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Dial Gauge M 2 T

Reading **0.01 mm**
Range **10 mm**
Bezel-Ø **58 mm**

Accuracy according to DIN 878
Dimensions according to DIN EN ISO 463

Dial Gauge MU 52 T

Reading **0.01 mm**
Range **10 mm**
Bezel-Ø **58 mm**

Strengthened rack-Ø 5 mm

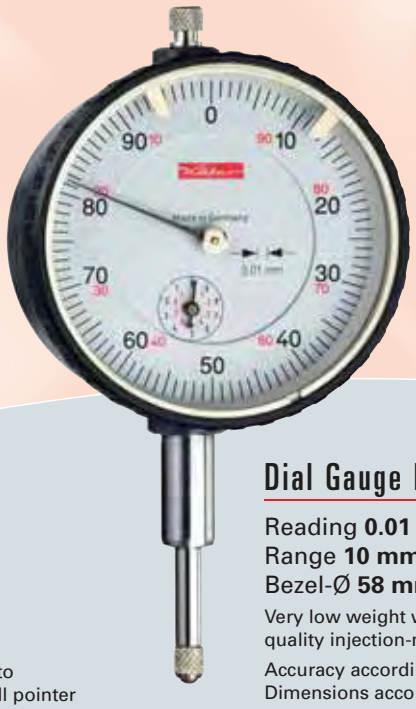
Accuracy according
to DIN 878
Dimensions according
to DIN EN ISO 463

Dial Gauge M 2 TK

Reading **0.01 mm**
Range **10 mm**
Bezel-Ø **58 mm**

Particularly clear reading due to concentrically positioned small pointer

Accuracy according to DIN 878
Dimensions according to DIN EN ISO 463



Dial Gauge M 2 X

Reading **0.01 mm**
Range **10 mm**
Bezel-Ø **58 mm**

Very low weight with the use of a polyamide quality injection-moulded casing

Accuracy according to DIN 878
Dimensions according to DIN EN ISO 463

Precision Dial Gauges

The well thought-out design, accurate components and robust construction of our Precision Dial Gauge series offer reliability, durability and a long work life.
Käfer reserves the right to modify or change the design of products shown in this brochure, without notice. The right also includes changes in specifications.

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Dial Gauge MU 52 ST

shockproof
Reading **0.01 mm**
Range **10 mm**
Bezel-Ø **58 mm**

Strengthened rack-Ø 5 mm

Accuracy according to DIN 878
Dimensions according to
DIN EN ISO 463

Dial Gauge M 2 TOP S

shockproof
Reading **0.01 mm**
Range **10 mm**
Bezel-Ø **58 mm**

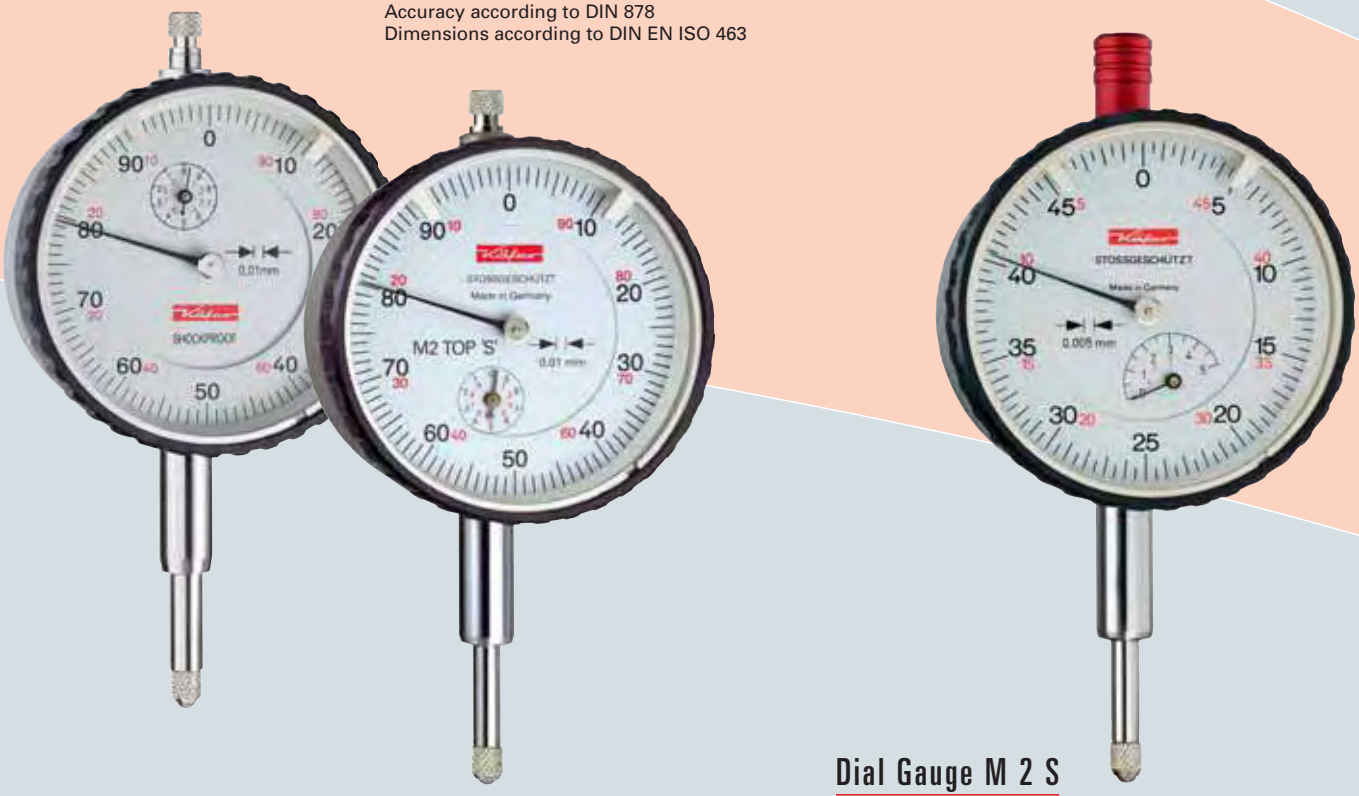
Accuracy according to DIN 878
Dimensions according to DIN EN ISO 463

Dial Gauge M 3 a S

shockproof
Reading **0.005 mm**
Range **5 mm**
Bezel-Ø **58 mm**

With metal lifting cap to raise the plunger easily and to prevent ingress of contaminants

Accuracy according to DIN 878
Dimensions according to DIN EN ISO 463



Dial Gauge M 2 S

shockproof
Reading **0.01 mm**
Range **10 mm**
Bezel-Ø **58 mm**

With fine adjustment of the pointer by moving of the knurled screw below the threaded protection sleeve

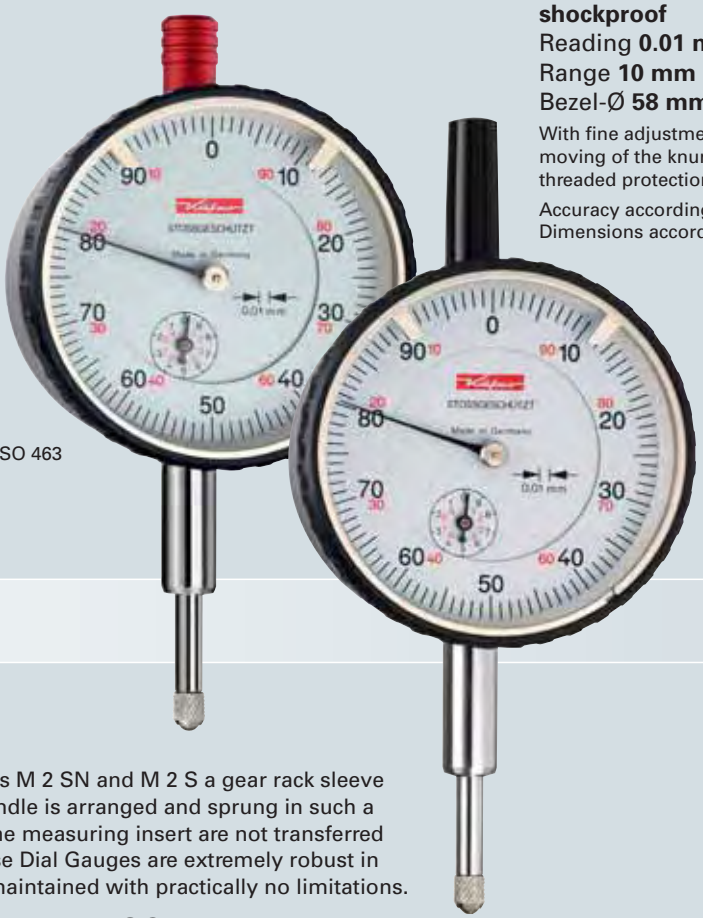
Accuracy according to DIN 878
Dimensions according to DIN EN ISO 463

Dial Gauge M 2 SN

shockproof
Reading **0.01 mm**
Range **10 mm**
Bezel-Ø **58 mm**

With metal lifting cap to raise the plunger easily and to prevent ingress of contaminants

Accuracy according to DIN 878
Dimensions according to DIN EN ISO 463



With the Precision Dial Gauges M 2 SN and M 2 S a gear rack sleeve covering the length of the spindle is arranged and sprung in such a way that the shocks against the measuring insert are not transferred to the gauge movement. These Dial Gauges are extremely robust in operation. Their precision is maintained with practically no limitations.

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With almost all Dial Gauges shown on this page an effective shockproof gear protects their movements even from hard shocks on the spindle. Shocks against the measuring insert are not directly transferred to the gauge movement.

A similar series of Dial Gauges, but not shockproof, is also available. Instead of an S they have a T in their type designations (example: GM 80/100 T).

For the range of only 30 mm you have the option of our low cost line designed and mounted by Käfer Dial Gauges Shanghai: MU 52/30 T and MU 52/30 S.

