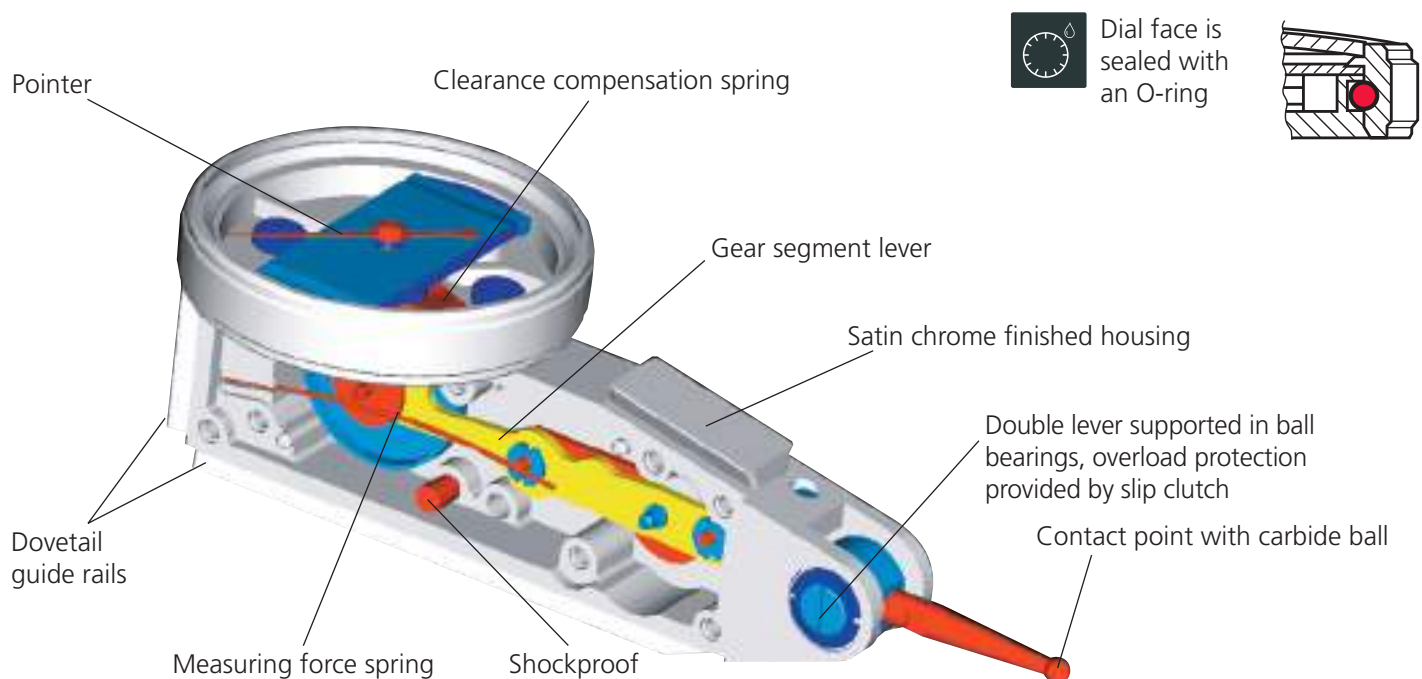
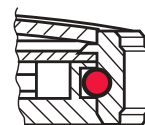




Dial face is sealed with an O-ring



SHOCK PROOF

Mechanism

- Shockproof
- Anti-magnetic
- Movement bearings are jeweled with 8 precious stones

Styli with carbide contact points



Styli with ruby contact points



MarTest | Applications

Concentricity of a shaft



Concentricity of a sleeve



Centering of a bore



Aligning a surface



Testing parallelism



MarTest | Avoiding Measuring Errors

For accurate measurements the axis of the contact point must be perpendicular to the measuring direction (fig. 1). If this is not possible, it is necessary to multiply the reading on the dial with a correction factor, which depends on angle α (fig. 2). The correction factor is negligible for angles below 15° .

Angle α	15°	30°	45°	60°
Corr. factor	0.96	0.87	0.70	0.50

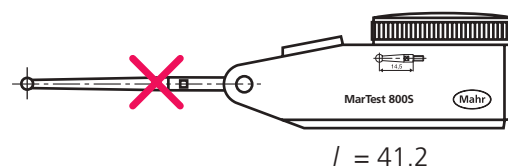
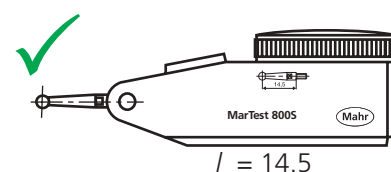
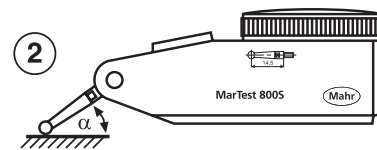
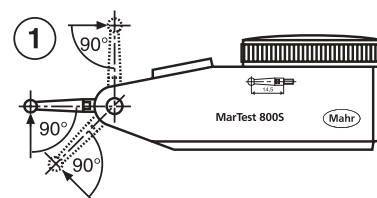
Example:

Angle α : 30° (estimated)

Reading on dial: 0.38 mm

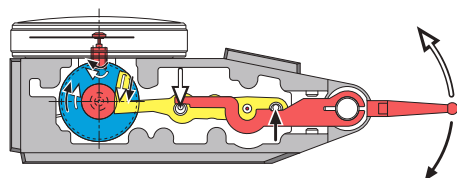
Meas. values: $0.38 \times 0.87 = 0.33$ mm

Please use only the provided measuring insert length for the type of device (e.g. 800 S)



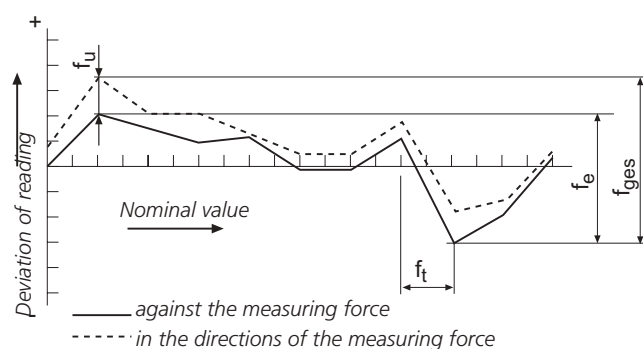
MarTest | Automatic Switch of Measuring Direction

Measurement in both directions is possible without switch. The pointer moves clockwise. This guarantees clear and errorless reading.



