

# BMI®

## Measuring Instruments

...measuring the progress

# 2016



# Our Intentions

As a private enterprise that has been owned by our family for more than 50 years, we feel particularly committed to our customers' interests.

One of our major intentions is to live up to the reputation and tradition of the quality label "made in Germany".

In the North Bavaria town of Hersbruck we manufacture high-quality measurement tools for the most diversified applications. These products meet the highest demands of trade and industry. On top of that, BMI succeeds in combining tradition and innovation.

This is also highlighted by our way into laser levelling. Since 1993, BMI has been one of the leading manufacturers in this technology.

A further indication of the continuous innovation are more than 40 active patents.

Some of our patented milestones in the development and production of practical measuring instruments are

- 1986** The introduction of unique spirit levels whose vials have been unalterably fixed by means of ultrasonic welding
- 1986** The minimization of a tape breakage hazard through the FLEXTOP tip for measuring tapes
- 1992** Measuring tape frames with ball bearings of the ERGOLINE series for left and right handers
- 1997** Hightech manufacture of EUROSTAR with unbreakable, laser-marked vials.
- 1999** The levelling laser BMI Magic and its universal usage
- 2001** Introduction of the enclosed series, RADIUS for measuring tapes
- 2003** Presenting the robust, waterproof construction laser NAUTILUS IPX7
- 2005** topoMAT – sold more than 10.000 times – becomes rainproof according to the IP55 standard
- 2007** Quicky – both tape and folding rule in one
- 2010** POLYWOOD – the first spirit level with attributes "non-sparking tool" and "fully insulated up to 1000 volts according to EN60900:2004"
- 2011** **BMI**meter with stop and beltclip

It has been, and remains our first priority to equip you with up-to-date premium quality measuring instruments



Hans Keller

Manager and Sole Proprietor

# Content



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Spirit Levels 34



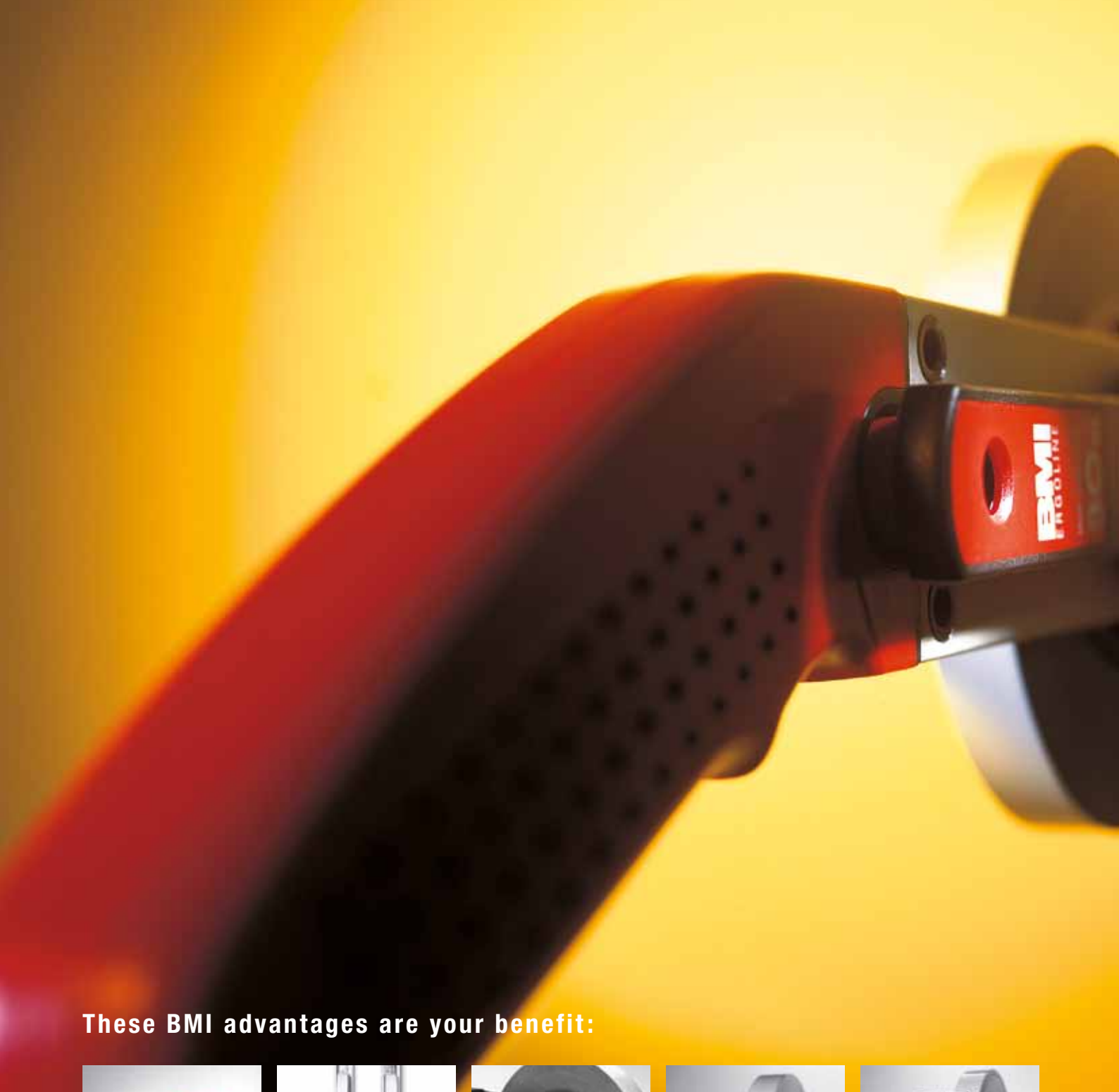
LASER-Technology 44



Rules 53



Squares 58



**These BMI advantages are your benefit:**



**Frame designed according to ergonomic requirements**



**Can be modified from right-hand to left-hand operation within seconds**



**Ball bearings resistant to wear for most convenient handling**



**Aluminium profiles resistant to bending**



**Wear-resistant tape outlet of high tech plastic**

# Measuring Tapes, Frame- and Case-Type

Measuring tapes by BMI, that means patented features which ease the work of professionals and "do it yourselfers" alike, protect the tool itself and thus save time and money. All the three frame series are ergonomically designed, can be modified from right-hand to left-hand operation in no time, and are even equipped with slide or ball bearings.

The FLEXTOP tip which is optionally available without extra charge prevents breakage at the tape end. Our broad range of tape designs with regard to lengths, materials and graduation layout provide the user with the perfect solution for every measuring task. The RADIUS case series also includes many of these features, of course.

Measuring tapes by BMI are certainly the right choice

## ADVANTAGES

- Tapes comply to the EC accuracy classes I, II or III. Many of them are EC type-approved and are thus suitable for calibration
- Frames designed according to ergonomic requirements
- Can be modified from right-hand to left-hand operation within a second
- Ball bearings resistant to wear for most convenient handling of the ERGOLINE frame
- Low-wear slide bearings for BASIC and STANDARD frames
- The FLEXTOP tip prevents breakage at the tape commencement (see page 12)
- Park position for the tape commencement ring and crank arm



**Nothing  
can scratch  
me!**

- Measuring tapes with this symbol have a transparent coating as wearing protection, 10 times stronger than any other non-abrasive coatings! You will obtain many of these advantages from BMI only, as they have been patented!



**Park position for tape  
commencement ring**



**Park position for  
crank arm**



**The FLEXTOP tip  
prevents breakage  
at the tape  
commencement  
(See also page 12)**



**RADIUS case with  
easy grip soft-touch  
surface**

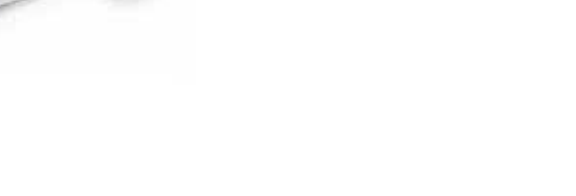
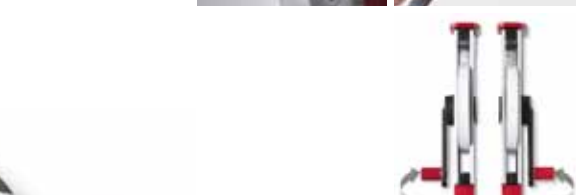
# ERGOLINE

## ERGOLINE frame series

Ergonomically shaped frame with easy-to-grip, soft rubber protrusions.

Park position for crank arm and tape commencement ring.

Ball bearings for highest winding convenience.



# STANDARD

## STANDARD frame series

Like ERGOLINE, but with plastic slide rings instead of ball bearings, without soft rubber protrusions.

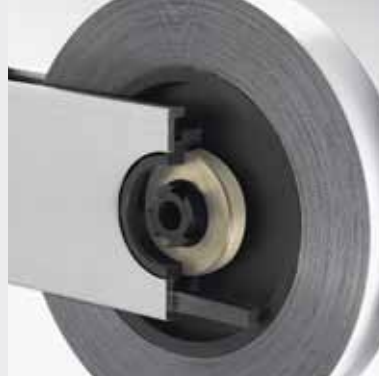




# BASIC

## BASIC frame series

Ultrasonic welded high-impact plastic frame. Important features as in ERGOLINE, but with slide rings instead of ball bearings.



**BMI**



We deliver long-length tapes with STANDARD V-frame



# RADIUS

## RADIUS case series

Ergonomically shaped case with large crank arm and park position for commencement ring. Slide bearing shells for highest winding comfort. With easy grip soft-touch surface





## 555 case series

555 case series

Handy case tape made of shock-resistant plastics.  
Carrying strap. **Tape width 10 mm**



## Brass frames

Dipping tapes, suitable for calibration (large fig.).

Brass frames for stainless steel tapes small fig.)



including weight 476,  
please see page 13 for description,  
suitable for calibration

# Graduation lay-out

Graduations available.  
Custom made graduations on request



1: (cm)



2: (cm/cm)



3: (cm/inch)



4: (mm)



5: (mm/inch)

## Measurement Commencements

**A:**  
Measurement commencement  
approx. 10 cm after end fitting



**B:**  
Measurement commencement  
at front fitting edge



**C:**  
Measuring commencement  
at front ring edge



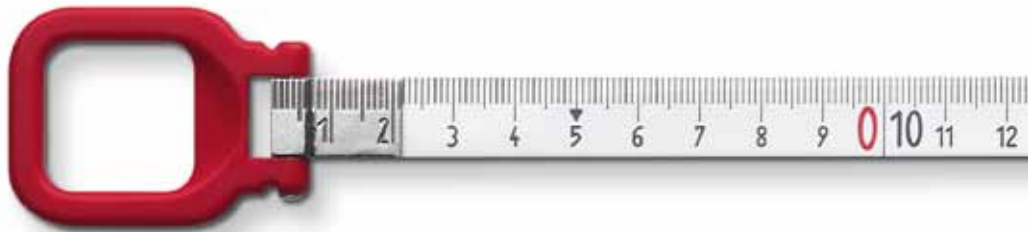
**L:**  
Measurement commencement  
at the bottom edge of the weight



# Tape Commencements

For all steel measuring tapes  
13 mm, pull ring made of  
break-proof plastic, 2 notches  
for weights.

**This commencement will be  
delivered when no special  
commencement is mentioned**



**F:**  
FLEXTOP tip made of trans-  
parent, highly-flexible plastic;  
reliably prevents breakage at the  
tape commencements.

