

Cycloid reducers 2S-40 - 2S-120

AKIM gear technology – Swiss Made.

Cycloid reducers 2S-40 - 2S-120.

Cycloid reducers are the first choice where high power, high torque and great ratio is needed. With shaft end. Drive speed up to 1500 min⁻¹. The ratios of 18 : 1 to 125 : 1 achievable in single stage, are all integer and mathematic precise.

General informations.

- Low backlash
- Fixed backlash: depending on application
- Backlash is < 0.02° and can be adjusted from outside
- Achieve efficiency of 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
- Excellent weight / performance ratio
- Very robust design
- Reliable
- Smooth operation
- Lifetime lubricated
- No oil fittings
- Maintenance free

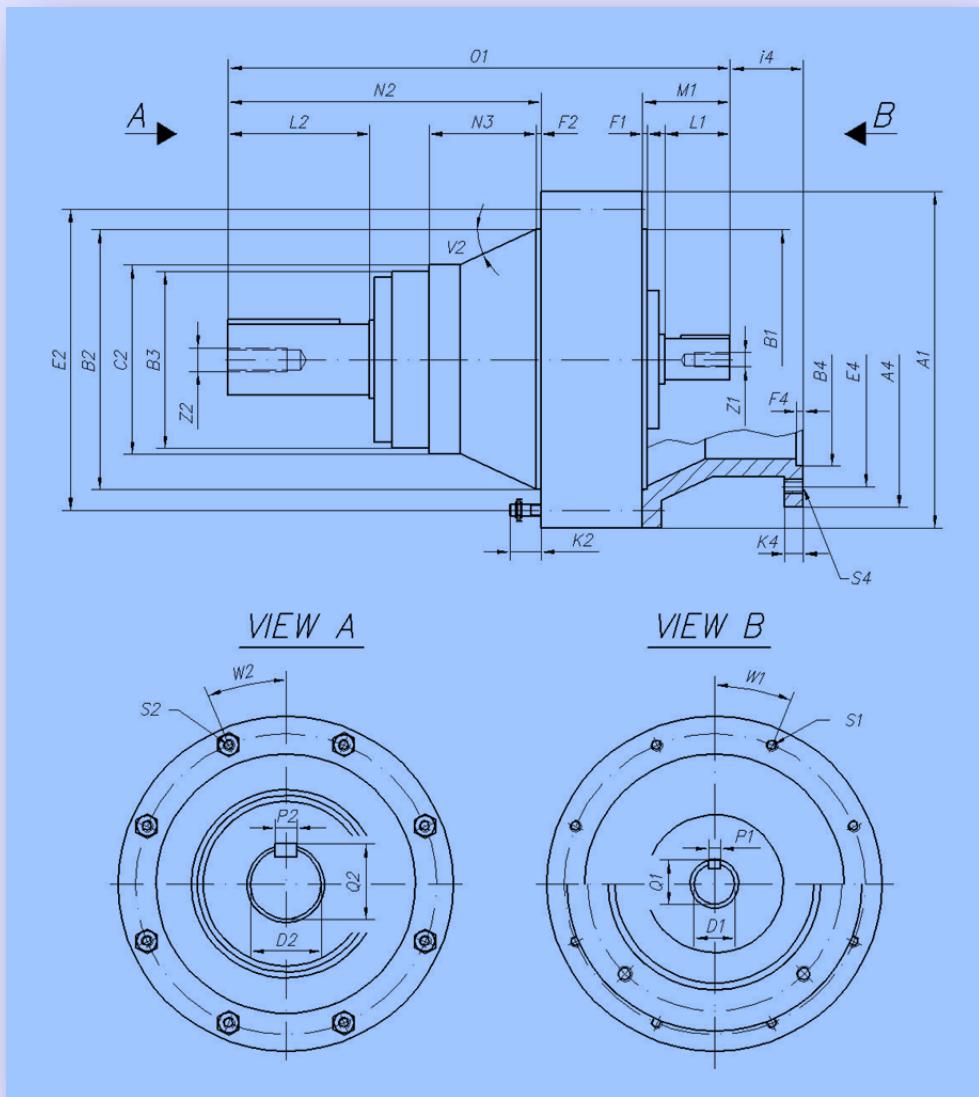
Standard program.

