

# YOUR STABLE PARTNER FOR MANUFACTURING. **MARSTAND.**



The latest information on MARSTAND products can be found on our website:

[www.mahr.de/en/Home](http://www.mahr.de/en/Home), WebCode 20316

▶ | MarStand Indicator Stands, Comparator Stands and Run out Testing Instruments offer high stability which ensures precise measurements. Whether you are using a dial indicator, a dial comparator, a test indicator or a measuring probe you will always have the best possible support. | ◀

## ▶ | MarStand. Indicator Stands, Comparator Stands, Run out Testing Instruments

### Indicator Stands

#### MarStand 815 GN

With Cast Iron Base

8- 2

#### MarStand 2400

For Electronic Measurements

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#### MarStand 815 MA / 815 MB / 815 MG / 815 P

With Magnetic Base

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### Post & Support Arm Assemblies

#### MarStand 815 XN / 815 XMA / 815 XMB / 815 XMS / 815 XMG / 815 XP

With Mounting Thread and / or T-slot

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### Magnetic Bases

#### MarStand 815 Y / 815 YP

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### Center Bench

#### MarStand 818

With moveable Tail Stocks and Support Arms

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### Comparator Stands

#### MarStand 820 N / 820 NC / 820 FC / 820 NG / 820 FG 35 B / NB-60

Small Version

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#### MarStand 821 NG / 821 FG

Large Version

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#### MarStand 824 NT / 824 FT / 824 GT

Heavy Version

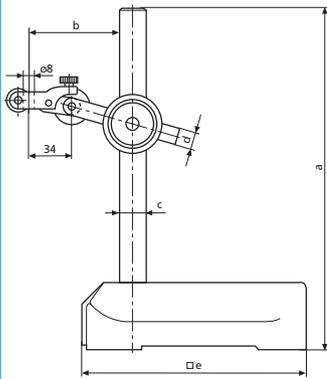
8-15

### Modular Units

#### MarStand 827 b

8-15

## Indicator Stand 815 GN



### Features

- Rugged base ensures both maximum stability and sturdiness
- The upper side of the base has a convenient hand grip
- Moves easily over surfaces without vibration
- Front of the base is ground to allow movement of the stand along edges and rules
- Stable due to the three point support
- Support arm can be finely adjusted
- Post and support arm are made from stainless steel
- Indicator can be rotated through  $\pm 90^\circ$

### Technical Data

Total height with base	Max. projection of support arm	Post dia.		Base surface	Fine adjustment range	Weight	Order no.* Mount dia.	Order no.* Mount dia.
a	b	c	d	e			8H7	3/8"
mm / inch	mm	mm	mm	mm	mm	kg		
300 / 12"	185	18	14	150 x 150	2	4.2	4413000	4413050
500 / 20"	200	25	18	190 x 180	2	9	4413001	4413051
750 / 30"	230	35	25	190 x 180	2	10	4413005	4413052

\*excludes indicating instrument

## Indicator Stand 2400



### Features

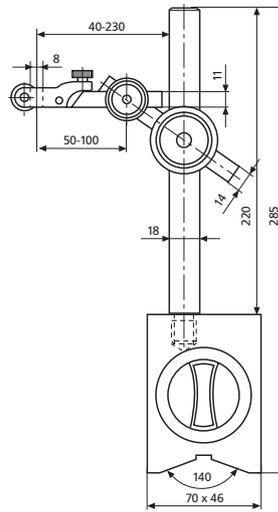
- A stable Height Stand for electronic measurement,
- Fine adjustment in the base allows easy operator set-up, even at high magnification. Up to 3.8 mm / .150" adjustment when arms fully extended
- Collar has Teflon bearings and metal-to-metal clamping.
- Post is thermally isolated from heat transfer from the base.
- Arm lock is independent of the pivot lock.
- Uses vertical lug mounting
- EHE-2056 Lever gage head mounts directly to arm (as shown) EHE-2048 Lever gage head requires an EAM-1071 adaptor
- CP-83 Extra arm and swivel clamp assembly (allows mounting two lever gage heads on one stand)

### Technical Data

Total height with base	Arm reach	Post dia. force		Base surface	Fine adjustment range	Order no.*
mm / inch	mm / inch	mm / inch		mm / inch	mm / inch	
457 / 18"	254 / 10"	31.8 / 1.25"		161.7 x 94 / 6.2 x 3.7"	3.8 / 0.150"	2400

