





무

DT(MT)

29



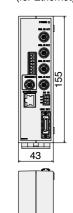
믓

DT(MT)

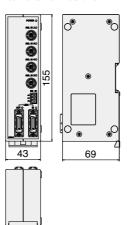








Hub unit MG42 *Common to MG41-NC and MG41-NE

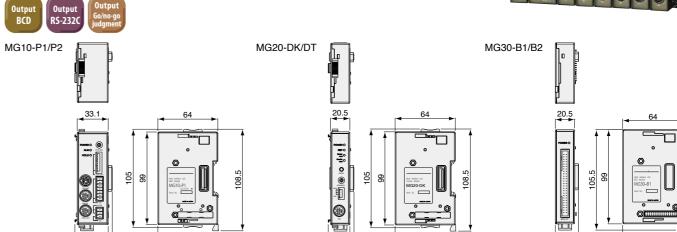


Unit: mm

Link cable MZ41-R5(0.5 m), MZ41-R01(1 m), MZ41-R5(5 m)MZ41-10(10 m)

Spec	cifications						
Item		Conditions, etc.		Des	cription		Remarks
Communication method			MG41-N	NC (CC-Link/Ethernet incorporated) / MC	341-NE (Ethernet incorporated) / M	G42-4 (hub unit)	
		Entire system		1 to 100 units (Connection of	of 101th unit and later disabled)	,	Up to 24 connected MG42 hub units
No. of connectable measuring MG41		MG41 main unit		21:			
units		MG42 hub unit	1	U to	4 units		
Conne	ctable measuring units		DK800	S, DK830S, DK800A/DK800B Series, D	K10, DK25, DK50, DK100, DK110,	DK155, DK205	
Connection cable length			MG41 main unit to MG42 hub unit, MG42 total cable length to MG42 hub unit: 0.5 m, 1 m, 2 m, 5 m, 10 m Total cable length from MG41 main unit: 30 m max. (Max. current: 4 A or less)				Connection cable MZ41-** (optional)
Resolu	ıtion			Settable output data reso	lution and display resolution		
Measuring unit resolution		0.1 µm	0.1 μm	0.5 μm	μm 5 μm	10 μm	
	(Input resolution)	0.5 μm	_	0.5 μm	μm 5 μm	10 μm	
Measuri	ng unit data fetching capacity	10 Mbps data transfer		Maximum 10,000 data/sec	when 100 axes are connected)		Data for one axis is counted as one data.
			Calculation of maximum, minimum, and peak-to-peak values for each axis (including pause, latch, and start functions)				
Darle I	nold function		Peak value is not updated during pause.				
Peak-r	iola lunction		No output and display data updated during latching (but internal data is updated)				
			Recalculation of peak value is started by start function.				
		Single axis		Current, maximum, minimum, an	d peak-to-peak values for each ax	is	
Output	-enable data	At addition and subtraction	Current, maximum, minimum, and peak-to-peak values of addition and subtraction axes of two axes				Single-axis calculation of addition and subtraction axes is disabled.
Compa	arator function		Data of each axis (single axis,	addition/subtraction axis) is compared and me	asured to output the comparator results	(Comparator is also latched during latch)	
	Comparator setting values		2 values	4 values	8 values	16 values	
	No. of setting value sets		16 groups	8 groups	4 groups	2 groups	
F-11	,		J 1	100Base-T (compliant with IEEE 802			
Ethern	et				and parameter setting enabled.	0	
Reset	function			The Current value for each	axis is reset (with command).	0	
Preset	function				value of each axis (with command	d). O	
Datum	-point setting function			The Datum point of each a	is is settable (with command).	0	When master calibration function
	nce point function		The	datum point of each axis can be reprod		h command).	is not used
Master	calibration function						
			Mast	er calibration of each axis can be repro-	luced using the reference point (wi	th command).	Addition and subtraction axes are unavailable.
	ing unit product information			er calibration of each axis can be repro- of the connected measuring unit can be			Addition and subtraction axes are unavailable.
							Addition and subtraction axes are unavailable.
					acquired (with command). Produc	t code, serial no., production date	Addition and subtraction axes are unavailable.
				of the connected measuring unit can be Reset function	acquired (with command). Rioduc Ethernet	t code, serial no., production date CC(Link	Addition and subtraction axes are unavailable.
				of the connected measuring unit can be Reset function Preset function	acquired (with command). Product Ethernet	t code, serial no., production date CC/Link ×	
				of the connected measuring unit can be Reset function	acquired (with command). Rioduc Ethernet	t code, serial no., production date CC@Link X	Addition and subtraction axes are unavailable. When master calibration function is not used
			The product information	of the connected measuring unit can be Reset function Preset function Datum-point setting function	acquired (with command). Rioduc Ethernet	t code, serial no., production date CC:Link X O	When master calibration function
				of the connected measuring unit can be Reset function Preset function Datum-point setting function Reference point function Master calibration function	acquired (with command). Produc Ethernet	t code, serial no., production date CC-Link X O	When master calibration function
			The product information	of the connected measuring unit can be Reset function Preset function Datum-point setting function Reference point function Master calibration function Comparator value setting	acquired (with command). Produc Ethernet	t code, serial no., production date CC4Link X O O O O O O O O O O O O	When master calibration function
			The product information	Reset function Preset function Datum-point setting function Reference point function Master calibration function Comparator value setting Comparator group number setting	acquired (with command). Product Ethernet	t code, serial no., production date CC+Link X O O O	When master calibration function
Measuri	ng unit product information		The product information	Reset function Preset function Datum-point setting function Reference point function Master calibration function Comparator value setting Comparator group number setting Start	acquired (with command). Produc	t code, serial no., production date CC-Link X O O O O O O O O O O O O	When master calibration function
Measuri	ng unit product information		The product information	of the connected measuring unit can be Reset function Preset function Datum-point setting function Reference point function Master calibration function Comparator value setting Comparator group number setting Start Pause	acquired (with command). Produc Ethernet	t code, serial no., production date CC-Link X O O O O O O O O O O O O	When master calibration function
