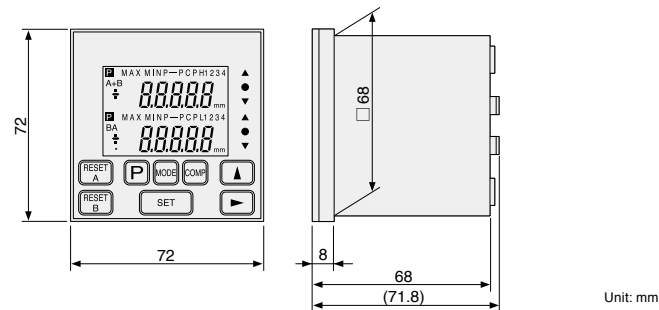# LT LT10A Series (for DT12/32)
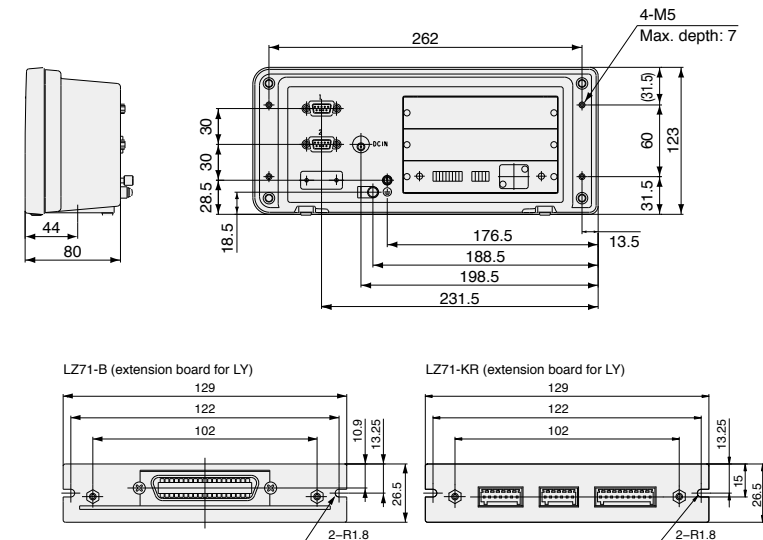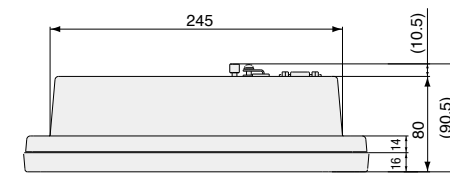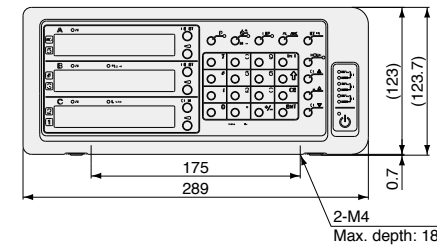
Unit: mm

Specifications

Model	LT10A-105	LT10A-105B (BCD output model)	LT10A-105C (RS-232C input/output model)	LT10A-205	LT10A-205B (BCD output model)	LT10A-205C (RS-232C input/output model)
Number of input axes	DT12/32 Series gauges can be connected.					
	1 axes			2 axes		
Input resolution	5/10 µm (parameter setting for each axis)					
Number of display axes	1 axes			2 axes		
Display data	Current, max., min., and peak-to-peak values (= max. value – min. value) (selected by parameter setting)			Current, max., min., and peak-to-peak values (= max. value – min value) of each axis or A-axis display: current, max., min., and peak-to-peak values (= max. value – min value) of 2-axis addition and subtraction B-axis display: single axis (1st or 2nd axis) (Caution for 2-axis addition or subtraction display setting: single-axis display can be only provided on monitor and cannot be operated.) (Selected by parameter setting)		
Display resolution	Same resolution as input resolution for each axis					
Direction	Parameter-based polarity setting for each axis					
Alarm display	Measuring unit unconnected, excess speed, display-digit overflow					
Addition and subtraction function	—			A+B, A–B, B–A can be set with the direction setting.		
Peak hold function	Peak calculation (max., min., and peak-to-peak values) is possible.			Peak calculation of each axis or addition/subtraction value is possible. (However, during 2-axis addition or subtraction, only 1st or 2nd axis display is possible in B-axis display.)		
Restart	Starts peak hold calculation. Operation is made by external input.			Starts peak hold calculation of each axis. Operation is made by external input (for each axis).		
Hold function (latch and pause) Latch = display and output holding Pause = peak calculation holding	Provided					
Comparator function	A set of upper and lower limits is settable.	Four sets of upper and lower limits are settable. Switching of a set is made through BCD connector.	A set of upper and lower limits is settable.	A set of upper and lower limits is settable for each axis. However, single-axis setting cannot be made during addition or substation.	Four sets of upper and lower limits are settable for each axis. However, single-axis setting cannot be made during addition or substation. Switching of a set is made through BCD connector.	A set of upper and lower limits is settable for each axis. However, single-axis setting cannot be made during addition or substation.
Input signal	Reset, start/latching, and pause of each axis					
	—	—	RS-TRg input (RS-232C data output command)	—	—	RS-TRg input (RS-232C data output command)
	Input circuit: Photocoupler (input voltage V = 4-26.4 V)					
Output signal	Comparator judgment output of each axis					
	Output circuit: NPN open collector (output voltage V = 5-26.4 V)					
Comparator judgment output	NPN open collector output					
BCD output	—	Current value and peak value (max., min., and peak-to-peak values) can be output.	—	—	Current value and peak value (max., min., and peak-to-peak values) can be output.	—
RS-232C input/output	—	—	Each function can be activated using RS-232C command instead of key operation. Current, max., min., and peak-to-peak values can be output using RS-232C data output command.	—	—	Each function can be activated using RS-232C command instead of key operation. Current, max., min., and peak-to-peak values can be output using RS-232C data output command.
Reset	Reset can be made by key operation or external reset input.					
Preset	Key operation		Key operation or command via RS-232C	Key operation		Key operation or command via RS-232C
Master calibration function	○					
Reference point function	—					
Key lock function	○					
Power supply	9 to 26.4 VDC					
Power consumption	1.8 W	2.9 W	2.0 W	2.3 W	4.0 W	2.5 W
Operating temperature range	0 to 40 °C					
Storage temperature range	−10 to 50 °C					
Mass	Approx. 200 g	Approx. 230 g	Approx. 220 g	Approx. 210 g	Approx. 270 g	Approx. 230 g

