Unit: mm



■ Graduation: 0.001mm Jeweled bearing



PRECISION DIAL INDICATORS



- Supplied with limit pointers and bezel clamp
- Optional accessory: backs (page 114~115), contact points (page 111~113)

2313-1A

	16 19
A	8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9
C D	Ø8-0.009 Ø4.5 M2.5x0.45

										(mm)
Code	Range	Accuracy	Hysteresis	Range/rev	Dial reading	Remark	Α	В	С	D
2313-1FA*	1mm	5µm	2µm	0.2mm	0-100-0	flat back	45	62.5	19.5	15
2313-2FA*	2mm	8µm	2.5µm	0.2mm	0-100-0	flat back	45	62.5	19.5	15
2313-1A*	1mm	5µm	2µm	0.2mm	0-100-0	lug back	45	62.5	19.5	15
2313-2A*	2mm	8µm	2.5µm	0.2mm	0-100-0	lug back	45	62.5	19.5	15

 $^{^{}ullet}$ Supplied with manufacturer inspection certificate traceable to NIST USA





COMPACT DIAL INDICATORS



■ Meet DIN878

- Jeweled bearing Supplied with limit pointers and bezel clamp
- Optional accessory: backs (page 114~115), contact points (page 111~113)

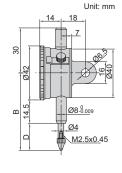
2311-5

(mm)	

DIAL INDICATORS (BASIC TYPE)

Code	Range	Graduation	Accuracy	Hysteresis	Range/rev	Dial reading	Remark	В	D
2311-3F *	3mm	0.01mm	12µm	3µm	0.5mm	0-50	flat back	46	10.5
2311-5F *	5mm	0.01mm	14µm	3µm	0.5mm	0-50	flat back	48	12.5
2311-3 *	3mm	0.01mm	12µm	3µm	0.5mm	0-50	lug back	46	10.5
2311-5*	5mm	0.01mm	14µm	3µm	0.5mm	0-50	lug back	48	12.5

^{*}Supplied with manufacturer inspection certificate traceable to NIST USA



TRACEABLE TO NIST

■ Meet DIN878

- Jeweled bearing
- Supplied with limit hands and bezel clamp
- Packed in carton box
- Optional accessory: backs (page 114~115), contact points (page 111~113)

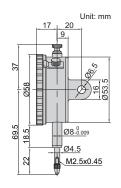




2301-10

Code	Range	Graduation	Accuracy	Hysteresis	Range/rev	Dial reading	Remark
2301-10F *	10mm	0.01mm	17µm	3µm	1mm	0-100	flat back
2301-10 *	10mm	0.01mm	17µm	3µm	1mm	0-100	lug back with spare flat back

 $^{^{\}star}$ Supplied with manufacturer inspection certificate traceable to NIST USA



DIAL INDICATORS (STANDARD TYPE)

- Meet DIN878
- Jeweled bearing
- Supplied with limit pointers and bezel clamp
- Optional accessory: backs (page 114~115), contact points (page 111~113)



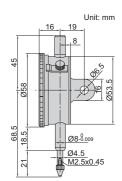
2308-10A

Code	Range	Graduation	Accuracy	Hysteresis	Range/rev	Dial reading	Remark
2308-3FA*	3mm	0.01mm	12µm	3µm	1mm	0-100	flat back
2308-5FA*	5mm	0.01mm	14µm	3µm	1mm	0-100	flat back
2308-10FA*	10mm	0.01mm	17µm	3µm	1mm	0-100	flat back
2308-3A*	3mm	0.01mm	12µm	3µm	1mm	0-100	lug back
2308-5A*	5mm	0.01mm	14µm	3µm	1mm	0-100	lug back
2308-10A*	10mm	0.01mm	17µm	3µm	1mm	0-100	lug back

^{*}Supplied with manufacturer inspection certificate traceable to NIST USA







REVERSE READING DIAL INDICATORS

- Meet DIN878
- Suitable for depth and step measurements
- Jeweled bearing
- Supplied with limit pointers and bezel clamp
- Optional accessory: backs (page 114~115), contact points (page 111~113)



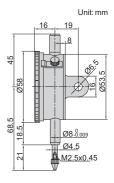
2801-10

Code	Range	Graduation	Accuracy	Hysteresis	Range/rev	Dial reading	Remark
2801-10F *	10mm	0.01mm	17µm	3µm	1mm	100-0	flat back
2801-10*	10mm	0.01mm	17µm	3µm	1mm	100-0	lug back

