

MF series (Motor-Driven Z-axis/Motor-Driven) SERIES 176 — Measuring Microscopes



MF-J2017D

• The binocular tube (eyepiece) and illumination unit are optional accessories.



MF-G2017D

• The binocular tube (eyepiece) and illumination unit are optional accessories.

- Motor-driven Z-axis model of the MF series and Motor-driven X-, Y-, and Z-axes model of the MF series.
- Using the optional Vision Unit enables the image AF function.
- Illumination unit (reflected/transmitted) can be selected from a high-intensity LED or halogen bulb (required).
- Variable aperture diaphragm (reflected/transmitted) allows observation measurement while suppressing light diffraction.
- A wide variety of optional accessories including various digital CCD cameras are offered.
- ML series, high-NA objectives that are specially designed for the MF series. (long working distance type)
- High-magnification observation up to 2000X.

Specifications for Motor-Driven Z-axis MF Series

Model No.	MF-J2017D		MF-J3017D	MF-J4020D
Order No.	176-891*1		176-892*1	176-893*1
Observation image	BF (Bright field)/Erect image			
Eyepiece (optional) Adjustable diopter	10X (eyepiece field number: 24), 15X, 20X Note: Monocular - one 10X eyepiece provided as standard; Binocular - two 10X eyepieces provided as standard			
Objective (optional)	ML objective 3X (provided as standard), 1X, 5X, 10X, 20X, 50X, 100X			
Illumination unit (One of the two options must be selected.)	LED	Transmitted: Telecentric, built-in aperture diaphragm, white LED light source, stepless brightness adjustment, equipped with cooling fan Reflected: Kohler illumination with adjustable aperture diaphragm, white LED light source, stepless brightness adjustment Control unit: Power switch (main switch), AC power supply input connector (100 to 240V)		
	Halogen	Transmitted: Telecentric, built-in aperture diaphragm, 12V/50W halogen lamp, stepless brightness adjustment, with cooling fan Reflected: Kohler illumination with adjustable aperture diaphragm, 12V/50W halogen lamp, stepless brightness adjustment with cooling fan Control unit: Power switch (main switch), AC power supply input connector (100 to 240V)		
Vision AF*2	Yes			
Stage	Measurement range	200x170mm	300x170mm	400x200mm
	Quick release mechanism	Fitted to X and Y axes		
Z axis	Zero set switch	Fitted to X and Y axes		
	Max. workpiece height	220mm		
Measuring accuracy*3 (X and Y axes, when not loaded)	Feed mechanism	Motordrive (Maximum measuring speed: 20mm/s)		
	Minimum reading	(2.2 + 0.02L) μ m L: measuring length (mm)		
Digital display	Minimum reading	1/0.5/0.1 μ m .0001"/.00005"/.00001" switchable		
	Display axes	X, Y and Z axes		
Functions	Zero-setting, direction switching			

*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 are required for PSE.

*2: Vision Unit and an image AF cable are separately required.

*3: Measuring method complies with JIS B7153.

Bulb replacement for transmitted/reflected illumination	Standard: Halogen bulb (12V, 50W) (No.513667) Bulb life: 1,100 hours
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Specifications for Motor-Driven MF Series

Model No.	MF-G2017D		MF-G3017D	MF-G4020D
Order No.	176-781*1		176-782*1	176-783*1
Observation image	BF (Bright field)/Erect image			
Eyepiece (optional) Adjustable diopter	10X (eyepiece field number: 24), 15X, 20X Note: Monocular - one 10X eyepiece provided as standard; Binocular - two 10X eyepieces provided as standard			
Objective (optional)	ML objective 3X (provided as standard), 1X, 5X, 10X, 20X, 50X, 100X			
Illumination unit (One of the two options must be selected.)	LED	Transmitted: Telecentric, built-in aperture diaphragm, white LED light source, stepless brightness adjustment, equipped with cooling fan Reflected: Kohler illumination with adjustable aperture diaphragm, white LED light source, stepless brightness adjustment Control unit: Power switch (main switch), AC power supply input connector (100 to 240V)		
	Halogen	Transmitted: Telecentric, built-in aperture diaphragm, 12V/50W halogen lamp, stepless brightness adjustment, with cooling fan Reflected: Kohler illumination with adjustable aperture diaphragm, 12V/50W halogen lamp, stepless brightness adjustment with cooling fan Control unit: Power switch (main switch), AC power supply input connector (100 to 240V)		
Vision AF*2	Yes			
Stage	Measurement range	200x170mm	300x170mm	400x200mm
	Feed mechanism	Motordrive (Maximum measuring speed: 40mm/s)		
Z axis	Max. workpiece height	220mm		
	Feed mechanism	Motordrive (Maximum measuring speed: 20mm/s)		
Measuring accuracy*3 (X and Y axes, when not loaded)	Minimum reading	(2.2 + 0.02L) μ m, L: measuring length (mm)		
	Minimum reading	1/0.5/0.1 μ m .0001"/.00005"/.00001" switchable		
Digital display	Display axes	X, Y and Z axes		
	Functions	Zero-setting, direction switching		

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