# Inch Reading Precision Dial Gauges

Page	Model	Reading	Range per revolution	Dial Reading	Range	Bezel-Ø	Stem-Ø	Special Feature
53	MU 28 ZO	.0005″	.020″	0–20	.140″	28 mm	8 mm h 6	
53	KZO 6 T	.0005″	.020″	0–20	.120″	32 mm	8 mm h 6	
_	KZO 4 T	.001″	.020″	0–20	.120″	40 mm	8 mm h 6	
_	KZO 4 R	.001″	.020″	0–20	.120″	40 mm	8 mm h 6	Back Plunger
_	KZO 4/5 SW	.001″	.100″	0–100	.200″	44.5 mm	8 mm h 6	Waterproof
-	ZO 2 T	.001″	.100″	0–100	.500″	58 mm	8 mm h 6	
	ZO 2 S	.001″	.100″	0–100	.400″	58 mm	8 mm h 6	Shockproof
	SI-90 Z	.001″	-	40-0-40	.080″	58 mm	8 mm h 6	Error Free
_	ZO 2/30 T	.001″	.100″	0–100	1.000″	58 mm	8 mm h 6	
_	ZO 2/50 T	.001″	.100″	0–100	2.000"	58 mm	8 mm h 6	
62	ZO 3 T	.0005″	.050″	0–50	.500″	58 mm	8 mm h 6	
62	ZO 3 S	.0005″	.050″	0–50	.400″	58 mm	8 mm h 6	Shockproof
-	ZO 3/30 T	.0005″	.050″	0–50	1.000″	58 mm	8 mm h 6	
-	ZO 3/50 T	.0005″	.050″	0–50	2.000″	58 mm	8 mm h 6	
-	ZO 3 R	.0005″	.050″	0–50	.120″	58 mm	8 mm h 6	Back Plunger
_	ZO 3/5 R	.0005″	.050″	0–50	.200″	58 mm	8 mm h 6	Back Plunger
-	ZO 3 SNW	.0005″	.050″	0–50	.400″	61.5 mm	8 mm h 6	Waterproof
_	GZ 80 T	.0005″	.050″	0–50	.500″	80 mm	8 mm h 6	
_	GZ 100 T	.0005″	.050″	0–50	.500″	100 mm	8 mm h 6	
_	KFZO T	.0001″	.010″	0–10	.040″	40 mm	8 mm h 6	
_	KFZO S	.0001″	.010″	0–10	.040″	40 mm	8 mm h 6	Shockproof
-	KFZO 1101	.00005″	.005″	0–50	.040″	40 mm	8 mm h 6	Shockproof, extra accurate movement
_	SI-914 ZO	.00005″	-	20-0-20	.004"	40 mm	8 mm h 6	Error Free, extra accurate movement
64	FZO T	.0001″	.010″	0–10	.040″	58 mm	8 mm h 6	
64	FZO 5 T	.0001″	.010″	0–10	.200″	58 mm	8 mm h 6	
-	FZO 1101	.00005″	.005″	0–50	.040″	58 mm	8 mm h 6	Shockproof, extra accurate movement
-	SI-915 ZO	.00005″	-	20-0-20	.004″	58 mm	8 mm h 6	Error Free, extra accurate movement
_	FZ 80 T	.0001″	.010″	0–10	.040″	80 mm	8 mm h 6	
_	12 00 1	.0001	.010″	0-10	.040	80 mm	8 mm h 6	

All models of the above table have a stem-diameter of 8 mm h 6 and a thread M 2.5. The Dial Gauges will be supplied with flat backs. A mounting lug is available at extra charge.

Inch Reading Dial Gauges are also available with measurements equivalent to the American Standard ANSI B89.1.10M-2001. These instruments have a stem- $\emptyset$  of  ${}^{3}/_{8}{}''$ , the thread for the contact point is 4/48 UNF. For details concerning this Dial Gauge series please see the table on pages 65 and 66.

Käfer





## Inch Dial Gauge ZO 3 T

#### Inch Dial Gauge ZO3S



The Dial Gauges ZO 3 T and ZO 3 S will be supplied with continuous dial reading and flat backs. On request balanced dials and lug backs are available at extra charge.

Due to its effective shockproof system the Dial Gauge ZO 3 S has an exceptionally long service life. 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 measuring gear. An additional feature of this Dial Gauge is the incorporated fine adjustment of the pointer. By turning the knurled screw at the top, the large hand can be easily set to 0 without turning the bezel and the outer dial.

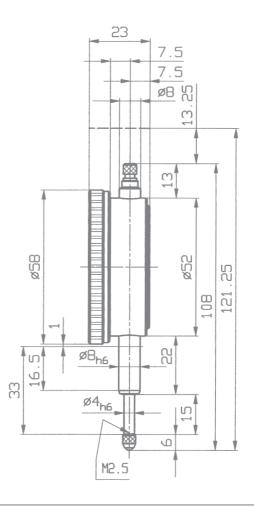
DIN-standard 878 applies to all permissible deviation spans analogous.

