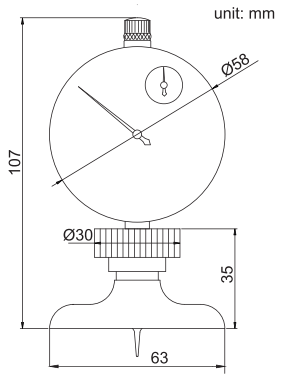
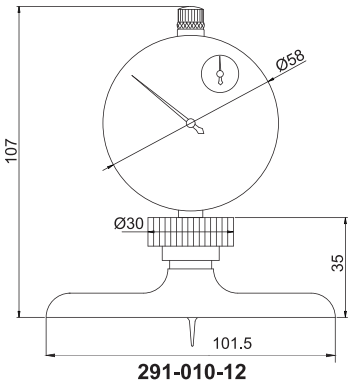
DIAL DEPTH INDIATOR SERIES 291

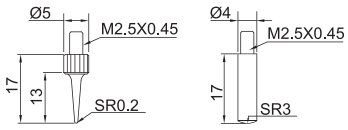
291-010-12



291-010-11



291-010-12



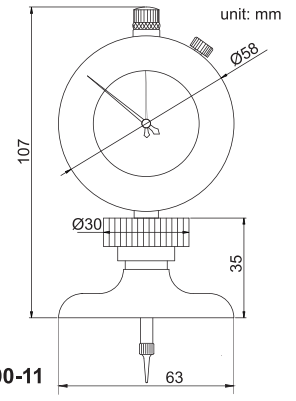
needle styli ball styli

- Graduation: 0.01mm
- Indicator travel: 10mm
- Accuracy: ±0.03mm
- Stainless steel base
- With needle and ball styli

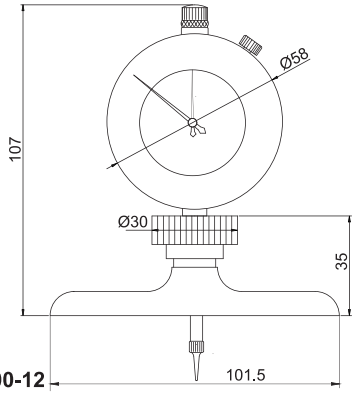
Code	Range	Base
291-010-11	0-10mm	63x17mm
291-010-12	0-10mm	101.5x17mm

DIAL DEPTH INDIATOR SERIES 292

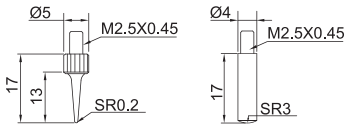
292-300-12



292-300-11



292-300-12



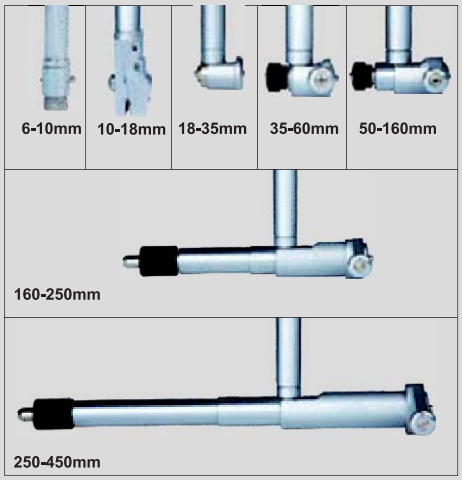
needle styli ball styli

- Graduation: 0.01mm
- Indicator travel: 30mm
- Accuracy: ±0.03mm
- Stainless steel base
- With needle and ball styli
- Extension rod: 25mm (1pc), 50mm (1pc), 75mm (1pc), 100mm (2pcs)

Code	Range	Base
292-300-11	0-300mm	63x17mm
292-300-12	0-300mm	101.5x17mm

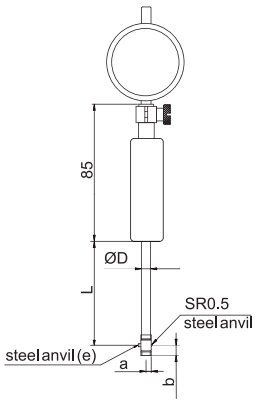
SERIES 251 DIAL BORE GAUGE

- Wooden handle isolate heat conduction
- Optional accessory: series 531 setting rings

