

Slew drive

1. RTR Slew Drive Introduction:

RTR slewing drives are powered with hourglass worm technology for maximum gear torque and the smoothest rotation. Typical slew drive applications include solar industry, truck cranes, man lifts, utility equipment, hydraulic attachments, oil tool equipment, marine cranes, tire handlers, digger derricks and automotive lifts, but the slew drives are used in many other applications requiring load holding and rotational capability. We offer different slew drive models with different moment load capacities.

The standard slew drives are fitted with an open housing and single self locking hourglass worm shaft. Once the power source input is returned to neutral, the worm shaft will lock the load into position without requiring any external braking device.

The slew drive can be with worm gear and helical gear. And also for the inside slewing ring, it can be single-row ball slewing ring, and also can be double-row ball slewing ring. The one with double-row can take much more load. It can be chosen depended on your application.

2. RTR Slew Drive Application:

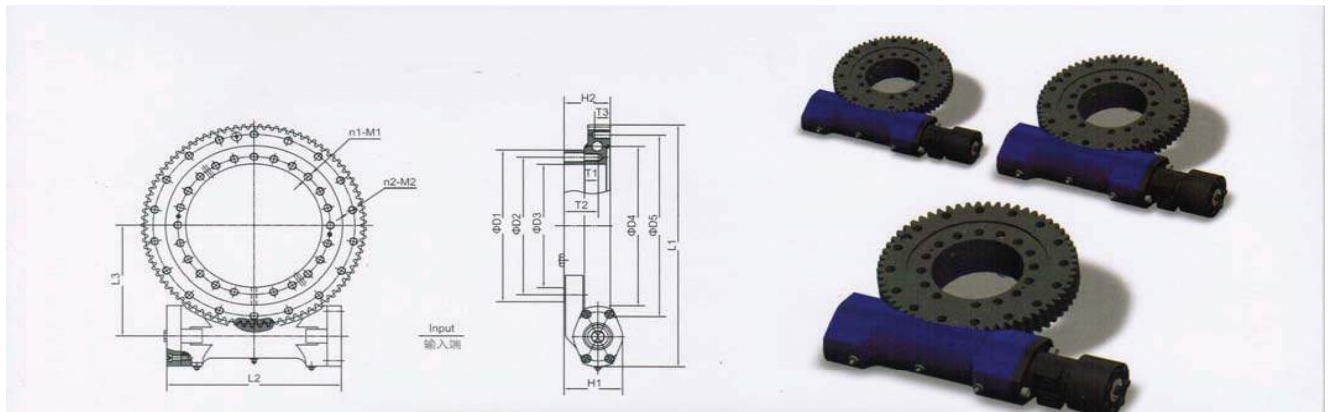
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3. RTR Slew Drive Models

1) Open housing slew drive (S type)

Open housing slew drive mainly apply to the lower working condition, such as no high requirement for the dustproof, rain-proof and anti-corrosion.



Dimensions parameters

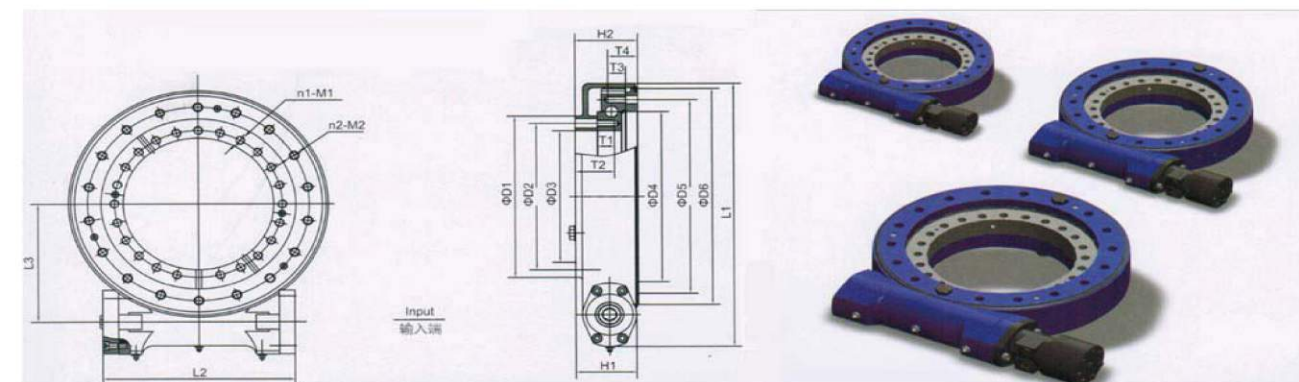
No.	External dimensions					Installation dimensions					Mounting hole data						
	L1	L2	L3	H1	H2	D1	D2	D3	D4	D5	n1	M1	T1	T2	n2	M2	T3
	mm										Inner ring				Outer ring		
S7	183	182	132.7	78.5	63.4	145	120.6	98	163	203.2	10	M12	25	45	8	M12	25
S9	296	322	174.15	102.7	89.3	204	175	145	222.5	270	15	M16	30	65	16	M16	30
S12	485	331	220	113	89.4	289	259	229	308.5	358	19	M16	30	69.4	18	M16	30
S14	520	337	237.6	113	89.1	325	295	265	342.5	390	23	M16	30	69	18	M16	30
S17	601	385	275.3	123	103.1	406	365.1	323.9	422.1	479.4	20	M16	32	79	20	M16	32
S21	723	469	339	130.2	137	533	466.7	431.8	525.5	584.2	35	M20	40	91	36	M20	40
S25	848	469	401.8	133.3	130	628	565	512	620	675	35	M20	40	87	36	M20	40

