

Mahr

MarStand. Indicator Stands, Comparator Stands, Run out Testing Instruments

# YOUR STABLE PARTNER FOR MANUFACTURING. MARSTAND.



The latest information on MARSTAND products can be found on our website: www.mahr.com, WebCode 210

► | MarStand Indicator Stands, Comparator Stands and Run out Testing Instruments offer high stablity 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.

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

### **Indicator Stands**

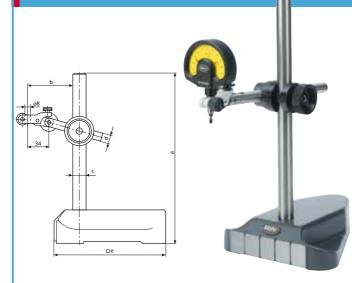
MarStand 815 GN With Cast Iron Base MarStand 2400 For Electronic Measurements MarStand 815 MA / 815 MB / 815 MG / 815 P With Magnetic Base	8- 2 8- 2 8- 3
Post & Support Arm Assemblies MarStand 815 XN / 815 XMA / 815 XMB /	8- 5
815 XMS / 815 XMG / 815 XP With Mounting Thread and / or T-slot	
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Modular Units	

MarStand 827 b

### Mahr 8-2

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### 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°

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

\* excludes indicating instrument

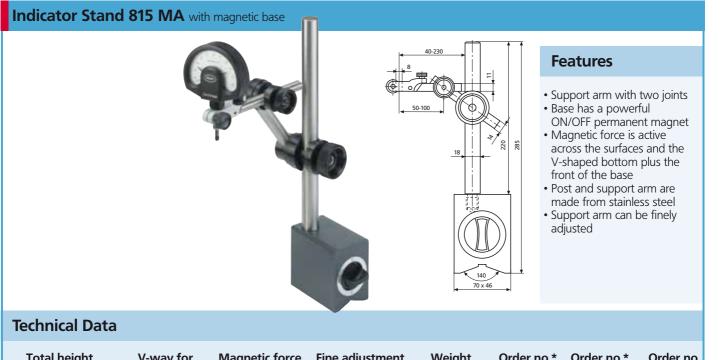
**Technical Data** 

### **Indicator Stand 2400**

	00				
			Features		
			<ul> <li>A stable Height Stand f electronic measuremen</li> <li>Fine adjustment in the allows easy operator se even at high magnificat to 3.8 mm / .150" adjus when arms fully extend</li> <li>Collar has Teflon bearir metal-to-metal clampin</li> <li>Post is thermally isolate heat transfer from the I</li> <li>Arm lock is independer the pivot lock.</li> </ul>	nt, EHE-2056 Lever base mounts directly et-up, shown) EHE-204 tion. Up head requires al adaptor ded CP-83 Extra arm ngs and clamp assembly ig. mounting two k heads on one st base.	gage head to arm (as 48 Lever gage h EAM-1071 and swivel (allows ever gage
Technical Data					
Total height with base mm / inch	<b>Arm reach</b> mm / <b>inch</b>	Post dia. force mm / inch	Base surface mm / <i>inch</i>	Fine adjustment range mm / inch	Order no.*
457 / <b>18"</b>	254 / <b>10"</b>	31.8 / <b>1.25"</b>	161.7 x 94 / <b>6.2 x 3.7"</b>	3.8 / <b>0.150"</b>	2400
* excludes indicating instrument	t				

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

\* excludes indicating instrument

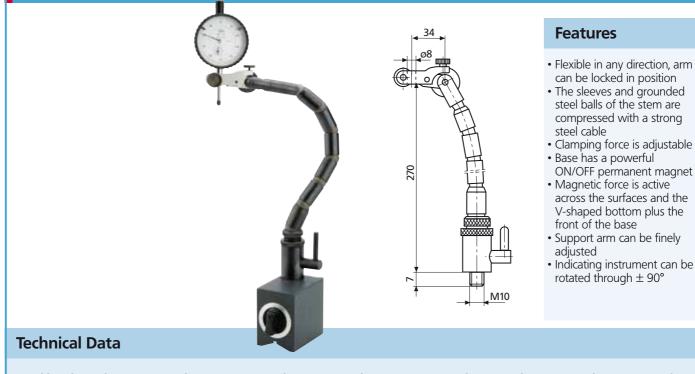
### Indicator Stand 815 MB with magnetic base

