

# Mitutoyo

Mitutoyo Quality

## Toolmakers' Microscopes TM Series

Optical Measuring



Catalog No. E14013(3)



## Bright and Clear Field of View Superior Performance in Small-model Class

TM-505B  
176-818-11

\* Shown with optional Digimatic micrometer heads

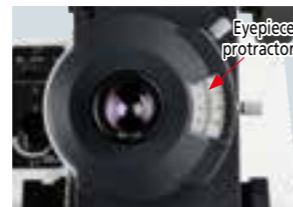
## FEATURES

- Newly designed LED illuminators provide clear observation with outstanding color reproduction.



Conventional illumination LED illumination

- A vernier scale mounted outside the eyepiece enables simple angle measurement.



- Optional LED circular illuminator available for applications requiring all-round lighting.



- Installation of optional Digimatic micrometer heads (164-163) enables easy digital measurement.

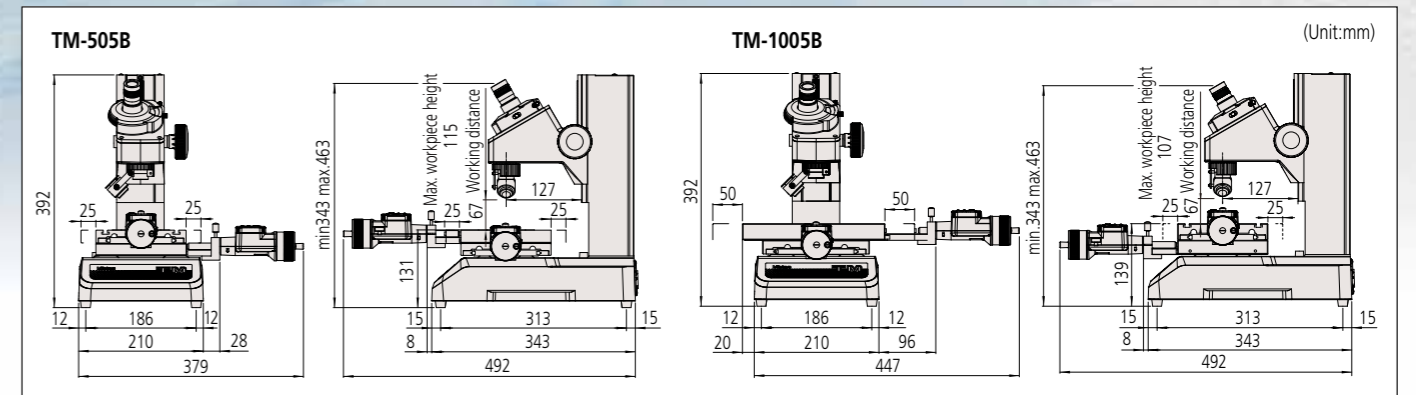


## SPECIFICATIONS

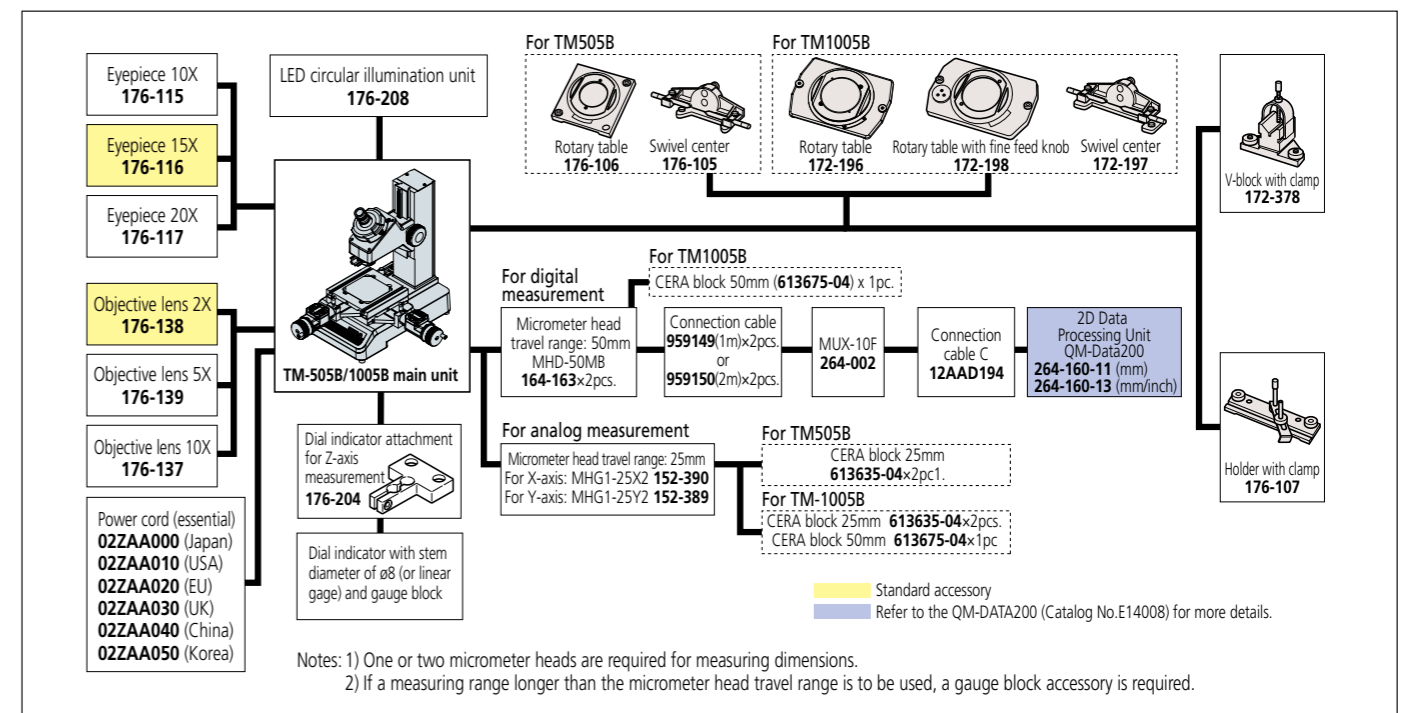
Model No.	TM-505B 176-818-11	TM-1005B 176-819-11
Order No.	176-818-11	176-819-11
Optical tube	Monocular type (Depression angle: 60°)	
Observation image	Erect	
Eyepiece protractor	Resolution (graduation) : 1°, Rotation angle: 360°, Minimum reading by Vernier: 6', Adjustable zero point	
Eyepiece	Standard accessory: 15X (field number: 13), Options: 10X, 20X	
Objective lens	Standard accessory: 2X, Options: 5X, 10X	
Microscope head	Maximum height of workpiece	115 mm
	Focusing method	Manual (Coarse feed)
Illumination unit	Transmitted illumination	Stepless brightness adjustment, White LED light source, With green filter
	Surface illumination	Oblique single-source type, Stepless brightness adjustment, White LED light source
Cross-travel stage	Measuring range	50x50 mm
	Table size	152x152 mm
	Usable area of the stage glass	96x96 mm