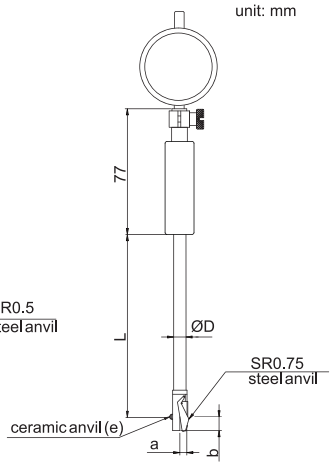


251-035-11

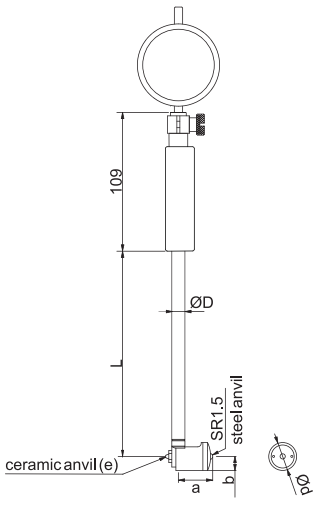
unit: mm



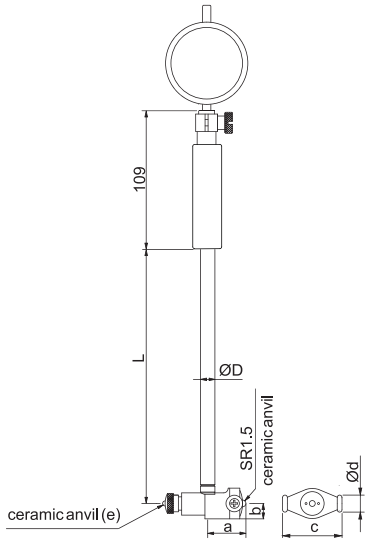
Range: 6-10mm



Range: 10-18mm



Range: 18-35mm



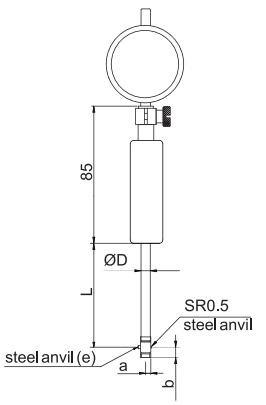
Range: 35mm - 450mm

Code	Range	Dial indicator	Accuracy	Repeatability	a	b	c	Ød	ØD	e	L
251-010-11	6-10mm	Range: 3mm graduation: 0.01mm	±0.012mm	3μm	3.6	5.7	/	/	4.5	SR1	48
251-018-11	10-18mm		±0.012mm	3μm	5.6	7.8	/	/	6	SR1	105
251-035-11	18-35mm	Range: 10mm graduation: 0.01mm	±0.015mm	3μm	12.2	6.4	/	12.7	9	SR1	141
251-060-11	35-60mm		±0.018mm	3μm	12.2	6.4	27	13	12.8	SR2	141
251-100-11	50-100mm		±0.018mm	3μm	26	9	27	13	12.8	SR2	141
251-160-11	50-160mm		±0.018mm	3μm	26	9	35	13	12.8	SR2	141
251-160-12	100-160mm		±0.018mm	3μm	26	9	35	13	12.8	SR2	141
251-250-11	160-250mm		±0.018mm	3μm	56.5	13	74.5	15	12.8	SR2	241
251-450-11	250-450mm		±0.018mm	3μm	86.5	15	101.5	15	14.5	SR2.5	241

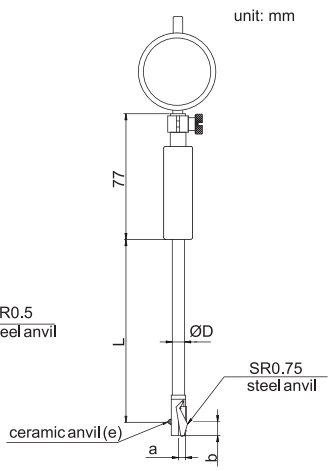
DIGITAL BORE GAUGE

SERIES 241

- Wooden handle isolate heat conduction
- With min. value tracking function, get the diameter automatically
- Optional accessory: series 531 setting rings

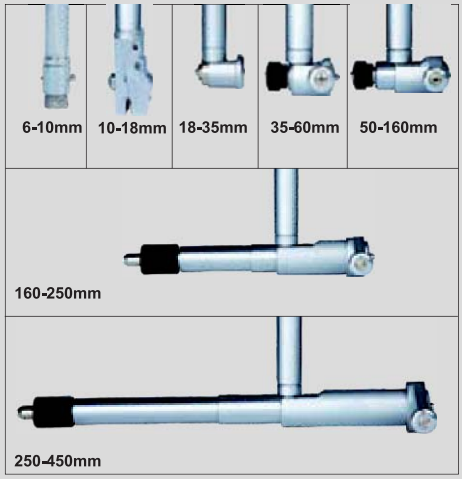


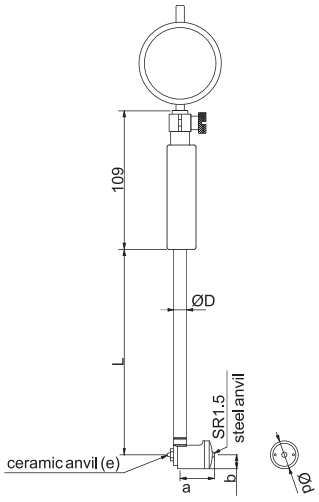
Range: 6-10mm



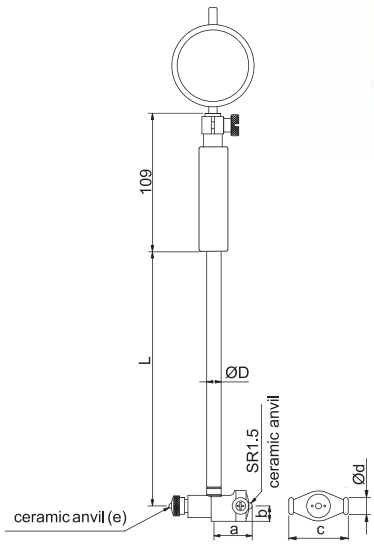
Range: 10-18mm

241-035-11





Range: 18-35mm

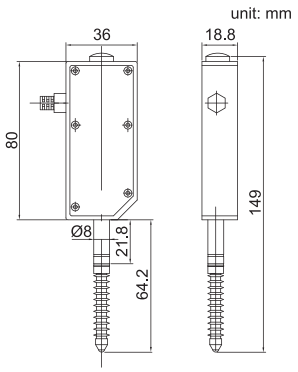


Range: 35mm - 450mm

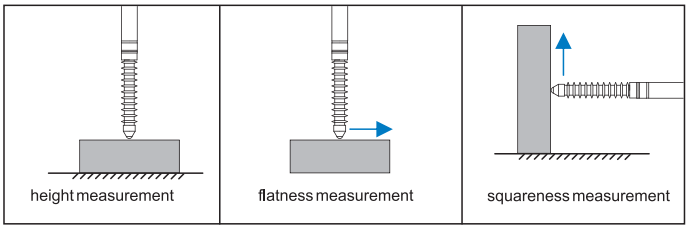
Code	Range	Digital indicator	Accuracy	Repeatability	a	b	c	Ød	ØD	e	L
241-010-11	6-10mm	Range: 12.7mm resolution: 0.002mm	±0.012mm	3μm	3.6	5.7	/	/	4.5	SR1	48
241-018-11	10-18mm		±0.012mm	3μm	5.6	7.8	/	/	6	SR1	105
241-035-11	18-35mm		±0.015mm	3μm	12.2	6.4	/	12.7	9	SR1	141
241-060-11	35-60mm		±0.018mm	3μm	12.2	6.4	27	13	12.8	SR2	141
241-100-11	50-100mm		±0.018mm	3μm	26	9	27	13	12.8	SR2	141
241-160-11	50-160mm		±0.018mm	3μm	26	9	35	13	12.8	SR2	141
241-160-12	100-160mm		±0.018mm	3μm	26	9	35	13	12.8	SR2	141
241-250-11	160-250mm		±0.018mm	3μm	56.5	13	74.5	15	12.8	SR2	241
241-450-11	250-450mm		±0.018mm	3μm	86.5	15	101.5	15	14.5	SR2.5	241

