

- Floor-standing projector with a vertical axis and a unique forward-sloping screen.
- The large 500 mm diameter screen enables the whole of a 100 mm diameter workpiece to be inspected using a 5X projection lens without needing to move the workpiece.

**PV-5110**  
**SERIES 304 — Profile Projectors**

- The sloping screen design enables the operator to maintain a comfortable operational posture for long periods of time while making comparative measurements or tracing a projected image.



PV-5110

**SPECIFICATIONS**

Model No.	<b>PV-5110</b>	
Order No.	<b>304-919</b> *1	
Projected image	Inverted-reversed	
Protractor screen	Effective diameter	ø508 mm (20 in)
	Screen rotation	±360° (±370° for display)
	Angle display	Digital counter (ABS/INC mode switching, Zero Set)
	Resolution	1' or 0.01° (switchable)
	Mechanism	Fine feed and clamp
	Cross-hairs	90° (solid lines)
Projection lens	Zero-base index	Built-in, With a LED back light
	Magnification	10X (standard accessory), 5X, 20X, 50X, 100X
Illumination	Contour illumination	Halogen bulb (24 V, 150 W, 500 hours) ( <b>512305</b> ), 2-step (High/Low) brightness switch, Combination use with a color filter available
	Surface illumination	Double-lighting oblique surface illumination unit (optional), Halogen bulb (24 V, 150 W, 500 hours) ( <b>512305</b> ), 2-step (High/Low) brightness switch
Resolution for X/Y counter*2	—	
Measuring unit	Digital scale	
Measuring range (X×Y)	200×100 mm (164×68 mm*3)	

\*1 To denote your AC power cable add the following suffixes to the order No.: A for UL/CSA, D for CEE, DC for CCC, E for BS, K for KC, C and No suffix is required for PSE.

\*2 X and Y counters are not built into the **PV-5110** main unit. If a counter display is required, it is recommended that a **QM-Data200** or **KA-212** is purchased separately.

\*3 The range where no shading is observed using a 5X projection lens with contour illumination.

- Standard models as used in the machine tool industry. Best for observation and measurement of cutting tools (end mills, lathe tools).
- The stage has a higher loading capacity (45 kg) than any other type of projector.

**PH-3515F**  
**SERIES 172 — Profile Projector**

- Unique projector employing horizontal optical system. The optical axis and the stage are parallel, and the workpiece can be easily removed.



PH-3515F

**SPECIFICATIONS**

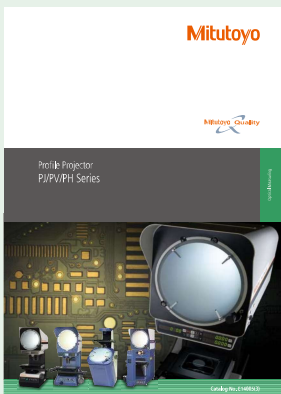
Model No.	<b>PH-3515F</b>	
Order No.	<b>172-868</b> *1	
Projected image	Erect-reversed	
Protractor screen	Effective diameter	ø353 mm (13.9 in)
	Screen rotation	±360° (±370° for display)
	Angle display	Digital counter (ABS/INC mode switching), Zero Set
	Resolution	1' or 0.01° (switchable)
	Mechanism	Fine feed and clamp
	Cross-hairs	90° (solid lines)
Projection lens	Zero-base index	Built-in, With a LED back light
	Magnification	10X (standard accessory), 5X, 20X, 50X, 100X
Illumination	Contour illumination	Halogen bulb (24 V, 150 W, 500 hours) ( <b>515530</b> ), 2-step (High/Low) brightness switch, Combination use with a color filter available
	Surface illumination (oblique)	Parabolic halogen bulb (24 V, 200 W, 50 hours) ( <b>12BAA637</b> ) Beam concentration and adjustment available, Heat-absorbing filter, Built-in cooling fan
Resolution for X/Y counter*2	—	
Measuring unit	Digital scale	
Measuring range (X×Y)	254×152 mm	

\*1 To denote your AC power cable add the following suffixes to the order No.: A for UL/CSA, D for CEE, DC for CCC, E for BS, K for KC, C and No suffix is required for PSE.

\*2 XY counter is not built in the main unit of the **PH-3515F**.

If a counter display is required, it is recommended to purchase the **QM-Data200** or a counter (**KA-212**) separately.

Note: Depending on the angle of illumination, measurement results may be smaller than actual values.



Refer to the Profile Projector Brochure (**E14005**) for more details.