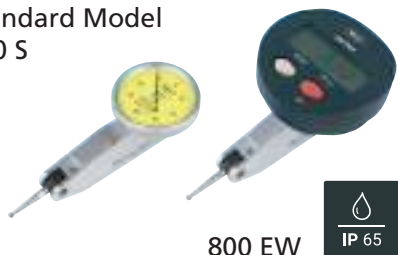
functional description

MarTest | Metrological Characteristics



MarTest | Versions

Standard Model
800 S



800 EW



Extra Long Styl
800 SL



800 EWL



Higher Resolution
800 SM



Larger Measuring Range
800 SR



Horizontal Model
800 H



Vertical Model
800 V



MarTest 800 S / 800 S-R / 800 SG / 800 SG-R / 800 SR / 800 SA / 800 SGA

SHOCK
PROOF



DIN
2270

Test Indicator

FEATURES

- Standard model
- High-contrast dial face, sealed with O-ring
- Mineral glass viewing panel for best protection:
 - against cracking, scratching or damage caused by hot shavings
 - optimum resistance to solvents
- Matt chrome-plated protective casing with three integrated dovetail guide rails
- Shockproof measuring mechanism
- Anti-magnetic model
- Automatic adjustment to the contacting direction ensuring infallible readings
- Ball bearing mounted double lever
- Friction clutch overload protection
- Package contains:** case, instruction manual, spanner for changing the styli, stylus dia. $\varnothing$ 2 mm, mounting shaft 800a8



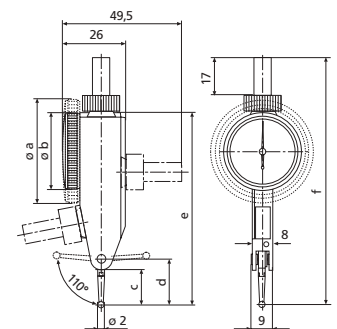
Application:

- Measurement of concentricity, alignment, parallelism and flatness
- Centering of bores and shafts
- Parallel or perpendicular alignment of work pieces

TECHNICAL DATA

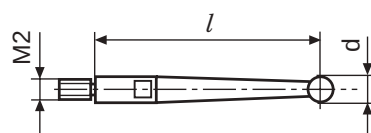
Order no.		4305200	4305205	4307200	4307205	4307250	4301200	4301250
Product type		800 S	800 S-R	800 SG	800 SG-R	800 SR	800 SA	800 SGA
Measuring range	mm	± 0.4				± 0.8	± 0.25	
Graduation value	mm	0.01						
Measuring surface		carbide	ruby	carbide	ruby	carbide		
Scale diameter	mm	28		38			28	38
Type of dial face		40–0–40					25–0–25	
Dial color		Yellow						
Measuring force	N	0.15					0.1	
Range per rev.	mm	0.8					0.5	
Deviation range f _e	μm	10					5	
Total deviation range f _{ges}	μm	13				14	8	
Hysteresis f _u	μm	3				4	3	
Partial measuring span f _t	μm	5						
Repeatability f _w	μm	3						
Standard		DIN 2270				Factory standard		

Order no.	a	b	c	d	e	f	Measuring anvil length
	mm	mm	mm	mm	mm	mm	mm
4305200		30	13.6	17.8	75	99	14.5
4305205		30	13.6	17.8	75	99	14.5
4307200	40.5		13.6	17.8	75	99	14.5
4307205	40.5		13.6	17.8	75	99	14.5
4307250	40.5		13.6	17.8	75	99	14.5
4301200		30	13.6	17.8	75	99	14.5
4301250	40.5		13.6	17.8	75	99	14.5



ACCESSORIES

Order no.	Product name	Product type
4305870	Stylus $\varnothing$ 1.0 mm, carbide, $l = 14.5$ mm	800 ts
4305850	Stylus $\varnothing$ 2.0 mm, carbide, $l = 14.5$ mm	800 ts
4305871	Stylus $\varnothing$ 3.0 mm, carbide, $l = 14.5$ mm	800 ts
4309051	Stylus $\varnothing$ 2.0 mm, ruby, $l = 14.5$ mm	800 tsr
4305868	Spanner	



800 tb;800 tbr;800 te;800 ter;800 tl;800 tlr;800 ts;800 tsr;801 tl

FEATURES

With long stylus, for measurements at poorly accessible measuring points

- High-contrast dial face, sealed with O-ring
- Mineral glass viewing panel for best protection:
 - against cracking, scratching or damage caused by hot shavings
 - optimum resistance to solvents
- Matt chrome-plated protective casing with three integrated dovetail guide rails
- Shockproof measuring mechanism
- Anti-magnetic model
- Automatic adjustment to the contacting direction ensuring infallible readings
- Ball bearing mounted double lever
- Friction clutch overload protection
- **Package contains:** case, instruction manual, spanner for changing the styli, stylus dia. $\varnothing 2$ mm, mounting shaft 800a6 (800 SA/SGA/SGB), mounting shaft 800a8



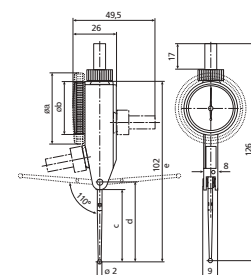
Application:

- Measurement of concentricity, alignment, parallelism and flatness
- Centering of bores and shafts
- Parallel or perpendicular alignment of work pieces

TECHNICAL DATA

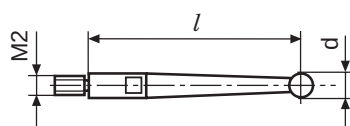
Order no.		4301300	4306200	4306250
Product type		800 SGB	800 SL	800 SGL
Measuring range	mm	± 0.5	± 0.25	
Graduation value	mm	0.01		
Measuring surface		carbide		
Scale diameter	mm	38	28	38
Type of dial face		50–0–50	25–0–25	
Dial color		Yellow		
Measuring force	N	0.07		
Range per rev.	mm	1	0.5	
Deviation range f _e	µm	10		
Total deviation range f _{ges}	µm	13		
Hysteresis f _u	µm	4	5	
Partial measuring span f _t	µm	5		
Repeatability f _w	µm	3		
Standard		Factory standard		