SERIES 201 LINEAR GAUGE

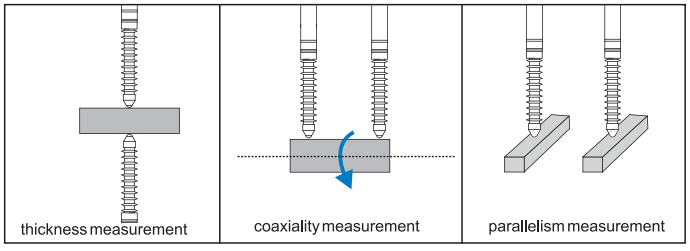
- Suitable for measuring the height, thickness, squareness, coaxiality and so on.
- IP65 protection level
- High frequence:100 times/s, can measure high speed workpiece
- Output signal:90° phase difference wave
- Standard cable length: 2m
- Long working life due to the special bearing



Single gauge application



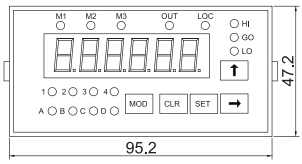
Multi-gauges application

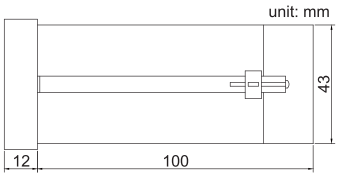


Code	Resolution	Interface	Range	Measuring force	Stem	Accuracy	Hysteresis
201-010-11	0.01mm	Pin4	0-12.7mm	1.5N	Ø8mm	20μm	10μm
201-010-12	0.01mm	RS232	0-12.7mm	1.5N	Ø8mm	20μm	10μm
201-010-01	0.001mm	Pin4	0-12.7mm	1.5N	Ø8mm	5μm	2μm
201-010-02	0.001mm	RS232	0-12.7mm	1.5N	Ø8mm	5μm	2μm

DISPLAY UNIT FOR LINEAR GAUGE

206



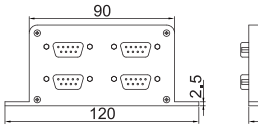


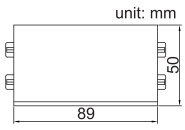
- High and low limits with judgement
- With external control
- With output I/O
- Power: DC9-24V

Code	Gage Input	Interface
206-010-01	1	Pin4

COUNTER FOR LINEAR GAUGE

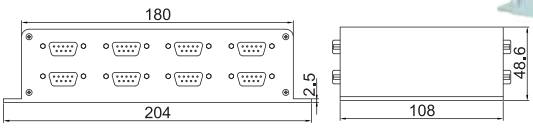
SERIES 208

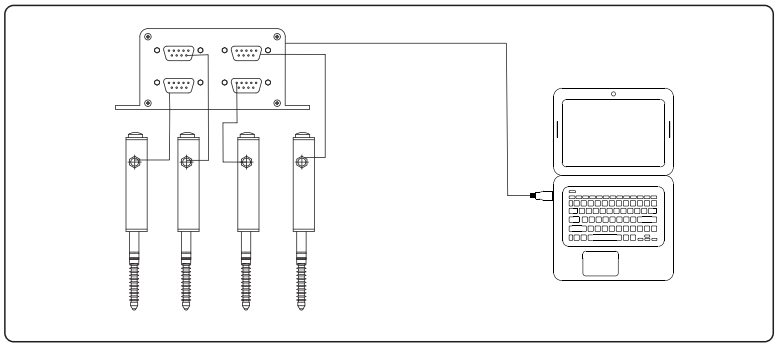




208-004-01

208-008-01





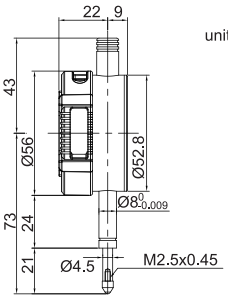
- With data recording software, can transfer the data into Excel

Code	Gages Input	Interface
208-004-01	4	RS232/485
208-008-01	8	RS232/485

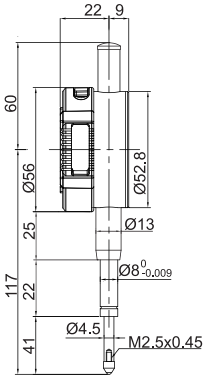
SERIES 210 DIGITAL INDICATOR

- Resolution: 0.01mm/0.0005"
- Button: tolerance set, data preset, inch/mm conversion, measuring direction set, max./min./range measurement, absolute/incremental measurement
- Data output

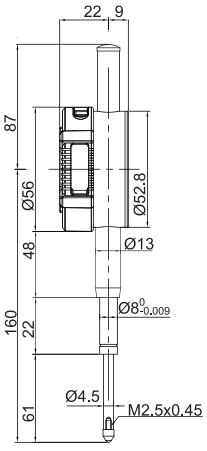
210-010-12



210-010-12



210-025-12



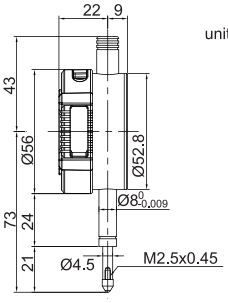
210-050-12

Code	Range	Back	Accuracy	Hysteresis
210-010-11	12.7mm/0.5"	lug	20μm	10μm
210-025-11	25.4mm/1"	lug	20μm	10μm
210-050-11	50.8mm/2"	lug	30μm	10μm
210-010-12	12.7mm/0.5"	flat	20μm	10μm
210-025-12	25.4mm/1"	flat	20μm	10μm
210-050-12	50.8mm/2"	flat	30μm	10μm

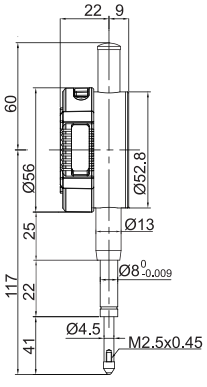
SERIES 210 DIGITAL INDICATOR

- Resolution: 0.001mm/0.00005"
- Button: tolerance set, data preset, inch/mm conversion, measuring direction set, max./min./range measurement, absolute/incremental measurement
- Data output

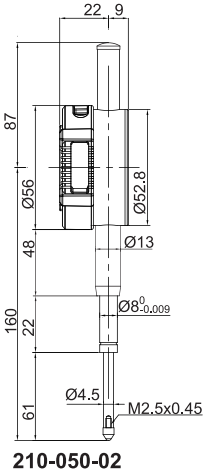
210-010-02



210-010-02



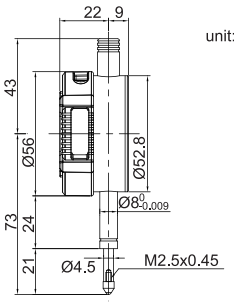
210-025-02



210-050-02

Code	Range	Back	Accuracy	Hysteresis
210-010-01	12.7mm/0.5"	lug	5μm	2μm
210-025-01	25.4mm/1"	lug	5μm	3μm
210-050-01	50.8mm/2"	lug	6μm	3μm
210-010-02	12.7mm/0.5"	flat	5μm	2μm
210-025-02	25.4mm/1"	flat	5μm	3μm
210-050-02	50.8mm/2"	flat	6μm	3μm