For all steel measuring tapes  
13 mm, pull ring made of  
break-proof plastic, 2 notches  
for weights.



**BHF:**  
Hookring with FLEXTOP tip,  
measurement commencement B



**CHF:**  
Hookring with FLEXTOP tip,  
measurement commencement C



**M:**  
Metal commencement with  
metal ring



# Weights



## Weight 11

Brass, cylindrical, no graduation, length 170 mm, diameter 24 mm, weight 500 g (can be removed from the tape)

**Order No.**  
340 00 11



## Weight 16

Stainless steel cylindrical, engraved mm scale on one and inch scale on the other side, length 113 mm, diameter 24 mm, weight 400 g (cannot be removed from the tape)

**Order No.**  
340 02 16



## Weight 14

Brass cylindrical, engraved mm scale on one and inch scale on the other side, length 80 mm, diameter 24 mm, weight 300 g (cannot be removed from the tape)

**Order No.**  
340 02 14



## Weight 10

Brass cylindrical, engraved mm scale on one and inch scale on the other side, length 89 mm, diameter 24 mm, weight 300 g (can be removed from the tape)

**Order No.**  
340 02 10



## Weight 30

Brass cylindrical, torpedo-shaped ends, mm scale engraved on one side, length 153 mm, diameter 30 mm, weight 700 g (cannot be removed from the tape), **suitable for calibration**

**Order No.**  
340 01 30



## Weight 31 according to IPM Standard

Brass cylindrical, torpedo-shaped ends, mm scale engraved on one side, length 156 mm, diameter 30 mm, weight 700 g (can be removed from the tape)

**Order No.**  
340 01 31 IPM



## Weight 476

Brass cylindrical, length 100 mm, diameter 45 mm, weight 660 g (cannot be removed from the tape), **suitable for calibration**

see order overview at page 22

## Custom made measuring tapes

For example self adhesive tapes with graduation from right to left side

We are pleased to produce custom made measuring tapes for you (see page 28). Please contact us

# Interesting facts about measuring tapes

## Accuracy:

BMI measuring tapes have been manufactured according to the highest quality standards in Germany. Within the scope of product liability we guarantee for the observation of tolerances according to EC accuracy classes for metric graduations.

Our standard is

- for steel tapes:  
class II (class I option for an extra charge)
- for glass fibre reinforced measuring tapes: class II or III

Tolerances according to EC accuracy classes:

- I:  $\pm 1,1$  mm in 10 m
- II:  $\pm 2,3$  mm in 10 m
- III:  $\pm 4,6$  mm in 10 m

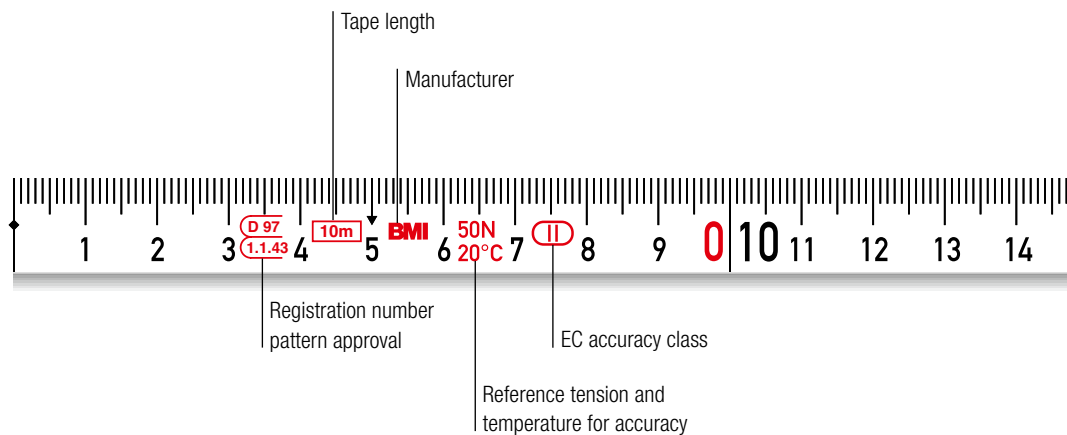
**High-quality measuring tapes can be recognized from the different imprints at the tape end. There you will find the manufacturer's label, the number of the EC type approval, the EC class accuracy, the reference temperature and the tension for which the manufacturer guarantees the observation of measurement tolerances according to the EC class accuracy.**

## Certificate of Conformity:

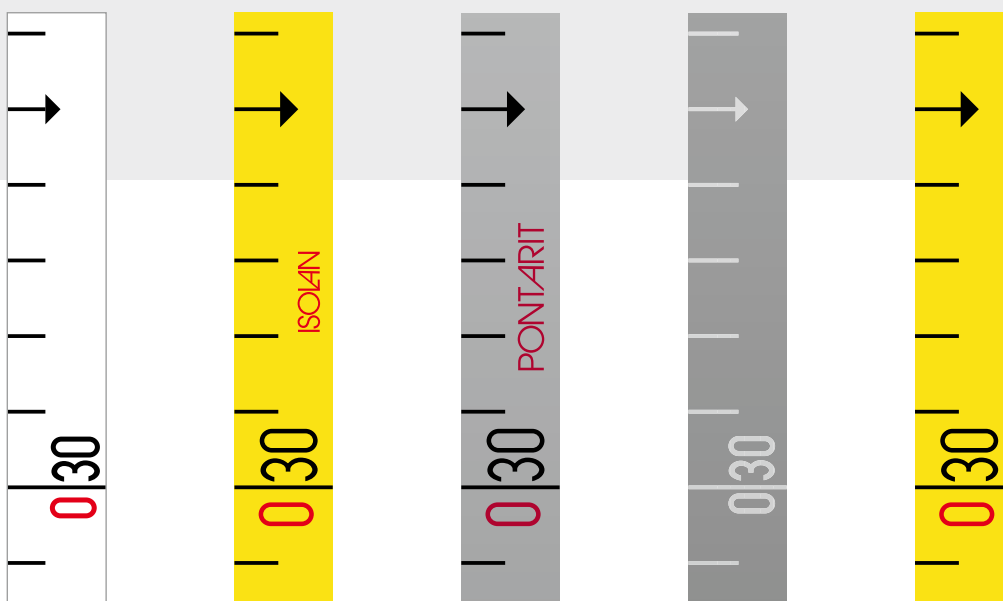
For all measuring tapes with a metric graduation we will issue a certificate of conformity, if required. Compliance of the tape widths with the respective EC type approval and the observation of measuring tolerances according to EC accuracy classes are certified herein (Surcharge).

## Calibration:

All measuring tapes with a metric graduation are EEC pattern approved and can be calibrated for an extra charge. This calibration is valid in all EU member states. Some dipping tapes, however, are exempted.



# Recommended usage



**BMI**

Tape quality:	Steel, white enameled, printed graduation	Steel, yellow enameled, printed graduation, with polyamide coating, "ISOLAN"	Refined steel, printed graduation, "PONTARIT"	Refined steel, high etched graduation,	Glassfibre, reinforced plastic, printed graduation
<b>Characteristics:</b>					
stainless	+	++	+++	+++	+++
acid-proof		+		+++	
proved for oil				+++	
non-conductive (insulated)					+++
unbreakable/flexible	+	++	++	++	+++
resistant to wear	++	+++	+	++	+
readability	+++	+++	++	+	+++
<b>Recommended use:</b>	universal, normal use	universal, toughest demands	also in wet environment	also in chemical aggressive environment	universal, weaker demands
<b>Equipment options:</b>					
Graduation	cm, cm/cm, mm, mm/inch	cm, cm/cm, mm, mm/inch	cm, cm/cm, mm, mm/inch	cm, cm/cm, mm, mm/inch	cm, cm/cm, cm/inch
Lengths	10 to 100 m	10 to 100 m	10 to 100 m	10 to 100 m	10 to 100 m
Measurement commence.	A, B, C, L	A, B, C, L	A, B, C, L	A, B, C, L	A, B, C
Tape commencements	all	all	all	all	all, but no Flextop
<b>Accuracy:</b>					
EC class	II, (I possible)	II, (I possible)	II, (I possible)	II, (I possible)	Graduation II on one side graduation III on two sides
Suitability for calibration	all variants on A and B, CH, L30	all variants on A and B, CH, L30	all variants on A and B, CH, L30	all variants on A and B, CH, L30, L476	all variants on A and B, CH

+ = for limited use  
 ++ = good for use  
 +++ = best suited for



# Order survey tape quality

## White enamelled

### 13 mm



This is how your order no. could look like:

301 01 1 010 A F

white enamelled measuring tape, printed graduation

#### ERGOLINE

Size 1/2



Type	Frame size	Graduation number	Length meter	Measurement commencement	Tape commencement	
301	01	X	010	X	X	
301	01	X	015	X	X	
301	01	X	020	X	X	
301	02	X	025	X	X	
301	02	X	030	X	X	
301	02	X	050	X	X	

Size 3/4



Type	Frame size	Graduation number	Length meter	Measurement commencement	Tape commencement	
301	03	X	050	X	X	
301	04	X	100	X	X	

#### STANDARD

Size 1/2



Type	Frame size	Graduation number	Length meter	Measurement commencement	Tape commencement	
501	01	X	010	X	X	
501	01	X	015	X	X	
501	01	X	020	X	X	
501	02	X	025	X	X	
501	02	X	030	X	X	
501	02	X	050	X	X	

Size 3/4



Type	Frame size	Graduation number	Length meter	Measurement commencement	Tape commencement	
501	03	X	050	X	X	
501	04	X	100	X	X	

Please choose numbers and capital letters of desired tape features and transfer them to your order no.

Graduations	
1	(cm)
4	(mm)
5	(mm/inch)  25% surcharge

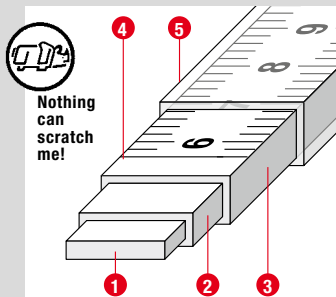
Measurement commencements	
A	
B	
C	
L	

Please order weight separately, see p.13 for model variants

Tape commencements (optional)	
F	(FLEXTOP)
HF	(hookring flexible, surcharge)
M	(metal ring)

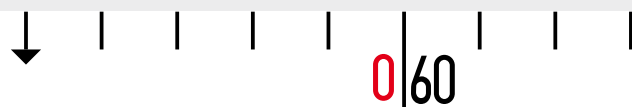
for measurement commencement B

for measurement commencement C



## Tape structures

- 1 Concave, tempered spring blade steel of high stability
- 2 Anticorrosive phosphate coating
- 3 Synthetic resin, stoved
- 4 Printed graduation with red meter figures
- 5 Clear varnish to protect against wear, stoved



**BMI**

Type	Frame size	Graduation number	Length meter	Measurement commencement	Tape commencement
501	31	X	010	X	X
501	31	X	015	X	X
501	31	X	020	X	X
501	31	X	025	X	X
501	31	X	030	X	X
501	32	X	050	X	X

Type	Frame size	Graduation number	Length meter	Measurement commencement	Tape commencement
501	34	X	100	X	X

Type	Frame size	Graduation number	Length meter	Measurement commencement	Tape commencement
501	21	X	010	X	X
501	21	X	015	X	X
501	21	X	020	X	X
501	22	X	025	X	X
501	22	X	030	X	X
501	23	X	050	X	X

Type	Frame size	Graduation number	Length meter	Measurement commencement	Tape commencement
501	00	X	001	X	X
501	00	X	002	X	X
501	00	X	005	X	X
501	00	X	010	X	X
501	00	X	015	X	X
501	00	X	020	X	X
501	00	X	025	X	X
501	00	X	030	X	X
501	00	X	050	X	X
501	00	X	100	X	X

## BASIC

Size 1/2



Size 3/4



equal to Standard 3/4

## RADIUS case



## Replacement tapes

Graduations	
1 (cm)	
4 (mm)	
5 (mm/inch)	

Measurement commencements	
A	
B	
C	
L	

Please order weight separately, see p.13 for model variants

Tape commencements (optional)	
F (FLEXTOP)	
HF (hookring flexible, surcharge)	
M (metal ring)	

for measurement commencement B  
for measurement commencement C

Please choose numbers and capital letters of desired tape features and transfer them to your order no.

