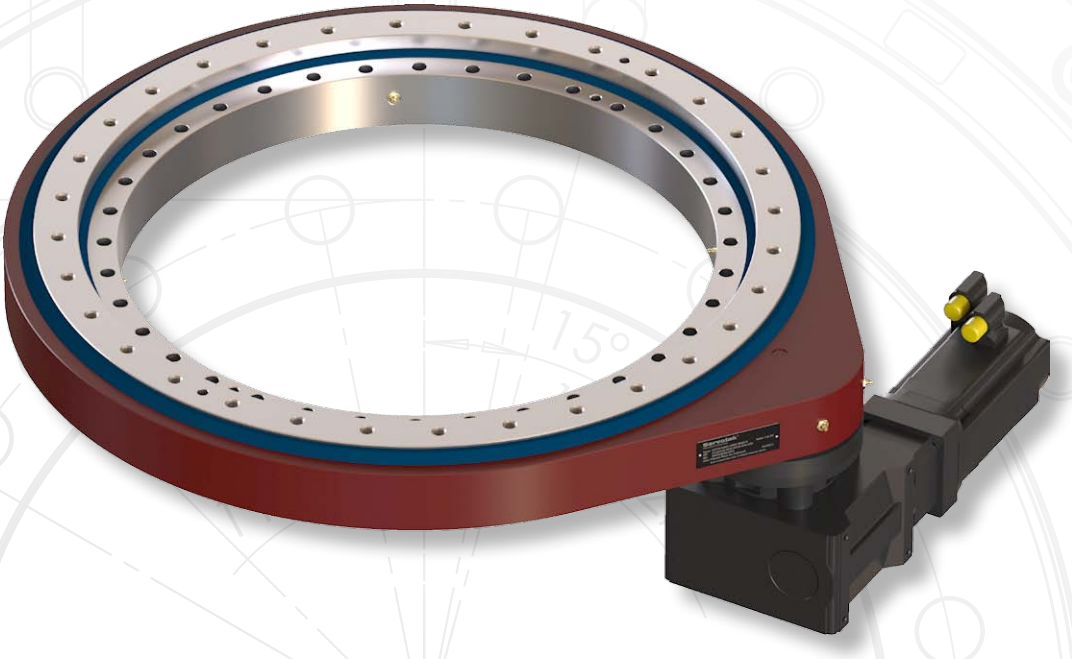
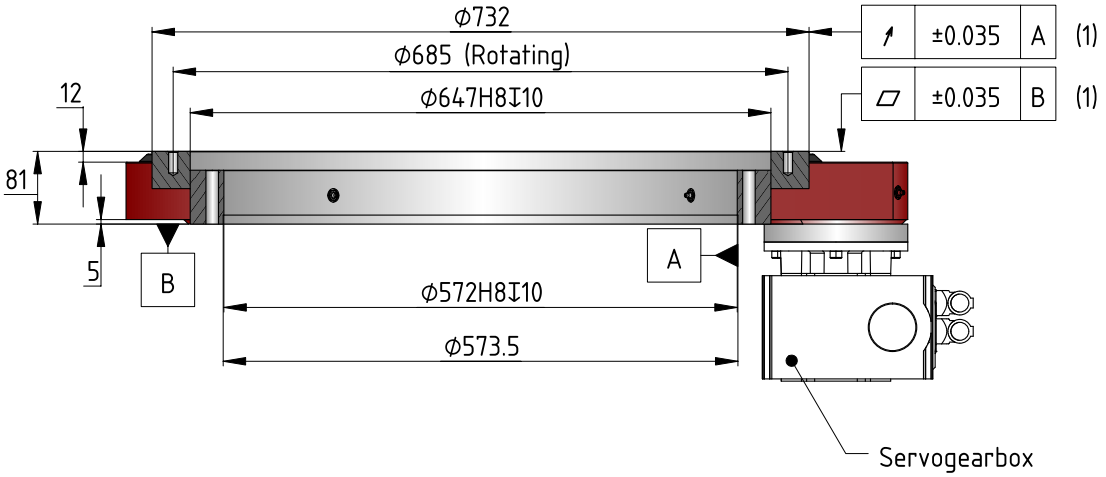
Servotak®
PRECISION GEARBOXES

