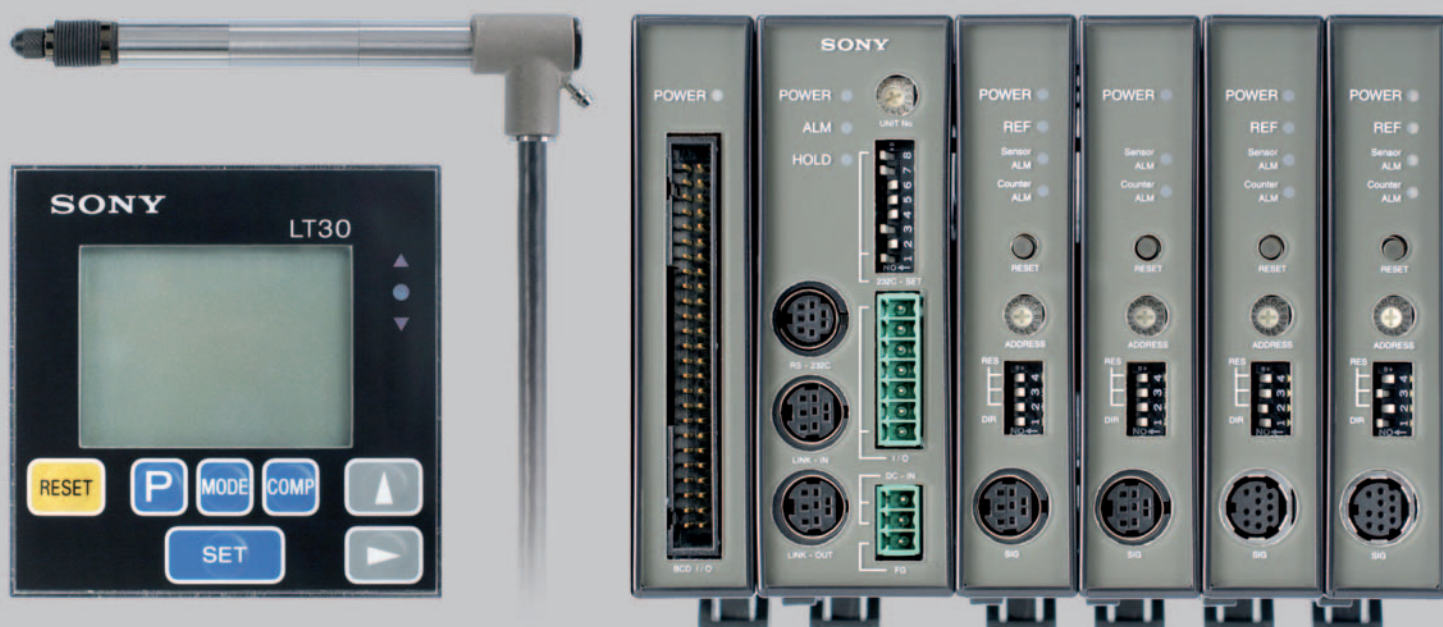
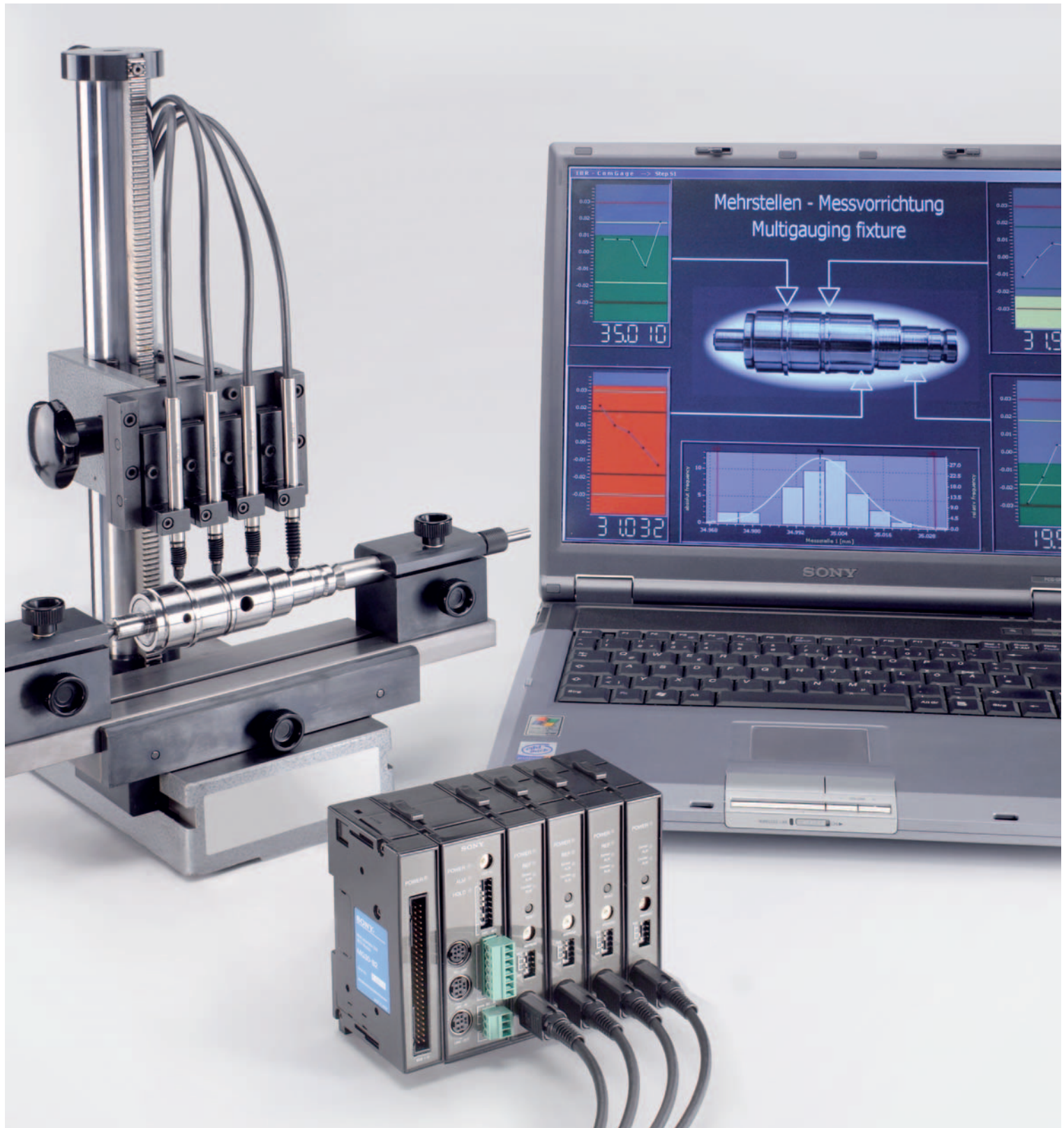


SONY

Digital Gauges and Interfaces
for Data Collection and Analysis

like.no.other™





Digital Gauges and Interfaces for data collection within multiple measuring fixtures

The development of production measurement technology is being led by the increasing transition to more flexible production. This fact, as well as shorter cycle times and increased quality demands, necessitates more efficient measuring systems. In the past random inspection at manual measuring stations was sufficient. Today, in contrast to that, inline measuring systems with automatic data collection and data processing are required in order to realize 100 % quality control.

