

FEATURES

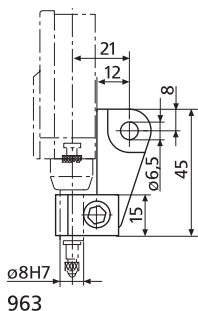
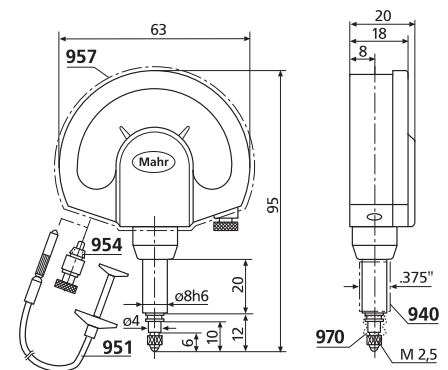
- Large, high contrast dial face
- Adjustable tolerance markers
- Lockable fine adjustment screw
- Shockproof movement
- Mounting shank and measuring spindle are both made of hardened stainless steel
- Measuring spindle is mounted in a high precision ball guide for minimal hysteresis
- Resistant to lateral forces (side play) acting on the measuring spindle
- Maximum sensitivity and accuracy are ensured by the jeweled movement in conjunction with the precision gears and pinions
- Box type protective housing
- Constant measuring force
- Measuring spindle can be retracted with either a screw in cable release or with a lifting knob
- Package contains: case



TECHNICAL DATA

Order no.	4334000	4334005	4334102	4334103	4335000	4335005
Product type	1003	1003 T	1002	1003	1002	1002 T
Measuring range	± 50		± 25	± 50	± 25	
Graduation value	1		0.5	1	0.5	
Type of dial face	50-0-50		25-0-25	50-0-50	25-0-25	
Error limit G _e	1		0.5	1	0.5	
Error limit G _{ges}	1.2		0.6	1.2	0.6	
Error limit G _t	0.7		0.4	0.7	0.4	
Hysteresis f _u	0.5		0.3	0.5	0.3	
Repeatability f _w	0.5		0.3	0.5	0.3	
Standard	DIN 879-1		Factory standard	DIN 879-1	Factory standard	
Overtravel	mm			2.8		
Measuring force	N			1		
Scale diameter	mm			50		
Dial color	Yellow		White		Yellow	
IP protection category:	IP 54		IP 54		IP 54	

Order no.	Mounting shaft	Scale diameter
	mm	mm
4334000	8	50
4334005	8	50
4334102	8	50
4334103	8	50
4335000	8	50
4335005	8	50



ACCESSORIES

Order no.	Product name	Product type
4310103	Adapter bushing (.375" / 8 mm)	940
4372000	Cable release (250 mm)	951
4372030	Lifting knob	954
4373030	Splash guard cover	957
4334786	Rubber bellows	970
4375002	Lug back to mount on mounting shank 8h6 mm	963

Millimes 1004 / 1004 T / 1003 XL / 1003 XLT

Mechanical Dial Comparator



FEATURES

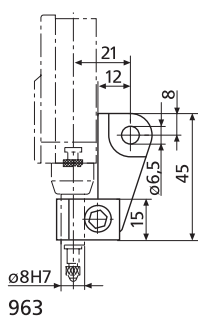
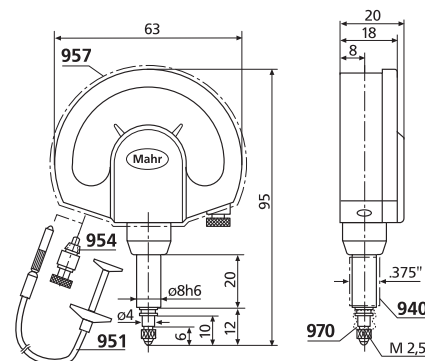
- Large, high contrast dial face
- Adjustable tolerance markers
- Lockable fine adjustment screw
- Shockproof movement
- Mounting shank and measuring spindle are both made of hardened stainless steel
- Measuring spindle is mounted in a high precision ball guide for minimal hysteresis
- Resistant to lateral forces (side play) acting on the measuring spindle
- Maximum sensitivity and accuracy are ensured by the jeweled movement in conjunction with the precision gears and pinions
- Box type protective housing
- Constant measuring force
- Measuring spindle can be retracted with either a screw in cable release or with a lifting knob
- Package contains: case



