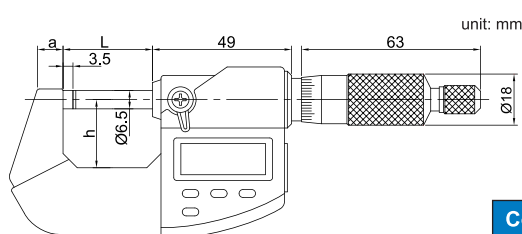


IP54 DIGITAL OUTSIDE MICROMETER

SERIES 311



311-001-01



Code	Range	Accuracy	a	h	L
311-001-01	0-25mm/0-1"	$\pm 2\mu\text{m}$	9	24	31.5
311-002-01	25-50mm/1-2"	$\pm 2\mu\text{m}$	8	32	57.5
311-003-01	50-75mm/2-3"	$\pm 3\mu\text{m}$	8	44.5	82.5
311-004-01	75-100mm/3-4"	$\pm 3\mu\text{m}$	8	57	107.5

- ◆ Resolution: 0.001mm/0.00005"
- ◆ IP54 protection level
- ◆ Button: origin, mm/inch, on/zero/abs, hold/data
- ◆ Automatic power off
- ◆ Carbide measuring faces
- ◆ Ratchet stop
- ◆ Setting standards are included (except 311-001-01)

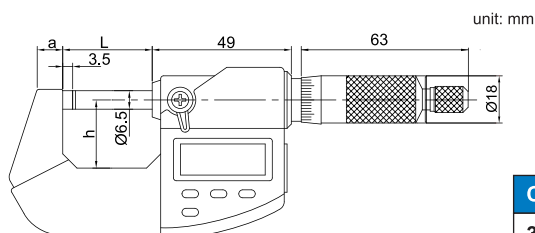


IP65 DIGITAL OUTSIDE MICROMETER

SERIES 313



313-001-01



Code	Range	Accuracy	a	h	L
313-001-01	0-25mm/0-1"	$\pm 2\mu\text{m}$	9	24	31.5
313-002-01	25-50mm/1-2"	$\pm 2\mu\text{m}$	8	32	57.5
313-003-01	50-75mm/2-3"	$\pm 3\mu\text{m}$	8	44.5	82.5
313-004-01	75-100mm/3-4"	$\pm 3\mu\text{m}$	8	57	107.5

- ◆ Absolute system
- ◆ Resolution: 0.001mm/0.00005"
- ◆ IP65 protection level
- ◆ Button: origin, mm/inch, on/zero/abs, hold/data
- ◆ Automatic power off
- ◆ Carbide measuring faces
- ◆ Ratchet stop
- ◆ Setting standards are included (except 313-001-01)

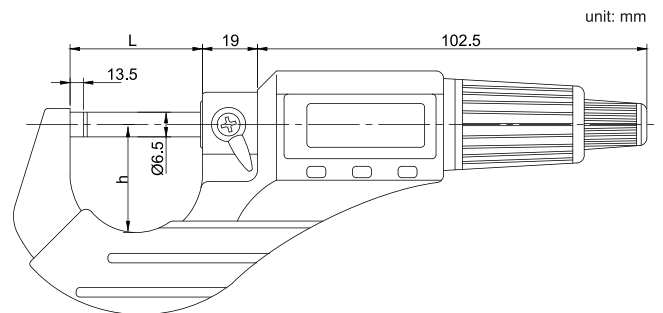
SERIES 312

DIGITAL OUTSIDE MICROMETER

- ◆ Resolution: 0.001mm/0.00005"
- ◆ Button: on/off, zero/abs, unit/set
- ◆ Carbide measuring faces
- ◆ Ratchet stop
- ◆ Setting standards are included
(except 312-001-01)



312-001-01



Code	Range	Accuracy	h	L
312-001-01	0-25mm/0-1"	±3μm	27.5	32
312-002-01	25-50mm/1-2"	±3μm	37	57
312-003-01	50-75mm/2-3"	±4μm	50	82
312-004-01	75-100mm/3-4"	±4μm	61	107

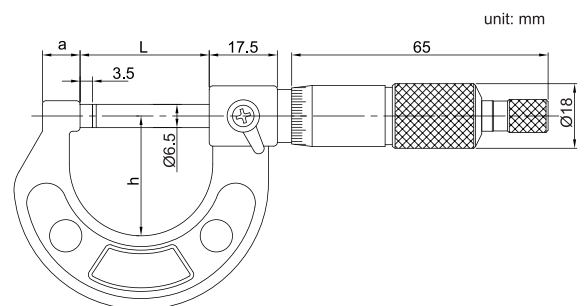
SERIES 321

OUTSIDE MICROMETER

- ◆ Graduation: 0.01mm
- ◆ Carbide measuring faces
- ◆ Ratchet stop
- ◆ Setting standards are included
(except 321-001-01)