Performance parameters

No.	Rated output torque (kN.m)	Tilting moment torque (kN.m)	Axial load (kN)	Radial load (kN)	Holding torque (kN.m)	Gear ratio	Tracking precision	Self-locking gears	Weight (kg)
S7	1.5	13.5	133	53	10.4	73:1	≤0.20	Yes	18
S9	6.5	33.9	338	135	38.7	61:1	≤0.20	Yes	42
S12	7.5	54.3	475	190	43	78:1	≤0.20	Yes	48
S14	8	67.8	555	222	48	85:1	≤0.20	Yes	55
S17	10	135.6	976	390	72.3	102:1	≤0.15	Yes	87
S21	15	203	1598	640	105.8	125:1	≤0.15	Yes	142
S25	18	271	2360	945	158.3	150:1	≤0.15	Yes	195

2) Enclosed housing slew drive (SE/PE/ZE type)

Enclosed housing slew drive mainly apply to the relatively high condition for high requirement for dustproof,rain-proof and anti-corrosion occasion. Precision grade IP65.



Dimensions parameters

model	External dimensions					Installation dimensions						Mounting hole data							
	L1	L2	L3	H1	H2	D1	D2	D3	D4	D5	D6	n	M	T	T2	n	M2	T	T4
	mm											Inner ring				Outer ring			
SE3/ PE3	190	157	80	94.	97.5	126	100	-	-	100	115	6	M1	1	32	6	M1	1	-
SE5/ PE5	228	173	100.1	107	119	140	100	-	-	128	146	6	M1	1	33	6	M1	2	-
SE7/ PE7	295	185	132.7	76.5	80.8	145	120.6	98	163	203.2	237.5	1	M1	2	45	8	M1	2	42.4
SE9/ PE9	408	314	174.2	102	108	204	175	145	222.5	270	316	1	M1	3	65	1	M1	3	53
SE12/ PE12	498	324	220	106	110.5	289	259	229	308.5	358	402	1	M1	3	69.4	1	M1	3	51
SE14/ PE14	533	330	237.6	106	110	325	295	265	342.5	390	435.5	2	M1	3	69	1	M1	3	51
SE17/ PE17	578	378	282.5	212	126	406	365.1	324	425	479.4	522	2	M1	3	79	2	M1	3	55
SE21/ PE21	737	462	339.1	133	136.5	533	466.7	431.8	525.5	584.2	618	3	M2	4	91	3	M2	4	-
SE25/ PE25	863	462	401.8	133	130	628	565	512	620	675	744	3	M2	4	87	3	M2	4	-

Performance parameters

No.	Rated output torque (kN.m)	Tilting moment torque (kN.m)	Axial load (kN)	Radial load	Holding torque (kN.m)	Gear ratio	Tracking precision	Weight (kg)
SE3	0.4	1.1	30	16.6	2	62:1	≤0.2	12
PE3	0.4	1.1	30	16.6	2	62:1	≤0.08, ≤0.12, ≤0.15	12
ZE3	0.24	1.1	30	16.6	2	62:1	0	12
SE5	0.6	3	45	22	5.5	62:1	≤0.2	20
PE5	0.6	3	45	22	5.5	62:1	≤0.08, ≤0.12, ≤0.15	20
ZE5	0.36	3	45	22	5.5	62:1	0	20
SE7	1.5	13.5	133	53	10.4	73:1	≤0.2	21
PE7	1.5	13.5	133	53	10.4	73:1	≤0.05, ≤0.07, ≤0.11	21
ZE7	0.6	13.5	133	53	10.4	73:1	0	21
SE9	6.5	33.9	338	135	38.7	61:1	≤0.17	49
PE9	6.5	33.9	338	135	38.7	61:1	≤0.05, ≤0.07, ≤0.09	49
ZE9	3.9	33.9	338	135	38.7	61:1	0	49
SE12	7.5	54.3	475	190	43	78:1	≤0.17	61
PE12	7.5	54.3	475	190	43	78:1	≤0.03, ≤0.05, ≤0.07	61
ZE12	4.5	54.3	475	190	43	78:1	0	61
SE14	8	67.8	555	222	48	85:1	≤0.17	64
PE14	8	67.8	555	222	48	85:1	≤0.03, ≤0.05, ≤0.07,	64
ZE14	4.8	67.8	555	222	48	85:1	0	64
SE17	10	135.6	970	390	72.3	102:1	≤0.15	105
PE17	10	135.6	970	390	72.3	102:1	≤0.03, ≤0.05, ≤0.07,	105
SE21	15	203	1598	640	105.8	125:1	≤0.15	149
PE21	15	203	1598	640	105.8	125:1	≤0.03, ≤0.05, ≤0.07,	149
SE25	18	271	2360	945	158.3	150:1	≤0.15	204
PE25	18	271	2360	945	158.3	150:1	≤0.03, ≤0.05, ≤0.07,	204

3) Double worm slew drive (S-2/ SE-2 type)

Double-worm slew drive has more rotator in the basic of single-worm slew drive.



Dimensions parameters

Model	External dimensions						Installation dimensions		Mounting hole data			
	L1	L2	L3	H	H1	H2	D1		n1	M1	n2	M2
	mm								Inner ring		Outer ring	
S14-2	338	237.6	302	110	59	11.5	325		23	M16	18	M16
SE14-2	338	237.6	302	110	59	11.5	325		23	M16	18	M16
S17-2	385	275.3	340.5	126	66	7.5	406		20	M16	20	M16
SE17-2	385	275.3	340.5	126	66	7.5	406		20	M16	20	M16

Performance parameters

Model	Rated output torque (kN.m)	Tilting moment torque (kN.m)	Axial load (kN)	Radial load (kN)	Holding torque (kN.m)	Gear ratio	Tracking precision	Weight (kg)
S14-2	12	67.8	555	222	48	85:1	≤0.17	62
SE14-2	12	67.8	555	222	48	85:1	≤0.17	76
S17-2	16.8	135.6	970	390	72.3	102:1	≤0.15	102
SE17-2	16.8	135.6	970	390	72.3	102:1	≤0.15	119



Dimensions parameters

Model	External dimensions			Installation dimensions					Mounting hole data			
	L1	L2	H	D1	D3	D3	D4	D5	n1	M1	n2	M2
	mm								Inner ring		Outer ring	
HSE21-2	487	368	145	525	465	425	584	622	23	M18	24	M16
HSE25-2	511	416	148	628	560	512	685	722	29	M18	30	M16

Performance parameters

Model	Rated output torque (kN.m)	Tilting moment torque (kN.m)	Axial load (kN)	Radial load (kN)	Holding torque (kN.m)	Gear ratio	Tracking precision	Weight (kg)
HSE21-2	43.6	52.3	1058	421	167	82:1	≤0.15	206
HSE25-2	50	60	2360	945	271	94:1	≤0.15	275



4) slewing drive for modular vehicles (HSE type)



Dimensions parameters

Model	External dimensions				Installation dimensions					Mounting hole data			
	L1	L2	L3	H	D1	D2	D3	D4	D5	n1	M1	n2	M2
	mm									Inner ring		Outer ring	
HSE21	487	268	438	145	425	465	584	622	525.5	23	M30	24	M16
HSE25	511	416	486	148	512	560	685	722	628	29	M30	30	M16

Performance parameters

Model	Rated output torque (kN.m)	Tilting moment torque (kN.m)	Axial load (kN)	Radial load (kN)	Holding torque (kN.m)	Gear ratio	Tracking precision	Weight (kg)
HSE21	21.8	26.6	1058	421	167	82:1	≤0.15	186
HSE25	25	30	2360	945	271	94:1	≤0.15	255

5) Worm gear slew drive (WE type)



Dimensions parameters

No.	External dimensions									Installation dimensions						Mounting hole data			
	L1	L2	L3	L4	H1	H2	H3	H4	H5	D1	D2	D3	D4	D5	D6	n1	M1	n2	M2
	mm															Inner ring		Outer ring	
WE9	340	177.5	241.5	170	97	82	12	26	41	260	175	145	222	270	325	15	M16	16	M16
WE14	380	237.5	301.5	190	97	82	12	26	41	380	295	265	342	390	445	18	M16	23	M16
WE17	405	285	349	202.5	97	82	12	23	41	460	365	332	430	479.5	535	20	M16	20	M16
WE21	482.5	350	415	245	120	130	25	45	65	550	465	425	526	584	632	23	M20	24	M20

Performance parameters

Model	Rated output torque (kN.m)	Tilting moment torque (kN.m)	Axial load (kN)	Radial load (kN)	Holding torque (kN.m)	Gear ratio	Tracking precision	Weight (kg)
WE9	8	33.9	550	205	38.7	62:1	≤0.15	48.5
WE14	28.7	203	1598	596	105.8	90:1	≤0.1	169
WE17	12.96	135.6	1110	414	72.3	104:1	≤0.1	90
WE21	10.8	67.8	920	343	48	86:1	≤0.13	68