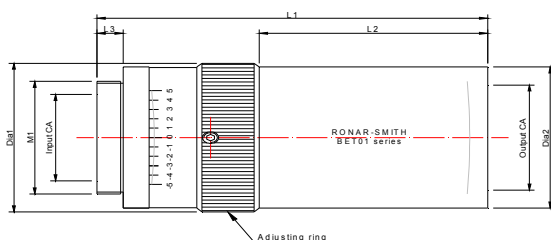


# CO<sub>2</sub> Beam Expander

UniBET series Beam expander is developed for higher power CO<sub>2</sub> laser >100w without water cool. With consistence in outer dimension and connecting thread M30x1, UniBET series provide customer convenience and wide range of fixed magnification of 1.5x-10x.



Specifications
For collimation of CO <sub>2</sub> laser >100W
Fixed magnifications 1.5x - 10x
Galilei Design
Adjustable divergence

## UniBET Series - CO<sub>2</sub> Beam Expander 10.6μm

Part No.	Magnification	Input CA (mm)	Output CA (mm)	Outer Dia (mm)	Length (mm)
BET0101.5	1.5x	20.0	28.0	39.6	75.2
BET0102A	2.0x	20.0	28.0	39.6	75.0
BET0102.5	2.5x	20.0	28.0	39.6	75.6
BET0103A	3.0x	20.0	28.0	39.6	75.0
BET0104A	4.0x	20.0	28.0	39.6	75.0
BET0105A	5.0x	20.0	28.0	39.6	75.0
BET0106A	6.0x	20.0	28.0	39.6	75.0
BET0107A	7.0x	20.0	28.0	39.6	78.5
BET0108A	8.0x	20.0	28.0	39.6	75.0
BET0110A	10.0x	20.0	28.0	39.6	85.0



NOTE: Water-Cooled Beam Expander is available upon request.

## MiniBET Series - CO<sub>2</sub> Beam Expander 10.6μm

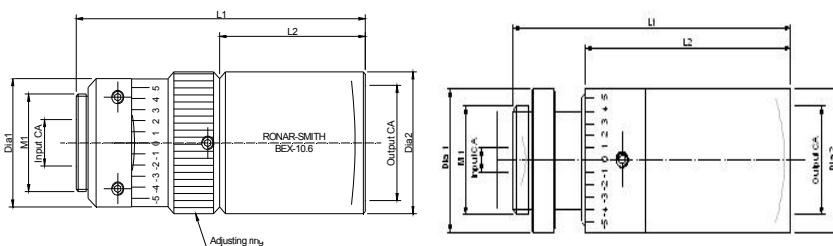
MiniBET series have the same external diameter of 20mm, thread M16x0.75 and it is widely applied in compact CO<sub>2</sub> laser system.



Part No.	Magnification	Input CA (mm)	Output CA (mm)	Outer Dia (mm)	Length (mm)
BEX-10.6-1.5Z	1.5x	12.0	14.0	20.0	44.1
BEX-10.6-2Z4	2.0x	10.0	15.0	20.0	51.0
BEX-10.6-2.5Z	2.5x	10.0	15.0	20.0	56.0
BEX-10.6-2.5Z1	2.5x	10.0	16.0	20.0	32.5
BEX-10.6-3Z1	3.0x	10.0	16.0	20.0	61.0
BEX-10.6-3H	3.0x	10.0	15.0	20.0	61.0
BEX-10.6-3A1	3.0x	10.0	15.0	20.0	59.0
BEX-10.6-3.3Z1	3.3x	10.0	15.0	20.0	69.0
BEX-10.6-3Z3T	3.0x	10.0	16.0	20.0	37.0
BEX-10.6-4Z	4.0x	10.0	16.0	20.0	55.0
BEX-10.6-5Z	5.0x	10.0	16.0	20.0	58.0
BEX-10.6-5Zi	5.0x	11.0	16.0	20.0	60.7
BEX-10.6-6Z2	6.0x	10.0	15.0	20.0	60.0

## ZnSe BEX Series — Adjustable BEX 10.6/9.4μm

This series of beam expander has advantage as the internal lenses will only move along the optical axis without rotation. Adjustable ring with scales makes it more convenient for user's operation. It has common connecting thread of M24x0.5, M33x0.5, M16x0.75, M22x0.75, M30x1



