

Digimatic Caliper Gages

Internal Tube Thickness Measurement SERIES 209

Versatile ID measuring gages for hole diameters, groove thickness, tube diameter and hard-to-reach dimensions. The Digimatic Caliper Gages provide error-free LCD readings, as well as data output for SPC analysis.

Internal measurement type

209-936



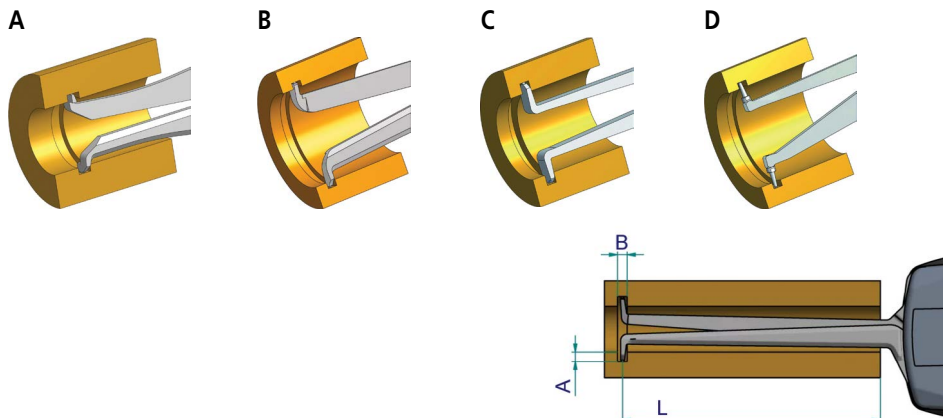
SPECIFICATIONS

Inch / Metric

Order No.	Range	Resolution	Accuracy	Measuring Depth (L)	Groove Depth (A)	Groove Width (B)	Measuring Contacts	Measuring Force (N)	Fig. Reference
209-934	0.09-0.49" / 2.5-12.5mm	10 Steps (switchable)*1	0.0005" / 0.015mm	0.47" / 12mm	.27" / 0.7mm	.02" / 0.4mm	Chisel R .0039" / 0.1mm	0.8-1.2	A
209-935	0.19-0.59" / 5-15mm		0.0005" / 0.015mm	1.37" / 35mm	.09" / 2.3mm	.03" / 0.8mm	Ball .024" / 0.6mm dia.	0.8-1.2	B
209-936	0.39-1.18" / 10-30mm		0.0010" / 0.03mm	3.34" / 85mm	.19" / 5.2mm	.05" / 1.2mm	Ball .04" / 1mm dia.	1.1-1.6	B
209-937	0.78-1.57" / 20-40mm		0.0010" / 0.03mm	3.34" / 85mm	.26" / 7.0mm	.05" / 1.2mm	Ball .04" / 1mm dia.	1.1-1.6	C
209-938	1.18-1.96" / 30-50mm		0.0010" / 0.03mm	3.34" / 85mm	.26" / 7.0mm	.05" / 1.2mm	Ball .04" / 1mm dia.	1.1-1.6	C
209-939	1.57-2.36" / 40-60mm		0.0010" / 0.03mm	3.34" / 85mm	.31" / 8.3mm	.05" / 1.2mm	Ball .04" / 1mm dia.	1.1-1.6	D
209-940	1.96-2.75" / 50-70mm		0.0010" / 0.03mm	3.34" / 85mm	.31" / 8.3mm	.05" / 1.2mm	Ball .04" / 1mm dia.	1.1-1.6	D
209-941	2.36-3.14" / 60-80mm		0.0010" / 0.03mm	3.34" / 85mm	.31" / 8.3mm	.05" / 1.2mm	Ball .04" / 1mm dia.	1.1-1.6	D
209-942	2.75-3.54" / 70-90mm		0.0010" / 0.03mm	3.34" / 85mm	.31" / 8.3mm	.05" / 1.2mm	Ball .04" / 1mm dia.	1.1-1.6	D
209-944	0.51-1.69" / 13-43mm		0.0015" / 0.04mm	5.00" / 127mm	.22" / 5.7mm	.06" / 1.5mm	Ball Ø.05" / 1.3mm	1.2-1.7	B
209-945	0.59-2.55" / 15-65mm		0.0020" / 0.05mm	7.40" / 188mm	.21" / 5.5mm	.07" / 1.9mm	Ball Ø.06" / 1.5mm	1.0-1.8	C
209-946	1.18-2.36" / 30-60mm		0.0015" / 0.04mm	5.19" / 132mm	.24" / 6.2mm	.07" / 1.8mm	Ball Ø.06" / 1.5mm	1.2-1.7	D
209-947	1.96-3.14" / 50-80mm		0.0015" / 0.04mm	5.19" / 132mm	.33" / 8.3mm	.09" / 2.4mm	Ball Ø.08" / 2mm	1.2-1.7	D
209-948	2.75-3.93" / 70-100mm		0.0015" / 0.04mm	5.19" / 132mm	.33" / 8.3mm	.09" / 2.4mm	Ball Ø.08" / 2mm	1.2-1.7	D
209-949	3.54-4.72" / 70-100mm		0.0015" / 0.04mm	5.19" / 132mm	.33" / 8.3mm	.09" / 2.4mm	Ball Ø.08" / 2mm	1.2-1.7	D
209-950	1.57-3.54" / 40-90mm		0.0020" / 0.05mm	7.55" / 192mm	.33" / 8.3mm	.09" / 2.4mm	Ball Ø.08" / 2mm	1.0-1.8	D

