



Cycloid reducers 2S-50 - 2S-120

Plug in version

AKIM gear technology – Swiss Made.

Cycloid reducers 2S-50 - 2S-120 - Plug in version.

Cycloid reducers are the first choice where high power, high torque and great ratio is needed. Plug in version: the hollow shaft allows a short mounting length. The ratios of 18 : 1 to 125 : 1 achievable in single stage, are all integer and mathematic precise. Drive speed up to 1500 min⁻¹ are permissible.

General informations.

- Low backlash
- Fixed backlash: depending on application
- Backlash is < 0.02° and can be adjusted from outside
- Achieve efficiency rates well over 90%
- Gear ratios greater than 125 : 1 require a two stage reducer and are available on request
- Nominal torque up to 20'000 Nm
- Easy motor mounting: separate flange with coupling
- Conventional motor can be mounted
- High overload safety
- Excellent weight / performance ratio
- Very robust design
- Reliable
- Lifetime lubrication
- No oil fittings
- Maintenance free

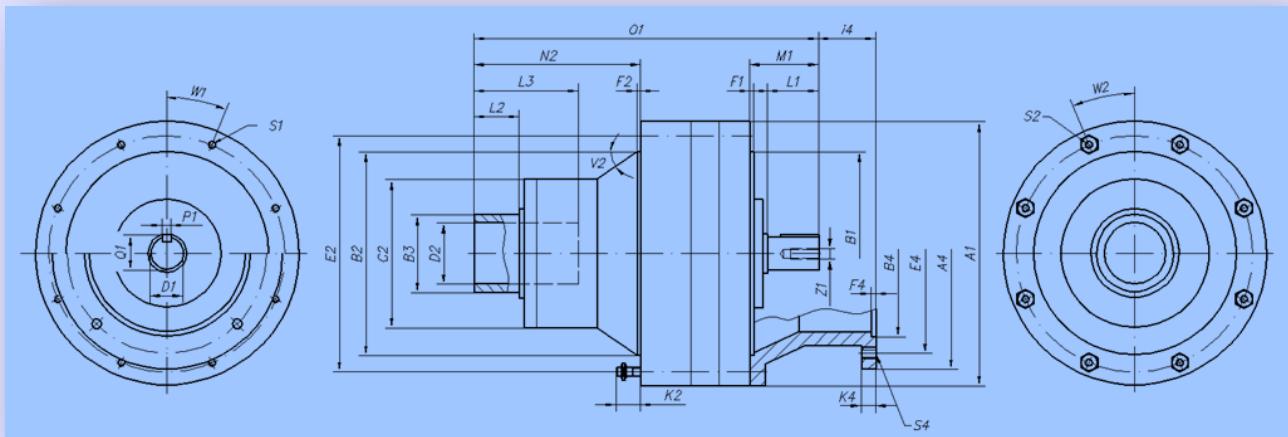
Technical data.

Type	2S-50	2S-60	2S-70	2S-80	2S-90	2S-100	2S-110	2S-120
Reduction ratio	18	22	22	27	25	24	28	33
	22	25	28	30	29	27	31	36
	27	28	29	34	34	30	35	41
	33	33	34	39	38	35	40	47
	36	40	40	45	44	40	46	55
	41	45	47	55	50	45	53	62
	47	50	53	60	60	53	60	71
	55	55	60	69	68	60	71	84
	68	68	69	79	75	72	85	100
	85	80	80	90	86	83	95	110
		100	97	110	100	93	105	125
						105	120	

Admissible continuous torque T₂ [Nm] at drive speed n₁.

Drive speed n ₁ [min ⁻¹]	Type							
	2S-50	2S-60	2S-70	2S-80	2S-90	2S-100	2S-110	2S-120
1500	675	1255	1995	3175	3945	6070		
1000	765	1420	2260	3590	4460	6860	11400	16300
750	830	1545	2460	3900	4860	7475	12425	17770
500	940	1745	2780	4415	5485	8445	14030	20060

Drawings.



Dimensions.