TECHNICAL DATA

Order no.	4333000	4333005	4334001	4334006
Product type	1004	1004 T	1003 XL	1003 XLT
Measuring range	μm ± 130			
Graduation value	μm 5		μm 2	
Type of dial face	130–0–130			
Error limit G _e	μm 3.5		μm 2	
Error limit G _{ges}	μm 4		μm 2.4	
Error limit G _t	μm 3		μm 1.4	
Hysteresis f _u	μm		μm 1	
Repeatability f _w	μm		μm 1	
Standard	Factory standard			
Overtravel	mm		mm 2.5	
Measuring force	N 1			
Scale diameter	mm		mm 50	
Dial color	White		Yellow	
IP protection category:	IP 54		IP 54	

Order no.	Mounting shaft	Scale diameter
	mm	mm
4333000	8	50
4333005	8	50
4334001	8	50
4334006	8	50



ACCESSORIES

Order no.	Product name	Product type
4310103	Adapter bushing (.375" / 8 mm)	940
4372000	Cable release (250 mm)	951
4372030	Lifting knob	954
4373030	Splash guard cover	957
4334786	Rubber bellows	970
4375002	Lug back to mount on mounting shank 8h6 mm	963

FEATURES

- Large, high contrast dial face
- Adjustable tolerance markers
- Lockable fine adjustment screw
- Shockproof movement
- Mounting shank and measuring spindle are both made of hardened stainless steel
- Measuring spindle is mounted in a high precision ball guide for minimal hysteresis
- Resistant to lateral forces (side play) acting on the measuring spindle
- Maximum sensitivity and accuracy are ensured by the jeweled movement in conjunction with the precision gears and pinions
- Box type protective housing
- Constant measuring force
- Measuring spindle can be retracted with either a screw in cable release or with a lifting knob
- Package contains: case

Application:

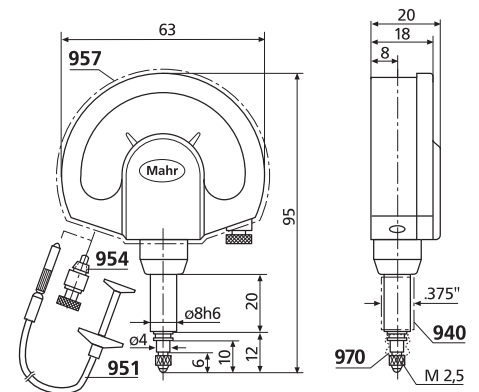
- Models with reduced / increased measuring force
- for measurements on thin walled, soft materials or delicate surfaces



TECHNICAL DATA

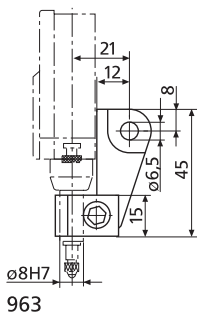
Order no.	4334075 4334070 4334050 4334076 4334071 4334010 4334011							
Product type	1003							
Measuring range	μm	± 50						
Graduation value	μm	1						
Type of dial face	50-0-50							
Error limit G _e	μm	1						
Error limit G _{ges}	μm	1.2						
Error limit G _t	μm	0.7						
Hysteresis f _u	μm	0.5						
Repeatability f _w	μm	0.5						
Standard	DIN 879-1							Factory standard
Overtravel	mm	2.8						
Measuring force	N	0.3	0.4	0.5	0.6	0.7	2	3
Scale diameter	mm	50						
Dial color	Yellow							

Order no.	Mounting shaft	Scale diameter
	mm	mm
4334075	8	50
4334070	8	50
4334050	8	50
4334076	8	50
4334071	8	50
4334010	8	50
4334011	8	50



ACCESSORIES

Order no.	Product name	Product type
4310103	Adapter bushing (.375" / 8 mm)	940
4372000	Cable release (250 mm)	951
4372030	Lifting knob	954
4373030	Splash guard cover	957
4334786	Rubber bellows	970
4375002	Lug back to mount on mounting shank 8h6 mm	963



Millimess 1000 A / 1000 B

Mechanical Dial Comparator

FEATURES

- Large, high contrast dial face
- Adjustable tolerance markers
- Lockable fine adjustment screw
- Shockproof movement
- Mounting shank and measuring spindle are both made of hardened stainless steel
- Measuring spindle is mounted in a high precision ball guide for minimal hysteresis
- Resistant to lateral forces (side play) acting on the measuring spindle
- Maximum sensitivity and accuracy are ensured by the jeweled movement in conjunction with the precision gears and pinions
- Box type protective housing
- Constant measuring force
- Measuring spindle can be retracted with either a screw in cable release or with a lifting knob
- **Package contains:** cable release, case