\*excludes indicating instrument

## Indicator Stand 815 MA with magnetic base



### Features

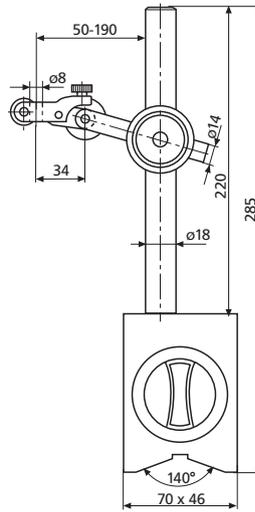
- Support arm with two joints
- Base has a powerful ON/OFF permanent magnet
- Magnetic force is active across the surfaces and the V-shaped bottom plus the front of the base
- Post and support arm are made from stainless steel
- Support arm can be finely adjusted

### Technical Data

Total height with base		V-way for shaft dia.	Magnetic force	Fine adjustment range	Weight	Order no.* Mount dia.	Order no.* Mount dia.	Order no. wooden case
mm	inch							
285	11.2"	20 - 100	450	2	2.5	4416000 8H7	4416050 3/8"	4416001

\* excludes indicating instrument

## Indicator Stand 815 MB with magnetic base



### Features

- Support arm with one joint
- Base has a powerful ON/OFF permanent magnet
- Magnetic force is active across the surfaces and the V-shaped bottom plus the front of the base
- Post and support arm are made from stainless steel
- Support arm can be finely adjusted
- Indicating instrument can be rotated through  $\pm 90^\circ$

### Technical Data

Total height with base		V-way for shaft dia.	Magnetic force	Fine adjustment range	Weight	Order no.* Mount dia.	Order no.* Mount dia.	Order no. wooden case.
mm	inch							
285	11.2"	20 - 100	450	2	2.2	4417000 8H7	4417050 3/8"	4416001

\* excludes indicating instrument

## Indicator Stand 815 MG with magnetic base



### Features

- 3D indicator Stand, can reach any position within the operating range
- Easy to position all 3 joints, position can be securely fixed with a handle
- Robust well dimensioned components, excellent stability and accuracy
- Maintenance free mechanical clamping system
- Arm components are made of black anodized high quality aluminum
- Dial Indicator holder with mount dia. 8 mm and dovetail for Test Indicators
- Equipped with micro fine adjustment, free of backlash
- Outstandingly easy to set-up, high repeatability
- Very powerful ON/OFF magnet
- Ideal for measuring instruments with  $\mu\text{m}$ -resolution (only with 4420380)

### Technical Data

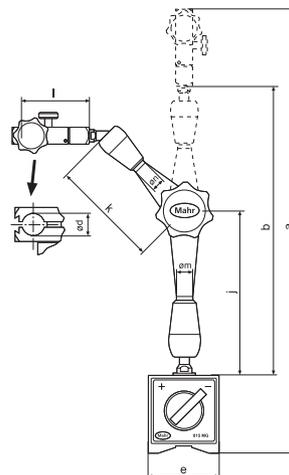
Total height with base	Projection (max.)	V-way for shaft dia.	Magnetic force	Mounting bore	Fine adjustment range	Weight	Order no.*
mm <i>inch</i>	mm	mm	N		mm	kg	
224 <b>8.82"</b>	130		300			1.6	<b>4420350</b>
316 <b>12.44"</b>	200	6 – 120	800	8H7	2	1.7	<b>4420360</b>
401 <b>15.78"</b>	280		1000		5	1.8	<b>4420370</b>
444 <b>17.48"</b>	330					1.9	<b>4420380</b>

\* excludes indicating instrument

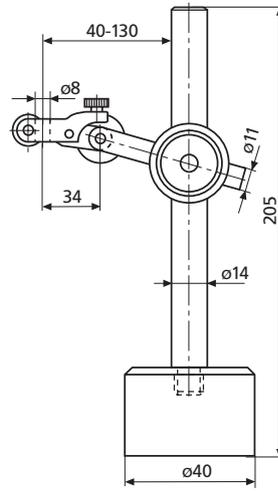
### Dimensions

Dimensions in mm

a	b	d	e	j	k	l	m	Order no.
224	130	8	34 x 34	70	60	62	9	<b>4420350</b>
316	200	8	60 x 50	120	80	64	10	<b>4420360</b>
401	280	8	60 x 50	170	110	66	16	<b>4420370</b>
444	330	8	73 x 50	201	129	67	21	<b>4420380</b>



## Indicator Stand 815 P with magnetic base



### Features

- Support arm has one joint
- Sturdy circular base with permanent magnet
- Post and support arm are made from stainless steel
- Support arm can be finely adjusted
- Indicating instrument can be rotated through  $\pm 90^\circ$