Within multiple measuring fixtures digital gauges are increasingly used as they have essential advantages over inductive gauges. The incremental Sony gauges with their high accuracy over the whole measuring stroke provide the possibility to measure several different parts in one production line without losing time for back fitting or calibration. This leads to increased throughput of parts and significant cost-savings.



Highest resolution and accuracy

Sony digital gauges provide high accuracy measurement over the whole measuring stroke. Due to the magnetic measuring principle they are insensitive to oil, water and dust. These properties combined with the robust and compact design ensures the Sony gauges are ideal for use in flexible multi measuring fixtures in production applications.

Product overview

DK Series (p. 4-7)

- Max. resolution 0.1 μm
- Measuring length 12 mm / 2 mm
- Display LT30 Series

DT Series (p. 12-17)

- Max. resolution 1 μm
- Measuring length 12 / 32 mm
- Display LT10/11 Series

DG Series (p. 8-11)

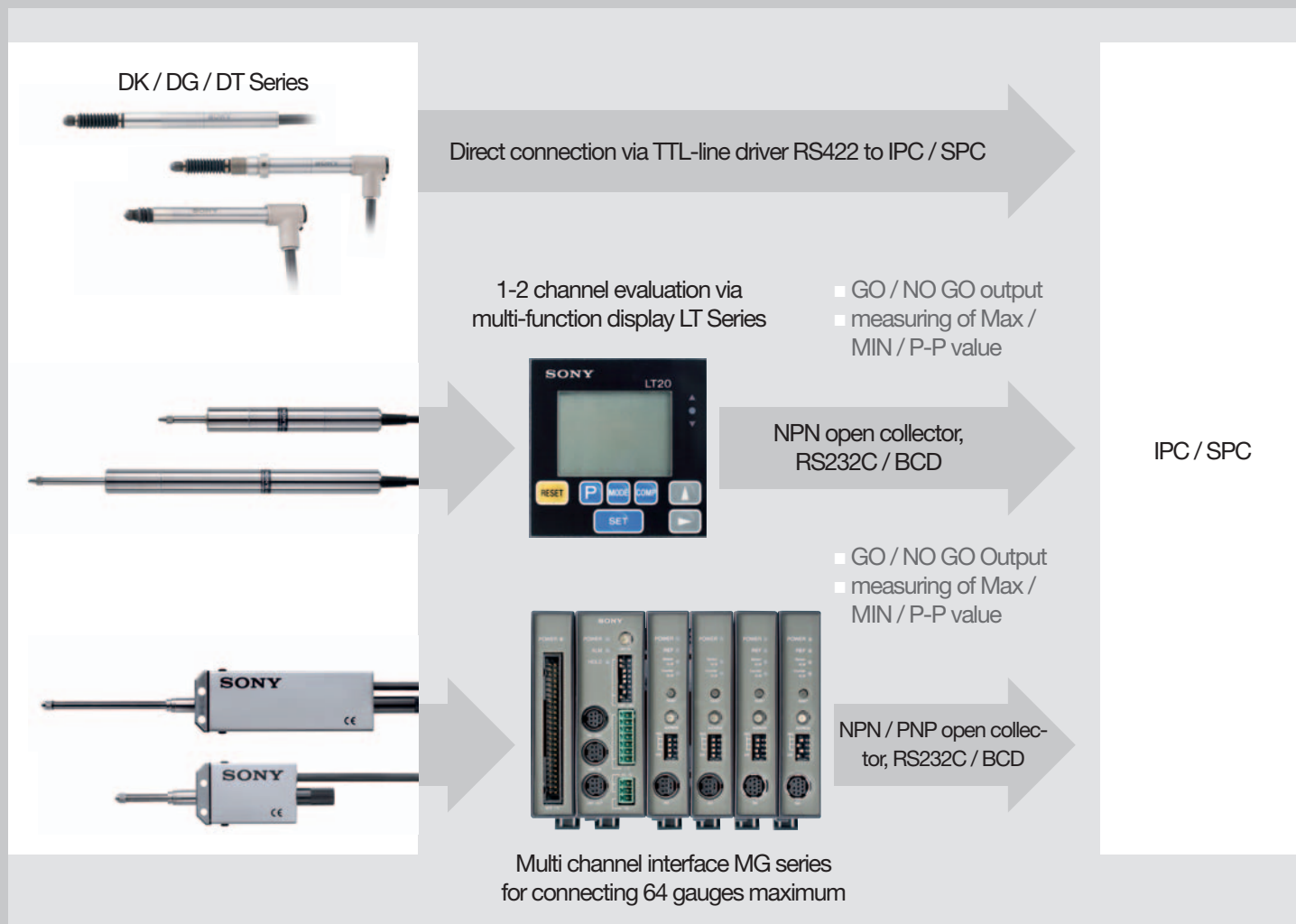
- Max. resolution 0.5 μm
- Measuring length 10 / 25 / 50 / 100 mm
- Display LT20 Series

MG Series (p. 18-19)

- Multi channel interface for connecting digital gauges of the DK / DG / DT Series

Information on additional measuring systems and accessories are available in our General Catalogue.

Integration of digital gauges to IPC/SPC



DK Series 0.1 μm

The DK Series is suitable for multi-gauge applications due to its slim 8mm diameter body.

- Measuring principle: magnetic incremental
- Measuring range: 12 mm / 2 mm
- Maximum resolution: 0,1 μm
- Accuracy: $\pm 0,5 \mu\text{m}$ / $\pm 0,8 \mu\text{m}$
- Maximum response speed: 42 m/min (0,1 μm)
- Reference point
- Protective design grade: IP66
- Spindle action by vacuum or pneumatic push

