



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.

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 SN

shockproof

Reading **0.01 mm**

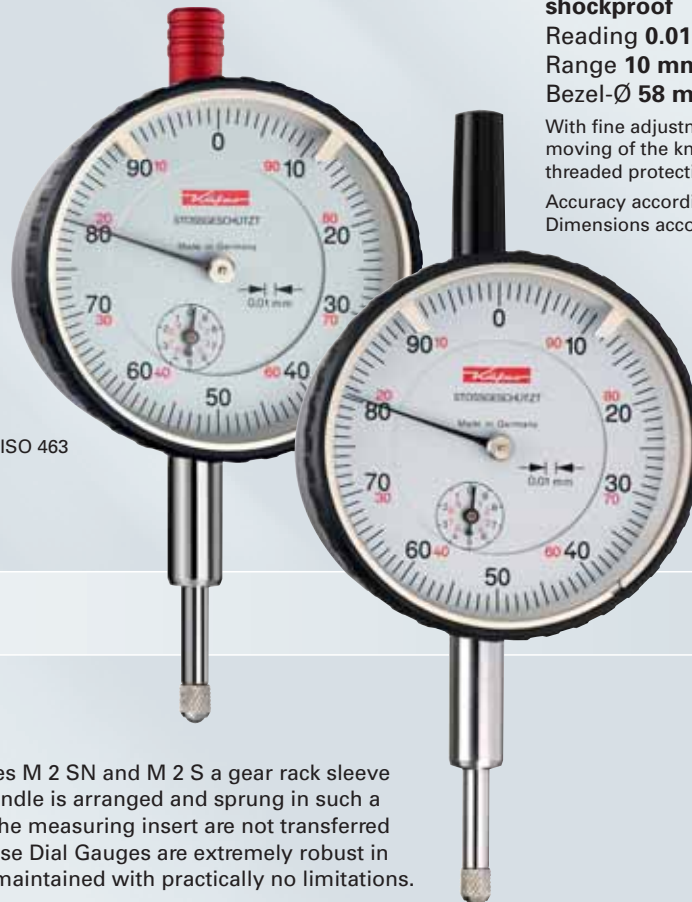
Range **10 mm**

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



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

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.



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 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 works standard 1.0200.9.0014
Dimensions according to DIN EN ISO 463



Dial Gauge M 2/20 T

shockproof
Reading **0.01 mm**
Range **20 mm**
Bezel-Ø **58 mm**

Accuracy according to Käfer works 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 works 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 works standard 1.0200.9.0002
Dimensions according to DIN EN ISO 463 (except of L₂)

Dial Gauge M 2/50 S

shockproof
Reading **0.01 mm**
Range **50 mm**
Bezel-Ø **58 mm**

Accuracy according to Käfer works standard 1.0200.9.0002
Dimensions according to DIN EN ISO 463 (except of L₂)

Dial Gauge MU 28

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

Accuracy according to Käfer
works 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 L₂)



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 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



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 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 works standard 0.0500.9.0010

Dimensions according to DIN EN ISO 463



Dial Gauge Feinika KM 1101

shockproof

Reading **0.001 mm**

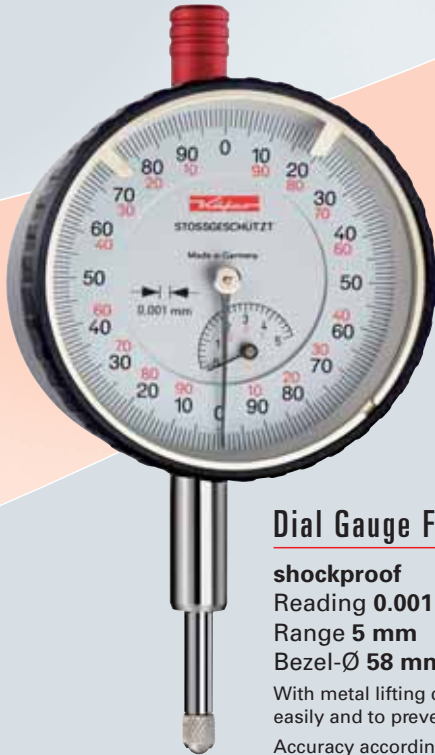
Range **1 mm**

Bezel-Ø **40 mm**

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

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



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

Dial Gauge M 2 SW

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



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 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 works standard
 0.0200.9.0006
 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 works standard
 0.0200.9.0006
 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 works 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 works 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 works standard 0.0200.9.0016