### Specifications

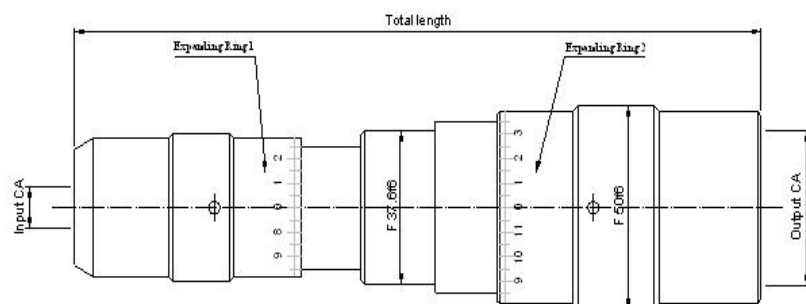
- For collimation of laser
- Fixed magnifications 1x-50x
- Adjustable divergence
- Galilei Design

Part No.	Magnification	Input CA (mm)	Output CA (mm)	Thread	Outer Dia (mm)	Length (mm)	Wavelength
BEX-10.6-2Z1i	2.0x	10.0	22.0	M22x0.75	32.0	50.0	10.6μm
BEX-10.6-2Z3i	2.0x	15.0	28.0	M22x0.75	36.0	48.1	10.6μm
BEX-10.6-2.5Z2i	2.5x	16.0	21.0	M22x0.75	28.0	57.4	10.6μm
BEX-10.6-3Z2i	3.0x	10.0	20.0	M22x0.75	28.0	61.0	10.6μm
BEX-10.6-3Z5i	3.0x	16.0	36.0	M22x0.75	44.0	75.5	10.6μm

Part No.	Magnification	Input CA (mm)	Output CA (mm)	Thread	Outer Dia (mm)	Length (mm)	Wavelength
BEX-10.6-3Z6i	3.0x	15.5	28.0	M22x0.75	36.0	60.0	10.6 $\mu$ m
BEX-10.6-4Z1i	4.0x	10.0	20.0	M22x0.75	28.0	71.0	10.6 $\mu$ m
BEX-10.6-4Z2i	4.0x	15.0	28.0	M22x0.75	36.0	67.3	10.6 $\mu$ m
BEX-10.6-5Z1i	5.0x	13.0	23.0	M22x0.75	30.0	70.0	10.6 $\mu$ m
BEX-10.6-6Zi	6.0x	11.0	26.0	M22x0.75	32.0	76.0	10.6 $\mu$ m
BEX-10.6-6Z1i	6.0x	11.0	36.0	M22x0.75	44.0	75.0	10.6 $\mu$ m
BEX-10.6-8Z1	8.0x	13.0	33.0	M22x0.75	44.0	121.7	10.6 $\mu$ m
BEX-10.6-8Z2	8.0x	10.5	23.4	M22x0.75	30.0	64.8	10.6 $\mu$ m
BEX-10.6-10Z1i	10.0x	10.0	36.0	M22x0.75	44.0	125.0	10.6 $\mu$ m
BEX-9.4-2X	2.0x	16.5	23.0	M22x0.75	28.0	59.0	9.4 $\mu$ m
BEX-9.4-2.5X	2.5x	13.0	21.0	M22x0.75	28.0	59.0	9.4 $\mu$ m
BEX-9.4-3X1	3.0x	10.0	22.0	M22x0.75	28.0	71.0	9.4 $\mu$ m
BEX-9.4-3X2	3.0x	18.0	30.0	M33x0.75	40.0	69.8	9.4 $\mu$ m

## ZnSe BXZ Series—CO<sub>2</sub> Zoom Beam Expander 10.6/9.4 $\mu$ m

BXZ series zoom expander with manual zoom and motorized variable zoom covering wavelengths from UV to the IR. ZOOM Beam expanders have been designed for use with various magnification.



Part No.	Magnification	Input CA (mm)	Output CA (mm)	Type	Length (mm)	Wavelength
BXZ-10.6-1-4XA	1x-4x	18.0	48.0	Manual	133.9	10.6 $\mu$ m
BXZ-10.6-2-6XA	2x-6x	18.0	28.0	Manual	213.0	10.6 $\mu$ m
BXZ-10.6-2-8X-MOT	2x-8x	10.0	30.0	Motorized	190.0	10.6 $\mu$ m
BXZ-10.6-2-8X	2x-8x	10.0	36.0	Manual	182.0	10.6 $\mu$ m
BXZ-9.4-2-8X	2x-8x	10.0	36.0	Manual	172.0	9.4 $\mu$ m



\*Motorized Zoom Expander: BXZ-MOT  
 - Operating Voltage 12V  
 - Connecting Type RS232