### Technical Data

Total height with base		Magnetic force	Fine adjustment range	Weight	Order no.* Mount dia.	Order no.* Mount dia.
mm	inch					
205	8"	250	1.5	0.7	4422000 8H7	4422050 3/8"

\* excludes indicating instrument

## Post and Support Assemblies 815 X

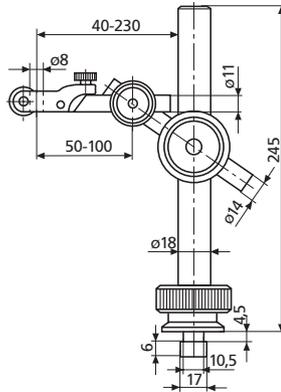
For application in inspection equipment for conducting length and concentricity (run-out) tests

### 815 XN

for mounting in a T-slot

- Two joints
- Knurled nut for clamping to the post
- Post and support arm are made from stainless steel
- With fine adjustment

**Order no. 4424000**

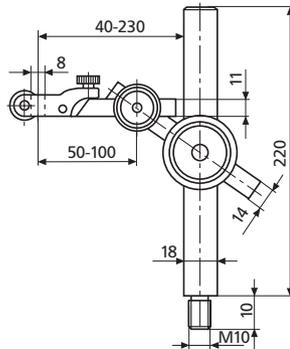


### 815 XMA

with mounting thread

- Two joints
- Post and support arm are made from stainless steel
- With fine adjustment

**Order no. 4424005**

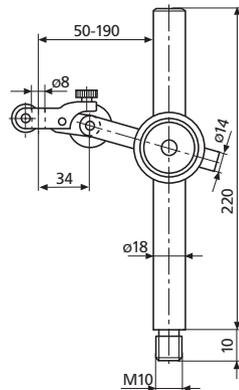


### 815 XMB

with mounting thread

- One joint
- Post and support arm are made from stainless steel
- With fine adjustment

**Order no. 4424006**



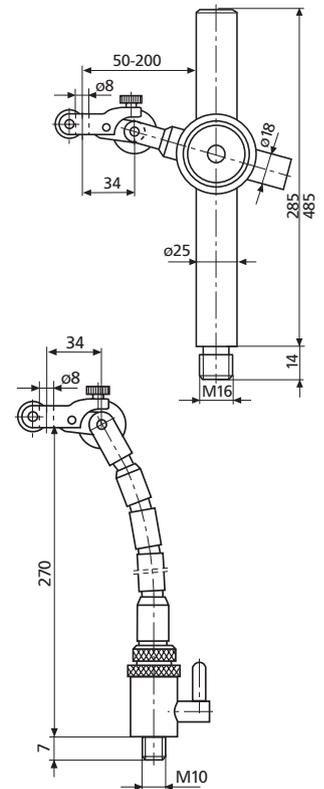
### 815 XMS

especially stable version with mounting thread

- One joint
- Post and support arm are made from stainless steel
- With fine adjustment

**Post height Order no.**

285 mm **4435011**  
485 mm **4435015**



### 815 XMG

with mounting thread

- Flexible in any direction, arm can be locked in position
- With fine adjustment

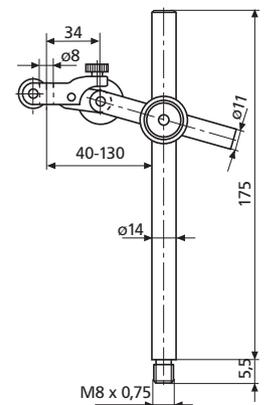
**Order no. 4424010**

### 815 XP

with mounting thread

- One joint
- Post and support arm are made from stainless steel
- With fine adjustment

**Order no. 4424015**



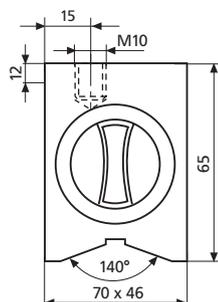
## Magnetic Bases 815 Y

For the setting up of inspection equipment or as a base for adjusting devices on machine tools.