	Maximum stage glass loading	5 kg
Linear measurement method	Micrometer head*	
Resolution	Depends on the micrometer head specifications* (for MHD-50MB (164-163): 0.001 mm)	
Micrometer head travel range	for MHD-50MB (164-163): 50 mm	
Power source	100 to 240 VAC 50/60 Hz Maximum power consumption: 4.2 W	
Main unit mass	14 kg	15 kg

\* Micrometer heads and gauge blocks (CERA blocks) are optional.

## DIMENSIONS



## SYSTEM DIAGRAM





### Whatever your challenges are, Mitutoyo supports you from start to finish.

Mitutoyo is not only a manufacturer of top quality measuring products but one that also offers qualified support for the lifetime of the equipment, backed up by comprehensive services that ensure your staff can make the very best use of the investment.

Apart from the basics of calibration and repair, Mitutoyo offers product and metrology training, as well as IT support for the sophisticated software used in modern measuring technology. We can also design, build, test and deliver measuring solutions and even, if deemed cost-effective, take your critical measurement challenges in-house on a sub-contract basis.



Find additional product literature and our product catalogue

<https://www.mitutoyo.co.jp/global.html>

#### Notes on Export Regulations:

Do not commit an act, which could directly or indirectly, violate any law or regulation of Japan, your country or any other international treaty, relating to the export or re-export of any commodities.

Note: Product illustrations are without obligation. Product descriptions, in particular any and all technical specifications, are only binding when explicitly agreed upon.

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