With Higher But	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
	<ul> <li>Front of the base</li> <li>Post and support arm are made from stainless steel</li> <li>Support arm can be finely adjusted</li> <li>Indicating instrument can be rotated through ± 90°</li> </ul>
Technical Data	

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

### Mahr 8-4 • I MarStand. Indicator Stands, Comparator Stands, Run out Testing Instruments

### Indicator Stand 815 MG with flexible stem



Т	Total height with V-way for base shaft dia.			Magnetic force	Fine adjustment range	Weight	Order no.* Mount dia.	<b>Order no.*</b> Mount dia.	Order no. wooden
	mm	inch	mm	Ν	mm	kg	8H7	3/8"	case.
	350	14"	20 - 100	450	1.5	1.9	4420000	4420001	4416001

\* excludes indicating instrument

205

8"

\* excludes indicating instrument

250

## Indicator Stand 815 P with magnetic base

Technical Dat	a				SOZ 014 040	
Total height with base mm inch	Magnetic force	Fine adjustment range mm	<b>Weight</b> kg	<b>Order no.*</b> Mount dia. 8H7	Order no.* Mount dia. 3/8"	

1.5

0.7

4422000

4422050

### **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°

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### Post and Support Assemblies 815 X

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

40-230

ø18

50-100

40-230

50-100

#### 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

4424000 Order no.

### 815 XMA

with mounting thread

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

#### Order no.

4424005

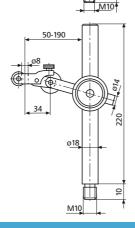
4424006

## 815 XMB

with mounting thread

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

Order no.



18

2



815 XMS

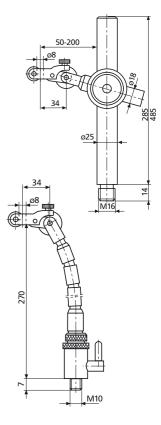
Post height	Order no.
285 mm	4435011
485 mm	4435015

#### 815 XMG

with mounting thread

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

Order no. 4424010



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#### 815 XP with mounting thread

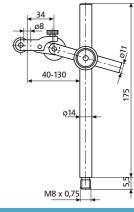
• One joint

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

4424015

4425002

Order no.



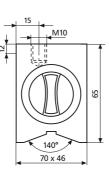
### Magnetic Bases 815 Y

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

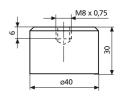
4425000 Order no.



#### 815 YP Round Version

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

Order no.



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### **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**

	ght of nters <i>(inch)</i>	Dista between mm		Base size (L x W) mm	Lateral and/or height difference of Tailstocks mm	T-slot width mm	<b>Weight</b> 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	<b>Base size</b> (L x W) mm	T-slot width mm	<b>Weight</b> 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	<b>Weight</b> 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

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## Modular Units 818 for individual center benches

### Accessories

818 pe V-support anvils in pairs						
<b>Center height</b> mm	<b>Dia. range</b> mm	Order no.				
50 / 75 100	3 - 15 8 - 45	4622210 4622211				

### 818 pb V-support in pairs

<b>Height</b> mm	<b>Dia. range</b> mm	<b>T-slot</b> width mm	Order no.
70	5 - 20	10	4622215
120	5 - 45	12	4622216

## 818 ab Roller support in pairs

<b>Height</b> mm	<b>Dia. range</b> mm	T-slot width mm	Order no.
70	3 - 20	10	4622220
120	3 - 45	12	4622221

## Supporting table

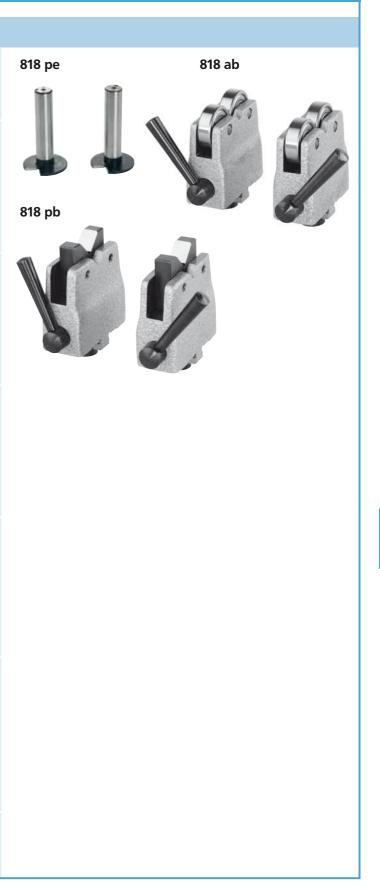
<b>Center height</b> mm	Base size (L x W) mm	Order no.
50	350 x 110	4622265
75	500 x 110	4622266
100 / 150	700 x 180	4622267