Spindle and stem are made of resistant stainless steel. The spindle is lapped.

Inch Dial Gauge ZO 3 T	
Reading	.0005″
Range	.500″
Range per revolution	.050″
Bezel-Ø	58 mm
Stem-Ø	8 h 6
Dimensions and accuracy according to DIN	EN ISO 463/DIN 878
Initial measuring force	0.8 N ± 20%
Dimensioned drawing	page 62

Inch Dial Gauge ZO 3 S shockproof				
Reading	.0005″			
Range	.400″			
Range per revolution	.050″			
Bezel-Ø	58 mm			
Stem-Ø	8 h 6			
Dimensions and accuracy acc	ording to DIN EN ISO 463/DIN 878			
Initial measuring force	0.9 N ± 20%			
Dimensioned drawing	same as M 2 S on page 14			





Special fittings:





# Small Inch Dial Gauge MU 28 Z0

The Dial Gauge MU 28 ZO is the smallest model of our broad manufacturing programme. Its extremely small overall dimensions require a special adjustment procedure according to a manufacturing standard.

Spindles and stems of the Small Dial Gauges MU 28 ZO and KZO 6 T are made of resistant stainless steel. The spindles are lapped.

	Plastic	Brass
$\checkmark$		

## Small Inch Dial Gauge KZO 6 T

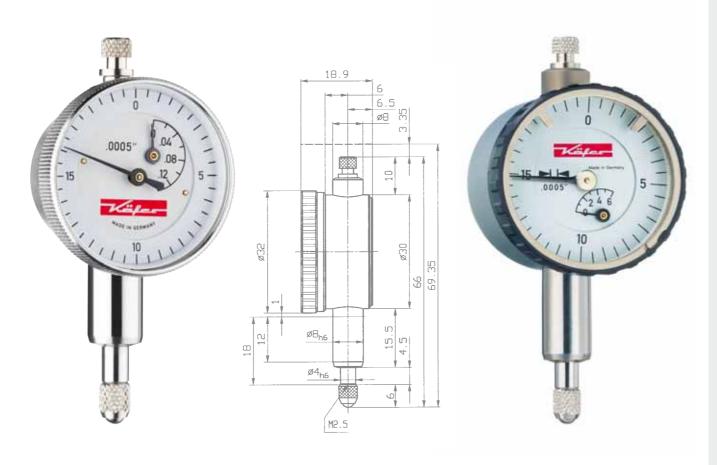


On request the Small Dial Gauge KZO 6 T is also available with special fittings:

- KZO 6 T with lifting device
- KZO 6 T with lug back
- KZO 6 T with customized dial

Small Inch Dial Gauge M	J 28 ZO
Reading	.0005″
Range	.140″
Range per revolution	.020″
Bezel-Ø	28 mm
Stem-Ø	8 h 6
Dimensions and accuracy a	ccording to DIN EN ISO 463 /
n	nanufacturing standard 4.0000.9.0012
Initial measuring force	0.8 N ± 20%
Dimensioned drawing	same as model MU 28 page 24

Small Inch Dial Gauge KZO 6 T	
Reading	.0005″
Range	.120″
Range per revolution	.020″
Bezel-Ø	32 mm
Stem-Ø	8 h 6
Dimensions and accuracy according to DIM	NEN ISO 463/DIN 878
Initial measuring force	0.7 N ± 20%
Dimensioned drawing	page 63



Special fittings for KZO 6 T:







# Inch Dial Gauge FZO T

# Inch Dial Gauge FZO 5 T

The carefully thought-out design, the use of selected components and materials as well as the movement perfected by precision engineering guarantee reliable measuring results and a long service life of our Precision Dial Gauges.

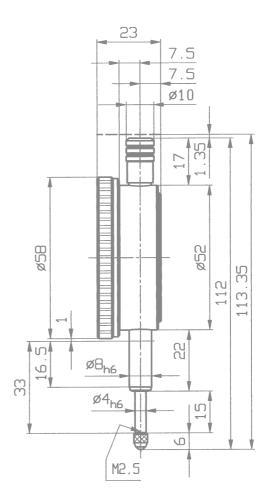
Spindle and stem are made of resistant stainless steel. The spindle is lapped.

Inch Dial Gauge FZO T	
Reading	.0001″
Range	.040″
Range per revolution	.010"
Bezel-Ø	58 mm
Stem-Ø	8 h 6
Dimensions and accuracy according to	DIN EN ISO 463 /
manufacturing	standard 0.0800.9.0005
Initial measuring force	1.3 N ± 20%
Dimensioned drawing	page 64