• Power Source: AAA Batteries (2 pcs)

*1 See Resolution Table



Technical Data

Display: LCD Analog / Digital
Power Supply: AAA Battery (2 pcs.)
Dust/Water protection level: IP67

Function

Zeraset, Preset, Auto power off, Inch/Metric, Conversion data hold, Max/Min value holding, Data output

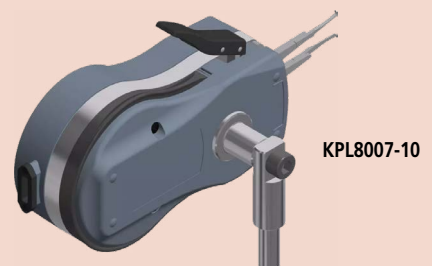
Optional Output Devices

Order No.	Description
Wired	
KPL1962-09	Interface Adapter (Required)
264-020	USB Input tool (IT-020U)
- 937387	Connecting Cable (1m)
- 965013	Connecting Cable (2m)
06AFM380E	USB Input Tool Direct (2m)
Wireless	
KPL1962-09	Interface Adapter (Required)
264-626	Transmitter (IP67)
264-623	Transmitter (Buzzer)
- 02AZD790E	Connecting Unit (Adapter)
- 02AZE140E	Connecting Cable (foot switch compatible)
KPL1961-13	Interface Adapter (Bluetooth)

Note: Model uses connector type "E"

• Resolution Switching*

Resolution (in)		Resolution (mm)	
.0005	.0001	0.001	0.01
.0001	.001	0.002	0.02
		0.005	0.05



Technical Data

Display: LCD Analog / Digital
Power Supply: AAA Battery (2 pcs.)
Dust/Water protection level: IP67

Function

Zeraset, Preset, Auto power off, Inch/Metric, Conversion data hold, Max/Min value holding, Data output

External Tube Thickness Measurement SERIES 209

Versatile OD measuring gages for groove thickness, tube thickness and hard-to-reach dimensions. Digimatic Caliper Gages provide error-free LCD readings, as well as data output for SPC analysis.