Order no.	a	b	c	d	e	f	Measuring anvil length
	mm	mm	mm	mm	mm	mm	mm
4301300	40.5		31.4	35.7	93	117	32.3
4306200		30	40.3	44.6	102	126	41.24
4306250	40.5		40.3	44.6	102	126	41.24



ACCESSORIES

Order no.	Product name	Product type
4301851	Stylus $\varnothing 1.0$ mm, carbide, $l = 32.3$ mm	800 tb
4301850	Stylus $\varnothing 2.0$ mm, carbide, $l = 32.3$ mm	800 tb
4301852	Stylus $\varnothing 3.0$ mm, carbide, $l = 32.3$ mm	800 tb
4309052	Stylus $\varnothing 2.0$ mm, ruby, $l = 32.3$ mm	800 tbr
4305868	Spanner	
4306851	Stylus $\varnothing 1.0$ mm, carbide, $l = 41.24$ mm	800 tl
4306850	Stylus $\varnothing 2.0$ mm, carbide, $l = 41.24$ mm	800 tl
4306853	Stylus $\varnothing 3.0$ mm, carbide, $l = 41.24$ mm	800 tl
4309053	Stylus $\varnothing 2.0$ mm, ruby, $l = 41.24$ mm	800 tlr



800 tb;800 tbr;800 te;800 ter;800 tl;800 tlr;800 ts;800 tsr;801 tl

FEATURES

For high-precision measurements

- High-contrast dial face, sealed with O-ring
- Mineral glass viewing panel for best protection:
 - against cracking, scratching or damage caused by hot shavings
 - optimum resistance to solvents
- Matt chrome-plated protective casing with three integrated dovetail guide rails
- Shockproof measuring mechanism
- Anti-magnetic model
- Automatic adjustment to the contacting direction ensuring infallible readings
- Ball bearing mounted double lever
- Friction clutch overload protection
- **Package contains:** case, instruction manual, spanner for changing the styli, stylus dia. $\varnothing$ 2 mm, mounting shaft 800a8



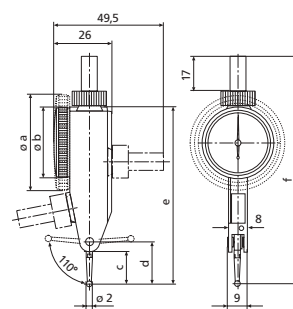
Application:

- Measurement of concentricity, alignment, parallelism and flatness
- Centering of bores and shafts
- Parallel or perpendicular alignment of work pieces

TECHNICAL DATA

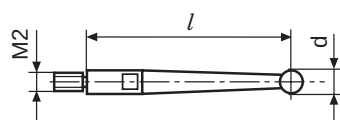
Order no.		4308150	4308200	4308205	4308250
Product type		800 SM	800 SGM	800 SGM-R	800 SRM
Measuring range	mm	± 0.1			± 0.2
Graduation value	mm	0.002			
Measuring surface		carbide		ruby	carbide
Scale diameter	mm	28	38		
Type of dial face		100–0–100			
Dial color		Yellow			
Measuring force	N	0.15			
Range per rev.	mm	0.2			
Deviation range f _e	µm	3			
Total deviation range f _{ges}	µm	4			5
Hysteresis f _u	µm	2			3
Partial measuring span f _t	µm	2			
Repeatability f _w	µm	1.5			
Standard		DIN 2270			Factory standard

Order no.	a	b	c	d	e	f	Measuring anvil length
	mm	mm	mm	mm	mm	mm	mm
4308150		30	13.6	17.8	75	99	14.5
4308200	40.5		13.6	17.8	75	99	14.5
4308205	40.5		13.6	17.8	75	99	14.5
4308250	40.5		13.6	17.8	75	99	14.5



ACCESSORIES

Order no.	Product name	Product type
4305870	Stylus $\varnothing$ 1.0 mm, carbide, $l = 14.5$ mm	800 ts
4305850	Stylus $\varnothing$ 2.0 mm, carbide, $l = 14.5$ mm	800 ts
4305871	Stylus $\varnothing$ 3.0 mm, carbide, $l = 14.5$ mm	800 ts
4309051	Stylus $\varnothing$ 2.0 mm, ruby, $l = 14.5$ mm	800 tsr
4305868	Spanner	



800 tb;800 tbr;800 te;800 ter;800 tl;800 tlr;800 ts;800 tsr;801 tl

FEATURES

- For high-precision measurements
- High-contrast dial face, sealed with O-ring
- Mineral glass viewing panel for best protection:
 - against cracking, scratching or damage caused by hot shavings
 - optimum resistance to solvents
- Matt chrome-plated protective casing with three integrated dovetail guide rails
- Shockproof measuring mechanism
- Anti-magnetic model
- Automatic adjustment to the contacting direction ensuring infallible readings
- Ball bearing mounted double lever
- Friction clutch overload protection
- Package contains:** case, instruction manual, spanner for changing the styli, stylus dia. $\varnothing$ 2 mm, mounting shaft 800a8



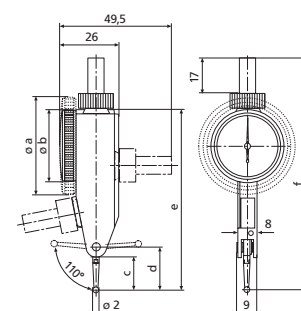
Application:

- Measurement of concentricity, alignment, parallelism and flatness
- Centering of bores and shafts
- Parallel or perpendicular alignment of work pieces

TECHNICAL DATA

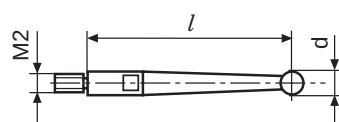
Order no.			4308220
Product type			800 SGE
Measuring range	mm		± 0.07
Graduation value	mm		0.001
Measuring surface			carbide
Scale diameter	mm		38
Type of dial face			70–0–70
Dial color			Yellow
Measuring force	N		0.2
Range per rev.	mm		0.14
Deviation range f_e	μm		3
Total deviation range f_{ges}	μm		4
Hysteresis f_u	μm		2
Partial measuring span f_t	μm		2
Repeatability f_w	μm		1.5
Standard			Factory standard

Order no.	a	c	d	e	f	Measuring anvil length
	mm	mm	mm	mm	mm	mm
4308220	40.5	8.3	12.5	70	94	9.15