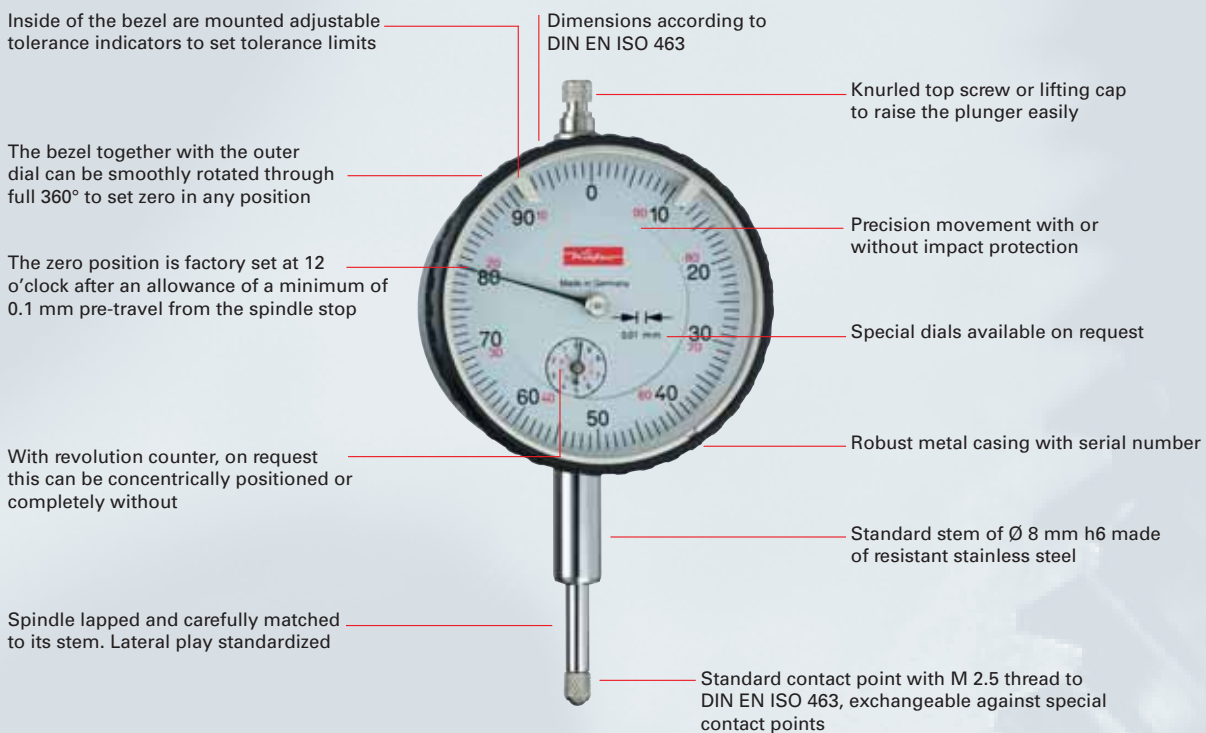
Precision Dial Gauges

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

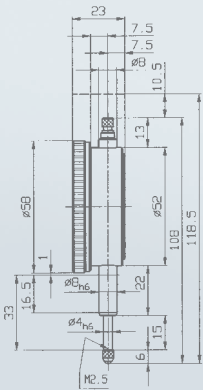
Model	Reading	Range per revolution	Range	Bezel-Ø	Stem-Ø	Special Feature
KM 5 a	0.1 mm	5 mm	5 mm	40 mm	8 h 6	
KM 10 a	0.1 mm	10 mm	10 mm	40 mm	8 h 6	
KM 5 a R	0.1 mm	5 mm	5 mm	40 mm	8 h 6	Back Plunger
M 10 a	0.1 mm	10 mm	10 mm	58 mm	8 h 6	
M 10 b	0.1 mm	10 mm	20 mm	58 mm	8 h 6	
M 10 c	0.1 mm	10 mm	30 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
KM 4 R	0.01 mm	0.5 mm	3 mm	40 mm	8 h 6	Back Plunger