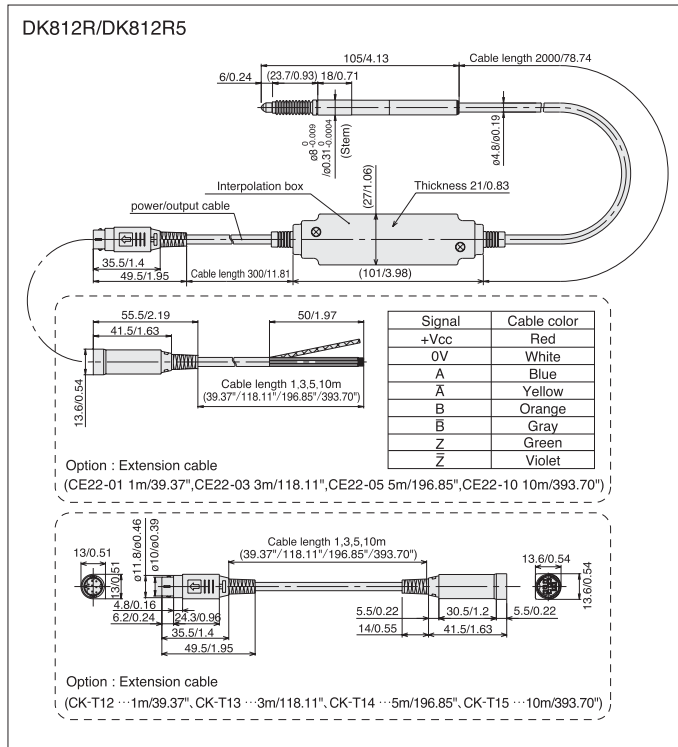


Model / name	DK812R, DK812LR, DK812FR, DK812FLR, DK812VR, DK802R, DK802LR	DK812R5, DK812LR5, DK812FR5, DK812FLR 5, DK812VR 5, DK802R5, DK802LR 5
Output	A/B/Z Quadrature (Line Driver EIA-422 or equivalent)	
Measuring range	2 mm/12 mm	
Minimum resolution	0.1 μm	0.5 μm
Minimum phase difference (*1)	100 ns	
Accuracy (at 20 °C)	$\pm 0.5 \mu\text{m}$	$\pm 0.8 \mu\text{m}$
Measuring Force	Measuring range: 2 mm Downward: 0.45 $\pm$ 0.25N Lateral: 0.40 $\pm$ 0.25N Upward: 0.35 $\pm$ 0.25N	Measuring range: 12 mm Downward: 0.6 $\pm$ 0.3N Lateral: 0.5 $\pm$ 0.3N Upward: 0.4 $\pm$ 0.3N
Reference point	1 (1 mm from spindle start)	
Maximum response speed	42 m/min	100 m/min
Feeler	carbide ball $\varnothing$ 3 (Mounting screw: M 2.5 x 0.45)	steel ball $\varnothing$ 3 (Mounting screw: M 2.5 x 0.45)
Spindle action by air	Vacuum retraction (type LR) Pneumatic push (type VR)	
Vibration resistance	100 m/s ² (10~2000 Hz)	
Shock resistance	1000 m/s ² (11 ms)	
Protective design grade	IP66 (not including Interpolation box and connector)	
Operating temperature	0 °C to +50 °C (Interpolation box 0 °C to +40 °C)	
Storage temperature	-20 °C to +60 °C	
Power supply voltage	+5 VDC $\pm$ 5 % (*2)	
Power consumption	1.8 W	
Mass (*3)	Approx. 20 g (measuring range: 2 mm), Approx. 30 g (measuring range: 12 mm)	
Length of output cable	12 m max. (Cable length to subsequent electronics)	

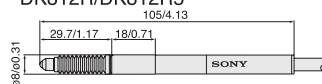
*1: Contact us for models with a larger phase difference

*2: The power supply should be between +5 V and +5.25 V with cable fully extended

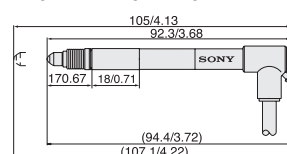
*3: Cable and Interpolation box are not included



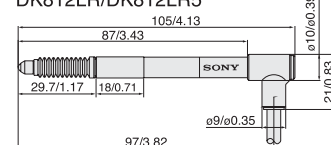
DK812R/DK812R5



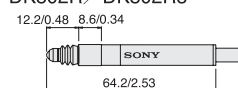
DK812VR/DK812VR5



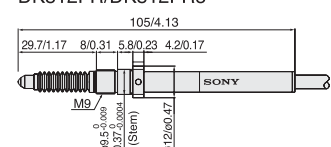
DK812LR/DK812LR5



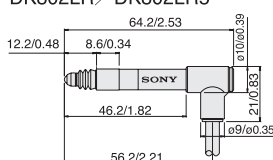
DK802R/DK802R5



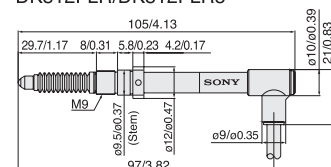
DK812FR/DK812FR5



DK802LR/DK802LR5



DK812FLR/DK812FLR5



Unit: mm/inch

Resolution	Measuring length	Models				
		Straight	Right Angle	Flange/Straight	Flange/Right Angle	Pneumatic push/Right Angle
0.1 μ m	2 mm	DK802R	DK802LR	DK812FR	DK812FLR	DK812VR
	12 mm	DK812R	DK812LR			
0.5 μ m	2 mm	DK802R5	DK802LR5	DK812FR5	DK812FLR5	DK812VR5
	12 mm	DK812R5	DK812LR5			

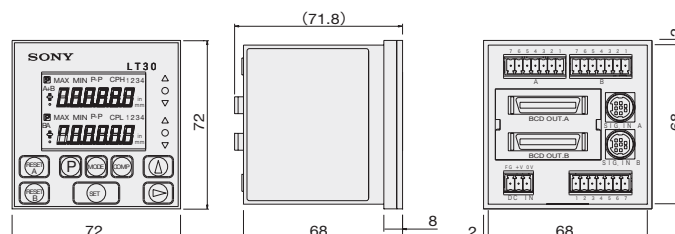
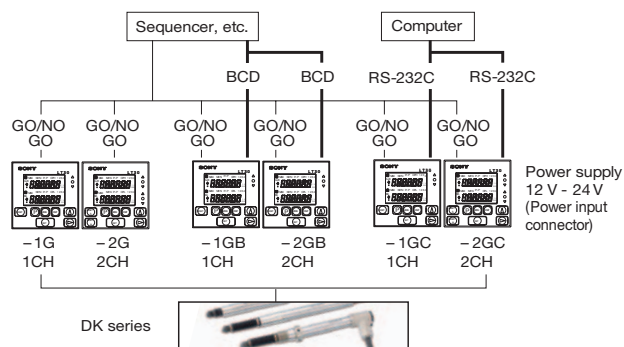
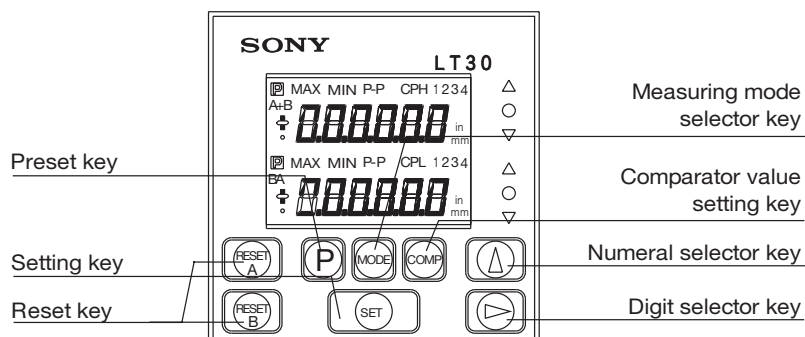


LT30

Display for DK Series digital gauges

Multifunction display of compact design for connection of one or two DK gauges. The LT30 display is suitable for applications within production lines for automatic measuring and sorting of parts.

- Compact design: DIN standard size 72 mm x 72 mm
- Resolution: 0.1 / 0.5 / 1 / 5 / 10 μ m
- Comparator: GO / NO GO evaluation
- Measuring of max / min / p-p value
- ADD / SUB function (2-axis model only)
- Reference point detection
- Interface RS232C or BCD available



Separate accessories
(Connectable to LT30-1GC / 2GC)

- RS232C cable
 - DZ252: D-sub 9-pin
 - DZ253A: D-sub-25-pin

Model	LT30-1G	LT30-1GB	LT30-1GC	LT30-2G	LT30-2GB	LT30-2GC
Display	6-digit backlit LCD display, mode indication					
I/O	Measuring unit inputs	1 CH			2 CH	
	I/O connector	•	•	•	•	•
	BCD	–	•	–	–	–
	RS232C	–	–	•	–	•
	RS-TRG (*1)	–	–	•	–	•
Zero point detection	By setting “use zero point” by parameter and detecting the zero point, the zero point is set at zero or at a preset value					
	–	–	Zero point reference via RS232C command	–	–	Zero point reference via RS232C command
Reset	Reset key or external input (through I/O connector) *Zero point is referenced by setting “use zero point” by parameter					
	–	–	RS232C command	–	–	RS232C command
Preset	Preset value is set with preset key and a value is recalled with reset key or input from a terminal *Zero point is used as the preset value by setting “use zero point” by parameter					
	–	–	Setting / recall via RS232C command	–	–	Setting / recall via RS232C command
Comparator	3-range comparator, comparator value setting with key switch GO / NO GO evaluation is displayed by LED and output through I/O connector (photo coupler)					
Peak hold	Measuring of max./min./p-p value started by reset key or by start input through I/O connector					
	–	–	Starting via RS232C command	–	–	Starting via RS232C command
Pause	With pause input at I/O even if the count value exceeds max./min./p-p value, those values do not change when there is pause input					
	–	–	Hold / cancel via RS232C command	–	–	Hold / cancel via RS232C command
Mode setting	Measuring mode setting with mode key					
		Setting via BCD terminal	Setting via RS232C command	–	Setting via BCD command	Setting via RS232C command
Input resolution	Selected from 0.1 / 0.5 / 1 / 5 / 10 μm (Set at the resolution of the measuring unit)					
Display resolution	Selected from 0.1 / 0.5 / 1 / 5 / 10 μm (Resolution cannot be set higher than that of the measuring unit)					
Direction	Selectable					
Maximum frequency response speed	42 m/min (at 0.1 μm resolution), 100 m/min. (at 0.5 μm resolution)					
ADD / SUB	–			Selection of A+B, A-B, B-A made by setting of direction		
Alarm	Response speed exceeded or measuring unit disconnected, level alarm Display on LCD, all the comparator outputs on terminals OFF					
	–	BCD alarm terminal “H” OFF	RS232C “E” output	–	BCD alarm terminal “H” OFF	RS232C “E” output
Data storage	Resolution, directions, comparator values, preset values, modes					
	–	BCD polarity (pos. / neg.), etc	Communication speed, etc.	–	BCD polarity (pos. / neg.), etc	Communication speed, etc.
Key lock	Key lock / cancellation by a long push of digit selector key					
Operating temperature	0 °C to +40 °C					
Storage temperature	–10 °C to +50 °C					
Power supply	Triple connector: 10.8 V DC to 26.4 V DC					
Power consumption	5 W	5 W	5 W	8,5 W	9 W	8,5 W
Mass	Approx. 200 g	Approx. 230 g	Approx. 220 g	Approx. 210 g	Approx. 270 g	Approx. 230 g
Applicable measuring unit	DK series					

*1: Trigger inputs for RS-232C data outputs

DG Series 0.5 μm

Sony DG gauges are characterized by their robust design, long measuring stroke to a maximum of 100 mm and high accuracy over the whole measuring range. The DG series is suitable for applications within production lines and machine installations.

- Measuring principle: Magnetic principle
- Measuring range: 10 / 25 / 50 / 100 mm
- Max. resolution: 0.5 μm
- Accuracy: $\pm 1 \mu\text{m}$ / $\pm 2 \mu\text{m}$
- Max. response speed: 60 m/min
- Spindle can be retracted with an air pressure device
- Air lifter: DZ174 for DG 10 / 25 / 50 available



DG10BS



DG25BS/DG25BL



DG10BP



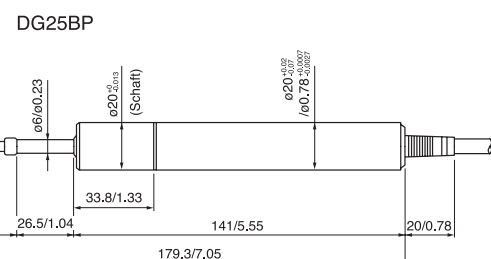
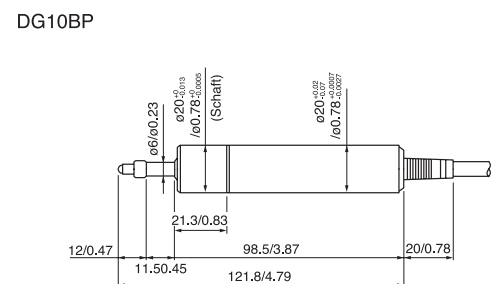
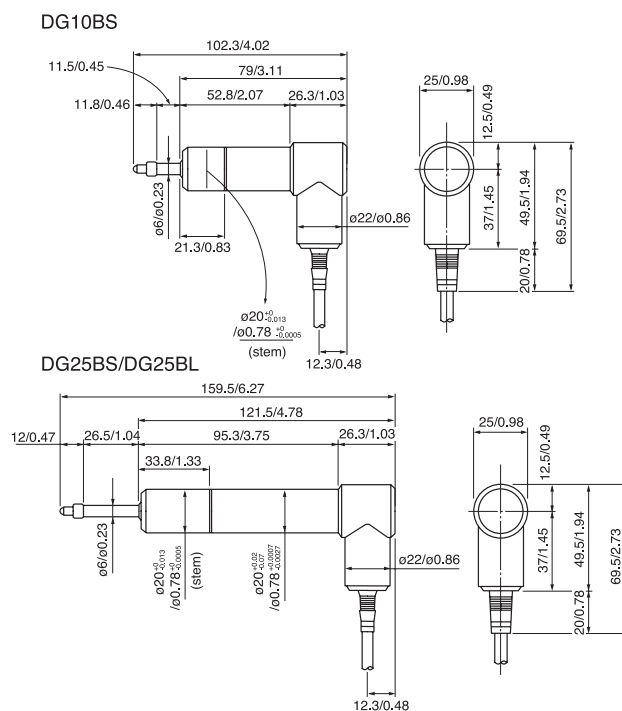
DG25BP