### Pointed support in pairs

<b>Center height</b> mm	Order no.
50	4622270
75	4622271
100	4622272
150	4622273

### Support arm 818 XNB

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



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## Mahr 8-8 ► |

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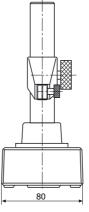
## **Small Comparator Stands 820**

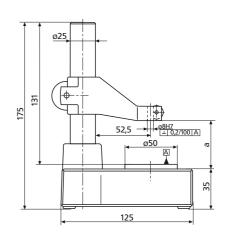


Indicating instruments are sold seperately

### **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**

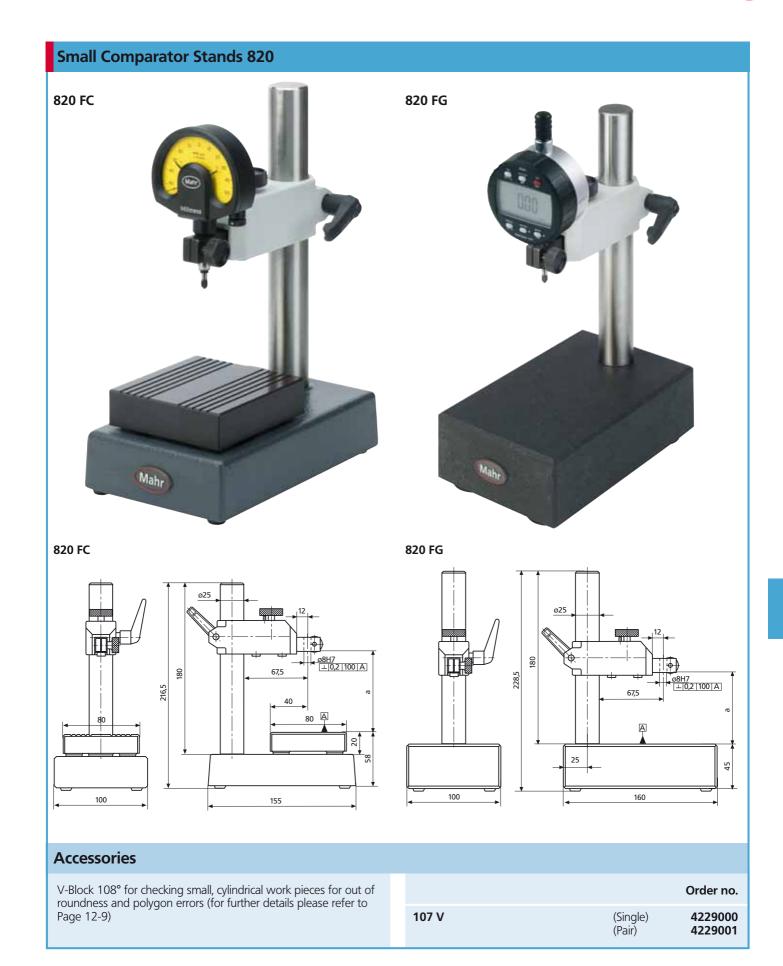
Working range a mm (inch) (	Flatness tolerance (DIN 876) Grade mm	Fine adjustment range	<b>Weight</b> kg	Order no.* Mount dia. 8H7	Order no.* Mount dia. 3/8 inch	Remarks
<b>820 NG</b> 0 - 130 (0 - 5.1") <b>820 FG</b> 0 - 130 (0 - 5.1") <b>820 NC</b> 0 - 110 (0 - 4.3")	steel 00 granite 0 granite 0 ceramic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



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### Mahr 8-10 MarStand. Indicator Stands, Comparator Stands, Run out Testing Instruments

### Comparator Stands 35 B



### **Technical Data**

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

### 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

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

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

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### **Comparator Stand NB-60**



### **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	OMI-NB-60
0 - 203 mm	31.75 mm	124 mm	238 x 165 mm	adjustable AM-147	none	OMI-NB-61

### Accessories

#### Platens

Type

#### Fine Adjustment Arm

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

serrated	114 x 152 mm	PL-99		
serrated	<b>(4.5 x 6")</b> 152 x 203 mm	PL-147	Range	Order no.
Senaleu	(6 x 8")	FL-147	1.5 mm / <b>0.060"</b>	AM-147