External measurement type

209-932



SPECIFICATIONS

Inch / Metric

Order No.	Range	Resolution	Accuracy	Measuring Depth (L)	Moveable (Hb)	Fixed (Hf)	Measuring Contacts	Measuring Force (N)	Fig. Reference
209-930	0-0.39" / 0-10mm	10 Steps (switchable)*1	0.0005" / 0.02mm	1.37" / 35mm	.75" / 19.1mm	.73" / 18.6mm	Ball .059"/1.5mm dia.	1.2-1.6	A
209-931	0-0.39" / 0-10mm		0.0005" / 0.02mm	1.37" / 35mm	.85" / 21.7mm	.58" / 14.8mm	Desc. .24"/6mm dia.	0.8-1.2	C
209-932	0-0.78" / 0-20mm		0.0010" / 0.03mm	3.34" / 85mm	.97" / 24.7mm	.97" / 24.6mm	Ball .059"/1.5mm dia.	1.1-1.6	A
209-933	0-0.78" / 0-20mm		0.0010" / 0.03mm	3.34" / 85mm	.97" / 24.7mm	.10" / 2.5mm	Ball .059"/1.5mm dia.	1.1-1.6	B
209-951	0-1.18" / 0-30mm		0.0015" / 0.04mm	4.48" / 114mm	1.2" / 30mm	1.2" / 30mm	Ball Ø.12"/3mm	0.9-1.6	A
209-952	0-1.18" / 0-30mm		0.0015" / 0.04mm	4.48" / 114mm	1.2" / 30mm	.16" / 4mm	Ball Ø.12"/3mm	0.9-1.6	B
209-953	0-1.18" / 0-30mm		0.0020" / 0.05mm	4.48" / 114mm	1.4" / 36mm	.94" / 24mm	Disc Ø1.97"/50mm	0.9-1.6	D
209-954	0-1.96" / 0-50mm		0.0020" / 0.05mm	6.57" / 167mm	1.2" / 30mm	1.2" / 30mm	Ball Ø.12"/3mm	0.8-1.7	A
209-955	0-1.96" / 0-50mm		0.0020" / 0.05mm	6.65" / 169mm	1.2" / 30mm	.17" / 4.3mm	Ball Ø.12"/3mm	0.8-1.7	B
209-956	0-1.96" / 0-50mm		0.0020" / 0.05mm	6.57" / 167mm	1.4" / 36mm	.94" / 24mm	Disc Ø1.97"/50mm	0.8-1.7	D

• Power Source: AAA Batteries (2 pcs)

*1 See Resolution Table

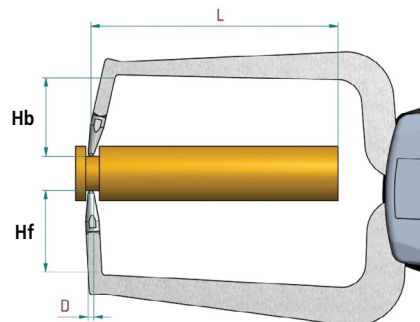
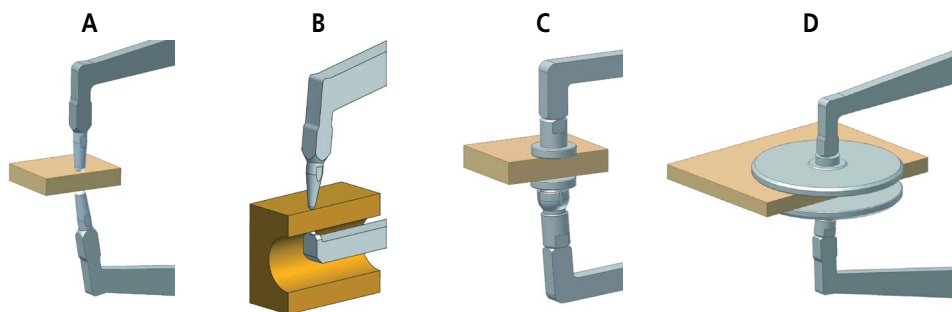
Optional Output Devices

Order No.	Description
Wired	
KPL1962-09	Interface Adapter (Required)
264-020	USB Input tool (IT-020U)
- 937387	Connecting Cable (1m)
- 965013	Connecting Cable (2m)
06AFM380E	USB Input Tool Direct (2m)
Wireless	
KPL1962-09	Interface Adapter (Required)
264-626	Transmitter (IP67)
264-623	Transmitter (Buzzer)
- 02AZD790E	Connecting Unit (Adapter)
- 02AZE140E	Connecting Cable (foot switch compatible)
KPL1961-13	Interface Adapter (Bluetooth)

Note: Model uses connector type "E"