# Order survey tape quality

## ISOLAN

### 13 mm

ISOLAN tape, polyamide coating, printed graduation

This is how your order no. could look like:

305 01 1 010 A F

#### ERGOLINE

Size 1/2



Size 3/4



Type	Frame size	Graduation number	Length meter	Measurement commencement	Tape commencement	
305	01	X	010	X	X	
305	01	X	015	X	X	
305	01	X	020	X	X	
305	02	X	025	X	X	
305	02	X	030	X	X	
Type	Frame size	Graduation number	Length meter	Measurement commencement	Tape commencement	
305	03	X	030	X	X	
305	03	X	050	X	X	
305	04	X	100	X	X	

#### STANDARD

Size 1/2



Size 3/4



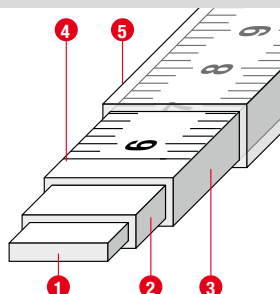
Type	Frame size	Graduation number	Length meter	Measurement commencement	Tape commencement	
505	01	X	010	X	X	
505	01	X	015	X	X	
505	01	X	020	X	X	
505	02	X	025	X	X	
505	02	X	030	X	X	
Type	Frame size	Graduation number	Length meter	Measurement commencement	Tape commencement	
505	03	X	030	X	X	
505	03	X	050	X	X	
505	04	X	100	X	X	

Please choose numbers and capital letters of desired tape features and transfer them to your order no.

Graduations	
1 (cm)	
4 (mm)	
5 (mm/inch)	
25% surcharge	

Measurement commencements	
A	
B	
C	
L	
Please order weight separately, see p.13 for model variants	

Tape commencements (optional)	
F (FLEXTOP)	
HF (hookring flexible, surcharge)	
for measurement commencement B	
for measurement commencement C	
M (metal ring)	



### Tape structures

- 1 Tempered spring blade made of carbon steel C 75
- 2 Anticorrosive phosphate layer
- 3 Yellow synthetic resin, stoved
- 4 Printed graduation with red metre digits
- 5 Polyamide coating against wear\*

\* resistant to alkalis, saline solutions, grease, oils and diluted acids

Type	Frame size	Graduation number	Length meter	Measurement commencement	Tape commencement
505	31	X	010	X	X
505	31	X	015	X	X
505	31	X	020	X	X
505	32	X	025	X	X
505	32	X	030	X	X
Type	Frame size	Graduation number	Length meter	Measurement commencement	Tape commencement
505	34	X	050	X	X

Type	Frame size	Graduation number	Length meter	Measurement commencement	Tape commencement
505	21	X	010	X	X
505	21	X	015	X	X
505	22	X	020	X	X
505	22	X	025	X	X
505	23	X	030	X	X
505	23	X	050	X	X

Type	Frame size	Graduation number	Length meter	Measurement commencement	Tape commencement
505	00	X	001	X	X
505	00	X	002	X	X
505	00	X	005	X	X
505	00	X	010	X	X
505	00	X	015	X	X
505	00	X	020	X	X
505	00	X	025	X	X
505	00	X	030	X	X
505	00	X	050	X	X
505	00	X	100	X	X

### BASIC

Size 1/2



Size 3/4



equal to Standard 3/4

### RADIUS case



### Replacement tapes

Graduations	
1 (cm)	
4 (mm)	
5 (mm/inch)	

25% surcharge

Measurement commencements	
A	
B	
C	

order weight separately, p.13 for model variants

Tape commencements (optional)	
F (FLEXTOP)	
HF (hookring flexible, surcharge)	
M (metal ring)	

for measurement commencement B

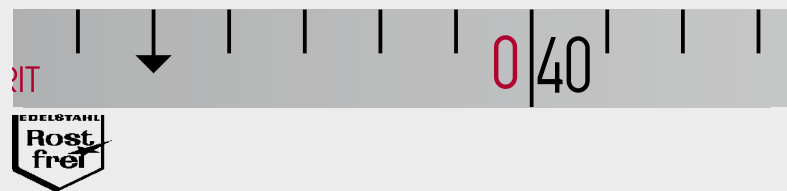
for measurement commencement C

Please choose numbers and capital letters of desired tape features and transfer them to your order no.

# Order survey tape quality

## PONTARIT

### 13 mm



PONTARIT stainless steel tape, printed graduation

This is how your order no. could look like:

315 01 1 010 A F

#### ERGOLINE

Size 1/2



Size 3/4



#### STANDARD

Size 1/2



Size 3/4



Type	Frame size	Graduation number	Length meter	Measurement commencement	Tape commencement
315	01	X	010	X	X
315	01	X	015	X	X
315	01	X	020	X	X
315	02	X	025	X	X
315	02	X	030	X	X
315	02	X	050	X	X

Type	Frame size	Graduation number	Length meter	Measurement commencement	Tape commencement
315	03	X	050	X	X
315	04	X	100	X	X

Type	Frame size	Graduation number	Length meter	Measurement commencement	Tape commencement
515	01	X	010	X	X
515	01	X	015	X	X
515	01	X	020	X	X
515	02	X	025	X	X
515	02	X	030	X	X
515	02	X	050	X	X

Type	Frame size	Graduation number	Length meter	Measurement commencement	Tape commencement
515	03	X	050	X	X
515	04	X	100	X	X

Please choose numbers and capital letters of desired tape features and transfer them to your order no.

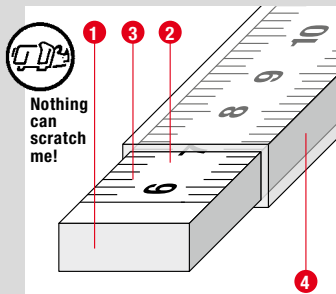
Graduations	
1 (cm)	
4 (mm)	

Measurement commencements	
A	
B	
C	
L	

Please order weight separately, see p.13 for model variants

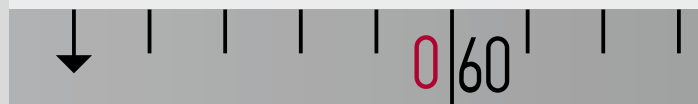
Tape commencements (optional)	
F (FLEXTOP)	
HF (hookring flexible, surcharge)	
M (metal ring)	

for measurement commencement B  
for measurement commencement C



## Tape structures

- 1 Strain-hardened spring blade made of stainless chrome nickel steel
- 2 Matt-pickled surface
- 3 Printed graduation with red metre digits
- 4 Clear varnish against wear, stoved



**BMI**

Type	Frame size	Graduation number	Length meter	Measurement commencement	Tape commencement
515	31	X	010	X	X
515	31	X	015	X	X
515	31	X	020	X	X
515	31	X	025	X	X
515	31	X	030	X	X
515	32	X	050	X	X

Type	Frame size	Graduation number	Length meter	Measurement commencement	Tape commencement
515	34	X	100	X	X

Type	Frame size	Graduation number	Length meter	Measurement commencement	Tape commencement
515	21	X	010	X	X
515	21	X	015	X	X
515	21	X	020	X	X
515	22	X	025	X	X
515	22	X	030	X	X
515	23	X	050	X	X

Type	Frame size	Graduation number	Length meter	Measurement commencement	Tape commencement
515	00	X	010	X	X
515	00	X	015	X	X
515	00	X	020	X	X
515	00	X	025	X	X
515	00	X	030	X	X
515	00	X	050	X	X
515	00	X	100	X	X

## BASIC

Size 1/2



Size 3/4

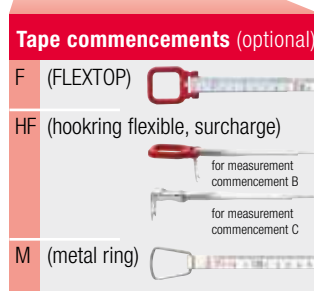
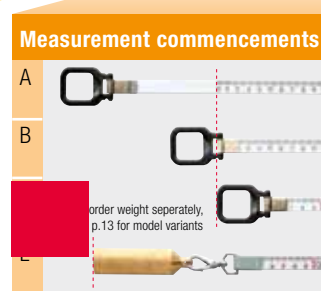
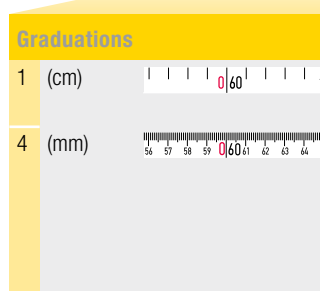


equal to Standard 3/4

## RADIUS case



## Replacement tapes



Please choose numbers and capital letters of desired tape features and transfer them to your order no.



Order survey tape quality

# High etched 13 mm



This is how your order no. could look like:

309 01 1 010 A F

## ERGOLINE

Size 1/2



Size 3/4



## STANDARD

Size 1/2



Size 3/4



## Brass frame series



including weight 476  
Please see p.13 for description,  
suitable for calibration

Type	Frame size	Graduation number	Length meter	Measurement commencement	Tape commencement
309	01	X	010	X	X
309	01	X	015	X	X
309	01	X	020	X	X
309	02	X	025	X	X
309	02	X	030	X	X
309	02	X	050	X	X

Type	Frame size	Graduation number	Length meter	Measurement commencement	Tape commencement
309	03	X	050	X	X
309	04	X	100	X	X

Type	Frame size	Graduation number	Length meter	Measurement commencement	Tape commencement
509	01	X	010	X	X
509	01	X	015	X	X
509	01	X	020	X	X
509	02	X	025	X	X
509	02	X	030	X	X
509	02	X	050	X	X

Type	Frame size	Graduation number	Length meter	Measurement commencement	Tape commencement
509	03	X	050	X	X
509	04	X	100	X	X

Type	Frame size	Graduation number	Length meter	Measurement commencement	Tape commencement
309	12	4	010	L	476
309	12	4	015	L	476
309	12	4	020	L	476
309	12	4	025	L	476
309	12	4	030	L	476
309	12	4	050	L	476

Please choose numbers and capital letters of desired tape features and transfer them to your order no.

