

# Digital Universal Protractor

## SERIES 187

### FEATURES

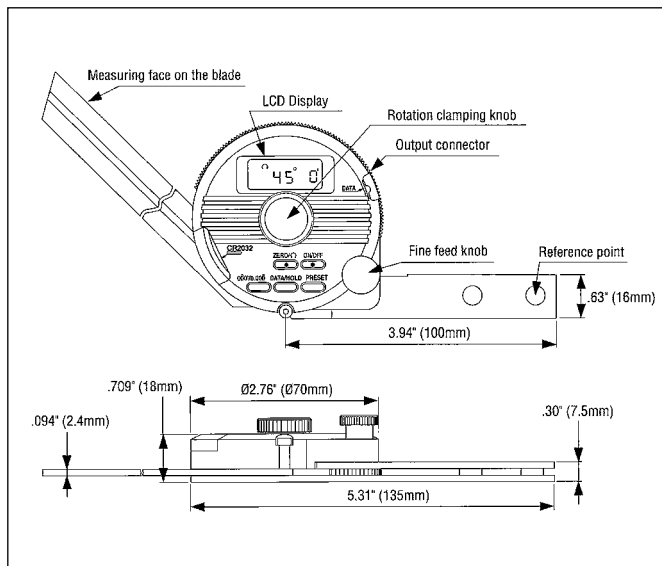
- Data output function make it easy to see the statistical data.
- Can be attached to height gages. gage holder (950750, metric)
- Setting preset value.
- Removable blade.



### SPECIFICATIONS

Code No.	187-552
Model	BP-D300E
Blade	12" (187-103)
Display	LCD - 5 digit, (-) sign, character height 6.5mm
Measuring range	-360° ~ +360°
Resolution	1' (0.01°)
Accuracy	± 2' (±0.03°)
Repeatability	1' (0.01°)
Mass	1.45 lbs (659g)
Dust / Water protection level	IP40
Function	Zero, Direction select, Data output / Data hold, Preset, Switchable Seagesimal or Decimal Natation
Max. response speed	3 rps
Battery	Lithium battery (CR2032) 1 pc. (Part No. 055AA217)
Battery life	2,000 hours
Alarm	Battery voltage low, Over speed error (Err)
Temperature	Operation temperature: 0 to 40°C Storage temperature: -10 to 60°C

### DIMENSIONS



### Technical Data

Range:	-360° to +360°
Tolerance:	±2' (±0.03°)
Repeatability:	1'
Resolution:	1' (0.01°)
Battery:	Lithium Battery
Battery life:	2,000 hours

### Function

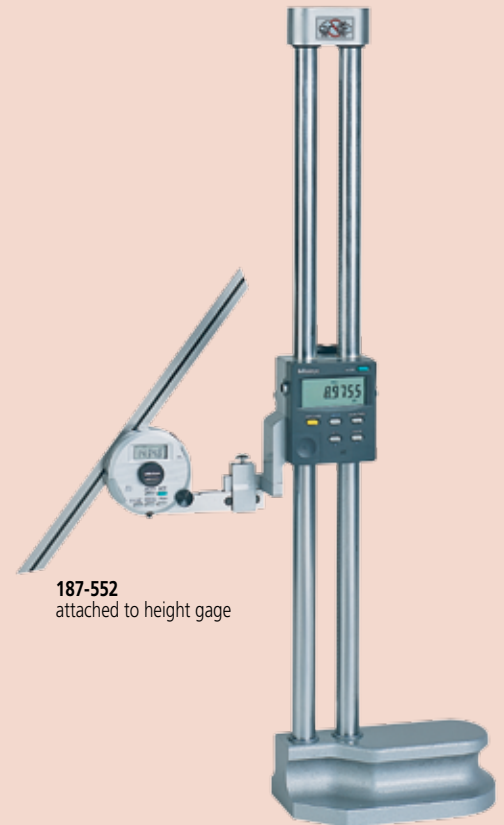
Presetting

### Standard Accessories

- 12" Blade (Code No. 187-103)
- Battery (CR2032) (Part No. 055AA217)
- Clamp box for Inch Height Gage (Part No. 950749)
- Plastic Case

### Optional Accessories

- 187-104** 6" blade
- 187-105** Acute angle attachment
- 950750** Clamp box for Metric Height Gage
- 905338** Connecting cable (40" / 1m)
- 905409** Connecting cable (80" / 2m)



**187-552**  
attached to height gage

# Universal Bevel Protractor

## SERIES 187

### Technical Data

Graduation:	5min. (0° - 90° - 0°)
Accuracy	
Vernier	±5'
Straightness	[.00016" + (.00005xL/2)]"
Parallelism	[.00016" + (.00005xL/2)]"
L = Length in inch	
Diameter:	2.56" / 70mm

### FEATURES

- High-precision angle gage for accurate angle measurement of machines, molds, and jigs.
- Can be attached to height gages.



