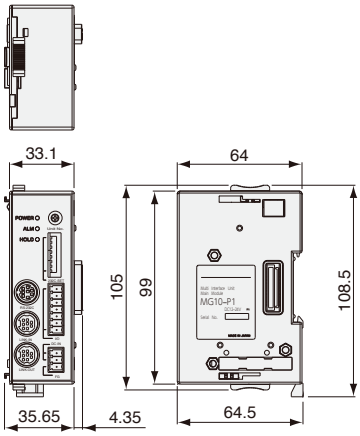
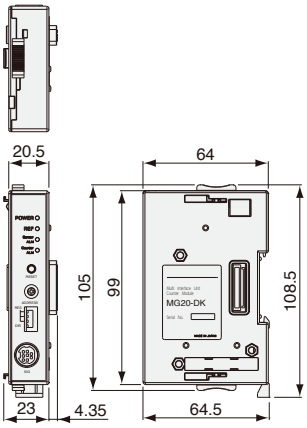
MG MG10/20/30

Output BCD | Output RS-232C | Output Go/no-go judgment

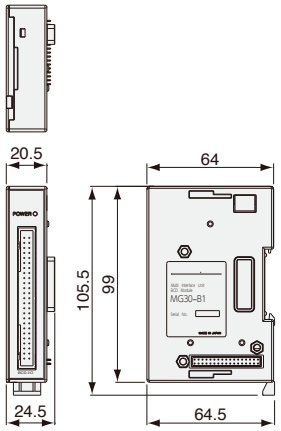
MG10-P1/P2



MG20-DK/DT



MG30-B1/B2



Unit: mm

Main module specifications

Model		MG10-P1	MG10-P2
Power source	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*1	
	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	Communication I/F	RS-232C (EIA-232C or equivalent)	
	Baud rate setting	2400 / 9600 / 19200 / 38400 bps (set with DIP switch)	
	Data length	7 / 8 bit (set with DIP switch)	
	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)	
	Maximum length of linking cable	10 m	
I/O	Input format	Source input (+COM)	Sink input (–COM)
		Photocoupler insulation, external power: 5-24 V DC	
	Output format	Open collector output sink type (–COM)	Source type (+COM)
		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)*1	
	Interface modules	MG30-B1, MG30-B2*1	

*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 module specifications

Model		MG20-DK	MG20-DT
Power consumption		1 W + power consumption for connected gauge	0.8 W
Measuring unit input	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	
	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.	—
Others	Alarm	S-ALM LED activates by excess speed/acceleration of measuring unit. 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.

Interface module specifications

Model		MG30-B1	MG30-B2
Power consumption		1 W	
I/O	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	
	Output format	Current sink input (–COM) Counterpart output circuit: source type (+COM)	Source type (+COM) Counterpart output circuit (+COM): source type (–COM)
		Photocoupler insulation, external power: 5-24 V DC	
	Input signal	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)
	Storage temperature	–10 to +60 °C(20 to 90%RH)