.0001″
.200″
.010″
58 mm
8 h 6
rding to DIN EN ISO 463 /
facturing standard 0.0800.9.0005
1.4 N ± 20%
on request



back



Special fittings:

glas

64

# Inch Reading Precision Dial Gauges to ANSI Standard

age	Model	Reading	Range per revolution	Dial Reading	Range	Bezel-Ø	Stem-Ø	Special Feature
	KZ 6 T	.0005″	.020″	0-20	.120″	1 <sup>13</sup> / <sub>50</sub> "	<sup>3</sup> / <sub>8</sub> ″	
	KZ 4/5 Sb	.001″	.100″	0-50-0	.200″	1 %/ <sub>16</sub> ″	<sup>3</sup> / <sub>8</sub> ″	Shockproof
	KZ 4/5 Sb FS	.001″	.100″	0-50-0	.200″	1 %/16"	3/8"	Shockproof, fixing screw
	KZ 4/5 Sb LB	.001″	.100″	0-50-0	.200″	1 <sup>9</sup> / <sub>16</sub> "	<sup>3</sup> / <sub>8</sub> ″	Shockproof, lug back
	KZ 4/5 Rb	.001″	.020″	0-10-0	.200″	1 <sup>9</sup> / <sub>16</sub> ″	<sup>3</sup> / <sub>8</sub> ″	Back plunger
	KZ 4/5 Rb FS	.001″	.020"	0-10-0	.200″	1 %/16 1 %/16"	<sup>78</sup> <sup>3</sup> / <sub>8</sub> "	Back plunger, fixing screv
	KZ 4 SI	.001″	-	40-0-40	.080″	1 %/16	3/8"	Error Free
	KZ 4 SI FS	.001″	-	40-0-40	.080″	1 %	3/8"	Error Free, fixing screw
	KZ 4 SI LB	.001″	-	40-0-40	.080″	1 %/16"	<sup>3</sup> / <sub>8</sub> ″	Error Free, lug back
	KZ 4/5 SW b	.001″	.100″	0-50-0	.200″	1 4/5"	3/8"	Waterproof
	Z 1 Ta	.001″	.100″	0-100	.250″	2 <sup>1</sup> / <sub>4</sub> "	<sup>3</sup> / <sub>8</sub> ″	
	Z 1 Ta FS	.001″	.100″	0-100	.250"	2 1/4"	3/8"	Fixing screw
	Z1TaLB	.001″	.100″	0-100	.250"	2 1/4"	3/8"	Lug back
	Z1Tb	.001″	.100″	0-50-0	.250"	2 1/4"	3/8"	Lug buok
	Z 1 Tb FS	.001″	.100″	0-50-0	.250″	2 1/4"	3/8"	Fixing screw
	Z 1 Tb LB	.001″	.100″	0-50-0	.250″	2 1/4"	3/8"	Lug back
	Z 2 Ta	.001″	.100″	0-100	.250″	2 1/4"	3/8"	3
	Z 2 Ta FS	.001″	.100″	0-100	.250″	2 1/4"	3/8"	Fixing screw
	Z 2 Ta LB	.001″	.100″	0-100	.250″	2 1/4"	3/8"	Lug back
	Z 2 Tb	.001″	.100″	0-50-0	.250″	2 <sup>1</sup> / <sub>4</sub> "	<sup>3</sup> / <sub>8</sub> "	
	Z 2 Tb FS	.001″	.100″	0-50-0	.250″	2 <sup>1</sup> / <sub>4</sub> "	<sup>3</sup> / <sub>8</sub> "	Fixing screw
	Z 2 Tb LB	.001″	.100″	0-50-0	.250″	2 <sup>1</sup> / <sub>4</sub> "	<sup>3</sup> / <sub>8</sub> "	Lug back
	Z 2/8 SNb	.001″	.100″	0-50-0	.312″	2 <sup>1</sup> / <sub>4</sub> "	<sup>3</sup> / <sub>8</sub> ″	Shockproof
	Z 2/8 SNb FS	.001″	.100″	0-50-0	.312″	2 <sup>1</sup> / <sub>4</sub> "	<sup>3</sup> / <sub>8</sub> "	Shockproof, fixing screw
	Z 2/8 SNb LB	.001″	.100″	0-50-0	.312″	2 <sup>1</sup> / <sub>4</sub> "	<sup>3</sup> / <sub>8</sub> "	Shockproof, lug back
	ZMU 52 TK	.001″	.100″	0-100	.500″	2 <sup>1</sup> / <sub>4</sub> "	<sup>3</sup> / <sub>8</sub> "	
	ZMU 52 TK LB	.001″	.100″	0-100	.500″	2 <sup>1</sup> / <sub>4</sub> "	<sup>3</sup> / <sub>8</sub> "	Lug back
	ZMU 52/30 T	.001″	.100″	0-100	1.000″	2 1/4"	3/8"	
	ZMU 52/30 T LB	.001″	.100″	0-100	1.000″	2 1/4"	<sup>3</sup> / <sub>8</sub> "	Lug back