Specifications of the Technical Data of Metric Dial Gauges

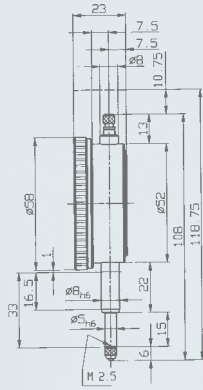
Model	Reading	Range per revolution	Range	Bezel-Ø	Stem-Ø	Special Feature
KM 4 R	0.01 mm	0.5 mm	3 mm	40 mm	8 h 6	Back Plunger
KM 4/5 R	0.01 mm	0.5 mm	5 mm	40 mm	8 h 6	Back Plunger
SI-45	0.01 mm	-	0.4 mm	40 mm	8 h 6	Error Free
SI-45 W	0.01 mm	-	0.4 mm	44.5 mm	8 h 6	Error Free
SI-45/0.8	0.01 mm	-	0.8 mm	40 mm	8 h 6	Error Free
KM 4 SW	0.01 mm	0.5 mm	3 mm	44.5 mm	8 h 6	Waterproof
KM 4/5 SW	0.01 mm	0.5 mm	5 mm	44.5 mm	8 h 6	Waterproof
KM 4 S wa	0.01 mm	0.5 mm	3 mm	40 mm	8 h 6	Water Protected
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
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 2/5 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
SI-90 X	0.01 mm	-	0.8 mm	58 mm	8 h 6	Error Free, light casing
MU 52 ST - SI	0.01 mm	-	0.8 mm	58 mm	8 h 6	Error Free
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
SI-100	0.01 mm	-	1 mm	58 mm	8 h 6	Error Free
SI-18	0.01 mm	-	1.6 mm	58 mm	8 h 6	Error Free
M 2 SW	0.01 mm	1 mm	10 mm	61.5 mm	8 h 6	Waterproof
M 2/30 SW	0.01 mm	1 mm	30 mm	61.5 mm	8 h 6	Waterproof
M 2 S wa	0.01 mm	1 mm	10 mm	58 mm	8 h 6	Water Protected
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
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
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
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
Feinika SI-914	0.001 mm	-	0.08 mm	40 mm	8 h 6	Error Free
KM 1000 S wa	0.001 mm	0.2 mm	1 mm	40 mm	8 h 6	Water Protected
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
Feinika SI-918	0.001 mm	-	0.16 mm	58 mm	8 h 6	Error Free, extra accurate
SI-180	0.001 mm	-	0.16 mm	58 mm	8 h 6	Error Free
FM 1000 S wa	0.001 mm	0.2 mm	1 mm	58 mm	8 h 6	Water Protected
FM 1000 SW	0.001 mm	0.2 mm	1 mm	61.5 mm	8 h 6	Waterproof
FM 1000/5 SW	0.001 mm	0.2 mm	5 mm	61.5 mm	8 h 6	Waterproof

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.

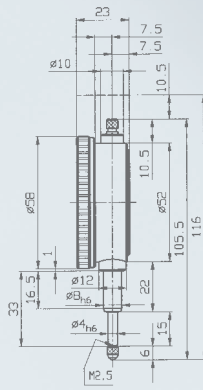
Dimensioned drawings of Metric Dial Gauges



