

Conex-LDS Beam Diameter Reducer

In some applications, where the mirror diameter is smaller than Conex-LDS beam diameter, the reflected beam returned to the Conex-LDS is affected by the mirror edge diffraction, which may generate measurement errors, when the mirror moves in the beam. Mounting a diaphragm / aperture as close to the autocollimator output as possible, will help to reduce output beam diameter compared to mirror diameter, thus minimize these measurement errors.

The LT10-05 lens tube shown below can be used for this purpose: one end directly screws onto Conex-LDS output thread, while the other end is modified to fit the diaphragm used.



Notes:

- Reducing the beam diameter affects signal to noise ratio, as well as decreases measurement range relative to distance.
- It is not recommended to use a diaphragm diameter smaller than 10 mm