	Z 2/30 Ta	.001″	.100″	0-100	1.000″	2 1/4"	<sup>3</sup> / <sub>8</sub> "	
	Z 2/30 Ta FS	.001″	.100″	0-100	1.000"	2 1/4"	3/8"	Fixing screw
	Z 2/30 Ta LB	.001″	.100″	0-100	1.000"	2 1/4"	3/8"	Lug back
	Z 2/50 Ta	.001"	.100″	0-100	2.000"	2 1/4"	<sup>3</sup> / <sub>8</sub> "	Finite a second
	Z 2/50 Ta FS Z 2/50 Ta LB	.001"	.100″	0-100	2.000"	2 <sup>1</sup> / <sub>4</sub> " 2 <sup>1</sup> / <sub>4</sub> "	<sup>3</sup> / <sub>8</sub> " <sup>3</sup> / <sub>8</sub> "	Fixing screw
	Z 2/100 Ta	.001″	.100″	0-100	4.000"	2 1/4"	3/8"	Lug back
	Z 2/100 Ta FS	.001	.100″	0-100	4.000"	2 1/4"	3/8"	Fixing screw
	Z 2/100 Ta LB	.001	.100″	0-100	4.000"	2 1/4	3/8"	Lug back
	Z 2 SI	.001″	-	40-0-40	.080″	2 1/4"	3/8"	Error Free
	Z 2 SI FS	.001″	-	40-0-40	.080″	2 1/4	3/8"	Error Free, fixing screw
	Z 2 SI LB	.001″	-	40-0-40	.080″	2 1/4"	3/8"	Error Free, lug back
	GZ 80/100 T	.001″	.100″	0-100	4.000″	3 <sup>1</sup> / <sub>8</sub> "	3/8″	
	GZ 80/100 T LB	.001″	.100"	0-100	4.000"	3 1/8"	3/8"	Lug back
	1/7 3/F Ch	.0005″	.040″	0-20-0	200."	1.9/ //	31 "	Charlinger
	KZ 3/5 Sb KZ 3/5 Sb FS	.0005″	.040″	0-20-0	.200"	1 %/16" 1 %/16"	<sup>3</sup> / <sub>8</sub> " <sup>3</sup> / <sub>8</sub> "	Shockproof Shockproof, fixing screw
	KZ 3/5 Sb F3	.0005	.040	0-20-0	.200	1 %/16 1 %/16"	<sup>3</sup> / <sub>8</sub> "	Shockproof, lug back
			.0+0.					
	KZ 3 SI	.0005″	-	10-0-10	.020"	1 %/16"	3/8"	Error Free
	KZ 3 SI FS KZ 3 SI LB	.0005″ .0005″	-	10-0-10 10-0-10	.020″ .020″	1 <sup>9</sup> / <sub>16</sub> " 1 <sup>9</sup> / <sub>16</sub> "	<sup>3</sup> / <sub>8</sub> " <sup>3</sup> / <sub>8</sub> "	Error Free, fixing screw Error Free, lug back
								21101 1100, lag 2001
	Z 3 Ta	.0005″	.050"	0-50	.125″	2 <sup>1</sup> / <sub>4</sub> " 2 <sup>1</sup> / <sub>4</sub> "	3/8"	Finite a second
	Z 3 Ta FS Z 3 Ta LB	.0005" .0005"	.050″ .050″	0-50 0-50	.125″ .125″	2 1/4"	<sup>3</sup> / <sub>8</sub> " <sup>3</sup> / <sub>8</sub> "	Fixing screw Lug back
	Z 3 Tb	.0005	.050″	0-25-0	.125	2 1/4"	<sup>3</sup> / <sub>8</sub> ″	LUY DACK
	Z 3 Tb FS	.0005″	.050″	0-25-0	.125	2 1/4	3/8"	Fixing screw
	Z 3 Tb LB	.0005	.050″	0-25-0	.125	2 1/4	3/8"	Lug back
	Z 3/0.04 SNb	.0005″	.040″	0-20-0	.312″	2 1/4"	3/8"	Shockproof
	Z 3/0.04 SNb FS	.0005″	.040″	0-20-0	.312"	2 1/4"	3/8"	Shockproof, fixing screw
	Z 3/0.04 SNb LB	.0005″	.040″	0-20-0	.312"	2 1/4	3/8"	Shockproof, lug back
	Z 3/30 Ta	.0005″	.050"	0-50	1.000″	2 1/4"	3/8"	Pi 001, iag baok
	Z 3/30 Ta FS	.0005″	.050″	0-50	1.000″	2 1/4"	3/8"	Fixing screw
	Z 3/30 Ta LB	.0005″	.050″	0-50	1.000″	2 1/4"	3/8"	Lug back
	Z 3/50 Ta	.0005″	.050″	0-50	2.000"	2 1/4"	3/8"	<u> </u>
	Z 3/50 Ta FS	.0005″	.050″	0-50	2.000″	2 1/4"	3/8"	Fixing screw
	Z 3/50 Ta LB	.0005″	.050″	0-50	2.000"	2 1/4"	3/8"	Lug back