Note: (4) screws SW-1338 are required

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

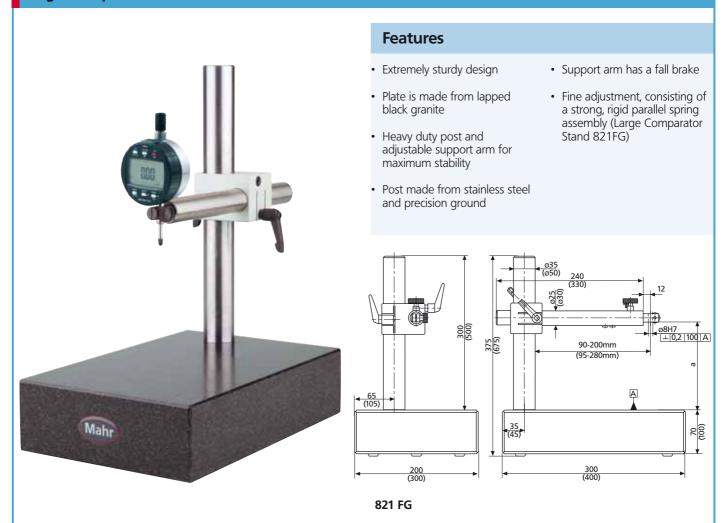
Order no.

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

Dimensions

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### Large Comparator Stands 821



### **Technical Data**

Working range a mm <i>(inch)</i>	Flatness tolerance (DIN 876) Grade	Fine adjustment range mm	<b>Weight</b> kg	Order no.* Mount dia. 8H7	Order no.* Mount dia. 3/8 inch	Remarks
<b>821 NG</b> 0 - 250 <b>(0 - 10")</b> 0 - 430 <b>(0 - 17")</b>	0 0	-	15.8 48	4435100 4435110	4435150 4435160	
821 FG 0 - 250 (0 -10") 0 - 430 (0 -17")	0 0	± 0.2 ± 0.2	15.8 48	4435101 4435111	4435151 4435161	Fine adjustment 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) (Pair)	4229000 4229001

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### 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 mm (inch)	Fine adjust- ment range mm	<b>Weight</b> kg	Order no.* Mount dia. 8H7	Order no.* Mount dia. 28H7	Order no.* Mount dia. 3/8 inch	
824 NT 824 FT 824 GT	0 - 210 (0 - 8.2") 0 - 210 (0 - 8.2") 0 - 200 (0 - 8.0")	_ ± 0.2 ± 1.5	17 19 18	4442100 4443100	4444200	4442105 4443105	<ul> <li>excludes indicating instrument, excludes plate</li> </ul>

### Plates

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

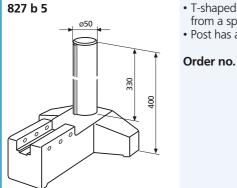
		Order no.
107 V	(Single) (Pair)	4229000 4229001

### Mahr 8-14 Image: MarStand. Indicator Stands, Comparator Stands, Run out Testing Instruments

### 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**

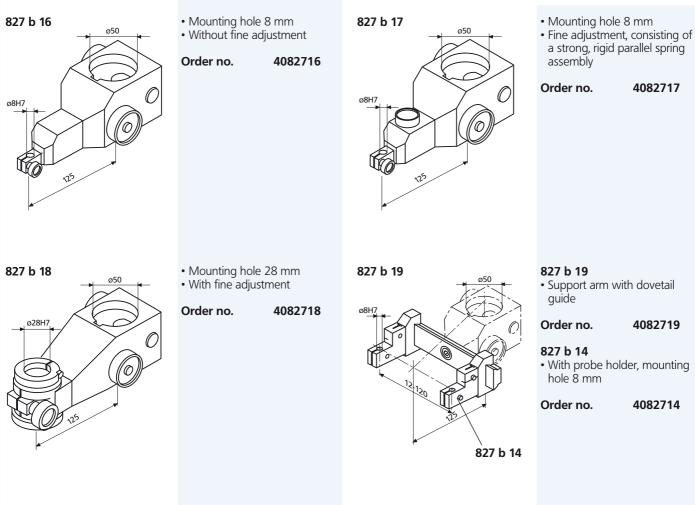


• T-shaped base which is made from a special cast iron

Post has a chrome finish

r no. 4082705

### Support Arms



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