Application:

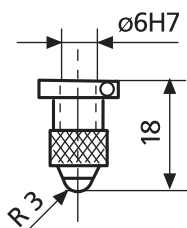
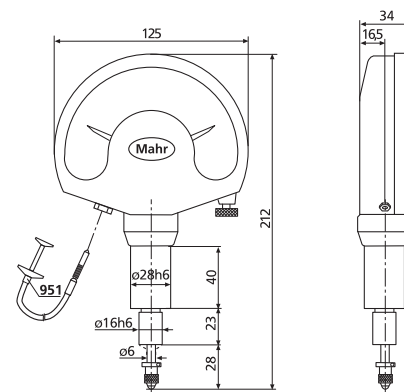
- Very clear, reliable and fatigue-free readings due to extra-large display.
- Ideal for test stations at which high volume production parts are measured or where the display can only be read from a distance.
- For use in a stable measuring table. We recommend: MarStand 824 GT measuring table
- M2.5 thread on end of measuring pin for optional standard anvils



TECHNICAL DATA

Order no.		4338100	4339100
Product type		1000 A	1000 B
Measuring range	µm	± 120	± 50
Graduation value	µm		1
Type of dial face		120–0–120	50–0–50
Error limit G_e	µm		1.5
Error limit G_{ges}	µm		2
Error limit G_t	µm		0.7
Hysteresis f_u	µm		1
Repeatability f_w	µm		0.5
Standard		Factory standard	
Overtravel	mm	4	
Measuring force	N	3.5	
Scale diameter	mm	110	
Dial color		Yellow	

Order no.	Mounting shaft	Scale diameter
	mm	mm
4338100	28	110
4339100	28	110



ACCESSORIES

Order no.	Product name	Product type
4362001	Contact point, Steel ball	921
4362002	Contact point, Ruby ball	921 R
4372000	Cable release (250 mm)	951
4338008	Rubber bellows for 1000 A/B	

Mechanical Dial Comparator

FEATURES

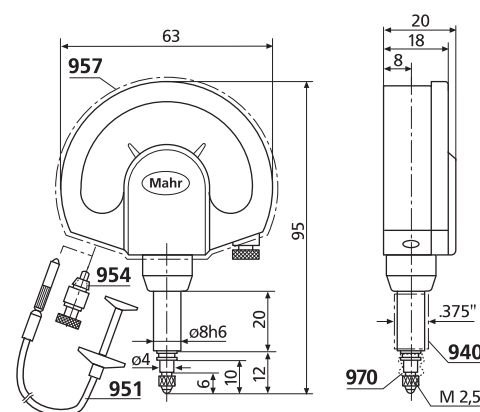
- Large, high contrast dial face
- Adjustable tolerance markers
- Lockable fine adjustment screw
- Shockproof movement
- Mounting shank and measuring spindle are both made of hardened stainless steel
- Measuring spindle is mounted in a high precision ball guide for minimal hysteresis
- Resistant to lateral forces (side play) acting on the measuring spindle
- Maximum sensitivity and accuracy are ensured by the jeweled movement in conjunction with the precision gears and pinions
- Box type protective housing
- Constant measuring force
- Measuring spindle can be retracted with either a screw in cable release or with a lifting knob
- **Package contains:** case, adapter bush 940, 8 mm to 3/8"



TECHNICAL DATA

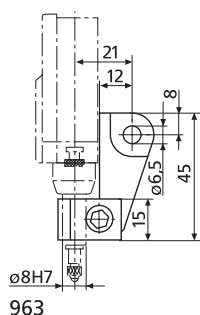
Order no.	4335900	4335905	4334900	4334905	4333900	4333905	4332900	4332905
Product type	1002 Z	1002 ZT	1003 Z	1003 ZT	1004 Z	1004 ZT	1010 Z	1010 ZT
Measuring range	inch	± .0010"	± .0020"	± .0050"	± .0100"			
Graduation value	inch	.00002"	.00005"	.0001"	.0005"			
Type of dial face		.001"–0–.001"	.002"–0–.002"	.005"–0–.005"	.01"–0–.01"			
Error limit G_e	inch	.00002"	.00005"	.0001"	.00035"			
Error limit G_{ges}	inch	.00003"	.00006"	.00012"	.0004"			
Error limit G_t	inch	.000014"	.000035"	.00005"	.00025"			
Hysteresis f_u	inch	.00001"	.000025"	.00003"	.0001"			
Repeatability f_w	inch	.00001"	.000025"	.00003"	.0001"			
Standard		Factory standard						
Overtravel	mm						2.5	
Measuring force	N	1						
Scale diameter	mm	50						
Dial color		White						
IP protection category:		IP 54	IP 54	IP 54	IP 54	IP 54	IP 54	IP 54