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# Inch Reading Precision Dial Gauges to ANSI Standard

age	Model	Reading	Range per revolution	Dial Reading	Range	Bezel-Ø	Stem-Ø	Special Feature
	Z3/5 Rb	.0005″	.050″	0-25-0	.200″	2 <sup>1</sup> / <sub>4</sub> "	<sup>3</sup> / <sub>8</sub> ″	Back plunger
	Z3/5 Rb FS	.0005″	.050″	0-25-0	.200″	2 <sup>1</sup> / <sub>4</sub> "	<sup>3</sup> / <sub>8</sub> "	Back plunger, fixing screv
	Z3 SNW	.0005″	.050″	0-50	.400″	2 <sup>27</sup> / <sub>64</sub> "	<sup>3</sup> / <sub>8</sub> "	Waterproof
	FZ3 SI	.0005″	-	10-0-10	.020″	2 <sup>1</sup> / <sub>4</sub> "	<sup>3</sup> / <sub>8</sub> "	Error Free
	FZ3 SI FS	.0005″	-	10-0-10	.020″	2 <sup>1</sup> / <sub>4</sub> "	<sup>3</sup> / <sub>8</sub> "	Error Free, fixing screw
	FZ3 SI LB	.0005″	-	10-0-10	.020″	2 <sup>1</sup> / <sub>4</sub> "	<sup>3</sup> / <sub>8</sub> "	Error Free, lug back
	KFZ Tb	.0001″	.010″	0-5-0	.040″	1 <sup>9</sup> / <sub>16</sub> "	<sup>3</sup> / <sub>8</sub> ″	
	KFZ Tb FS	.0001″	.010″	0-5-0	.040″	1 <sup>9</sup> / <sub>16</sub> "	<sup>3</sup> / <sub>8</sub> "	Fixing screw
	KFZ Tb LB	.0001″	.010″	0-5-0	.040″	1 <sup>9</sup> / <sub>16</sub> "	<sup>3</sup> / <sub>8</sub> "	Lug back
	KFZ3 Sb	.0001″	.010″	0-5-0	.100″	1 <sup>9</sup> / <sub>16</sub> "	<sup>3</sup> / <sub>8</sub> ″	Shockproof
	KFZ3 Sb FS	.0001″	.010″	0-5-0	.100″	1 <sup>9</sup> / <sub>16</sub> "	<sup>3</sup> / <sub>8</sub> "	Shockproof, fixing screw
	KFZ3 Sb LB	.0001″	.010″	0-5-0	.100″	1 <sup>9</sup> / <sub>16</sub> "	<sup>3</sup> / <sub>8</sub> ″	Shockproof, lug back
	KFZ 1101	.00005″	.005″	0-50	.040″	1 <sup>9</sup> / <sub>16</sub> "	<sup>3</sup> / <sub>8</sub> ″	Shockproof
	KFZ 1101 FS	.00005″	.005″	0-50	.040″	1 <sup>9</sup> / <sub>16</sub> "	<sup>3</sup> / <sub>8</sub> "	Shockproof, fixing screw
	KFZ 1101 LB	.00005″	.005″	0-50	.040″	1 %/ <sub>16</sub> "	<sup>3</sup> / <sub>8</sub> ″	Shockproof, lug back
	SI-914 Z	.00005″	-	20-0-20	.004″	1 <sup>9</sup> / <sub>16</sub> "	<sup>3</sup> / <sub>8</sub> ″	Error Free
	SI-914 Z FS	.00005″	-	20-0-20	.004″	1 <sup>9</sup> / <sub>16</sub> "	<sup>3</sup> / <sub>8</sub> ″	Error Free, fixing screw
	SI-914 Z LB	.00005″	-	20-0-20	.004″	1 <sup>9</sup> / <sub>16</sub> "	<sup>3</sup> / <sub>8</sub> ″	Error Free, lug back
	FZ Ta	.0001″	.010″	0-10	.025″	2 <sup>1</sup> / <sub>4</sub> "	<sup>3</sup> / <sub>8</sub> ″	
	FZ Ta FS	.0001″	.010″	0-10	.025″	2 <sup>1</sup> / <sub>4</sub> "	<sup>3</sup> / <sub>8</sub> ″	Fixing screw
	FZ Ta LB	.0001″	.010″	0-10	.025″	2 <sup>1</sup> / <sub>4</sub> "	<sup>3</sup> / <sub>8</sub> ″	Lug back
	FZ Tb	.0001″	.010″	0-5-0	.025″	2 <sup>1</sup> / <sub>4</sub> "	<sup>3</sup> / <sub>8</sub> "	
	FZ Tb FS	.0001″	.010″	0-5-0	.025″	2 <sup>1</sup> / <sub>4</sub> "	<sup>3</sup> / <sub>8</sub> ″	Fixing screw
	FZ Tb LB	.0001″	.010″	0-5-0	.025″	2 <sup>1</sup> / <sub>4</sub> "	<sup>3</sup> / <sub>8</sub> ″	Lug back
	FZ 1101	.00005″	.005″	0-50	.040″	2 <sup>1</sup> / <sub>4</sub> "	<sup>3</sup> / <sub>8</sub> ″	Shockproof
	FZ 1101 FS	.00005″	.005″	0-50	.040″	2 <sup>1</sup> / <sub>4</sub> "	<sup>3</sup> / <sub>8</sub> ″	Shockproof, fixing screw
	FZ 1101 LB	.00005″	.005″	0-50	.040″	2 <sup>1</sup> / <sub>4</sub> "	<sup>3</sup> / <sub>8</sub> ″	Shockproof, lug back
	FZ/2.5 Sb	.0001″	.010″	0-5-0	.100″	2 <sup>1</sup> / <sub>4</sub> "	<sup>3</sup> / <sub>8</sub> ″	Shockproof
	FZ/2.5 Sb FS	.0001″	.010″	0-5-0	.100″	2 <sup>1</sup> / <sub>4</sub> "	<sup>3</sup> / <sub>8</sub> ″	Shockproof, fixing screw
	FZ/2.5 Sb LB	.0001″	.010″	0-5-0	.100″	2 1/4"	<sup>3</sup> / <sub>8</sub> ″	Shockproof, lug back
	SI-915 Z	.00005″	-	20-0-20	.004″	2 <sup>1</sup> / <sub>4</sub> "	<sup>3</sup> / <sub>8</sub> ″	Error Free
	SI-915 Z FS	.00005″	-	20-0-20	.004″	2 1/4"	<sup>3</sup> / <sub>8</sub> "	Error Free, fixing screw
	SI-915 Z LB	.00005″	-	20-0-20	.004″	2 <sup>1</sup> / <sub>4</sub> "	<sup>3</sup> / <sub>8</sub> "	Error Free, lug back

