Starrett®

Precision, Quality, Innovation

METROLOGY SYSTEMS

THE VB300 & VB400
BENCHTOP OPTICAL COMPARATORS

Optical Comparators

Readouts

Software

VB300

The VB300 is another optical comparator with the Starrett trademark formula: high performance at a low cost. This vertical bench top comparator is designed to meet the demands of modern industry and is ideal for the rapid inspection of small light-weight components, stampings, plastic molding, electronic components, small turned parts and more. The VB300 features a variety of digital displays making the VB300 easy to use and has the power to satisfy the most complex of measuring requirements.

FEATURES AND SPECIFICATIONS

- All metal construction for optimum performance
- 12" (300mm) diameter screen with overlay clips
- Linear encoder (glass scale) with 4µin (0.1µm) resolution on both X and Y axes
- Stage weight capacity: 11lbs (5kg) (evenly distributed)
- LED profile and surface illumination
- Screen driven Q-axis
- Quick release mechanism on X-axis and Y-axis
- Available with a simple integrated LED readout display or choice of the new MetLogix™ M1 tablet, M2 all-in-one touchscreen PC, or Mx-Series digital readout systems

OPTIONS

- Choice of four fixed magnification lenses including 10x, 20x, 25x and 50x
- Canopy and curtains- free standing design
- Purpose built cabinet stand
- Work holding accessories

OPERATOR INTERFACE- VB300

Feature	Integral LED readout	MetLogix™ M1	M2	Mx100	Mx200
Angular digital measurement in readout	✓	–	–	–	✓
Mounted to comparator arm	–	✓	✓	✓	✓
Color graphics	–	✓	✓	✓	✓
Touch screen operation	–	✓	✓	✓	✓
Operating system	–	Android™	Windows®	MLX Android™	MLX Android™
X-Y-Q axis digital readout	✓	✓	✓	✓	✓
2D geometry software with skew	–	✓	✓	–	✓
Optical edge detection option	–	✓	✓	–	✓
Software developer	–	MetLogix™	MetLogix™	MetLogix™	MetLogix™

SPECIFICATIONS

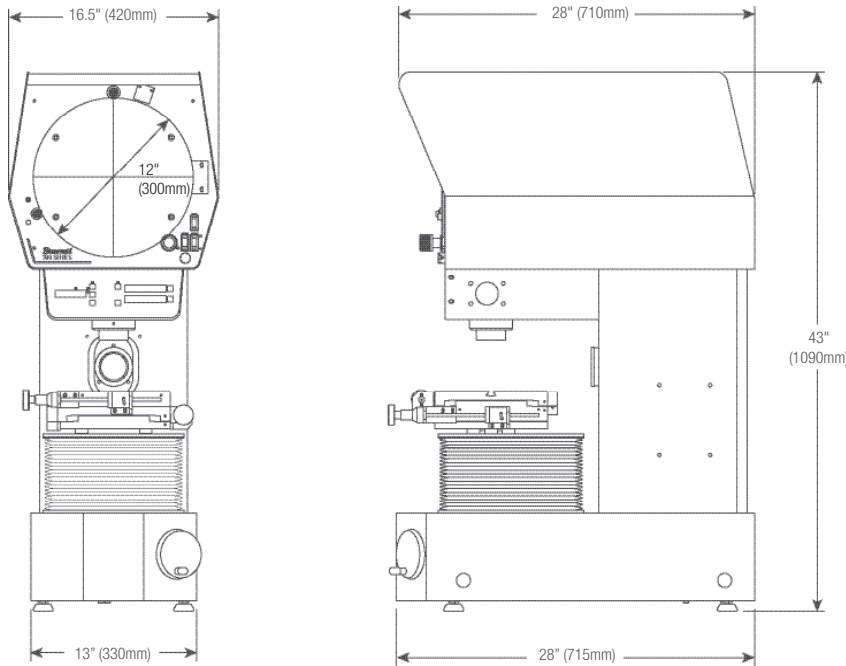|	VB300
Horizontal Travel	4" (100mm)
Vertical Travel	4" (100mm)
Focus Travel	3.5" (90mm)
Top Plate*	9" x 9" (225mm x 225mm)
Glass Insert	6" x 6" (150mm x 150mm)
Image	Reversed

*With machined slot for easy fixturing

WEIGHT AND DIMENSIONS

	VB300
Net Weight	423lbs / 192kg
Shipping Weight	443lbs / 201kg
Gross Dimensions (L x W x H)	44" x 33" x 52" (112cm x 84cm x 132cm)

Click the QR code to view the VB300

VB300 Dimensions

VB400

The VB400 Vertical Optical Comparator allows flat parts to be simply laid on a glass insert in the workstage. Features include a 16" (400mm) diameter vertical screen, ultra-bright LED profile and surface illumination, and linear encoder scales for 4µin (0.1µm) resolution.

