

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

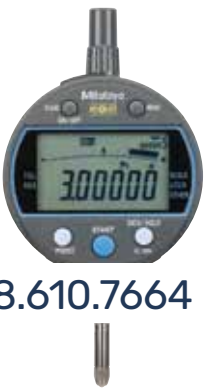


- Peak-Value TIR/MAX/MIN Hold enables GO/±NG judgment for peak value.
 - Simple operation of many functions using five buttons and status icons.
 - Wide LCD and new analog bar graph are now standard on all models.
- Performs sampling at 50 times per second and detects peak value more correctly.



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.



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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" / 0.002 mm		0.002 mm	.00010" / 0.002 mm	
Stem diameter			ø8mm		ø9.52mm=.375" (3/8") DIA	ø8mm		ø9.52mm=.375" (3/8") DIA	ø8mm		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			Displayed value = Ax'+B+Cx ⁻¹ (x' = plunger displacement + offset)								
Others			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 frequency	Normal mode		10 times/sec								
	Peak detection mode	FAST mode OFF									
		FAST mode ON									
Power supply			50 times/sec								
Battery life (normal use) *2			CR2032 x 1 pc.								
Type of back			Approx. 1 year								
Net weight			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.

SPECIFICATIONS

Type/Model			Peak-value hold					
Order No.			543-300	543-300B	543-301	543-301B	543-302	543-302B
Measuring range			12.7 mm		.5" = 12.7 mm			
Magnification and linearity (overall) *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			ø8mm				ø9.52mm= .375" (3/8") DIA	
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			Four sets of upper and lower limits (P1, P2, P3 and INC) can be set and stored.					
Functions	Peak detection		TIR, Max, Min					
	Calculation		Ax					
	Others		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 frequency	Normal mode		10 times/sec					
	Peak detection mode	FAST mode OFF						
		FAST mode ON						
Power supply			CR2032 x 1 pc.					
Battery life (normal use) *2			Approx. 1 year					
Type of back			With lug	Flat	With lug	Flat	With lug	Flat
Net weight			180 g	170 g	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.

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			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			ø8mm	ø9.52mm=.375" (3/8") DIA	
Display rotate			330°		
Resolution			0.001/0.01 mm	.00005/.0001/.0005" // 0.001/0.01 mm	
Analog bar display			±20 scales		
Functions	Preset		Three Preset values (P1, P2 and P3) can be set and stored.		
	Tolerance judgment		Three sets of upper and lower limits (P1, P2 and P3) can be set and stored.		
	Peak detection		Min		
	Calculation		—		
	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 frequency	Normal mode		10 times/sec		
	Peak detection mode	FAST mode OFF	50 times/sec		
		FAST mode ON			
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".
*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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**Whatever your challenges are,
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