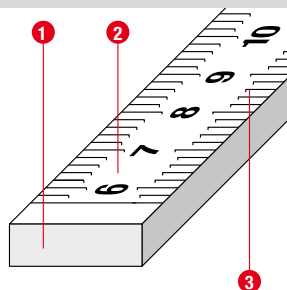
Graduations	
1 (cm)	
4 (mm)	
5 (mm/inch)	
25% surcharge	

Measurement commencements	
A	
B	
C	
L	

Please order weight separately, see p.13 for model variants

Tape commencements (optional)	
F (FLEXTOP)	
HF (hookring flexible, surcharge)	
M (metal ring)	

for measurement commencement B  
for measurement commencement C



### Tape structures

- 1 Strain-hardened spring blade made of stainless chrome steel
- 2 Lowered, etched surface
- 3 Raised, polished graduation



Type	Frame size	Graduation number	Length meter	Measurement commencement	Tape commencement
509	31	X	010	X	X
509	31	X	015	X	X
509	31	X	020	X	X
509	31	X	025	X	X
509	31	X	030	X	X
509	32	X	050	X	X

Type	Frame size	Graduation number	Length meter	Measurement commencement	Tape commencement
509	34	X	100	X	X

Type	Frame size	Graduation number	Length meter	Measurement commencement	Tape commencement
509	21	X	010	X	X
509	21	X	015	X	X
509	21	X	020	X	X
509	22	X	025	X	X
509	22	X	030	X	X
509	23	X	050	X	X

Type	Frame size	Graduation number	Length meter	Measurement commencement	Tape commencement
509	00	X	010	X	X
509	00	X	015	X	X
509	00	X	020	X	X
509	00	X	025	X	X
509	00	X	030	X	X
509	00	X	050	X	X
509	00	X	100	X	X

### BASIC

Size 1/2



Size 3/4



equal to  
Standard 3/4

### RADIUS case



### Replacement tapes

Graduations	
1 (cm)	
4 (mm)	
5 (mm/inch)	
25% surcharge	

Measurement commencements	
A	
B	
C	
L	
Please order weight separately, see p.13 for model variants	

Tape commencements (optional)	
F (FLEXTOP)	
HF (hookring flexible, surcharge)	
for measurement commencement B	
for measurement commencement C	
M (metal ring)	

Please choose numbers and capital letters of desired tape features and transfer them to your order no.

# Order survey tape quality

## Plastic 13 mm



This is how your order no. could look like:

320 01 1 010 A

Plastic measuring tape, glass fibre reinforced

### ERGOLINE

Size 1/2



Size 3/4



Type	Frame size	Graduation number	Length meter	Measurement commencement	Tape commencement
320	01	X	010	X	X
320	02	X	015	X	X
320	02	X	020	X	X
320	02	X	025	X	X

Type	Frame size	Graduation number	Length meter	Measurement commencement	Tape commencement
320	03	X	030	X	X
320	04	X	050	X	X

### STANDARD

Size 1/2



Size 3/4



Type	Frame size	Graduation number	Length meter	Measurement commencement	Tape commencement
520	01	X	010	X	X
520	02	X	015	X	X
520	02	X	020	X	X
520	02	X	025	X	X

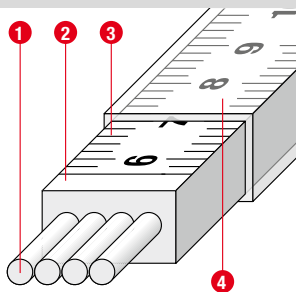
Type	Frame size	Graduation number	Length meter	Measurement commencement	Tape commencement
520	03	X	030	X	X
520	03	X	050	X	X
520	04	X	100	X	X

Please choose numbers and capital letters of desired tape features and transfer them to your order no.

Graduations	
1	(cm)
2	(cm/cm)
3	(cm/inch)  25% surcharge

Measurement commencements	
A	
B	
C	

Tape commencements (optional)	
H	(hookring) surcharge
	for measurement commencement B
	for measurement commencement C



### Tape structures

- 1 Glass fibres
- 2 Extruded plastic coating
- 3 Printed graduation with red metre digits
- 4 Varnished against wear



**BMI**

Type	Frame size	Graduation number	Length meter	Measurement commencement	Tape commencement
520	31	X	010	X	X
520	31	X	015	X	X
520	32	X	020	X	X
520	32	X	025	X	X

Type	Frame size	Graduation number	Length meter	Measurement commencement	Tape commencement
520	33	X	030	X	X
520	34	X	050	X	X
520	34	X	100	X	X

Type	Frame size	Graduation number	Length meter	Measurement commencement	Tape commencement
520	21	X	010	X	X
520	22	X	015	X	X
520	22	X	020	X	X
520	23	X	025	X	X
520	23	X	030	X	X

Type	Frame size	Graduation number	Length meter	Measurement commencement	Tape commencement
520	00	X	010	X	X
520	00	X	015	X	X
520	00	X	020	X	X
520	00	X	025	X	X
520	00	X	030	X	X
520	00	X	050	X	X
520	00	X	100	X	X

### BASIC

Size 1/2



Size 3/4



equal to Standard 3/4

### RADIUS case



### Replacement tapes

Graduations	
1 (cm)	
2 (cm/cm)	
3 (cm/inch)	
25% surcharge	

Measurement commencements	
A	
B	
C	

Tape commencements (optional)	
H (hookring) surcharge	
	for measurement commencement B
	for measurement commencement C

Please choose numbers and capital letters of desired tape features and transfer them to your order no.

# Order survey tape quality

## High etched

### 13 mm

Tank dipping tapes according to IPM specification

High etched measuring tape



This is how your order no. could look like:

312 11 4 010 L 31

according to IPM specification



Type	Frame size	Graduation number	Length meter	Measurement commencement	Tape commencement	
312	11	4	010	L	31	
312	11	4	020	L	31	
312	11	4	030	L	31	
312	11	4	050	L	31	

including weight 31, please see p.13 for description, mm graduation

# Order survey tape quality

## White enamelled,

### 10 mm

White enamelled measuring tape, printed graduation



This is how your order no. could look like:

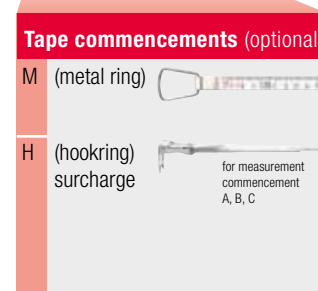
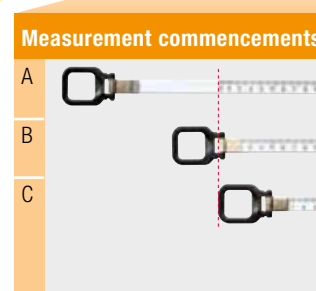
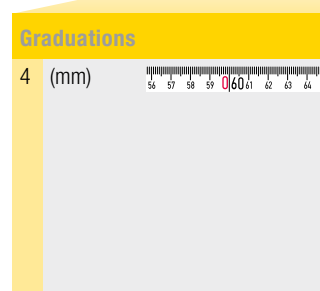
303 17 4 010 A M

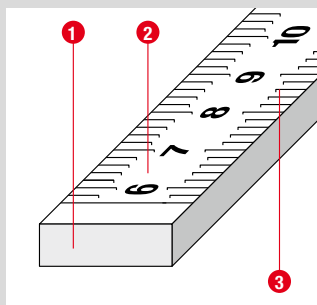
555 case series



Type	size of case	Graduation number	Length meter	Measurement commencement	Tape commencement	
303	17	4	010	X	X	
303	17	4	020	X	X	
303	17	4	030	X	X	

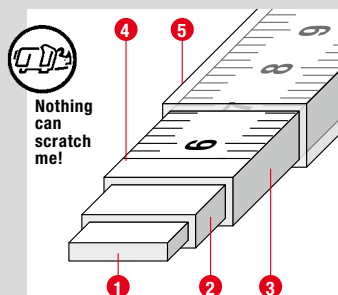
Please choose numbers and capital letters of desired tape features and transfer them to your order no.





### Tape structures

- 1 Strain-hardened spring blade made of stainless chrome steel
- 2 Lowered, etched surface
- 3 Raised, polished graduation



Nothing can scratch me!

### Tape structures

- 1 Tempered spring blade made of carbon steel C 75
- 2 Anticorrosive phosphate layer
- 3 White synthetic resin, stoved
- 4 Printed graduation with red metre digits
- 5 Clear varnish against wear, stoved

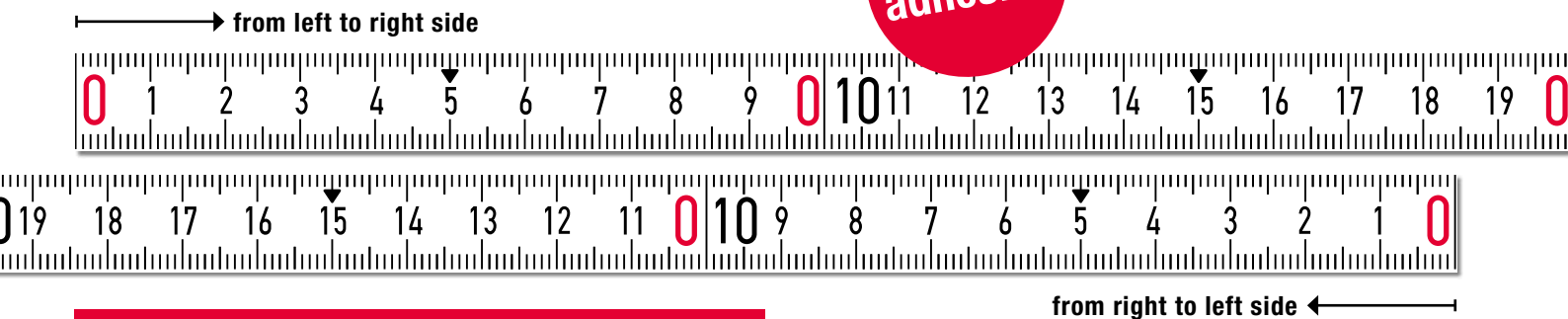




# Custom made measuring tapes

White enamelled measuring tape, printed graduation

self-  
adhesive



## Custom made measuring tapes

For example self adhesive tapes with graduation  
from right to left side

We are pleased to produce custom made measuring tapes for you.  
Please contact us!

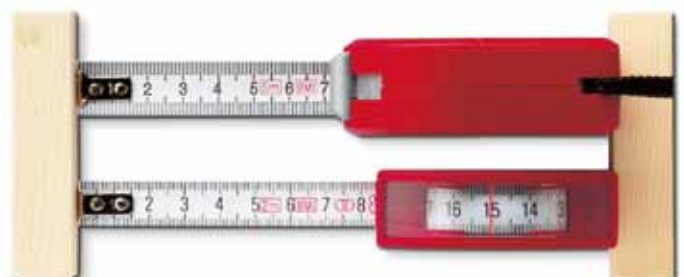


### End fittings

Metal sliding tip, nickel-plated, adjustable for both end-on and hook-on measurements

### Internal measuring

With the IN-OUT, VISO, X 4, TOP and TOP-M models the internal measurement can conveniently be read directly from the top sight window. For other models the case length is to be added.



# Pocket Tapes

Pocket tapes manufactured by BMI are versatile with regard to their use as their users' demands are diverse.

Longitudinal, internal measuring, radii, mm/mm graduation mm/inch graduation, individual case designs and much more. There is almost no limit to your imagination. Owing to the fact that these pocket tapes are manufactured in our own works there are many design options, even for small quantities.

Our main focus is of course on precise measuring, perfect handling and long working life.