ACCESSORIES

Order no.	Product name	Product type
4308851	Stylus $\varnothing$ 1.0 mm, carbide, $l = 9.1$ mm	800 te
4308850	Stylus $\varnothing$ 2.0 mm, carbide, $l = 9.1$ mm	800 te
4308852	Stylus $\varnothing$ 3.0 mm, carbide, $l = 9.1$ mm	800 te
4309050	Stylus $\varnothing$ 2.0 mm, ruby, $l = 9.1$ mm	800 ter
4305868	Spanner	



800 tb;800 tbr;800 te;800 ter;800 tl;800 tlr;800 ts;800 tsr;801 tl

FEATURES

For high-precision measurements

- High-contrast dial face, sealed with O-ring
- Mineral glass viewing panel for best protection:
 - against cracking, scratching or damage caused by hot shavings
 - optimum resistance to solvents
- Matt chrome-plated protective casing with three integrated dovetail guide rails
- Shockproof measuring mechanism
- Anti-magnetic model
- Automatic adjustment to the contacting direction ensuring infallible readings
- Ball bearing mounted double lever
- Friction clutch overload protection
- **Package contains:** case, instruction manual, spanner for changing the styli, stylus dia. $\varnothing$ 2 mm, mounting shaft 800a3/8



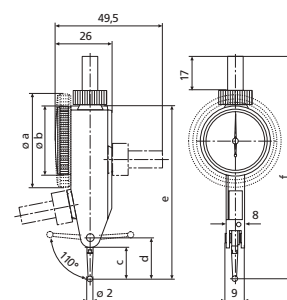
Application:

- Measurement of concentricity, alignment, parallelism and flatness
- Centering of bores and shafts
- Parallel or perpendicular alignment of work pieces

TECHNICAL DATA

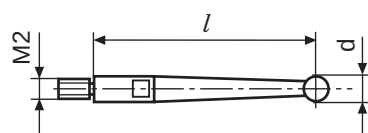
Order no.		4308960	4308970	4308980	4308985
Product type		801 SM	801 SGM	801 SRM	801 SGE
Measuring range	inch	± .004"		± .008"	± .004"
Graduation value	inch	.0001"			.00005"
Scale diameter	inch	1.1"	1.5"		
Type of dial face		4-0-4			
Dial color		Green			
Measuring force	N	0.15			
Range per rev.	inch	.008"			
Deviation range f _e	inch	.00012"			.0004"
Total deviation range f _{ges}	inch	.00016"		.0002"	.0005"
Hysteresis f _u	inch	.00008"		.00012"	
Partial measuring span f _t	inch	.00008"			.0002"
Repeatability f _w	inch	.0001"			
Standard		Factory standard			

Order no.	a	b	c	d	e	f	Measuring anvil length
	mm	mm	mm	mm	mm	mm	mm
4308960		30	13.6	17.8	75	99	14.5
4308970	40.5		13.6	17.8	75	99	14.5
4308980	40.5		13.6	17.8	75	99	14.5
4308985	40.5		13.6	17.8	75	99	14.5



ACCESSORIES

Order no.	Product name	Product type
4305850	Stylus $\varnothing$ 2.0 mm, carbide, l = 14.5 mm	800 ts
4305870	Stylus $\varnothing$ 1.0 mm, carbide, l = 14.5 mm	800 ts
4305871	Stylus $\varnothing$ 3.0 mm, carbide, l = 14.5 mm	800 ts
4309051	Stylus $\varnothing$ 2.0 mm, ruby, l = 14.5 mm	800 tsr
4305868	Spanner	



800 tb;800 tbr;800 te;800 ter;800 tl;800 tlr;800 ts;800 tsr;801 tl

FEATURES

Standard model

- High-contrast dial face, sealed with O-ring
- Mineral glass viewing panel for best protection:
 - against cracking, scratching or damage caused by hot shavings
 - optimum resistance to solvents
- Matt chrome-plated protective casing with three integrated dovetail guide rails
- Shockproof measuring mechanism
- Anti-magnetic model
- Automatic adjustment to the contacting direction ensuring infallible readings
- Ball bearing mounted double lever
- Friction clutch overload protection
- **Package contains:** case, instruction manual, spanner for changing the styli, stylus dia. $\varnothing 2$ mm, mounting shaft 800a3/8



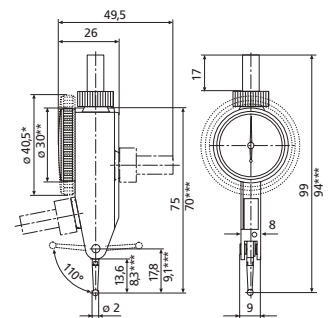
Application:

- Measurement of concentricity, alignment, parallelism and flatness
- Centering of bores and shafts
- Parallel or perpendicular alignment of work pieces

TECHNICAL DATA

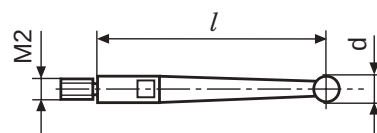
Order no.	4305950	4305960	4307950	4307960	4307970
Product type	801 S	801 S1	801 SG	801 SR	801 SGI
Measuring range	mm				± 0.3
Measuring range	inch	$\pm .015''$		$\pm .030''$	$\pm .015''$
Graduation value	mm				0.01
Graduation value	inch		.0005"		
Scale diameter	inch	1.1"	1.5"	1.1"	1.5"
Type of dial face			15–0–15		
Dial color			Green		
Measuring force	N		0.15		
Range per rev.	mm				0.6
Range per rev.	inch		.03"		
Deviation range f_e	inch		.0004"		
Total deviation range f_{ges}	inch		.0005"		
Hysteresis f_u	inch	.00012"		.0002"	.00012"
Partial measuring span f_t	inch		.0002"		
Repeatability f_w	inch		.0001"		
Standard			Factory standard		

Order no.	a	b	c	d	e	f	Measuring anvil length
	mm	mm	mm	mm	mm	mm	mm
4305950		30	13.6	17.8	75	99	14.5
4305960		30	13.6	17.8	75	99	14.5
4307950	40.5		13.6	17.8	75	99	14.5
4307960	40.5		13.6	17.8	75	99	14.5
4307970	40.5		13.6	17.8	75	99	14.5



