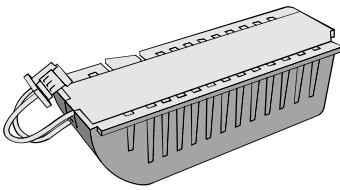


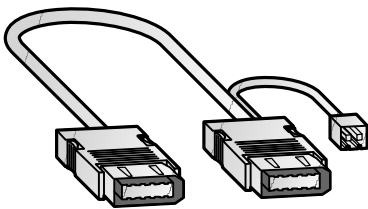
Buffer Battery



The servomotor's absolute value can be maintained by mounting the MR-J3BAT battery on the servo amplifier. The battery is not required when the servo system is used in incremental mode.

Battery	Application	Art. no.
MR-J3BAT	Buffering absolute positioning data	160224

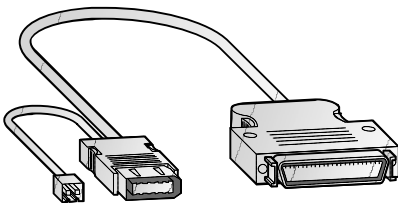
Battery Connection Relay Cable



This relay cable is used to hold the absolute value if the servo amplifier has to be removed from a machine for shipping. The servo motor does not have a super capacitor (for holding an absolute value for short time) in the encoder. When this optional cable is used, the absolute value can be held even when the encoder cable is disconnected from the servo amplifier, making it easy to do maintenance on the servo amplifier.

Cable	Application	Art. no.
MR-J3BTCBL03M	Buffering absolute value	160327

Diagnostic Cable

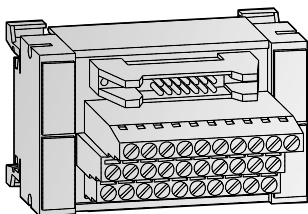


This cable is required when using the amplifier diagnostic function of MR Configurator (Setup software).

Can be used only in combination with an MR-J3-A servo amplifier.

Cable	Application	Art. no.
MR-J3ACHECK	MR Configurator diagnostic function	161577

Terminal Blocks

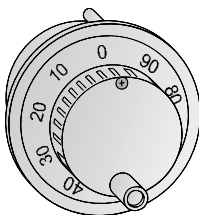


These terminal blocks TB-20-EG/TB-26-EG/TB-50-EG are adapter modules that simplify the wiring of the inputs and outputs of the servo amplifiers.

In addition preconfigured system cabling is available for all of these terminal blocks.

Specifications	TB-20-EG	TB-26-EG	TB-50-EG
Terminal block type	Input/output block	Input/output block	Input/output block
Channels	8/16	26	50
Design	20 pin terminal module	26 pin terminal module	50 pin terminal module
Connection type	Screw terminals	Screw terminals	Screw terminals
Application	Servoamplifier MR-J3-B Extension I/O unit MR-J3-D01	Servoamplifier MR-ES/MR-J3-T	Servoamplifier MR-J3-A Motion controller MR-MQ100, Q170MCP Extension I/O unit MR-J3-D01
Dimensions (WxHxD) mm	75x45x52	73x81x58	102x81x80
Order information	Art. no. 212032	215134	212033
Connection cables	MR-J3TBL-CN3-05M-EG; length 0.5 m; Art. no.: 212096, MR-J3TBL-CN3-1M-EG; length 1 m; Art. no.: 212095	MR-ESTBL-CN1-05M-EG; length 0.5 m; Art. no.: 215135 MR-ESTBL-CN1-1M-EG; length 1 m; Art. no.: 215137	MR-J2M-CN1TBL05M; length 0.5 m; Art. no.: 146794 MR-J2M-CN1TBL1M; length 1 m; Art. no.: 189864

Manual Pulse Generator

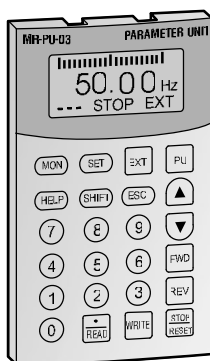


MR-HDP01

By this serial handwheel an external incremental setting value can be generated.

Specifications	MR-HDP01
Resolution	25 pls/rev (100 pls/rev at magnification of 4)
Output voltage	Input voltage > 1 V
Consumption current	Max. 60 mA
Weight	kg 0.4
Order information	Art. no. 128728

Parameter Unit



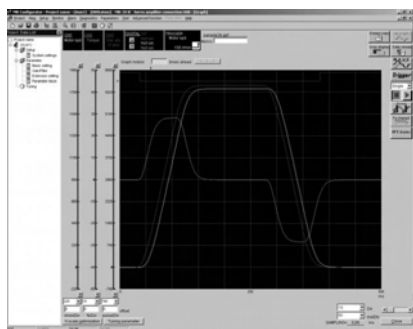
The parameter unit MR-PRU03 with a 16 characters x 4 lines LCD display, is available as an option.

By connecting the parameter unit to the servo amplifier, data setting, test operation, parameter setting, etc. can be performed without using MR Configurator.

The parameter unit can be used with a MR-J3-□□□ servo amplifier.

