

PH-A14

SERIES 172 — Profile Projector

FEATURES

- Benchtop model uses a horizontal optical system.
- Suitable for thread pitch measurements—blurred or distorted images will not be produced when workpiece is angled.
- Inverted image on the day-bright screen.
- 14" (356mm) diameter vernier protractor screen with solid line cross-hairs for easy alignment.
- Heavy-duty workpiece table incorporates linear scales for fast, accurate measurement.

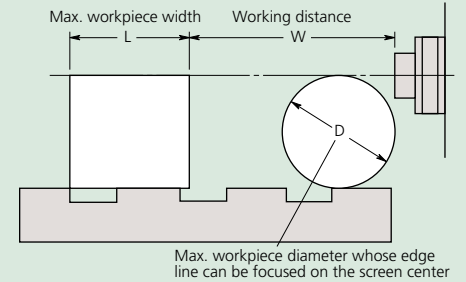


PH-A14



PH-A14 with touch screen M2 geometric measurement display

Projection Capacity



PH-A14

Unit: mm

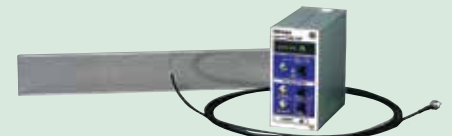
	Magnification			
	10X	20X	50X	100X
View field	35.6	17.8	7.12	3.56
L	235	235	109	109
W	93	40	14.6	9.5
D	130	116	31.3	19.2



KA Counter (174-183A)
(Refer to page H-7 for more details.)
64AAB149: Counter stand



QM-Data200
2-D data processing unit.
264-155A: Stand mount type
264-156A: Arm mount type
(Refer to page I-25 for more details.)



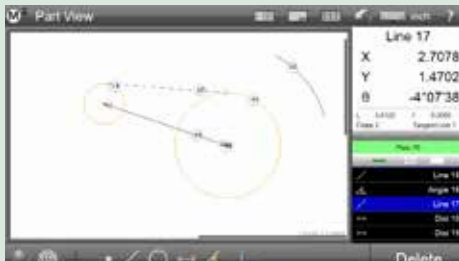
332-151: Optoeye
Edge detection system for QM-Data 200
12AAE671: Detector attachment (A)

Optional Accessories

172-011:	10X projection lens (standard accessory)
172-012:	20X projection lens
172-013:	50X projection lens set
172-014:	100X projection lens set
172-116:	Standard scale (50mm)
172-117:	Standard scale (2")
172-118:	Reading scale (200mm)
172-161:	Reading scale (300mm)
172-119:	Reading scale (8")
172-162:	Reading scale (12")
172-286:	Green filter
512305:	Halogen bulb (24V, 150W) (standard accessory)

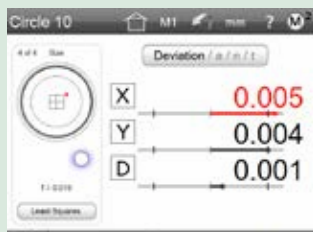
Fixture and Stage Accessories

172-142:	Center support
172-143:	Center support riser
172-144:	Rotary vise
	(Max. workpiece dia.: 2.4" / 60mm)
172-234:	V-block with clamp
	(Max. workpiece dia.: 2" / 50mm)
172-132:	Vertical holder
64AAA129B:	Machine stand 23" W x 45" D x 20" H



Graphics-based "Part View" constructions

Generate popular construction types, like Distances and Tangent Lines, from within the graphical part view.



Geometric tolerancing

Measure features, set nominals, apply tolerances and view deviation results with only a few quick clicks.



Reports Flexibility for report contents and formatting allows for full customization of the data format, header information, and header and footer graphics.

SPECIFICATIONS

Model No.	PH-A14	
Order No.	172-810-10A*	
Package No.	64PKA087	PH-A14 with QM Data Arm Mount
	64PKA086A	PH-A14 with KA Counter and Tray
Projected image	Inverted image	
Protractor screen	Effective diameter	14" / 356mm
	Screen material	Fine ground glass
	Reference line	Cross hair line
	Screen rotation	±360°, fine feed and clamp
	Angle display	Vernier reading, Resolution: 2'
Projection lens	Standard accessory: 10X (172-011), Optional accessories: 20X, 50X, 100X	
Magnification accuracy	Contour illumination	±0.1% or less
	Surface illumination	±0.15% or less
Contour illumination	Light source	Halogen bulb (24V 150W)
	Optical system	Telecentric system
	Functions	Heat-absorbing filter, Cooling fan
Surface illumination	Light source	Halogen bulb (24V 150W)
	Optical system	Twin fiber optic illumination
XY Stage	Table travel (X-axis)	8" / 203.2mm
	Table size (X, Z)	16 x 6" / 407 x 153mm
	Vertical travel (Y-axis)	4" / 101.6mm
	Resolution	.00005" / 0.001mm*
	Measuring unit	Built in Linear scale
	Max. workpiece width	See (L) on page I-10
Power supply	120V AC, 50/60Hz	
Mass	308lbs / 140kg	
Standard accessories	10x projection lens set, work stage, power cord, halogen bulb, fuse, grounding wire, allen wrench	

*Counter not included

PH-A14 Packages with M2 Geometric Display

Order No.	Description
64PKA154A	PH-A14 PROFILE PROJECTOR - WITH TOUCH SCREEN M2 GEOMETRIC DISPLAY
64PKA155A	PH-A14 PROFILE PROJECTOR - WITH OPTICAL EDGE DETECTION AND TOUCH SCREEN M2 GEOMETRIC DISPLAY

M2 Geometric Display Retrofit Packages

Order No.	Description
64PKA156A	M2 2D Data Processing Unit with software and hardware including a tablet PC. Also includes installation and calibration on the customer's existing PH-A14
64PKA157A	M2 2D Data Processing Unit with Edge Detection software and hardware including a tablet PC. Also includes installation and calibration on the customer's existing PH-A14

DIMENSIONS