FEATURES AND SPECIFICATIONS

- All metal construction
- 16" (400mm) diameter screen
- Collimating condenser with yellow/green filter and provision to mount further accessories
- Linear encoder (glass scale) with 4µin (0.1µm) resolution on both X and Y axes
- LED profile and surface illumination
- Digital protractor for accurate angle measurements (1' resolution) via Q-axis readout
- Available with MetLogix™ M1 tablet, M2 all-in-one touchscreen PC, or Mx-Series digital readout system
- Fine adjustment on all axes
- Quick release mechanism on the X-Y axes

OPTIONS

- Choice of five fixed magnification lenses including 10x, 20x, 25x, 31.25X , 50x and 100x
- Canopy and curtains- free standing design
- Purpose built cabinet stand
- Work holding accessories

OPERATOR INTERFACE- VB400

Feature	MetLogix™ M1	M2	Mx100	Mx200
Mounted to comparator arm	x	x	x	x
Color graphics	x	x	x	x
Touch screen operation	x	x	x	x
Operating system	Android™	Windows®	MLX Android™	MLX Android™
X-Y-Q axis digital readout	x	x	x	x
2D geometry software with skew	x	x	–	x
Optical edge detection option	x	x	–	x
Software developer	MetLogix™	MetLogix™	MetLogix™	MetLogix™

SPECIFICATIONS

	VB400
Horizontal Travel	8" (200mm)
Vertical Travel	4" (100mm)
Focus Travel	4" (100mm)
Top Plate*	16" x 9" (400mm x 230mm)
Glass Insert	9-1/4" x 5-1/2" (235mm x 140mm)
Image	Reversed

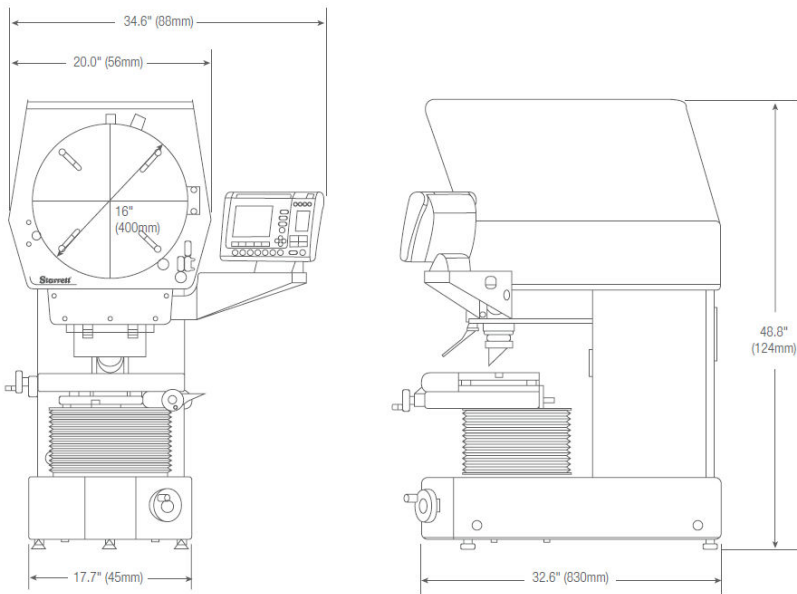*With machined slot for easy fixturing

WEIGHT AND DIMENSIONS

	VB400
Net Weight	423lbs / 192kg
Shipping Weight	443lbs / 201kg
Shipping Dimensions (L x W x H)	49" x 32" x 51" (125cm x 81cm x 130cm)

Click the QR code to view the VB400

VB400 Dimensions

Accessories

Starrett offers a full range of accessories and purpose-built cabinet stands designed for our optical comparator systems to ensure efficient system setup for a broad range of applications.
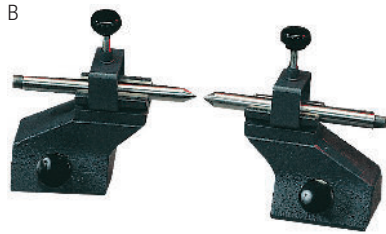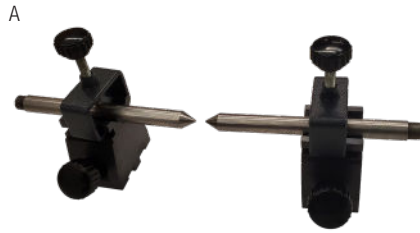
A
B
D
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C

Photo Key	Part No.	Description	For Models
A	9W001	Centers and Vees	VB300
B	6H000	Centers and Vees	VB400, VF600
C	8170 8171	31" Cabinet Stand 22" Cabinet Stand	HE400, HB400, HD400, VB300, VB400
D	8276	Canopy and Curtains	HE400, HB400, HD400, VB300, VB400
E	30Z110	10X Lens	VB300, VB400
F	30Z120**	20X Lens**	VB300, VB400
G	30Z125**	25X Lens**	VB300, VB400
H	30Z150**	50X Lens**	VB300, VB400
I	3V000	Helix Center Support Fixture	VB400
J	6U003	Rotary Work Stage	VB400, VF600

**Product not shown

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