Measuri Commor disa	ng unit product information		The product information	Reset function Preset function Datum-point setting function Master calibration function Comparator value setting Comparator group number setting Start Pause Latch	acquired (with command). Produc	t code, serial no., production date CC-Elink X OHERMAN OHERMAN	When master calibration function
Measuri Commor disa	ng unit product information and/setting enabled bled for		The product information	Reset function Preset function Datum-point setting function Reference point function Master calibration function Comparator value setting Comparator group number setting Start Pause Latch Current value/Peak value (All axes)	acquired (with command). Produc Ethernet	t code, serial no., production date CC-Link X O O O O O O O O O O O O	When master calibration function
Measuri Commor disa	ng unit product information and/setting enabled bled for		The product information Command	of the connected measuring unit can be Reset function Preset function Datum-point setting function Reference point function Master calibration function Comparator value setting Comparator value setting Start Pause Latch Current value/Peak value (All axes) Current value/Peak value (each unit)	acquired (with command). Produc Ethernet	t code, serial no., production date CC-Link X O O O O O O O O O O O O	When master calibration function
Measuri Commor disa	ng unit product information and/setting enabled bled for		The product information	Reset function Preset function Datum-point setting function Master calibration function Comparator value setting Comparator group number setting Start Pause Latch Current value/Peak value (All axes) Comparator judgment result Comparator judgment result Comparator group number setting	acquired (with command). Product Ethernet	t code, serial no., production date CC-Link X O O O O O O O O O O O O	When master calibration function
Measuri Commor disa	ng unit product information and/setting enabled bled for		The product information Command	of the connected measuring unit can be Reset function Preset function Datum-point setting function Reference point function Master calibration function Comparator value setting Comparator value setting Comparator group number setting Start Pause Latch Current value/Peak value (All axes) Current value/Peak value (each unit) Comparator judgment result Alarm (Communication/Measuring unit	acquired (with command). Product Ethernet	t code, serial no., production date CC-Link X O O O O O O O O O O O O	When master calibration function
Measuri Commor disa	ng unit product information and/setting enabled bled for		The product information Command	Reset function Preset function Preset function Preset function Preset function Datum-point setting function Reference point function Master calibration function Comparator value setting Comparator group number setting Start Pause Latch Current value/Peak value (All axes) Current value/Peak value (each unit) Comparator judgment result Alarm (Communication/Measuring uni Software version	acquired (with command). Product Ethernet	t code, serial no., production date CC-Link X O O O O O O O O O O O O	When master calibration function
Measuri Commor disa	ng unit product information and/setting enabled bled for		The product information Command	Reset function Preset function Preset function Datum-point setting function Reference point function Master calibration function Comparator value setting Comparator group number setting Start Pause Latch Current value/Peak value (All axes) Current value/Peak value (each unit) Comparator judgment result Alarm (Communication/Measuring unit Software version Measuring unit product information	acquired (with command). Product Ethernet	t code, serial no., production date CC-Link X O O O O O O O O O O O O	When master calibration function
Measuri Commor disa	ng unit product information and/setting enabled bled for		Command Data output	of the connected measuring unit can be Reset function Preset function Datum-point setting function Reference point function Master calibration function Comparator value setting Comparator value setting Comparator group number setting Start Pause Latch Current value/Peak value (All axes) Current value/Peak value (each unit) Comparator judgment result Alarm (Communication/Measuring unit Software version Measuring unit product information Input resolution	acquired (with command). Product Ethernet	t code, serial no., production date CC-Link X O O O O O O O O O O O O	When master calibration function
Measuri Commor disa	ng unit product information and/setting enabled bled for		The product information Command	Reset function Preset function Preset function Datum-point setting function Reference point function Master calibration function Comparator value setting Comparator group number setting Start Pause Latch Current value/Peak value (All axes) Current value/Peak value (cach unit) Comparator judgment result Alarm (Communication/Measuring unit Software version Measuring unit product information Input resolution Display and output resolution	acquired (with command). Product Ethernet	t code, serial no., production date CC-Link X O O O O O O O O O O O O	When master calibration function
Measuri Commor disa	ng unit product information and/setting enabled bled for		Command Data output	of the connected measuring unit can be Reset function Preset function Preset function Datum-point setting function Reference point function Master calibration function Comparator value setting Comparator value setting Start Pause Latch Current value/Peak value (All axes) Current value/Peak value (each unit) Comparator judgment result Alarm (Communication/Measuring unit Software version Measuring unit product information Input resolution Display and output resolution Axis addition	acquired (with command). Produc Ethernet	t code, serial no., production date CC-Link X O O O O O O O O O O O O	When master calibration function
