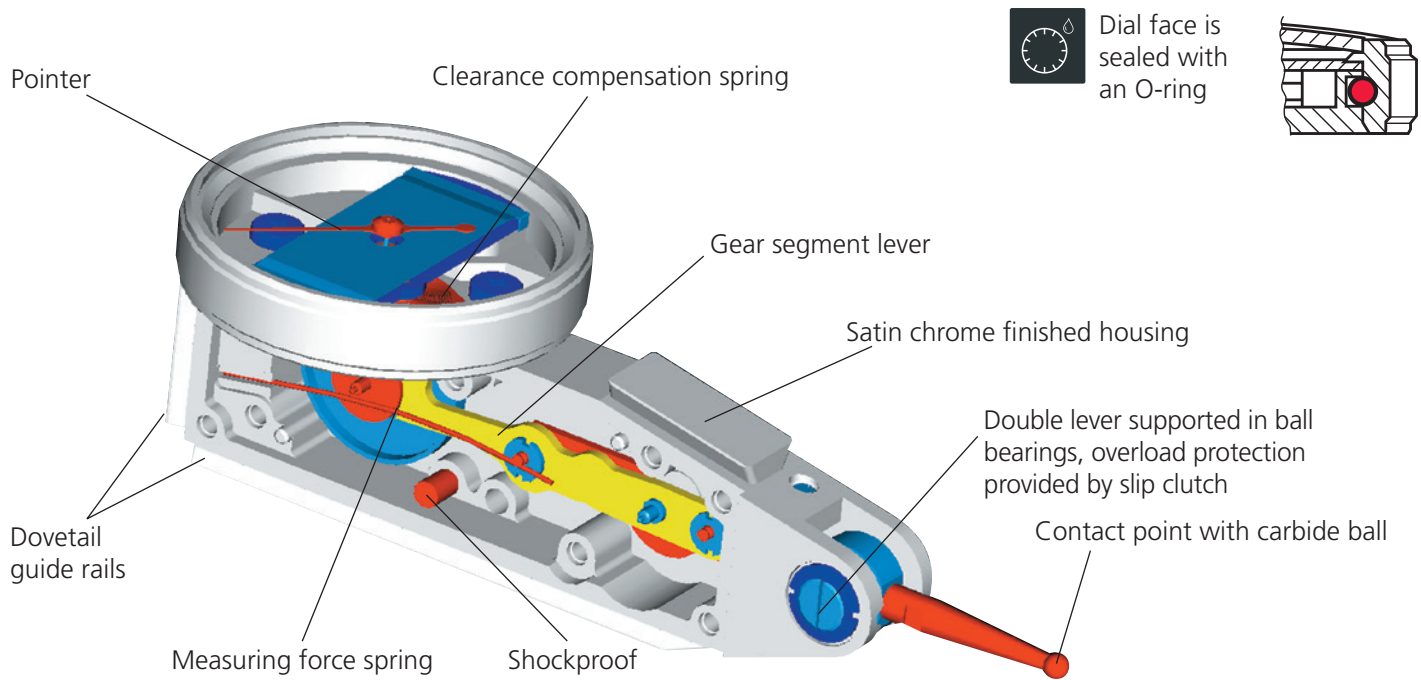


MarTest | Test Indicators and Touch Probes

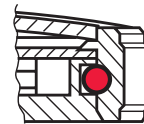
Dial test indicators from Mahr are ideal for delicate measuring tasks. Their sensitive measuring mechanism ensures maximum security and precision. The display has a hardened mineral glass panel and seal to protect it in harsh workshop conditions.



