

Waterproof Dial Gauges

shockproof

In the workshop it is unavoidable that Precision Dial Gauges are in contact with oil, water mist or dust. Our range of hermetically sealed Waterproof Dial Gauges has been specially designed to withstand these conditions. These extremely robust Precision Dial Gauges conforming to protection class IP 67 bear the order code 'W'.

Their features are:

- A flexible rubber bellows is fitted where the spindle enters the stem.
- The upper end of the measuring spindle is sealed by a safety cap and an 'O' ring.
- A new design of the metal bezel and its assembly produces a perfect seal. Its special features include 'O' rings, flat glasses and a screwed-on brass ring.
- An additional 'O' ring is placed between the rotating outer ring and the indicator's metal housing.
- The back plate is fitted in such a way that no foreign matter can enter.
- Effective shockproof system.

Technical data for Metric Waterproof Dial Gauges IP 67

Model	Reading	Range per revolution	Range	Bezel-Ø	Accuracy according to
KM 4 SW	0.01 mm	0.5 mm	3 mm	44.5 mm	DIN 878
KM 4/5 SW	0.01 mm	0.5 mm	5 mm	44.5 mm	DIN 878
SI-45 W	0.01 mm	–	0.4 mm	44.5 mm	DIN 878
M 2 SW	0.01 mm	1 mm	10 mm	61.5 mm	DIN 878
M 2/30 SW	0.01 mm	1 mm	30 mm	61.5 mm	Manufacturing standard 1.0200.9.0014
M 2 R W	0.01 mm	1 mm	3 mm	61.5 mm	Manufacturing standard 0.0500.9.0006
SI-90 W	0.01 mm	–	0.8 mm	61.5 mm	DIN 878
GM 80 SW	0.01 mm	1 mm	10 mm	80 mm	Manufacturing standard 0.0200.9.0006
KM 500 SW	0.002 mm	0.2 mm	1 mm	44.5 mm	Manufacturing standard 0.0500.9.0001
Feinika KM 1101 W	0.001 mm	0.1 mm	1 mm	44.5 mm	Manufacturing standard 0.0500.9.0010
Feinika FM 1101 W	0.001 mm	0.1 mm	1 mm	61.5 mm	Manufacturing standard 0.0500.9.0010
FM 1000 SW	0.001 mm	0.2 mm	1 mm	61.5 mm	Manufacturing standard 0.0500.9.0001
FM 1000/5 SW	0.001 mm	0.2 mm	5 mm	61.5 mm	Manufacturing standard 0.0500.9.0001

Other Dial Gauges from our manufacturing programme with a measuring range of maximum 30 mm can also be supplied water- and oilproof. Please request our respective offer.

Small Dial Gauge KM 4 SW

waterproof, shockproof

Small Dial Gauge KM 4/5 SW

waterproof, shockproof

Due to their high-class impact protection the Small Dial Gauges KM 4 SW and KM 4/5 SW offer an extremely 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. These Dial Gauges are robust in operation. Their precision is maintained with practically no limitations.

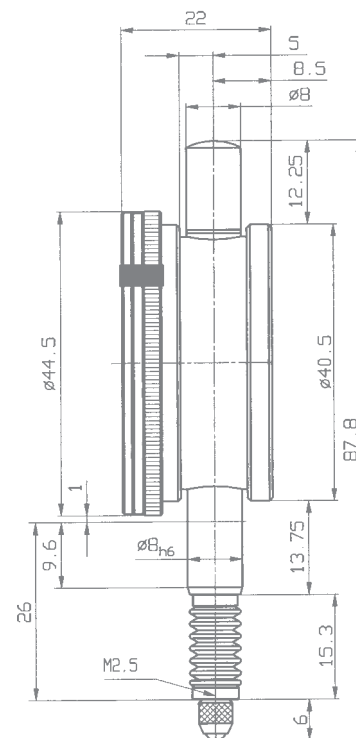
Spindle and stem are made of resistant stainless steel. The spindle is lapped.