^{*}Supplied with manufacturer inspection certificate traceable to NIST USA







SHOCKPROOF DIAL INDICATORS

- Meet DIN878
- Shockproof
- Jeweled bearing
- Supplied with limit pointers and bezel clamp
- Optional accessory: backs (page 114~115), contact points (page 111~113)



2314-10A

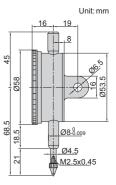
Code	Range	Graduation	Accuracy	Hysteresis	Range/rev	Dial reading	Remark
2314-3FA *	3mm	0.01mm	12µm	3µm	1mm	0-100	flat back
2314-5FA *	5mm	0.01mm	14µm	3µm	1mm	0-100	flat back
2314-10FA*	10mm	0.01mm	17µm	3µm	1mm	0-100	flat back
2314-3A*	3mm	0.01mm	12µm	3µm	1mm	0-100	lug back
2314-5A*	5mm	0.01mm	14µm	3µm	1mm	0-100	lug back
2314-10A *	10mm	0.01mm	17µm	3µm	1mm	0-100	lug back

^{*}Supplied with manufacturer inspection certificate traceable to NIST USA









TRACEABLE TO NIST

handle (included)



- Supplied with handle
- With limit pointers
- Optional accessory: contact points (page 111~113)



2357-5

<u>M5×0</u> .8	Offic. Hilli
76	Ø42 Ø40 Ø35 Ø12 Ø8.8.009 Ø4 M2.5×0.45

WATERPROOF DIAL INDICATORS

DOUBLE FACE DIAL INDICATOR

BACK PLUNGER TYPE DIAL INDICATOR

Code	Range	Graduation	Accuracy	Hysteresis	Range/rev	Dial reading
2357-5*	5mm	0.01mm	15µm	5µm	1mm	0-100

^{*}Supplied with manufacturer inspection certificate traceable to NIST USA

TRACEABLE TO NIST

- Meet DIN878
- IP54 dust/waterproof
- With limit pointers
- Optional accessory: backs (page 114~115), contact points (page 111~113)



2324-10A

	Unit: 16.5.7.5	mm
48	99	Ø55
30 20.25	Ø8-8.009 M2.5x0.4	. <u>5</u>

Code	Range	Graduation	Accuracy	Hysteresis	Range/rev	Dial reading	Remark
2324-10FA*	10mm	0.01mm	17µm	3µm	1mm	0-100	flat back
2324-10A*	10mm	0.01mm	17µm	3µm	1mm	0-100	lug back

^{*}Supplied with manufacturer inspection certificate traceable to NIST USA

TRACEABLE TO NIST

front

back

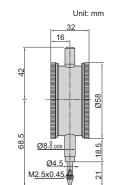
■ Meet DIN878

- Read from both sides
- Jeweled bearing
- Supplied with limit pointers
- Optional accessory: contact points (page 111~113)

2328-10

Code	Range	Graduation	Accuracy	Hysteresis	Range/rev	Dial reading
2328-10*	10mm	0.01mm	17µm	3µm	1mm	0-100

 $^{^{\}star}$ Supplied with manufacturer inspection certificate traceable to NIST USA



DIAL INDICATORS (LONG STROKE)

- TRACEABLE TO NIST

- Supplied with limit pointers and bezel clamp
- Optional accessory: backs (page 114~115), contact points (page 111~113)

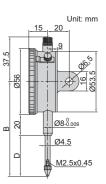


2310-30A

(mm)

Code		Range	Graduation	Accuracy	Hysteresis	Range/rev	Dial reading	Remark	В	D
2310-20F	Α*	20mm	0.01mm	25µm	5µm	1mm	0-100	flat back	83	35
2310-30F	A*	30mm	0.01mm	35µm	7µm	1mm	0-100	flat back	88	40
2310-20	*	20mm	0.01mm	25µm	5µm	1mm	0-100	lug back	83	35
2310-30	*	30mm	0.01mm	35µm	7µm	1mm	0-100	lug back	88	40

^{*}Supplied with manufacturer inspection certificate traceable to NIST USA



TRACEABLE TO NIST

Unit: mm

Ø8-8.009 Ø4.5 M2.5x0.45

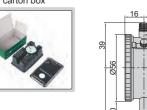
DIAL INDICATORS (LONG STROKE, BASIC TYPE)

- Supplied with limit pointers and bezel clamp
- Packed in carton box
- Optional accessory: backs (page 114~115), contact points (page 111~113)



2302-25

ſ	carton box



Code	Range	Graduation	Accuracy	Hysteresis	Range/rev	Dial reading	Remark
2302-25F *	25mm	0.01mm	35µm	7µm	1mm	0-100	flat back
2302-25 *	25mm	0.01mm	35µm	7µm	1mm	0-100	lug back with spare flat back