ACCESSORIES

Order no.	Product name	Product type
4305870	Stylus $\varnothing 1.0$ mm, carbide, $l = 14.5$ mm	800 ts
4305850	Stylus $\varnothing 2.0$ mm, carbide, $l = 14.5$ mm	800 ts
4305871	Stylus $\varnothing 3.0$ mm, carbide, $l = 14.5$ mm	800 ts
4309051	Stylus $\varnothing 2.0$ mm, ruby, $l = 14.5$ mm	800 tsr
4305868	Spanner	



800 tb;800 tbr;800 te;800 ter;800 tl;800 tlr;800 ts;800 tsr;801 tl

FEATURES

With long stylus, for measurements at poorly accessible measuring points

- High-contrast dial face, sealed with O-ring
- Mineral glass viewing panel for best protection:
 - against cracking, scratching or damage caused by hot shavings
 - optimum resistance to solvents
- Matt chrome-plated protective casing with three integrated dovetail guide rails
- Shockproof measuring mechanism
- Anti-magnetic model
- Automatic adjustment to the contacting direction ensuring infallible readings
- Ball bearing mounted double lever
- Friction clutch overload protection
- **Package contains:** case, instruction manual, spanner for changing the styli, stylus dia. $\varnothing 2$ mm, mounting shaft 800a3/8



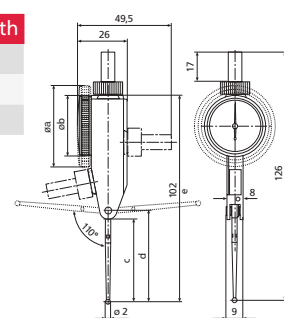
Application:

- Measurement of concentricity, alignment, parallelism and flatness
- Centering of bores and shafts
- Parallel or perpendicular alignment of work pieces

TECHNICAL DATA

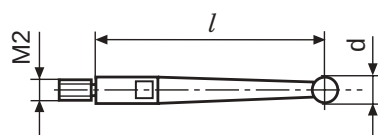
Order no.		4306950	4306960
Product type		801 SL	801 SGL
Measuring range	inch	± .010"	
Graduation value	inch	.0005"	
Scale diameter	inch	1.1"	1.5"
Type of dial face		10–0–10	
Dial color		Green	
Measuring force	N	0.07	
Range per rev.	inch	.02"	
Deviation range f _e	inch	.0004"	
Total deviation range f _{ges}	inch	.0005"	
Hysteresis f _u	inch	.0002"	
Partial measuring span f _t	inch	.0002"	
Repeatability f _w	inch	.0001"	
Standard		Factory standard	

Order no.	a	b	c	d	e	f	Measuring anvil length
	mm	mm	mm	mm	mm	mm	mm
4306950		30	40.3	44.6	102	126	41.24
4306960	40.5		40.3	44.6	102	126	41.24



ACCESSORIES

Order no.	Product name	Product type
4306851	Stylus $\varnothing 1.0$ mm, carbide, $l = 41.24$ mm	800 tl
4306850	Stylus $\varnothing 2.0$ mm, carbide, $l = 41.24$ mm	800 tl
4306853	Stylus $\varnothing 3.0$ mm, carbide, $l = 41.24$ mm	800 tl
4309053	Stylus $\varnothing 2.0$ mm, ruby, $l = 41.24$ mm	800 tlr
4305868	Spanner	



800 tb;800 tbr;800 te;800 ter;800 tl;800 tlr;800 ts;800 tsr;801 tl

Vertical model

- High-contrast dial face, **sealed with O-ring**
- **Mineral glass viewing panel** for best protection:
 - against cracking, scratching or damage caused by hot shavings
 - optimum resistance to solvents
- Matt chrome-plated protective casing with three integrated dovetail guide rails
- Shockproof measuring mechanism
- Anti-magnetic model
- Automatic adjustment to the contacting direction ensuring infallible readings
- Ball bearing mounted double lever
- Friction clutch overload protection
- **Package contains:** case, instruction manual, spanner for changing the styli, stylus dia. ø 2 mm, mounting shaft 800a8



- Measurement of concentricity, alignment, parallelism and flatness
- Centering of bores and shafts
- Parallel or perpendicular alignment of work pieces

800 tb;800 tbr;800 te;800 ter;800 tl;800 tlr;800 ts;800 tsr;801 tl



FEATURES

- Vertical model
- High-contrast dial face, sealed with O-ring
 - Mineral glass viewing panel for best protection:
 - against cracking, scratching or damage caused by hot shavings
 - optimum resistance to solvents
 - Matt chrome-plated protective casing with three integrated dovetail guide rails
 - Shockproof measuring mechanism
 - Anti-magnetic model
 - Automatic adjustment to the contacting direction ensuring infallible readings
 - Ball bearing mounted double lever
 - Friction clutch overload protection
 - **Package contains:** case, instruction manual, spanner for changing the styli, stylus dia. $\varnothing$ 2 mm, mounting shaft 800a3/8



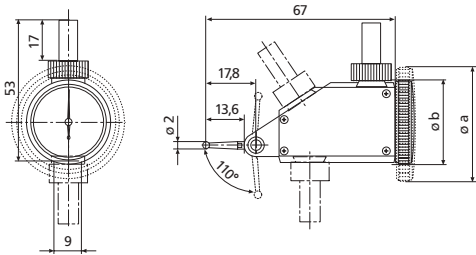
Application:

- Measurement of concentricity, alignment, parallelism and flatness
- Centering of bores and shafts
- Parallel or perpendicular alignment of work pieces

TECHNICAL DATA

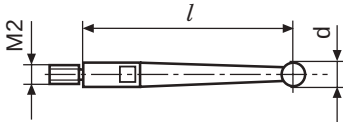
Order no.		4302950
Product type		801 V
Measuring range	inch	$\pm .015''$
Graduation value	inch	.0005"
Measuring surface		carbide
Scale diameter	inch	1.1"
Type of dial face		15–0–15
Dial color		Green
Measuring force	N	0.2
Range per rev.	inch	.03"
Deviation range f_e	inch	.0004"
Total deviation range f_{ges}	inch	.0005"
Hysteresis f_u	inch	.00012"
Partial measuring span f_t	inch	.0002"
Repeatability f_w	inch	.0001"
Standard		Factory standard

