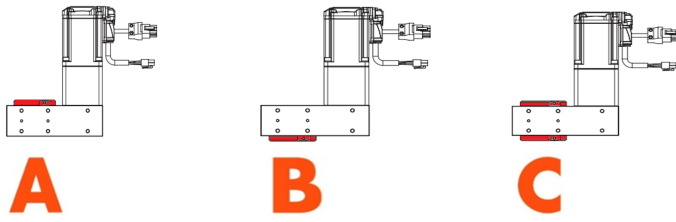
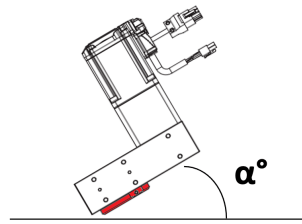


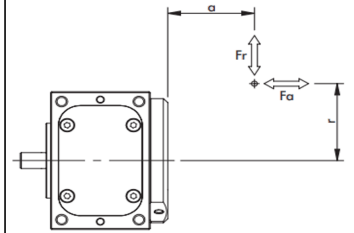
Rotating flange mounting position



Actuator mounting position



Load diagram



Rotating flange mounting position



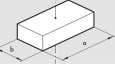
Actuator mounting position α from 0° to 90°

Phase No.

Rotation angle (° deg) + clockwise (CW) - counterclockwise (CCW)

Time (s)

Moment of inertia J with respect to the axis of rotation (kg • m²)

MOMENTS OF INERTIA FOR THE MOST COMMON SHAPES					
	Denomination	Unit of measurement	Formula	Example	
			Disco		
M	Disk mass	kg		7	
d	Disk diameter	m		0.3	
J	Moment of inertia of the disk	kg m²		$= \frac{M d^2}{8}$	$= \frac{7 \cdot 0.3^2}{8} = 0.0787$
				Mass distant from rotation axis	
M	Mass	kg		0.5	
R	Distance between barycenter and rotation axis	m		0.2	
J	Moment of inertia of the mass	kg m²		$= M R^2$	$= 0.5 \times 0.2^2 = 0.02$
				Parallelepiped with barycenter on rotation axis	
M	Mass	kg		10	
L	Sides a and b of the parallelepiped	m		$a = 0.4; b = 0.3$	
J	Moment of inertia of the mass	kg m²		$= M \cdot \frac{1}{12} (a^2 + b^2)$	$= \frac{10 \cdot (0.4^2 + 0.3^2)}{12} = 0.21$

EXTERNAL FORCE (N) (e.g. force of a cylinder/spring to be resisted)

Fa										
Fr										

POSITION OF EXTERNAL FORCE APPLICATION POINT (MM)

a										
r										

Resistant torque (Nm)

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Any space limitations

Should the axis work "in position" (e.g., reach a defined angle, counteracting external torques), or "in torque" (e.g., push with controlled torque against contrast in an undefined position)?

A feedback control is needed.

No. of hours/day worked (h/d)

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ENVIRONMENTAL CONDITIONS

Temperature °C / Humidity	
Severity of environment use presence of dust, processing chips, etc.	

Need for rotating flange stopped with motor not powered

Motor	<input type="checkbox"/> Metal Work <input type="checkbox"/> Client <input type="checkbox"/> To be evaluated (produce both solutions)
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ACCESSORIES

V-Lock Adapter	
Motor cable length	

Available supply voltage

The control will be done with:	<input type="checkbox"/> PLC with step-dir board and "Line Driver" signals <input type="checkbox"/> PLC with step-dir board and "Open Collector" signals <input type="checkbox"/> PLC with brushless axis board <input type="checkbox"/> There is no PLC
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Short description, notes and draw of the possible application:

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