MarTest | Terms



Dial face is sealed with an O-ring



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

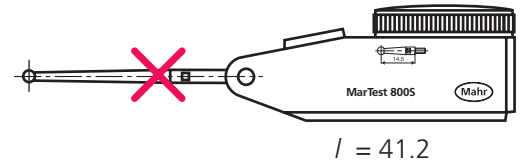
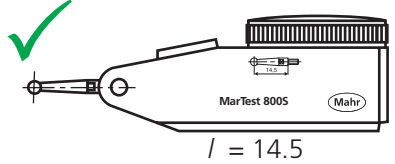
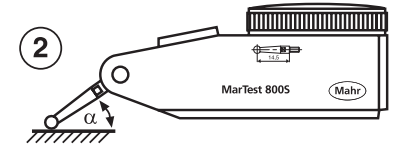
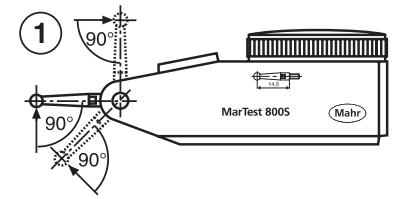
For accurate measurements the axis of the contact point must be perpendicular to the measuring direction (fig. 1). If this is not possible, it is necessary to multiply the reading on the dial with a correction factor, which depends on angle α (fig. 2). The correction factor is negligible for angles below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

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

Example:

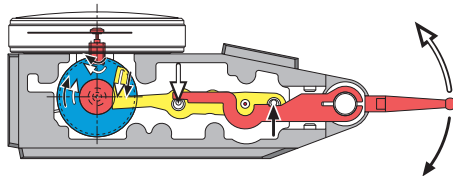
Angle α : 30° (estimated)
 Reading on dial: 0.38 mm
 Meas. values: 0.38 x 0.87 = 0.33 mm

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



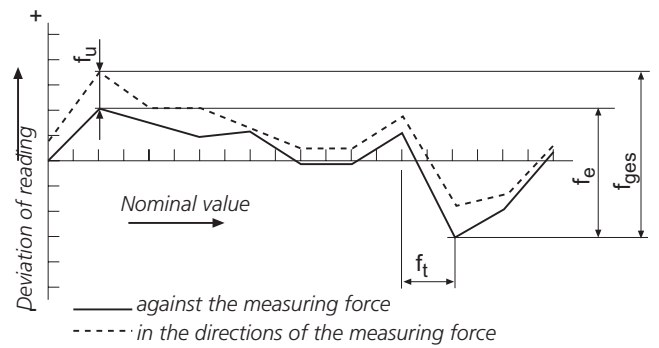
MarTest | Automatic Switch of Measuring Direction

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



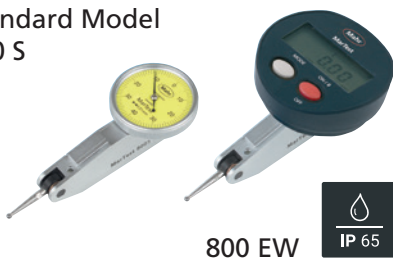
functional description

MarTest | Metrological Characteristics



MarTest | Versions

Standard Model
800 S



800 EW



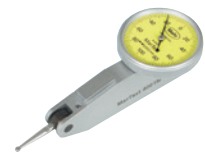
Extra Long Styli
800 SL



800 EWL



Higher Resolution
800 SM



Larger Measuring Range
800 SR



Horizontal Model
800 H



Vertical Model
800 V



MarTest 800 SGB / 800 SL / 800 SGL

Test Indicator



DIN 2270

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



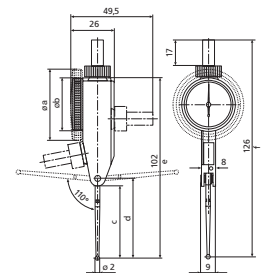
Application:

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

TECHNICAL DATA

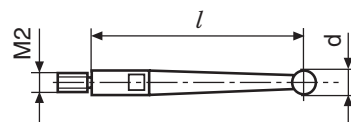
Order no.	4301300	4306200	4306250
Product type	800 SGB	800 SL	800 SGL
Measuring range	mm ± 0.5	mm ± 0.25	
Graduation value	mm	0.01	
Measuring surface		carbide	
Scale diameter	mm 38	mm 28	mm 38
Type of dial face	50-0-50	25-0-25	
Dial color		Yellow	
Measuring force	N	0.07	
Range per rev.	mm 1	mm 0.5	
Deviation range f_e	μm	10	
Total deviation range f_{ges}	μm	13	
Hysteresis f_u	μm 4	μm 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
4301300	mm 40.5	mm	mm 31.4	mm 35.7	mm 93	mm 117	mm 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