Order no.	b	Measuring anvil length
	mm	mm
4302950	30	14.5



ACCESSORIES

Order no.	Product name	Product type
4305870	Stylus $\varnothing$ 1.0 mm, carbide, l = 14.5 mm	800 ts
4305850	Stylus $\varnothing$ 2.0 mm, carbide, l = 14.5 mm	800 ts
4305871	Stylus $\varnothing$ 3.0 mm, carbide, l = 14.5 mm	800 ts
4309051	Stylus $\varnothing$ 2.0 mm, ruby, l = 14.5 mm	800 tsr
4305868	Spanner	



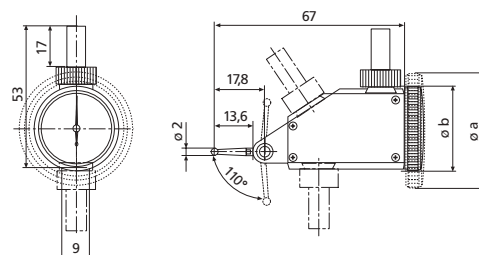
800 tb;800 tbr;800 te;800 ter;800 tl;800 tlr;800 ts;800 tsr;801 tl

Vertical model

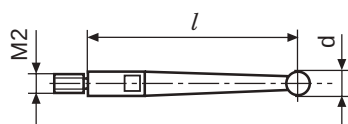


Order no.	4302250	
Product type		800 VGM
Measuring range	mm	± 0.1
Graduation value	mm	0.002
Measuring surface		carbide
Scale diameter	mm	38
Type of dial face		100–0–100
Dial color		Yellow
Measuring force	N	0.25
Range per rev.	mm	0.2
Deviation range f_e	μm	3
Total deviation range f_{ges}	μm	4
Hysteresis f_u	μm	2
Partial measuring span f_t	μm	2
Repeatability f_w	μm	1.5
Standard		DIN 2270

Order no.	a	Measuring anvil length
	mm	mm
4302250	40.5	14.5



Order no.	Product name	Product type
4305870	Stylus ø 1.0 mm, carbide, l = 14.5 mm	800 ts
4305850	Stylus ø 2.0 mm, carbide, l = 14.5 mm	800 ts
4305871	Stylus ø 3.0 mm, carbide, l = 14.5 mm	800 ts
4309051	Stylus ø 2.0 mm, ruby, l = 14.5 mm	800 tsr
4305868	Spanner	





FEATURES

- Vertical model
- High-contrast dial face, sealed with O-ring
 - Mineral glass viewing panel for best protection:
 - against cracking, scratching or damage caused by hot shavings
 - optimum resistance to solvents
 - Matt chrome-plated protective casing with three integrated dovetail guide rails
 - Shockproof measuring mechanism
 - Anti-magnetic model
 - Automatic adjustment to the contacting direction ensuring infallible readings
 - Ball bearing mounted double lever
 - Friction clutch overload protection
 - **Package contains:** case, instruction manual, spanner for changing the styli, stylus dia. $\varnothing$ 2 mm, mounting shaft 800a3/8



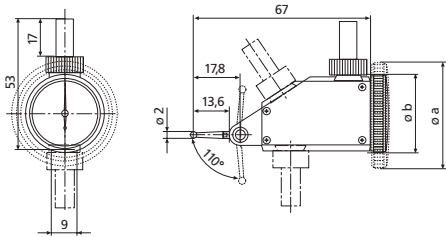
Application:

- Measurement of concentricity, alignment, parallelism and flatness
- Centering of bores and shafts
- Parallel or perpendicular alignment of work pieces

TECHNICAL DATA

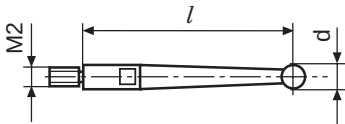
Order no.		4302960
Product type		801 VGM
Measuring range	inch	$\pm .004''$
Graduation value	inch	.0001"
Measuring surface		carbide
Scale diameter	inch	1.5"
Type of dial face		4–0–4
Dial color		Green
Measuring force	N	0.25
Range per rev.	inch	.008"
Deviation range f_e	inch	.00012"
Total deviation range f_{ges}	inch	.00016"
Hysteresis f_u	inch	.00008"
Partial measuring span f_t	inch	.00008"
Repeatability f_w	inch	.0001"
Standard		Factory standard

Order no.	a	Measuring anvil length
	mm	mm
4302960	40.5	14.5



ACCESSORIES

Order no.	Product name	Product type
4305870	Stylus $\varnothing$ 1.0 mm, carbide, l = 14.5 mm	800 ts
4305850	Stylus $\varnothing$ 2.0 mm, carbide, l = 14.5 mm	800 ts
4305871	Stylus $\varnothing$ 3.0 mm, carbide, l = 14.5 mm	800 ts
4309051	Stylus $\varnothing$ 2.0 mm, ruby, l = 14.5 mm	800 tsr
4305868	Spanner	



800 tb;800 tbr;800 te;800 ter;800 tl;800 tlr;800 ts;800 tsr;801 tl

FEATURES

- Horizontal model
- High-contrast dial face, sealed with O-ring
- Mineral glass viewing panel for best protection:
 - against cracking, scratching or damage caused by hot shavings
 - optimum resistance to solvents
- Matt chrome-plated protective casing with three integrated dovetail guide rails
- Shockproof measuring mechanism
- Anti-magnetic model
- Automatic adjustment to the contacting direction ensuring infallible readings
- Ball bearing mounted double lever
- Friction clutch overload protection
- Package contains:** case, instruction manual, spanner for changing the styli, stylus dia. $\varnothing$ 2 mm, mounting shaft 800a8



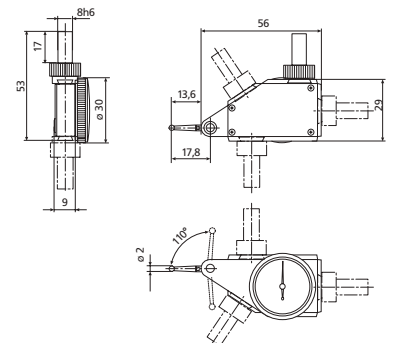
Application:

- Measurement of concentricity, alignment, parallelism and flatness
- Centering of bores and shafts
- Parallel or perpendicular alignment of work pieces

