

EPL681

Linkage Configuration for Part-Turn Actuators

General description

EPL681 is a piece of software used to determine the geometric conditions in linkage rods of rotary actuators. Force or torque for damper actuation depends not only on the actuator, but also on the angle configurations in the linkage rods (damper lever, actuator lever, coupling rod).

Provide the relevant data in the questionnaire where required and you will receive detailed information from ABB regarding:

- Resulting length of the coupling rod
- Effective control element on the final control element within the operating range
- Axial force in the coupling rod
- Angular position of the final control element lever depending on the angular position of the actuator lever

The values are presented in graphic and table form.

System data

System data

Date:	Return calculation to:	Phone:
		Email:
Operator:	Appendix:	
Site:	System part	
Application:	CCP:	

Setup of actuator and final control element

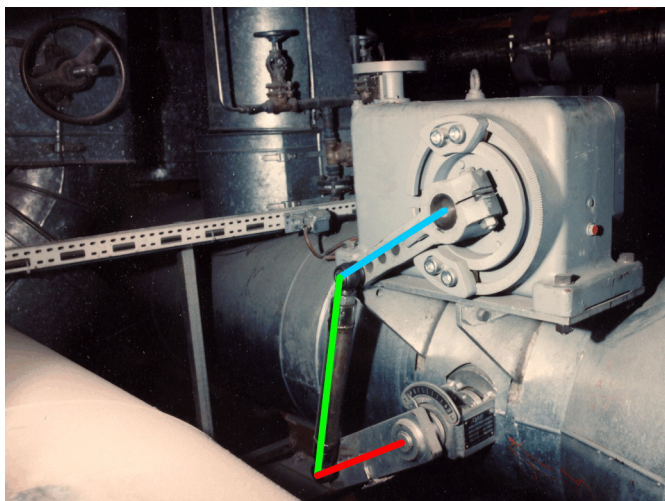


Figure 1: Reference setup

Obtain all input data from the reference setup in Figure 1 and the drawing Figure 2 below.

Note the correct signs (positive or negative).