MarTest 800 SM / 800 SGM / 800 SGM-R / 800 SRM

Test Indicator



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



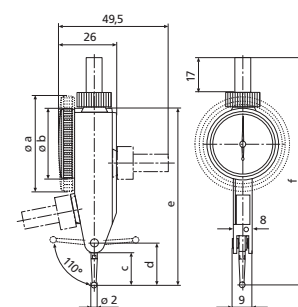
Application:

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

TECHNICAL DATA

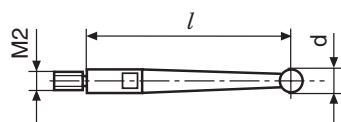
Order no.	4308150	4308200	4308205	4308250
Product type	800 SM	800 SGM	800 SGM-R	800 SRM
Measuring range	mm	± 0.1		± 0.2
Graduation value	mm	0.002		
Measuring surface		carbide	ruby	carbide
Scale diameter	mm	28	38	
Type of dial face		100-0-100		
Dial color		Yellow		
Measuring force	N	0.15		
Range per rev.	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

MarTest 800 SGE

Test Indicator



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



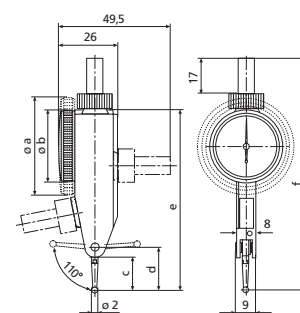
Application:

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

TECHNICAL DATA

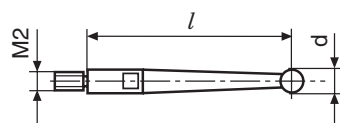
Order no.	4308220	
Product type	800 SGE	
Measuring range	mm	± 0.07
Graduation value	mm	0.001
Measuring surface	carbide	
Scale diameter	mm	38
Type of dial face	70-0-70	
Dial color	Yellow	
Measuring force	N	0.2
Range per rev.	mm	0.14
Deviation range f_e	μm	3
Total deviation range f_{ges}	μm	4
Hysteresis 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
4308220	mm	mm	mm	mm	mm	mm
	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

MarTest 801 SM / 801 SGM / 801 SRM / 801 SGE

Test Indicator



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



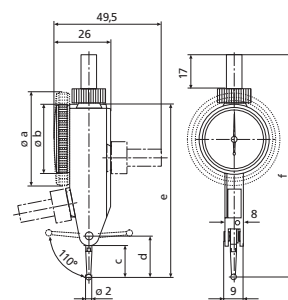
Application:

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

TECHNICAL DATA

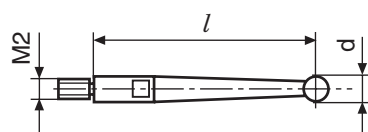
Order no.	4308960	4308970	4308980	4308985
Product type	801 SM	801 SGM	801 SRM	801 SGE
Measuring range	inch	$\pm .004''$	$\pm .008''$	$\pm .004''$
Graduation value	inch	.0001"		.00005"
Scale diameter	inch	1.1"	1.5"	
Type of dial face			4-0-4	
Dial color			Green	
Measuring force	N		0.15	
Range per rev.	inch		.008"	
Deviation range f_e	inch		.00012"	
Total deviation range f_{ges}	inch	.00016"	.0002"	.0005"
Hysteresis f_u	inch	.00008"	.00012"	
Partial measuring span f_t	inch		.00008"	
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

MarTest 801 S / 801 S1 / 801 SG / 801 SR / 801 SGI

Test Indicator

SHOCK
PROOF



DIN
2270

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



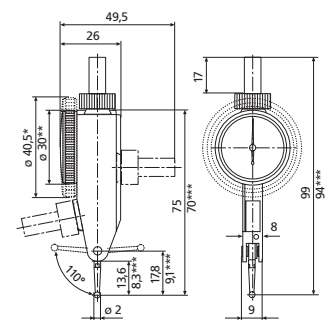
Application:

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

TECHNICAL DATA

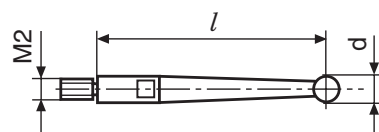
Order no.	4305950	4305960	4307950	4307960	4307970
Product type	801 S	801 S1	801 SG	801 SR	801 SGI
Measuring range	mm				± 0.3
Measuring range	inch	$\pm .015''$		$\pm .030''$	$\pm .015''$
Graduation value	mm				0.01
Graduation value	inch		.0005"		
Scale diameter	inch	1.1"	1.5"	1.1"	1.5"
Type of dial face			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

