

MG

MG40 SERIES

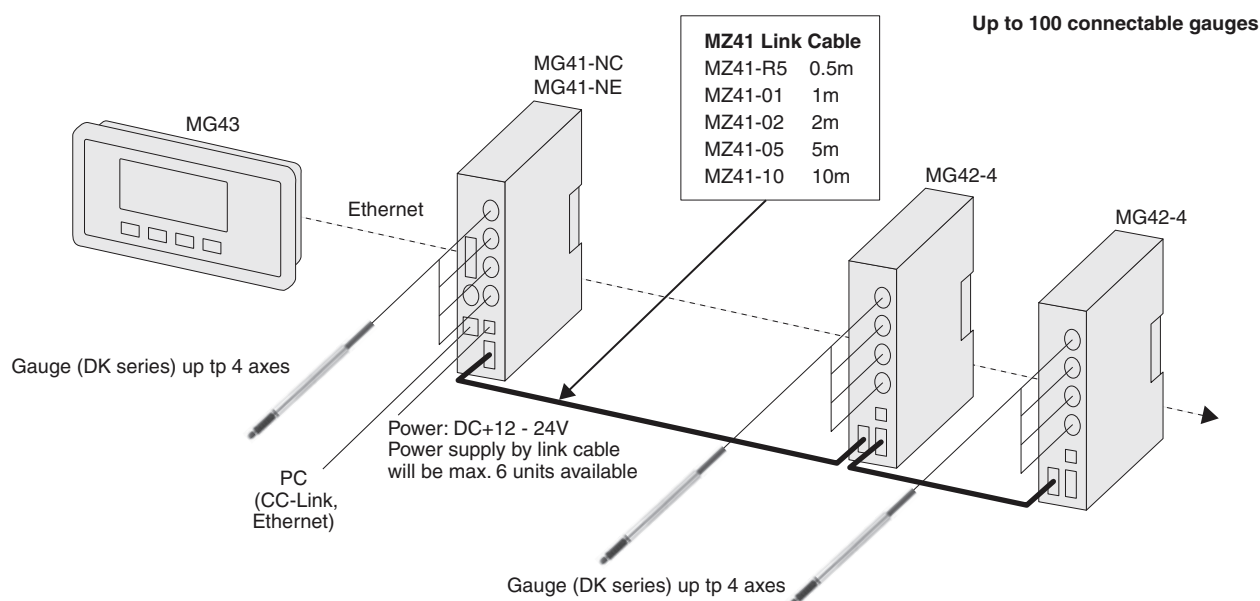
Intelligent Network system

- Up to 100 connectable gauges
- High speed data communication 100Mbit/sec
- Compatible with Ethernet, cc-Link
- Operating voltage : 12-24VDC
- DIN rail mounting (35mm)

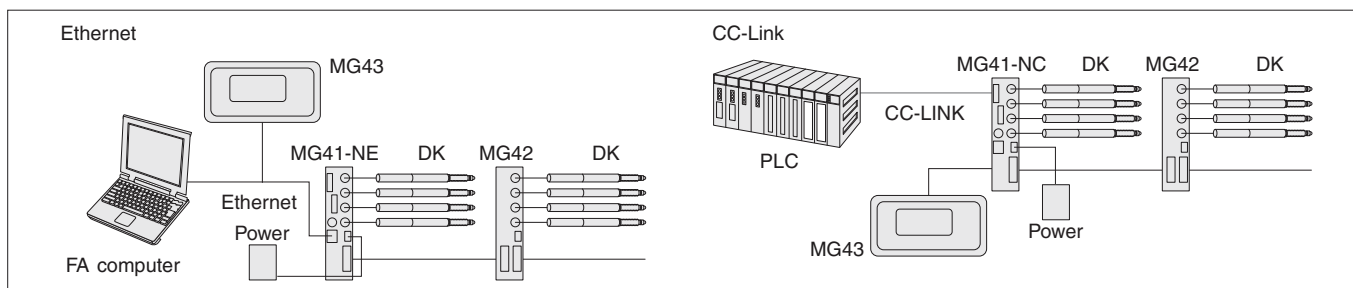


Interface unit

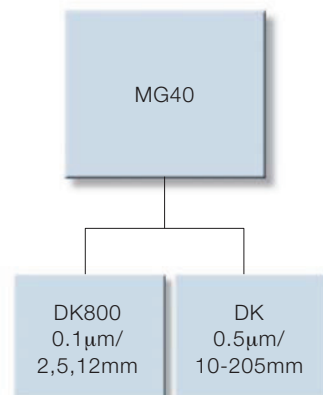
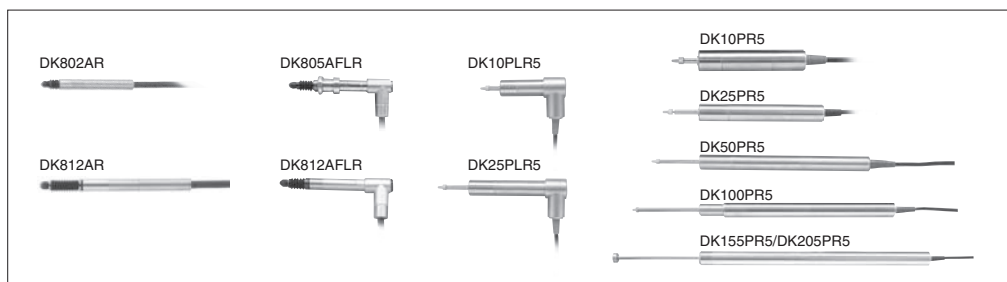
System structure