### 815 YM Standard Version

- Base has a powerful ON/OFF permanent magnet
- With threaded mounting hole
- V-groove in base
- Front is flat
- Magnetic force 450 N

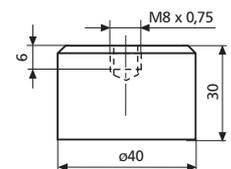
**Order no. 4425000**



### 815 YP Round Version

- Permanent magnet plus threaded mounting hole
- Underside of the base is flat
- Magnetic force 250 N

**Order no. 4425002**



## Center Bench 818



### Features

- Ideal for quick and accurate concentricity / run-out checks

#### Bench:

- Flatness of the surface is in accordance to DIN 876/1
- Two T-slots for Tailstock and / or Support Arm

#### Tailstock:

- Both Tailstocks can be relocated (slide into position)
- The Tailstock on the right side has a retractable (spring actuated) precision aligned center
- The Tailstocks have a peak height of 75 mm with a 90° prism for workpieces without a center, to a diameter of 20 mm (.79")

#### Support Arm 818 XNB:

- Support arm with one joint
- with fine adjustment

### Technical Data

Height of centers mm (inch)	Distance between centers mm (inch)	Base size (L x W) mm	Lateral and/or height difference of Tailstocks mm	T-slot width mm	Weight kg	Order no.*
50 (2")	0 - 200 (0-8")	350 x 110	0.01	10H7	8	4622200
75 (3")	0 - 350 (0-14")	500 x 110	0.01	10H7	12	4622201
100 (4")	0 - 450 (0-18")	700 x 180	0.01	12H7	35	4622202
150 (6")	0 - 450 (0-18")	700 x 180	0.01	12H7	38	4622203

\* excludes indicating instrument

#### Center Bench 818 with V-support

V-support height mm	Base size (L x W) mm	T-slot width mm	Weight kg	Order no. (excludes indicating instrument)
70	350 x 110	10H7	6.5	4622260
70	500 x 110	10H7	9.5	4622261
120	700 x 180	12H7	30	4622262

#### Center Bench 818 with Roller support

Roller support height mm	Base size (L x W) mm	T-slot width mm	Weight kg	Order no. (excludes indicating instrument)
70	350 x 110	10H7	6.5	4622250
70	500 x 110	10H7	9.5	4622251
120	700 x 180	12H7	30	4622252

## Modular Units 818 for individual center benches

### Accessories

#### V-support anvils 818 pe in pairs (to change with peaks)

Center height mm	Dia. range mm	Order no.
50 / 75	3 - 15	4622210
100	8 - 45	4622211

#### 818 pe



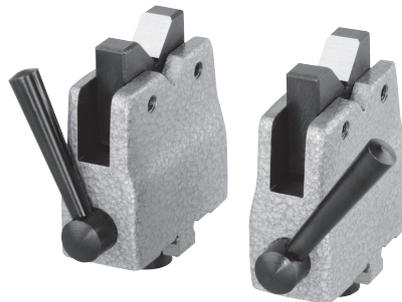
#### 818 ab



#### V-support 818 pb in pairs

Height *	Dia. range	T-slot width	Order no.
mm	mm	mm	
65	5 - 20	10	4622215
100	5 - 45	12	4622216

#### 818 pb



#### Roller support 818 ab in pairs

Height *	Dia. range	T-slot width	Order no.
mm	mm	mm	
65	3 - 20	10	4622220
100	3 - 45	12	4622221

\* referred to the center of shaft with dia. 10 mm

#### Supporting table

Center height	Base size (L x W)	Order no.
mm	mm	
50	350 x 110	4622265
75	500 x 110	4622266
100 / 150	700 x 180	4622267

#### Pointed support in pairs

Center height	Order no.
mm	
50	4622270
75	4622271
100	4622272
150	4622273

#### Support arm 818 XNB

Center height	Support Arm		Order no.
mm	Dia.	Length	
	mm	mm	
50 / 75	18	210	4622275
100	18	260	4622276
150	18	360	4622277

## Small Comparator Stands 820

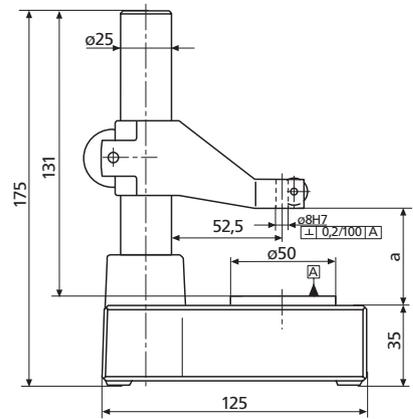
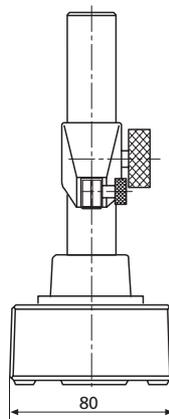
### 820 N



Indicating instruments are sold separately

### Features

- Sturdy design
- Plate is made from either hardened steel or black granite or ceramic
- Rugged ground post made of stainless steel
- Fine adjustment, consisting of a strong, rigid parallel spring assembly (Small Comparator Stands 820 FG and 820 FC)
- Adjustable support arm for a indicating instrument