Functions	MR-PRU03
Parameter mode	Basic setting parameters, gain/filter parameters, extension setting parameters, input/output setting parameters
Monitor Mode	MR-J3-□□□ Current position, command position, command remaining distance, point table No., cumulative feedback pulses, droop pulses, regenerative load ratio, effective load ratio, peak load ratio, instantaneous torque, within one revolution position, ABS counter, servo motor speed, bus voltage, load inertia moment ratio
Diagnosis mode	External input/output display, motor information
Alarm mode	Current alarm, alarm history
Test operation mode	JOG operation, positioning operation, DO forced output, motor-less operation, single-step feed
Point table mode	Position data, servo motor speed, acceleration/deceleration time constant, dwell time, auxiliary function, M code
Order information	Art. no. 208805

Setup Software (MR Configurator)

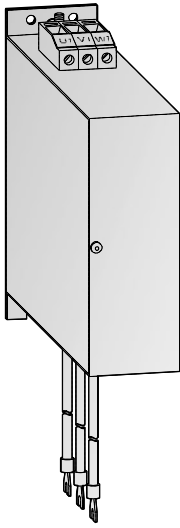


The comfortable setup software for Windows based personal computers allows perfect tuning of the servo amplifiers and the connected servo motors.

The software makes it easy to read and write parameters, monitor, diagnose and test the servo system via a personal computer.

Functions	MR Configurator
Monitor	Batch display, input/output I/F display, high speed monitor, graph display
Parameters	Parameter setting, device setting, tuning, display of change list, display of detailed information, converter, parameter copy
Diagnostics	Rotation failure reason display, system information display, tuning data display, absolute data display, axis name setting, amplifier diagnostic
Alarms	Alarm display, alarm history, display of data that generated alarm
Test operations	JOG operation, positioning operation, operation without motor, forced digital output, program operation using simple language
Advanced function	Machine analyser, gain search, machine simulation
Others	Automatic operation, help display, project and data administration
Order information	Art. no. 217710

■ Noise Filters



For complying with the EMC directives of the European Community regarding the electromagnetic compatibility, the servo amplifiers have to be equipped with a noise filter across the input circuit. Additionally it has to be installed and wired according to the EMC directives.

The filter units are designed to reduce mains conducted RFI emissions to meet the European standard EN 61800-3.

More details are enclosed in the installation sheet of the MR-J3 filters.

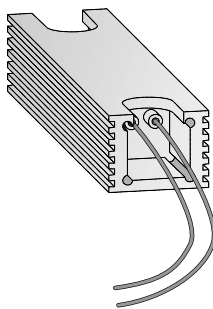
Filter ①	Servo amplifier	Power loss [W]	Rated current [A]	Leakage current [mA]	Weight [kg]	Art. no.
MF-2F230-006.230MFa	MR-J3-10A/B/T–MR-J3-60A/B/T	10	6	< 26	0.45	189332
MF-2F230-006.230MFb	MR-J3-70A/B/T	10	6	< 26	0.45	189331
MF-3F480-010.233MF	MR-J3-60A4/B4/T4, MR-J3-100A/B/T and MR-J3-100A4/B4/T4	9	10	< 7	1.0	208775
MF-3F480-015.230MF3	MR-J3-200A/B/T and MR-J3-200A4/B4/T4	12	15	< 4 ②	1.5	200463
MF-3F480-015.233MF	MR-J3-350A4/B4/T4	16	15	< 20	2.0	208776
MF-3F480-025.230MF3 ③	MR-J3-350A/B/T, MR-J3-500A4/B4/T4 and MR-J3-700A4/B4/T4	20	25	< 4	3.0	203854
MF-3F480-035.230	MR-J3-11KA4/B4/T4 and MR-J3-15KA4/B4/T4	40	50	< 12	4.0	189329
MF-3F480-050.230MF3	MR-J3-500A/B/T, MR-J3-700A/B/T and MR-J3-22KA4/B4/T4	40	50	< 4 ②	4.0	203855
FMR-ES-3A-RS1-FP	MR-E-10A/AG-QW003–MR-E-20A/AG-QW003	1	3	< 3.5	0.32	219207
FMR-ES-6A-RS1-FP	MR-E-40A/AG-QW003–MR-E-70A/AG-QW003	4.4	6	< 3.5	0.37	219208
MF-3F230-011.230	MR-E-100A/AG-QW003–MR-E-200A/AG-QW003	8	11	< 6	1.0	221468

① All filters can provide conformity with the limits for environment 1, restricted distribution up to 50 m or environment 1, unrestricted distribution up to 20 m.

② At normal operation: voltage difference between 2 phases < 3 %/at fault occurrence (value in brackets) : 2 dead phases (worst case)

③ No foot print filter

■ Brake Resistors



If the regenerative power exceeds the power of the built-in resistor, the following listed optional brake resistors can be used.

Resistor	Servo amplifier	Power capacity [W]	Resistance (Ω)	Weight [kg]	Dimensions (WxHxD) [mm]	Art. no.
MR-RFH75-40	MR-J3-10A/B/T–MR-J3-60A/B/T, MR-J3-70A/B/T, MR-J3-100A/B/T and MR-E-10A/AG-QW003–MR-E-100A/AG-QW003	150	40	0.16	36x27x90	137279
MR-RFH220-40	MR-J3-70A/B/T and MR-J3-100A/B/T	400	40	0.42	36x27x200	137278
MR-RFH400-13	MR-J3-200A/B/T, MR-J3-350A/B/T, MR-J3-500A/B/T and MR-E-200A/AG-QW003	600	13	0.73	36x27x320	137277
MR-RFH400-6.7	MR-J3-700A/B/T	600	6.7	0.73	36x27x320	137275
MR-PWR-R T 400-120	MR-J3-60A4/B4/T4 and MR-J3-100A4/B4/T4	400	120	0.4	36x27x200	154746
MR-PWR-R T 600-47	MR-J3-200A4/B4/T4 and MR-J3-350A4/B4/T4	600	47	0.64	36x27x320	154751
MR-PWR-R T 600-26	MR-J3-500A4/B4/T4 and MR-J3-700A4/B4/T4	600	26	0.64	36x27x320	154752

Note: The MR-J3-11KA4/B4/T4–MR-J3-22KA4/B4/T4 have the external brake resistors included.