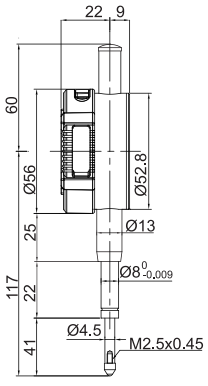
DIGITAL INDICATOR SERIES 211



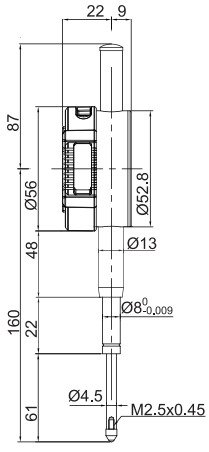
211-010-12

211-010-12

- With analog reading
- Resolution: 0.01mm/0.0005"
- Button: tolerance set, data preset, inch/mm conversion, measuring direction set, max./min./range measurement, absolute/incremental measurement
- Data output



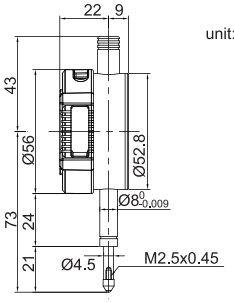
211-025-12



211-050-12

Code	Range	Back	Accuracy	Hysteresis
211-010-11	12.7mm/0.5"	lug	20μm	10μm
211-025-11	25.4mm/1"	lug	20μm	10μm
211-050-11	50.8mm/2"	lug	30μm	10μm
211-010-12	12.7mm/0.5"	flat	20μm	10μm
211-025-12	25.4mm/1"	flat	20μm	10μm
211-050-12	50.8mm/2"	flat	30μm	10μm

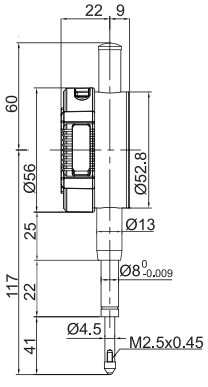
DIGITAL INDICATOR SERIES 211



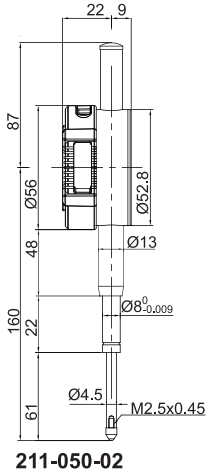
211-010-02

211-010-02

- With analog reading
- Resolution: 0.001mm/0.00005"
- Button: tolerance set, data preset, inch/mm conversion, measuring direction set, max./min./range measurement, absolute/incremental measurement
- Data output



211-025-02



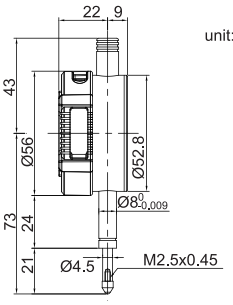
211-050-02

Code	Range	Back	Accuracy	Hysteresis
211-010-01	12.7mm/0.5"	lug	5μm	2μm
211-025-01	25.4mm/1"	lug	5μm	3μm
211-050-01	50.8mm/2"	lug	6μm	3μm
211-010-02	12.7mm/0.5"	flat	5μm	2μm
211-025-02	25.4mm/1"	flat	5μm	3μm
211-050-02	50.8mm/2"	flat	6μm	3μm

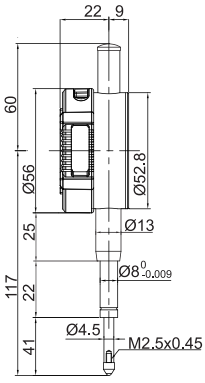
SERIES 212 DIGITAL INDICATOR

- Resolution: 0.01mm/0.0005"
- Button: on/off, zero, inch/mm conversion, measuring direction set, data preset absolute/incremental measurement
- Data output

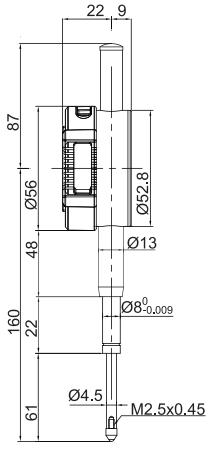
212-010-12



212-010-12



212-025-12



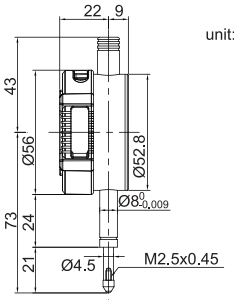
212-050-12

Code	Range	Back	Accuracy	Hysteresis
212-010-11	12.7mm/0.5"	lug	20μm	10μm
212-025-11	25.4mm/1"	lug	20μm	10μm
212-050-11	50.8mm/2"	lug	30μm	10μm
212-010-12	12.7mm/0.5"	flat	20μm	10μm
212-025-12	25.4mm/1"	flat	20μm	10μm
212-050-12	50.8mm/2"	flat	30μm	10μm

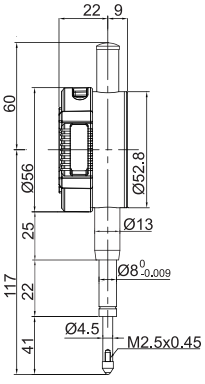
SERIES 212 DIGITAL INDICATOR

- Resolution: 0.001mm/0.00005"
- Button: on/off, zero, inch/mm conversion, measuring direction set, data preset absolute/incremental measurement
- Data output

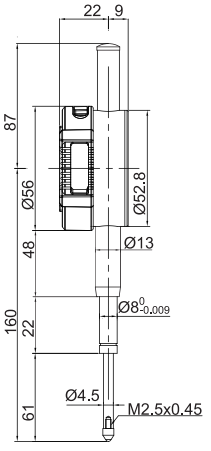
212-010-02



212-010-02



212-025-02



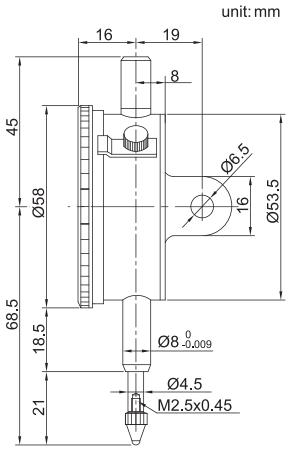
212-050-02

Code	Range	Back	Accuracy	Hysteresis
212-010-01	12.7mm/0.5"	lug	5μm	2μm
212-025-01	25.4mm/1"	lug	5μm	3μm
212-050-01	50.8mm/2"	lug	6μm	3μm
212-010-02	12.7mm/0.5"	flat	5μm	2μm
212-025-02	25.4mm/1"	flat	5μm	3μm
212-050-02	50.8mm/2"	flat	6μm	3μm