187-904



### SPECIFICATIONS

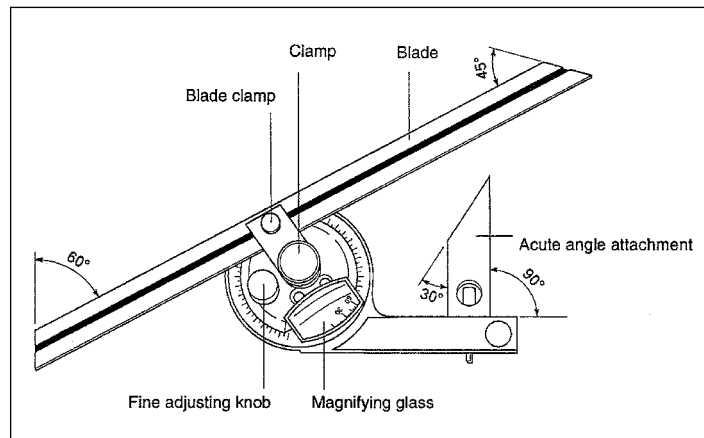
#### Universal Bevel Protractors

Order No.	Dial	Vernier	Graduation
			Remarks
187-904	1°	5 min	with 6" blade (187-104) and Clamp box for Inch Height Gages (950749)
187-906	1°	5min	with 12" blade (187-103) and Clamp box for Inch Height Gages (950749)

#### Universal Bevel Protractor Accessories and Parts

Order No.	Remarks
187-103	12" Blade.
187-104	6" Blade.
187-105	Acute angle attachment
950749	Clamp box for Inch Height Gages
950750	Clamp box for Metric Height Gages

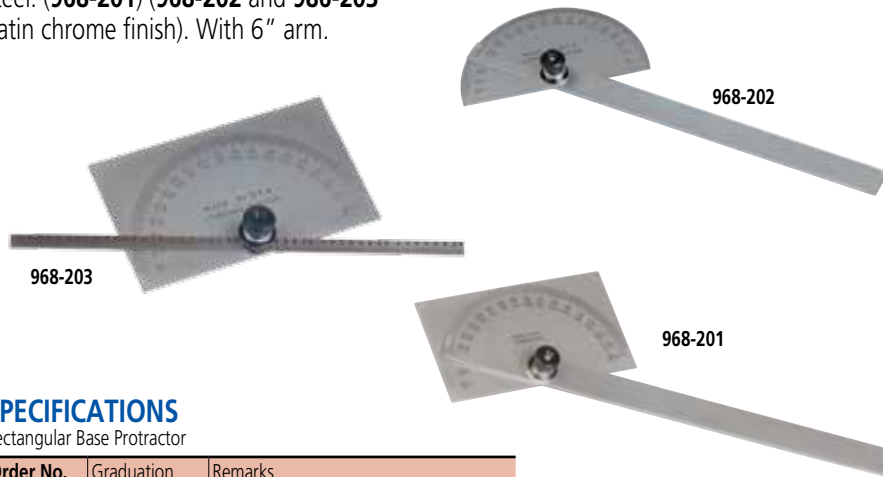
### DIMENSIONS



# Protractor

## SERIES 968

Basegular Base Protractor's scale plate and indicator blade are made entirely of stainless steel. (968-201) (968-202 and 986-203 Satin chrome finish). With 6" arm.



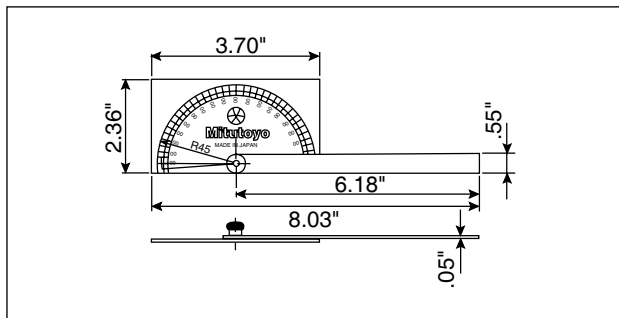
## SPECIFICATIONS

Rectangular Base Protractor

Order No.	Graduation	Remarks
968-201	1°	Protractor Graduation: 0°-90°, 90°-180°, 180°-90°, 90°-0°
968-202	1°	Semi-Circle: 0°-180°, 180°-0°
968-203*		Rectangle: 0°-180°, 180°-0°

\*6" Arm with graduation rule.

