■Counter specifications (continued)

Item \ Model name	LH70-1	LH70-2	LH70-3	LH71-1	LH71-2	LH71-3
Segmented error compensation	–			32 sections max. (Requires a scale with a reference point)		
Line hole function	–			Input angle, number of holes and pitch of the holes.		
Scaling function	–			0.100000 to 9.999999		
Program function	–			Coordinates of datum points can be programmed via: 1.Manual programming by the keypad 2.Automatic programming while machining 3.Mirror image function when the program is executed 4.Canned cycles (Bolt hole, Line hole, ARC) can be inserted into the program		
Angle display function	–			Angle value displayed when using the Digiruler scale and entering the diameter and signal resolution		
Power save function	LED display turns off after a user-definable period of time.					
Navigation function	Status and Navigation LEDs					
Power supply	12VDC 100 to 240VAC±10% (When using AC adaptor)					
Power consumption	Max. 25VA (connected at AC power supply)					
Operating temperature	0 to 40℃ (no condensation)					
Storage temperature	-20 to 60℃(no condensation)					
Mass	Approx. 1.5kg					

■AC adaptor

Item \ Model name	PSC-21	PSC-22	PSC-23
Input voltage	100 to 240VAC±10%		
Output voltage	12VDC (3A)		
Destination	For Japan only*	For U.S.A. only*	For Europe and other countries

*When using under 200VAC, a cable capable of 250VAC must be used.

⚠ Safety notice: Prior to use, be absolutely certain to read and understand the Operating Instruction to ensure proper use of this product.

●Specifications and dimensions listed in this brochure are subject to change without notice due to product improvement.

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SONY

Scale Unit
SJ300 SERIES
DRO Display Unit
LH70/71 SERIES

Magnescale®

SJ300 series
The “SJ300” Magnescale features a unique flexible head and scale mechanism which combine to reduce installation time, and still maintain Sony’s legendary resistance to oil, dirt and coolant.

LH70 series
The “LH70” DRO display unit combines popular, easy to use functions for both Mills and Lathes.

Sony Manufacturing Systems Corporation

JAB QS Accreditation R 031
ISO 9001 JACO QC98J1029
UKAS QUALITY MANAGEMENT 051
Isehara Center is registered to ISO 9001 (Quality)

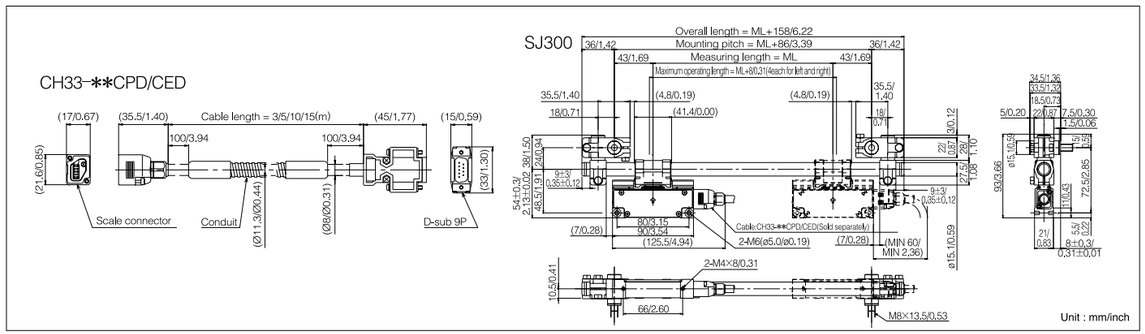
Scale Unit

SJ300 SERIES

Sony's legendary Magnescale technology has been improved!

- Flexible Reader Head mounting provides wider installation tolerances and less installation time.
- Excellent resistance to workshop conditions (IP64)
- Classic Sony Magnescale benefits: No cleaning or maintenance, and no scratched or broken glass.
- No machined surface or backer bar required.
- Reader Head Status lamp provides visual signal status.
- Scale mounting brackets slide and rotate to accommodate a wide range of installation configurations.
- Removable cable for easy replacement.

■Outer dimensions



■Scale specifications:

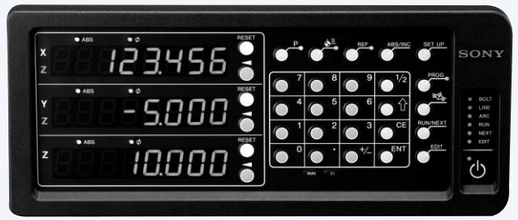
Item \ Model name	SJ300-005 to SJ300-220
Measuring length ML(mm)	50,100,150,200,250,300,350,400,450,500,550,600,650,750,800, 850,950,1050,1250,1400,1600,1850,2050,2200
Overall length	L+158mm
Accuracy(20°C)	±10µm/m
Resolution	1µm
Max. response speed	60m/min
Output signal	A/B Quadrature (compliant with EIA-422)
Min. output phase difference	200ns
Expansion coefficient	(17±1)x10^{-6}/°C
Status lamp functions	Low Scale signal / Low power supply voltage
Max. cable length	15m
Power supply voltage	5V±5%
Power consumption	2.5W or less(With load)
Operating temperature	0 to 45℃
Storage temperature	-20 to 60℃
Vibration resistance	20m/s^2,50Hz to 2kHz
Shock resistance	600m/s^2,11mm/s
Protective design grade	IP64(Or equivalent)