DIAL INDICATOR SERIES 222

222-010-11

- Graduation: 0.01mm
- With limit hands
- Jeweled bearing
- Range per revolution: 1mm
- With lock screw

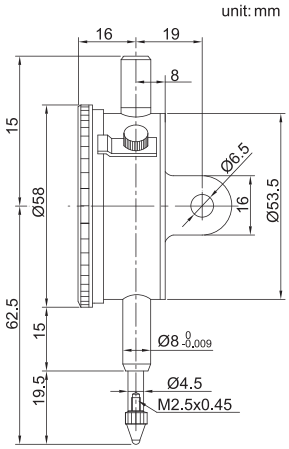


Code	Range	Back	Accuracy	Scale	Hysteresis
222-003-11	3mm	lug	14μm	0-100	3μm
222-005-11	5mm	lug	16μm	0-100	3μm
222-010-11	10mm	lug	20μm	0-100	3μm
222-003-12	3mm	flat	14μm	0-100	3μm
222-005-12	5mm	flat	16μm	0-100	3μm
222-010-12	10mm	flat	20μm	0-100	3μm

DIAL INDICATOR SERIES 222

222-001-01

- Graduation: 0.001mm
- With limit hands
- Jeweled bearing
- Rang per revolution: 0.2mm
- With lock screw

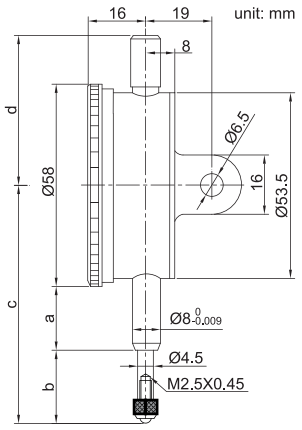


Code	Range	Back	Scale	Accuracy	Hysteresis
222-001-01	1mm	lug	0-100-0	5μm	2μm
222-001-02	1mm	flat	0-100-0	5μm	2μm

SERIES 221 DIAL INDICATOR

- Graduation: 0.001mm
- With limit hands
- Jeweled bearing
- Rang per revolution: 0.2mm

221-001-01

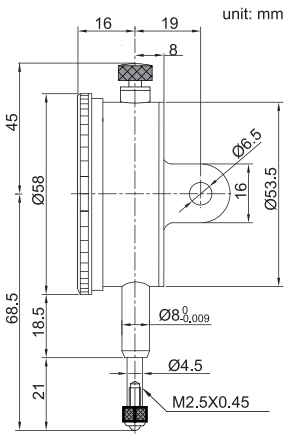


Code	Range	Back	Scale	Accuracy	Hysteresis	a	b	c	d
221-001-01	1mm	lug	0-20	5μm	2μm	15	19.5	62.5	45
221-003-01	3mm	lug	0-20	10μm	4μm	10	21.5	59.5	41.5
221-005-01	5mm	lug	0-20	10μm	4μm	10	21.5	59.5	41.5
221-001-02	1mm	flat	0-20	5μm	2μm	15	19.5	62.5	45
221-003-02	3mm	flat	0-20	10μm	4μm	10	21.5	59.5	41.5
221-005-02	5mm	flat	0-20	10μm	4μm	10	21.5	59.5	41.5

SERIES 226 SHOCKPROOF DIAL INDICATOR

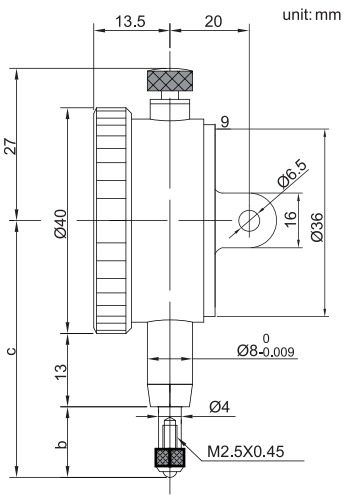
- Shockproof
- Graduation: 0.01mm
- With limit hands
- Jeweled bearing
- Rang per revolution: 1mm

226-010-11



Code	Range	Back	Accuracy	Hysteresis	Scale
226-003-11	3mm	lug	14μm	3μm	0-100
226-005-11	5mm	lug	16μm	3μm	0-100
226-010-11	10mm	lug	20μm	3μm	0-100
226-003-12	3mm	flat	14μm	3μm	0-100
226-005-12	5mm	flat	16μm	3μm	0-100
226-010-12	10mm	flat	20μm	3μm	0-100

DIAL INDICATOR SERIES 228

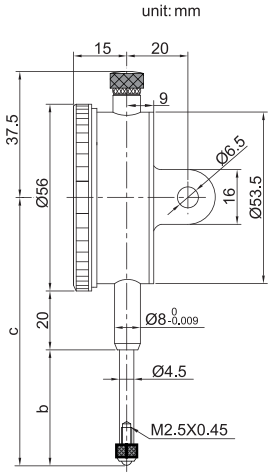


228-005-11

- Bezel: Ø40mm
- Graduation: 0.01mm
- With limit hands
- Jeweled bearing
- Rang per revolution: 1mm

Code	Range	Back	Accuracy	Hysteresis	Scale	b	c
228-003-11	3mm	lug	14µm	3µm	0-100	11mm	44mm
228-005-11	5mm	lug	16µm	3µm	0-100	12.5mm	45.5mm
228-003-12	3mm	flat	14µm	3µm	0-100	11mm	44mm
228-005-12	5mm	flat	16µm	3µm	0-100	12.5mm	45.5mm

DIAL INDICATOR SERIES 229



229-030-11

- Graduation: 0.01mm
- With limit hands
- Rang per revolution: 1mm

Code	Range	Back	Accuracy	Hysteresis	Scale	b	c
229-020-11	20mm	lug	25µm	5µm	0-100	35mm	83mm
229-030-11	30mm	lug	35µm	7µm	0-100	40mm	88mm
229-020-12	20mm	flat	25µm	5µm	0-100	35mm	83mm
229-030-12	30mm	flat	35µm	7µm	0-100	40mm	88mm