Type	2S-50	2S-60	2S-70	2S-80	2S-90	2S-100	2S-110	2S-120	
Dimensions									
Input	A1	245	285	345	365	445	500	600	660
	B1	180-j6	220-j6	250-j6	280-j6	320-j6	390-j6	450-j6	530-j6
	D1	30-j6	35-j6	40-j6	45-j6	50-j6	60-j6	70-j6	80-j6
	F1	4	4	6	6	10	10	14	18
	L1	45	55	60	70	75	90	105	120
	M1	63	74	82	97	105	121	137	156
	O1	294	320	356	403	445	525	590	658
	P1	8	10	12	14	14	18	20	22
	Q1	33	38	43	48.5	53.5	64	74.5	85
	S1	8xM10	8xM10	8xM12	8xM16	12xM16	12xM20	12xM20	12xM20
	W1	22.5°	22.5°	22.5°	22.5°	15°	15°	15°	15°
	Z1	M10x25	M12x30	M12x30	M12x30	M12x30	M16x40	M16x40	M16x40
Output	B2	180-j6	220-j6	250-j6	280-j6	320-j6	390-j6	450-j6	530-j6
	B3	70-f7	75-f7	85-f7	95-f7	105-f7	135-f7	150-f7	180-f7
	C2	160	180	210	230	260	310	350	390
	D2	55-H7	60-H7	70-H7	75-H7	85-H7	105-H7	115-H7	135-H7
	E2	210	255	295	330	380	450	510	600
	F2	4	4	6	10	10	15	15	18
	K2	30	30	40	45	50	55	55	60
	L2	35	40	45	50	55	65	70	75
	L3	93	93	105	110	118	150	174	198
	N2	126	128	144	156	185	226	244	267
	S2	8xM10	8xM10	8xM12	8xM16	12xM16	12xM20	12xM20	12xM20
	V2	35°	35°	35°	35°	35°	35°	35°	35°
	W2	22.5°	22.5°	22.5°	22.5°	15°	15°	15°	15°

Dimensions of the lantern.

Dimensions		A4	B4	E4	F4	I4	K4	S4
Type	Lantern	Mounting dimensions						
2S-50	IEC-080	200	130	165	4	52	12	4xM10
	IEC-090	200	130	165	4	52	12	4xM10
	IEC-100	250	180	215	5	62	16	4xM12
	IEC-112	250	180	215	5	62	16	4xM12
	IEC-132	300	230	265	5	85	16	4xM12
2S-60	IEC-080	200	130	165	4	55	15	4xM10
	IEC-090	200	130	165	4	55	15	4xM10
	IEC-100	250	180	215	5	65	18	4xM12
	IEC-112	250	180	215	5	65	18	4xM12
	IEC-132	300	230	265	5	85	17	4xM12
2S-70	IEC-100	250	180	215	5	65	11	4xM12
	IEC-112	250	180	215	5	65	11	4xM12
	IEC-132	300	230	265	5	85	16	4xM12
	IEC-160	350	250	300	6	115	19	4xM16
	IEC-180	350	250	300	6	115	19	4xM16
2S-80	IEC-100	250	180	215	5	68	12	4xM12
	IEC-112	250	180	215	5	68	12	4xM12
	IEC-132	300	230	265	5	85	17	4xM12
	IEC-160	350	250	300	6	115	19	4xM16
	IEC-180	350	250	300	6	115	19	4xM16
2S-90	IEC-132	300	230	265	5	85	14	4xM12
	IEC-160	350	250	300	6	115	17	4xM16
	IEC-180	350	250	300	6	115	17	4xM16
2S-100	IEC-160	350	250	300	6	114	16	4xM16
	IEC-180	350	250	300	6	114	16	4xM16
	IEC-225	450	350	400	6	143	23	8xM16
2S-110	IEC-160	350	250	300	6	115	15	4xM16
	IEC-180	350	250	300	6	115	15	4xM16
	IEC-200	400	300	350	6	115	15	8xM16
	IEC-225	450	350	400	6	115	15	8xM16
	IEC-250	550	450	500	6	115	15	8xM16
2S-120	IEC-225	450	350	400	6	144	20	8xM16