All the models of the above table have measurements equivalent to the American Standard ANSI B 89. 1/10M-2001. These instruments have a stem- $\emptyset$  of  $3_{8}^{"}$ , the thread for the contact point is 4/48 UNF.

In standard version the Dial Gauges will be delivered without fixing device for the bezel and flat back. At extra charge versions with fixing screw as well as lug back are available. Please add the type code FS for fixing screw resp. LB for lug back should you require the Dial Gauge with these features. Extra charges can be found in our price list below the listing of Inch Dial Gauges.

Additional accessories are available for Inch Dial Gauges:

- Offset lug back
- Screw type back
- Special contact points (see page 91)

Inch reading Dial Gauges are also available with a stem-Ø 8 mm h 6 and a thread M 2.5. For details of this Dial Gauge Series please see the table on page 61.





#### Small Inch Dial Gauges KZ 4/5 Sb and KZ 3/5 Sb

to ANSI standard, shockproof

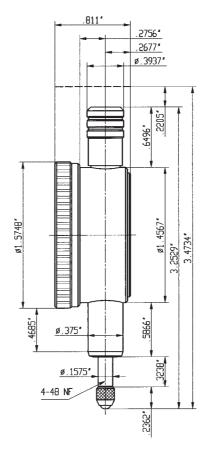
The high-class impact protection of the Inch Dial Gauges KZ 4/5 Sb and KZ 3/5 Sb results in an exceptionally long service life. A gear rack sleeve covering the length of the spindle is arranged and sprung in such a way that the shocks against the measuring insert are not transferred to the measuring gear. The Dial Gauges are robust in operation. Their precision is maintained with practically no limitations.

Spindle and stem are made of resistant stainless steel.

Small Inch Dial Gauge KZ 4/5 Sb shockproof	
Reading	.001″
Range	.200″
Range per revolution	.100″
Dial reading	0-50-0
Bezel-Ø	1 <sup>9</sup> / <sub>16</sub> "
Stem-Ø	<sup>3</sup> / <sub>8</sub> "
Dimensions and accuracy according to	ANSI
Spindle	lapped
Dimensioned drawing	page 67

Small Inch Dial Gauge KZ 3/5 Sb shockproof			
Reading	.0005″		
Range	.200″		
Range per revolution	.040″		
Dial reading	0-20-0		
Bezel-Ø	1 <sup>9</sup> / <sub>16</sub> "		
Stem-Ø	3/8″		
Dimensions and accuracy according to	ANSI		
Spindle	lapped		
Dimensioned drawing	page 67		





For model KZ 3/5 Sb the spindle is shorter by .0285" thus reducing the overall length to 3.4449" from 3.4734".

Special fittings:



Cäfer



#### Inch Dial Gauge Z 2/8 SNb

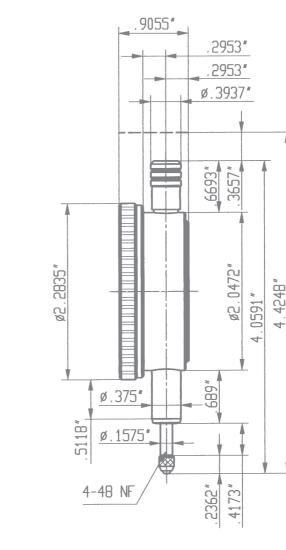
to ANSI standard, shockproof

With this shockproof series, a product of our extensive design expertise, we offer an accurate, reliable and long-lasting Dial Gauge.

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 measuring gear. The Dial Gauge is robust in operation. Its precision is maintained with practically no limitations.