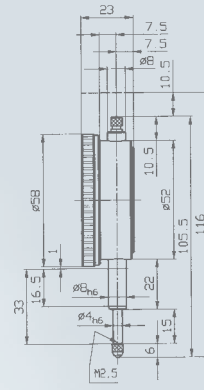
M 2 T / M 2 TK



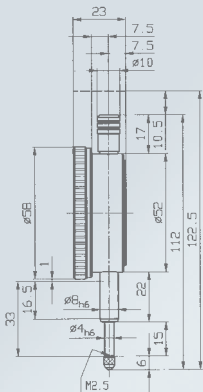
MU 52 T / MU 52 ST



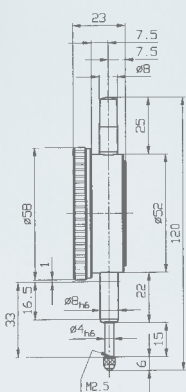
M 2 X



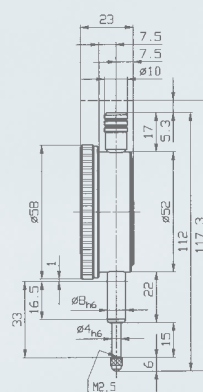
M 2 TOP S



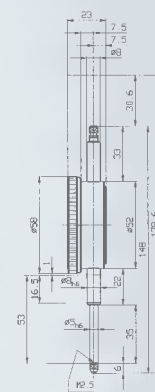
M 2 SN / SI-90



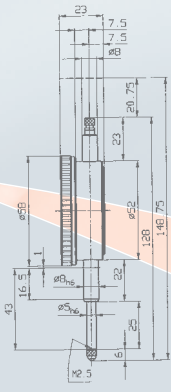
M 2 S



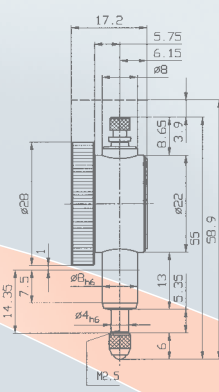
M 3 aS / FM 1000 S / FM 100/5 S



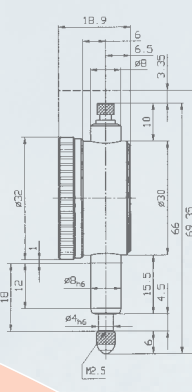
M 2/30 S



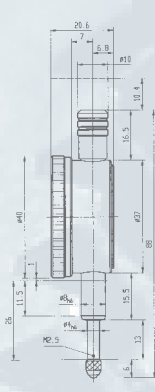
M 2/20 T



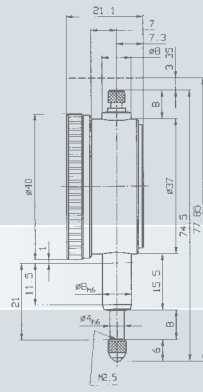
MU 28



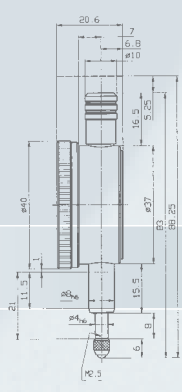
KM 6 T



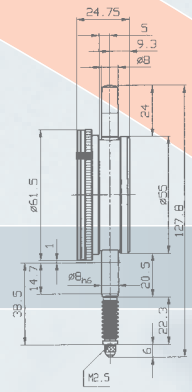
KM 4/10 TK-100



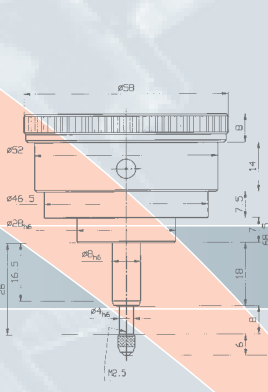
KM 4 TOP S



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.

Extracts of works standards for Metric Dial Gauges

Works standard	Field of application	Span of error	Range	Maximum value
0.0100.9.0004	Dial Gauges with 0.1 mm reading	Span of error ft	1 mm	30 µm
		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		
0.0200.9.0006	Dial Gauges with 0.01 mm reading and back plunger	Span of error ft	0.1 mm	5 µm
		Span of error fe	up to 3 mm	12 µm
			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
Repeatability fw	5 mm	8 µm		
				5 µm
0.0500.9.0001	Dial Gauges with 0.001 mm reading and 0.002 mm reading	Span of error ft	0.1 mm	3 µm
		Span of error fe	0.16 mm	3 µm
			1 mm	5 µm
			2 mm	7 µm
			5 mm	10 µm
			Span of error fges	0.16 mm
		Span of error fges	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 with 0.001 mm reading and 0.002 mm reading	Span of error ft	0.01 mm	1 µm
		Span of error fe	0.08 mm	2 µm
			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 with 0.01 mm reading and range > 30 mm	Span of error ft	0.1 mm	5 µm
		Span of error fe	50 mm	25 µm
			80 mm	30 µm
			100 mm	50 µm
			up to 80 mm	3 µm
		Span of error fw	100 mm	5 µm
Some values may differ on Large Dial Gauges				
1.0200.9.0014	Dial Gauges with 0.01 mm reading and ranges 20 - 30 mm	Span of error ft	0.1 mm	5 µm
		Span of error fe		20 µm
		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

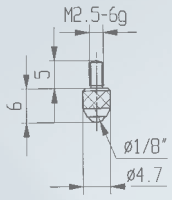
Reading **0.01 mm**
 Range **3 mm**
 Bezel-Ø **40 mm**
 With threaded protective sleeve to
 prevent ingress of contaminants

Without photo

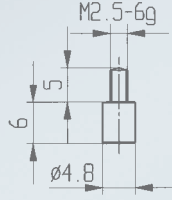
- Dial Gauges with increased or reduced measuring force
- Dial Gauges with special transmission ratio
- Dial Gauges with limited range
- Dial Gauges without revolution counter