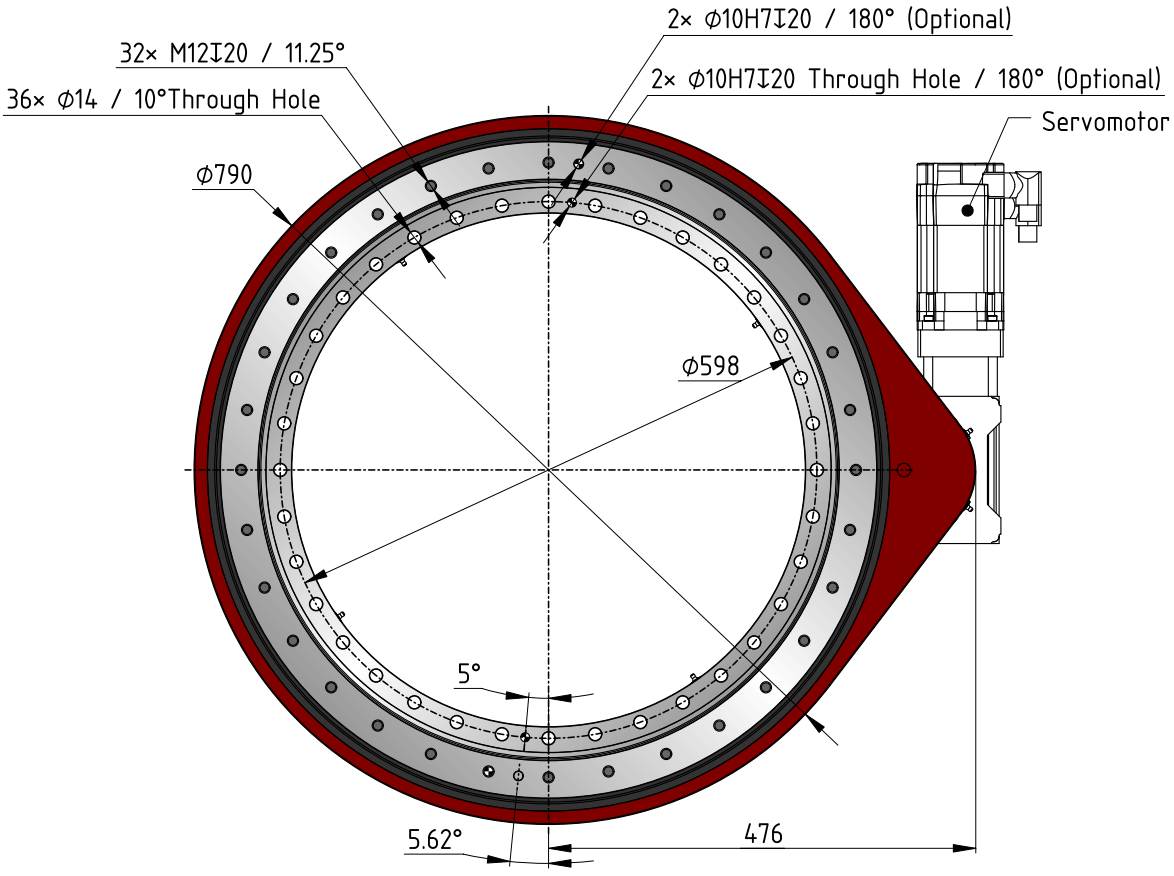


SRT-M-0685-1M

SRT-M-0685-1M

Dimensions





(1) Values valid while supported by a precision machined surface on a support structure with sufficient stiffness.
Subject to technical improvements without prior notice.