• Resolution Switching*

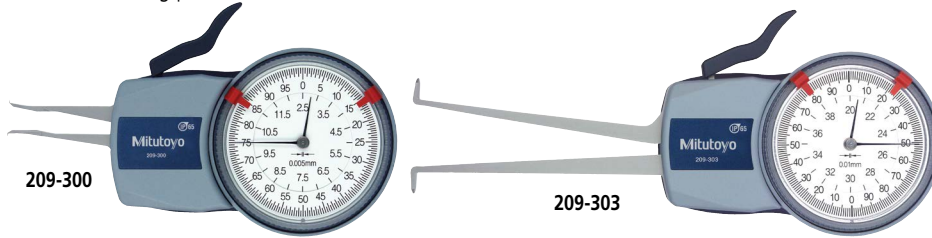
Resolution (in)	Resolution (mm)
.0005	.0001
.0001	.001



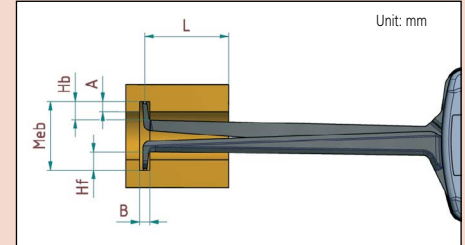
Dial Caliper Gages

Internal Measurement SERIES 209

The caliper is spring loaded and makes point contact at a constant measuring pressure.



DIMENSIONS



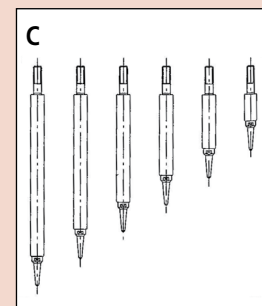
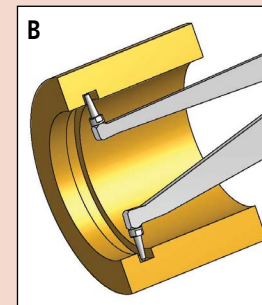
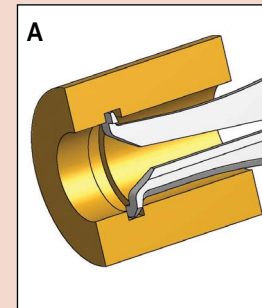
SPECIFICATIONS

Inch									
Order No.	Measuring Range	Graduation	Accuracy	Max. Measuring Depth L	Max. Groove Depth A	Min. Groove Width B	Measuring Contact Type	Size (mm)	Mass (g)
209-350	.10 - .50"	.0002"	± .0008"	.47"	.027"	.023"	A	R0.1	200
209-351	.20 - .60"	.0002"	± .0008"	1.37"	.09"	.032"	A	ø0.6	200
209-352	.40 - 1.2"	.0005"	± .0015"	3.3"	.19"	.06"	A	ø1	200
209-354	.80 - 1.6"	.0005"	± .0015"	3.3"	.26"	.06"	A	ø1	200
209-355	1.2 - 2"	.0005"	± .0015"	3.3"	.26"	.06"	A	ø1	200
209-356	1.6 - 2.4"	.0005"	± .0015"	3.3"	.31"	.06"	B	ø1	200
209-357	2 - 2.8"	.0005"	± .0015"	3.3"	.31"	.06"	B	ø1	200
209-358	2.4 - 3.2"	.0005"	± .0015"	3.3"	.31"	.06"	B	ø1	250
209-359	2.8 - 3.6"	.0005"	± .0015"	3.3"	.31"	.06"	B	ø1	250
209-360	3.2 - 4"	.0005"	± .0015"	3.3"	.31"	.06"	B	ø1	250
209-361*	2 - 4"	.0005"	± .0015"	3.3"	.31"	.06"	C	ø1	250
209-362*	3.6 - 5.6"	.0005"	± .0015"	3.3"	.31"	.06"	C	ø1	250
209-363*	5.2 - 7.2"	.0005"	± .0015"	3.3"	.31"	.06"	C	ø1	250

*Interchangeable contact points (additional anvil 4 pcs.) with ball point .04" dia. These Dial Caliper Gages are used only as comparison gages and should be used along with a setting ring or a micrometer.