Step 1: Specify the horizontal and vertical pivot point distance including unit

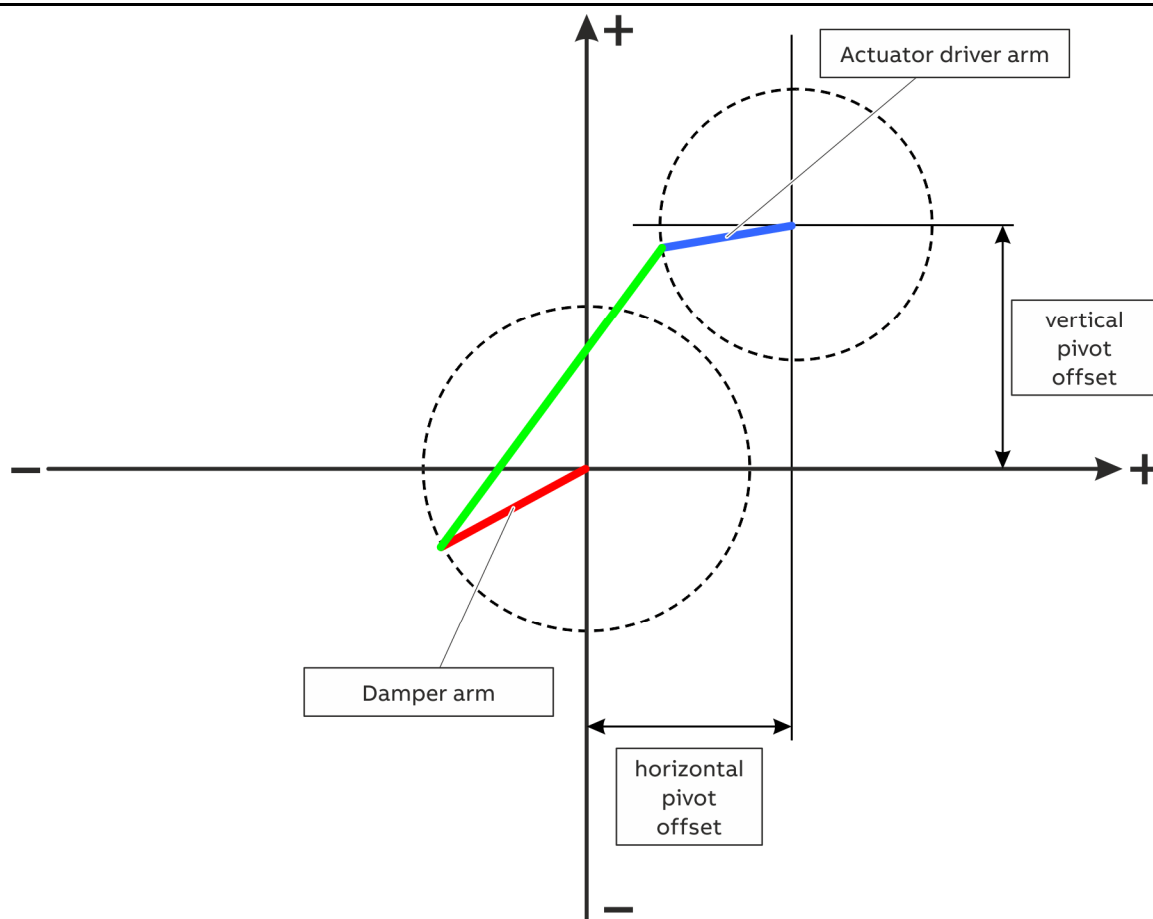


Figure 2: General setup of the final control element and actuator pivot point

Vertical pivot point distance:

Horizontal pivot point distance:

Step 2: Provide the system data including units

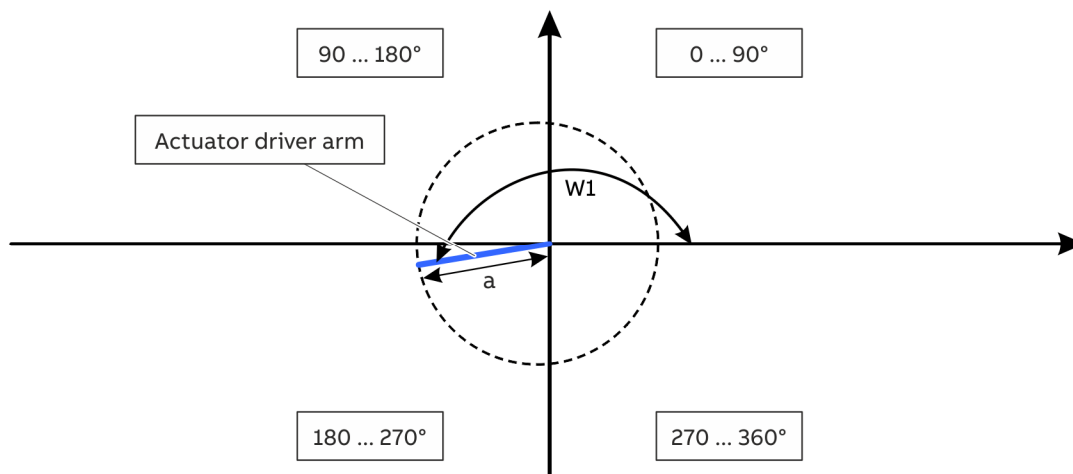


Figure 3: Schematic diagram of the actuator lever

Start angle of the actuator lever (w1):

Length of the actuator level (a):

Actuator torque:

Rotation direction of the actuator lever (CW / CCW):

Step 3: Provide the final control element data including units

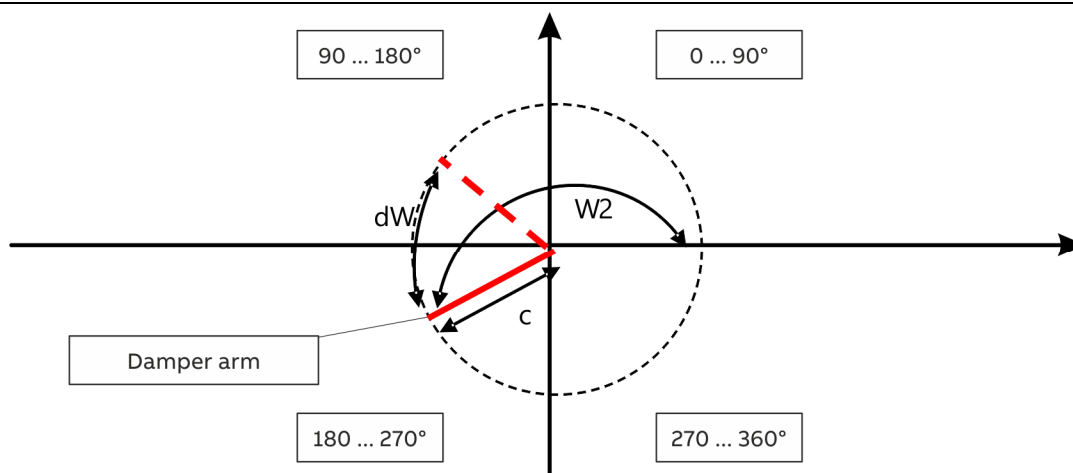


Figure 4: Schematic diagram of the final control element lever

Start angle of the actuator lever (w_2):

Operating angle of the final control element lever (dW):

Length of the final control element lever (c):

Limit value for the final control element