LY LY71

Unit: mm

Specifications

Model	LY71
Compatible measuring units	DK Series (connection cable CE29 required), GB-ER, SJ700A Series (Magnescale)/PL20 Series (Digiruler)
Number of input axes	1 axis or 2 axes (by parameter setting)
Input resolution	Linear standard: 0.1 / 0.5 / 1 / 5 / 10 µm (expanded linear: 0.05 / 2 / 20 / 25 / 50 / 100 µm), Angle: 1 s / 10 s / 1 min / 10 min, (Expanded angle: 1 degree)
Number of display axes	3 axes (axes A, B, and C), When LZ71-KR is used: 1 axis (A-axis display) only, B- and C-axis display is fixed to comparator value display.
Display data	Current, max., min., and peak-to-peak values (= max. value – min value) of each axis or current, max., min., and peak-to-peak values (= max. value – min value) of 2-axis addition and subtraction
	Setting of axis to be displayed can be set by parameter. Data (current value, max. value, etc.) to be displayed can be switched by key operation.
	(Addition and subtraction display is impossible if two LZ71-Bs are used.)
Display resolution	Measuring unit input resolution or more. It is possible to provide simple angle display by adhering Digiruler in arc. (There are limitations on displayable resolution depending on radius size.)
Direction	Parameter-based polarity setting for each axis
Alarm display	Measuring unit unconnected, excess speed, display-digit overflow
Addition and subtraction function	2-axis addition and subtraction is possible, but axis-based calculation is impossible during addition or subtraction (addition and subtraction display is impossible during use of two LZ71-Bs).
Peak hold function	Peak calculation of each axis or addition or subtraction value can be made (calculation of each axis (single axis) cannot be made during addition or subtraction).
Restart	Starts peak hold calculation of each axis/all axes. Operation is made by key operation or general external input.
Hold function (latch and pause) Latch = display and output holding Pause = peak calculation holding	Latch function or pause function (selected by parameter setting) Operation: key operation or general external input
Comparator function	Available only when LZ71-KR is used (separated into 5 areas). 16 sets of set values can be set with 1 to 4 set values taken as 1 set for 1 axis or addition/subtraction value, but single-axis setting cannot be made during addition or subtraction. (Switching of a set is made by key operation or LZ71-KR external input.)
Positioning function	Available only when LZ71-KR is used. A pulse signal of 0.5 s is output when a set value (1 point) is passed through. 16 sets of set values are settable. Unavailable if comparator function is selected. (Comparator/positioning function is selected by parameter setting.)
Input signal	External reset and external preset recall for each axis (4 in total), 1 general input for each axis and 1 common (3 in total)
	For general input, 3 items are selected from hold, restart, display switching (switching between current and peak values), and reference point loaded (datum value reproduction start).
	Input circuit: +12-24 V photocoupler (isolation from internal circuit = power supply Vcc = 12-24 V required)
Output signal	2 for each axis (4 in total)
	General output (2 items are selected from alarm, display data (current or peak value), reference-point passing, reference-point alarm, and zero-point passing.)
	Output circuit: open collector (photocoupler) 12-24 V, isolated from internal circuit
Comparator judgment output	Available only when LZ71-KR is used. Open collector (isolated from photocoupler and 12-24 V internal circuit) and relay (24 V DC/100 V AC at 0.3 A, ON time: approx. 2 ms, OFF time: approx. 1 ms)
BCD output	Available only when LZ71-B is used. One LZ71-B is used: 1st or 2nd axis or current and peak values of addition and subtraction values. When two LZ71-Bs are used: current and peak values of 1st axis for 1st LZ71-B and current and peak values of 2nd axis for 2nd LZ71-B. One LZ71-B can output three types of values.
RS-232C input/output	—
A/B phase output	Available only when LZ71-HT01 is used.※ Top stage is fixed to 1st-axis output, while middle stage is fixed to 2nd-axis output. ※Please consult our sales representative for details.
Expansion unit	LZ71-KR, LZ71-B, LZ71-HT01 (Up to two units can be used)
Reset	Reset can be made by key operation or external reset input.
Preset	A value can be set by key operation and a value set by external preset recall can be recalled.
Master calibration function	Provided
Datum point/Reference point function	Provided
Key lock function	Provided (presence/absence of setting is set by parameter)
Data storage	Storage/no-storage can be set.
Scaling function	Provided (0.100000 to 9.99999)
Liner compensation	Provided (±600 µm/m)
Power supply	Optional PSC-21/22/23 adapter is used.
Power consumption	32 VA max. (when optional AC adapter is used)
Operating temperature range	0 to 40 °C
Storage temperature range	−20 to 60 °C
Mass	Approx. 1.5 kg