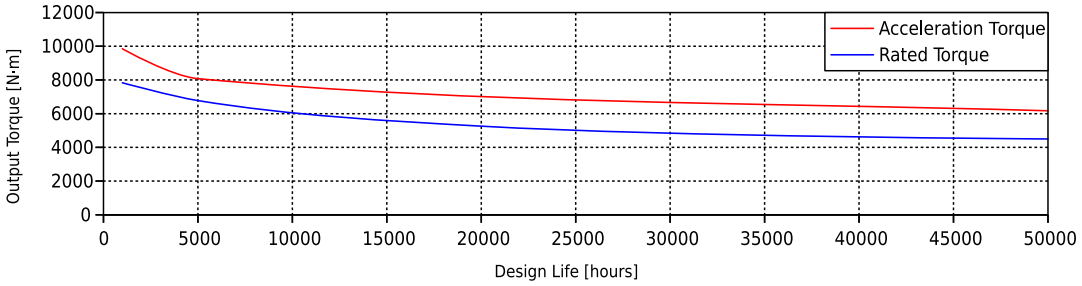
SRT-M-0685-1M

Technical Data

Transmission		Standard Precision (P2)	High Precision (P1)
Turning Direction		Programmable, reversible	
Internal Ratio		12.2:1	12.2:1
Backlash	arcmin	≤1.5	≤0.9
Moment of Inertia	$kg \cdot m^2$	0.074	0.074
Efficiency (1)	%	89	92
Operating Temperature	°C	-15 to +50	-15 to +50
Mass (without Gearmotor)	kg	75	75

(1) This value remains constant and is independent of output torque and input speed.

Output Torque Capacity as per DIN-3990



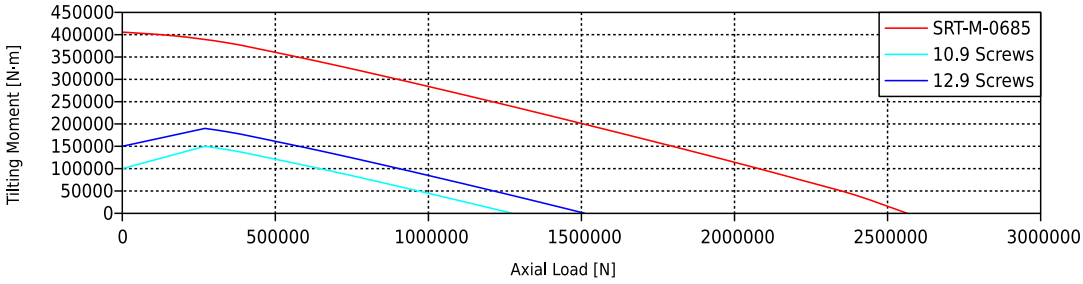
Curves for Standard Precision (P2) SRT actuators.

Gearbox	Total Transmission Ratio
SVS (Right Angle)	91:1 to 1220:1
MQ (Right Angle)	61:1 to 1000:1
MA (Right Angle)	48:1 to 4758:1
SG (Coaxial)	36:1 to 12200:1

Bearing Load Capacity		
Basic Static Axial Load Rating C_{0a} (1)	N	1778940
Basic Dynamic Axial Load Capacity C_a (2)	N	244173
Basic Static Radial Load Capacity C_{0r} (1)	N	816276
Basic Dynamic Radial Load Capacity C_r (2)	N	240809

(1) Values calculated as per ISO-76 and ISO/TR-10657.
(2) Values calculated as per ISO-281 and ISO/TR-1281-1.

Bearing Load Capacity



Limiting Load Diagram calculated with a Static Safety Factor SF=1. Values calculated at the bearing raceway, for a supported axial load. Support structure must be sufficiently rigid, and must be machined and level. The operating load point must be under the curve, and a service factor depending on machine type and desired service life must be applied.