TECHNICAL DATA

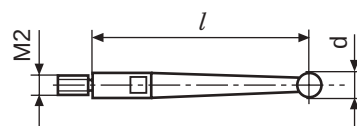
Order no.		4303200
Product type		800 H
Measuring range	mm	± 0.4
Graduation value	mm	0.01
Measuring surface		carbide
Scale diameter	mm	28
Type of dial face		40–0–40
Dial color		Yellow
Measuring force	N	0.25
Range per rev.	mm	0.8
Deviation range f_e	μm	10
Total deviation range f_{ges}	μm	13
Hysteresis f_u	μm	3
Partial measuring span f_t	μm	5
Repeatability f_w	μm	3
Standard		DIN 2270

Order no.	Measuring anvil length
	mm
4303200	14.5



ACCESSORIES

Order no.	Product name	Product type
4305870	Stylus $\varnothing$ 1.0 mm, carbide, $l = 14.5$ mm	800 ts
4305850	Stylus $\varnothing$ 2.0 mm, carbide, $l = 14.5$ mm	800 ts
4305871	Stylus $\varnothing$ 3.0 mm, carbide, $l = 14.5$ mm	800 ts
4309051	Stylus $\varnothing$ 2.0 mm, ruby, $l = 14.5$ mm	800 tsr
4305868	Spanner	



800 tb;800 tbr;800 te;800 ter;800 tl;800 tlr;800 ts;800 tsr;801 tl

FEATURES

- Horizontal model
- High-contrast dial face, sealed with O-ring
 - Mineral glass viewing panel for best protection:
 - against cracking, scratching or damage caused by hot shavings
 - optimum resistance to solvents
 - Matt chrome-plated protective casing with three integrated dovetail guide rails
 - Shockproof measuring mechanism
 - Anti-magnetic model
 - Automatic adjustment to the contacting direction ensuring infallible readings
 - Ball bearing mounted double lever
 - Friction clutch overload protection
 - **Package contains:** case, instruction manual, spanner for changing the styli, stylus dia. ø 2 mm, mounting shaft 800a3/8



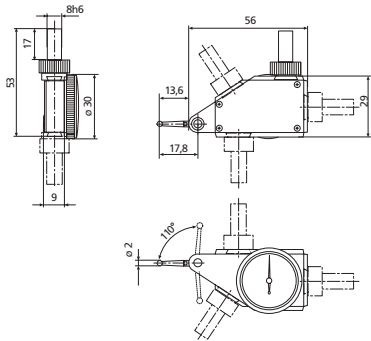
Application:

- Measurement of concentricity, alignment, parallelism and flatness
- Centering of bores and shafts
- Parallel or perpendicular alignment of work pieces

TECHNICAL DATA

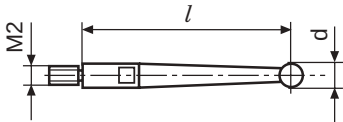
Order no.		4303950
Product type		801 H
Measuring range	inch	± .015"
Graduation value	inch	.0005"
Measuring surface		carbide
Scale diameter	inch	1.1"
Type of dial face		15–0–15
Dial color		Green
Measuring force	N	0.25
Range per rev.	inch	.03"
Deviation range f_e	inch	.0004"
Total deviation range f_{ges}	inch	.0005"
Hysteresis f_u	inch	.00012"
Partial measuring span f_t	inch	.0002"
Repeatability f_w	inch	.0001"
Standard		Factory standard

Order no.	Measuring anvil length
	mm
4303950	14.5



ACCESSORIES

Order no.	Product name	Product type
4305870	Stylus ø 1.0 mm, carbide, l = 14.5 mm	800 ts
4305850	Stylus ø 2.0 mm, carbide, l = 14.5 mm	800 ts
4305871	Stylus ø 3.0 mm, carbide, l = 14.5 mm	800 ts
4309051	Stylus ø 2.0 mm, ruby, l = 14.5 mm	800 tsr
4305868	Spanner	



800 tb;800 tbr;800 te;800 ter;800 tl;800 tlr;800 ts;800 tsr;801 tl

MarTest 800 EW / 800 EWL

Digital Test Indicator



FUNCTIONS

- ON/OFF
- RESET (set display to zero)
- mm/inch
- MAX/MIN memory for searching the reversal point
- TIR (MAX-MIN) for testing flatness and concentricity

FEATURES

- Inductive measuring system
- Battery life approx. 2 years
- Operating unit is protected against coolants and lubricants, protection class IP65
- Combined analog and digital display
- Operating and display unit (bezel) can be rotated through 360°
- Satin chrome finished housing with 3 dovetail guideways
- Shockproof
- Movement bearings are jeweled
- Automatic matching to sensing direction
- Anti-magnetic
- Double lever supported in ball bearings
- Overload protection provided by slip clutch
- **Data interface:** Opto RS232C, USB
- **IP protection category:** IP 65
- **Package contains:** mounting shaft 800a8, spanner for changing the styli, stylus dia. $\varnothing 2$ mm, case
- SoftwareMarCom Professional free download: www.mahr.com/marcom (only for Mahr data cables and wireless systems with USB and RS232 interface)

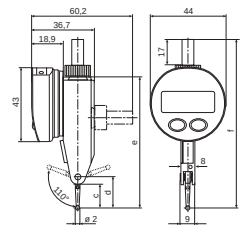
Application:

- Measurement of concentricity, alignment, parallelism and flatness
- Centering of bores and shafts
- Parallel or perpendicular alignment of work pieces

TECHNICAL DATA

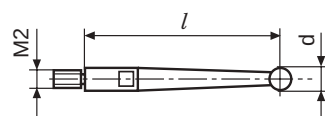
Order no.		4305120	4306120
Product type		800 EW	800 EWL
Measuring range	mm	± 0.4	± 0.25
Measuring range	inch	$\pm .015''$	$\pm .010''$
Resolution	mm	0.001	
Resolution	inch	.00005''	
Measuring force	N	0.13	0.07
Deviation range f_e	μm	10	
Total deviation range f_{ges}	μm	13	
Hysteresis f_u	μm	5	7
Partial measuring span f_t	μm	5	
Repeatability f_w	μm	3	
Standard		Factory standard	

Order no.	c	d	e	f	Mounting shaft	Measuring anvil length
	mm	mm	mm	mm	mm	mm
4305120	13.6	17.8	75	99	8	14.5
4306120	40.3	44.6	102	126	8	41.24