■Cable specifications

Item \ Model name	CH33-							
	03CPD	05CPD	10CPD	15CPD	03CED	05CED	10CED	15CED
Cable length L(m)	3	5	10	15	3	5	10	15
Cable sheath	PVC				Polyurethane			
Cable armor	Yes							
Protective design grade	IP64(At reader head cable connection)							

Display Unit

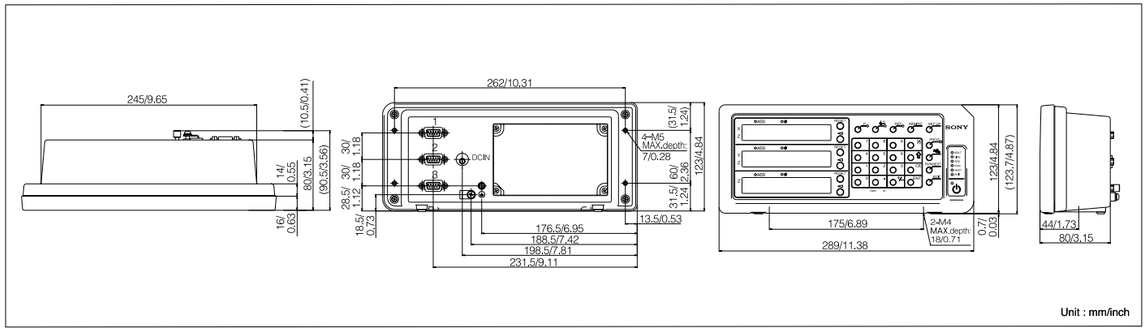
LH70 SERIES



By combining both Mill and Lathe features, the LH70 offers flexibility for multiple applications in a single DRO display

- Function-specific keys for ease of use.
- Simple, intuitive function operation.
- Function LEDs guide you through each operation.
- Productivity enhancing features include:
  - ●Bolt Hole Circle ●Line Hole Calculator ●Tool Offset
  - ●Arc Contouring ●Programmable Memory Positions
  - ●Linear Error Compensation ●Power Saving “Sleep Mode”

■Outer dimensions



■Display specifications

LH71:Coming Soon

Item \ Model name	LH70-1	LH70-2	LH70-3	LH71-1	LH71-2	LH71-3
Display axes	1	2	3	1	2	3
Display	7 digits and “-” display. Amber LEDs					
Connectable measuring units	SJ300 series (Direct), GB-A/SR128, PL20B, DG-B series (Adaptors available)					
Scale input resolution	Basic : 0.1µm, 0.5µm, 1µm, 5µm, 10µm, 1s, 10s, 1min, 10min Expanded : 100µm, 50µm, 25µm, 20µm, 2µm, 0.05µm					
Display resolution*	Basic : The above, and their diameter displays 0.000005”, 0.00001”, 0.00002”, 0.00005”, 0.0001”, 0.0002”, 0.0005”, and their diameter displays Expanded: The above, and their diameter displays 0.000002”, 0.000005”, 0.00001”, 0.00002”, 0.00005”, 0.0001”, 0.0002”, 0.0005”, 0.001”, 0.002”, 0.005”, and their diameter displays					
Input signal	A/B Quadrature signal,Z signal (Equivalent with RS-422)					
Mln. phase input difference	100ns					
Alarm display	Scale disconnected/Excess speed/Data Overflow/Power failure/Error in stored data					
Preset/Recall function	3 items					
Multi datum point	10			150		
Tool offsets(For Lathe)	–		12	–		99
Axis Summing	–		Same as LH71	–		Sum of 2 axes
Display hold	–		Same as LH71	–		The displayed value can be held and the datum entered.
Ref. point function	The absolute zero point can be detected and the datum point can be re-established. (Requires a scale with a reference point)					
Bolt hole circle	–	Same as LH71		–	Input diameter, start angle, stop angle, No. of holes	
Radius cutting function	–	Same as LH71		–	Input radius, Tool diameter, feed angle	
Data storage	Stores the value displayed before power loss and the last preset datum					
Max. linear error compensation	±600µm/m					

*Minimum display resolution is same as scale input resolution.