## ADVANTAGES

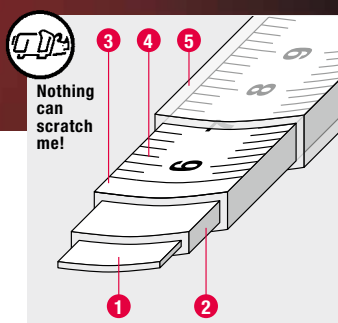
- Durability in rough work environment through rust protection of the tapes (phosphate ground coating)



Nothing can scratch me!

- BMI pocket tapes have a transparent coating as wearing protection, 10 times stronger than any other non-abrasive coatings!
- Long working life of the return lock spring owing to a special spring band steel
- Sophisticated interior: inserted winding coils or distance washers ensure perfectly smooth running
- Robust high-impact ABS or polyamide case
- Tapes with mm-graduation EEC pattern approved, suitable for calibration
- Accuracy acc. to EEC class II  
 $2\text{ m} \pm 0,7\text{ mm}$   
 $3\text{ m} \pm 0,9\text{ mm}$   
 $5\text{ m} \pm 1,3\text{ mm}$   
 $8\text{ m} \pm 1,9\text{ mm}$

You will recognize high-quality measuring tapes by these imprints:

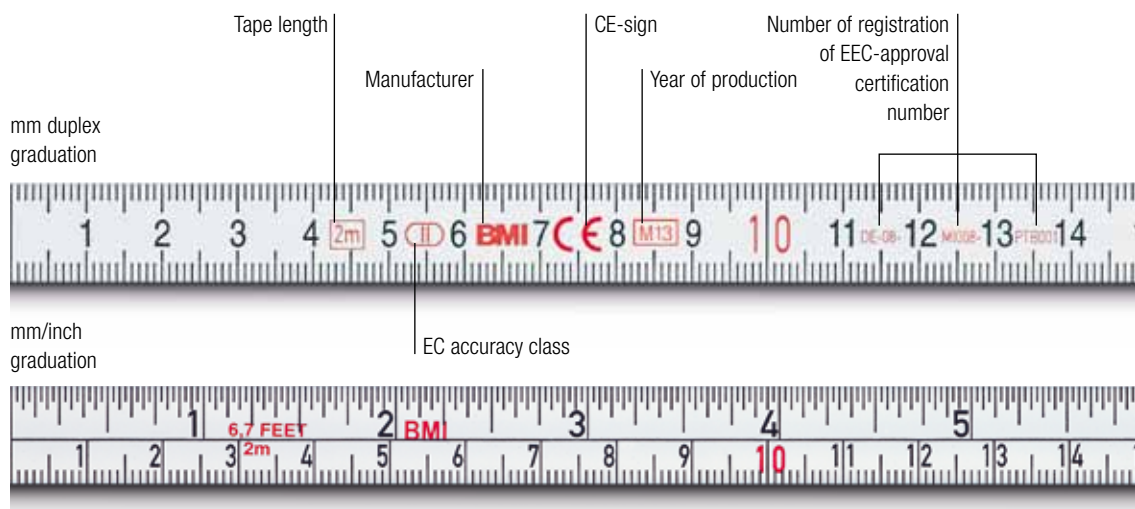


### Tape structure

- 1 Concaved, tempered spring blade steel of high stability
- 2 Anticorrosive phosphate coating
- 3 Synthetic resin, stoved
- 4 Printed graduation with red meter figures
- 5 Clear varnish to protect against wear, stoved

mm duplex graduation

mm/inch graduation



# Pocket Tapes

## 407 TOP / 406 TOP-M

Internal measuring tape (see page 30) without lock. Top sight window with magnifying effect. The graduation in the window is not displayed upside down (no reading errors possible). Polyamide case. Free-running blade in push-pull execution. Lengths 3 m with mm- or mm/inch-graduations. Blade width 13 mm. Case dimensions: 65 x 65 x 21 mm

406 TOP-M:  
with steel base



Length	2 m	2 m/79"	3 m	3 m/122"	2 m	2 m/79"	3 m	3 m/122"
Graduation	mm	mm/inch	mm	mm/inch	mm	mm/inch	mm/inch	mm/inch
Width	13 mm	13 mm	13 mm	13 mm	13 mm	13 mm	13 mm	13 mm
Model no.	407 241	407 251	407 341	407 351	406 241	406 251	406 341	406 351

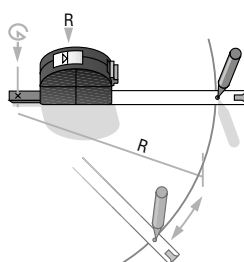
## 408 X4

The most versatile tape with 4 functions:

1. Longitudinal measuring
2. Internal measuring (see page 30)
3. Radii drawing
4. Level

The graduation in the window is not displayed upside down (no reading errors possible). Blade lock. Polyamide case. Free-running blade in push-pull execution. Lengths 3 m with mm- or mm/inch-graduations. Blade width 13 mm. Case dimensions: 60 x 80 x 20 mm

The steel stylus integrated in the swing-out arm allows 6 m radii to be drawn.



Length	3 m	3 m/122"
Graduation	mm	mm/inch
Width	13 mm	13 mm
Model no.	408 341	408 351

# Pocket Tapes

## 490 MET

The pocket tape with heat-resistant zinc die-cast case with chrome finish.

Automatic, lock-operated blade return.

Lengths 2 + 3 m with mm- or mm/inch-graduations.

Blade width 13 mm.

Case dimensions:

60 x 58 x 19 mm



Length	2 m	2 m/79"	3 m	3 m/120"
Graduation	mm	mm/inch	mm	mm/inch
Width	13 mm	13 mm	13 mm	13 mm
Model no.	490 241	490 251	490 341	490 351

## PICO – Rule and level in one tool

Perfect measuring tool, as horizontal/vertical measurements are mainly combined with lengths measurements.

### Advantages:

- The tape can be fixed elongated in the case for the measurements
- The tape can be kept compact and safe in the level case
- Stainless steel tape
- Perfect reading by convex arch
- Total waterproof!
- Accuracy of the tape: EEC class II
- Accuracy off he level: 1,0 mm/m
- Made in Germany

Length	1 m	1 m with magnet
Graduation	mm	mm
Width	16 mm	16 mm
Item No.	426 100 4 1030	426 100 4 1030 M

Case dimension  
62 x 25 x 52 mm  
Weight app. 75 g

Both tape and ruler in one!

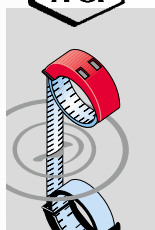
# The new **BMI**meter with tape stop and belt clip



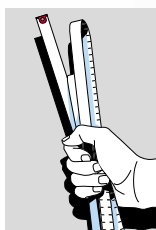
... rolls out on its own!



can be perfectly used as a ruler



waterproof, stainless



unbreakable

tape stop for easiest use and complete control

**NEW** The belt clip



## Fascination:

Due to a special treatment of the refined steel the tape unrolls on its own!

## Benefits:

- stainless refined steel tape, white-enamelled
- totally waterproof
- unbreakable, durable
- accurate according to EC class II (+/- 0,9mm/2m - a wooden ruler is 2,2mm/2m)
- compact, light and handy
- perfect for use as a ruler
- tape lies flatly on a table, allowing precise markings and easy transfer of measurements
- world first!
- **Made in Germany!**

The BMI-Quicky, sold by hundreds of thousands, has been further developed and is now called **BMI**meter.

## The main changes:

- **BMI**meter has a tape stop!
- **BMI**meter is available in 2 m and 3 m!

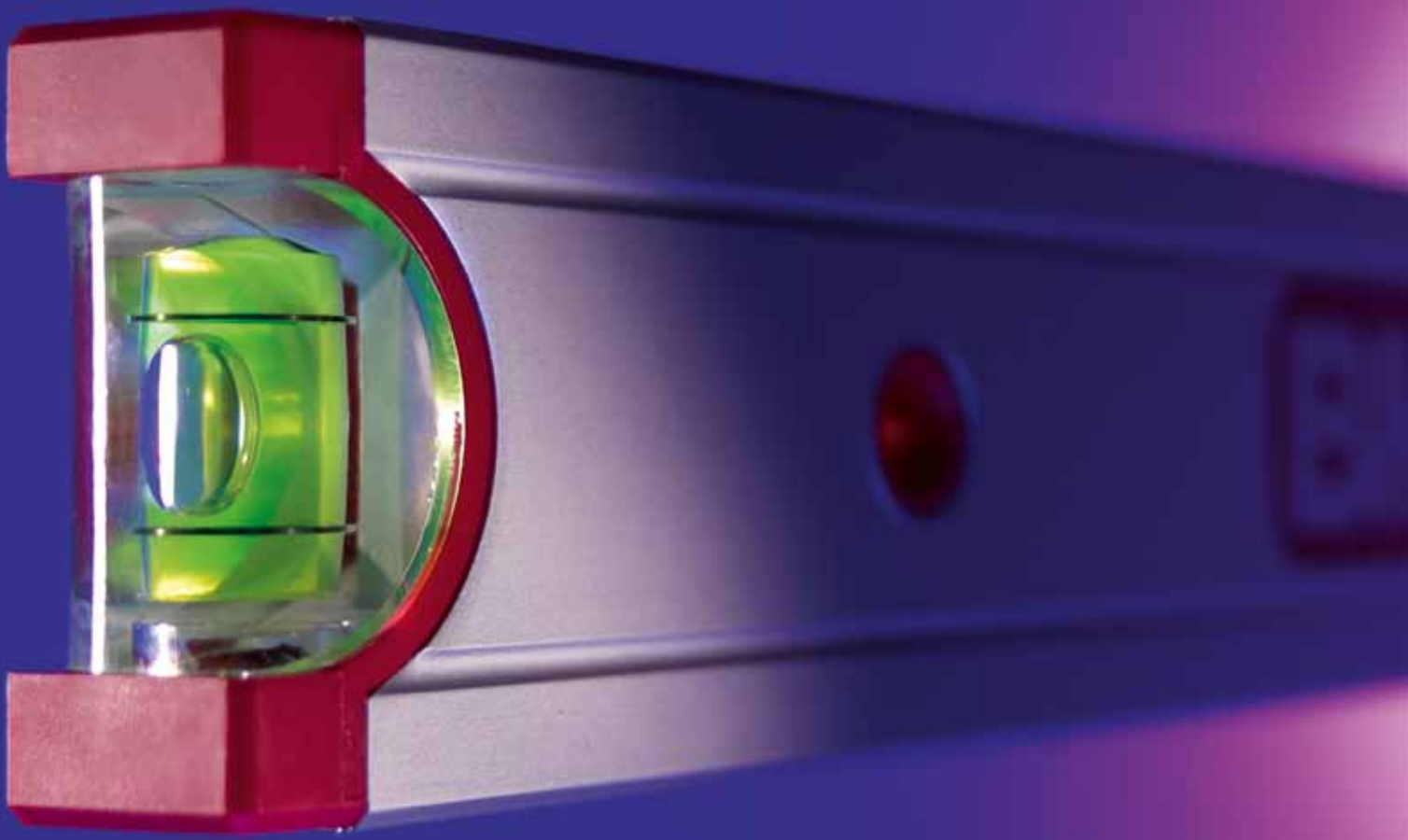
This measuring tool fascinates and his benefits are unbeatable.