ACCESSORIES

Order no.	Product name	Product type
4305870	Stylus $\varnothing 1.0$ mm, carbide, $l = 14.5$ mm	800 ts
4305850	Stylus $\varnothing 2.0$ mm, carbide, $l = 14.5$ mm	800 ts
4305871	Stylus $\varnothing 3.0$ mm, carbide, $l = 14.5$ mm	800 ts
4102520	Battery 3 V, CR 2032	
4305122	Data connection cable RS232C (2 m)	800 EWr
4305121	800 EWu Data connection cable USB (2 m)	800 EWu
4309051	Stylus $\varnothing 2.0$ mm, ruby, $l = 14.5$ mm	800 tsr
4306850	Stylus $\varnothing 2.0$ mm, carbide, $l = 41.24$ mm	800 tl
4306851	Stylus $\varnothing 1.0$ mm, carbide, $l = 41.24$ mm	800 tl
4306853	Stylus $\varnothing 3.0$ mm, carbide, $l = 41.24$ mm	800 tl
4309053	Stylus $\varnothing 2.0$ mm, ruby, $l = 41.24$ mm	800 tlr



800 tb;800 tbr;800 te;800 ter;800 tl;800 tlr;800 ts;800 tsr;801 tl

MarTest 800 a4 / 800 a6 / 800 a8 / 800 a3/8 / 800 a1/4"

Mounting Shaft

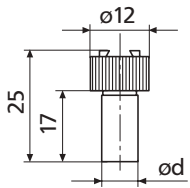
FEATURES

- Clamping shafts on the housing can be moved on dovetail guide rails
- Clamping in any position with milled nut (no tools required)



TECHNICAL DATA

Order no.	Mounting shaft		Product type
	mm	inch	
4305885	4		800 a4
4301865	6		800 a6
4305865	8		800 a8
4305875		.375"	800 a3/8
4305895		.25"	800 a1/4"



MarTest 800 h1

Holder

FEATURES

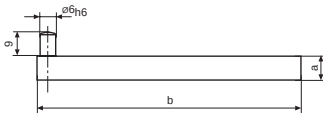
- Used for holding dial test indicator measuring devices on machine tools in conjunction with the 800k universal clamp



TECHNICAL DATA

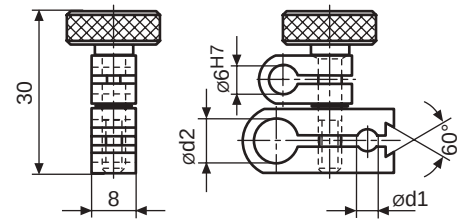
Order no.	Product type
4305888	800 h1

Order no.	Cross-section	a	b
	mm	mm	mm
4305888	9x9	9	100



ACCESSORIES

Order no.	Product name	Product type
4305891	Universal clamp, ø d1 = 4 mm, ø d2 = 8 mm, dovetail clamp	800 k8



800 k8;800 k3/8"

MarTest 800 hs8

Universal Holder with Dovetail Clamp

FEATURES

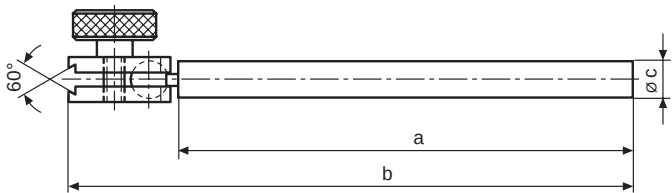
- For aligning and centering work pieces on machine tools
- Pivoting holding clamp for dovetail



TECHNICAL DATA

Order no.	Product type
4305886	800 hs8

Order no.	a	b	c
	mm	mm	mm
4305886	100	124	8



MarTest 801 v

Measuring and Centering Arm

FEATURES

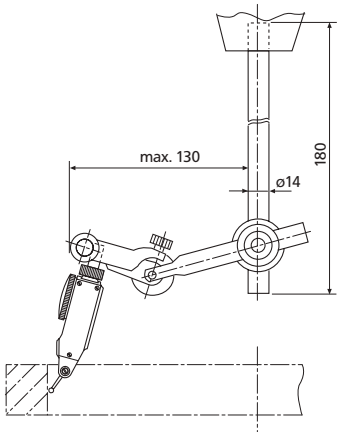
- For aligning and centering work pieces on machine tools
- Pivoting holding clamp with integrated precision adjustment
- Stainless steel struts



TECHNICAL DATA

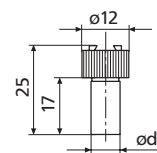
Order no.	Product type
4309070	801 v

Order no.	Mounting hole	Swivel range of mounting clamp
4309070	8 mm	180



ACCESSORIES

Order no.	Product name
4305865	Mounting shaft ø 8 mm



800 a6;800 a8;800 a3/8;800 a4;800 a1/4"

MarTest 801 p

Measuring Stand

FEATURES

Perfect for measurements with small dial indicators and dial test indicator measuring devices

- Pivoting holder with Ø 8 and Ø 4 mm mount and dovetail profile for dial test indicator measuring devices
- Stainless steel column
- Base with V-groove



TECHNICAL DATA

Order no.		Product type			
4309090		801 p			
Order no.	Base surface	Column diameter	Height	Mounting hole	V-angle
		mm	mm		°
4309090	65 x 40 mm	8	150	4 and 8 mm	140

MarTest 800 b

Universal Centering Support Frame

FEATURES

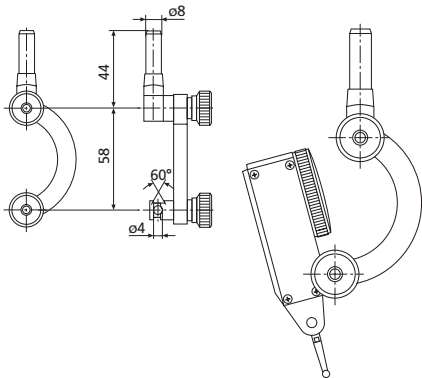
- For aligning and centering work pieces on machine tools
- Pivoting holding clamp



TECHNICAL DATA

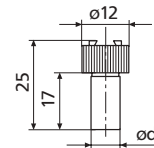
Order no.	Product type
4305893	800 b

Order no.	Mounting hole
4305893	4 mm



ACCESSORIES

Order no.	Product name	Product type
4305885	Mounting shaft $\varnothing$ 4 mm	800 a4



800 a6;800 a8;800 a3/8;800 a4;800 a1/4"