Dial Gauge M 2/30 S

shockproof
Reading **0.01 mm**
Range **30 mm**
Bezel-Ø **58 mm**
Accuracy according to Käfer manufacturing standard 1.0200.9.0014
Dimensions according to DIN EN ISO 463

Dial Gauge M 2/20 T

Reading **0.01 mm**
Range **20 mm**
Bezel-Ø **58 mm**
Accuracy according to Käfer manufacturing standard 1.0200.9.0014
Dimensions according to DIN EN ISO 463

Dial Gauge GM 80/100 S

shockproof
Reading **0.01 mm**
Range **100 mm**
Bezel-Ø **80 mm**
Stem-Ø **10 mm h 6**
Accuracy according to Käfer manufacturing standard 1.0200.9.0002

Dial Gauge M 2/80 S

shockproof
Reading **0.01 mm**
Range **80 mm**
Bezel-Ø **58 mm**
Accuracy according to Käfer manufacturing standard 1.0200.9.0002
Dimensions according to DIN EN ISO 463 (except of L_2)

Dial Gauge M 2/50 S

shockproof
Reading **0.01 mm**
Range **50 mm**
Bezel-Ø **58 mm**
Accuracy according to Käfer manufacturing standard 1.0200.9.0002
Dimensions according to DIN EN ISO 463 (except of L_2)

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Dial Gauge MU 28

Reading **0.01 mm**
Range **3.5 mm**
Bezel-Ø **28 mm**

Accuracy according to Käfer manufacturing standard 0.0200.9.0012

Dimensions according to DIN EN ISO 463

Dial Gauge KM 6 T

Reading **0.01 mm**
Range **3 mm**
Bezel-Ø **32 mm**

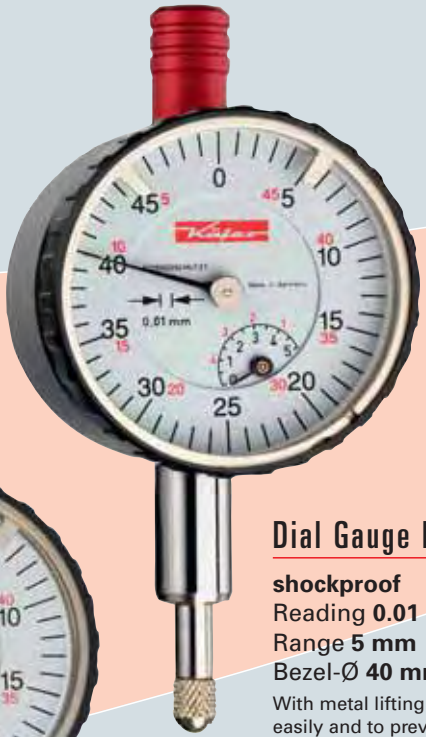
Accuracy according to DIN 878
Dimensions according to DIN EN ISO 463 (except of L_2)

Dial Gauge KM 4/10 TK - 100

Reading **0.01 mm**
Range **10 mm**
Bezel-Ø **40 mm**

Particularly clear reading due to concentrically arranged small pointer
With metal lifting cap to raise the plunger easily and to prevent ingress of contaminants

Accuracy according to DIN 878
Dimensions according to DIN EN ISO 463



Dial Gauge KM 4/5 S

shockproof
Reading **0.01 mm**
Range **5 mm**
Bezel-Ø **40 mm**

With metal lifting cap to raise the plunger easily and to prevent ingress of contaminants

Accuracy according to DIN 878
Dimensions according to DIN EN ISO 463

Dial Gauge KM 4/5 TOP S

shockproof
Reading **0.01 mm**
Range **5 mm**
Bezel-Ø **40 mm**

Accuracy according to DIN 878
Dimensions according to DIN EN ISO 463

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Dial Gauge Feinika FM 1101

shockproof
Reading **0.001 mm**
Range **1 mm**
Bezel-Ø **58 mm**

With lifting cap to raise the plunger easily and to prevent ingress of contaminants

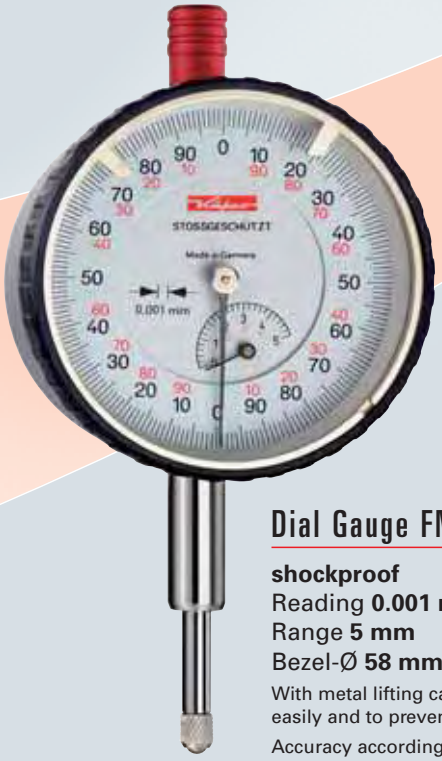
Accuracy according to Käfer manufacturing standard 0.0500.9.0010
Dimensions according to DIN EN ISO 463

Dial Gauge Feinika KM 1101

shockproof
Reading **0.001 mm**
Range **1 mm**
Bezel-Ø **40 mm**

With lifting cap to raise the plunger easily and to prevent ingress of contaminants

Accuracy according to Käfer manufacturing standard 0.0500.9.0010
Dimensions according to DIN EN ISO 463



Dial Gauge FM 1000/5 S

shockproof
Reading **0.001 mm**
Range **5 mm**
Bezel-Ø **58 mm**

With metal lifting cap to raise the plunger easily and to prevent ingress of contaminants

Accuracy according to Käfer manufacturing standard 0.0500.9.0001
Dimensions according to DIN EN ISO 463

Dial Gauge FM 1000 T

Reading **0.001 mm**
Range **1 mm**
Bezel-Ø **58 mm**

With metal lifting cap to raise the plunger easily and to prevent ingress of contaminants

Accuracy according to Käfer manufacturing standard 0.0500.9.0001
Dimensions according to DIN EN ISO 463

Dial Gauge KM 500 S

shockproof
Reading **0.002 mm**
Range **1 mm**
Bezel-Ø **40 mm**

With metal lifting cap to raise the plunger easily and to prevent ingress of contaminants

Accuracy according to Käfer manufacturing standard 0.0500.9.0001
Dimensions according to DIN EN ISO 463

Dial Gauge M 10 a

Reading **0.1 mm**
Range **10 mm**
Bezel-Ø **58 mm**

Accuracy according to Käfer manufacturing standard 0.0100.9.0004
Dimensions according to DIN EN ISO 463

Dial Gauge KM 10 a

Reading **0.1 mm**
Range **10 mm**
Bezel-Ø **40 mm**

Accuracy according to Käfer manufacturing standard 0.0100.9.0004
Dimensions according to DIN EN ISO 463

Dial Gauge M 10 c

Reading **0.1 mm**
Range **30 mm**
Bezel-Ø **58 mm**

Accuracy according to Käfer manufacturing standard 0.0100.9.0004
Dimensions according to DIN EN ISO 463

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Dial Gauge SI-90

shockproof
Reading **0.01 mm**
Range **0.8 mm**
Overtravel **9 mm**
Bezel-Ø **58 mm**

With metal lifting cap to raise the plunger easily and to prevent ingress of contaminants

Accuracy according to DIN 878
Dimensions according to DIN EN ISO 463

Dial Gauge SI-45

shockproof
Reading **0.01 mm**
Range **0.4 mm**
Overtravel **4.5 mm**
Bezel-Ø **40 mm**

With metal lifting cap to raise the plunger easily and to prevent ingress of contaminants

Accuracy according to DIN 878
Dimensions according to DIN EN ISO 463

Oil, water and dust contamination is often unavoidable in the work environment. Our range of hermetically sealed waterproof Dial Gauges has been specially designed to withstand these conditions. These extremely robust Precision Dial Gauges which conform to protection class IP 67 bear the order code 'W'.

Dial Gauge M 2 SW

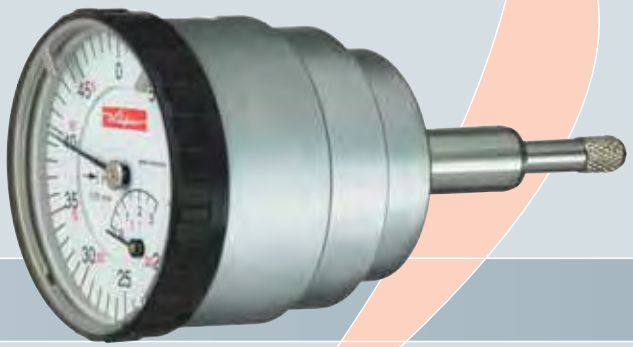
shockproof, waterproof
Reading **0.01 mm**
Range **10 mm**
Bezel-Ø **61.5 mm**
Accuracy according to DIN 878

Dial Gauge SI-90 W

shockproof, waterproof
Reading **0.01 mm**
Range **0.8 mm**
Overtravel **9 mm**
Bezel-Ø **61.5 mm**
Accuracy according to DIN 878

Dial Gauge M 2 R

with back plunger
Reading **0.01 mm**
Range **3 mm**
Bezel-Ø **58 mm**
Accuracy according to Käfer manufacturing standard 0.0500.9.0006
Dimensions according to DIN EN ISO 463