Spindle and stem are made of resistant stainless steel.

Inch Dial Gauge Z 2/8 SNb shockproof	
Reading	.001″
Range	.312″
Range per revolution	.100″
Dial reading	0-50-0
Bezel-Ø	2 <sup>1</sup> / <sub>4</sub> "
Stem-Ø	3/8"
Dimensions and accuracy according to	ANSI
Spindle	lapped
Dimensioned drawing	page 68







Special fittings:

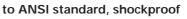




Dial Gauge ZMU 52 TK

to ANSI standard

Dial Gauge ZMU 52/30 T



Our new Dial Gauge Series MU 52 has been designed and manufactured by Käfer Dial Gauges Shanghai. The racks and pinions – the key parts for the accuracy of Dial Gauges – are however supplied by Käfer Germany. All Dial Gauges are checked for their accuracy on a Feinmess Suhl automatic Dial Gauge Measuring Machine.

All details of these Dial Gauges conform to the American Standard ANSI B 89. Particularly clear reading due to the concentrically positioned small pointer.

Precision Dial Gauge ZMU 52 TK	
Reading	.001″
Range	.5″
Range per revolution	.1"
Bezel-Ø	2 <sup>1</sup> / <sub>4</sub> "
Stem-Ø	3/8″
Dimensions and accuracy according to	ANSI
Spindle	lapped
Dimensioned drawing	on request

Precision Dial Gauge ZMU 52/30 T	
Reading	.001″
Range	1″
Range per revolution	.1"
Bezel-Ø	2 1/4"
Stem-Ø	<sup>3</sup> / <sub>8</sub> "
Dimensions and accuracy according to	ANSI
Spindle	lapped
Dimensioned drawing	on request



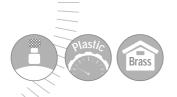


Special fittings:





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# Inch Dial Gauge Z 2/30 Ta

to ANSI standard

# Inch Dial Gauge Z 3/30 Ta

to ANSI standard

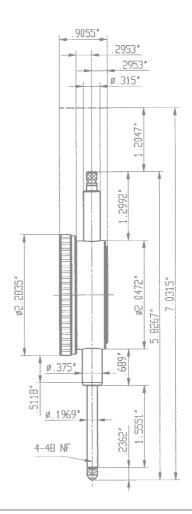
The concentric millimetre pointer allows an easy and safe reading of these Dial Gauges. The carefully thought out design, the use of selected components and materials as well as the movement perfected by precision engineering guarantee reliable measuring results and a long service life of the Precision Dial Gauges Z 2/30 Ta and Z 3/30 Ta.

The essential parts of the movement are jewelled. Spindle and stem are made of resistant stainless steel.

Inch Dial Gauge Z 2/30 Ta	
Reading	.001″
Range	1″
Range per revolution	.100″
Dial reading	0-100
Bezel-Ø	2 1/4"
Stem-Ø	3/8"
Dimensions and accuracy according to	ANSI
Spindle	lapped
Dimensioned drawing	page 70

Inch Dial Gauge Z 3/30 Ta	
Reading	.0005″
Range	1″
Range per revolution	.050″
Dial reading	0-50
Bezel-Ø	2 <sup>1</sup> / <sub>4</sub> "
Stem-Ø	<sup>3</sup> / <sub>8</sub> ″
Dimensions and accuracy according to	ANSI
Spindle	lapped
Dimensioned drawing	page 70

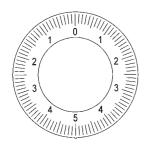




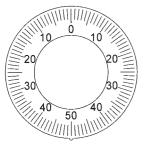
Special fittings:



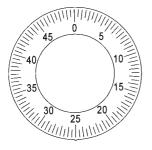
# Dial Numbering of Inch Reading Dial Gauges to ANSI



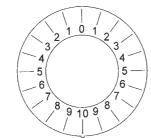
0-5-0 reading .0001" KFZ Tb, KFZ3 Sb, FZ Tb, FZ 2.5 Sb



0-50-0 reading .001" KZ 4/5 Sb, KZ 4/5 SWb, Z 1 Tb, Z 2 Tb, Z 2/8 SNb



0-50 reading .00005" KFZ 1101, FZ 1101



0-10-0 reading .001" KZ 4/5 Rb

5

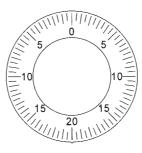
reading .0001"

0-20

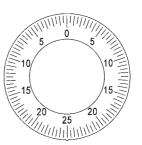
KZ 6 T

0-10

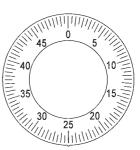
FZ Ta



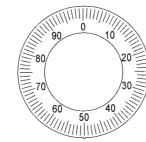
0-20-0 reading .0005" KZ 3/5 Sb, Z 3/0.4 SNb



0-25-0 reading .0005" Z3 Tb, Z 3/5 Rb



0-50 reading .0005" Z 3 Ta, Z 3/30 Ta, Z 3/50 Ta Z 3 SNW



0-100 reading .001" Z 1 Ta, Z 2 Ta, Z 2/30 Ta, Z 2/50 Ta, Z 2/100 Ta, GZ 80/100 T, ZMU 52 TK, ZMU 52/30 T

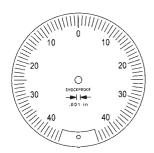


reading .0005"

**10-0-10** reading .000 KZ 3 SI, FZ 3 SI



**20-0-20** reading .00005" SI – 914 Z, SI – 915 Z



All models bearing the same prefix but with a suffix identifying a special version (i.e. FS for fixing screw or LB for lug back) have the same dial numbering as the illustrated basic models.