Length	2 m	2 m/79"	3 m	3 m/118"
Graduation	mm	mm/inch	mm	mm/inch
Width	16 mm	16 mm	16 mm	16 mm

**Display BMI**meter 2 meter  
Item-No. 429 2410 601-VK  
Contents: 30 pcs.



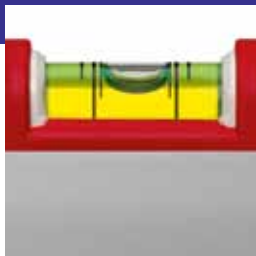




**These BMI advantages are your benefit:**



**Vial with magnifying effect.  
No more double-bubble trouble!**



**2% slope/fall lines and precision reading markings**



**Top-end vial**



**Shock-absorbing rubber end-caps**



**Unique, sturdy 4-chamber profile**

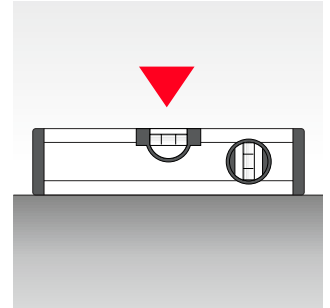


# Spirit Levels

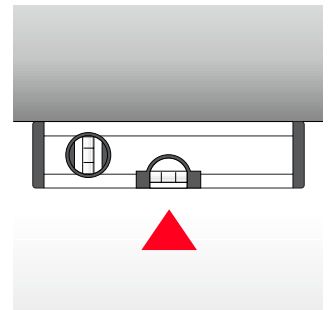
Applications for  
spirit levels

**BMI**

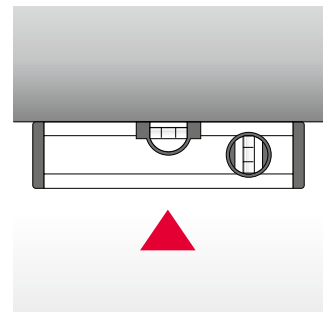
Horizontal **normal position**



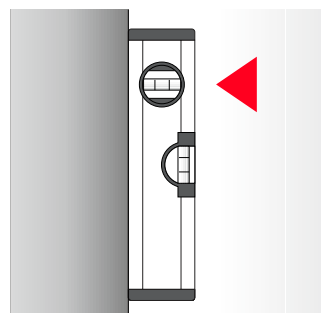
Horizontal **inverted position**  
(over-head measuring)



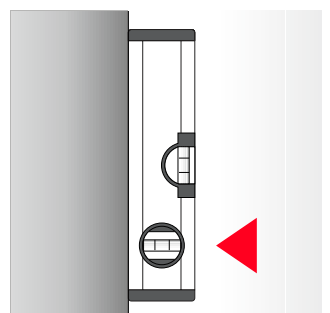
Horizontal **over-head measuring**  
(only for BMI-EUROSTAR  
and BMI-ROBUST)



Vertical **normal position**



Vertical **inverted position**



## ADVANTAGES

- Selected high quality materials.
- Worldwide patented manufacturing processes.
- High measuring accuracy up to 0,5 mm/m in normal and inverted position.
- Up to 30 years BMI guarantee for the durability of the vials.

This means safety for your work.

# Aluminium Profiles

## Types of Vials

## Mounting of the Vial

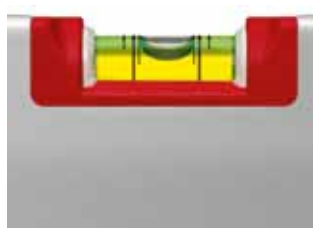
Thickness of wall +/- 10%  
due to technical reasons



Box section  
22 x 50 mm, wall  
strength 1,5 mm,  
is used for the  
**690 type series**  
up to a length of  
200 cm.



Thick-walled, sturdy vial, made of  
plexiglass, used in the horizontal  
vials of the 662, 665, 666 and  
689 type series.



Break- and shock-proof tube vial  
with magnifying effect of the  
690 type series, extremely good  
viewing, 2% slope markings.



Box section  
22 x 50 mm, wall  
strength 1,6 mm,  
is used for the **691  
type series** up to  
a length of 120 cm.  
The lengths 150,  
180 and 200 cm  
have a wall strength  
of 2,2 mm.



Thick-walled, sturdy vial, made of  
plexiglass, with magnifying effect,  
extremely good viewing, used as  
vertical and horizontal vial in the  
692 type series and as horizontal  
vial in the 691, 695, 698 and 699  
series.



Thick-walled, sturdy block vial,  
made of plexiglass, used as  
vertical vial in the 662, 665, 666,  
691, 698 and 699 series.



For all spirit levels (except the  
690 type) made of aluminium  
profile up to a length of 120 cm  
the vials are electronically  
adjusted and fixed in the body by  
means of ultrasonic welding.



Box section  
22 x 50 mm, wall  
strength 1,8 mm, is  
used for the **692 and  
699 type series** up  
to a length of 120 cm.  
The lengths 150,  
180, 200 and 240 cm  
have a wall strength  
of 2,3 mm

### Angle of Inclination

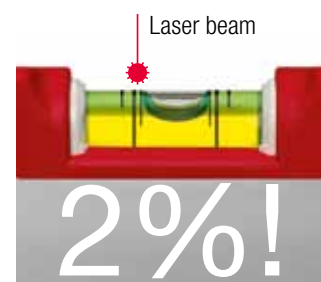
The picture shows a rotating vial  
of the 691 W and 691 WM  
and the SUPERTORPEDO type  
for an easy transfer of  
inclinations and angles.



Strong 4-chamber  
aluminium profile  
box section  
60 x 26 mm,  
wall strength 2 mm,  
extremely flexible  
and torsion-proof,  
used in the **698  
type series**.



Extremely sturdy  
4-chamber alu-  
minium profile, box  
section 75 x 26 mm,  
wall strength  
2.0 mm, used in the  
**695 type series**  
(even more torsion  
resistant than the  
698).



The 690 EUROSTAR is at first  
completely mounted. At this stage,  
the vials don't have any marking  
rings. In the final stage, a computer  
measures the position of the vial  
and controls a laser which applies  
marking rings to the vial on either  
side of the bubble in precisely  
equal distances.

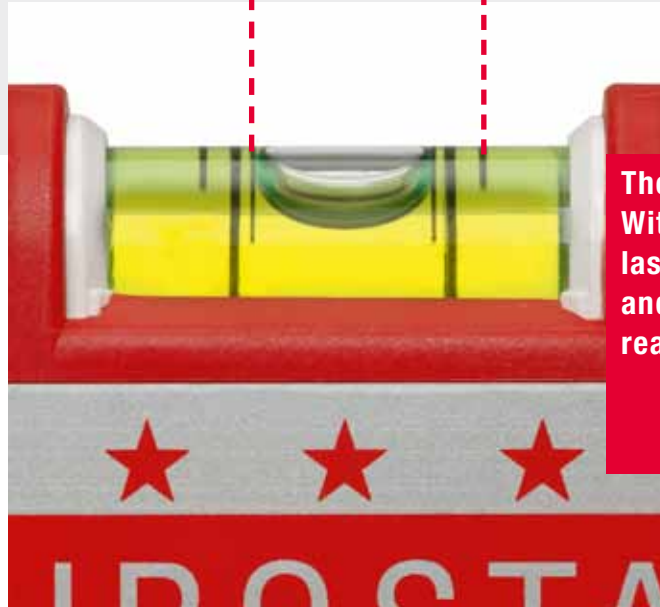
**This process has been  
patented for BMI nationally  
and internationally.**

	Eurostar 690	Alustar 691	Ultrasonic 692	Super Star 699	Robust 698	HighPrecision 695	Die-Cast level 665	Teakwood level 661	PolyWood 660
measuring accuracy in normal position mm/m	0,5	0,5	0,5	0,5	0,5	0,3	1,0	1,0	0,5
measuring accuracy in inverted position mm/m	–	0,75	0,5	0,5	0,5	–	–	–	0,75
milled measuring surface	–	–	–	✓	2 milled measuring surface ✓	✓	✓	–	–
horizontal vial with magnifying effect / no “No double”	✓	✓	✓	✓	✓	✓	–	–	✓
number of vials	2	2	2	2	3	2	2	2	2
profile weight per meter	550 g/m	up to 120 cm 550 g/m from 120 cm 840 g/m	640 g/m	up to 120 cm 680 g/m from 120 cm 840 g/m	1060 g/m	1340 g/m	–	–	750 g/m
handhole	–	–	–	–	✓	✓	✓	–	–
also available as magnetic version	✓	✓	✓ length 20 cm only	✓	–	✓	–	–	–
non-conductive	–	–	–	–	–	–	–	–	✓
special features and benefits	2% slope/fall and precision reading		with top-end vial		sturdy 4-chamber profile	sturdy 4-chamber profile, vials with high sensivity			non-sparking tool, fully insulated up to 1000 volts according to En60900:2004
recommendations for use	builders, heating installers, plumbers, landscapers	general handicraft, dry wall construction	general handicraft, dry wall construction	general handicraft, dry wall construction	builders, prefab construction, carpentry	window and door fitting, carpentry, steel construction	builders	plumbers, road construction	Electricians, miners
Made in Germany	✓	✓	✓	✓	✓	✓	✓	✓	✓

# EUROSTAR

precision reading

2% slope/fall line



The original!  
With patented  
laser-marked vials  
and reflection-free  
readability!



No more  
double-bubble trouble!

690 E



690 EM

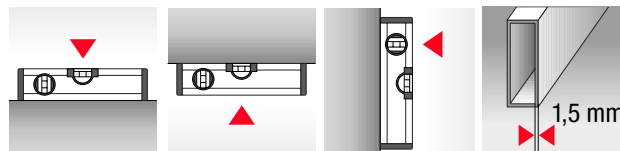


690 ES



- 2% slope markings on horizontal vial.
- additional precision reading markings on all vials.
- Laser-marked vials provide measuring accuracy of 0,5 mm/m for a lifetime..
- Tube vial offers easy readability.
- Strong walls for longer life..

Also available as  
690 P (powder-coated),  
price equal to 690 E

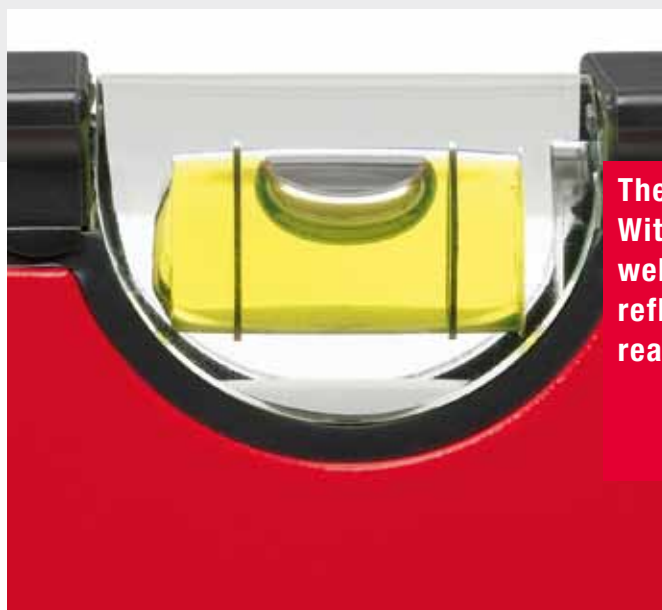


Length in cm	30	40	50	60	80	90	100	120	150	180	200
Order no.	690 030 E	690 040 E	690 050 E	690 060 E	690 080 E	690 090 E	690 100 E	690 120 E	690 150 E	690 180 E	690 200 E
Order no.		690 040 ES		690 060 ES	690 080 ES		690 100 ES	690 120 ES			
Order no.		690 040 EM	690 050 EM	690 060 EM	690 080 EM	690 090 EM	690 100 EM	690 120 EM			

# ROBUST

**NEW**

also available  
in magnetic



The original!  
With ultrasonic-  
welded vials and  
reflection-free  
readability!



