

Technical Data

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

Function

Presetting

Digital Universal Protractor SERIES 187

- Data output function makes it easy to gather statistical data.
- Can be attached to height gages using a gage holder (**950750**, metric)
- Setting preset value.
- Removable blade.

SPECIFICATIONS

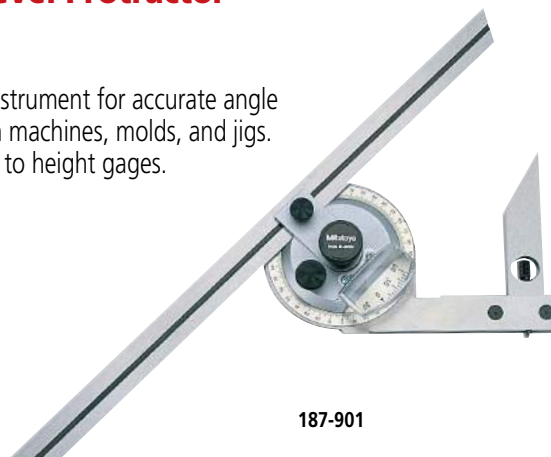
Order No.	Blade length	Remarks (standard accessory)
187-501	150mm	Height gage holder (950750)
187-502	300mm	Height gage holder (950750)
187-551	6"	Height gage holder (950749)
187-552	12"	Height gage holder (950749)



187-501

Universal Bevel Protractor SERIES 187

- High-precision instrument for accurate angle measurement on machines, molds, and jigs.
- Can be attached to height gages.
- Graduation: 5'



187-901

SPECIFICATIONS

Metric		
Order No.	Blade length	Remarks
187-901	150, 300mm	w/60°, 45°, 30° edges
187-907	150mm	w/60°, 45° edges
187-908	300mm	w/60°, 45° edges

Inch		
Order No.	Blade length	Remarks
187-902	6", 12"	w/60°, 45°, 30° edges
187-904	6"	w/60°, 45° edges
187-906	12"	w/60°, 45° edges

Technical Data

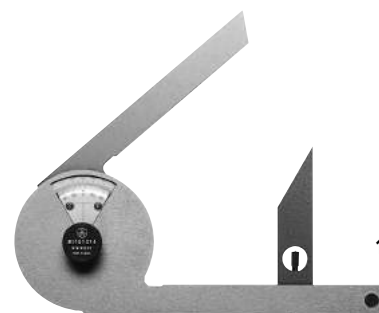
Range: 90° x 4 (360°)
 Graduation: 5 min. (0° - 90° - 0°)
 Blade edge angle: 30° and 60°
 Mass: 260g

Bevel Protractor SERIES 187

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

SPECIFICATIONS

Order No.	Blade length	Remarks
187-201	137mm	w/60°, 30° edges



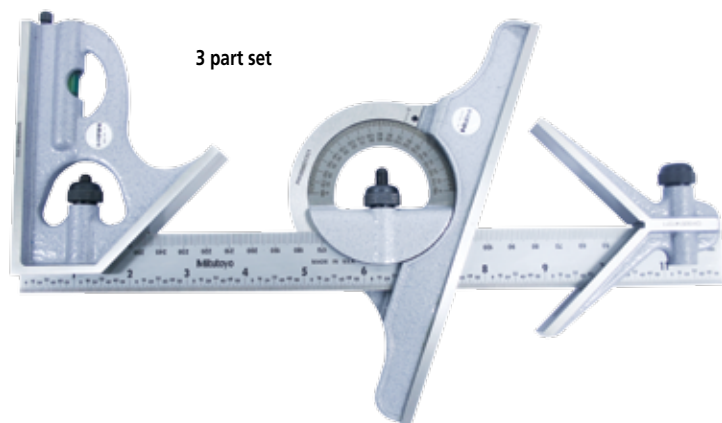
187-201

Combination Square Set

SERIES 180

FEATURES

- Measuring head are attached to the graduated steel rule (blade), allowing versatile measurements on various types of workpieces
- The measuring head come hardened or cast iron-not-hardened
- Economy sets not including a protractor head are also available



SPECIFICATIONS

Head Only Hardened

Order No.	Description
180-102B	Square Head for 12"/300mm to 24"/600mm
180-202B	Center Head for 12"/300mm to 24"/600mm

Head Only Cast iron-not hardened

Order No.	Description
180-112B	Square Head for 12"/300mm to 24"/600mm
180-212B	Center Head for 12"/300mm to 24"/600mm
180-301B	Protractor Head for 12"/300mm to 24"/600mm

Inch/Metric Hardened Combination Square Sets

Set No.	Blade		Square Head	Center Head	Protractor Head	
	Size	Type				
180-903B	12"	4R	180-501B	180-102B	180-202B	-
180-905B	12"	4R	180-501B	180-102B	180-202B	180-301B*
180-906B	12"	16R	180-502B	180-102B	180-202B	180-301B*
180-907B	12"/300mm	E/M	180-503B	180-102B	180-202B	180-301B*
180-910B	300mm	Metric	180-505B	180-102B	180-202B	180-301B*

*Cast iron-not hardened

Inch/Metric Cast iron-not hardened Combination Square Sets

Set No.	Blade		Square Head	Center Head	Protractor Head	
	Size	Type				
180-803B	12"	4R	180-501B	180-112B	180-212B	-
180-805B	12"	4R	180-501B	180-112B	180-212B	180-301B

Inch / Metric Blades only

Order No.	Length	Graduations	Accuracy (length)
180-501B	12"	8, 16, 32, 64ths (4R)	+0.005" / -0.0035" (+0.13mm / -0.09mm)
180-502B	12"	32, 64, 50, 100ths (16R)	
180-503B	12" x 300mm	32, 64ths, 1, 0.5mm	
180-505B	300mm	1, .5, 1, 0.5mm	+0.006" / -0.0035" (+0.15mm / -0.09mm)
180-701B	18"	8, 16, 32, 64ths (4R)	
180-703B	18" x 450mm	32, 64ths, 1, 0.5mm	
180-601B	24"	8, 16, 32, 64ths (4R)	+0.007" / -0.0035" (+0.18mm / -0.09mm)
180-603B	24" x 600mm	32, 64ths, 1, 0.5mm	

Technical Data

- Square head: Used to set the rule at 90 degrees or 45 degrees to an edge of a workpiece.
- Center head: Used to locate centers of round workpieces
- Protractor head: Used to set the rule at a desired angle to an edge of a workpiece. Also used for measuring angles.