Order no.	Mounting shaft	Scale diameter
	mm	mm
4335900	8	50
4335905	8	50
4334900	8	50
4334905	8	50
4333900	8	50
4333905	8	50
4332900	8	50
4332905	8	50



ACCESSORIES

Order no.	Product name	Product type
4310103	Adapter bushing (.375" / 8 mm)	940
4372000	Cable release (250 mm)	951
4372030	Lifting knob	954
4373030	Splash guard cover	957
4334786	Rubber bellows	970
4375002	Lug back to mount on mounting shank 8h6 mm	963



Millimess 1150 N / 1150 NT

Mechanical Dial Comparator with Limit Contacts

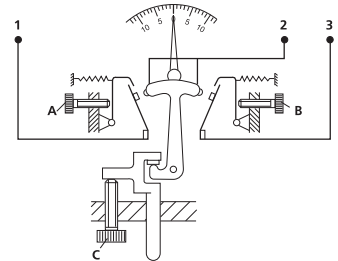


FEATURES

- Large, high contrast dial face
- Adjustable tolerance markers
- Lockable fine adjustment screw
- Shockproof movement
- Mounting shank and measuring spindle are both made of hardened stainless steel
- Measuring spindle is mounted in a high precision ball guide for minimal hysteresis
- Resistant to lateral forces (side play) acting on the measuring spindle
- Maximum sensitivity and accuracy are ensured by the jeweled movement in conjunction with the precision gears and pinions
- Box type protective housing
- Constant measuring force
- Adjustable limit contacts made from high grade precious metal
- Limit contacts are particularly well protected against vibration and mechanical overload
- **Package contains:** case, instruction manual, adjusting knob 953, connection cable 1.2 m

Application:

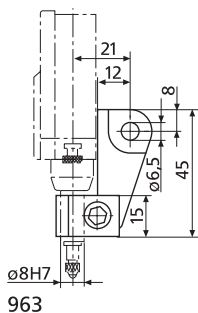
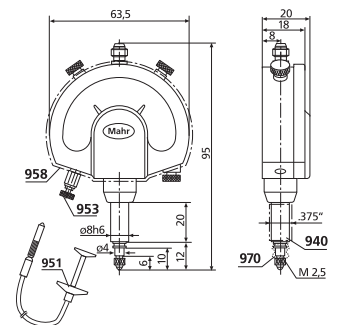
- Can be applied, for example, as tolerance control or as a precision contactor in automatic control systems



TECHNICAL DATA

Order no.	4342100	4342105
Product type	1150 N	1150 NT
Measuring range	mm	±1.5
Graduation value	mm	0.05
Type of dial face	15–0–15	
Error limit G_e	µm	35
Error limit G_{ges}	µm	60
Error limit G_t	µm	25
Hysteresis f_u	µm	17
Repeatability f_w	µm	17
Standard	Factory standard	
Overtravel	mm	0.3
Measuring force	N	1.5
Scale diameter	mm	50
Dial color	White	
IP protection category:	IP 54	
Maximum switching capacity	mW	240
Maximum switching voltage	V	24
Maximum switching current	mA	100
Switching accuracy with non-inductive load of 10 mA/24 V	µm	7

Order no.	Mounting shaft	Scale diameter
	mm	mm
4342100	8	50
4342105	8	50



ACCESSORIES

Order no.	Product name	Product type
4372000	Cable release (250 mm)	951
4372020	Setting knob for setting the limit contacts without an additional setting standard	953
4372030	Lifting knob	954
4373031	Splash guard cover	958
4310103	Adapter bushing (.375" / 8 mm)	940
4334786	Rubber bellows	970
4375002	Lug back to mount on mounting shank 8h6 mm	963
4345694	Connection cable (5 m), axial	
4345695	Connection cable (1.2 m), axial	