DG50BP



DG100BP



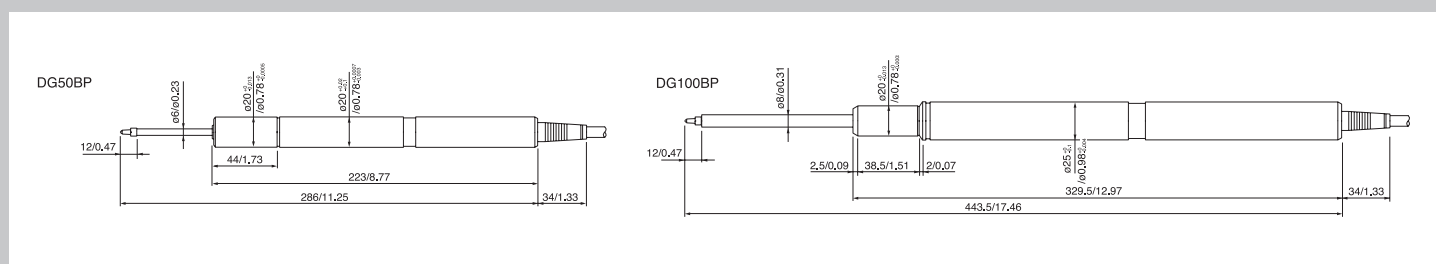
Model		DG10BP/ BPM/BPE	DG10BS/ BSM/BSE	DG25BP/ BPM/BPE	DG25BS/ BSM/BSE	DG50BP/ BPM/BPE	DG100BP/ BPM/BPE
Compatibility		DGBP/BS model to be attached to LT20 display or Interface MG Series					
Measuring range		10 mm		25 mm		50 mm	100 mm
Resolution		0.5 μm					
Accuracy (at 20 °C / 68 F)		±1 μm					±2 μm
Measuring force	lateral	All directions: 4.9 N or less				All directions: 6.29 N or less	All directions: 9.3 N or less
	upwards						
Protective design grade		Equivalent to IP64					
Sealing (oil, water, dust)		Oil sealing, O-rings, Y-gaskets					
Mounting stem diameter		ø 20 ⁰ _{-0,013} mm					
Operating temperature		0 °C to +50 °C					
Storage temperature		-20 °C to +60 °C					
Cable length (*1)		5 m					
Feeler		Feeler with Ø 2.5 mm carbide ball (M 2.5 x 0.45)				Feeler with carbide ball (DZ122)	Feeler with carbide ball (DZ121)
Mass (exclusive of cable)		230 g		300 g		360 g	630 g
Air lifter		DZ174 (option)					

*1: Longer cables on request; extension cables are not available for DG Series.

DG-M/E Model with TTL (RS422) output signal

Model	DG□□□□□M	DG□□□□□E
Power supply voltage	DC 5 V ±5 %	DC 11 V to 28 V
Power consumption	300 mA (Maximum)	150 mA (Maximum)
Output signal	A/B quadrature signal (RS422)	
Resolution	Selectable: 0.5 / 1 / 2 / 5 / 10 µm	
Max. response speed	1 m/s	
Min. phase difference	200 ns	
Alarm	if the maximum response speed is exceeded or in case of cable break	
Dimensions	125 x 28 x 28 mm (projecting parts not included)	

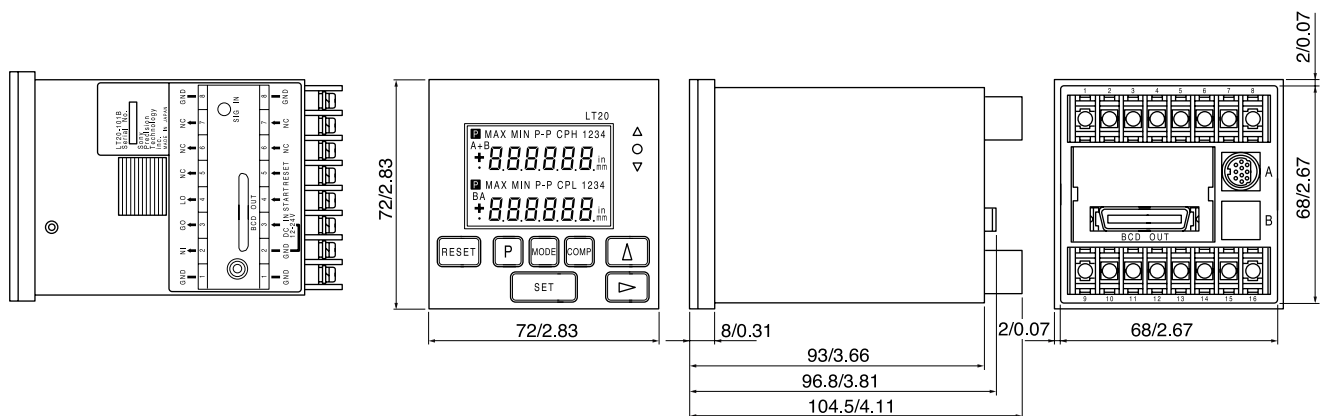
other models are available in our General Catalogue



LT20 Series Display for DG gauges

Multifunction display of compact design for connection of one or two DG gauges. The LT20 display is suitable for applications within production lines for automatic measuring and sorting of parts.

- Compact design: DIN standard size 72 mm x 72 mm
- Resolution: 0.5 / 1 / 5 / 10 μ m
- Comparator: GO / NO GO evaluation
- Measuring of max / min / p-p value
- ADD / SUB function (2-axis model only)
- Interface RS232C or BCD available



Model		LT20-101	LT20-101B	LT20-101C	LT20-201	LT20-201B	LT20-201C
Compatibility		DG-BP/BS gauge models (*1)					
Display		6 digits, backlit LCD display, mode indication					
Display resolution		0.5 / 1 / 5 or 10 μm selectable					
ADD / SUB function		—			A+B, A-B, B-A selection by direction setting		
Direction		Selectable					
I/O	Measuring input units	1 channel			2 channels		
	Terminals	•					
	BCD	—	•	—	—	•	—
	RS232C	—		•	—		•
	Ext. IN	—		•	—		•
Reset		Reset key operation or external input (from terminals)					
		—	—	RS232C command	—	•	RS232C command
Preset		Preset key and recall with reset key					
		—	—	Setting and recall via RS232C	—	—	Setting and recall via RS232C
Comparator function		3-range comparator, comparator value setting by key switch GO/NO GO evaluation: LED display and terminals output (open collector)					
		—	4 sets of comparison points selected via BCD	Setting via RS232C	—	4 sets of comparison points setting possible selected via BCD	Setting via RS232C
Peak hold function		Max / min / peak-to-peak values; sampling commenced by start input from terminals; either these values or current values are selected					
		—	Set via BCD terminal	Setting and start via RS232C	—	Set via BCD terminal	Setting and start via RS232C
Mode settings		Set measurement mode with mode key					
		—	Set via BCD terminal	Set via RS232C command	—	Set via BCD terminal	Set via RS232C command
Alarm		Response frequency exceeded or measuring unit disconnected (Display on LCD, the comparator output for the terminals are all “H”)					
		—	BCD alarm (output = “H”)	RS232C (output character “E”)	—	BCD alarm (output = “H”)	RS232C (output character “E”)
Data storage		Resolutions, directions, comparator values, preset values, modes					
		—	BCD polarity	Data communications parameters	—	BCD polarity	Data communications parameters
Operating temperature		0 °C to +40 °C / 32 °F to 104 °F					
Storage temperature		-10 °C to +50 °C / 14 °F to 122 °F					
Power supply		Terminals: 12 VDC -10% to 24 VDC ±10 %					
Power consumption		4 W	5 W	4 W	6 W	8 W	6 W
Compatible measuring units		DG-B, DL-B, DL-BR and DT12N/P (*1)					
Dimensions		72 (W) x 72 (H) x 93 (D) mm / 2.83” x 2.83” x 3.66”					
Mass		270 g / 9.52 oz	300 g / 10.58 oz	290 g / 10.23 oz	280 g / 9.88 oz	340 g / 11.99 oz	300 g / 10.58 oz