Small Dial Gauge KM 4 SW waterproof, shockproof	
Reading	0.01 mm
Range	3 mm
Range per revolution	0.5 mm
Bezel-Ø	44.5 mm
Stem-Ø	8 h 6
Accuracy according to	DIN 878
Initial measuring force	1.2 N
Dimensioned drawing	page 54

Small Dial Gauge KM 4/5 SW waterproof, shockproof	
Reading	0.01 mm
Range	5 mm
Range per revolution	0.5 mm
Bezel-Ø	44.5 mm
Stem-Ø	8 h 6
Accuracy according to	DIN 878
Initial measuring force	1.2 N
Dimensioned drawing	page 54



Model shown: KM 4 SW



The above dimensioned drawing also applies to the Safety Dial Gauge SI-45 W.

On model KM 4/5 SW the dimension 12.25 mm at the top is 15.25 mm instead. The overall length thus becomes 90.8 mm instead of 87.8 mm.

Dial Gauge M 2 SW

waterproof, shockproof

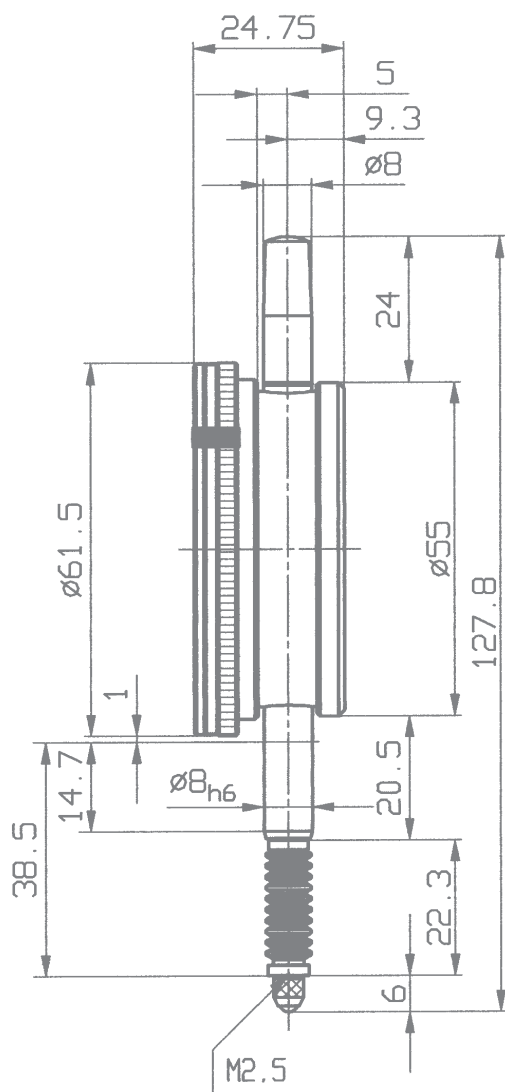
The waterproof Precision Dial Gauge M 2 SW also has a bezel which can be rotated through 360°.

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. The spindle is lapped.

Precision Dial Gauge M 2 SW waterproof, shockproof

Reading	0.01 mm
Range	10 mm
Range per revolution	1 mm
Bezel-Ø	61.5 mm
Stem-Ø	8 h 6
Accuracy according to	DIN 878
Initial measuring force	0.9 N
Dimensioned drawing	page 55



Dial Gauge M 2 R W

waterproof, back plunger

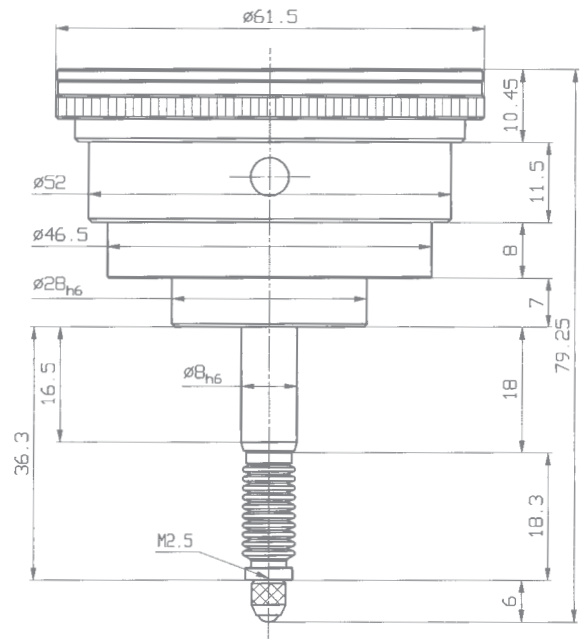
For the first time we are introducing with this catalogue edition model M 2 R W, a Precision Dial Gauge with back plunger which is waterproof according to protection class IP 67.

