

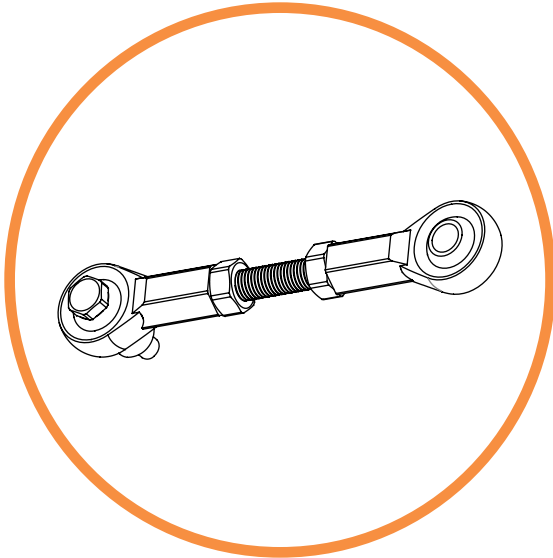


## **BALL END TETHER**

M9230-03/XXX

### Introduction

This ball end tether kit is suitable for use with Hazardous Area encoders. One end attaches to a threaded M6 hole in the side or bottom of the encoder body with a spacer between the tether and the body of the encoder (M6 screw and spacer included); while the other end is secured using threaded stock, nuts and washers, (not included).



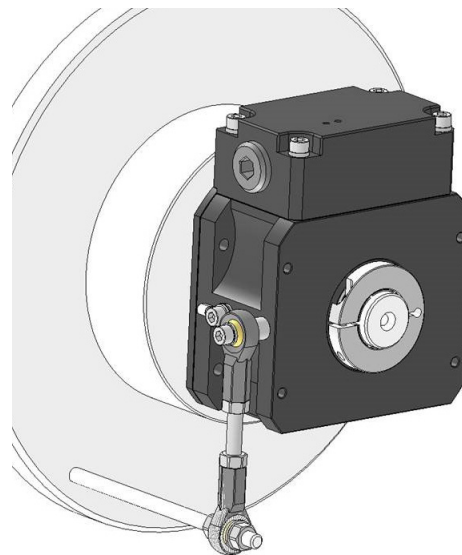
### Part No.

- M9230-03/xxx, where xxx = length between centers in millimeters

### Features

- Swiveling ball ends compensate for movement due to shaft runout and axial motion while keeping the body of the encoder from rotating
- The threaded rod and locknuts make this tether somewhat adjustable in length, making it useful for a wider range of applications
- Maximum misalignments are as shown in the drawings and the table
- Typical installations are shown below

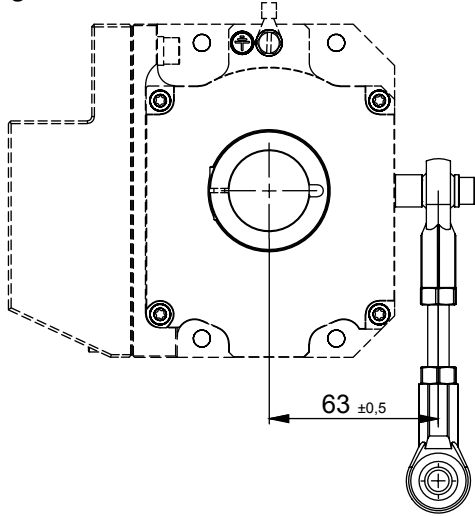
Perpendicularity	Axial Misalignment
3 ° on 60mm radius	+/-10 ° maximum either direction
15 ° on a 85mm radius	



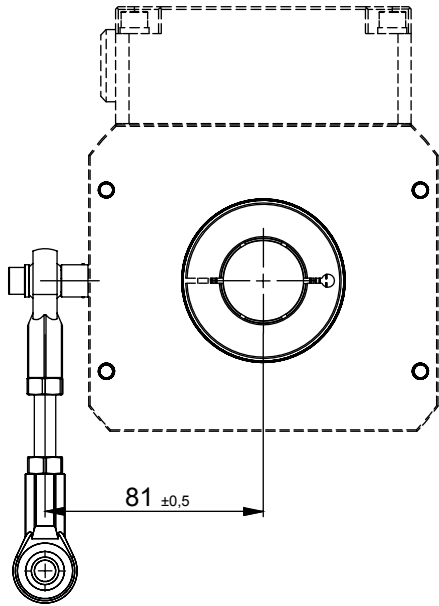


# DIMENSIONS

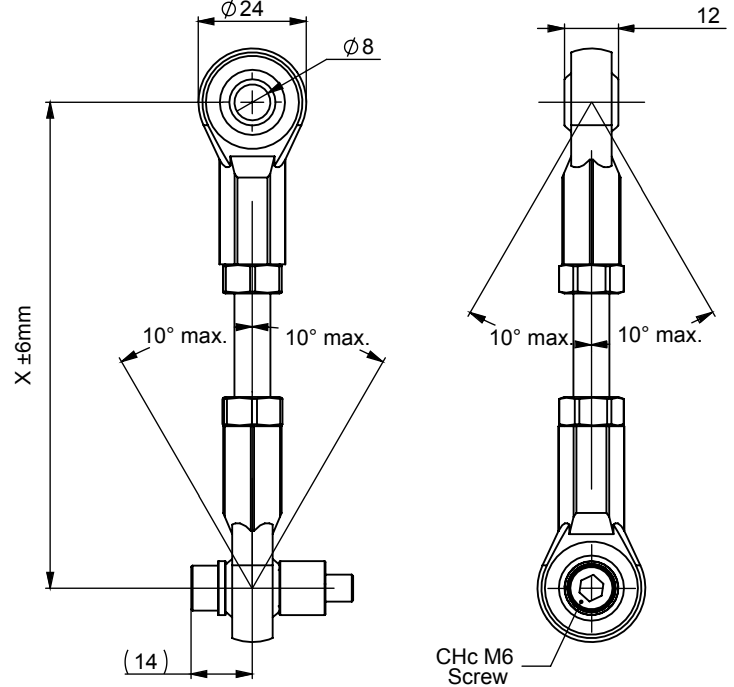
## M9230-03/xxx mounting example on HHUX and LP35-HC with through shaft



## M9230-03/xxx mounting example on MAUX



Tether Length, X:  
90mm minimum, 500mm maximum  
(20mm increments typical)



To calculate the tether length, X in mm, that you need:

For HHUX or LP35:  $X = \sqrt{Y^2 - A^2}$

A = 63mm tether distance at encoder

Y = Center distance to tether hole in mm (110mm min.)

For MAUX:  $X = \sqrt{Y^2 - A^2}$

A = 81mm tether distance at encoder

Y = Center distance to tether hole in mm (121mm min.)

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