No more  
double-bubble trouble!

698

Thick shock-absorbing rubber end-caps

also available in magnetic



Milled measuring surfaces up to 200 cm

698 D

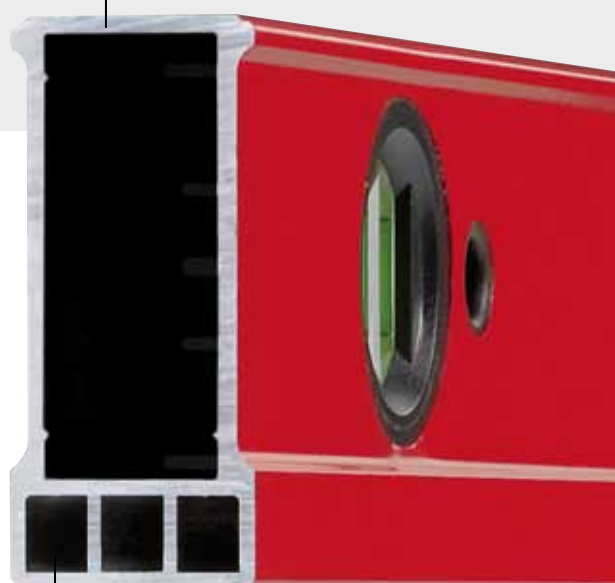


Also available with practical handholds



Weight of profile 1060 g/meter

- Unique, extremely torsion-resistant 4-chamber profile (60 x 26 mm cross-cut).
- The original BMI domed round vial with magnifying effect provides unsurpassed readability, also for inverted measurement.
- Highest accuracy for life (0,5 mm/m) due to ultrasonic-welded vials.
- Especially thick shock-absorbing rubber end-caps preserve high measuring accuracy – for life.
- Two milled measuring surfaces (up to 120 cm)
- Highest accuracy also for inverted measurement (0,5 mm/m).

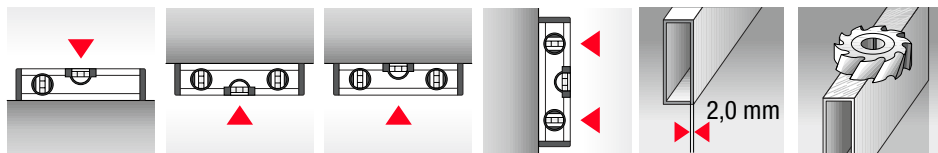


4-chamber profile –  
one of the most stable profile in the market

Unsurpassed readability through round vials



available in lengths  
of up to 240 cm



Length in cm	40	50	60	80	90	100	120	150	180	200	240
<b>Order no.</b>	698 040	698 050	698 060	698 080	698 090	698 100	698 120	698 150	698 180	698 200	698 240 H
<b>Order no.</b>			698 060 D	698 080 D	698 090 D	698 100 D	698 120 D	698 150 D	698 180 D	698 200 D	698 240 DH
<b>Order no.</b>	698 040 M		698 060 M	698 080 M		698 100 M	698 120 M		698 180 M	698 200 M	



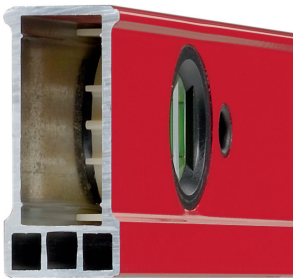
spirit level

# MASONS FRIEND



Highlighted items are stock

Length in Feet	3.3'	4'
Order no.	L1698100E	L1698120E



- Black anodized
- Unique, extremely torsion-resistant 4-chamber profile (60 x 26 mm cross-cut).
- The original BMI domed round vial with magnifying effect provides unsurpassed readability, also for inverted measurement.
- Highest accuracy for life (0,5 mm/m) due to ultrasonic-welded vials.
- Especially thick shock-absorbing rubber end-caps preserve high measuring accuracy – for life.
- Two milled measuring surfaces
- Two stainless steel strips, marked with graduation
- Highest accuracy also for inverted measurement

# Special Spirit Levels

**POLYWOOD –**  
the first spirit  
level with attributes  
“non-sparking tool”  
and “fully insulated  
up to 1000 volts  
according to  
EN60900:2004”

## 660 POLYWOOD



- Round horizontal vial with magnifying effect.
- reflection-free readability of horizontal vial, also in inverted position!
- measuring accuracy 0,5 mm/m in normal position, 0,75 mm/m when inverted.
- Strong walls and shock-absorbing rubber end-cap preserve high measuring accuracy.

Length in cm	40	60	80
Order no.	660 040	660 060	660 080

## ULTRASONIC



- length 25 cm
- vertical headvial
- turnable anglevial
- 2% slope marking in the horizontal vial
- magnetic
- accuracy 0,5 mm/m

Order no. 692 025 TWM



- length 20 cm
- vertical headvial
- horizontal vial with magnifying effect
- magnetic
- accuracy 0,5mm/m also for inverted measurement

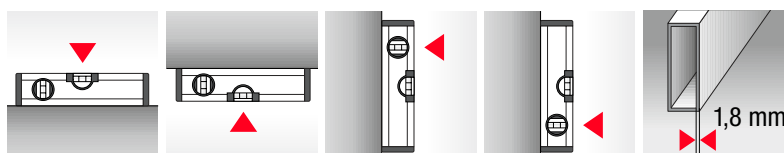
Length 20 cm

Order no. 692 020 M

With practical beltbag

Order no. 692 020 M-TA

Optimal  
reading  
by vertical  
head vial!



# Alu die-cast levels

666



Heavy-weight, trapezoid-shaped aluminium die-cast level with milled measuring surface. Red powder-coated level body. Very high torsion-resistance. Measuring accuracy in normal position 1,0 mm/m.

Length in cm	40	60	80
Order no.	666 040	666 060	666 080

665S / 665



Heavy-weight aluminium die-cast level with two milled measuring surfaces. Red powder-coated frame. Very high torsion-resistance. Grip holes for easy handling. Also available with 2 vials as model 665. Measuring accuracy in normal position 1,0 mm/m.

Length in cm	60	80
Order no.	665 060	665 080
Order no.	665 060 S	665 080 S

689R



Aluminium die-cast level, milled on all sides, red powder coated. Extremely torsion resistant. Handholds for easier handling. Accuracy in normal position 0,75 mm/m.

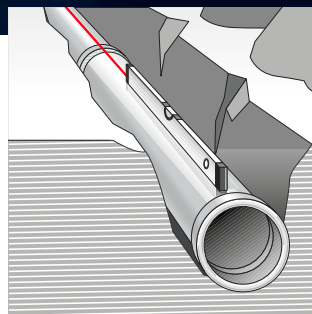
Length in cm	40	50	60	80
Order no.	689 040R	689 050R	689 060R	689 080R



**This is how BMI LASER technology facilitates your work:**

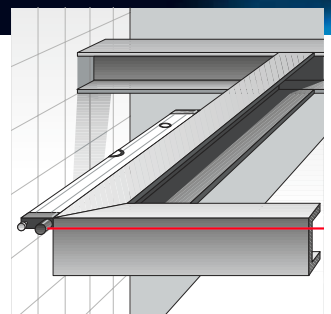
BMI laser systems are suitable for a wide range of measuring, alignment and levelling tasks.

**Some basic applications are exemplified here:**



**The laser beam replaces the levelling line for**

- Projecting slopes and gradients
- Setting alignments
- Checking the smoothness of walls and other surfaces



**Determine right angles without other tools and auxiliary constructions when**

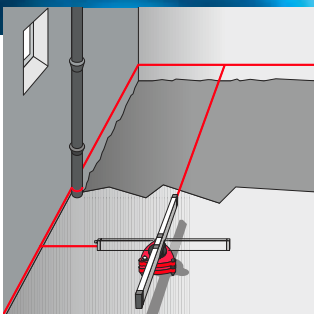
- Installing partitions
- Installing floors and platforms
- Checking angles of fabrications and steelwork



In 1993, BMI was the first to present laser levelling systems for trade and industry. The program has been continuously advanced and today, the user is offered ingenious, practical devices. From laser levels with useful accessories and levelling sets up to fully automatic rotating laser systems, BMI provides the perfect product for your application. The advantage – then and now – has always been the tremendous time efficiency of these single-hand operated levelling systems.

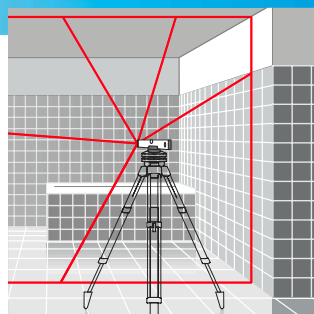
## ADVANTAGES

- BMI LASER technology complies with international safety standards; all devices conform to laser class 2; power output < 1 mW.
- BMI LASER technology is robust, suited to the workshop and has been developed for practical application.
- BMI LASER technology offers service at first hand.



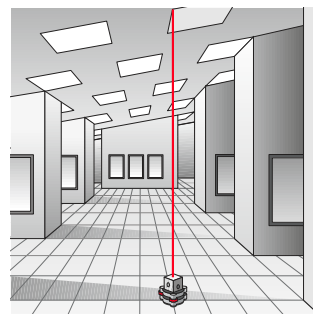
### Save time-consuming measurements in the horizontal plane when

- Installing ceilings
- Marking the correct height of electrical outlets and switches
- Marking the upper line of tiled areas



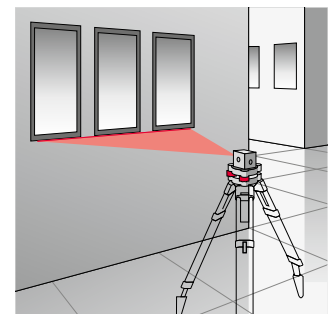
### Save time-consuming measurements in the vertical plane when

- Installing partitions
- Installing display windows
- Establishing tiling columns



### Replace the traditional plumb line to determine vertical references from the floor to the ceiling when

- Installing ceiling lighting
- Mounting conductor rails
- Installing fittings for ceiling panels



### The line laser replaces the snap line when

- Mounting advertising billboards
- Ensuring the correct horizontal alignment of tiles
- Hanging up posters and pictures

# Pulsed, self-levelling crossline laser autoCROSS 3

- Self-levelling crossline-laser.
- Horizontal and vertical lines can be switched on separately.
- Can also be used with receiver by pulsed laserdiodes.
- Delivery with transport case, including batteries.