321-001-01



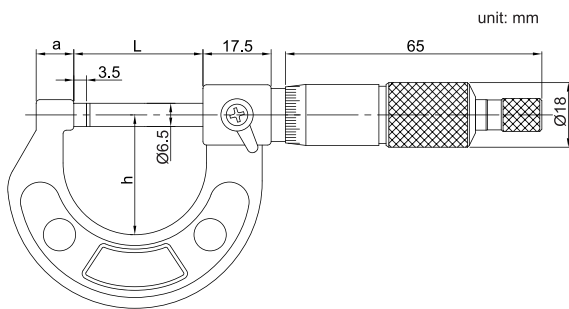
Code	Range	Accuracy	a	h	L
321-001-01	0-25mm	4μm	9	29	32
321-002-01	25-50mm	4μm	9	39	58
321-003-01	50-75mm	5μm	10	53	83
321-004-01	75-100mm	5μm	10	65	109
321-005-01	100-125mm	6μm	11.5	76	133
321-006-01	125-150mm	6μm	11.5	88	159
321-007-01	150-175mm	7μm	11.5	101	185
321-008-01	175-200mm	7μm	11.5	114	210
321-009-01	200-225mm	8μm	11.5	126	235
321-010-01	225-250mm	8μm	12	139	260
321-011-01	250-275mm	9μm	12.5	151	286
321-012-01	275-300mm	9μm	12.5	164	311

MICRO GRADUATION OUTSIDE MICROMETER

SERIES 322



322-001-01



- ◆ Graduation: 0.001mm
- ◆ Carbide measuring faces
- ◆ Ratchet stop
- ◆ Setting standards are included (except 322-001-01)

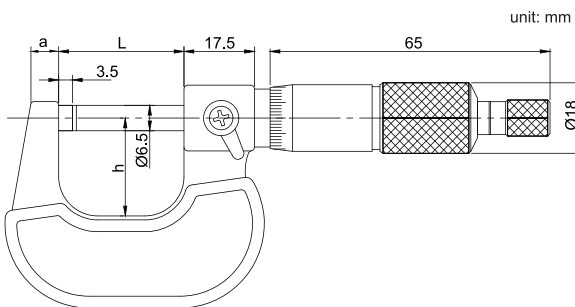
Code	Range	Accuracy	a	h	L
322-001-01	0-25mm	4μm	9	29	32
322-002-01	25-50mm	4μm	9	39	58
322-003-01	50-75mm	5μm	10	53	83
322-004-01	75-100mm	5μm	10	65	109

OUTSIDE MICROMETER

SERIES 323



323-001-01



- ◆ Graduation: 0.01mm
- ◆ Carbide measuring faces
- ◆ Ratchet stop
- ◆ Setting standards are included (except 323-001-01)

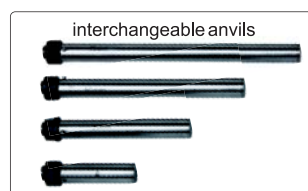
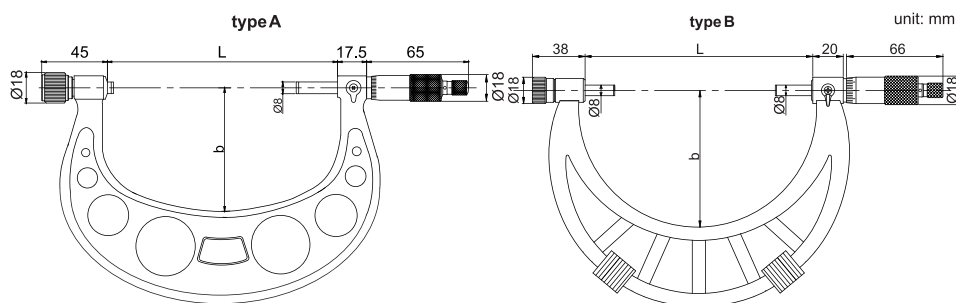
Code	Range	Accuracy	a	h	L
323-001-01	0-25mm	4μm	6	25	32.5
323-002-01	25-50mm	4μm	8	32	58
323-003-01	50-75mm	5μm	8	45	83.5
323-004-01	75-100mm	5μm	8	57	109



SERIES 325

- ◆ Graduation: 0.01mm
- ◆ Ratchet stop
- ◆ Carbide measuring faces
- ◆ Supplied with setting standards

OUTSIDE MICROMETER WITH INTERCHANGEABLE ANVILS

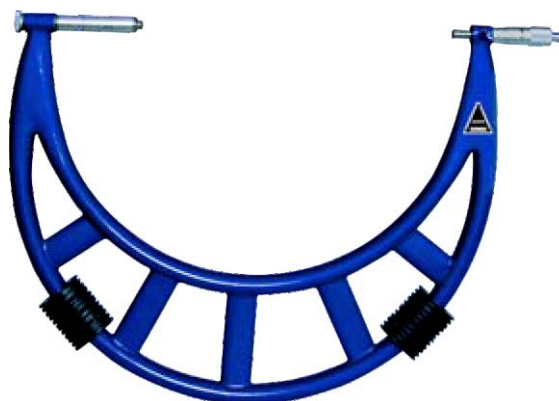


Code	Range	Type	Accuracy	L	b
325-002-01	0-50mm	A	4μm	58	35
325-004-01	0-100mm	A	5μm	108	57
325-006-01	0-150mm	A	6μm	158	82
325-008-01	100-200mm	A	7μm	208	114
325-012-01	150-300mm	A	9μm	308	165
325-016-02	300-400mm	B	11μm	409	224
325-020-02	400-500mm	B	13μm	509	275
325-024-02	500-600mm	B	14μm	609	321
325-028-02	600-700mm	B	16μm	709	371
325-032-02	700-800mm	B	18μm	809	426
325-036-02	800-900mm	B	20μm	909	476
325-040-02	900-1000mm	B	22μm	1009	576

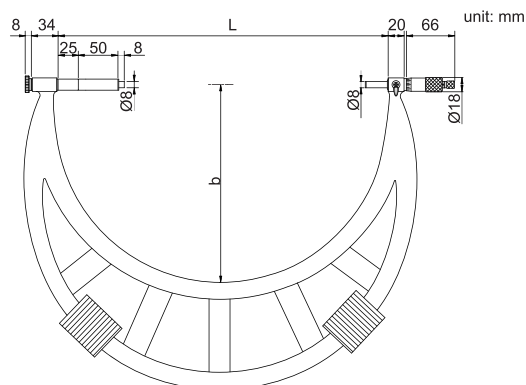
SERIES 329

- ◆ Adjust collars for different measuring ranges
- ◆ Graduation 0.01mm
- ◆ Ratchet stop
- ◆ Carbide measuring faces
- ◆ Supplied with setting standards

OUTSIDE MICROMETER WITH EXTENSION ANVIL



329-016-01



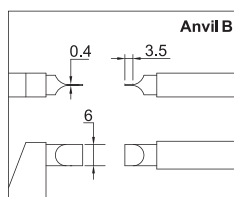
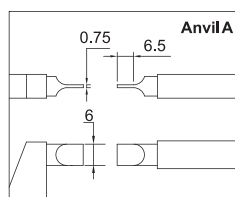
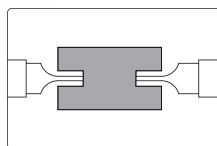
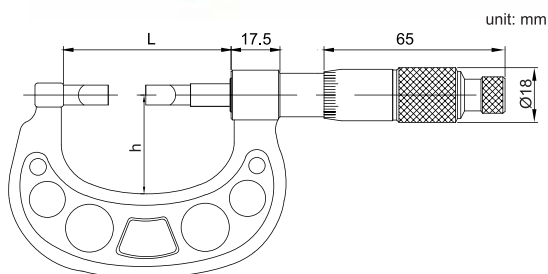
Code	Range	Accuracy	L	b
329-016-01	300-400mm	11μm	410	250
329-020-01	400-500mm	13μm	510	295
329-024-01	500-600mm	14μm	610	345
329-028-01	600-700mm	16μm	710	395
329-032-01	700-800mm	18μm	810	445
329-036-01	800-900mm	20μm	910	495
329-040-01	900-1000mm	22μm	1010	545

BLADE MICROMETER

SERIES 326



326-001-01



- ◆ Measure the small groove diameter
- ◆ Graduation: 0.01mm
- ◆ Non-rotating spindle
- ◆ Ratchet stop
- ◆ Setting standards are included (except 0-25mm)

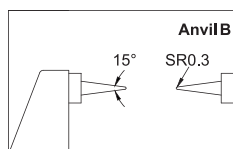
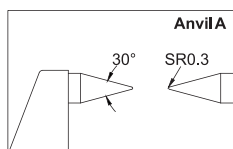
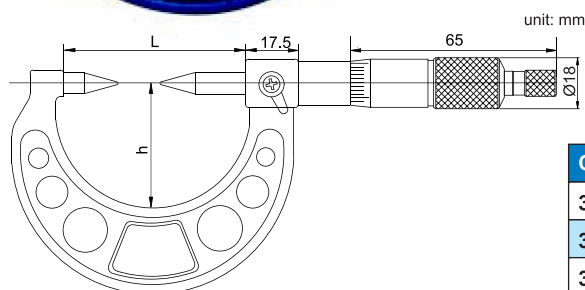
Code	Range	Anvil	Accuracy	h	L
326-001-01	0-25mm	A	4μm	35	57
326-002-01	25-50mm	A	4μm	46	82
326-003-01	50-75mm	A	5μm	58	107
326-004-01	75-100mm	A	5μm	70	133
326-005-01	100-125mm	A	6μm	83	158
326-006-01	125-150mm	A	6μm	96	183
326-007-01	150-175mm	A	7μm	109	209
326-001-02	0-25mm	B	4μm	35	57
326-002-02	25-50mm	B	4μm	46	82