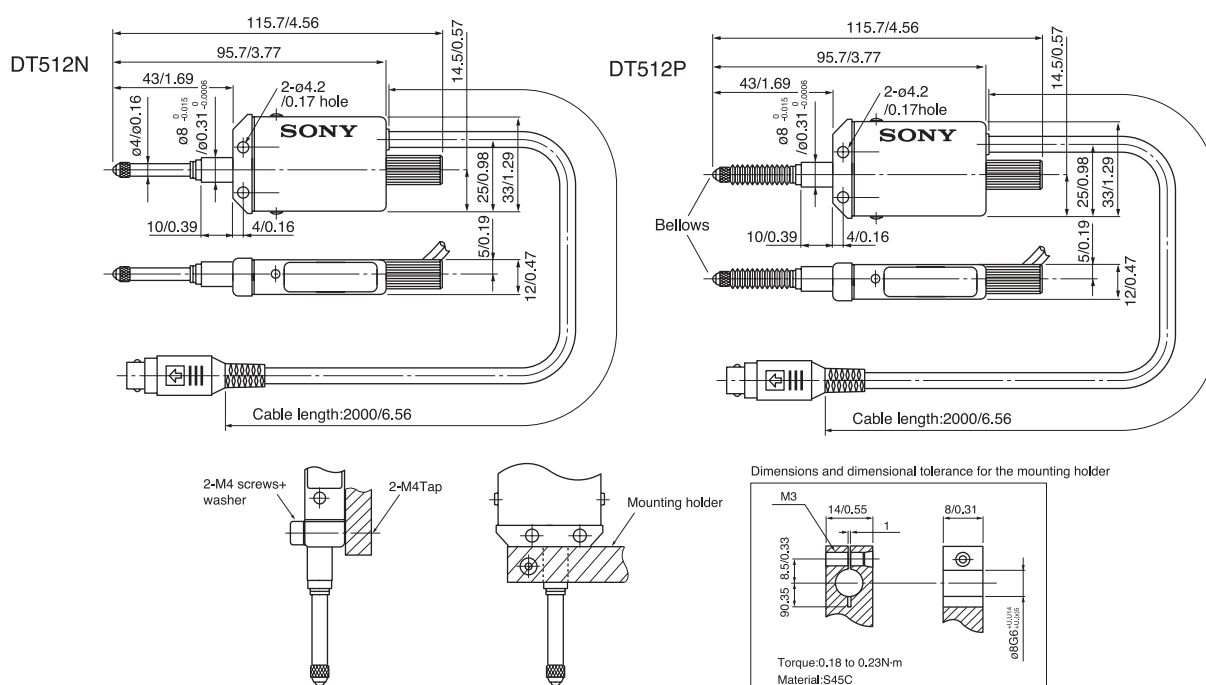
*1: Use the MT10 detector (option) for connection to the DT12N/P gauge.

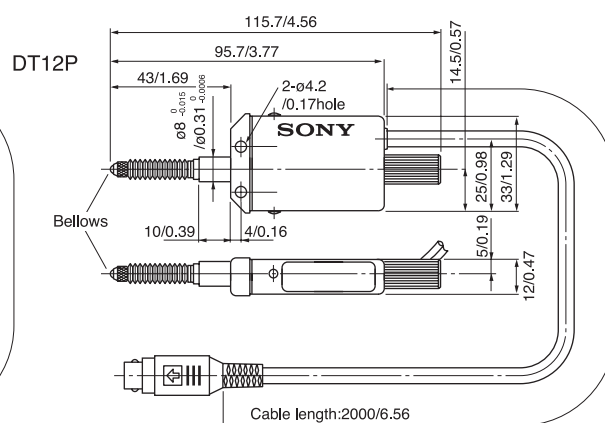
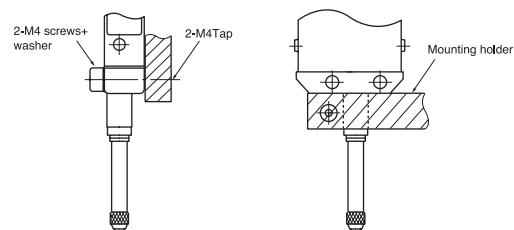
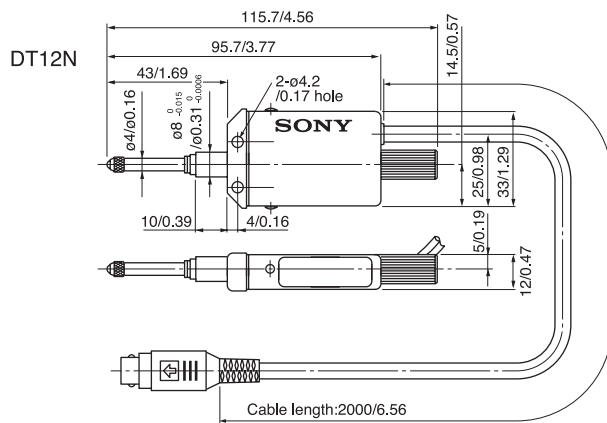
DT Series 1 μm / 5 μm

- Magnetic principle
- Excellent resistance to workshop conditions
- Resistant to oil, water and dust
- Compact design
- Accuracy: $\pm 3 \mu\text{m}$ / $\pm 5 \mu\text{m}$
- Resolution: 1 μm / 5 μm
- Measuring range: 12 mm / 32 mm
- Air lifter:
 - DT12/512: Air lifter DZ176 separately available
 - DT32: Available with integrated air lifter (DT32NV/PV)
- Main application: Measuring of parts and automatic sorting in production and assembly lines
- Optional: cable adapter MT11 for DT12/32 for connection to SPC/IPC via TTL-line-driver (RS422)

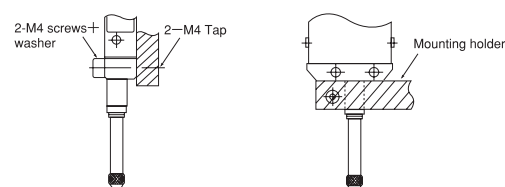
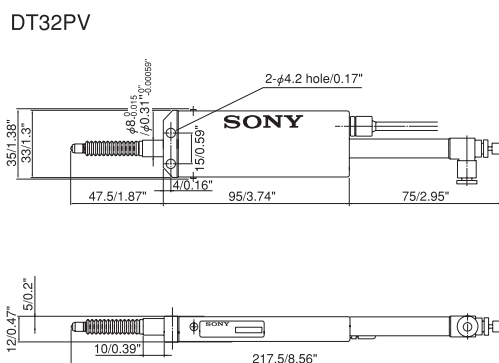
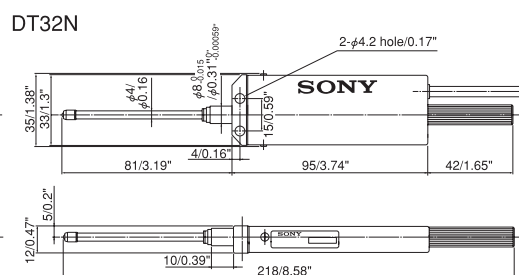
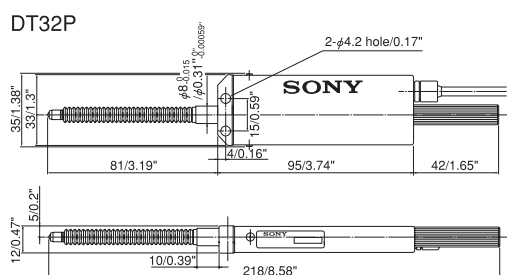
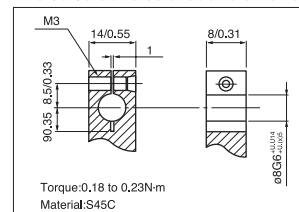