Dial Gauge KM 4 R

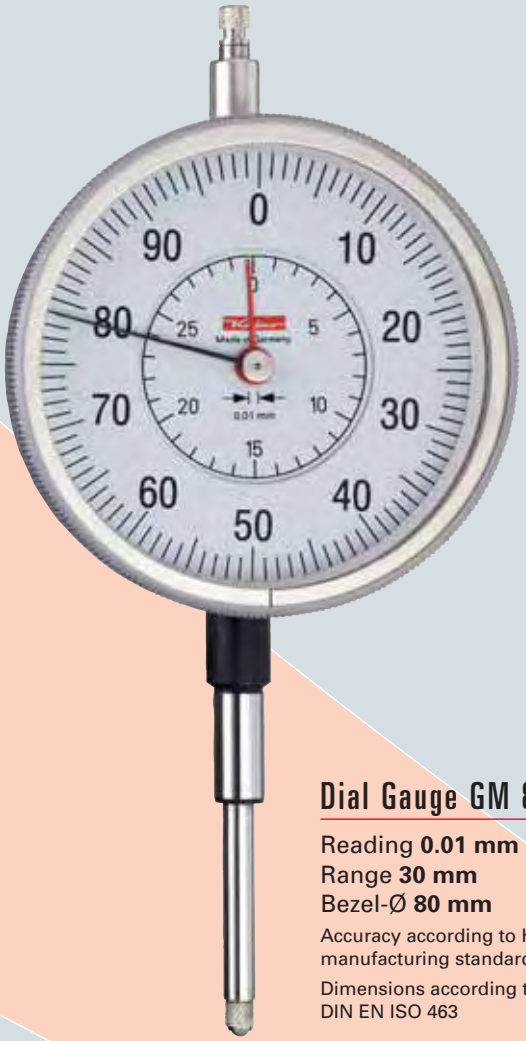
with back plunger
Reading **0.01 mm**
Range **3 mm**
Bezel-Ø **40 mm**
Accuracy according to Käfer manufacturing standard 0.0500.9.0006
Dimensions according to DIN EN ISO 463

Dial Gauge GM 80 S

shockproof
Reading **0.01 mm**
Range **10 mm**
Bezel-Ø **80 mm**

Accuracy according to Käfer manufacturing standard 0.0200.9.0016

Dimensions according to DIN EN ISO 463



Dial Gauge GM 80/30 T

Reading **0.01 mm**
Range **30 mm**
Bezel-Ø **80 mm**

Accuracy according to Käfer manufacturing standard 1.0200.9.0014

Dimensions according to DIN EN ISO 463

Dial Gauge GM 80 SW

shockproof, waterproof
Reading **0.01 mm**
Range **10 mm**
Bezel-Ø **80 mm**

Accuracy according to Käfer manufacturing standard 0.0200.9.0016

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Precision Dial Gauges

The well thought-out design, accurate components and robust construction of our Precision Dial Gauge series offer reliability, durability and long work life. The standard features that enhance the quality across our entire product range are:

- Calibrations of all Dial Gauges are traceable to national and international standards.
- The final quality control for the whole series includes visual inspection and full mechanical functions' tests.
- Supplied with Declaration of Conformity and Confirmation of Traceability.
- Materials and components selected specifically to ensure a long work life.

Technical merits

of metric Käfer Precision Dial Gauges

Specifications of the Technical Data of Metric Dial Gauges

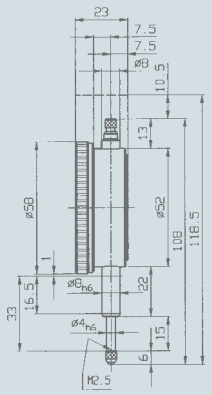
Model	Reading	Range per revolution	Range	Bezel-Ø	Stem-Ø	Special Feature
KM 5 a	0.1 mm	5 mm	5 mm	40 mm	8 h 6	
KM 10 a	0.1 mm	10 mm	10 mm	40 mm	8 h 6	
KM 5 a R	0.1 mm	5 mm	5 mm	40 mm	8 h 6	Back plunger
M 10 a	0.1 mm	10 mm	10 mm	58 mm	8 h 6	
M 10 b	0.1 mm	10 mm	20 mm	58 mm	8 h 6	
M 10 c	0.1 mm	10 mm	30 mm	58 mm	8 h 6	
M 10 d	0.1 mm	10 mm	50 mm	58 mm	8 h 6	
SI-9/0.1	0.1 mm	-	8 mm	58 mm	8 h 6	Error free
GM 10/80	0.1 mm	10 mm	20 mm	80 mm	8 h 6	
MU 28	0.01 mm	0.5 mm	3.5 mm	28 mm	8 h 6	
KM 6 T	0.01 mm	0.5 mm	3 mm	32 mm	8 h 6	
KM 4 T	0.01 mm	0.5 mm	3 mm	40 mm	8 h 6	
KM 4 T – 100	0.01 mm	1.0 mm	3 mm	40 mm	8 h 6	
KM 4 TOP	0.01 mm	0.5 mm	3 mm	40 mm	8 h 6	
KM 4 X	0.01 mm	0.5 mm	3 mm	40 mm	8 h 6	Light casing from polyamide
KM 4 S	0.01 mm	0.5 mm	3 mm	40 mm	8 h 6	Shockproof
KM 4 S – 100	0.01 mm	1.0 mm	3 mm	40 mm	8 h 6	Shockproof
KM 4 TOP ‚S'	0.01 mm	0.5 mm	3 mm	40 mm	8 h 6	Shockproof
KM 4 XS	0.01 mm	0.5 mm	3 mm	40 mm	8 h 6	Shockproof, light casing
KM 4/5 T	0.01 mm	0.5 mm	5 mm	40 mm	8 h 6	
KM 4/5 TOP	0.01 mm	0.5 mm	5 mm	40 mm	8 h 6	
KM 4/5 X	0.01 mm	0.5 mm	5 mm	40 mm	8 h 6	Light casing from polyamide
KM 4/5 S	0.01 mm	0.5 mm	5 mm	40 mm	8 h 6	Shockproof
KM 4/5 TOP ‚S'	0.01 mm	0.5 mm	5 mm	40 mm	8 h 6	Shockproof
KM 4/10 TK – 100	0.01 mm	1 mm	10 mm	40 mm	8 h 6	Concentric hands

