VB400

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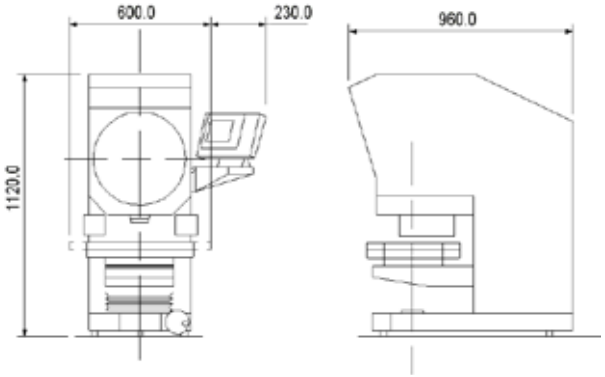

Vertical Bench Top Optical Projector

Having a large measuring capacity, the VB400 has the versatility to be at home in many differing working environments: ideal for high volume or low batch production or on routine component sampling, perfect for the general purpose tool room.

In fact the VB400 can be found wherever there is the need to verify and measure complex shapes, hole patterns etc., and where accuracy, ease of use and speed are of the essence.

Designed with unique surface illumination options, the VB400 can be configured to match exact measuring requirements.

- Rigid all metal construction.
- Fully usable 400mm (16”) diameter vertically mounted screen, with integral hood.
- Choice of standard or extra large workstage.
- Quick release table drive mechanism, for rapid table positioning.
- Fast traverse, quick release mechanism on X and Y axis
- Available with the full range of Quadra-Chek readout systems.
- Electronic digital protractor.
- Fibre Optic or Dual High Powered Fan Cooled Lamps.
- Comprehensive range of multi-element precision ground lenses.
- Large range of accessories available.

Technical Specification

Screen Diameter
400mm (16”) with precision cross lines and overlay clips.

Workstage
Top plate - 400 x 230mm (16 x 9”).
Glass insert - 240 x 140mm (9.25 x 5.5”).
Measuring Travel - 200mm x 100mm (8 x 4”).

Focus
100mm (4”).

Workstage Capacity
10kg (22lb) maximum.
(Evenly distributed).

Illumination
Profile - Fan cooled, halogen, switchable high/low intensity with yellow/green filter.
Surface - Fibre Optic or Dual High Powered Fan Cooled Lamps.

Measurement/display systems
Linear - 0.001mm resolution linear scales. Simple DRO or Quadra-Chek readout systems with edge sensing option.
Angle - Digital protractor (1 minute resolution).
Quadra-Chek Q-Axis

Lenses
x10, x20, x25, x 31 1/4, x50, x100.

Power Supply
110/120/230/240/250V.AC 50/60Hz.
Consumption 5A.

Starrett®

Precision Optical

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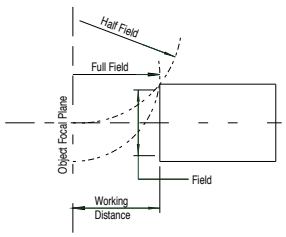
VB400 Specification:	SR121	SR221	SR221e	SR515	SR515 CNC
Rigid steel body	●	●	●	●	
Standard workstage 200 x 100mm travel	●	●	●	●	
Extended workstage 250 x 150mm travel	o	o	o	o	
Anti-corrosion nickel plated workstage top					
Rotary screen & clips	●	●	●	●	
Handwheel X and Y drive control	●	●	●	●	
Motorised joystick control					
CNC control					
Angular digital protractor					
Angular digital measurement in QC DRO	●	●	●	●	
X-Y axis only digital readout	●				
Geometric function digital readout		●	●		
Computer with geometric s/ware readout.				●	
On screen edge sensing			●	●	
Internal edge sensor					
Single interchangeable lens mount	●	●	●	●	
Dual lens slide					
Multi lens turret					
Fibre optic surface illumination	o	o	o	o	
Dual High Powered Fan Cooled Lamps	o	o	o	o	
Single condenser	●	●	●	●	
Dual condenser slide					
Multi condenser turret					
Yellow/green light filter	●	●	●	●	
Available lenses (See guide below)	o	o	o	o	
X5 magnification lens					
X31¼ magnification lens option	o	o	o	o	
Standard or deluxe support cabinet	o	o	o	o	
Canopy and curtains	o	o	o	o	
Work holding accessories	o	o	o	o	
Magnification checking graticule	o	o	o	o	
OV² Optical video adaptor	o	o	o	o	
Screen overlay templates	o	o	o	o	
Standard ● Optional o					

Guide to Maximum Component Size (mm)							
Magnification		**X5**	**X10**	**X20**	**X25**	**X50**	**X100**
Field of View		N/A	40	20	16	8	4
Working Distance		N/A	80	76	62	50	41
Max Work Diameter	Half Field	N/A	140	140	140	140	106
	Full Field	N/A	140	140	140	125	98
Projected Image		Fully Reversed					



Terminology:

Working Distance: *Is the distance between the objective lens and the component when the component is in focus.*

Field of View (FOV): *Is the viewing area of the component. A 30mm FOV using a 10x lens would produce a screen image of 300mm.*

Half Field View: *Is the maximum size a component can be projected to the centre of the screen before colliding with the lens.*

Full Field View: *Is the maximum size a component can be projected over the full screen before colliding with the lens.*

Projected Image: *Is how a component is projected onto the screen in relation to its placement on the workstage.*

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