Commor disa each o	and/setting enabled libled for communication line	Terminal board	Command Data output	of the connected measuring unit can be Reset function Preset function Preset function Datum-point setting function Reference point function Master calibration function (Comparator value setting Comparator value setting Comparator yalue setting Start Pause Latch Current value/Peak value (All axes) Current value/Peak value (each unit) Comparator judgment result Alarm (Communication/Measuring unit Software version Measuring unit product information Input resolution Display and output resolution Axis addition Comparator mode (2, 4, 8, or 16 value)	acquired (with command). Produc Ethernet O O O O O O O O O O O O O O O O O O	t code, serial no., production date CC-Link X O O O O O O O O O O O O	When master calibration function is not used
Commor disa each o	ng unit product information and/setting enabled bled for		Command Data output Settings	Reset function Preset function Preset function Preset function Datum-point setting function Reference point function Master calibration function Comparator value setting Comparator group number setting Start Pause Latch Current value/Peak value (All axes) Current value/Peak value (cach unit) Comparator judgment result Alarm (Communication/Measuring unit Software version Measuring unit product information Input resolution Display and output resolution Axis addition Comparator mode (2, 4, 8, or 16 value 12 to 24 V (1) System total:	acquired (with command). Produc Ethèrnet	t code, serial no., production date CC-Link X O O O O O O O O O O O O	When master calibration function is not used Used by adding power at a current of 4A or more on a six MG42 hub units basis. (Recommended: +24 V)
Commor disaseach c	and/setting enabled libled for communication line	Cautions for	Command Data output Settings	of the connected measuring unit can be Reset function Preset function Preset function Datum-point setting function Reference point function Master calibration function (Comparator value setting Comparator group number setting Start Pause Latch Current value/Peak value (All axes) Current value/Peak value (each unit) (Comparator judgment result Alarm (Communication/Measuring unit Software version Measuring unit product information Input resolution Display and output resolution Axis addition Comparator mode (2, 4, 8, or 16 value 12 to 24 V (1)	acquired (with command). Produc Ethèrnet	t code, serial no., production date CC-Link X O O O O O O O O O O O O	When master calibration function is not used Used by adding power at a current of 4A or more on a six MG42 hub units basis. (Recommended: +24 V)
Commor disaseach c	and/setting enabled bled for ommunication line		Command Data output Settings	Reset function Preset function Preset function Preset function Datum-point setting function Reference point function Master calibration function Comparator value setting Comparator group number setting Start Pause Latch Current value/Peak value (All axes) Current value/Peak value (cach unit) Comparator judgment result Alarm (Communication/Measuring unit Software version Measuring unit product information Input resolution Display and output resolution Axis addition Comparator mode (2, 4, 8, or 16 value 12 to 24 V (1) System total:	acquired (with command). Produc Ethernet	t code, serial no., production date CC-Link X O O O O O O O O O O O O	When master calibration function is not used Used by adding power at a current of 4A or more on a six MG42 hub units basis. (Recommended: +24 V)
Commor disa each o	and/setting enabled bled for ommunication line	Cautions for	Command Data output Settings	of the connected measuring unit can be Reset function Preset function Preset function Datum-point setting function Reference point function Master calibration function (Comparator value setting Comparator value setting Comparator group number setting Start Pause Latch Current value/Peak value (All axes) Current value/Peak value (each unit) Comparator judgment result Alarm (Communication/Measuring unit Software version Measuring unit product information Input resolution Display and output resolution Axis addition Comparator mode (2, 4, 8, or 16 value 12 to 24 V (11 System total: did the maximum current, supplying power to a successumption for each units MG41 main un MG41 ma	acquired (with command). Produc Ethernet	t code, serial no., production date CC-Link X O O O O O O O O O O O O	When master calibration function is not used Used by adding power at a current of 4A or more on a six MG42 hub units basis. (Recommended: +24 V)
Commor disageach o	and/setting enabled bled for communication line	Cautions for	Command Data output Settings	Reset function Preset function Preset function Datum-point setting function Reference point function Master calibration function Comparator value setting Comparator group number setting Start Pause Latch Current value/Peak value (All axes) Current value/Peak value (cach unit) Comparator judgment result Alarm (Communication/Measuring unit Software version Measuring unit product information Input resolution Display and output resolution Axis addition Comparator mode (2, 4, 8, or 16 value 12 to 24 V (1) System total: dds the maximum current, supplying power to a succe sumption for each unito- MG41 main un 0 to +50 °C (0)	acquired (with command). Produc Ethernet Charles It is in 1 group) It to 26.4 V) DC Max. current 4 A ding MGS2 hub unit an eables the main unit to I 4 W, MGAS2 hub unit 1 W/unit, M	t code, serial no., production date CC-Link X O O O O O O O O O O O O	When master calibration function is not used Used by adding power at a current of 4A or more on a six MG42 hub units basis. (Recommended: +24 V)