Specifications of the Technical Data of Metric Dial Gauges

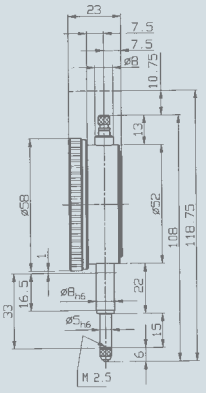
Model	Reading	Range per revolution	Range	Bezel-Ø	Stem-Ø	Special Feature
KM 4 R	0.01 mm	0.5 mm	3 mm	40 mm	8 h 6	Back plunger
KM 4/5 R	0.01 mm	0.5 mm	5 mm	40 mm	8 h 6	Back plunger
SI-45	0.01 mm	-	0.4 mm	40 mm	8 h 6	Error free, shockproof
SI-45 W	0.01 mm	-	0.4 mm	44.5 mm	8 h 6	Error free, waterproof, shockproof
SI-45/0.8	0.01 mm	-	0.8 mm	40 mm	8 h 6	Error free, shockproof
KM 4 SW	0.01 mm	0.5 mm	3 mm	44.5 mm	8 h 6	Waterproof, shockproof
KM 4/5 SW	0.01 mm	0.5 mm	5 mm	44.5 mm	8 h 6	Waterproof, shockproof
KM 4 S wa	0.01 mm	0.5 mm	3 mm	40 mm	8 h 6	Water protected, shockproof
KM 4 T Magnet	0.01 mm	0.5 mm	3 mm	40 mm	8 h 6	Magnetic back
M 2 T	0.01 mm	1 mm	10 mm	58 mm	8 h 6	
M 2 TK	0.01 mm	1 mm	10 mm	58 mm	8 h 6	Concentric hands
M 2 TOP	0.01 mm	1 mm	10 mm	58 mm	8 h 6	
M 2 X	0.01 mm	1 mm	10 mm	58 mm	8 h 6	Light casing from polyamide
MU 52 T	0.01 mm	1 mm	10 mm	58 mm	8 h 6	
M 2 S	0.01 mm	1 mm	10 mm	58 mm	8 h 6	Fine adjustment of the hand, shockproof
M 2 SN	0.01 mm	1 mm	10 mm	58 mm	8 h 6	Shockproof
M 2 TOP ‚S'	0.01 mm	1 mm	10 mm	58 mm	8 h 6	Shockproof
M 2 XS	0.01 mm	1 mm	10 mm	58 mm	8 h 6	Shockproof, light casing
MU 52 ST	0.01 mm	1 mm	10 mm	58 mm	8 h 6	Shockproof
M 3 T	0.01 mm	0.5 mm	5 mm	58 mm	8 h 6	
M 3 S	0.01 mm	0.5 mm	5 mm	58 mm	8 h 6	Shockproof
M 2/20 T	0.01 mm	1 mm	20 mm	58 mm	8 h 6	
M 2/20 S	0.01 mm	1 mm	20 mm	58 mm	8 h 6	Shockproof
M 2/30 T	0.01 mm	1 mm	30 mm	58 mm	8 h 6	
MU 52/30 T	0.01 mm	1 mm	30 mm	58 mm	8 h 6	
M 2/30 S	0.01 mm	1 mm	30 mm	58 mm	8 h 6	Shockproof
MU 52/30 S	0.01 mm	1 mm	30 mm	58 mm	8 h 6	Shockproof
M 2/50 T	0.01 mm	1 mm	50 mm	58 mm	8 h 6	
M 2/50 S	0.01 mm	1 mm	50 mm	58 mm	8 h 6	Shockproof
M 2/80 T	0.01 mm	1 mm	80 mm	58 mm	8 h 6	
M 2/80 S	0.01 mm	1 mm	80 mm	58 mm	8 h 6	Shockproof
M 2/100 T	0.01 mm	1 mm	100 mm	58 mm	10 h 6	
M 2 R	0.01 mm	1 mm	3 mm	58 mm	8 h 6	Back plunger
M 2 RW	0.01 mm	1 mm	3 mm	61.5 mm	8 h 6	Back plunger, waterproof
M 2/5 R	0.01 mm	1 mm	5 mm	58 mm	8 h 6	Back plunger
SI-90	0.01 mm	-	0.8 mm	58 mm	8 h 6	Error free, shockproof
SI-90 X	0.01 mm	-	0.8 mm	58 mm	8 h 6	Error free, shockproof, light casing
MU 52 ST – SI	0.01 mm	-	0.8 mm	58 mm	8 h 6	Error free, shockproof
SI-90 R	0.01 mm	-	0.8 mm	58 mm	8 h 6	Error free, back plunger
SI-90 W	0.01 mm	-	0.8 mm	61.5 mm	8 h 6	Error free, waterproof, shockproof
SI-100	0.01 mm	-	1 mm	58 mm	8 h 6	Error free, shockproof
SI-18	0.01 mm	-	1.6 mm	58 mm	8 h 6	Error free, shockproof
M 2 SW	0.01 mm	1 mm	10 mm	61.5 mm	8 h 6	Waterproof, shockproof
M 2/30 SW	0.01 mm	1 mm	30 mm	61.5 mm	8 h 6	Waterproof, shockproof
M 2 S wa	0.01 mm	1 mm	10 mm	58 mm	8 h 6	Water protected, shockproof
M 2 T Magnet	0.01 mm	1 mm	10 mm	58 mm	8 h 6	Magnetic back
GM 80 T	0.01 mm	1 mm	10 mm	80 mm	8 h 6	
GM 80 S	0.01 mm	1 mm	10 mm	80 mm	8 h 6	Shockproof
GM 80/30 T	0.01 mm	1 mm	30 mm	80 mm	8 h 6	
GM 80/50 T	0.01 mm	1 mm	50 mm	80 mm	8 h 6	
GM 80/100 T	0.01 mm	1 mm	100 mm	80 mm	10 h 6	
M 3 a T	0.005 mm	0.5 mm	5 mm	58 mm	8 h 6	
M 3 a S	0.005 mm	0.5 mm	5 mm	58 mm	8 h 6	Shockproof
M 3 a SI	0.005 mm	-	0.4 mm	58 mm	8 h 6	Error free, shockproof
KM 500 T	0.002 mm	0.2 mm	1 mm	40 mm	8 h 6	
KM 500 S	0.002 mm	0.2 mm	1 mm	40 mm	8 h 6	Shockproof
KM 500 SW	0.002 mm	0.2 mm	1 mm	44.5 mm	8 h 6	Waterproof, shockproof
FM 500 T	0.002 mm	0.2 mm	1 mm	58 mm	8 h 6	
FM 500 SI	0.002 mm	-	0.16 mm	58 mm	8 h 6	Error free, shockproof
KM 1000 T	0.001 mm	0.2 mm	1 mm	40 mm	8 h 6	
KM 1000 S	0.001 mm	0.2 mm	1 mm	40 mm	8 h 6	Shockproof
Feinika KM 1101	0.001 mm	0.1 mm	1 mm	40 mm	8 h 6	Shockproof, extra accurate
KM 1000/3 T	0.001 mm	0.2 mm	3 mm	40 mm	8 h 6	
KM 1000/3 S	0.001 mm	0.2 mm	3 mm	40 mm	8 h 6	Shockproof
KM 1000/5 T	0.001 mm	0.2 mm	5 mm	40 mm	8 h 6	
Feinika SI-914	0.001 mm	-	0.08 mm	40 mm	8 h 6	Error free, shockproof, extra accurate
KM 1000 S wa	0.001 mm	0.2 mm	1 mm	40 mm	8 h 6	Water protected, shockproof
FM 1000 T	0.001 mm	0.2 mm	1 mm	58 mm	8 h 6	
FM 1000 S	0.001 mm	0.2 mm	1 mm	58 mm	8 h 6	Shockproof
Feinika FM 1101	0.001 mm	0.1 mm	1 mm	58 mm	8 h 6	Shockproof, extra accurate
FM 1000/5 T	0.001 mm	0.2 mm	5 mm	58 mm	8 h 6	
FM 1000/5 S	0.001 mm	0.2 mm	5 mm	58 mm	8 h 6	Shockproof
Feinika SI-915	0.001 mm	-	0.08 mm	58 mm	8 h 6	Error free, extra accurate, shockproof
Feinika SI-918	0.001 mm	-	0.16 mm	58 mm	8 h 6	Error free, extra accurate, shockproof
SI-180	0.001 mm	-	0.16 mm	58 mm	8 h 6	Error free, shockproof
FM 1000 S wa	0.001 mm	0.2 mm	1 mm	58 mm	8 h 6	Water protected, shockproof
FM 1000 SW	0.001 mm	0.2 mm	1 mm	61.5 mm	8 h 6	Waterproof, shockproof
FM 1000/5 SW	0.001 mm	0.2 mm	5 mm	61.5 mm	8 h 6	Waterproof, shockproof

Our Dial Gauges are available in many special versions (e.g.: increased or reduced measuring force, with anti-clockwise numbered dials, with dials to customers' drawing, with long stems). A table of Dial Gauges with inch reading can be found in our separate Käfer Inch Reading Dial Gauges leaflet.

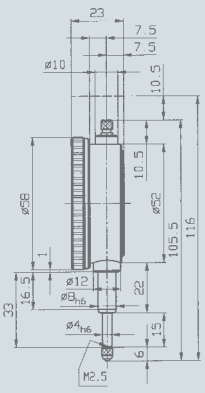
Dimensioned drawings of Metric Dial Gauges



