

RHSD Series of Harmonic reducer

RHSD-I Series



RHSD-I is a ultra thin hollow flanged shaped structure design, small in size and light in weight, which is very suitable for the use in the tight-space occasions.

RHSD-III Series



RHSD-III is a ultra thin hollow flanged shaped structure design. The wave generator's center is a hollow shaft, which is very suitable for the use in tight-space requirement and threading occasions.

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Pull-in torque (cNm)						
Ratio \ Model	14	17	20	25	32	40
50	4.5	6.5	8.5	16	32	56
80	3.5	4.5	5.5	10	20	38
100	3.2	3.5	5	9	19	32
120	-	3.5	4	8	16	30
160	-	-	3.8	7	15	25

RHSD rigidity ($\times 10^4 \text{N} \cdot \text{m/rad}$)							
Ratio \ Model	14	17	20	25	32	40	
50	K1	0.28	0.64	1.05	1.90	4.47	8.80
	K2	0.35	0.84	1.24	2.57	5.80	11.00
	K3	0.45	1.14	1.90	3.52	7.98	15.00
80 and above	K1	0.38	0.80	1.24	2.57	5.80	11.00
	K2	0.42	0.89	1.62	3.52	7.41	14.00
	K3	0.58	1.24	2.38	4.47	10.45	20.00

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Buckling torque (Nm)

Model	14	17	20	25	32	40
All ratio	130	260	470	850	1800	3600

Pawl torque (Nm)

Model Ratio	14	17	20	25	32	40
50	88	150	220	450	980	1800
80	110	200	350	680	1400	2100
100	84	160	260	500	1000	2100
120	-	120	240	470	980	2100
160	-	-	220	450	980	1800

Hysteresis loss (arc min)

Model Ratio	14	17	20	25	32	40
50	2.5	1.5	1.5	1.5	1.5	1.5
80 and above	2	1	1	1	1	1

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Model	Reduction Ratio	Rated torque at 2000r/min	Allowable peak torque at start and stop	Allowable average torque	Allowable Max. Momentary torque	Max. input Speed	Allowable average input speed	Back lash (arc sec)	Transmission accuracy (arc sec)	Noise (Db)
		Nm	Nm	Nm	Nm	r/min	r/min	≤	≤	≤
14	50	3.5	11.4	4.6	23	8000	3500	20	90	60
	80	5.1	15	6.2	29			20	90	60
	100	5.1	18	7.3	33			20	90	60
17	50	10.4	22	17	46	7000	3500	20	90	60
	80	14	29	21	54			20	90	60
	100	15.2	35	26	67			20	90	60
	120	15.2	35	26	67			20	90	60
20	50	16.1	37	23	66	6000	3500	20	60	60
	80	23	49	28	78			20	60	60
	100	27	54	32	90			20	60	60
	120	27	57	32	90			20	60	60
	160	27	60	32	90			20	60	60
25	50	26	66	36	121	5500	3500	20	60	60
	80	42	91	62	157			20	60	60
	100	45	105	71	175			20	60	60
	120	45	111	71	187			20	60	60
	160	45	118	71	190			20	60	60
32	50	50	143	71	255	4500	3500	20	60	60
	80	79	202	126	350			20	60	60
	100	91	221	144	399			20	60	60
	120	91	235	144	423			20	60	60
	160	91	250	144	423			20	60	60
40	50	91	267	130	456	4000	3000	10	60	60
	100	176	387	247	665			10	60	60
	160	196	430	300	727			10	60	60