Model	DT512N	DT512P	DT12N	DT12P	DT32N	DT32NV	DT32P	DT32PV
Measuring range	12 mm				32 mm			
Resolution	1 μm				5 μm			
Accuracy (at 20 °C / 68 F)	$\pm 3 \mu\text{m}$				$\pm 5 \mu\text{m}$			
Measuring force	downwards	0.9 $\pm$ 0.5 N	All directions: 1.7 N or less	0.9 $\pm$ 0.5 N	All directions: 1.7 N or less	1.5 $\pm$ 0.8 N	All directions: 2.9 N or less	
	lateral	0.8 $\pm$ 0.5 N		0.8 $\pm$ 0.5 N		1.3 $\pm$ 0.8 N		
	upwards	0.7 $\pm$ 0.5 N		0.7 $\pm$ 0.5 N		1.1 $\pm$ 0.8 N		
Protective design grade	—	Equivalent to IP64	—	Equivalent to IP64	—		Equivalent to IP64	
Mounting stem diameter	$\phi 8 \begin{smallmatrix} 0 \\ -0.015 \end{smallmatrix}$ mm							
Operating temperature	0 °C to +50 °C							
Storage temperature	-10 °C to +60 °C							
Cable length	2m; extension cable CE08- 1 / 3 / 5 / 10 / 15 separately available							
Feeler	Feeler with $\phi 3$ mm steel ball (M 2.5 x 0.45)							
Mass (exclusive of cable)	75 g	80 g	75 g	80 g	120 g	140 g	120 g	140 g
Guaranteed number of strokes	5 million							
Spindle action						pneumatic push		pneumatic push

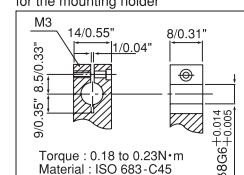




Dimensions and dimensional tolerance for the mounting holder



Dimensions and dimensional tolerance for the mounting holder



MT11

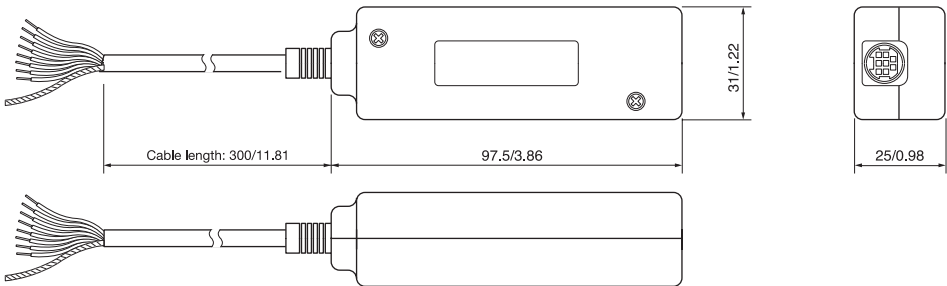
Cable detector for DT12/32

- Cable detector for Sony-gauge DT12/32 for output of TTL (RS422) output signal
- Gauges DT12/32 can be connected directly to IPC or SPC
- Resolution: 5 μm



Model	MT11
Compatibility	DT12N/ P DT32N/NV/P/PV
Resolution	5 μm
Max. response speed	60 m/min
Max. response acceleration	2400 m/s²
Output signal	A/B quadrature output by line driver (RS422)
Power supply	5 VDC ±4 %
Power consumption	1 W
Operating temperature	0 °C to +50 °C
Storage temperature	-10 °C to +60 °C
Connection	open-end cable

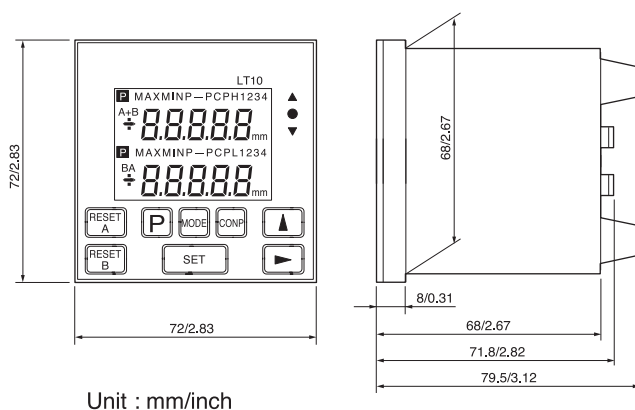
MT11



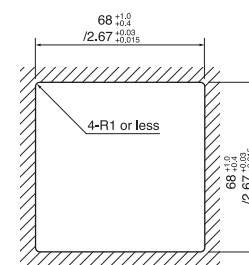
LT10/11 Display for DT gauges

Multifunction display of compact design for connection of one or two DT gauges. The LT10 display is suitable for applications within production lines for automatic measuring and sorting of parts.

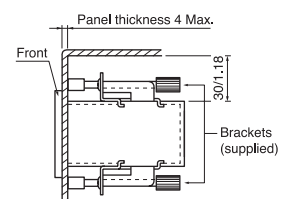
- Compact design: DIN standard size 72 mm x 72 mm
- Compatibility:
 - LT10 can be connected to gauge DT12/32
 - LT11 can be connected to gauge DT512
- Selectable resolution:
 - LT10: 5 / 10 μ m
 - LT11: 1 / 5 / 10 μ m
- Comparator: GO / NO GO evaluation
- Measuring of max / min / p-p value
- ADD / SUB function (2-axis model only)
- Interface RS232C or BCD available



<Panel cut dimensions>



<Brackets>



*Allow at least 30 mm between LT10 and mounting surface.