820 N

### Technical Data

	Working range a		Flatness tolerance (DIN 876)	Fine adjustment range	Weight	Order no.* Mount dia. 8H7	Order no.* Mount dia. 3/8 inch	Remarks
	mm	(inch)	mm		kg			
820 N	0 - 110	(0 - 4.3")	00		2.6	4430000	4430018	
820 NG	0 - 130	(0 - 5.1")	0		3.2	4430100	4430110	
820 FG	0 - 130	(0 - 5.1")	0	± 0.2	3.2	4431100	4431110	fine adjustment
820 NC	0 - 110	(0 - 4.3")	00		4.0	4432100	4432120	
820 FC	0 - 110	(0 - 4.3")	00	± 0.2	4.0	4433100	4433110	fine adjustment

\* excludes indicating instrument

## Small Comparator Stands 820

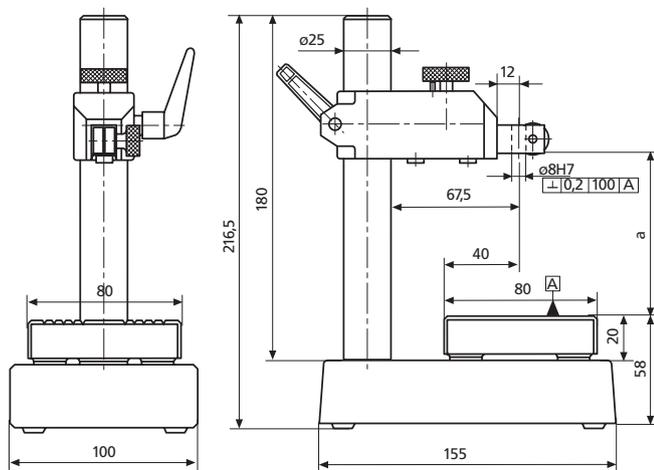
820 FC / 820 NC



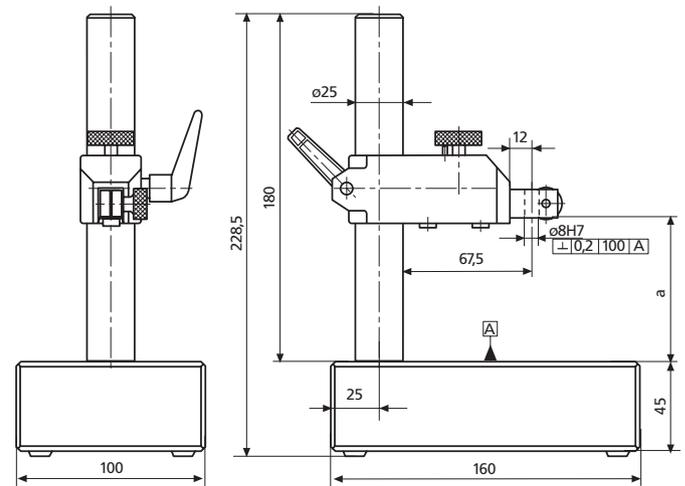
820 FG / 820 NG



820 FC / 820 NC



820 FG / 820 NG



### Accessories

V-Block 108° for checking small, cylindrical work pieces for out of roundness and polygon errors (for further details please refer to Page 12-9)

107 V

(Single)  
(Pair)

Order no.

4229000  
4229001

## Comparator Stands 35 B



### Features

- Model 35B has a precision ground base. Indicator arms with and without fine adjustment are available. Models are also available with lapped anvils for the highest precision work.
- Alternate post lengths, Indicators, Anvils and special fixturing available upon request. Contact Mahr Federal Technical Assistance

*Excludes indicating instrument. Only indicating instruments that have a horizontal lug back can be used.*

### Technical Data

Capacity	Post Diameter	Throat Depth	Reference Surface	Gaging Arm	Anvil	Order no. (w/o indicator)
0 - 8.75" 0 - 222 mm	1.25" 31.75 mm	2.5" 62.5 mm	1 x 3" 25 x 75 mm	adjustable AM-146 plain AM-3 adjustable AM-146 adjustable AM-146	plain none none serrated	<b>OMI-35B-21</b> <b>OMI-35B-30</b> <b>OMI-35B-32</b> <b>OMI-35B-41</b>

### Accessories

#### Replacement Anvils

- Anvils for Comparator Stands 35B-21 and 35B-41 are available: Surface is lapped flat to within .00001"

