

DIGIMATIC INDICATORS **ID-C Series**

For Calculation, Peak-Value Hold and Bore Gage Applications

SMALL TOOL INSTRUMENTS
AND DATA MANAGEMENT



Digimatic Indicators For Calculation Applications

FEATURES

- Calculation function operates on spindle displacement.
- Entering the appropriate formula factors for a fixture dedicated to the application enables direct measurement readout, thereby eliminating any need for the conversion tables previously needed for those applications where fixtures are typically used.
- Peak-Value TIR/MAX/MIN Hold enables GO/±NG judgement for peak value.
- Simple operation of many functions with five buttons and status icons.
- Wide LCD and new analog bar graph are now standard on all models.
- It performs sampling in fifty times per second and it enables to detect peak value more correctly.



SPECIFICATIONS

Type/Model
Order No.
Measuring range
Magnification and linearity (overall) *1
Hysteresis *1
Repeatability *1
Stem diameter
Display rotate
Resolution (selectable)
Analog bar display
Functions
Preset
Tolerance judgment
Peak detection
Calculation
Others
Data output
Input from PC (Dedicated I/F)
Key lock (set from instrument or PC)
Parameter lock (set from PC)
Detection method
Response speed
Measurement frequency
Normal mode
Peak detection mode
FAST mode OFF
FAST mode ON
Power supply
Battery life (normal use) *2
Type of back
Net weight

Digimatic Indicators For Peak-Value Hold Applications

FEATURES

- Peak-Value TIR/MAX/MIN Hold enables GO/±NG judgement for peak value.
- Simple operation of many functions with five buttons and status icons.
- Wide LCD and new analog bar graph are now standard on all models.
- It performs sampling in fifty times per second and it enables to detect peak value more correctly.



SPECIFICATIONS

Type/Model
Order No.
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Magnification and linearity (overall) *1
Hysteresis *1
Repeatability *1
Stem diameter
Display rotate
Resolution
Analog bar display
Functions
Preset
Tolerance judgment
Peak detection
Calculation
Others
Data output
Input from PC (Dedicated I/F)
Key lock (set from instrument or PC)
Parameter lock (set from PC)
Detection method
Response speed
Measurement frequency
Normal mode
Peak detection mode
FAST mode OFF
FAST mode ON
Power supply
Battery life (normal use) *2
Type of back
Net weight

Digimatic Indicators For Bore Gage Applications

FEATURES

- Dedicated for inside measurement with minimum value hold and tolerance judgement function.
- Measurement data memory function (9 measurement results can be stored)
- Simple operation of many functions with five buttons and status icons.
- Wide LCD and new analog bar graph are now standard on all models.
- It performs sampling in fifty times per second and it enables to detect peak value more correctly.



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Normal mode
Peak detection mode
FAST mode OFF
FAST mode ON
Power supply
Battery life (normal use) *2
Type of back
Net weight

Calculation									
543-340B	543-341B	543-342B	543-590B	543-591B	543-592B	543-595B	543-596B	543-597B	
12.7 mm	.5" = 12.7 mm		25.4 mm	1" = 25.4 mm		50.8 mm	2" = 50.8 mm		
0.003 mm	±.00010" / 0.003 mm		0.003 mm	±.00010" / 0.003 mm		0.006 mm	±.00025" / 0.006 mm		
0.002 mm	.00010" / 0.002 mm		0.002 mm	.00010" / 0.002 mm		0.002 mm	.00010" / 0.002 mm		
0.002 mm	.00010" / 0.002 mm		0.002 mm	.00010" / 0.002 mm		0.002 mm	.00010" / 0.002 mm		
ø8mm		ø9.52mm=.375"(3/8") DIA		ø8mm		ø9.52mm=.375"(3/8") DIA		ø8mm	
330°									
12 steps									
±20 scales									
Three Preset values (P1, P2 and P3) can be set and stored.									
Four sets of upper and lower limits (P1, P2, P3 and INC) can be set and stored.									
TIR, Max, Min									
Displayed value = Ax'+B+Cx ⁻¹ (x' = plunger displacement + offset)									
Display value HOLD									
Digimatic									
Yes									
Yes									
Yes									
Capacitance-type absolute-linear-encoder									
infinite									
10 times/sec									
50 times/sec									
CR2032 x 1 pc.									
Approx. 1 year									
Flat									
170 g			190 g			260 g			

*1 Does not include quantizing error (±1 count). Valid for resolution set to 0.001mm°.00005" and coefficients A=1, B=0 and C=0.

