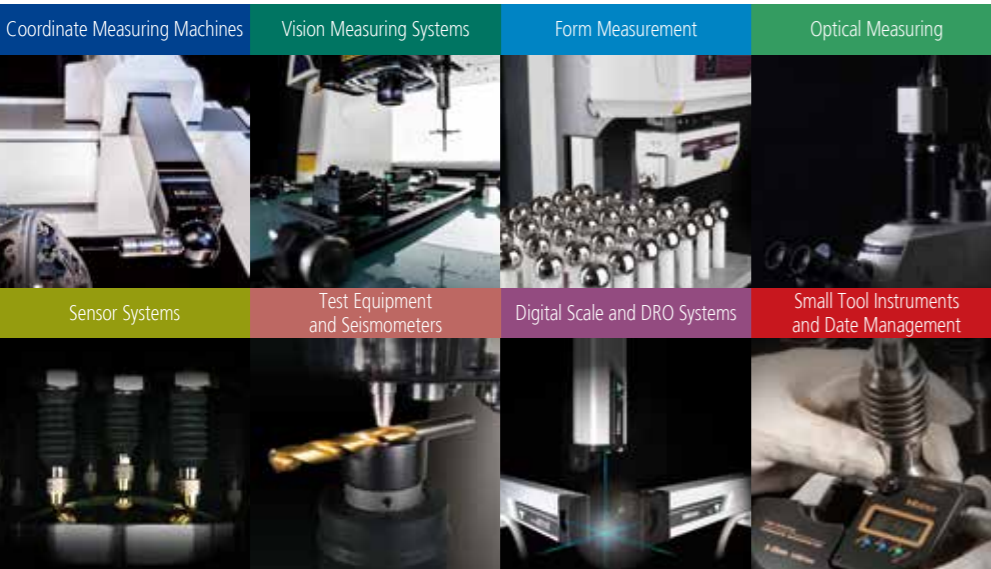


Mitutoyo



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DIGIMATIC INDICATORS ID-C Series

For Calculation, Peak-Value Hold and Bore Gage Applications

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Catalog No.E12025(2)

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	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								
Functions	Three Preset values (P1, P2 and P3) can be set and stored.								
Preset	Four sets of upper and lower limits (P1, P2, P3 and INC) can be set and stored.								
Tolerance judgment	TIR, Max, Min								
Peak detection	Displayed value = Ax+B+Cx ¹ (x' = plunger displacement + offset)								
Calculation	Display value HOLD								
Others	Digimatic								
Data output	Yes								
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	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		

*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.

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	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		50.8 mm	
Magnification and linearity (overall) *1	0.003 mm		±.00010" / 0.003 mm		0.006 mm	
Hysteresis *1	0.002 mm		.00010" / 0.002 mm		0.002 mm	
Repeatability *1	0.002 mm		.00010" / 0.002 mm		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	Three Preset values (P1, P2 and P3) can be set and stored.					
Preset	Four sets of upper and lower limits (P1, P2, P3 and INC) can be set and stored.					
Tolerance judgment	TIR, Max, Min					
Peak detection	Ax					
Calculation	Display value HOLD					
Others	Digimatic					
Data output	Yes					
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	FAST mode ON: 50 times/sec					
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.

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.



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		
Display rotate	330°		
Resolution	0.001/0.01 mm		.00005/.0001/.0005" // 0.001/0.01 mm
Analog bar display	±20 scales		
Functions	Three Preset values (P1, P2 and P3) can be set and stored.		
Preset	Three sets of upper and lower limits (P1, P2 and P3) can be set and stored.		
Tolerance judgment	Min		
Peak detection	Measurement data memory (9 measurement results can be stored), Display value HOLD		
Calculation	Digimatic		
Others	Yes		
Data output	Yes		
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	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".

*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.