

About RSS/RSH Motors

- 2-phase, Hybrid stepping motors
- Standard step angle 1.8
- Protection IP 54, IP 65 optional
- Holding torque 14 to 2071 oz-in
- Different lengths per diameter
- Different windings per size
- Integrated Encoder, Brake optional

Environments & Applications

- Washdown
 - Humid
 - Dusty
 - Extreme Temperatures
 - Chemicals
 - In-Oil
- Food processing, Packaging, Paper, Environmental chambers, Chemical treatment



Mechanical Characteristics

Size	Type	Current per phase			Holding Torque		Detent Torque		Rotor Inertia		Axial Load		Radial Load		Mass	
		Amps			N-cm	lb-in	N-cm	lb-in	kg-cm ²	oz-in ²	N	lb _f	N	lb _f	kg	lb _m
42	RSS 41	0.6	1.2	2.5	10	0.89	0.4	0.04	0.025	0.14	20	4.5	40	9	0.26	0.57
	RSS 42	0.6	1.2	2.5	14	1.24	0.5	0.04	0.045	0.25	20	4.5	40	9	0.32	0.71
	RSS 43	0.6	1.2	2.5	26	2.3	0.7	0.06	0.077	0.42	20	4.5	40	9	0.47	1.04
52	RSS 52	1.2	2.5	5	45	3.98	1.3	0.12	0.15	0.82	25	5.63	70	15.75	0.65	1.43
56	RSS 56	1.2	2.5	5	40	3.54	3	0.27	0.17	0.93	40	9	80	18	0.7	1.54
	RSS 57	1.2	2.5	5	70	6.2	5	0.44	0.24	1.31	40	9	80	18	0.9	1.98
65	RSS 64	1.2	2.5	5	65	5.75	4	0.35	0.33	1.8	40	9	120	27	0.88	1.94
	RSS 65	1.2	2.5	5	95	8.41	5	0.44	0.41	2.24	40	9	120	27	1.28	2.82
	RSS 66	1.2	2.5	5	140	12.39	7	0.62	0.82	4.48	40	9	120	27	2	4.41
80	RSH 79	5	7.5	10	140	12.39	10	0.89	0.95	5.19	50	11.25	180	40.5	1.9	4.19
	RSH 80	5	7.5	10	220	19.47	12	1.06	1.24	6.78	50	11.25	180	40.5	2.5	5.51
	RSH 81	5	7.5	10	260	23.01	15	1.33	1.77	9.68	50	11.25	180	40.5	3.5	7.72
100	RSH 99	7.5	10	15	340	30.09	12	1.06	2.6	14.22	70	15.75	300	67.5	2.5	5.51
	RSH 100	7.5	10	15	480	42.48	14	1.24	4.4	24.06	70	15.75	300	67.5	4.5	9.92
	RSH 101	7.5	10	15	680	60.19	17	1.5	5.8	31.71	70	15.75	300	67.5	6.7	14.77
125	RSH 124	7.5	10	15	700	61.96	18	1.59	7	38.27	150	33.75	700	157.5	5.5	12.13
	RSH 125	7.5	10	15	1100	97.36	25	2.21	11.4	62.33	150	33.75	700	157.5	8.5	18.74
	RSH 126	7.5	10	15	1450	128.34	33	2.92	18.2	99.51	150	33.75	700	157.5	12.6	27.78

Options

Encoder

- Optical incremental encoder
- Mounted on the rear shaft of the motor
- Resolution
 - 500 lines for sizes 42 to 80
 - 1000 lines for sizes 100 to 125
- Supply voltage 5 V_{dc}, 100 mA
- Short circuit proof line driver
- Outputs
 - Channels A and B, \bar{A} and \bar{B} (signals are 90 phase shifted)
 - 0 and $\bar{0}$ reference pulses
- Temperature range -40°C to +100°C
- Detail information upon request

Brake

- Permanent magnet type
- Fail-Safe
- Mounted on the rear shaft of the motor
- Connection via a 2-pin round connector
- Supply voltage 24 V_{dc} ±15%