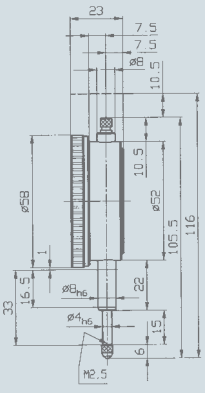
M 2 T / M 2 TK



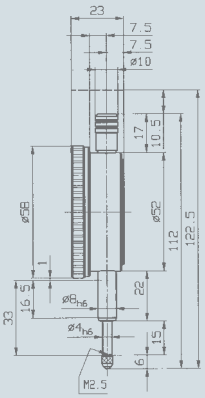
MU 52 T / MU 52 ST



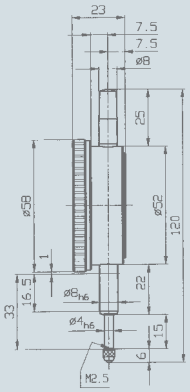
M 2 X



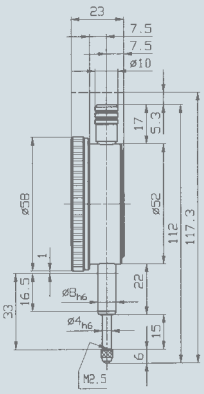
M 2 TOP S



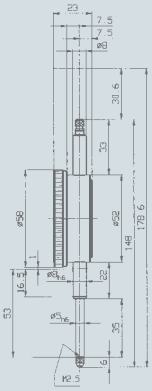
M 2 SN / SI-90



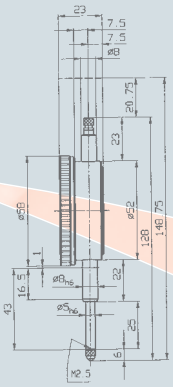
M 2 S



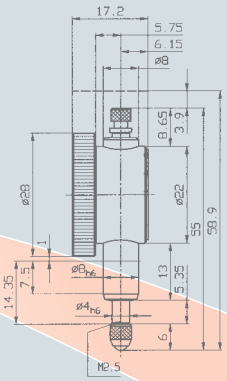
M 3 aS / FM 1000 S / FM 100/5 S



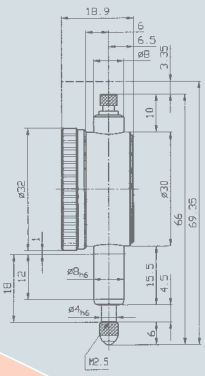
M 2/30 S



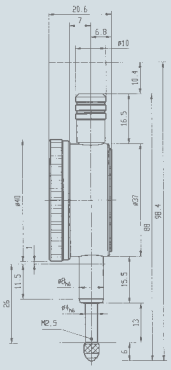
M 2/20 T



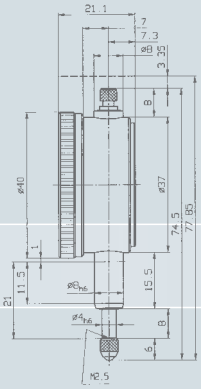
MU 28



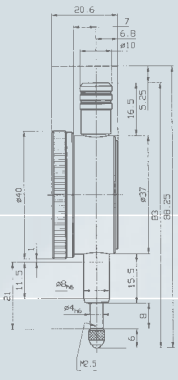
KM 6 T



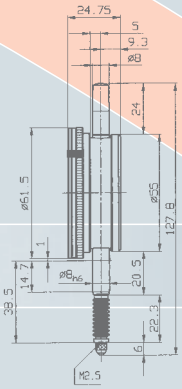
KM 4/10 TK-100



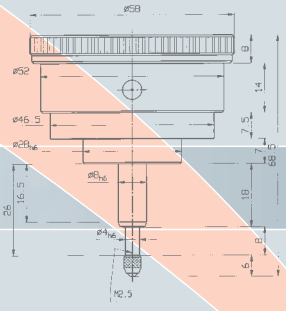
KM 4 TOP S



KM 4 / 5 S / SI-45



M 2 SW / SI-90 W



M 2 R

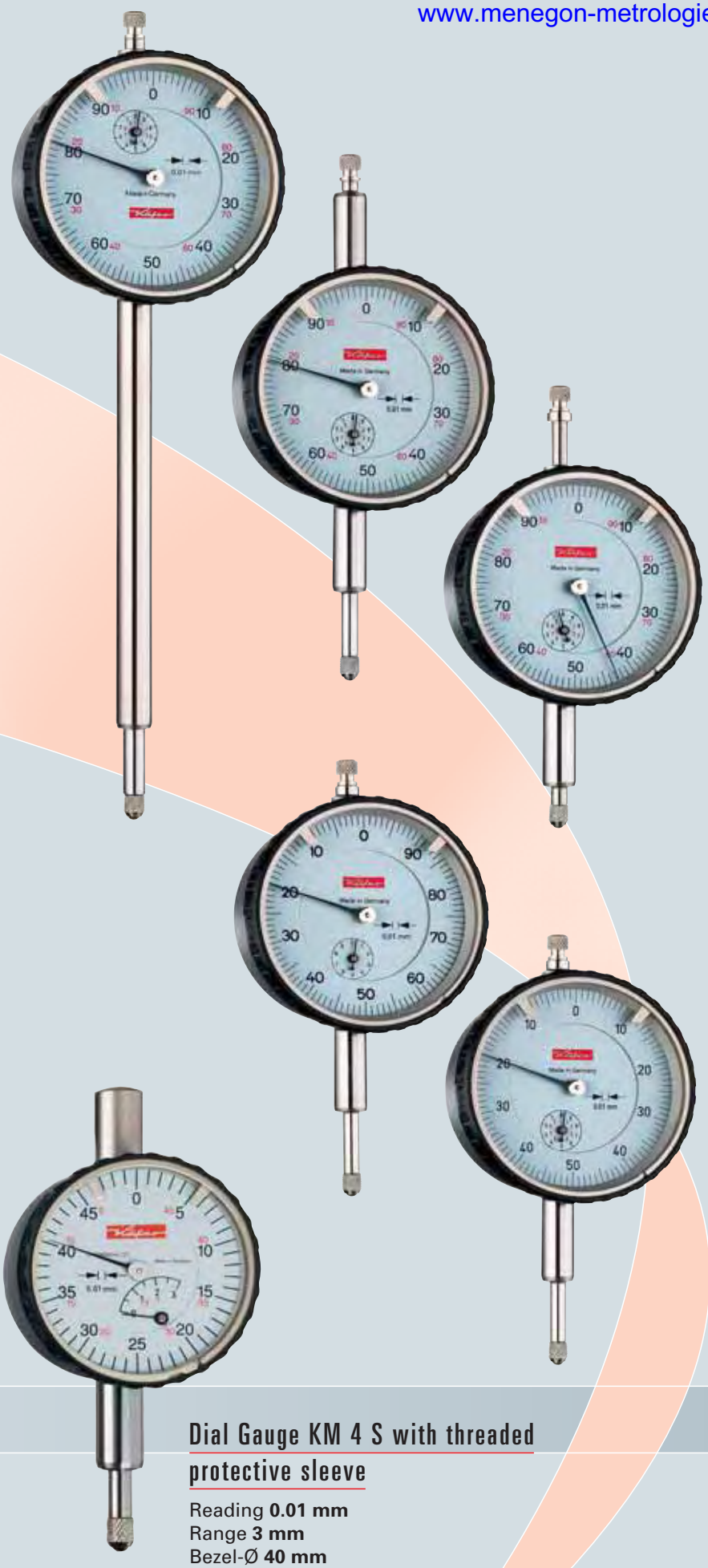
Other dimensioned drawings as well as data sheets to DIN EN ISO 463 are available on request
or from our homepage **www.kaefer-messuhren.de**

Jean Louis MENEGON - Votre représentant et Conseiller - Tél. : **06 76 08 96 83**
Email: *jlouismenegon@aol.com* - web: www.menegon-metrologie.com

Extracts of manufacturing standards for Metric Dial Gauges

Manufacturing standard	Field of application	Span of error	Range	Maximum value
0.0100.9.0004	Dial Gauges	Span of error **ft**	1 mm	30 µm
	with 0.1 mm reading	Span of error **fe**	up to 30 mm	50 µm
			50 mm	80 µm
			80 mm	100 µm
			100 mm	100 µm
		Hysteresis **fu**		15 µm
		Repeatability **fw**		15 µm
0.0200.9.0016	Dial Gauges	Span of error **ft**	0.1 mm	5 µm
	with 0.01 mm reading	Span of error **fe**	10 mm	15 µm
	and 80 mm bezel diameter	Span of error **fges**	10 mm	17 µm
		Hysteresis **fu**		5 µm
		Repeatability **fw**		3 µm
0.0500.9.0006	Dial Gauges	Span of error **ft**	0.1 mm	5 µm
	with 0.01 mm reading	Span of error **fe**	up to 3 mm	12 µm
	and back plunger		5 mm	17 µm
		Span of error **fges**	up to 3 mm	15 µm
			5 mm	20 µm
		Hysteresis **fu**	up to 3 mm	5 µm
			5 mm	8 µm
		Repeatability **fw**		5 µm
0.0500.9.0001	Dial Gauges	Span of error **ft**	0.1 mm	3 µm
	with 0.001 mm reading	Span of error **fe**	0.16 mm	3 µm
	and 0.002 mm reading		1 mm	5 µm
			2 mm	7 µm
			5 mm	10 µm
		Span of error **fges**	0.16 mm	4 µm
			1 mm	7 µm
			2 mm	9 µm
			5 mm	12 µm
		Hysteresis **fu**		3 µm
		Repeatability **fw**		3 µm
0.0500.9.0010	Dial Gauges FEINIKA	Span of error **ft**	0.01 mm	1 µm
	with 0.001 mm reading	Span of error **fe**	0.08 mm	2 µm
	and 0.002 mm reading		0.16 mm	2 µm
			1 mm	3 µm
		Span of error **fges**	0.08 mm	3 µm
			0.16 mm	3 µm
			1 mm	4 µm
		Hysteresis **fu**		1.5 µm
		Repeatability **fw**		1.5 µm
1.0200.9.0002	Dial Gauges	Span of error **ft**	0.1 mm	5 µm
	with 0.01 mm reading	Span of error **fe**	50 mm	25 µm
	and range > 30 mm		80 mm	30 µm
			100 mm	50 µm
		Repeatability **fw**	up to 80 mm	3 µm
			100 mm	5 µm
		Some values may differ on Large Dial Gauges		
1.0200.9.0014	Dial Gauges	Span of error **ft**	0.1 mm	5 µm
	with 0.01 mm reading	Span of error **fe**		20 µm
	and ranges 20 - 30 mm	Span of error **fges**		25 µm
		Hysteresis **fu**		5 µm
		Repeatability **fw**		3 µm
		Some values may differ on Large Dial Gauges		

Our complete standards as well as data sheets to DIN EN ISO 463 are available on request or from our homepage **www.kaefer-messuhren.de**



Dial Gauge M 2 T with extended stem

Reading **0.01 mm**
Range **10 mm**
Bezel-Ø **58 mm**
Stem-Ø **8 h6 in special lengths**
50 mm, 75 mm, 100 mm,
125 mm or 150 mm

Dial Gauge M 2 T with two stems: top and bottom

Reading **0.01 mm**
Range **10 mm**
Bezel-Ø **58 mm**
with two stems-Ø **8 h6 top and bottom**

Dial Gauge M 2 T with reverse spring traction

Reading **0.01 mm**
Range **10 mm**
Bezel-Ø **58 mm**
Spindle in its initial position pressed in

Dial Gauge M 2 T with counter clockwise dial reading

Reading **0.01 mm**
Range **10 mm**
Bezel-Ø **58 mm**
Dials counter clockwise numbered for depth measurements

Dial Gauge M 2 T with balanced dial reading

Reading **0.01 mm**
Range **10 mm**
Bezel-Ø **58 mm**
Dials balanced numbered for comparative measurements

Dial Gauge KM 4 S with threaded protective sleeve

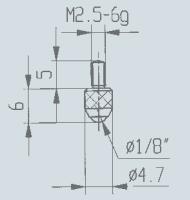
Reading **0.01 mm**
Range **3 mm**
Bezel-Ø **40 mm**
With threaded protective sleeve to prevent ingress of contaminants

Without photo

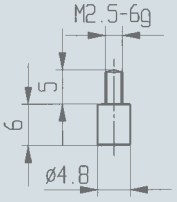
- **Dial Gauges with increased or reduced measuring force**
- **Dial Gauges with special transmission ratio**
- **Dial Gauges with limited range**
- **Dial Gauges without revolution counter**