## DIMENSIONS



# Bevel Protractor

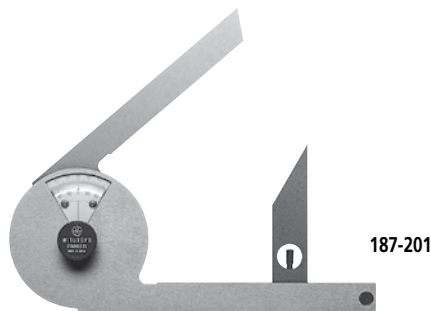
## SERIES 187

### FEATURES

- Consists of three sheets of stainless steel, the middle one of which is made for angle measurements.

### SPECIFICATIONS

Order No.	Graduation	Remarks
187-201	1° / 5 min	Center black knob locks the blade position Protractor Graduation: 0°-90°, 90°-0°



### Technical Data

Graduation: 5 min. (0° - 90° - 0°)  
Blade edge angle: 30° and 60°  
Diameter: 2.56" / 70mm

# Digital Protractor

## SERIES 950

### FEATURES

These Digital Protractors present inclination values on an easy-to-read liquid crystal display. The measurements are generated by an electronic gravity sensor and processed by the latest low-power electronic circuit technology.

- Full 360° range (90° x 4).
- Machined aluminum frame.
- Alternate reference (zero).
- Reading hold.
- Simple calibration requiring no special fixtures.
- Display remains upright to view at all angles. (950-315, Pro 360 Model).
- RS232C output. (950-316 Pro 3600 Model).
- Supplied in fitted carrying case.



Front View



950-315 Back View



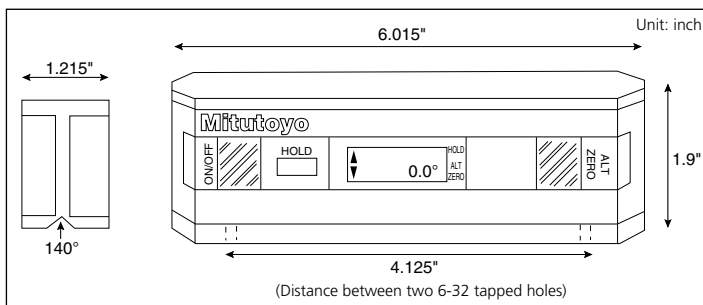
950-316 Back View

### SPECIFICATIONS

Order No.	950-315	950-316
Model	Pro 360	Pro 3600
Range	360° (90°x4)	360° (90°x4)
Resolution	0.1°	0.01° (0° to 9.99°) 0.1° (10° to 90°)
Accuracy	±0.1° Level ±10°, Plumb ±10° ±0.2° Maximum error	±0.05° (0° to 10°) ±0.1° (80° to 90°) ±0.2° (10° to 80°)
Repeatability	±0.1°	±0.05°
Cross Axis Error	Minimal	Minimal
Battery Life	500 Hrs. Standard 9-Volt Battery	500 Hrs. Standard 9-Volt Battery
Temperature Operation	-5°C to 50°C (23° to 122°F)	-5°C to 50°C (23° to 122°F)
Storage	-20°C to 65°C (-4°F to 149°F)	-20°C to 65°C (-4°F to 149°F)
Weight	289g (10.2oz.)	295g (10.4oz.)
Output	N/A	RS-232C Compatible
Standard Accessories	Plastic Case	Plastic Case

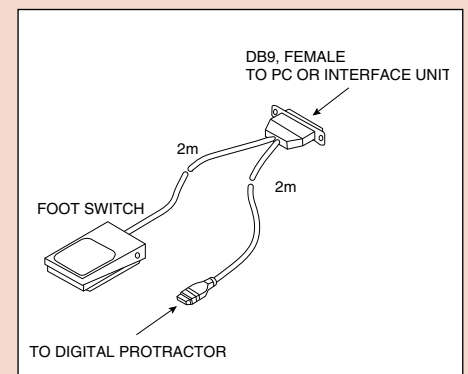
±Represents clockwise or counter-clockwise slope.

### DIMENSIONS



### Optional Accessories

- 64PPP794 Magnetic base
- 50AAA983A RS-232C Output cable w/foot switch



50AAA983A RS-232C Output cable w/foot switch 10P-25P