MarTest 801 SL / 801 SGL

Test Indicator



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



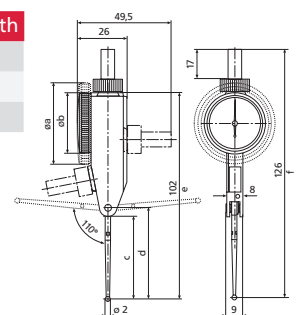
Application:

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

TECHNICAL DATA

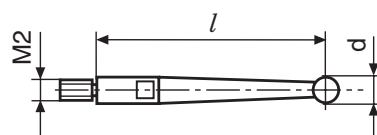
Order no.	4306950	4306960
Product type	801 SL	801 SGL
Measuring range	inch	$\pm .010''$
Graduation value	inch	.0005"
Scale diameter	inch	1.1" 1.5"
Type of dial face		10-0-10
Dial color		Green
Measuring force	N	0.07
Range per rev.	inch	.02"
Deviation range f_e	inch	.0004"
Total deviation range f_{ges}	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

MarTest 800 V

Test Indicator

SHOCK
PROOF



DIN
2270

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 800a8



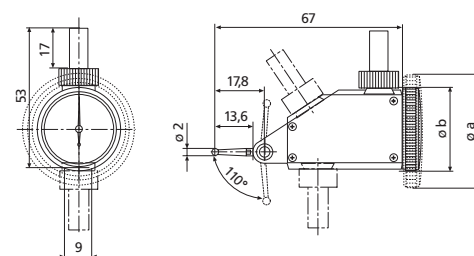
Application:

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

TECHNICAL DATA

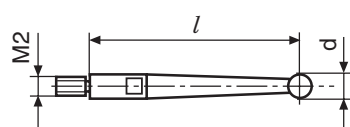
Order no.	4302200	
Product type	800 V	
Measuring range	mm	± 0.4
Graduation value	mm	0.01
Measuring surface	carbide	
Scale diameter	mm	28
Type of dial face	40–0–40	
Dial color	Yellow	
Measuring force	N	0.2
Range per rev.	mm	0.8
Deviation range f_e	μm	10
Total deviation range f_{ges}	μm	13
Hysteresis f_u	μm	3
Partial measuring span f_t	μm	5
Repeatability f_w	μm	3
Standard	DIN 2270	

Order no.	b	Measuring anvil length
	mm	mm
4302200	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

MarTest 800 VGM

Test Indicator



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 800a8



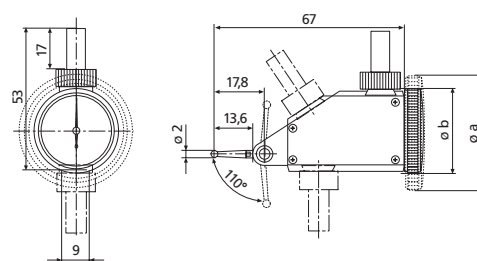
Application:

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

TECHNICAL DATA

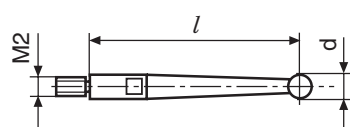
Order no.	4302250	
Product type	800 VGM	
Measuring range	mm	± 0.1
Graduation value	mm	0.002
Measuring surface	carbide	
Scale diameter	mm	38
Type of dial face	100-0-100	
Dial color	Yellow	
Measuring force	N	0.25
Range per rev.	mm	0.2
Deviation range f_e	μm	3
Total deviation range f_{ges}	μm	4
Hysteresis 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
4302250	mm	mm
	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

MarTest 801 VGM

Test Indicator



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



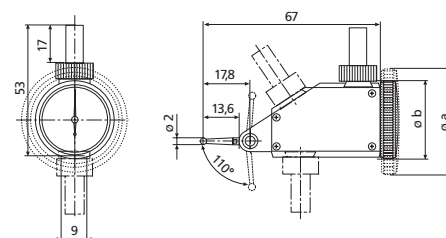
Application:

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

TECHNICAL DATA

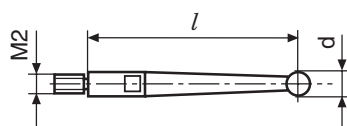
Order no.	4302960	
Product type	801 VGM	
Measuring range	inch	$\pm .004''$
Graduation value	inch	.0001''
Measuring surface	carbide	
Scale diameter	inch	1.5''
Type of dial face	4-0-4	
Dial color	Green	
Measuring force	N	0.25
Range per rev.	inch	.008''
Deviation range f_e	inch	.00012''
Total deviation 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

MarTest 800 H

Test Indicator

SHOCK
PROOF



DIN
2270

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



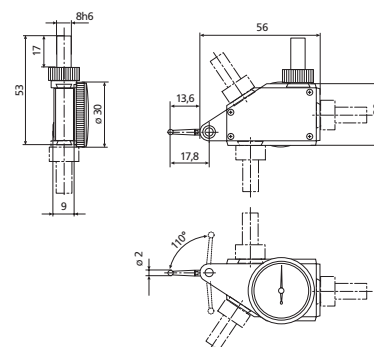
Application:

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

TECHNICAL DATA

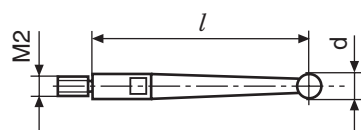
Order no.	4303200	
Product type		800 H
Measuring range	mm	± 0.4
Graduation value	mm	0.01
Measuring surface		carbide
Scale diameter	mm	28
Type of dial face		40-0-40
Dial color		Yellow
Measuring force	N	0.25
Range per rev.	mm	0.8
Deviation range f_e	μm	10
Total deviation range f_{ges}	μm	13
Hysteresis 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

MarTest 801 H

Test Indicator



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 800a3/8



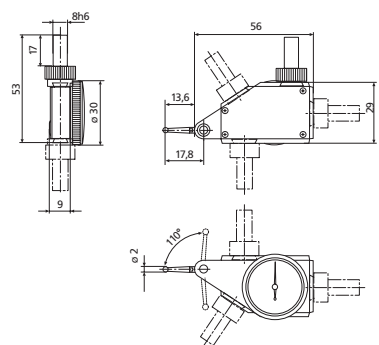
Application:

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

TECHNICAL DATA

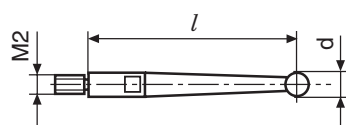
Order no.	4303950	
Product type	801 H	
Measuring range	inch	$\pm .015''$
Graduation value	inch	.0005''
Measuring surface	carbide	
Scale diameter	inch	1.1''
Type of dial face	15-0-15	
Dial color	Green	
Measuring force	N	0.25
Range per rev.	inch	.03''
Deviation range f_e	inch	.0004''
Total deviation range 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 \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

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. ø 2 mm, case
- SoftwareMarCom Professional free download: www.mahr.com/marcom (only for Mahr data cables and wireless systems with USB and RS232 interface)



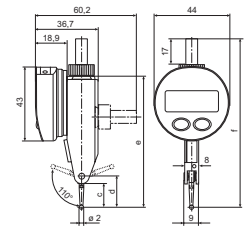
Application:

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

TECHNICAL DATA

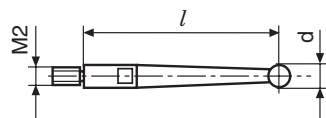
Order no.	4305120	4306120
Product type	800 EW	800 EWL
Measuring range	mm ± 0.4	± 0.25
Measuring range	inch ± .015"	± .010"
Resolution	mm 0.001	
Resolution	inch .00005"	
Measuring force	N 0.13	0.07
Deviation range f_e	µm 10	
Total deviation range f_{ges}	µm 13	
Hysteresis f_u	µm 5	7
Partial measuring 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 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
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 ø 2.0 mm, ruby, l = 14.5 mm	800 tsr
4306850	Stylus ø 2.0 mm, carbide, l = 41.24 mm	800 tl
4306851	Stylus ø 1.0 mm, carbide, l = 41.24 mm	800 tl
4306853	Stylus ø 3.0 mm, carbide, l = 41.24 mm	800 tl
4309053	Stylus ø 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