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



Dial Gauge M 2 R W waterproof, back plunger

Reading	0.01 mm
Range	3 mm
Range per revolution	1 mm
Bezel-Ø	61.5 mm
Stem-Ø	8 h 6
Accuracy according to manufacturing standard	0.0500.9.0006
Initial measuring force	1.7 N
Dimensioned drawing	page 56



Error Free Dial Gauge SI-90 W

waterproof, shockproof

Due to its high-class impact protection the Safety Dial Gauge SI-90 W offers an extremely 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 Gauge is robust in operation. Its precision is maintained with practically no limitations.

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

Error Free Dial Gauge SI-90 W waterproof, shockproof

Reading	0.01 mm
Range	0.8 mm
Overtravel	9 mm
Bezel-Ø	61.5 mm
Stem-Ø	8 h 6
Accuracy according to	DIN 878
Initial measuring force	0.9 N
Dimensioned drawing	page 55



On request other Dial Gauges from our manufacturing programme are available in waterproof version.

- Dial Gauge M 3 SW
- Dial Gauge M 3 a SW
- Dial Gauge SI-18 W

Please request our offers.

Dial Gauge GM 80 SW

waterproof, shockproof

For the first time we are introducing with this catalogue edition model GM 80 SW, a Precision Dial Gauge with 80 mm bezel diameter which is waterproof according to protection class IP 67.

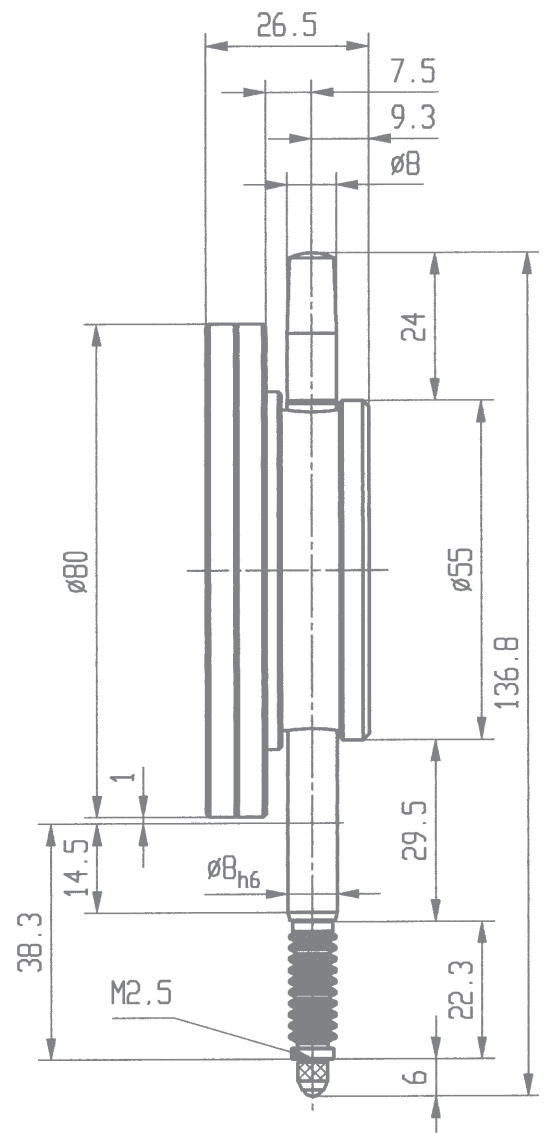
The high-class impact protection of the Dial Gauge GM 80 SW results in an exceptionally long service life. A gear rack sleeve covering the length of the spindle is arranged and sprung in such a way that the shocks against the measuring insert are not transferred to the measuring gear. The Dial Gauge is robust in operation. Its precision is maintained with practically no limitations.