^{*}If DK800S connected to MG40 is connected to LT30 or MG10/20, the reference point cannot be recognized. For more information, contact our Sales Dept. in charge.



Model		MG10-P1	MG10-P2	
Power supply		12-24 V (11-26.4 V) DC, Min. startup time: 100ms or less		
	Power consumption	2.0 W + total power consumption for connected modules'		
Power source	Inrush current (10 ms)	10 A or less (when maximum number of modules are connected)		
	Power supply protection	Fuse (5-A fuse is built in.)		
	Communication I/F	RS-232C (EIA-232C or equivalent)		
	Baud rate setting	2400 / 9600 / 19200 / 38400 bps (set with DIP switch)		
0	Data length	7 / 8 bit (set with DIP switch)		
Communication	Stop bit	1 / 2 bit (set with DIP switch)		
	Parity	None / ODD / EVEN (set with DIP switch)		
	Delimiter	CR / CR+LF (set with DIP switch)		
Linkage function	Maximum number of linkages	16 (total of counter modules: 64)		
Linkage function	Maximum length of linking cable	10 m		
	Input format	Source input (+COM)	Sink input (-COM)	
		Photocoupler insulation, external power: 5-24 V DC		
I/O	Output format	Open collector output sink type (-COM)	Source type (+COM)	
1/0		Photocoupler insulation, external power: 5-24 V DC		
	Input signal	Reset, pause, start, latching, and data out trigger to whole channels		
	Output signal	Integrated alarm		
Connectable modules	Counter modules	MG20-DK, MG20-DG, and MG-20DT (available for mixed use, up to 16 modules)"		
CONTINUE CLADIC HIDUUIES	Interface modules	MG30-B1, MG30-B2 ⁻¹		
Accessory		LZ61: Link cable (1m)		