POINT MICROMETER

SERIES 327



327-001-01



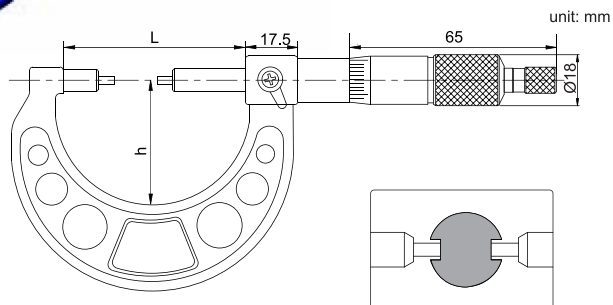
- ◆ Measure the thickness of drills, small grooves and keyways
- ◆ Graduation: 0.01mm
- ◆ Ratchet stop
- ◆ Carbide measuring faces
- ◆ Setting standards are included (except 0-25mm)

Code	Range	Anvil	Accuracy	h	L
327-001-01	0-25mm	A	4μm	39	58
327-002-01	25-50mm	A	4μm	53	83
327-003-01	50-75mm	A	5μm	65	109
327-004-01	75-100mm	A	5μm	76	133
327-001-02	0-25mm	B	4μm	39	58
327-002-02	25-50mm	B	4μm	53	83
327-003-02	50-75mm	B	5μm	65	109
327-004-02	75-100mm	B	5μm	76	133

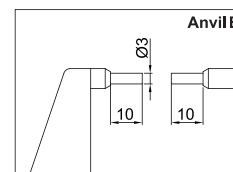
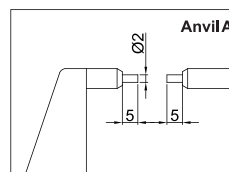
SERIES 328

SPLINE MICROMETER

- ◆ Measure grooves and sharped parts
- ◆ Graduation: 0,01mm
- ◆ Carbide measuring faces
- ◆ Ratchet stop
- ◆ Setting standards are included
(except 0-25mm)



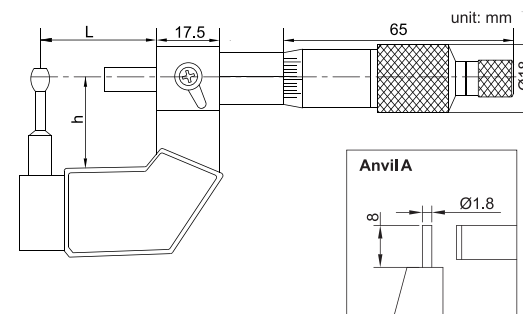
Code	Range	Anvil	Accuracy	h	L
328-001-02	0-25mm	A	4μm	39	58
328-001-01	0-25mm	B	4μm	39	58
328-002-01	25-50mm	B	4μm	53	83
328-003-01	50-75mm	B	5μm	65	109
328-004-01	75-100mm	B	5μm	76	133



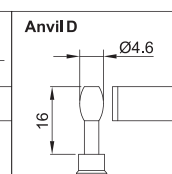
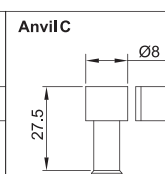
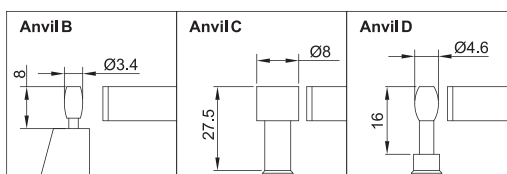
SERIES 341

TUBE MICROMETER

- ◆ Measure the wall thickness of tube, bearing and rings
- ◆ Graduation: 0.01mm
- ◆ Carbide measuring faces
- ◆ Ratchet stop
- ◆ Setting standards are included
(except 0-25mm)



Code	Range	Anvil	Accuracy	h	L
341-001-01	0-25mm	A	6μm	24	31
341-002-01	25-50mm	A	6μm	32	57
341-001-02	0-25mm	B	6μm	24	31
341-002-02	25-50mm	B	6μm	32	57
341-001-03	0-25mm	C	6μm	24	31
341-001-04	0-25mm	D	6μm	24	31

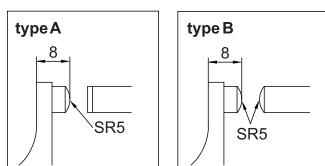
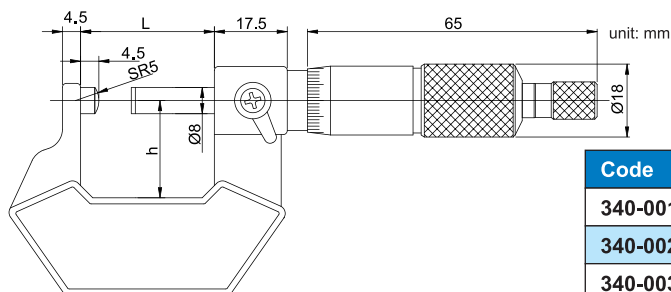


SPHERICAL ANVIL TUBE MICROMETER

SERIES 340



340-001-01



- ◆ Measure wall thickness of tubes
- ◆ Graduation: 0.01mm
- ◆ Carbide measuring faces
- ◆ Ratchet stop
- ◆ Setting standards are included (except 0-25mm)

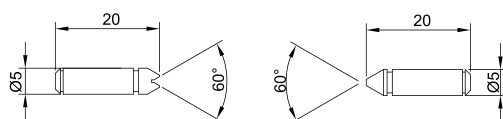
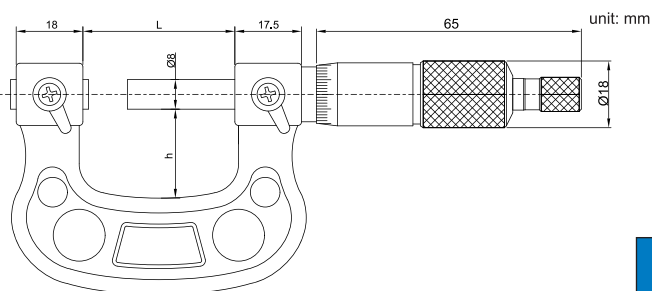
Code	Range	Type	Accuracy	L	h
340-001-01	0-25mm	A	4μm	57	24
340-002-01	25-50mm	A	4μm	82	32
340-003-01	50-75mm	A	5μm	107	44.5
340-004-01	75-100mm	A	5μm	133	57
340-001-02	0-25mm	B	4μm	57	24
340-002-02	25-50mm	B	4μm	82	32
340-003-02	50-75mm	B	5μm	107	44.5
340-004-02	75-100mm	B	5μm	133	57

SCREW THREAD MICROMETER

SERIES 343



343-001-01



60° thread angle tips (included)

- ◆ Measure pitch diameter of screw threads
- ◆ Measuring tips are included
pitch: 0.4-0.5mm/64-48TPI
0.6-0.9mm/44-28TPI, 1-1.75mm/24-14TPI
2-3mm/13-9TPI, 3.5-5mm/8-5TPI
5.5-7mm/4.5-3.5TPI
- ◆ Graduation: 0.01mm
- ◆ Carbide measuring faces
- ◆ Ratchet stop
- ◆ Non-rotating spindle

Code	Range	Accuracy		L	h
		Head	Tips		
343-001-01	0-25mm	4μm	8μm	57	35
343-002-01	25-50mm	4μm	8μm	82	46
343-003-01	50-75mm	5μm	10μm	107	58
343-004-01	75-100mm	5μm	10μm	133	70

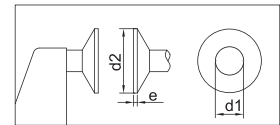
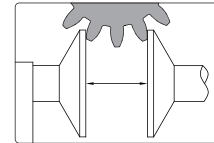
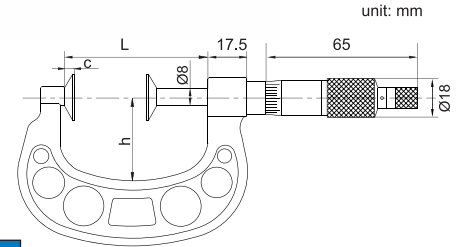
SERIES 342

DISK MICROMETER

- ◆ Disc-shaped measuring face, for measuring the root-tangent length of spur and helical gears
- ◆ Graduation: 0.01mm
- ◆ Ratchet stop
- ◆ Setting standards are included (except 342-001-01)



342-001-01



Code	Range	Accuracy	L	d1	d2	e	h	c
342-001-01	0-25mm	4μm	34	Ø8	Ø20	0.7	24	3.3
342-002-01	25-50mm	4μm	59	Ø8	Ø20	0.7	32	3.3
342-003-01	50-75mm	5μm	85	Ø8	Ø20	0.7	45	3.3
342-004-01	75-100mm	5μm	110	Ø8	Ø20	0.7	57	3.3
342-005-01	100-125mm	6μm	138	Ø12	Ø30	0.9	70	4.3
342-006-01	125-150mm	6μm	163	Ø12	Ø30	0.9	82	4.3
342-007-01	150-175mm	7μm	188	Ø12	Ø30	0.9	95	4.3
342-008-01	175-200mm	7μm	214	Ø12	Ø30	0.9	107	4.3

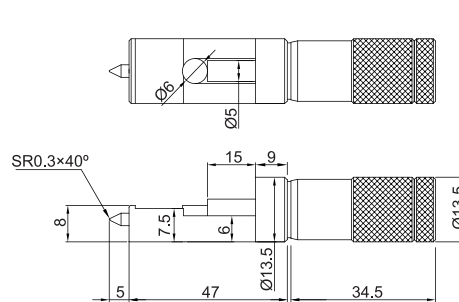
SERIES 348

CAN SEAM MICROMETER

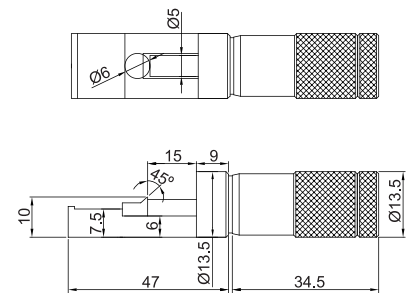
- ◆ Measure the width, height and depth of can seams
- ◆ Graduation: 0.01mm
- ◆ Ratchet stop



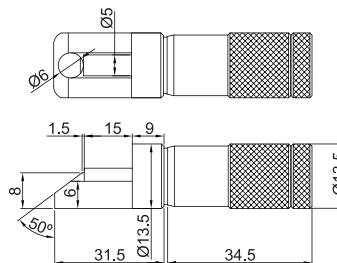
348-013-01



348-001-01



348-001-02

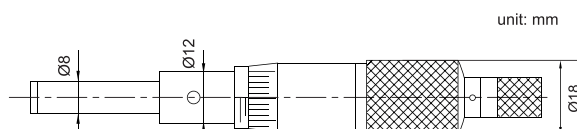


348-001-03

Code	Range	Accuracy
348-001-01	0-13mm	4μm
348-001-02	0-13mm	4μm
348-001-03	0-13mm	4μm

MICROMETER HEAD

371

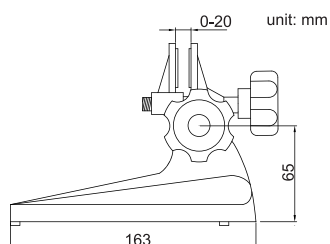


- ◆ Graduation: 0.01mm
- ◆ Carbide measuring faces
- ◆ Ratchet stop

Code	Range	Accuracy
371-001-01	0-25mm	3μm

MICROMETER STAND

381



- ◆ For micrometer which measuring range is less than 100mm

Code
381-000-00



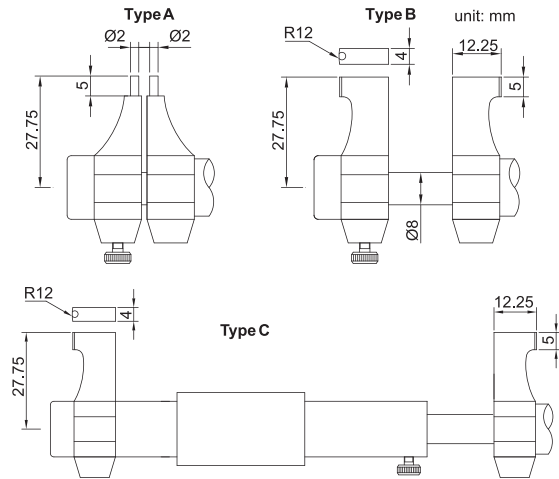
SERIES 351

INSIDE MICROMETER

- ◆ Graduation: 0.01mm
- ◆ Carbide measuring faces
- ◆ Ratchet stop



351-001-01



Code	Range	Type	Setting ring	Accuracy
351-001-01	5-30mm	A	included	5μm
351-002-01	25-50mm	B	included	6μm
351-003-01	50-75mm	B	optional	7μm
351-004-01	75-100mm	C	optional	8μm
351-005-01	100-125mm	C	optional	9μm
351-006-01	125-150mm	C	optional	9μm

SERIES 352

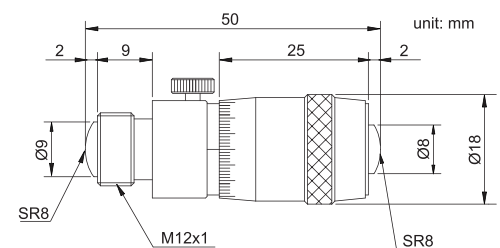
TUBULAR INSIDE MICROMETER

- ◆ Graduation: 0.01mm
- ◆ Travel of micrometer head: 13mm
- ◆ Accuracy: $(3+n+L/50)\mu\text{m}$, n is number of rods, L is max. measuring length in mm
- ◆ Supplied with setting standards
- ◆ Carbide measuring faces



352-002-01

Code	Range	Extension rods (mm)
352-002-01	50-63mm	—
352-006-01	50-150mm	13, 25, 50
352-012-01	50-300mm	13, 25, 50(2pcs), 100
352-020-01	50-500mm	13, 25, 50(2pcs), 100, 200
352-024-01	50-600mm	13, 25, 50, 100, 150, 200
352-040-01	50-1000mm	13, 25, 50(2pcs), 100, 200(2pcs), 300
352-060-01	50-1500mm	13, 25, 50(2pcs), 100, 200(3pcs), 300(2pcs)

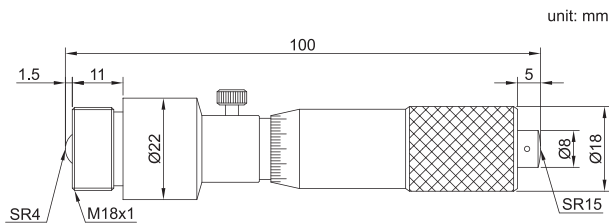


TUBULAR INSIDE MICROMETER

SERIES 353



353-005-01



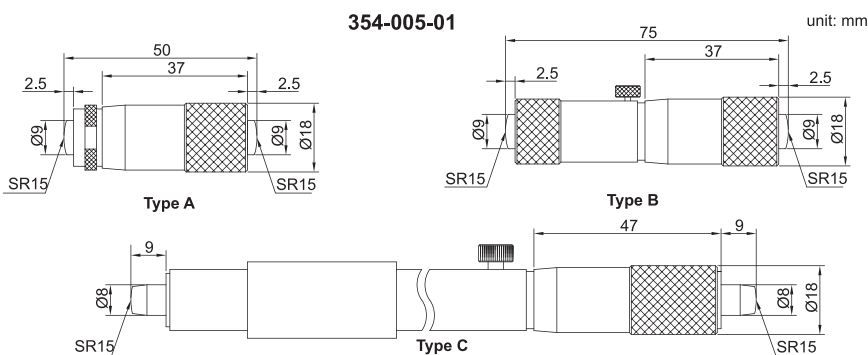
Code	Range	Extension rods (mm)
353-005-01	100-125mm	—
353-020-01	100-500mm	25, 50, 100, 200
353-036-01	100-900mm	25, 50, 100, 200, 400
353-052-01	100-1300mm	25, 50, 100, 200, 400(2pcs)
353-068-01	100-1700mm	25, 50, 100, 200, 400(3pcs)
353-084-01	100-2100mm	25, 50, 100, 200, 400(4pcs)

TUBULAR INSIDE MICROMETER

SERIES 354



354-005-01



Code	Range	Type	Accuracy
354-003-01	50-75mm	A	5μm
354-004-01	75-100mm	B	5μm
354-005-01	100-125mm	C	6μm
354-006-01	125-150mm	C	6μm
354-007-01	150-175mm	C	7μm
354-008-01	175-200mm	C	7μm
354-009-01	200-225mm	C	8μm
354-010-01	225-250mm	C	8μm
354-011-01	250-275mm	C	9μm

Code	Range	Type	Accuracy
354-012-01	275-300mm	C	9μm
354-013-01	300-325mm	C	9μm
354-014-01	325-350mm	C	9μm
354-015-01	350-375mm	C	10μm
354-016-01	375-400mm	C	10μm
354-017-01	400-425mm	C	10μm
354-018-01	425-450mm	C	10μm
354-019-01	450-475mm	C	11μm
354-020-01	475-500mm	C	11μm



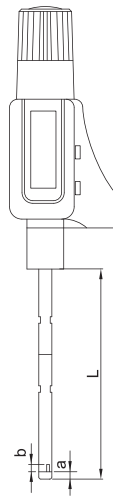
SERIES 361

DIGITAL THREE POINTS INSIDE MICROMETER

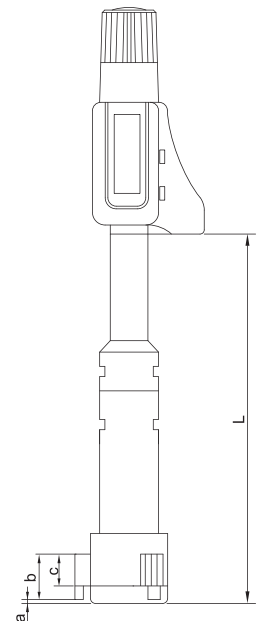
- ◆ Resolution: 0.001mm/0.00005"
- ◆ IP54 protection level
- ◆ Automatic power off
- ◆ Data output
- ◆ Ratchet stop
- ◆ Carbide measuring faces (over 12mm series)
- ◆ Setting rings and extension rod are included



361-003-01

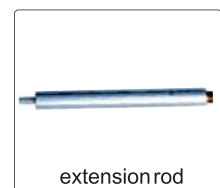


Range 6-12mm



Range 12-100mm

Code	Range	Accuracy	Setting ring	Extension rod	a	b	c	L
361-001-01	6-8mm/0.24-0.31"	4μm	Ø6mm	100mm	1.5	2.5	/	54.5
361-002-01	8-10mm/0.31-0.4"	4μm	Ø8mm	100mm	1.5	2.5	/	54.5
361-003-01	10-12mm/0.4-0.47"	4μm	Ø10mm	100mm	1.5	2.5	/	54.5
361-004-01	12-16mm/0.47-0.63"	4μm	Ø16mm	150mm	0.5	6	4.5	80
361-005-01	16-20mm/0.63-0.8"	4μm	Ø16mm	150mm	0.5	6	4.5	80
361-006-01	20-25mm/0.8-1"	4μm	Ø25mm	150mm	0.5	8	6	90
361-007-01	25-30mm/1-1.2"	4μm	Ø25mm	150mm	0.5	8	6	90
361-008-01	30-40mm/1.2-1.6"	4μm	Ø40mm	150mm	0.5	14	12	97
361-009-01	40-50mm/1.6-8"	5μm	Ø40mm	150mm	0.5	14	12	97
361-010-01	50-63mm/2-2.5"	5μm	Ø62mm	150mm	0.5	17.5	14.5	114
361-011-01	62-75mm/2.5-3"	5μm	Ø62mm	150mm	0.5	17.5	14.5	114
361-012-01	75-88mm/3-3.5"	5μm	Ø87mm	150mm	0.5	17.5	14.5	114
361-013-01	87-100mm/3.5-4"	5μm	Ø87mm	150mm	0.5	17.5	14.5	114

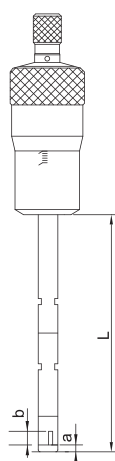


THREE POINTS INSIDE MICROMETER

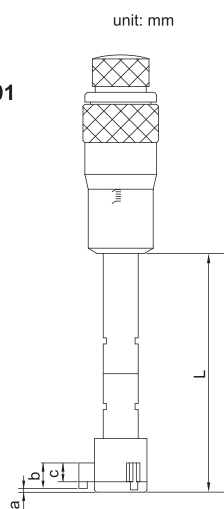
SERIES 362



362-004-01



Range 6-12mm

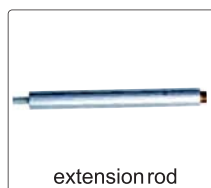


Range 12-100mm

- ◆ 6-12mm graduation: 0.001mm
Steel measuring faces
- ◆ 12-100mm graduation: 0.005mm
Carbide measuring faces
- ◆ Ratchet stop
- ◆ Setting rings and extension rod are included



setting ring



extension rod

Code	Range	Accuracy	Setting ring	Extension rod	a	b	c	L
362-001-01	6-8mm	4μm	Ø6mm	100mm	1.5	2.5	/	54.5
362-002-01	8-10mm	4μm	Ø8mm	100mm	1.5	2.5	/	54.5
362-003-01	10-12mm	4μm	Ø10mm	100mm	1.5	2.5	/	54.5
362-004-01	12-16mm	4μm	Ø16mm	150mm	0.5	6	4.5	80
362-005-01	16-20mm	4μm	Ø16mm	150mm	0.5	6	4.5	80
362-006-01	20-25mm	4μm	Ø25mm	150mm	0.5	8	6	90
362-007-01	25-30mm	4μm	Ø25mm	150mm	0.5	8	6	90
362-008-01	30-40mm	4μm	Ø40mm	150mm	0.5	14	12	97
362-009-01	40-50mm	5μm	Ø40mm	150mm	0.5	14	12	97
362-010-01	50-63mm	5μm	Ø62mm	150mm	0.5	17.5	14.5	114
362-011-01	62-75mm	5μm	Ø62mm	150mm	0.5	17.5	14.5	114
362-012-01	75-88mm	5μm	Ø87mm	150mm	0.5	17.5	14.5	114
362-013-01	87-100mm	5μm	Ø87mm	150mm	0.5	17.5	14.5	114

SERIES 391

DEPTH MICROMETER

- ◆ Micrometer head accuracy: $\pm 3\mu\text{m}$
Rod accuracy: $\pm(2+L/75)\mu\text{m}$,
L is the measuring range in mm
- ◆ Supplied with rods
- ◆ Ratchet stop

Code	Range	Base (HxW)
391-001-01	0-25mm	101.5x17mm
391-002-01	0-50mm	101.5x17mm
391-003-01	0-75mm	101.5x17mm
391-004-01	0-100mm	101.5x17mm
391-006-01	0-150mm	101.5x17mm
391-008-01	0-200mm	101.5x17mm
391-012-01	0-300mm	101.5x17mm
391-001-02	0-25mm	63x17mm
391-002-02	0-50mm	63x17mm
391-003-02	0-75mm	63x17mm
391-004-02	0-100mm	63x17mm
391-006-02	0-150mm	63x17mm
391-008-02	0-200mm	63x17mm
391-012-02	0-300mm	63x17mm