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



Dial Gauge GM 80 SW waterproof, shockproof

Reading	0.01 mm
Range	10 mm
Range per revolution	1 mm
Bezel-Ø	80 mm
Stem-Ø	8 h 6
Accuracy according to	manufacturing standard 0.0200.9.0016
Initial measuring force	1.5 N
Dimensioned drawing	page 58



Dial Gauge FM 1000/5 SW

waterproof, shockproof

Dial Gauge FM 1000 SW

waterproof, shockproof

The high-class impact protection of the Dial Gauges FM 1000/5 SW and FM 1000 SW 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 Gauge is robust in operation. Its precision is maintained with practically no limitations.

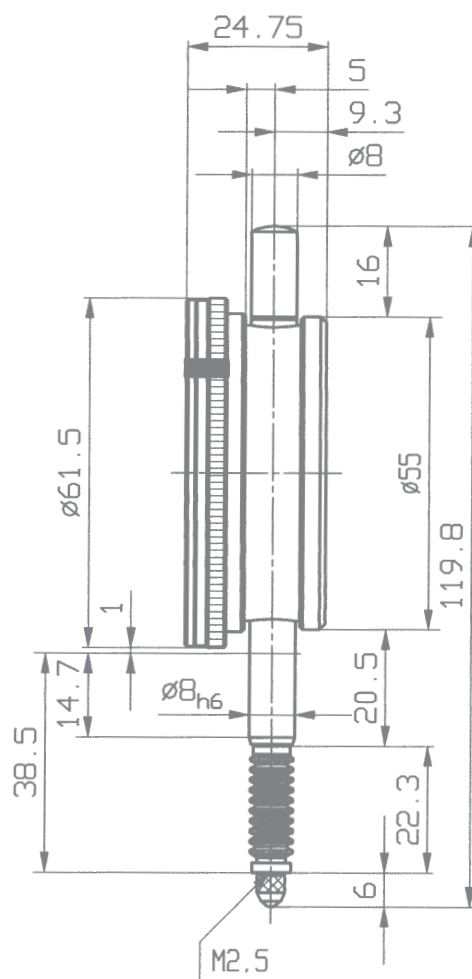
Spindle and stem are made of resistant stainless steel. The spindle is lapped.

Dial Gauge FM 1000/5 SW waterproof, shockproof	
Reading	0.001 mm
Range	5 mm
Range per revolution	0.2 mm
Bezel-Ø	61.5 mm
Stem-Ø	8 h 6
Accuracy according to	manufacturing standard 0.0500.9.0001
Initial measuring force	1.2 N
Dimensioned drawing	page 59

Dial Gauge FM 1000 SW waterproof, shockproof	
Reading	0.001 mm
Range	1 mm
Range per revolution	0.2 mm
Bezel-Ø	61.5 mm
Stem-Ø	8 h 6
Accuracy according to	manufacturing standard 0.0500.9.0001
Initial measuring force	1.2 N
Dimensioned drawing	page 59



Model shown: FM 1000/5 SW



Dial Gauge M 2 S wa

water protected, shockproof

Water protected Dial Gauges are to be recommended for applications where splash water prevails. These Dial Gauges conforming to protection class **IP53** bear the order code 'wa'.

The transparent front cover, made of knock resistant plastics, with its anti-reflective coating reduces shadows on the dial face and makes the Dial Gauge M 2 S wa very easy to read even at awkward angles that may often be found in fixture applications.



Precision Dial Gauge M 2 S wa, water protected

Reading	0.01 mm
Range	10 mm
Range per revolution	1 mm
Bezel-Ø	58 mm
Stem-Ø	8 h 6
Accuracy according to	DIN 878
Initial measuring force	0.9 N
Dimensioned drawing	page 60