SERIES 270

CONTACT POINTS

Ball Point

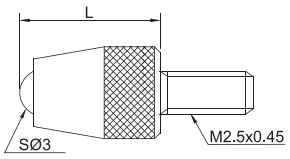
270-001-01

type A

Code	Material	L(mm)
270-001-01	carbide	7.3
270-001-02	ceramic	7.3
270-001-03	carbide	8.3
270-001-04	carbide	12.1
270-001-05	carbide	14
270-001-06	carbide	15
270-001-07	ceramic	15
270-001-08	carbide	17
270-001-09	carbide	19.3
270-001-10	carbide	20
270-001-11	ceramic	20
270-001-12	carbide	22
270-001-13	carbide	25
270-001-14	ceramic	25
270-001-15	carbide	30
270-001-16	ceramic	30

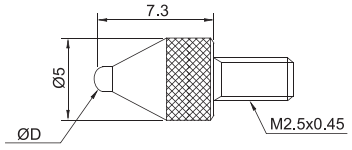
type A

unit: mm



type B

unit: mm



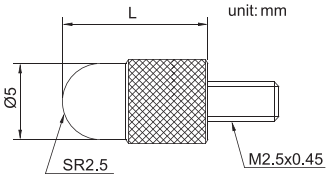
type B

Code	Material	ØD(mm)
270-001-21	steel	1
270-001-22	carbide	1.5
270-001-23	carbide	1.8
270-001-24	carbide	2.5
270-001-25	carbide	4

Shell Type Point

270-002-01

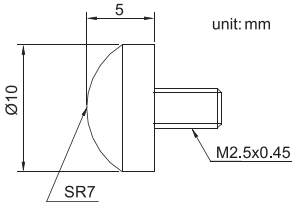
unit: mm



Code	Material	L(mm)
270-002-01	steel	5
270-002-02	steel	10
270-002-03	steel	15
270-002-04	steel	20
270-002-05	steel	25
270-002-06	steel	30

Spherical Point

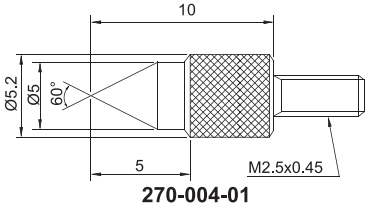
unit: mm



Code	Material
270-003-01	steel

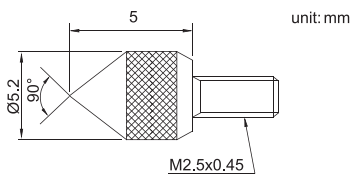
Conical Point

270-004-01



270-004-01

unit: mm



270-004-02

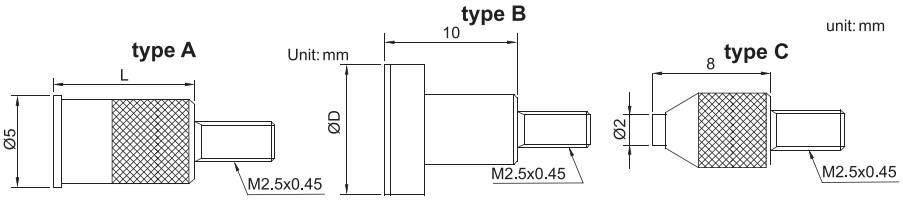
Code	Material
270-004-01	steel
270-004-02	steel

CONTACT POINTS

SERIES 270

Flat Point

270-005-11



type A

Code	Material	L
270-005-01	steel	8
270-005-02	steel	10

type B

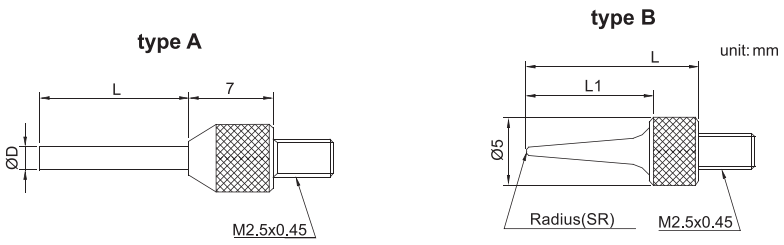
Code	Material	ØD
270-005-11	steel	10
270-005-12	steel	15
270-005-13	steel	20
270-005-14	steel	25
270-005-15	steel	30

type C

Code	Material
270-005-21	carbide

Needle Point

270-006-21



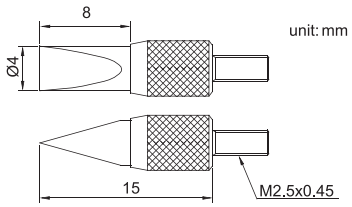
type A

Code	Material	ØD	L
270-006-02	steel	0.45	5
270-006-03	carbide	1	3
270-006-04	carbide	1	5
270-006-05	carbide	1	8
270-006-06	carbide	1	10
270-006-07	carbide	1	20
270-006-08	carbide	1	40
270-006-09	carbide	1.5	5
270-006-10	carbide	1.5	10
270-006-11	carbide	1.5	13
270-006-12	carbide	1.5	20
270-006-13	carbide	1.5	40
270-006-14	carbide	2	8
270-006-15	carbide	2	18
270-006-16	carbide	2	28
270-006-17	carbide	2	40

type B

Code	Material	L1	L	SR
270-006-21	steel	11	15	0.4
270-006-22	steel	13	17	0.2
270-006-23	steel	21	25	0.4
270-006-24	steel	31	35	0.4

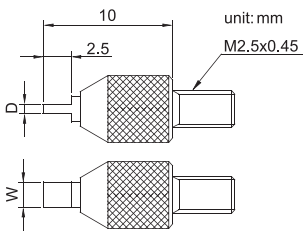
Knife Edge Point



Code	Material
270-007-01	steel

Blade Point

270-008-01



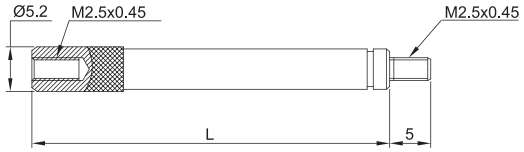
Code	Material	D	W
270-008-01	steel	0.4	2
270-008-02	steel	0.6	2
270-008-03	steel	1	4