#### Fine Adjustment Arm

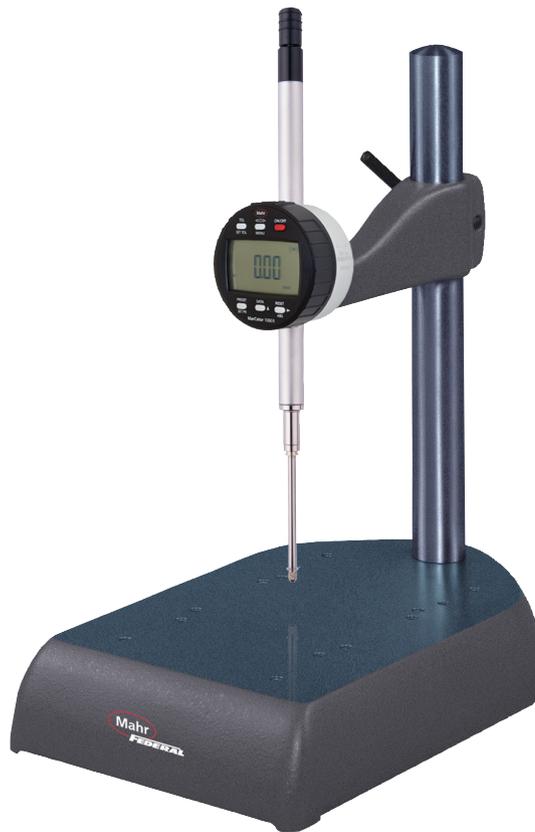
- The Fine Adjust Arm is available separately to convert 35B Comparator Stands with plain arms

Type	Dimensions	Order no.	Range	Order no.
plain surface	25 x 25 x 75 mm <b>(1 x 1 x 3")</b>	<b>AL-96</b>	1.5 mm / <b>0.060"</b>	<b>AM-146</b>
serrated surface	25 x 25 x 75 mm <b>(1 x 1 x 3")</b>	<b>AL-97</b>		

**Readout Specification:** Because of the versatility of the Series 35B and NB-60 Stands, almost any type of readout can be used.

- With Dial or Digital Indicators having a horizontal lug back

## Comparator Stand NB-60



### Features

- Model NB-60 and NB-61 have the largest base and greatest throat depth. Indicator arms with and without fine adjust are available. Base has a pattern of 1/4-20 tapped holes for mounting platens or special tooling

*Shown with optional 1086 indicating instrument. Only indicating instruments that have a horizontal lug back can be used.*

### Technical Data

Capacity	Post Diameter	Throat Depth	Reference Surface	Gaging Arm	Anvil	Order no. (w/o indicator)
0 - 8"	1.25"	4.88"	9.38 x 6.5"	plain AM-10011	none	<b>OMI-NB-60</b>
0 - 203 mm	31.75 mm	124 mm	238 x 165 mm	adjustable AM-147	none	<b>OMI-NB-61</b>

### Accessories

#### Platens

Type	Dimensions	Order no.
serrated	114 x 152 mm (4.5 x 6")	<b>PL-99</b>
serrated	152 x 203 mm (6 x 8")	<b>PL-147</b>

*Note: (4) screws SW-1338 are required*

#### Fine Adjustment Arm

- The Fine Adjustment Arm is available separately to convert NB-60 Comparator Stands with plain arms

Range	Order no.
1.5 mm / 0.060"	<b>AM-147</b>

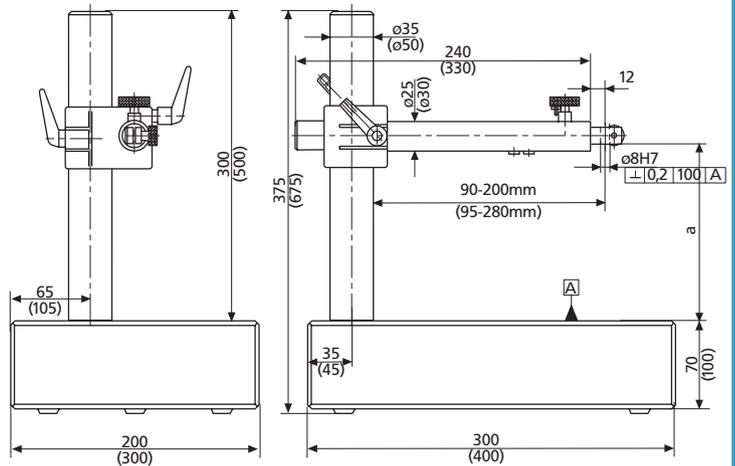
**Readout Specification:** Because of the versatility of the Series 35B and NB-60 Stands, almost any type of readout can be used.