Contact Points for Dial Gauges and Comparator Gauges

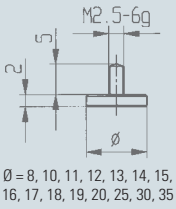
with male thread M 2.5



M2/70

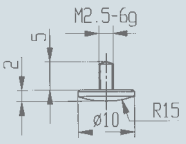


573/10

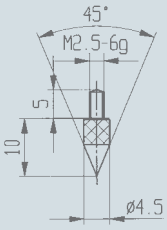


Ø = 8, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 25, 30, 35

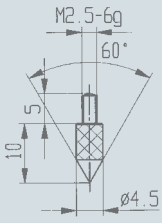
573/11



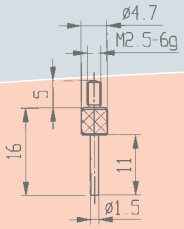
573/12



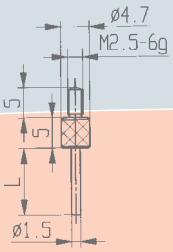
573/13



573/13-60

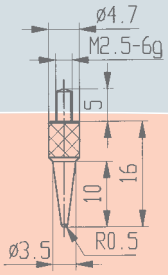


573/14

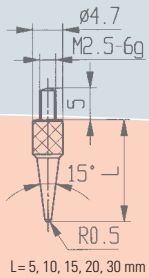


L= 15, 20, 25, 30, 35, 40, 50mm

573/14 L

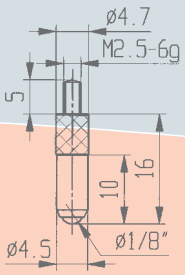


573/15

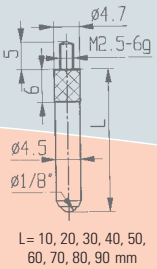


L= 5, 10, 15, 20, 30 mm

573/15 L

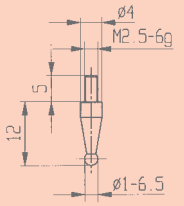


573/16

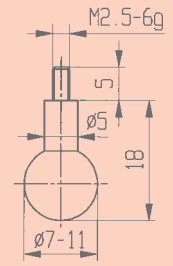


L= 10, 20, 30, 40, 50, 60, 70, 80, 90 mm

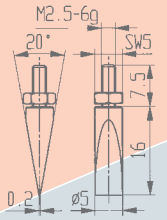
573/17 L



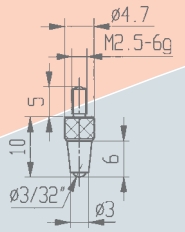
573/18



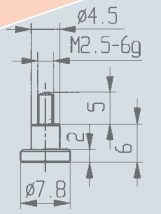
573/19



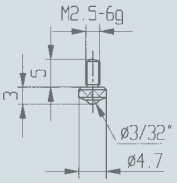
573/20 E



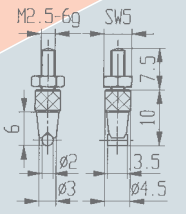
573/21



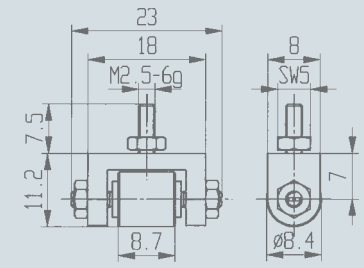
573/22



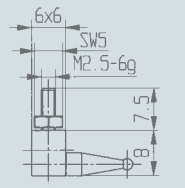
573/23



573/24 E

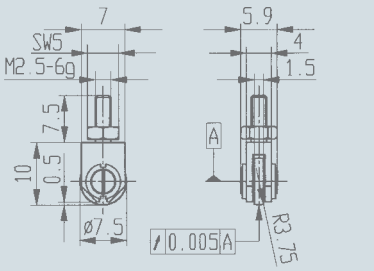


573/25 E

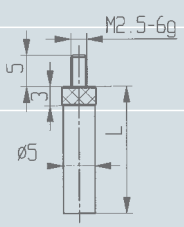


with female thread M 2.5 for use with feelers 573/18 Ø 1-6 mm and with female thread M 1.6 for use with feelers for Dial Test Indicators.

573/27 E

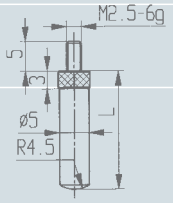


573/28 E



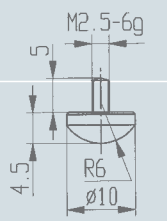
L= 3, 5, 8, 10, 12, 15, 20mm

573/29 L

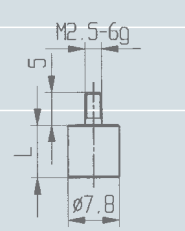


L= 3, 5, 8, 10, 12, 15, 20mm

573/30 L

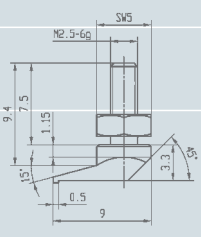


573/32

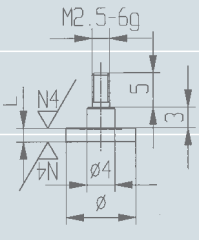


L = 3, 5, 8, 10 mm

573/35 L



573/39 E



Ø = 7, 8 or 10 mm
L = 1, 1.5 or 2 mm

573/40-D-L

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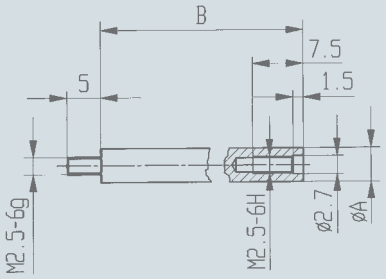
Contact Point Extensions

Contact Points with carbide (H) or ceramic (C) insert

Contact Points with balls from ruby (R), sapphire (S) or plastic (KU)

with male thread M 2.5



Contact Point Extensions:

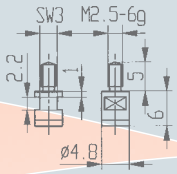
Dimension A: 4 mm (used at Dial Gauges with spindle Ø of 4 mm)

Dimension A: 5 mm (used at Dial Gauges with spindle Ø of 5 mm)

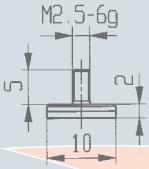
Dimension B available in the following standard lengths: 10, 15, ….. 90, 95 and 100 mm

Other lengths are available upon customers request.

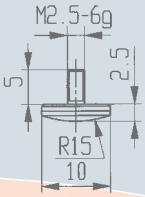
Contact Points with carbide (H), ruby (R), sapphire (S), ceramic (C), or plastic (KU) inserts



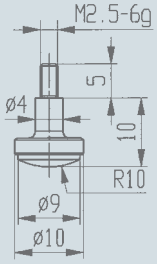
573/10 H



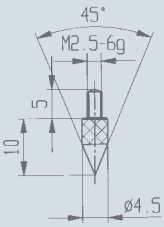
573/11 H/C



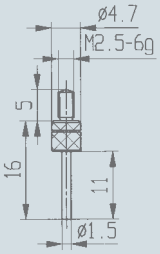
573/12 H/C



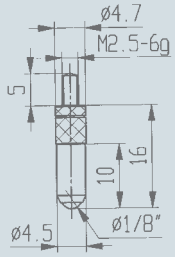
573/12-10 H



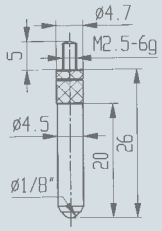
573/13 H



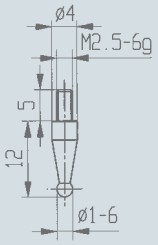
573/14 H



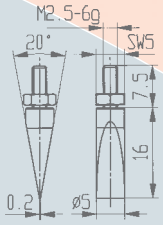
573/16 H/R/S



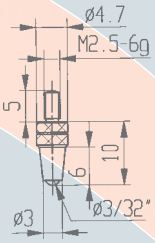
573/17 H/R/S



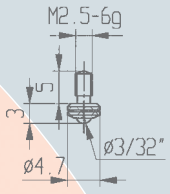
573/18 H



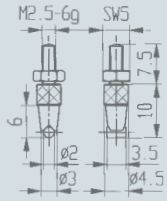
573/20 HE



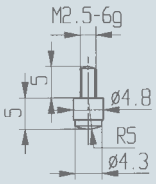
573/21 H



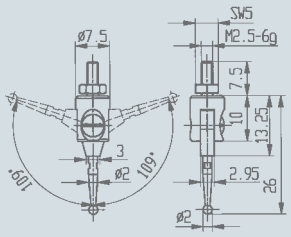
573/23 H



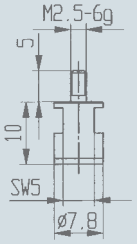
573/24 HE



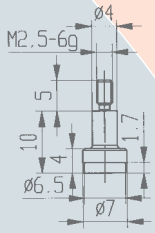
573/31 H



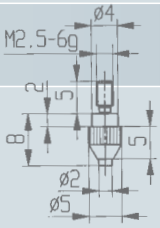
573/33 HE



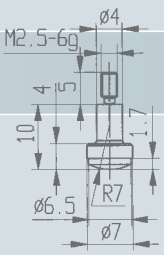
573/35 H



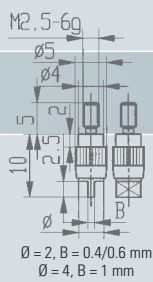
573/102 H



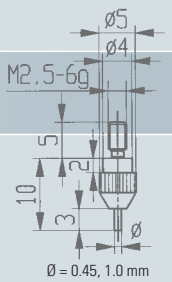
573/105 H



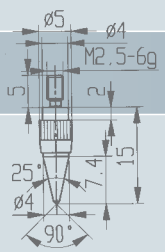
573/108 H



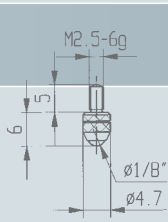
573/110 H



573/112 H



573/114 H



M 2/70 H/R/S/C/KU

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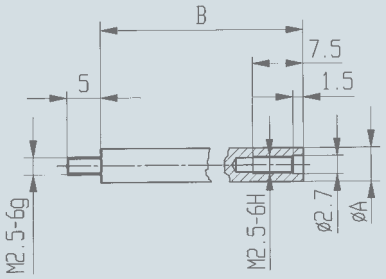
Contact Point Extensions

Contact Points with carbide (H) or ceramic (C) insert

Contact Points with balls from ruby (R), sapphire (S) or plastic (KU)

with male thread M 2.5



Contact Point Extensions:

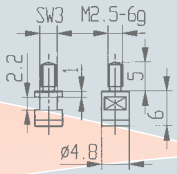
Dimension A: 4 mm (used at Dial Gauges with spindle Ø of 4 mm)

Dimension A: 5 mm (used at Dial Gauges with spindle Ø of 5 mm)

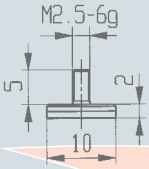
Dimension B available in the following standard lengths: 10, 15, ….. 90, 95 and 100 mm

Other lengths are available upon customers request.