Contact Points for Dial Gauges and Comparator Gauges

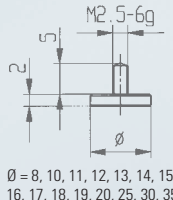
with male thread M 2.5



M2/70

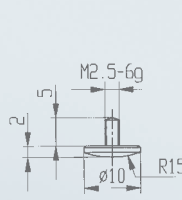


573/10

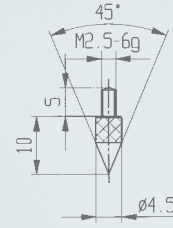


573/11

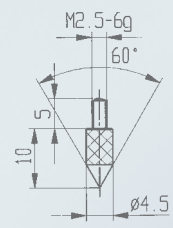
Ø = 8, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 25, 30, 35



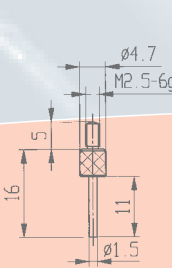
573/12



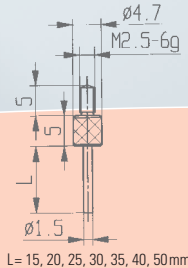
573/13



573/13-60

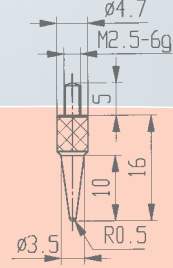


573/14

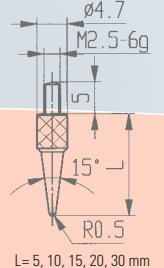


573/14 L

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

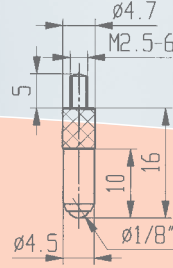


573/15

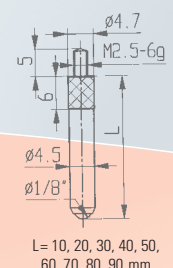


573/15 L

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

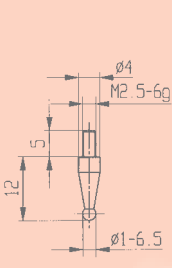


573/16

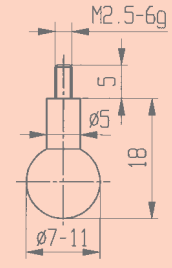


573/17 L

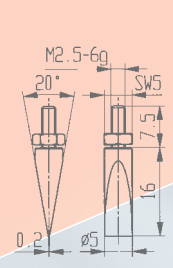
L = 10, 20, 30, 40, 50, 60, 70, 80, 90 mm



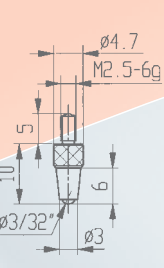
573/18



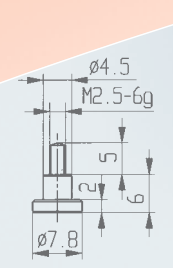
573/19



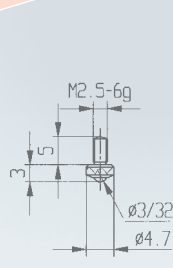
573/20 E



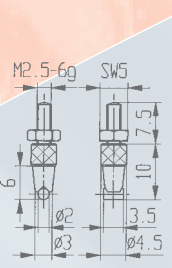
573/21



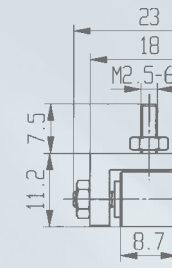
573/22



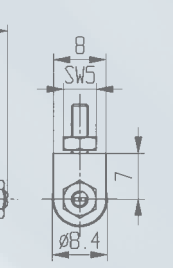
573/23



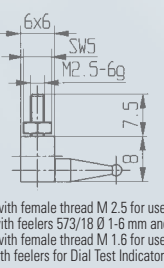
573/24 E



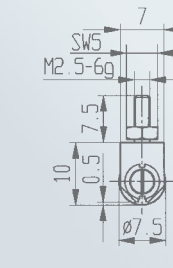
573/25 E



573/27 E

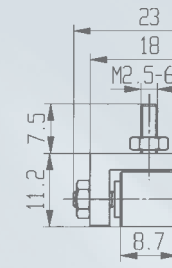


573/28 E



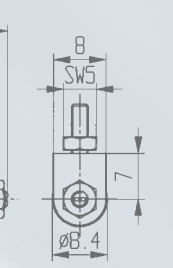
L = 3, 5, 8, 10, 12, 15, 20 mm

573/29 L

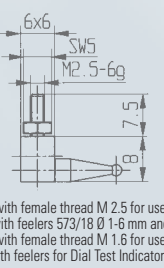


L = 3, 5, 8, 10, 12, 15, 20 mm

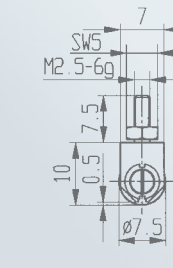
573/30 L



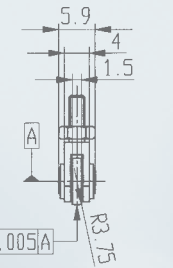
573/32



573/35 L



573/39 E



Ø = 7, 8 or 10
L = 1, 1.5 or 2 mm

573/40-D-L

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:

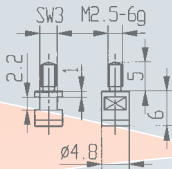
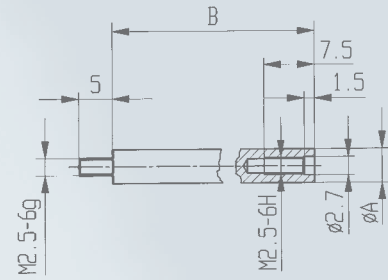
Dimension A: 4 mm (used at Dial Gauges with spindle Ø of 4 mm)

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

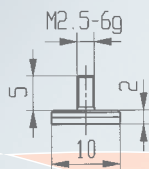
Dimension B available in the following standard lengths: 10, 15, 90, 95 and 100 mm

Custom lengths are available.

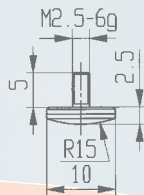
Contact Points with carbide (H), ruby (R), sapphire (S), ceramic (C), or plastic (KU) inserts



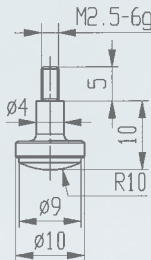
573/10 H



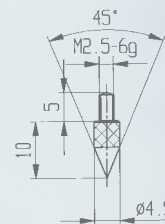
573/11 H/C



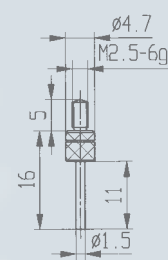
573/12 H/C



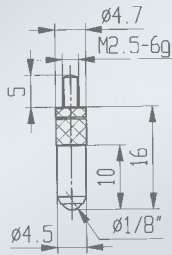
573/12-10 H



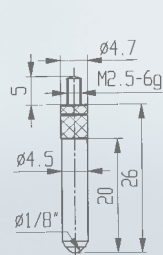
573/13 H



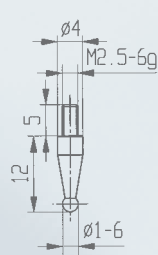
573/14 H



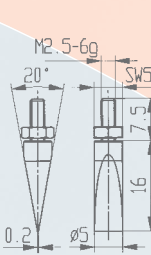
573/16 H/R/S



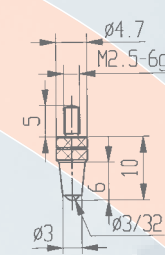
573/17 H/R/S



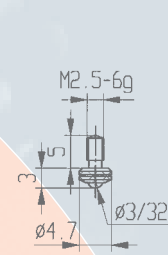
573/18 H



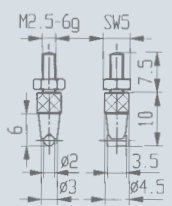
573/20 HE



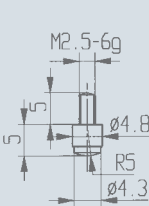
573/21 H



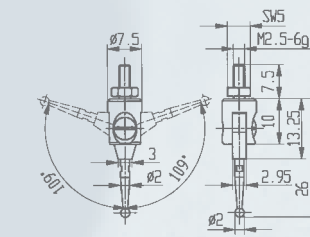
573/23 H



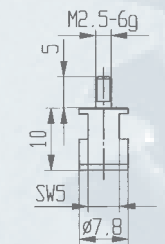
573/24 HE



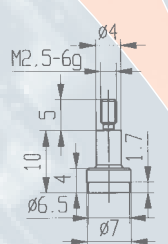
573/31 H



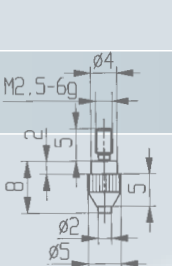
573/33 HE



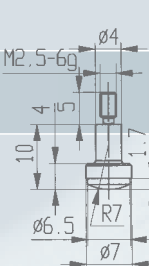
573/35 H



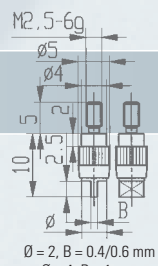
573/102 H



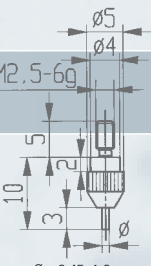
573/105 H



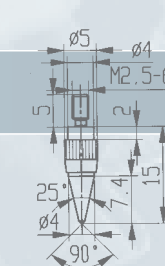
573/108 H



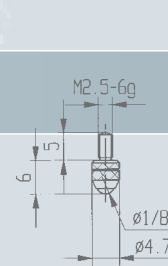
573/110 H



573/112 H



573/114 H



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

Digital Dial Gauge FMD 25 T

Resolution **0.001 mm / .00005"**
Range **25 mm / 1"**
Bezel-Ø **58 mm**
Output **RS 232 optoelectronic / USB**
Maximum error in one measuring direction: **5 µm**



Digital Dial Gauge KMD 12 T

Resolution **0.01 mm / .0005"**
Range **12.5 mm / .5"**
Bezel-Ø **40 mm**
Output **RS 232 optoelectronic / USB**
Maximum error in one measuring direction: **20 µm**



Digital Dial Gauge MDMV 12 T

Resolution **0.01 mm / .0005"**
Range **12.5 mm / .5"**
Bezel-Ø **58 mm**
Output **RS 232 / DIGIMATIC**