Motor size	52 - 65	80	100	125
Brake type	2	3	5	6
Power (W)	8	9	10	13
Torque (Nm)	0.75	1.5	3	6

Gearheads

- Planetary type
- Mounted on the motor front
- Compact design
- Diameters from 42 to 105 mm
- Available in 1, 2 or 3 stages
- Gear ratios from 4:1 to 512:1
- Low backlash
- Efficiency 80 to 94%
- Detail information upon request

Heavy Duty Stepping Motors

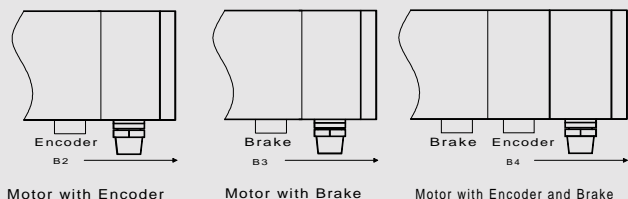
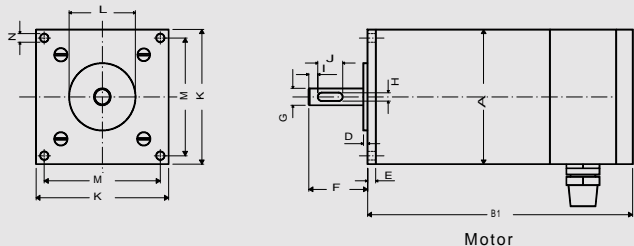
RSS / RSH 42 – 125

Diameter: 42 to 125 mm (1.65 to 4.9 inches)

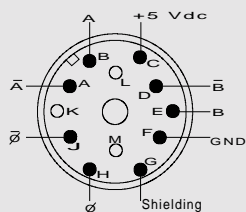
Torque: 10 to 1450 N-cm (0.9 to 129 lb-in)

Dimensions (in mm)

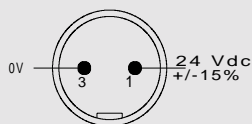
Size	Type	A	B1	B2	B3	B4	D	E	F	G ₉₅	K	L	M	N
42	RSS 41	42	64				1	3	16	5	42	22	36	3.2
	RSS 42	42	79				1	3	16	5	42	22	36	3.2
	RSS 43	42	94				1	3	16	5	42	22	36	3.2
52	RSS 52	52	92				1.5	3.5	17.5	6	52	28	44	4.3
56	RSS 56	56.4	81.6				1.5	4.5	22	6.35	38.1	47.15	5.2	
	RSS 57	56.4	97.6				1.5	4.5	22	6.35	38.1	47.15	5.2	
65	RSS 64	65	98	125.5	132	166	1.5	5.5	23.5	8	65	40	55	5.2
	RSS 65	65	113	140.5	147	181	1.5	5.5	23.5	8	65	40	55	5.2
	RSS 66	65	143.5	171	177.5	211.5	1.5	5.5	23.5	8	65	40	55	5.2
80	RSH 79	80	109	136.5	146	183	2	7.5	27	10	80	50	68	6.4
	RSH 80	80	131	158.5	168	205	2	7.5	27	10	80	50	68	6.4
	RSH 81	80	166	193.5	203	240	2	7.5	27	10	80	50	68	6.4
100	RSH 99	100	128.5	157.5	170	211.5	2	8	32	12	100	60	86	6.4
	RSH 100	100	159	188	200.5	242	2	8	32	12	100	60	86	6.4
	RSH 101	100	203	232	244.5	286	2	8	32	12	100	60	86	6.4
125	RSH 124	125	147.5	176.5	189	230.5	3	9.5	34	14	125	60	108	8.4
	RSH 125	125	192.5	211.5	234	275.5	3	9.5	34	14	125	60	108	8.4
	RSH 126	125	246.5	275.5	288	329.5	3	9.5	34	14	125	60	108	8.4



Encoder Connector



Brake Connector



Wiring

Standard RSS/RSH series are 4-lead for bipolar control. 5- and 6-lead configuration is also available for unipolar upon request.

Ordering Code

RSS 42 . 200 . 1.2 - E - K1 - GPL 42/20 - ST - X