Model		LT10-105 LT11-101	LT10-105B LT11-101B	LT10-105C LT11-101C	LT10-205 LT11-201	LT10-205B LT11-201B	LT10-205C LT11-201C
Display		5 digits, backlit LCD display, mode indication					
Display resolution		1.5 or 10 μm selectable					
Max. response acceleration		2400 m/s ²			1500 m/s ²		
Max. response speed		60 m/min					
ADD / SUB function		—			A+B, A-B, B-A, selectable		
Direction		selectable					
I/O	Measuring input units	1 channel			2 channels		
	Terminals	•					
	DC IN jack	•					
	BCD	—	•	—	—	•	—
	RS232C	—		•	—		•
	Ext. IN	—		•	—		•
Reset		Reset key operation or external input (via terminals)					
		—	BCD input	RS232C command	—	BCD input	RS232C command
Preset		Preset key and recall via reset key					
		—	Recall via BCD reset terminal	Setting and recall via RS232C	—	Recall via BCD reset terminal	Setting and recall via RS232C
Comparator function		3-range comparator, comparator value setting by key switch; GO / NO GO evaluation via LED display and terminal output (open collector NPN)					
		—	4 comparator value setting possible, selected via BCD	Setting via RS232C	—	4 comparator value setting possible, selected via BCD	Setting via RS232C
Peak hold function		Max./Min./peak-to-peak values; sampling commenced by start input from terminals; either these values or current values are selectable					
		—	Start possible via BCD	Setting and start via RS232C	—	Start possible via BCD	Setting and start via RS232C
Alarm		Response speed exceeded or measuring unit disconnected (Display on LED; comparator output at terminals “H”)					
		—	BCD alarm (output = “H”)	RS232C (output character “E”)	—	BCD alarm (output = “H”)	RS232C (output character “E”)
Data storage		Resolutions, directions, comperator values, preset values, modes					
		—	BCD polarity (positive / negative)	communication parameters	—	BCD polarity (positive / negative)	communication parameters
Operating temperature		0 °C to +40 °C / 32 °F to 104 °F					
Storage temperature		−10 °C to +50 °C / 14 °F to 122 °F					
Power supply		Terminals: 12 VDC −10 % to 24 VDC +10 % DC IN jack: 9 VDC, AC power adapter					
Power consumption		1.8 W	2.9 W	2.0 W	2.9 W	5.2 W	3.1 W
Compatible measuring units		LT10: DT12N/P, DT32N/NV/P/PV; LT11: DT512N/P					
Dimensions		72 x 72 x 79.5 mm (W x H x D)					
Mass		185 g	215 g	205 g	190 g	250 g	210 g

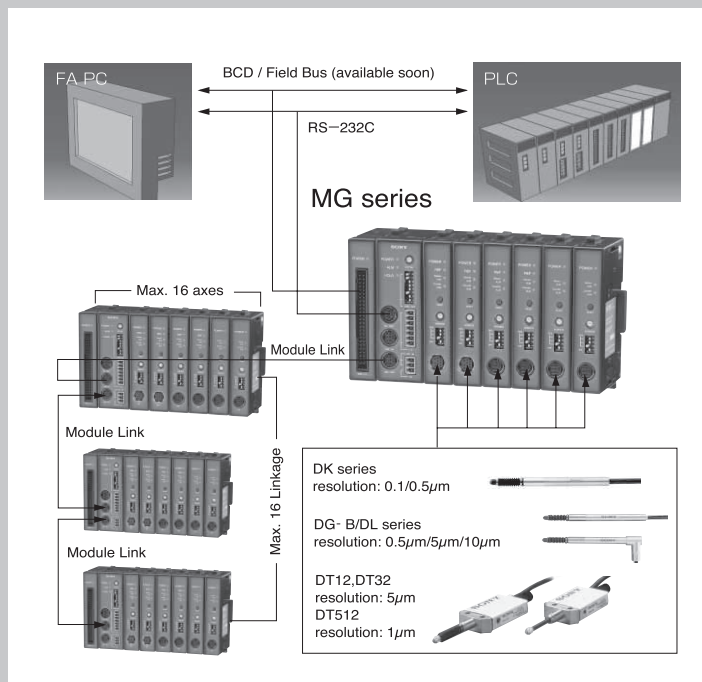
MG Series Multi channel interface

Multi channel interface for connecting up to 64 gauges

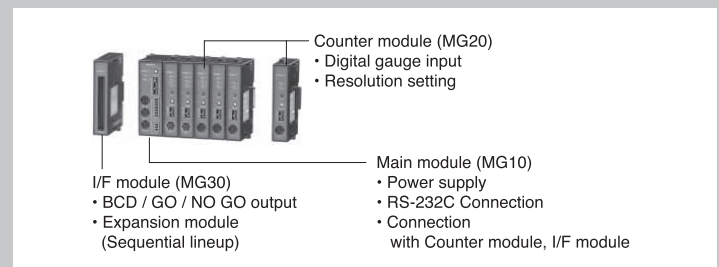
- Output via RS232C or BCD
- Mounts to a standard DIN rail (35 mm)
- Measuring of max / min / p-p value
- Comparator: GO / NO GO evaluation
- Reference point detection
- Resolution: 0.1 / 0.5 / 1 / 5 / 10 μm
- Compatible to all Sony gauges
- Applications: Detection and forwarding of measuring data to superior IPC or SPC



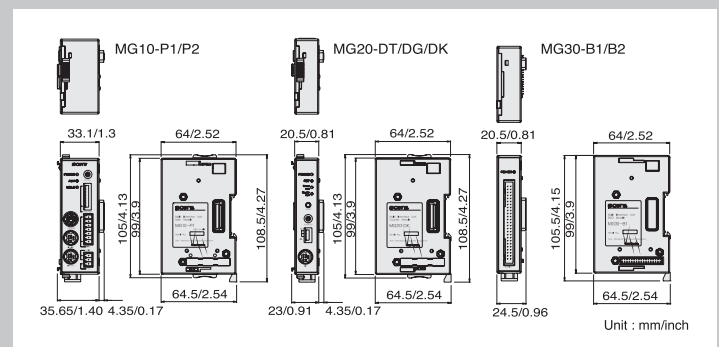
System structure



“MG” Multi Interface unit



Dimensions



Model		MG10-P1	MG10-P2
Power source	Supply voltage	DC12 – 24 V (11 – 26.4 V); Allowable power start up 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	RS232C (EIA232C 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/OCD/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)
		Photo coupler insulation, external power: DC5 – 24 V	
	Output format	sink type (-COM)	source type (+COM)
		Photo coupler insulation, external power: DC5 – 24 V	
	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: Total power of modules connected to MG10 should not be over 54 W (12 VDC Input) or 108 W (24 VDC Input)

Model		MG20-DK	MG20-DG	MG20-DT
Power consumption		1 W + power consumption for connected gauge	1.4 W (connected to DG-B) 0.5 W (connected to DL-B)	0.8 W
Measuring unit input	Corresponding gauge	DK series (A/B quadrature input)	DG**B series DL**B / DL**BR series	DT series
	Allowable resolution setting (*2)	10 / 5 / 1 / 0.5 / 0.1 μ m	10 / 5 / 0.5 μ m	5 μ m (DT12 / 32), 1 μ m (DT512)
	Maximum response speed	set with DIP switch		1 m/s
	Reference point (*3)	REF-LED (reference point loaded) shows on the display after the reference point is detected. 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.		
		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

*3: MG20-DG: work only connect to DL**BR series

Model		MG30-B1	MG30-B2
Power consumption		1 W	
I/O	Input format	source input (+COM)	sink input (-COM)
		Photo coupler insulation, external power: DC5 – 24 V	
	Output format	sink type (-COM)	source type (+COM)
		Photo coupler insulation, external power: DC5 – 24 V	
	Input signal	DRQ / channel address / measuring mode shifting / comparator shifting / reset / start posing / reference point loaded	
Output setting	Output signal	BCD data (6 digits) / READY / code / GO/NO GO output / alarm / reference point loaded	
		timer (1 ~ 128 ms) / OUT / OR / polarity (set with internal DIP switch)	

All models	Operating temperature	0 °C to +50 °C (No condensation)
	Storage temperature	–10 °C to +60 °C (20 to 90 % RH)

SONY

GeBoTech_{GmbH}

Industriestraße 24 77815 Bühl
Tel. 07223/91249-30 Fax. 07223/91249-59
www.gebotech.de [info\(at\)gebotech.de](mailto:info(at)gebotech.de)