Maximum error in one measuring direction: **30 µm**



Digital Dial Gauge FMD 50 T

Resolution **0.001 mm / .00005"**
Range **50 mm / 2"**
Bezel-Ø **58 mm**
Output **RS 232 optoelectronic / USB**
Maximum error in one measuring direction: **7 µm**



Digital Dial Gauge FKMD 5 R

Resolution **0.001 mm / .00005"**
Range **5 mm / .2"**
Bezel-Ø **44 mm**
Output **RS 232 optoelectronic / USB**
Maximum error in one measuring direction: **5 µm**



Summary of important technical data of Digital Gauges

Model	Resolution	Range	Bezel-Ø	Data cables	Special feature	
KMD 12 T	0.01 mm	12.5 mm	44 mm	DCKMD 232 or DCKMD USB	water protected	
KMD 12 T wa	0.01 mm	12.5 mm	44 mm	DCKMD 232 or DCKMD USB		
FKMD 12 T	0.001 mm	12.5 mm	44 mm	DCKMD 232 or DCKMD USB		
MDMV 12 T	0.01 mm	12.5 mm	58 mm	DCMV 232 or DCMV DIGIMATIC		
MD 12 T	0.01 mm	12.5 mm	60 mm	DCMD 232 or DCMD USB		
FMD 12 T	0.001 mm	12.5 mm	60 mm	DCMD 232 or DCMD USB		
MD 25 T	0.01 mm	25 mm	60 mm	DCMD 232 or DCMD USB		
FMD 25 T	0.001 mm	25 mm	60 mm	DCMD 232 or DCMD USB		
MD 50 T	0.01 mm	50 mm	60 mm	DCMD 232 or DCMD USB		
FMD 50 T	0.001 mm	50 mm	60 mm	DCMD 232 or DCMD USB		
MD 100 T	0.01 mm	100 mm	60 mm	DCMD 232 or DCMD USB		
FMD 100 T	0.001 mm	100 mm	60 mm	DCMD 232 or DCMD USB		
KMD 5 R	0.01 mm	5 mm	44 mm	DCKMD 232 or DCKMD USB		back plunger
FKMD 5 R	0.001 mm	5 mm	44 mm	DCKMD 232 or DCKMD USB		back plunger
DK 30	0.01 mm	0.8 mm	44 mm	DCKMD 232 or DCKMD USB	Dial Test Indicator	

Accessories	Model	Technical features	Suitable for model
Data cable	DCMV 232	2 m long, SUB-D jack, 9-pin	MDMV 12 T
Data cable	DCMV DIGIMATIC	2 m long, flat connector, 10-pin	MDMV 12 T
Data cable	DCMD 232	2 m long SUB-D jack, 9-pin/F	MD 12 T, MD 25 T, MD 50 T, MD 100 T FMD 12 T, FMD 25 T, FMD 50 T, FMD 100 T
Data cable	DCMD USB	2 m long, USB	MD 12 T, MD 25 T, MD 50 T, MD 100 T FMD12T, FMD25T, FMD50T, FMD100T
Data cable	DCKMD 232	2m long, SUB-D jack; 9-pin / F, power supply	KMD 12 T, FKMD 12 T, KMD 5 R, FKMD 5 R, DK 30
Data cable	DCKMD USB	2 m long, USB	KMD 12 T, FKMD 12 T, KMD 5 R, FKMD 5 R, DK 30
Battery	BCR 2032	Lithium 3 V type CR 2032	For all Digital Gauges

The cable for data transmission is not included with Digital Gauges but has to be ordered separately.