*2 When data processors are not connected. Battery life depends on use of the indicator. Use the above value as a guide only. (TIP) Battery life with Peak detection mode and FAST mode ON is about 10 months.

Peak-value hold					
543-300	543-300B	543-301	543-301B	543-302	543-302B
12.7 mm			.5" = 12.7 mm		
0.003 mm			±.00010" / 0.003 mm		
0.002 mm			.00010" / 0.002 mm		
0.002 mm			.00010" / 0.002 mm		
		ø8mm		ø9.52mm=.375"(3/8") DIA	
0.001/0.01 mm				.00005/.0001/.0005" // 0.001/0.01 mm	
±20 scales					
Three Preset values (P1, P2 and P3) can be set and stored.					
Four sets of upper and lower limits (P1, P2, P3 and INC) can be set and stored.					
TIR, Max, Min					
Ax					
Display value HOLD					
Digimatic					
Yes					
Yes					
Yes					
Capacitance-type absolute-linear-encoder					
infinite					
10 times/sec					
50 times/sec					
CR2032 x 1 pc.					
Approx. 1 year					
With lug		Flat		With lug	
180 g		170 g		195 g	
				170 g	

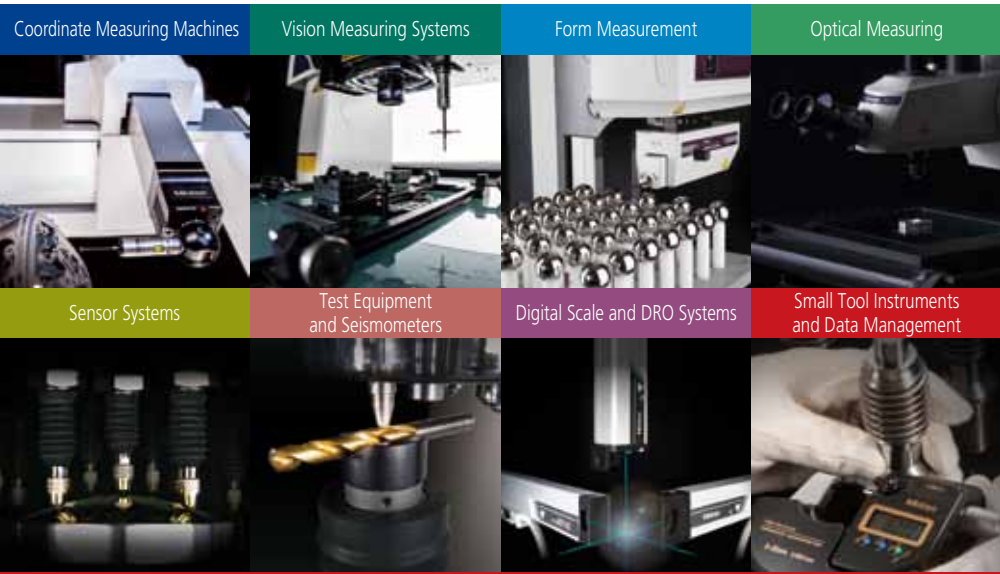
*1 Does not include quantizing error (±1 count). Valid for resolution set to 0.001mm°.00005" and coefficient A=1.

*2 When data processors are not connected. Battery life depends on use of the indicator. Use the above value as a guide only. (TIP) Battery life with Peak detection mode and FAST mode ON is about 4.5 months.

Bore gage		
543-310B	543-311B	543-312B
12.7 mm	.5" = 12.7 mm	
0.003 mm	±.00010" / 0.003 mm	
0.002 mm	.00010" / 0.002 mm	
0.002 mm	.00010" / 0.002 mm	
ø8mm		ø9.52mm=.375"(3/8") DIA
0.001/0.01 mm		.00005/.0001/.0005" // 0.001/0.01 mm
±20 scales		
Three Preset values (P1, P2 and P3) can be set and stored.		
Three sets of upper and lower limits (P1, P2 and P3) can be set and stored.		
Min		
—		
Measurement data memory (9 measurement results can be stored), Display value HOLD		
Digimatic		
Yes		
Yes		
Yes		
Capacitance-type absolute-linear-encoder		
infinite		
10 times/sec		
50 times/sec		
CR2032 x 1 pc.		
Approx. 1 year		
Flat		
170 g		

*1 Does not include quantizing error (±1 count). Valid for resolution set to 0.001mm°.00005".

*2 When data processors are not connected. Battery life depends on use of the indicator. Use the above value as a guide only. (TIP) Battery life with Peak detection mode and FAST mode ON is about 4.5 months.



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