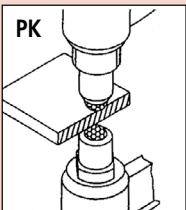
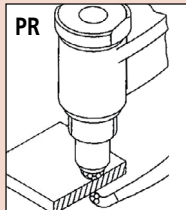
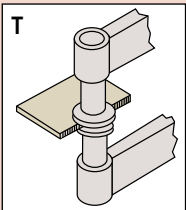
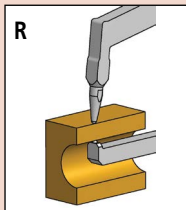
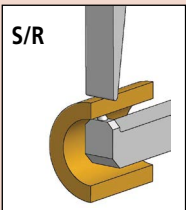
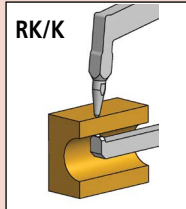
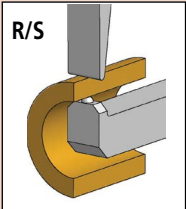
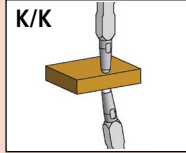
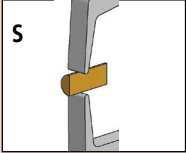
Metric									
Order No.	Measuring Range	Graduation	Accuracy	Max. Measuring Depth L	Max. Groove Depth A	Min. Groove Width B	Measuring Contact Type	Size (mm)	Mass(g)
209-300	2.5 - 12.5mm	0.005mm	±0.015mm	12mm	0.7mm	0.5mm	A	R0.1	155
209-301	5 - 15mm	0.005mm	±0.015mm	35mm	2.3mm	0.8mm	B	ø0.6	160
209-302	10 - 30mm	0.01mm	±0.03mm	85mm	5.2mm	1.2mm	B	ø1	180
209-303	20 - 40mm	0.01mm	±0.03mm	85mm	7mm	1.2mm	B	ø1	180
209-304	30 - 50mm	0.01mm	±0.03mm	85mm	7mm	1.2mm	B	ø1	185
209-305	40 - 60mm	0.01mm	±0.03mm	85mm	8.3mm	1.2mm	B	ø1	195
209-306	50 - 70mm	0.01mm	±0.03mm	85mm	8.3mm	1.2mm	B	ø1	195
209-307	60 - 80mm	0.01mm	±0.03mm	85mm	8.3mm	1.2mm	B	ø1	200
209-308	70 - 90mm	0.01mm	±0.03mm	85mm	8.3mm	1.2mm	B	ø1	200
209-309	80 - 100mm	0.01mm	±0.03mm	85mm	8.3mm	1.2mm	B	ø1	200
209-310*	50 - 100mm	0.01mm	±0.03mm	85mm	8.3mm	1.2mm	C	ø1	220
209-311*	90 - 140mm	0.01mm	±0.03mm	85mm	8.3mm	1.2mm	C	ø1	230
209-312*	130 - 180mm	0.01mm	±0.03mm	85mm	8.3mm	1.2mm	C	ø1	240
209-901	15-65mm	0.05mm	±0.05	188	5	1.9	B	ø1.5mm	355
209-902	40-90mm	0.05mm	±0.05	192	8.5	2.4	B	ø2mm	370
209-903	70-120mm	0.05mm	±0.05	192	8.5	2.4	B	ø2mm	380

*Interchangeable contact point (additional anvil 5pcs.) with ball point 1mm dia. These Dial Caliper Gages are used only as comparison gages and should be used along with a setting ring or a micrometer.