SERIES 270

EXTENSION ROD FOR CONTACT POINTS

270-000-13

unit: mm



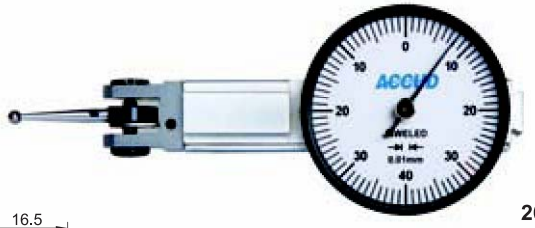
Code	Material	L
270-000-01	steel	10
270-000-02	steel	15
270-000-03	steel	20
270-000-04	steel	25
270-000-05	steel	30
270-000-06	steel	35
270-000-07	steel	40
270-000-08	steel	45
270-000-09	steel	50

Code	Material	L
270-000-10	steel	55
270-000-11	steel	60
270-000-12	steel	65
270-000-13	steel	70
270-000-14	steel	75
270-000-15	steel	80
270-000-16	steel	90
270-000-17	steel	100

SERIES 261

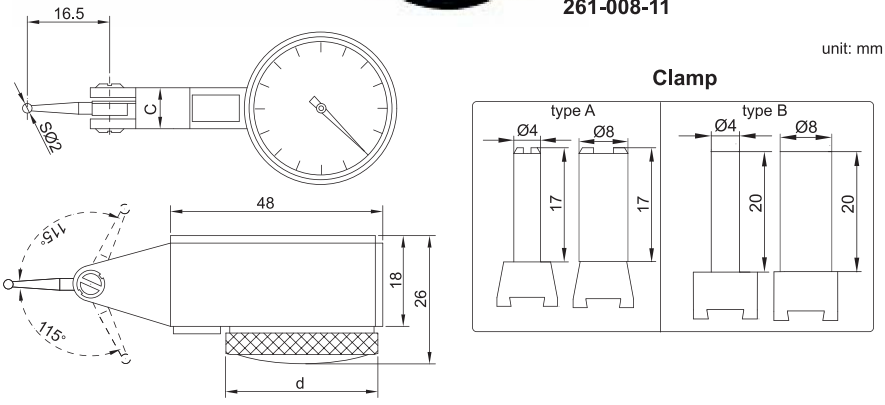
DIAL TEST INDICATOR

- Jeweled bearing
- Double scale spacing
- Anti-magnetic copper body
- With two clamps: Ø4mm and Ø8mm



261-008-11

unit: mm



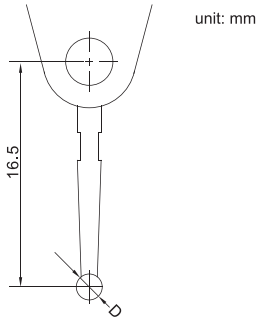
Code	Range	Bezel(d)	Graduation	Styli	Clamp	Accuracy	Hysteresis	Scale	C
261-008-11	0.8mm	Ø30mm	0.01mm	carbide	type A	13μm	3μm	0-40-0	8.9mm
261-008-12	0.8mm	Ø37.5mm	0.01mm	carbide	type A	13μm	3μm	0-40-0	8.9mm
261-002-01	0.2mm	Ø30mm	0.002mm	ruby	type B	6μm	2μm	0-100-0	8mm
261-002-02	0.2mm	Ø37.5mm	0.002mm	ruby	type B	6μm	2μm	0-100-0	8mm

STYLI FOR DIALTEST INDICATOR

SERIES 260

- For series 261

260-002-02



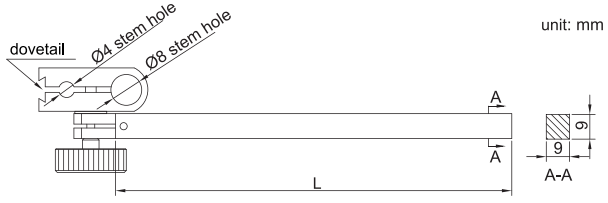
Code	Tip material	D(mm)
260-001-01	steel	SØ1
260-002-02	carbide	SØ2
260-003-02	carbide	SØ3

HOLDER FOR INDICATOR

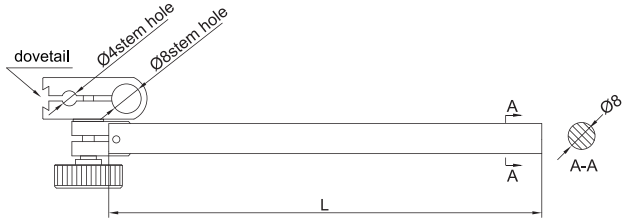
SERIES 267

- Use as holder for dial/digital indicators, dial test indicators and height gages

267-115-02



267-050-01 and 267-100-01

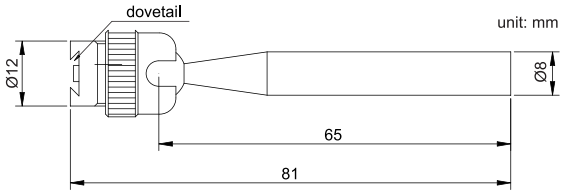


267-115-02

Code	Section size	Size(L)
267-050-01	9x9mm	50mm
267-100-01	9x9mm	100mm
267-115-02	Ø8mm	115mm

