

DIGIMATIC INDICATORS ID-C Series

For Calculation, Peak-Value Hold and Bore Gage Applications



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 the need for conversion tables previously needed for those applications where fixtures are typically used.
- Peak-Value TIR/MAX/MIN Hold enables GO/±NG judgment for peak value.
- Simple operation of many functions using five buttons and status icons.
- Wide LCD and new analog bar graph are now standard on all models.
- Performs sampling at 50 times per second and detects peak value more correctly.







Digimatic Indicators For Peak-Value Hold Applications



FEATURES

- Peak-Value TIR/MAX/MIN Hold enables GO/±NG judgment for peak value.
- Simple operation of many functions using five buttons and status icons.
- Wide LCD and new analog bar graph are now standard on all models. Performs sampling at 50 times per second and detects peak value more correctly.







Digimatic Indicators For Bore Gage Applications



FEATURES

- Dedicated for inside measurement with minimum value hold and tolerance judgment function.
- Measurement data memory function (9 measurement results can be stored)
- Simple operation of many functions using five buttons and status icons.
- Wide LCD and new analog bar graph are now standard on all models.
- Performs sampling at 50 times per second and detects peak value more correctly.









SPECIFICATIONS

Type/Model	Calculation							
Order No.	543-340B	543-341B 543-342B	543-590B	543-591B	543-592B	543-595B	543-596B	543-597B
Measuring range	12.7 mm	.5" = 12.7 mm	25.4 mm	1" = 25.4 mm		50.8 mm	2" = 50.8 mm	
Magnification and linearity (overall) *1	0.003 mm	±.00010" / 0.003 mm	0.003 mm	±.00010" / 0.003 mm		0.006 mm	±.00025" / 0.006 mm	
Hysteresis *1	0.002 mm	.00010" / 0.002 mm	0.002 mm	.00010" / 0.002 mm		0.002 mm	.00010" / 0.002 mm	
Repeatability *1	0.002 mm	.00010" / 0.002 mm	0.002 mm	.00010" / 0.0		0.002 mm		10" / 0.002 mm
Stem diameter	ø81	mm ø9.52mm=.375"(3/8") DIA	ø8r		mm=.375"(3/8") DIA	ø81	mm	ø9.52mm=.375"(3/8") DIA
Display rotate	330°							
Resolution (selectable)	12 steps							
Analog bar display	±20 scales							
Preset	Three Preset values (P1, P2 and P3) can be set and stored.							
Tolerance judgment	Four sets of upper and lower limits (P1, P2, P3 and INC) can be set and stored.							
Peak detection	TIR, Max, Min							
Calculation Others	Displayed value = $Ax' + B + Cx'^{-1}$ (x' = plunger displacement + offset)							
	Display value HOLD							
Data output	Digimatic							
Input from PC (Dedicated I/F)	Yes							
Key lock (set from instrument or PC)	Yes							
Parameter lock (set from PC)	Yes							
Detection method	Capacitance-type absolute-linear-encoder							
Response speed	infinite							
Measurement Focusion Normal mode Peak detection FAST mode OFF	- 10 times/sec							
frequency Peak detection FAST mode OFF FAST mode ON	50 times/sec							
Power supply	CR2032 x 1 pc.							
Battery life (normal use) *2	Approx. 1 year							
Type of back	Flat							
Net weight	170 g 190 g 260 g							

SPECIFICATIONS

Type/Model	Peak-value hold						
Order No.	543-300	543-300B	543-301	543-301B	543-302	543-302B	
Measuring range	12.7	nm	.5" = 12.7 mm				
Magnification and linearity (overall) *1	0.003	mm	±.00010" / 0.003 mm				
lysteresis *1	0.002		.00010" / 0.002 mm				
lepeatability *1	0.002 mm .00010" / 0.002 mm						
tem diameter	ø8mm ø9.52mm=.375"(3/8") DIA				.375"(3/8") DIA		
isplay rotate	330°						
esolution	0.001/0.	01 mm	.00005/.0001/.0005" // 0.001/0.01 mm				
nalog bar display	±20 scales						
Preset	Three Preset values (P1, P2 and P3) can be set and stored.						
Tolerance judgment Peak detection	Four sets of upper and lower limits (P1, P2, P3 and INC) can be set and stored.						
Peak detection	TIR, Max, Min						
Calculation	Ax						
Others	Display value HOLD						
ita output	Digimatic						
out from PC (Dedicated I/F)	Yes						
ey lock (set from instrument or PC)	Yes						
rameter lock (set from PC)	Yes						
etection method	Capacitance-type absolute-linear-encoder						
sponse speed	infinite						
leasurement Normal mode	10 times/sec						
fraction Peak detection FAST mode OFF	50 times/sec						
· / Illione Least lilione Old							
ower supply	CR2032 x 1 pc.						
attery life (normal use) *2	Approx. 1 year						
ype of back	With lug	Flat	With lug	Flat	With lug	Flat	
let weight	180 g	170 g	180 g	170 g	195 g	170 g	

SPECIFICATIONS

Type/Model	Bore gage					
Order No.	543-310B	543-311B	543-312B			
Measuring range	12.7 mm	.5" = 12.7 mm				
Magnification and linearity (overall) *1 Hysteresis *1	0.003 mm	±.00010" / 0.003 mm				
Hysteresis *1	0.002 mm	.00010" / 0.002 mm				
Repeatability *1	0.002 mm	.00010" / 0.002 mm				
Stem diameter	ø8i	mm				
Display rotate		330°				
Resolution	0.001/0.01 mm	.00005/.0001/.0005" // 0.001/0.01 mm				
Analog bar display	±20 scales					
Preset	Three Preset values (P1, P2 and P3) can be set and stored.					
Tolerance judgment Peak detection Calculation Others	Three sets of upper and lower limits (P1, P2 and P3) can be set and stored.					
Peak detection	Min					
Calculation Others	_					
Others	Measurement data memory (9 measurement results can be stored), Display value HOLD					
Data output	Digimatic					
Input from PC (Dedicated I/F)	Yes					
Key lock (set from instrument or PC)	Yes					
Parameter lock (set from PC)	Yes					
Detection method	Capacitance-type absolute-linear-encoder					
Response speed	infinite					
Measurement Normal mode	10 times/sec					
frequency Peak detection mode FAST mode OFF FAST mode ON	50 times/sec					
Power supply	CR2032 x 1 pc.					
Battery life (normal use) *2	Approx. 1 year					
Type of back	Flat					
Net weight	170 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.

^{*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.

^{*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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