
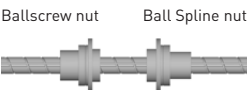
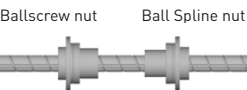
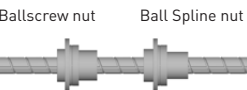
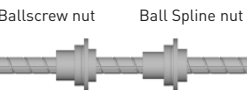
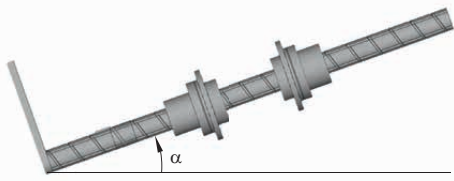
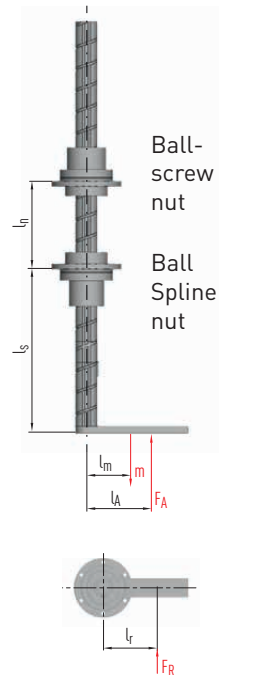


# Project Planning Sheet

## Ball Spline

Customer data	
Company:	Contact person:
	Department:
	Phone:
Project:	Fax:
	Email:

System parameters	
Feature	Option
Specification:	<input type="checkbox"/> SP16 <input type="checkbox"/> SP20 <input type="checkbox"/> SP25 <input type="checkbox"/> SP32
Type:	<input type="checkbox"/> FB 
Shaft Type:	<input type="checkbox"/> Solid Shaft <input type="checkbox"/> Hollow Shaft
Shaft Accuracy:	<b>FB</b> <input type="checkbox"/> H (high)
Flange direction:	<div style="display: flex; justify-content: space-between;"> <div style="width: 22%;"> <input type="checkbox"/> A              Flange of Ball Spline nut and Ballscrew nut point inwards         </div> <div style="width: 22%;"> <input type="checkbox"/> B              Flange of Ball Spline nut and Ballscrew nut point outwards to the respective spindle end         </div> <div style="width: 22%;"> <input type="checkbox"/> C              Flange of Ball Spline nut and Ballscrew nut point to the screw end of the threaded side         </div> <div style="width: 22%;"> <input type="checkbox"/> D              Flange of ball spline nut and ballscrew nut point to the spindle end of the longitudinal groove side/ball spline side         </div> </div>
Total length of the shaft:	$l$ [mm]
Groove length:	$l_1$ [mm]
Thread length:	$l_2$ [mm]
Moved mass:	$m$ [kg]
Distance to center of mass:	$l_m$ [mm]
Initial position:	$l_s$ [mm]
Distance of the nuts:	$l_n$ [mm]
Installation position:	$\alpha = 0^\circ$ (horizontal) $\alpha = 90^\circ$ (vertical) $\alpha = \underline{\hspace{2cm}}$ 
	

# Project Planning Sheet

## Ball Spline

<b>Lubrication</b>		<b>Operating temperature</b>	
Oil <input type="checkbox"/>		min. _____ °C	max. _____ °C
Grease <input type="checkbox"/>		<b>Special operating conditions</b> (e.g. dust, fluids, vibrations)	

<b>Cycle data</b>								
Phases	Type of movement & direction	Axial load		Radial load		Time [s]	Rotation angle [°]	Stroke path [mm]
		Force	Lever arm	Force	Lever arm			
		(+/-) F <sub>A</sub> [N]	L <sub>A</sub> [mm]	(+/-) F <sub>R</sub> [N]	L <sub>R</sub> [mm]			
1								
2								
3								
4								
5								
6								
7								
8								
9								

<b>Overview: Possible types of movement and directions</b>			
Type of movement	Stroke movement	Rotation	Stroke & Rotation (Screw movement)
Direction of movement	Option 1: Stroke upwards Option 2: Stroke downwards	Option 1: Rotation right Option 2: Rotation left	Option 1: Stroke upwards + Rotation right Option 2: Stroke downwards + Rotation left
	<p>Ball-screw nut Ball Spline nut</p>	<p>Ball-screw nut Ball Spline nut</p>	<p>Ball-screw nut Ball Spline nut</p>

<b>Operation time</b>		<b>Required lifetime</b>	
Cycles/hour [z/h] = _____	1-shift-operating <input type="checkbox"/>	Cycles [z]	L <sub>z</sub> = _____
Working days/year [d/y] = _____	2-shift-operating <input type="checkbox"/>	Kilometers [km]	L <sub>km</sub> = _____
	3-shift-operating <input type="checkbox"/>	Years [y]	L <sub>y</sub> = _____

**Other notes**