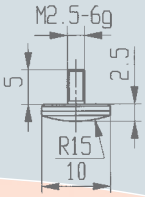
Contact Points with carbide (H), ruby (R), sapphire (S), ceramic (C), or plastic (KU) inserts



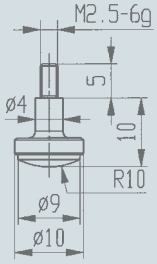
573/10 H



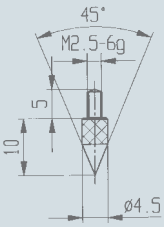
573/11 H/C



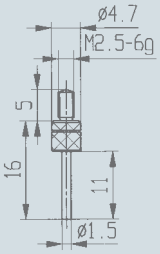
573/12 H/C



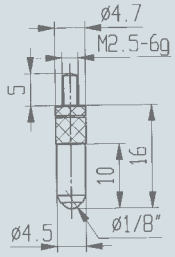
573/12-10 H



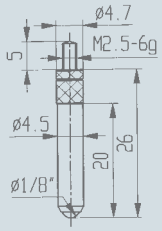
573/13 H



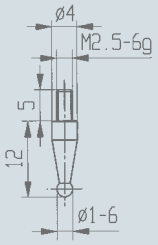
573/14 H



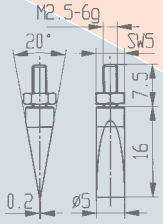
573/16 H/R/S



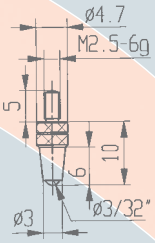
573/17 H/R/S



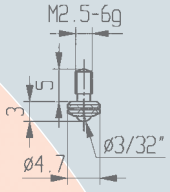
573/18 H



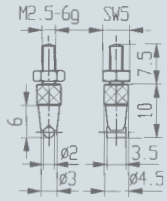
573/20 HE



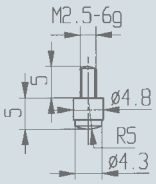
573/21 H



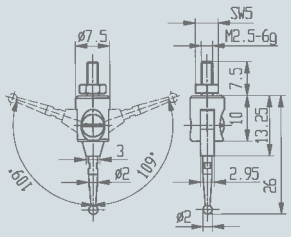
573/23 H



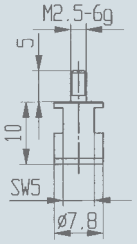
573/24 HE



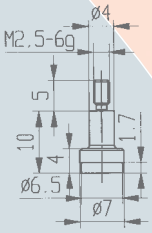
573/31 H



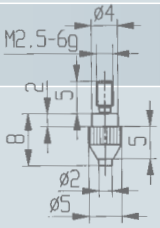
573/33 HE



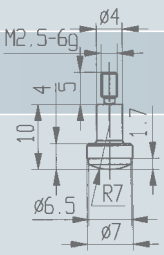
573/35 H



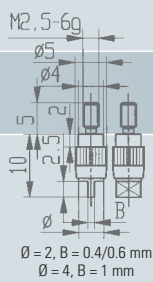
573/102 H



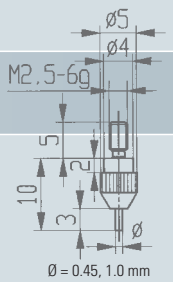
573/105 H



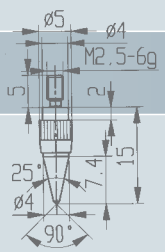
573/108 H



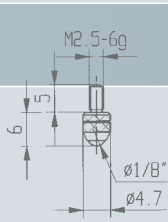
573/110 H



573/112 H



573/114 H



M 2/70 H/R/S/C/KU

Dial Test Indicator K 30

shockproof, non-magnetic
Reading **0.01 mm**
Range **0.8 mm**
Bezel-Ø **32 mm**
Length of contact point **12.8 mm**
Form A to DIN 2270
Accuracy according to DIN 2270

Dial Test Indicator K 33

shockproof, non-magnetic
Reading **0.01 mm**
Range **0.5 mm**
Bezel-Ø **32 mm**
Length of contact point **35.7 mm**
Form A to DIN 2270
Accuracy according to DIN 2270

Dial Test Indicator K 37

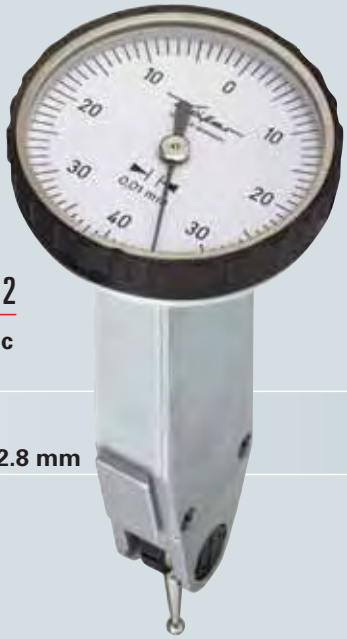
shockproof, non-magnetic
Reading **0.002 mm**
Range **0.2 mm**
Bezel-Ø **32 mm**
Length of contact point **12.8 mm**
Form B to DIN 2270
Accuracy according to DIN 2270

Dial Test Indicator K 30/1

shockproof, non-magnetic
Reading **0.01 mm**
Range **1.0 mm**
Bezel-Ø **32 mm**
Length of contact point **16.6 mm**
Form A to DIN 2270
Accuracy according to DIN 2270

Dial Test Indicator K 32

shockproof, non-magnetic
Reading **0.01 mm**
Range **0.8 mm**
Bezel-Ø **32 mm**
Length of contact point **12.8 mm**
Form C to DIN 2270
Accuracy according to DIN 2270



Technical data for Metric Dial Test Indicators to DIN 2270

Model	Reading	Range	Dial Reading	Bezel-Ø	Form to DIN 2270	Length of contact point (2 mm Ø ball)
K 30	0.01 mm	0.8 mm	0-40-0	32 mm	A	12.8 mm
K 30/1	0.01 mm	1 mm	0-50-0	32 mm	A	16,6 mm
K 30/3	0.01 mm	3 mm	0-100	32 mm	A	16,6 mm
K 31	0.01 mm	0.8 mm	0-40-0	32 mm	B	12.8 mm
K 32	0.01 mm	0.8 mm	0-40-0	32 mm	C	12.8 mm
K 33	0.01 mm	0.5 mm	0-25-0	32 mm	A	35.7 mm
K 34	0.01 mm	0.5 mm	0-25-0	32 mm	B	35.7 mm
K 35	0.01 mm	0.5 mm	0-25-0	32 mm	C	35.7 mm
K 36	0.002 mm	0.2 mm	0-100-0	32 mm	A	12.8 mm
K 37	0.002 mm	0.2 mm	0-100-0	32 mm	B	12.8 mm
K 38	0.002 mm	0.2 mm	0-100-0	32 mm	C	12.8 mm
K 40	0.01 mm	0.8 mm	0-40-0	40 mm	A	12.8 mm
K 40/1	0.01 mm	1 mm	0-50-0	40 mm	A	16,6 mm
K 40/3	0.01 mm	3 mm	0-100	40 mm	A	16,6 mm
K 41	0.01 mm	0.8 mm	0-40-0	40 mm	B	12.8 mm
K 42	0.01 mm	0.8 mm	0-40-0	40 mm	C	12.8 mm
K 43	0.01 mm	0.5 mm	0-25-0	40 mm	A	35.7 mm
K 44	0.01 mm	0.5 mm	0-25-0	40 mm	B	35.7 mm
K 45	0.01 mm	0.5 mm	0-25-0	40 mm	C	35.7 mm
K 46	0.002 mm	0.2 mm	0-100-0	40 mm	A	12.8 mm
K 47	0.002 mm	0.2 mm	0-100-0	40 mm	B	12.8 mm
K 48	0.002 mm	0.2 mm	0-100-0	40 mm	C	12.8 mm
K 49 AD	0.001 mm	0.2 mm	0-200-0	40 mm	A	12.8 mm
K 58	0.001 mm	0.2 mm	0-200-0	58 mm	A	12.8 mm

Here are some of the advantages applicable to the whole series of Dial Test Indicators:

- Automatic change of the direction of measurement.
- Body with 3 dovetail slides for camping the stem and other equipment.
- Precision components, running in ruby bearings, warrant highest precision throughout.
- Tungsten carbide ball 2 mm Ø in measuring inserts.
- The friction clutch mechanism provides an effective shockproof system.
- Accuracy to DIN 2270 (except of models K 30/3 and K 40/3).
- Reading not sensitive to ordinary magnetic fields.

Contact points for Dial Test Indicators

Model	Length	ball
5.2281	12.8 mm	Ø 2 mm (Tungsten carbide)
5.2297	12.0 mm	Ø 0.4 mm (Tungsten carbide)
5.2282	12.3 mm	Ø 1 mm (Tungsten carbide)
5.2283	13.3 mm	Ø 3 mm (Tungsten carbide)
5.2296	12.8 mm	Ø 2 mm (Ruby)
5.2280	16.6 mm	Ø 2 mm (Tungsten carbide)
5.2299	16.6 mm	Ø 2 mm (Ruby)
5.2284	35.7 mm	Ø 2 mm (Tungsten carbide)
5.2285	35.2 mm	Ø 1 mm (Tungsten carbide)
5.2286	36,2 mm	Ø 3 mm (Tungsten carbide)
5.2298	35.7 mm	Ø 2 mm (Ruby)

Stems for Dial Test Indicators

Model	Ø	Model	Ø
2.4801	8 h6	2.4804	4 h6

Centering Holder FH 8

Ø 8h6, mounting bores Ø 4H7 and Ø 8H7 with dovetail clamp

Round Holder FH 90

8 mm Ø x 90 mm with dovetail clamp

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Saw Setting Dial Gauge

Reading **0.1 mm**
Range **2 mm**
Bezel-Ø **40 mm**
With dial on both sides
for right and left hand use

Saw Setting Dial Gauge K 2/61

Reading **0.1 mm**
Range **2 mm**
Bezel-Ø **40 mm**
With dial on both sides for right and left hand use. With stand feet at right angle to the dial.

