



Servo reducers 2S-R90

AKIM gear technology – Swiss Made.

Servo reducers 2S-R90

A high dynamic and very precise cycloid gear that can be combined with almost all AC and DC servomotors. The motor- gear shaft connection is done with a torsionally rigid and flexible clamp coupling. The ratios of 13 : 1 to 100 : 1 achievable in single stage, are all integer and mathematic precise. In the servo mode, drive speeds of up to 5'000 min⁻¹ are permissible.

What really sets AKIM Servo reducers apart from others is.

- Minimum backlash < 1 min can be adjusted to “backlash-free”
- Minimum mass moment of inertia through ingenious construction
- Maximum position accuracy
- Maximum efficiency through special toothed system
- Maximum overload safety
- High torsional rigidity through compact design
- High concentricity
- High ratio range through optimal utilization of space
- High level of quietness during operation
- High input speeds

General informations.

- Makes use of all the advantages of the toothed system for driving
- Low backlash: The backlash can be adjusted to “backlash free” from outside with the machine is running
- With its special toothed system and highly precise, solid bearings and components operates with low noise and very quietly even at speeds over 5'000 min⁻¹
- Gear ratios greater than 100 : 1 require a two stage reducer and are available on request
- Achieve efficiencies of well over 90%
- Very good starting up performance with low motor torques via initial breakaway torque up to 72%
- With its high precision standard has excellent concentricity and constant true-running
- Excellent weight / performance ratio
- The compact design and the optimally dimensioned bearings result in high overload safety and torsional rigidity
- Used for servo applications where maximum accelerations and decelerations are required and maximum position accuracy is one of the specifications of the drive unit
- Lifetime lubricated
- No oil fittings
- Maintenance free

Standard program.

Type	2S-R90/00	2S-R90/0	2S-R90/1	2S-R90/2	2S-R90/3	2S-R90/4
Reduction ratio	14 19 24 29 36 48 60 75	13 16 19 24 30 32 38 48 65 *78 *100	17 21 26 36 45 55 66 73 *97	14 21 26 36 45 55 62 70 80 90	14 21 26 36 45 55 62 70 80 90 100	16 21 26 36 45 55 62 70 80 90 100
Nominal torque. T ₂ [Nm]	80	150	400	1000	2000	4000
**Max. torque T _{2m} [Nm]	120	220	600	1500	3000	6000
Mass moment of inertia [kgcm ²] type C2, C7, C8	0.007	0.06	0.19	0.58	0.95	2.25
Mass moment of inertia [kgcm ²] type C9	0.12	0.4	1.3	3.7	7.90	12.85
** (1% ED)	* Operation with reduced torque only					

Detailed technical documentation is available on our website www.akim.ch.