



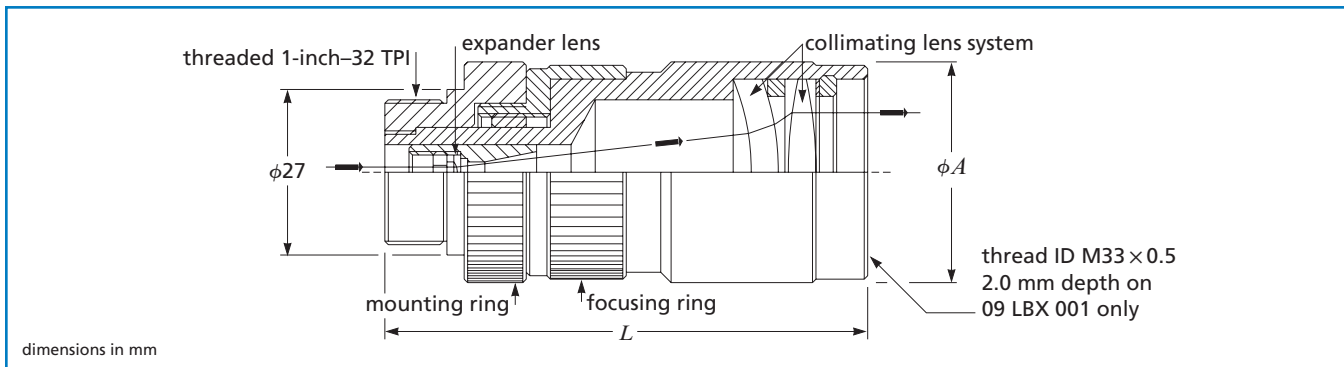
Standard Laser Beam Expanders

Many applications of helium neon and other visible lasers require the beam to be expanded for uniform illumination of a large area. CVI Melles Griot has developed a cost-effective range of beam expanders which are guaranteed to produce 1λ or less of peak-to-peak wavefront distortion.

- Cost effective and ideal for illuminating a large area
- Designed for broadband applications from 450 to 750 nm
- Expansion ratios to $20\times$ with 1λ (peak to peak) or less wavefront distortion
- Far-field focusing adjustable from 3 m to infinity
- Direct mounting onto any CVI Melles Griot 44.5-mm-diameter cylindrical helium neon laser head with 4-40 on a 36-mm bolt pattern
- Adaptor ring product number 09 LAR 701 included

SPECIFICATIONS: Standard Laser Beam Expanders

Wavelength Range	450–750 nm
Recommended Maximum Input Beam Diameter ($1/e^2$)	1.0 mm
Input Aperture	2.5-mm diameter
Wavefront Distortion	$<1\lambda$ (p-p) at 632.8 nm
Transmission	$>95\%$
Coating	(HEBBAR™ /078) HE-415-700
Housing Material	Black-anodized aluminum
Mounting	1 inch-32 TPI



09 LBX standard laser beam expanders (09 LAR 701 adaptor ring included)

Standard Laser Beam Expanders

Expansion Ratio	Exit Aperture (mm)	Minimum Focus Distance (m)	Diameter ϕA (mm)	Length L (mm)	PART NUMBER
5 ×	5.0	3.0	38	50	09 LBX 001
10 ×	10.0	3.0	39	83	09 LBX 003
20 ×	20.0	3.0	47	136	09 LBX 005