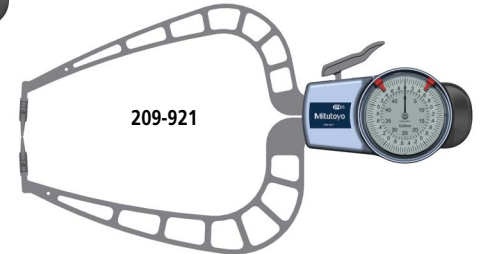


Dial Caliper Gages

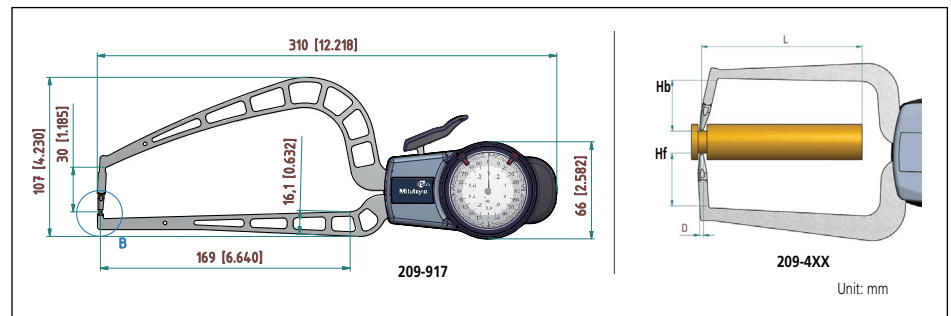
Type of Contact Points



External Measurement SERIES 209



DIMENSIONS



SPECIFICATIONS

Inch

Order No.	Measuring Range	Graduation	Accuracy	Max. Measuring Depth L	Length Hb	Length Hf	Measuring Contact Type	Size (mm)	Mass (g)
209-450	0 - .40"	.0002"	± .0008"	1.37"	.75"	.75"	K/K	ø1.5	170
209-451	0 - .40"	.0002"	± .001"	1.37"	.85"	.58"	T	ø6	175
209-452	0 - .40"	.0002"	± .0008"	1.37"	.75"	.035"	RK/K	ø1.5	165
209-453	0 - .40"	.0002"	± .0008"	1.37"	.75"	.035"	R/S	Chisel R0.4, ø1.5	165
209-454	0 - .80"	.0005"	± .0015"	3.2"	.97"	.97"	S	Chisel R0.4	210
209-455	0 - .80"	.0005"	± .0015"	3.2"	.97"	.97"	K/K	ø1.5	210
209-456	0 - .80"	.0005"	± .0015"	3.2"	.97"	.10"	RK/K	ø1.5	200
209-457	0 - .80"	.0005"	± .0015"	3.2"	.97"	.10"	R/S	Chisel R0.4, ø1.5	200
209-916	0 - 2.0"	.001"	± .002"	6.6"	1.2"	1.2"	K/K	ø3	430
209-917	0 - 2.0"	.001"	± .002"	6.6"	1.2"	.18"	RK/K	ø3	400

Metric

Order No.	Measuring Range	Graduation	Accuracy	Max. Measuring Depth L	Length Hb	Length Hf	Measuring Contact Type	Size (mm)	Mass (g)
209-402	0 - 10mm	0.005mm	±0.015mm	35mm	19.1mm	18.6mm	K/K	ø1.5	240
209-403	0 - 10mm	0.005mm	±0.02mm	35mm	21.7mm	14.8mm	T	ø6	175
209-404	0 - 20mm	0.01mm	±0.03mm	85mm	7mm	24.6mm	K/K	ø1.5	210
209-405	0 - 20mm	0.01mm	±0.03mm	85mm	7mm	24.6mm	S	R 0.4	210
209-406	0 - 20mm	0.01mm	±0.03mm	80mm	7mm	2.5mm	R/S	Chisel R0.4, ø1.5	200
209-407	0 - 20mm	0.01mm	±0.03mm	80mm	7mm	2.5mm	RK/K	ø1.5	200
209-603	0 - 10mm	0.1mm	±0.1mm	33mm	-	-	PR	ø2	40
209-911	0 - 50mm	0.05mm	±0.05mm	167mm	30mm	30mm	KK	Ball Ø3mm	430
209-912	0 - 50mm	0.05mm	±0.05mm	169mm	30mm	4.5mm	RK/K	Ball Ø3mm	400
209-921	0 - 50mm	0.05mm	±0.05mm	167mm	30mm	30mm	S	Chisel R0.75	490
209-922	0 - 50mm	0.05mm	±0.05mm	169mm	30mm	4.5mm	R/S	ø3, Chisel R0.75	400



Get a Quote