- With Air Probes or Electronic Probes having a 3/8 in dia., order Mounting Adapter **AAD-66**

## Large Comparator Stands 821

### Features

- Extremely sturdy design
- Plate is made from lapped black granite
- Heavy duty post and adjustable support arm for maximum stability
- Post made from stainless steel and precision ground
- Support arm has a fall brake
- Fine adjustment, consisting of a strong, rigid parallel spring assembly (Large Comparator Stand 821FG)



821 FG

### Technical Data

	Working range a		Flatness tolerance (DIN 876) Grade	Fine adjustment range	Weight kg	Order no.* Mount dia. 8H7	Order no.* Mount dia. 3/8 inch	Remarks
	mm	(inch)						
821 NG	0 - 250	(0 - 10")	0	—	15.8	4435100	4435150	
	0 - 430	(0 - 17")	0	—	48	4435110	4435160	
821 FG	0 - 250	(0 - 10")	0	± 0.2	15.8	4435101	4435151	Fine adjustment
	0 - 430	(0 - 17")	0	± 0.2	48	4435111	4435161	Fine adjustment

\* excludes indicating instrument

### Accessories

V-Block 108° for checking small, cylindrical work pieces for out of roundness and polygon errors (for further details please refer to Page 12-9)

Order no.

107 V	(Single)	4229000
	(Pair)	4229001

## Heavy Comparator Stands 824



**Precision Stand 824 NT**

Without fine adjustment



**Precision Stand 824 FT**

With fine adjustment, consisting of a strong, rigid parallel spring assembly



**Precision Stand 824 GT**

For Large Type Millimess. With fine adjustment by way of vertical movement of the mounting socket

### Features

#### Basic Units

- Sturdy, T-shaped base which is made from a special cast iron
- Extremely stable
- Fine adjustment, consisting of a strong, rigid parallel spring assembly
- Support arm has a rotation lock, height of the arm via the toothed rack is adjustable

#### Plates

- Measuring faces are hardened and lapped
- Longitudinal grooves
- Plates for sum measurements have a 8H7 mm mounting hole for Inductive Probes

### Technical Data

#### Basic Unit

	Working range		Fine adjustment range	Weight	Order no.*	Order no.*	Order no.*
	mm	(inch)					
<b>824 NT</b>	0 - 210	<b>(0 - 8.2")</b>	—	17	<b>4442100</b>		<b>4442105</b>
<b>824 FT</b>	0 - 210	<b>(0 - 8.2")</b>	± 0.2	19	<b>4443100</b>		<b>4443105</b>
<b>824 GT</b>	0 - 200	<b>(0 - 8.0")</b>	± 1.5	18		<b>4444200</b>	

\* excludes indicating instrument, excludes plate

#### Plates

	Plate size		Flatness tolerance	Mounting hole	Weight	Order no.	Remarks
	mm	mm					
<b>827 b 31</b>	100	x 40	1		1.2	<b>4082731</b>	for single measurement
<b>827 b 32</b>	100	x 40	1	8H7	1.0	<b>4082732</b>	for sum measurement
<b>827 b 33</b>	130	x 130	1		2.5	<b>4082733</b>	for single measurement
<b>827 b 34</b>	130	x 130	1	8H7	2.5	<b>4082734</b>	for sum measurement

### Accessories

V-Block 108° for checking small, cylindrical work pieces for out of roundness and polygon errors (for further details please refer to Page 12-9)

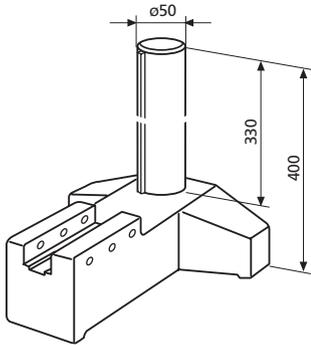
	Order no.
<b>107 V</b>	(Single) <b>4229000</b> (Pair) <b>4229001</b>

## Modular Units 827 for individual comparator stands

For the combination of comparator stands for special tasks, to adapt existing stands as well as the incorporation into inspection equipment for all types of length measurements.