MG series System structures



Spec.	Model	DK802A/B	DK805A/B	DK812A/B	DK10	DK25	DK50	DK100	DK110	DK155	DK205
Min.resolution		0.1μm	1μm			2μm		0.5μm			
Accuracy								4μm	5μm	6μm	
Measuring Range		2mm	5mm	12mm	10mm	25mm	50mm	100mm	110mm	155mm	205mm



Specifications																
Item		Description					Remarks									
								Conditions								
No. of connectable measuring units	Entire system	1 to 100 units (Connection disabled after connection of 101st unit.)					Up to 24 connected MG42 hub units									
	MG41 main unit	0 to 4 axis														
	MG42 hub unit															
Connectable measuring units		DK800A/DK 800B series, DK10, DK25, DK50, DK100, DK110, DK155, DK205														
Connection cable length		Between MG41 main unit and MG42 hub unit, between MG42 hub unit and MG42 hub unit: 0.5 m, 1 m, 2 m, 5 m, 10 m Total cable length from MG41 main unit: Maximum 30 m(Maximum current: 4 A or less)														
Resolution		Settable output data resolution and display resolution														
Measuring unit resolution (input resolution)	0.1μm	0.1μm	0.5μm	1μm	5μm	10μm										
	0.5μm	-	0.5μm	1μm	5μm	10μm										
Measuring unit data import capacity	10 Mbps data transfer	Maximum 10,000 data/s (when 100 axes are connected)					The data for one axis is counted as one data.									
Peak-hold function		Calculation of maximum value, minimum value, and peak-to-peak value for each axis (including pause, latch, and start functions)														
		Peak value is not updated during pause.														
		Output and display data are not updated during latching (internal data is updated)														
		Recalculation of peak value is started by start function.														
Output data	Single axis	Current value, maximum value, minimum value, and peak-to-peak value for each axis														
	Addition and subtraction	Current value, maximum value, minimum value, and peak-to-peak value for the two-axis addition/subtraction axis					Single axis calculation of an addition/subtraction axis is not possible(for preventing inconsistencies in calculation).									
Comparator function		Data for each axis (single axis, addition/subtraction axis) is compared and measured, and the comparator results are output.(Comparator during latch is also latched.)														
Comparator setting values		2 values	4 values	8 values	16 values											
	No. of setting value groups	16 groups	8 groups	4 groups	2 groups											
Ethernet		100Base-T (compliant with IEEE 802.3) 100 Mbps/10 Mbps (Auto-negotiation) Command input, data output, and parameter setting are possible.														
Reset function		Current value for each axis is reset (by command).														
Preset function		Value is preset to the current value of each axis (by command).														
Datum point setting function		Datum point of each axis can be set (by command).														
Reference point function		Reference point can be used to relocate the datum point of each axis (by command).					When master calibration function is not used									
Master calibration function		Reference point can be used to perform master calibration for each axis (by command).					Addition/subtraction axis cannot be used.									
Measuring unit product information		The product information of the connected measuring unit can be acquired.														
Command/setting enabled or disabled for each communication line		Command		Reset function	Ethernet	Available	CC-Link	When master calibration function is not used								
									Preset function							
										Datum point setting function						
											Reference point function					
												Master calibration function				
													Comparator value setting			
														Comparator group number setting		
															Start	
																Pause
		Data output		Current value/Peak value (All axes)	Available	N/A										
								Current value/Peak value (each unit)								
									Comparator result							
										Alarm (Communication/Measuring unit)						
											Soft ware version					
												Measuring unit product information				
													Settings		Input resolution	
		Display and output resolution														
			Axis addition													
				Comparator mode (2, 4, 8, or 16 values in 1 group)												

Supply voltage	Terminal input	DC 12 to 24 V (11 to 26.4 V)	Use a power supply with a current that is 4 A or higher,(Recommended: +24 V) (for every six MG42 hub units)
Power consumption	Note the connection conditions.	System total: Max. current 4 A When the maximum current is exceeded, the connection can be enabled by providing a power supply to the MG42 hub units that come later in the connection. <Details of power consumption for each unit> MG41 main unit : 4 W , MG42 hub unit : 1 W/unit , Measuring unit supply : 1 W/unit	
Operating temperature and humidity range		0 to +50 °C (no condensation)	
Storage temperature and humidity range		-10 to +60 °C (20 to 90 % RH)	
Mass		MG41 : 300 g , MG42 : 250 g	

Display unit MG43

Specifications			
Item	Description		
Compatible main units	MG41-NE/MG41-NC		
Compatible hub units	Hub units compatible with the main unit		
Compatible measuring units	Measuring units compatible with the main unit or hub unit		
Main functions	Measure Monitor, Setting Monitor, System Monitor		
Communication protocol	MG40 original protocol on TCP/IP		
Screen display	480 x 272 pixels, 4.3-inch TFT LCD with backlight		

Item	Description
Network interface	100Base-TX / 10Base-T (compliant with IEEE802.3) Auto-negotiation
Power consumption	DC12~24V(11~26.4V)
Power supply	4W
Operating temperature range	0 to +40°C (no condensation)
Storage temperature and humidity range	-10~+60°C (20~90%RH)
Mass	Approx.500g