Type	2S-40	2S-50	2S-60	2S-70	2S-80	2S-90	2S-100	2S-110	2S-120
Reduction ratio	20	18	22	22	27	25	24	28	33
	23	22	25	26	30	29	27	31	36
	28	28	28	29	34	34	30	35	41
	35	33	33	34	39	38	35	40	47
	40	36	40	40	45	44	40	46	55
	47	41	45	47	55	50	45	53	62
	55	47	50	53	60	60	53	60	71
	71	55	55	60	69	68	60	71	84
	90	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-40	2S-50	2S-60	2S-70	2S-80	2S-90	2S-100	2S-110	2S-120
1500	475	675	1255	1995	3175	3945	6070		
1000	535	765	1420	2260	3590	4460	6860	11400	16300
750	585	830	1545	2460	3900	4860	7475	12425	17770
500	660	940	1745	2780	4415	5485	8445	14030	20060

Drawings.



Dimensions.

Type	2S-40	2S-50	2S-60	2S-70	2S-80	2S-90	2S-100	2S-110	2S-120	
Dimensions										
Input	A1	200	235	285	330	365	420	500	560	660
	B1	150-j6	180-j6	220-j6	250-j6	280-j6	320-j6	390-j6	450-j6	530-j6
	D1	25-j6	30-j6	35-j6	40-j6	45-j6	50-j6	60-j6	70-j6	80-j6
	F1	4	4	4	6	6	10	10	14	18
	L1	40	45	55	60	70	75	90	105	120
	M1	60	63	74	82	97	105	121	137	156
	O1	320	365	425	486	555	615	695	790	901
	P1	8	8	10	12	14	14	18	20	22
	Q1	28	33	38	43	48.5	53.5	64	74.5	85
	S1	8xM8	8xM10	8xM10	8xM12	8xM16	12xM16	12xM20	12xM20	12xM20
	W1	22.5°	22.5°	22.5°	22.5°	22.5°	15°	15°	15°	15°
	Z1	M8x20	M10x25	M12x30	M12x30	M12x30	M12x30	M16x40	M16x40	M16x40
Output	B2	150-j6	180-j6	220-j6	250-j6	280-j6	320-j6	390-j6	450-j6	530-j6
	B3	106-h8	125-h8	150-h8	175-h8	210-h8	240-h8	280-h8	320-h8	350-h8
	C2	112	140	160	180	230	270	310	340	380
	D2	40-k5	50-k5	60-k5	70-k5	90-k5	100-k5	110-k5	125-k5	140-k5
	E2	178	210	255	295	330	380	450	510	600
	F2	4	4	4	6	10	10	15	15	18
	K2	30	30	30	40	45	50	55	55	60
	L2	90	100	120	140	160	180	200	220	250
	N2	195	225	265	305	350	400	445	495	560
	N3	50	76	91	104	115	130	140	160	182
	P2	12	14	18	20	25	28	28	32	36
	Q2	43	53.5	64	74.5	95	106	116	132	148
	S2	8xM8	8xM10	8xM10	8xM12	8xM16	12xM16	12xM20	12xM20	12xM20
	V2	20°	20°	25°	30°	25°	25°	25°	25°	30°
	W2	22.5°	22.5°	22.5°	22.5°	22.5°	15°	15°	15°	15°
	Z2	M12x30	M16x40	M20x50	M20x50	M24x60	M24x60	M30x75	M30x75	M36x90

Dimensions of the lantern.

Dimensions		A4	B4	E4	F4	I4	K4	S4
Type	Lantern	Mounting dimensions.						
2S-40	IEC-080	200	130	165	4	52	12	4xM10
	IEC-090	200	130	165	4	52	12	4xM10
	IEC-100	250	180	215	5	65	15	4xM12
	IEC-112	250	180	215	5	65	15	4xM12
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