max. thrust load N	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50
Rotation when in cw	cw	cw	cw	cw	cw	cw	cw	cw	cw	cw	ccw	ccw	ccw	ccw	ccw	ccw	cw	cw	cw	cw	cw	cw	cw	cw	cw	ccw	ccw	ccw	ccw
Length (mm)	42.5																												
Weight (kg)	0.8																												

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		AWG18	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	3100
No load current (A)	2.0 Max.	0.8 Max.
Nominal speed (rpm)	2800	3000
Nominal torque (mNm)	136	127
Nominal current (A)	5.2	2.1
Output (W)	40	40
Length (mm)	120	
Weight (kg)	1.8	