^{*}Supplied with manufacturer inspection certificate traceable to NIST USA

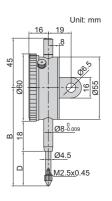
DIAL INDICATORS (GRADUATION 0.1mm)

- Supplied with limit pointers and bezel clamp
- Optional accessory: backs (page 114~115), contact points (page 111~113)



2318-30

				2310-30					
Code	Range	Graduation	Accuracy	Hysteresis	Range/rev	Dial reading	Remark	В	D
2318-10F	10mm	0.1mm	40µm	20µm	10mm	0-10	flat back	70	20
2318-20F	20mm	0.1mm	50µm	20µm	10mm	0-10	flat back	85	35
2318-25F	25mm	0.1mm	60µm	20µm	10mm	0-10	flat back	85	35
2318-30F	30mm	0.1mm	60µm	20µm	10mm	0-10	flat back	90	40
2318-10	10mm	0.1mm	40µm	20µm	10mm	0-10	lug back	70	20
2318-20	20mm	0.1mm	50µm	20µm	10mm	0-10	lug back	85	35
2318-25	25mm	0.1mm	60µm	20µm	10mm	0-10	lug back	85	35
2318-30	30mm	0.1mm	60µm	20µm	10mm	0-10	lug back	90	40







ONE REVOLUTION DIAL INDICATORS



- Meet DIN878
- Eliminate the possibility of reading errors due to miscounting
- Shockproof
- Supplied with limit pointers
- Optional accessory: backs (page 114~115), contact points (page 111~113)



2316-05

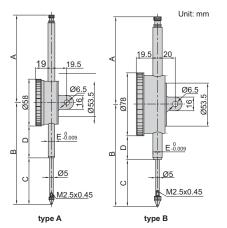
Unit: i	nm
15 20	
958 42	Ø53.5
08.0009 08.0009	Q .
Ø4.5 © M2.5x0.45	i

Code	Range	Graduation	Accuracy	Hysteresis	Dial reading	Remark
2316-05F*	0.5mm	0.01mm	9µm	3µm	25-0-25	flat back
2316-1F *	1mm	0.01mm	9µm	3µm	50-0-50	flat back
2316-05 *	0.5mm	0.01mm	9µm	3µm	25-0-25	lug back
2316-1*	1mm	0.01mm	9µm	3µm	50-0-50	lug back

^{*}Supplied with manufacturer inspection certificate traceable to NIST USA

TRACEABLE TO NIST

- Shockproof Jeweled bearing
- Supplied with limit pointers
 Optional accessory: backs (page 114~115), contact points (page 111~113)







	JEWELED BEARING	
S S S		
8		

DIAL INDICATORS (LONG STROKE)

2309-5	0
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						(,
Code	Type	Α	В	С	D	E
2309-30F	Α	37.5	89.5	40.9	19.5	Ø8
2309-30	Α	37.5	89.5	40.9	19.5	Ø8
2309-50	Α	108.3	126.2	57.7	39.5	Ø8
2309-50D	В	108.3	126.2	57.7	29.5	Ø8
2309-80	Α	138.4	168.4	88	51.3	Ø8
2309-80D	В	138.4	168.4	88	41.3	Ø8
2309-100D	В	167.6	207.8	108	60.8	Ø10

Code	Range	Graduation	Type	Accuracy	Hysteresis	Range/rev	Dial reading	Remark
2309-30F *	30mm	0.01mm	Α	35µm	7µm	1mm	0-100	flat back
2309-30*	30mm	0.01mm	Α	35µm	7µm	1mm	0-100	lug back
2309-50*	50mm	0.01mm	Α	40µm	8µm	1mm	0-100	flat back with spare lug back
2309-50D*	50mm	0.01mm	В	40µm	8µm	1mm	0-100	flat back with spare lug back
2309-80	80mm	0.01mm	Α	50µm	9µm	1mm	0-100	flat back with spare lug back
2309-80D	80mm	0.01mm	В	50µm	9µm	1mm	0-100	flat back with spare lug back
2309-100D	100mm	0.01mm	В	50µm	9µm	1mm	0-100	flat back with spare lug back

Note: 1) 2309-80, 2309-80D and 2309-100D can only be used vertically

- 2) **2309-100D** is supplied with stem clamp Ø10mm for magnetic stands (code **6200-60**, **6201-60**, **6202-80**, **6202-100**) 3) **2309-30** and **2309-30F** can not accept optional backs (page 114~115)

(mm)

 $^{^{}ullet}$ Supplied with manufacturer inspection certificate traceable to NIST USA