40-0-40 reading .001" KZ4 SI, Z 2 SI





#### Small Inch Dial Gauge KZ 4/5 Rb

Inch Dial Gauge Z 3/5 Rb

with back plunger

with back plunger

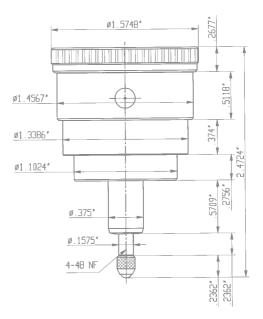
The models with back plunger provide the designer with new construction possibilities. They allow positioning with optimal read-out facility. These models can be held either on the stem  $\emptyset {}^{3}/_{8}{}''$  or on the 1.1024" diameter spigot.

Spindle and stem are made of resistant stainless steel.

Small Inch Dial Gauge	KZ 4/5 Rb with back plunger
Reading	.001″
Range	.200″
Range per revolution	.020″
Dial reading	0-10-0
Bezel-Ø	1 <sup>9</sup> / <sub>16</sub> "
Stem-Ø	3/8"
Accuracy according to	manufacturing standard 0.0500.9.0007
Spindle	lapped
Dimensioned drawing	page 72

Inch Dial Gauge Z 3/5 I	Rb with back plunger
Reading	.0005″
Range	.200″
Range per revolution	.050″
Dial reading	0-25-0
Bezel-Ø	2 1/4"
Stem-Ø	3/8"
Accuracy according to	manufacturing standard 0.0500.9.0007
Spindle	lapped
Dimensioned drawing	on request







Special fittings:



# Error Free Inch Dial Gauge Z2 SI

to ANSI, with overtravel, shockproof

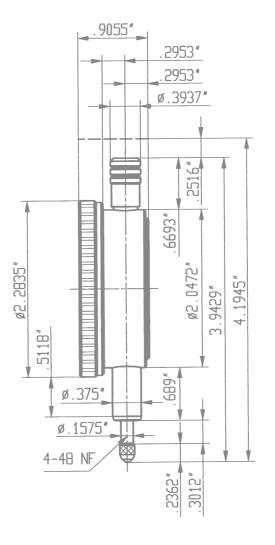
In order to avoid reading errors the measuring ranges of our Error Free Dial Gauges series ,SI' are limited to slightly less than one revolution of the hand. Therefore a measurement can only be performed within the range of one revolution of the hand guaranteeing an error free reading of the Dial Gauges.

The high-class impact protection of the Error Free Dial Gauge Z2 SI results in an exceptionally long service life. 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 measuring gear.

Spindle and stem are made of resistant stainless steel.

Error Free Inch Dial Gauge Z2 SI shockproof, with overtravel	
Reading	.001″
Range	.080″
Overtravel	.1568″
Bezel-Ø	2 <sup>1</sup> / <sub>4</sub> "
Stem-Ø	3/8"
Dimensions and accuracy according to	ANSI
Spindle	lapped
Dimensioned drawing	page 73





The above dimensioned drawing also applies to model FZ 3 SI which is not shown in this catalogue.





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#### Inch Dial Gauge Z3 SNW

waterproof, shockproof

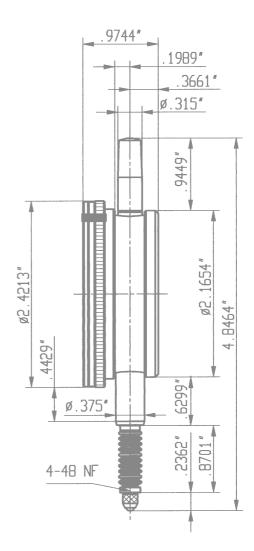
The technical features of our waterproof Inch Dial Gauges are the same as for the metric models on page 53 of this catalogue.

When changing the measuring insert attention has to be paid that the spacer disc between the measuring insert and the rubber bellows is put back again. Otherwise the Dial Gauge is no longer sealed against the ingress of contamination.

Spindle and stem are made of resistant stainless steel.

	.0005″
Reading	.0005
Range	.400″
Range per revolution	.050″
Bezel-Ø	2 <sup>27</sup> / <sub>64</sub> "
Stem-Ø	<sup>3</sup> / <sub>8</sub> "
Dimensions and accuracy according to	ANSI
Spindle	lapped
Dimensioned drawing	page 74





Special fittings:

