

### FEATURES

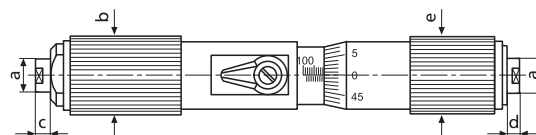
- Operating and display units with satin chrome finish
- Rigid, lightweight tubular construction
- Stainless spindle is hardened throughout and ground
- Measuring faces spherically lapped, one measuring face adjustable
- Measuring range of 100–125 mm with heat insulators and a locking device
- Package contains: case



### TECHNICAL DATA

Order no.	Product type	Measuring range	Graduation value	Error limit	Spindle thread pitch	Standard
		mm	mm	μm	mm	
4163000	44 F	30 – 40	0.01	4	0.5	DIN 863–4
4163001	44 F	40 – 50	0.01	4	0.5	DIN 863–4
4163002	44 F	50 – 70	0.01	5	0.5	DIN 863–4
4163003	44 F	70 – 100	0.01	5	0.5	DIN 863–4
4163004	44 F	100 – 125	0.01	6	0.5	DIN 863–4
4163005	44 F	125 – 150	0.01	6	0.5	DIN 863–4
4163006	44 F	150 – 175	0.01	7	0.5	DIN 863–4
4163007	44 F	175 – 200	0.01	7	0.5	DIN 863–4

Order no.	a	b	c	d	e
	mm	mm	mm	mm	mm
4163000	7	12.5	2	4	12.6
4163001	7	12.5	2.5	4.5	12.6
4163002	7	13.5	2.5	4.5	13.6
4163003	7	13.5	4.5	4.5	14
4163004	8	20	4.5	4.5	20
4163005	8	20	8	8	20
4163006	8	20	8	8	20
4163007	8	20	8	8	20



### ACCESSORIES

Order no.	Product name	Product type
4710050	Adjustment ring DIN 2250 C (30 mm)	355 E
4710060	Adjustment ring DIN 2250 C (40 mm)	355 E
4710070	Adjustment ring DIN 2250 C (50 mm)	355 E
4710090	Adjustment ring DIN 2250 C (70 mm)	355 E
4710120	Adjustment ring DIN 2250 C (100 mm)	355 E
4710121	Adjustment ring DIN 2250 C (125 mm)	355 E
4710122	Adjustment ring DIN 2250 C (175 mm)	355 E



355 E

# Micromar 44 Cm / 44 Cms 1 / 44 Cms 2 / 44 Cms 3 / 44 Cms 4

DIN  
863-4

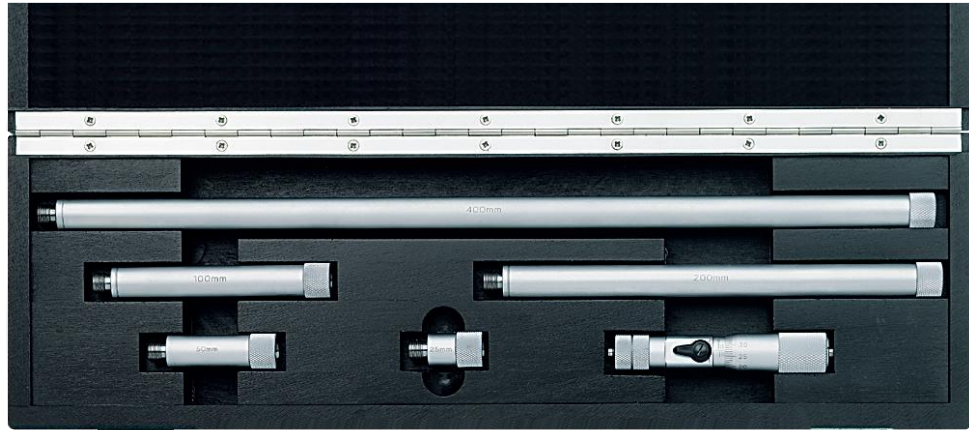
## Measuring Head

### FEATURES

- Operating and display units with satin chrome finish
- Rigid, lightweight tubular construction
- Stainless spindle is hardened throughout and ground
- Locking device
- Carbide-tipped spherical measuring faces
- Interchangeable extension 44 Cv contains cylindrical gage rods that are spring mounted in protective sleeves for the extension of the measuring range
- Protection sleeves have a satin chrome finish

### Scope of delivery

- Measuring head 44 Cm, measuring range of 100–150 mm with extensions 44 Cv, case



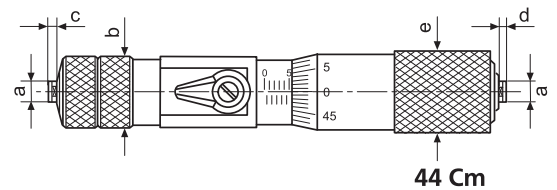
### Application:

For measuring large inside diameters

### TECHNICAL DATA

Order no.	Product type	Measuring range	Graduation value	Extensions 44 Cv	Error limit	Error limit	Spindle thread pitch	Standard
		mm	mm		μm	μm	mm	
4168001	44 Cm	100–125	0.01		6	4+(l/100)μm l= length of the combination in mm	0.5	DIN 863-4
4168020	44 Cms 1	100–150	0.01	25 mm		4+(l/100)μm l= length of the combination in mm	0.5	DIN 863-4
4168021	44 Cms 2	100–300	0.01	25 mm 50 / 100 mm		4+(l/100)μm l= length of the combination in mm	0.5	DIN 863-4
4168022	44 Cms 3	100–500	0.01	25 / 50 mm 100 / 200 mm		4+(l/100)μm l= length of the combination in mm	0.5	DIN 863-4
4168023	44 Cms 4	100–900	0.01	25 / 50 mm 100 / 200 mm 400 mm		4+(l/100)μm l= length of the combination in mm	0.5	DIN 863-4

Order no.	a	b	c	d	e
	mm	mm	mm	mm	mm
4168001	5	16	2	2	18
4168020	5	16	2	2	18
4168021	5	16	2	2	18
4168022	5	16	2	2	18
4168023	5	16	2	2	18



### ACCESSORIES

Order no.	Product name	Product type
4167030	Individual extension (25 mm)	44 Cv
4167031	Individual extension (50 mm)	44 Cv
4167032	Individual extension (100 mm)	44 Cv
4167033	Individual extension (200 mm)	44 Cv
4167034	Individual extension (400 mm)	44 Cv
4167035	Individual extension (800 mm)	44 Cv
4168016	Wood case for two extensions 44Cv 800mm	
4168160	Case for 44 Cms	

# Micromar 44 A

## Self-Centering Inside Micrometer

DIN  
863-4

### FEATURES

- Operating and display units with satin chrome finish
- Stainless spindle is hardened throughout and ground
- Rapid drive with integrated ratchet
- Self-centering measuring head consists of 3 laterally positioned anvils, each are offset at intervals of 120°
- Anvils from 12 mm are carbide-tipped
- From 12 mm the anvils can be used to measure the bottom of a bore
- From 40 mm all measuring heads are made from aluminium to reduce weight
- **Package contains:** instruction manual, allen key, key for replacing measuring heads (from 30 mm), case



### Application:

For measuring:

- Through holes
- Blind holes
- Centering shoulders

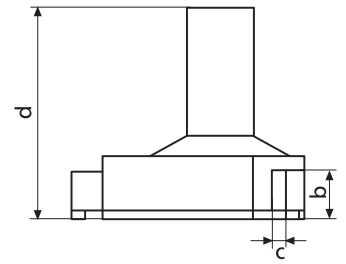
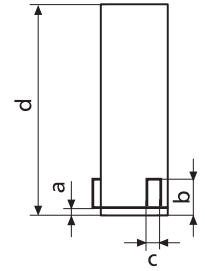
### TECHNICAL DATA

Order no.	Product type	Measuring range	Graduation value	Error limit	Spindle thread pitch	Standard	Measuring depth	Measuring depth with extension
		mm	mm	µm	mm		mm	mm
4190310	44 A	6–8	0.001	4	0.5	DIN 863–4	58	133
4190311	44 A	8–10	0.001	4	0.5	DIN 863–4	58	133
4190312	44 A	10–12	0.001	4	0.5	DIN 863–4	58	133
4190313	44 A	12–16	0.001	4	0.5	DIN 863–4	64	139
4190314	44 A	16–20	0.001	4	0.5	DIN 863–4	64	139
4190315	44 A	20–25	0.005	4	0.5	DIN 863–4	68	218
4190316	44 A	25–30	0.005	4	0.5	DIN 863–4	68	218
4190317	44 A	30–40	0.005	4	0.5	DIN 863–4	76	226
4190319	44 A	40–50	0.005	4	0.5	DIN 863–4	76	226
4190320	44 A	50–60	0.005	5	0.5	DIN 863–4	79	229
4190321	44 A	60–70	0.005	5	0.5	DIN 863–4	79	229
4190012	44 A	70–85	0.005	5	0.5	DIN 863–4	97	247
4190013	44 A	85–100	0.005	5	0.5	DIN 863–4	97	247
4190014	44 A	100–125	0.005	6	0.5	DIN 863–4	132	282
4190015	44 A	125–150	0.005	6	0.5	DIN 863–4	132	282
4190016	44 A	150–175	0.005	7	0.5	DIN 863–4	132	282
4190017	44 A	175–200	0.005	7	0.5	DIN 863–4	132	282

# Micromar 44 A

## Self-Centering Inside Micrometer

Order no.	a	b	c	d
	mm	mm	mm	mm
4190310	1.5	4	1.5	58
4190311	1.8	4.3	1.5	58
4190312	1.8	4.3	1.5	58
4190313		6.5	4	64
4190314		6.5	4	64
4190315		9	4	68
4190316		9	4	68
4190317		15	5	76
4190319		15	5	76
4190320		18	5	79
4190321		18	5	79
4190012		23	7	97
4190013		23	7	97
4190014		27	7	132
4190015		27	7	132
4190016		27	7	132
4190017		27	7	132

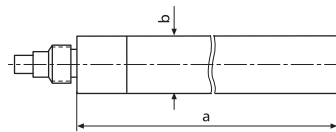


### ACCESSORIES

Order no.	Product name	Product type
4710026	Adjustment ring DIN 2250 C (8 mm)	355 E
4710030	Adjustment ring DIN 2250 C (10 mm)	355 E
4710032	Adjustment ring DIN 2250 C (12 mm)	355 E
4710036	Adjustment ring DIN 2250 C (16 mm)	355 E
4710040	Adjustment ring DIN 2250 C (20 mm)	355 E
4710045	Adjustment ring DIN 2250 C (25 mm)	355 E
4710050	Adjustment ring DIN 2250 C (30 mm)	355 E
4710060	Adjustment ring DIN 2250 C (40 mm)	355 E
4710070	Adjustment ring DIN 2250 C (50 mm)	355 E
4710080	Adjustment ring DIN 2250 C (60 mm)	355 E
4710105	Adjustment ring DIN 2250 C (85 mm)	355 E
4710121	Adjustment ring DIN 2250 C (125 mm)	355 E
4710122	Adjustment ring DIN 2250 C (175 mm)	355 E
4190090	Extensions 75 mm, (6 –12 mm)	44 Av
4190091	Extensions 75 mm, (12 –20 mm)	44 Av
4190092	Extensions 150 mm, (20 –30 mm)	44 Av
4190093	Extensions 150 mm, (30 –200 mm)	44 Av



355 E



44 Av

# Micromar 44 AS

## Self-Centering Inside Micrometer Set

DIN  
863-4

### FEATURES

- Operating and display units with satin chrome finish
- Stainless spindle is hardened throughout and ground
- Rapid drive with integrated ratchet
- Self-centering measuring head consists of 3 laterally positioned anvils, each are offset at intervals of 120°
- Anvils from 12 mm are carbide-tipped
- From 12 mm the anvils can be used to measure the bottom of a bore
- From 40 mm all measuring heads are made from aluminium to reduce weight
- **Package contains:** instruction manual, setting rings, key for replacing measuring heads (from 30 mm), allen key, case



### Application:

For measuring:

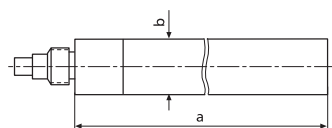
- Through holes
- Blind holes
- Centering shoulders

### TECHNICAL DATA

Order no.	Product type	Measuring range	Graduation value	Error limit	Standard	Number of micrometers	Setting rings
		mm	mm	µm			
4190350	44 AS	6 – 12	0.001	4	DIN 863-4	3	8 mm, 10 mm
4190351	44 AS	12 – 20	0.001	4	DIN 863-4	2	16 mm
4190352	44 AS	20 – 50	0.005	4	DIN 863-4	4	25 mm, 40 mm
4190353	44 AS	50 – 100	0.005	5	DIN 863-4	4	60 mm, 85 mm

### ACCESSORIES

Order no.	Product name	Product type
4190090	Extensions 75 mm, (6 – 12 mm)	44 Av
4190091	Extensions 75 mm, (12 – 20 mm)	44 Av
4190092	Extensions 150 mm, (20 – 30 mm)	44 Av
4190093	Extensions 150 mm, (30 – 200 mm)	44 Av



44 Av