### Base with Post

#### 827 b 5

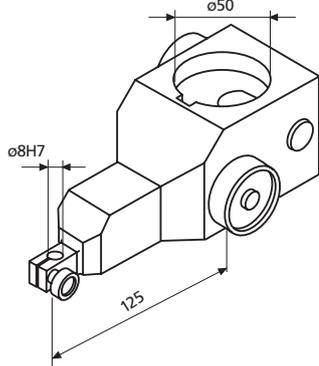


- T-shaped base which is made from a special cast iron
- Post has a chrome finish

Order no. 4082705

### Support Arms

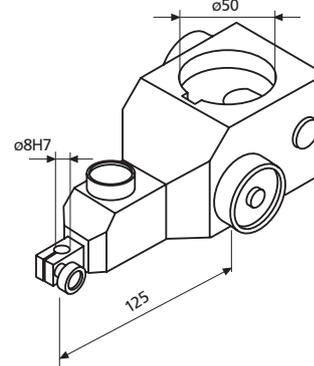
#### 827 b 16



- Mounting hole 8 mm
- Without fine adjustment

Order no. 4082716

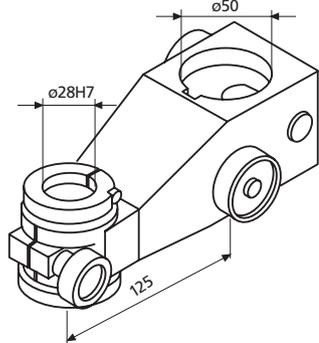
#### 827 b 17



- Mounting hole 8 mm
- Fine adjustment, consisting of a strong, rigid parallel spring assembly

Order no. 4082717

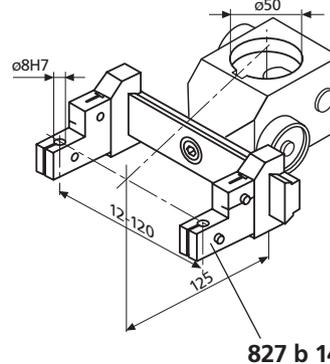
#### 827 b 18



- Mounting hole 28 mm
- With fine adjustment

Order no. 4082718

#### 827 b 19



- Support arm with dovetail guide

Order no. 4082719

- With probe holder, mounting hole 8 mm

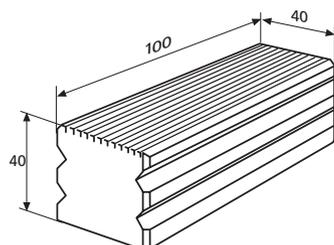
Order no. 4082714

827 b 14

## Modular Units 827 for individual comparator stands

### Plates

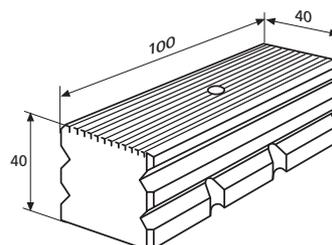
#### 827 b 31



- For single measurement
- Hardened and lapped
- Reversible
- Measuring surface has longitudinal grooves
- Flatness deviation 1  $\mu\text{m}$

**Order no. 4082731**

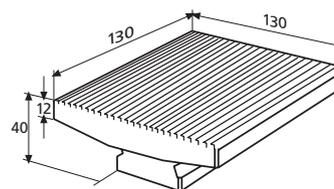
#### 827 b 32



- For sum measurement
- Measuring surface has longitudinal grooves, hardened and lapped
- With mounting hole 8H7 mm/ .375" and a clamp for inductive probes
- Flatness deviation 1  $\mu\text{m}$

**Order no. 4082732**

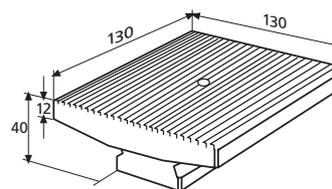
#### 827 b 33



- For single measurement
- Large measuring surfaces which have longitudinal grooves, hardened and lapped
- Flatness deviation 1  $\mu\text{m}$

**Order no. 4082733**

#### 827 b 34

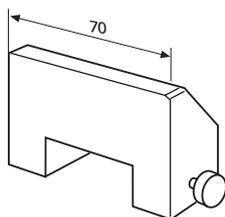


- For sum measurement
- Large measuring surfaces which have longitudinal grooves, hardened and lapped
- With mounting hole 8H7 mm/ .375" and a clamp for inductive probes
- Flatness deviation 1  $\mu\text{m}$

**Order no. 4082734**

### Adjustable Stop

#### 827 b 35

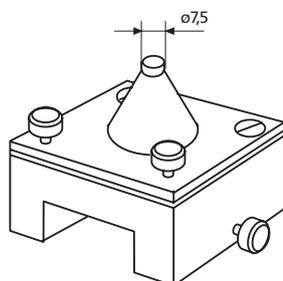


- Ensures that a work piece is correctly positioned
- To be attached to plates 827 b 31 and 827 b 32

**Order no. 4082735**

### Attachment Stand

#### 827 b 36



- With adjustment screws for parallel alignment of 2 plan surfaces
- Particularly suitable for mounting Pin Gages 426 M
- To be attached to plates 827 b 31 and 827 b 32

**Order no. 4082736**