268 UNIVERSAL HOLDER FOR DIAL TEST INDICATOR

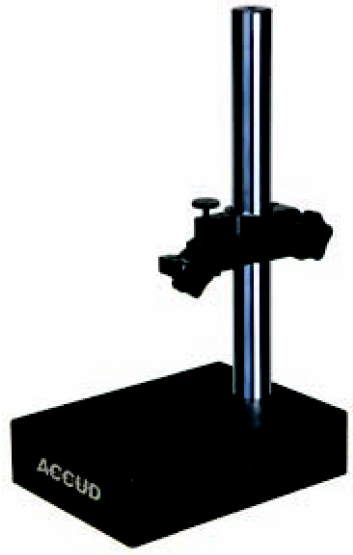
- universal head

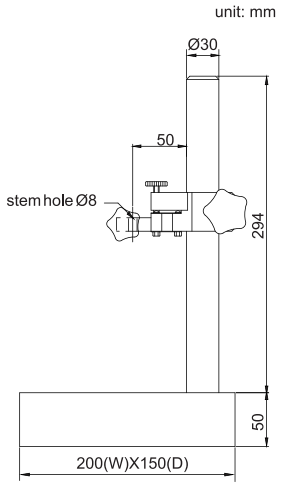


Code	Section size	Size(L)
268-055-01	Ø8mm	55mm

289 INDICATOR STAND WITH GRANITE BASE

- Holder vertical travel: 150mm
- Fine adjustment range: 2mm

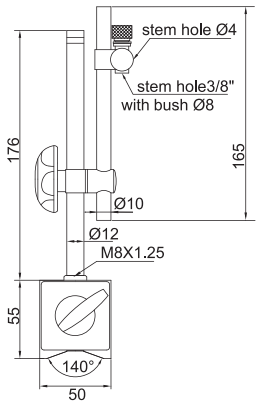




Code	Stem hole	Base flatness
289-008-01	Ø8mm	3.2μm

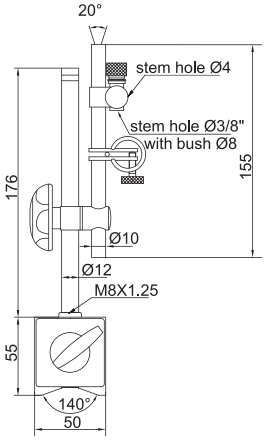
MAGNETIC STAND SERIES 281

unit: mm

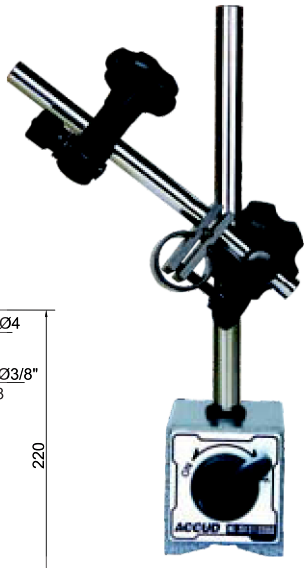


281-060-02

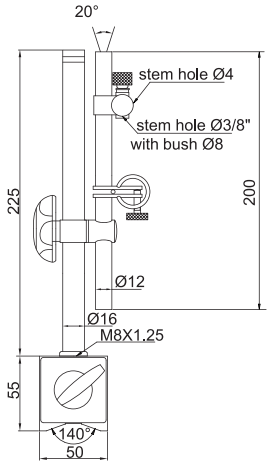
281-060-02



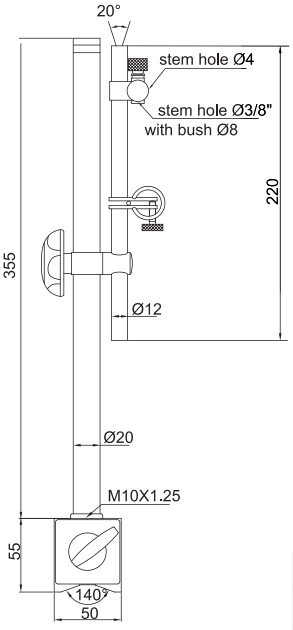
281-060-01



281-060-01



281-080-01



281-100-01

- For dial/digital indicators and dial test indicators
- V-block base

Code	Stem hole	Magnetic force	Fine adjustment
281-060-01	Ø8mm, Ø4mm, 3/8"	60kgf	With
281-060-02	Ø8mm, Ø4mm, 3/8"	60kgf	Without
281-080-01	Ø8mm, Ø4mm, 3/8"	80kgf	With
281-100-01	Ø8mm, Ø4mm, 3/8"	100kgf	With

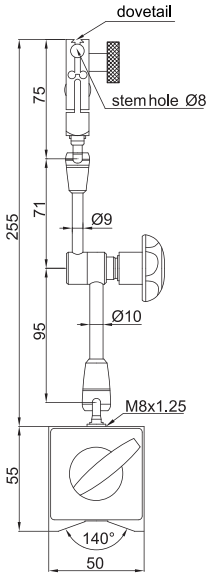
SERIES 282

UNIVERSAL MAGNETIC STAND

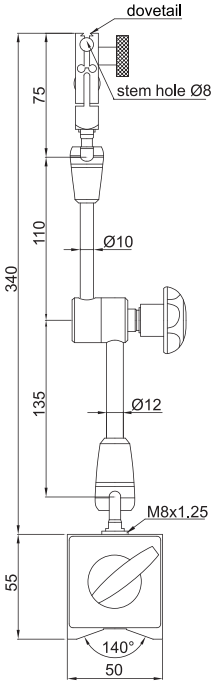
- For dial/digital indicators and dial test indicators
- Stem hole: Ø8mm
- With find adjustment and dovetail
- V-block base

282-080-01

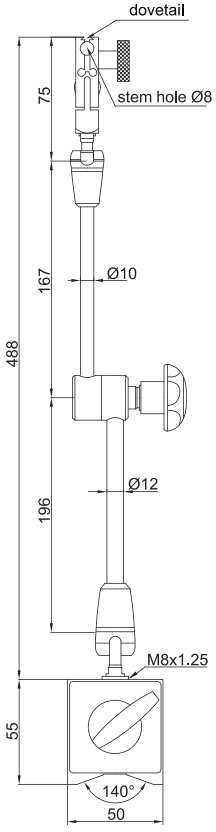
unit: mm



282-080-01



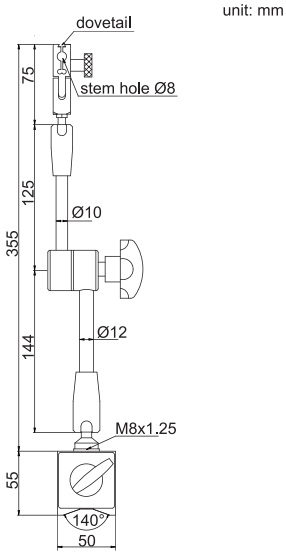
282-080-02



282-100-01

Code	Magnetic force
282-080-01	80kgf
282-080-02	80kgf
282-100-01	100kgf

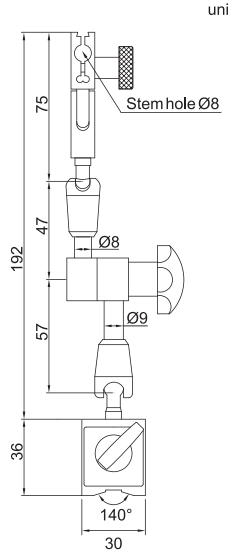
UNIVERSAL MAGNETIC STAND 283



- Economic type
- For dial/digital indicators and dial test indicators
- Stem hole: Ø8mm
- With find adjustment and dovetail
- V-block base

Code	Magnetic force
283-080-01	80kgf

MINI MAGNETIC STAND 286



- For dial test indicators
- Stem hole: Ø8mm
- With find adjustment and dovetail
- V-block base

Code	Magnetic force	Stem hole
286-040-01	40kgf	Ø8mm