^{*1:} Total power of modules connected to MG10 should not be over 54W (at 12 VDC input) or 108 W (at 24 VDC input).

Counter modu	le specifications			
Model		MG20-DK	MG20-DT	
Power consumption		1 W + power consumption for connected gauge	0.8 W	
	Corresponding gauge	DK Series (Voltage differential A/B quadrature input)	DT Series	
	Allowable resolution setting*2	10/5/1/0.5/0.1 μm	5 μm(DT12/32) 1 μm(DT512)	
		Set with DIP switch		
Measuring unit input	Maximum response speed	Subject to the specification of the connected gauge	1m/s	
	Maximum response acceleration	REF-LED (reference-point loaded) shows on the display after the reference point is detected.	2400m/s²	
	Reference point	Set "0" or preset value on the counter when the reference point is detected.	-	
	Alarm	S-ALM LED activates by excess speed/acceleration of measuring unit.		
Others		C-ALM LED activates by excess speed of the internal circuit of counter.		
		The Alarm display is cancelled by reset command from MG10 or with the reset button of main unit.		

^{*2:} Set the resolution value of the connected gauge.

Model		MG30-B1	MG30-B2	
Power consumption		1W		
	Input format	Source type (+COM) Counterpart output circuit: current sink input (-COM)	Current sink input (+COM) Counterpart output circuit: source type (+COM)	
		Photocoupler insulation, external power: 5-24 V DC		
I/O	Output format Input signal	Current sink input (-COM) Counterpart output circuit: source type (+COM)	Source type (+COM) Counterpart output circuit (+COM): source type (-COM)	
1/0		Photocoupler insulation, external power: 5-24 V DC		
		DRQ / channel address / measuring mode shifting / comparator shifting / reset / start / posing / reference-point loaded		
	Output signal	BCD data (6 digits) / READY / code / Go/No-go output / alarm / reference-point		
Output setting		Timer (1 to 128 ms) / OUT / OR / polarity (set with internal DIP switch)		
All models	Operating temperature	0 to +50 °C(No condensation)		
All Hodels	Storage temperature	-10 to +60 °C(20 to 90%RH)		

28