Dial Depth Gauge TM 2/30

Reading **0.01 mm**
Range **30 mm**
Bezel-Ø **58 mm**
Base **80 x 16 mm**
Dial reading anti-clockwise

Magnetic Holder P 18

with flat holding base
Dimensions of the
magnetic base **73 x 11 x 46 mm**
Magnetic force **180 N**
Length of the swivel arm
up to holder opening **35 mm**
Holder opening **8 mm H7**

Magnetic Holder P 19

with prismatic base
Dimensions of the
magnetic base **72 x 26 x 59 mm**
Magnetic force **180 N**
Length of the swivel arm
up to holder opening **35 mm**
Holder opening **8 mm H7**

Digital Thickness Gauge FD 50

Resolution **0.001 mm**
Range **10 mm**
Depth of jaw **50 mm**
Output **RS 232/USB**
Maximum error **5 µm**
Standard contact points type C (10 mm Ø flat)

Dial Thickness Gauge J 50 with lifting device

Reading **0.01 mm**
Range **10 mm**
Depth of jaw **50 mm**
Maximum error **15 µm**
Standard contact points type C (10 mm Ø flat)

Pocket Dial Thickness Gauge J 15

Reading **0.01 mm**
Range **10 mm**
Depth of jaw **18 mm**
Maximum error **15 µm**
Standard contact points 6.35 mm Ø flat

Dial Thickness Gauge K 200 with lifting lever

Reading **0.1 mm**
Range **30 mm**
Depth of jaw **200 mm**
Maximum error **50 µm**
Standard contact points type C (10 mm Ø flat)

Digital Foil Thickness Gauge FD 1000/30-3

Resolution **0.001 mm**
Range **3 mm**
Depth of jaw **30 mm**
Output **RS 232 / USB**
Maximum error **3 µm**
Standard contact points 6,35 mm Ø flat

Model shown: J 50 R without side discs

Dial Thickness Gauge J 50 R

Reading **0.01 mm**
Range **5 mm**
Depth of jaw **50 mm**
Maximum error **20 µm**
With roller contact points
roll width 8.7 mm, roll diameter 8.4 mm
Available with side discs for measuring the thickness of wires and threads.
Available without side discs for measuring paper, foil and sheet.

Foil Dial Thickness Gauge F 1101/30

Reading **0.001 mm**
Range **1 mm**
Depth of jaw **30 mm**
Maximum error **3 µm**
Standard contact points 6,35 mm Ø flat

Another similar Foil Dial Thickness Gauge,
but only with 1 hand and a range of 0.1 mm:

Foil Dial Thickness Gauge F 1101/30-0.1

Reading **0.001 mm**
Range **0.1 mm**
Depth of jaw **30 mm**
Maximum error **1.5 µm**
Standard contact points 6,35 mm Ø flat

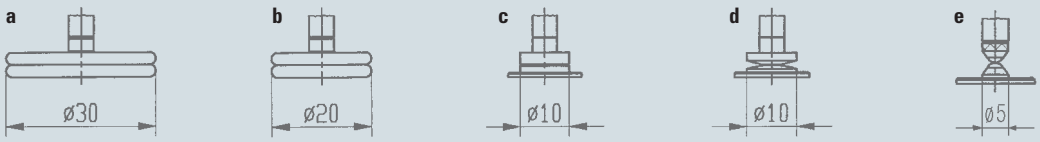
Technical Data for Metric Thickness Gauges

Model	Reading mm	Range mm	Depth of jaw mm	Lifting device	Type of contact points standard	available on request
K 15	0.1	10	15	no	6.35 mm Ø flat	10 mm Ø flat, convex or spherical
K 15/2	0.1	20	15	no	6.35 mm Ø flat	10 mm Ø flat, convex or spherical
K 50	0.1	10	50	no	c	a, b, d or e
K 50 with lifting device	0.1	10	50	yes	c	a, b, d or e
K 50/2	0.1	20	50	no	c	a, b, d or e
K 50/3	0.1	30	50	no	c	a, b, d or e
K 50/5	0.1	50	50	no	c	a, b, d or e
K 100	0.1	30	100	no	c	a, b, d or e
K 200	0.1	30	200	yes	c	a, b, d or e
K 300	0.1	30	300	yes	c	a, b, d or e
K 400	0.1	30	400	yes	c	a, b, d or e
J 12	0.01	8	12	yes	6.35 mm Ø flat	spherical
J 15	0.01	10	18	yes	6.35 mm Ø flat	10 mm Ø flat, convex or spherical
J 45	0.01	10	45	yes	6.35 mm Ø flat	10 mm Ø flat, convex or spherical
J 50	0.01	10	50	no	c	a, b, d or e
J 50 with lifting device	0.01	10	50	yes	c	a, b, d or e
JD 50	0.01	10	50	yes	c	a, b, d or e
JD 50 TOP	0.01	10	50	yes	c	a, b, d or e
J 50/30	0.01	30	50	no	c	a, b, d or e
J 50/30 with lifting device	0.01	30	50	yes	c	a, b, d or e
JD 50/25	0.01	25	50	yes	c	a, b, d or e
J 50 R	0.01	5	50	yes	rollers	
J 50 R without side discs	0.01	5	50	yes	rollers without side discs	
JD 50 R	0.01	10	50	yes	rollers	
JD 50 R without side discs	0.01	10	50	yes	rollers without side discs	
J 50 W	0.01	10	50	yes	pin with collar for pipe walls	
JD 50 W	0.01	10	50	yes	pin with collar for pipe walls	
J 100	0.01	10	100	yes	c	a, b, d or e
JD 100	0.01	10	100	yes	c	a, b, d or e
J 100/30	0.01	30	100	yes	c	a, b, d or e
JD 100/25	0.01	25	100	yes	c	a, b, d or e
J 200	0.01	10	200	yes	c	a, b, d or e
JD 200	0.01	10	200	yes	c	a, b, d or e
J 200/30	0.01	30	200	yes	c	a, b, d or e
JD 200/25	0.01	25	200	yes	c	a, b, d or e
J 300	0.01	10	300	yes	c	a, b, d or e
JD 300	0.01	10	300	yes	c	a, b, d or e
F 50	0.001	5	50	yes	c	a, b, d or e
F 1101/30-0.1	0.001	0.1	30	yes	6.35 mm Ø flat	convex R 15 or R 40, flat 10 mm Ø, spherical
F 1101/30	0.001	1	30	yes	6.35 mm Ø flat	convex R 15 or R 40, flat 10 mm Ø, spherical
F 1000/30-3	0.001	3	30	yes	6.35 mm Ø flat	convex R 15 or R 40, flat 10 mm Ø, spherical
FD 50	0.001	10	50	yes	c	a, b, d or e
FD 50/25	0.001	25	50	yes	c	a, b, d or e
FD 100/25	0.001	25	100	yes	c	a, b, d or e
FD 200/25	0.001	25	200	yes	c	a, b, d or e

The contact points listed in the column ‚standard' will be mounted unless the order calls for specials. Thickness Gauges can be supplied with contact points listed in the column 'available on request' without extra costs.

Schematic diagrams of the contact points style a, b, c, d and e are shown below. Thickness Gauges adding 'D' in the type designation possess a digital indicating instrument.

Types of contact points



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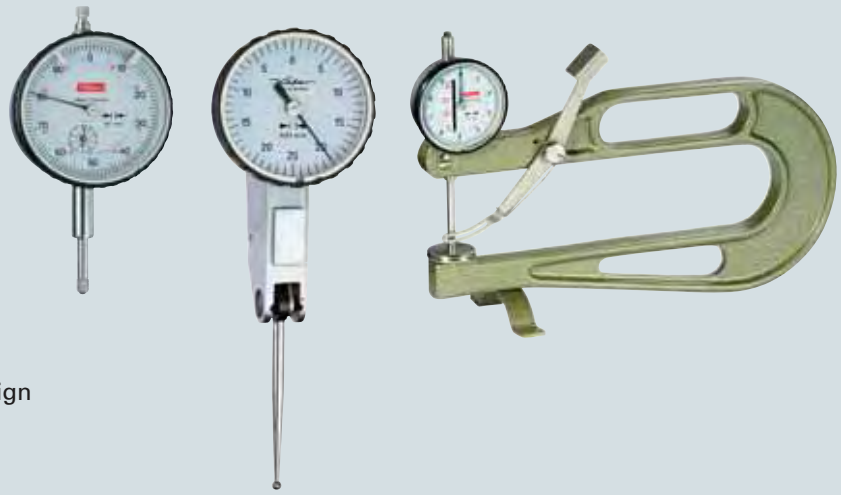
Käfer Messuhrenfabrik – since 1932 The specialist in Dial Gauges

The most important European manufacturer of Dial Gauges. Our headquarters and main plant is located at Villingen-Schwenningen, Germany. There is a branch at Shanghai, China.

Our long standing experience of more than 70 years makes us the right address for you whenever you need a Dial Gauge.

We offer a broad manufacturing programme of more than 1000 standard versions of

- Dial Gauges
- Dial Test Indicators
- Comparator Gauges
- Thickness Gauges
- Depth Gauges
- Special Measuring Instruments



We have good production capabilities for Gauges and Contact points in special design according to customers' drawings.

- **Wide production range with main expertise in parts with gear teeth**
- **Use of up-to-date machines and equipment**
- **Use of accurate and high quality components and materials**
- **Own engineering design department**
- **Certified to DIN EN ISO 9001:2000**

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