Summary of important technical data of Metric Comparator Gauges Compika to DIN 879

Model	Reading	Range	Dial Reading	Overtravel	Special features
Compika 101, 101 B	0.01 mm	0.5 mm	25-0-25	2.5 mm	Shockproof
Compika 101 wa	0.01 mm	0.5 mm	25-0-25	2.5 mm	Shockproof, water protected
Compika 505, 505 B	0.005 mm	0.2 mm	100-0-100	2.8 mm	Shockproof
Compika 502, 502 B	0.002 mm	0.2 mm	100-0-100	2.8 mm	Shockproof
Compika 1001, 1001 B	0.001 mm	0.1 mm	50-0-50	3.0 mm	Shockproof
Compika 1001 wa	0.001 mm	0.1 mm	50-0-50	3.0 mm	Shockproof, water protected

Comparator Gauge Compika 1001

shockproof

Reading **0.001 mm**
 Range **0.1 mm (± 0.05 mm)**
 Overtravel **3.0 mm**
 Bezel-Ø **62 mm**

Accuracy according to DIN 879

Comparator Gauge Compika 1001 wa

shockproof, water protected

Reading **0.001 mm**
 Range **0.1 mm (± 0.05 mm)**
 Overtravel **3.0 mm**
 Bezel-Ø **62 mm**

Accuracy according to DIN 879



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 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
<hr/>						
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 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 clamping the stem and other equipment.
- Precision components, running in ruby bearings, warrant highest precision throughout.
- Tungsten carbide ball 2 mm Ø in measuring inserts.
- Body hard-chromed in order to protect the dovetail slides against damage.



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)
5.2284	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 4+8 H7 with dovetail clamp



Round Holder FH 90

8 mm Ø x 90 mm with dovetail clamp



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



JKA-FEINTASTER Precision Gauge

Reading **0.01 mm**

Range **10 mm**

Bezel-Ø **58 mm**

with contact jaws and adjustable measuring
table for the watchmaker in order to measure
the thickness and run out of spigots and shafts



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)

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 Wall Thickness Gauge JD 50 W

Resolution **0.01 mm**
Range **10 mm**
Depth of jaw **50 mm**
Output **RS 232 / USB**
Maximum error **20 µm**

Lower contact point 6 mm Ø with a collar radius of 1 mm at its end for measuring the wall thickness of tubes



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 with side discs for measuring the thickness of wires and threads

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



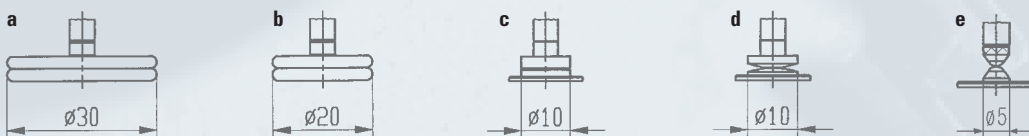
Technical Data for Metric Thickness Gauges

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 with lifting device	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
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 can be found below. Thickness Gauges adding 'D' in the type designation possess a digital indicating instrument.

Types of contact points



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.

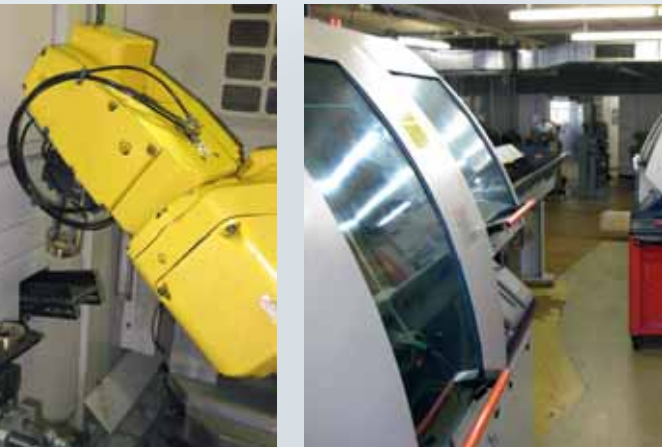
Our long standing experience of more than 70 years makes us the right address for you whenever you need a Dial Gauge.

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 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 rmb design department
- Certified to DIN EN ISO 9001:2000



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