Basic instrument:

**Order no.:** 654 KLPP

Basic instrument with receiver:

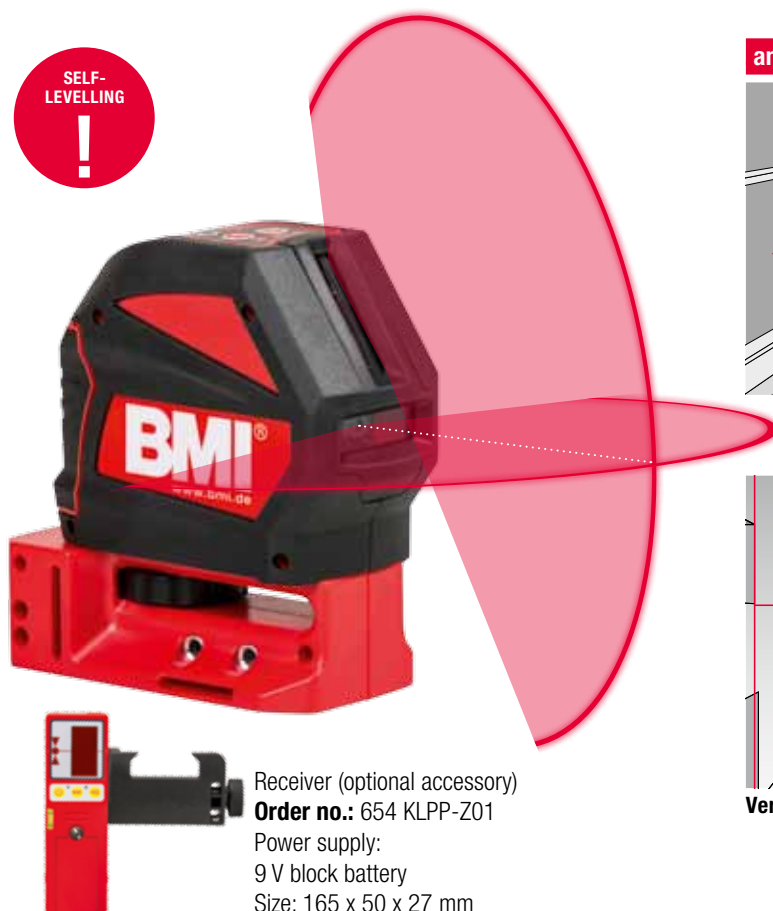
**Order no.:** 654 KLPP-Set

Receiver:

**Order no.:** 654 KLPP-Z01

Very good visible laserlines by super-lighting power

An aperture angel of 140° vertical and 120° horizontal gives you extraordinary line lengths.



Receiver (optional accessory)

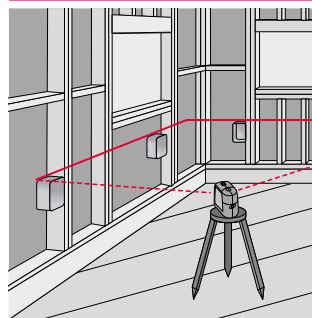
**Order no.:** 654 KLPP-Z01

Power supply:

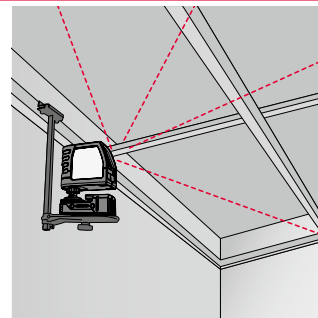
9 V block battery

Size: 165 x 50 x 27 mm

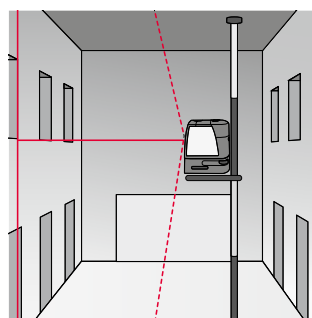
and it can help you do all the following ...



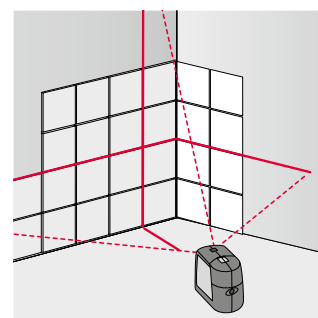
Markings for floors, electrical ...



... and drop ceilings



Vertical line (carpentry)



Cross line to align tiles etc.

- **Self-levelling mechanism** – eliminates set-up time and guarantees accuracy by using a magnetically subdued pendulum.
- **Automatic out of level sensing** – by blinking laser beam.
- **Locked line angle** – take unit out of self-levelling mode and lock line in place allowing to set unit in any angle.
- **Multipurpose attachment accessory** – with strong magnets, tripod connections allow to use the instrument also on tripods.

## Technical Data autoCROSS 3

Type of laser	red diode laser, wave length 635 nm
Output	laser class 2
Levelling	fully automatic (pendulum)
Self-levelling range	± 4°
Accuracy	± 3 mm/10 m
Range with receiver	minimum 30 m
Power supply	3 x 1.5 V batteries Type AALR6
Aperture angle	140° vertical, 120° horizontal
Out of level indicator	blinking laser lines
Tripod connection size	1/4"
Operating temperature	-10° C to 50° C
Storage temperature	-20° C to 70° C
Dimensions	120 x 95 x 62 mm

## Technical Data Adapter

Tripod connection size	1/4" and 5/8"
Fastening	magnets, tripod
Dimensions	115 x 65 x 40 mm

Delivery  
in transport case,  
incl. batteries



Crossline and 5-beam laser, all in one!

# autoMAGIC

- Self-levelling 5 beam and cross line laser
- Plumb beam, up and down
- 5 laser beams at a time
- Laser glasses

- Multifunctional adapter with magnets and tripod connection threads 1/4" and 5/8"
- Comes as set in hard plastic case
- Incl. batteries

Basic device:

**Order no.:** 654 KLP 5SP

Complete set (incl. receiver):

**Order no.:** 654 KLP 5SP – Set

Receiver:

**Order no.:** 654 KLP 5SP – Z01

Basic device

Basic device includes:  
auto MAGIC, magnetic  
wall-mounting bracket with  
1/4 and 5/8 inch tripod  
connection, laser target card,  
batteries and carry bag

## Pulsed laser lines

enable use of  
a receiver at a range  
up to 50 m –  
even outdoors

SELF-  
LEVELLING

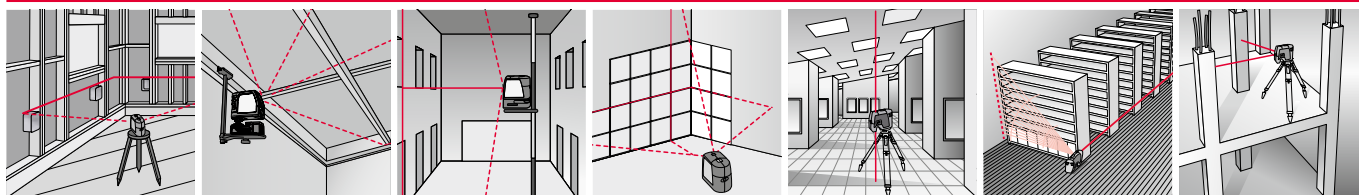


Receiver  
(optional)

Multifunctional  
adapter with  
magnets and  
tripod connection



and it can help you do all the following ...



Markings for  
floors, electrical...

...and drop  
ceilings

Plumb line  
(carpentry)

Cross line to align  
tiles etc.

Plumb line up  
and down

90° angle

Dot relays

- **Self-levelling mechanism** – eliminates set up time and guarantees accuracy by using a magnetically subdued pendulum.
- **Automatic out-of-level sensing** – by blinking laser beam.
- **Locked line angle** – out of self-levelling mode and lock line in place allowing you to set unit at any angle.

## Technical Data autoMAGIC

Type of laser	red diode laser, wavelength 635 nm
Output	laser class 2
Levelling	fully automatic (motor function)
Accuracy	± 3 mm/10 m
Range	bis zu 50 m (mit Empfänger)
Power supply	3 x 1,5 V batteries size Typ AA LR6
Tripod connection size	1/4"
Dimensions	115 x 115 x 75 mm
Casing	dustproof, dirt-proof and waterproof

## Technical Data Adapter



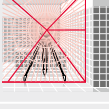
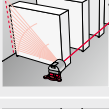
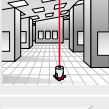

Tripod connection size	1/4", 5/8"
Fastening	magnets, straps, tripod
Dimensions	105 x 53 x 60 mm
Set Weight	0,9 kg

BMI



## Which construction laser for which application?

# Make your choice!

	Features	uniLASER	topoMAT	Nautilus
	Protection against water	✓ <b>Dust and waterproof according to IP 64</b>	✓ <b>Rainproof according to IP 55</b>	✓ <b>Waterproof according to IP 67</b>
	Indoor-application	✓ Range with receiver Ø 300 m	✓ Range with receiver Ø 300 m	✓ Range with receiver Ø 300 m
	Outdoor-application	Range with receiver Ø 300 m	✓ Range with receiver Ø 300 m	✓ Range with receiver Ø 300 m
	Power supply	Line powered and accumulator (Ni-MH)	3 batteries 1,5V mono LR20	Line powered and accumulator (Ni-MH)
	<b>Electronic Safety Program</b>	✓ Shock monitored by <b>ESP</b>	✓ Shock-monitored by <b>ESP</b>	✓ Shock-monitored by <b>ESP</b>
	Accuracy	± 3 mm / 30 m	± 2,6 mm / 30 m	± 2,6 mm / 30 m
	All-taken-care-of- package		3-year-warranty First inspection included Help in case of defects	3-year-warranty First inspection included Help in case of defects
	Vertical levelling	✓	✓	
	Continuous inclination	Adjustable in 2 axis +/- 5 degree	✓	
	Right angle 90°	✓	✓	
	Plumb line	✓ Up and down	✓	
	Horizontal levelling	✓	✓	✓
	Remote control	✓	✓	
	Visible line	✓	✓	

# topoMAT IPX5

- Needs no more than one person to take care of levelling jobs!
- Efficient, automatic and safe in all situations.
- A universal levelling system for various jobs.

**topoMAT  
IPX5  
in action**  
[www.ciecanada.com](http://www.ciecanada.com)

## Precision and safety:

- As a result of the automatic self-levelling function with an accuracy of  $\pm 2,6 \text{ mm}/30 \text{ m}$
- Automatic laserstop function in case of impact or other changes of position.



**Electronic Safety  
Program**



**Photodiode hand receiver to ensure optimum functioning of the laser within a working range up to a distance of 250 m**

- Acoustic and optical receiving signal
- LCD display at the front side for easy and practical handling

## Laser operating modes:

- Rotation – with 600, 300 and 100 rotations per minute – to choose the optimum task-suited rotation speed!
- Line-mode – with settings of 15, 30, or 45 degrees – to create visible laser lines or different lengths especially inside buildings!
- Dot-line mode – to the right or left – optional for the slow or fast retracing of laser dots or laser lines – function can be enabled directly at the laser or via remote control!
- Permanent angle through the firmly connected beam splitting prism.



**Rainproof  
IP55 compliant**



**Waterproof IP67  
compliant**

## Automatic self-levelling:

Requires only rough setting with the help of the built-in bulls-eye vial

**Far-reaching infra-red remote control for every laser operating mode**



The electronic inclination measure allows fast measuring of inclinations between 0 and 90 degrees. The angle measure is detachable and can be used solo.

**The topoMAT is also available without the inclinometer.**

**Set-Order no.:** 648 02N SET **incl.** inclinometer

**Set-Order no. topoMAT IPX5:** 648 02B SET **without** inclinometer

**Order no. inclinometer:** 648 10 Z

### No time-consuming modification:

Fast **variable** changing from horizontal to vertical operation with lockable 90° tilting joint

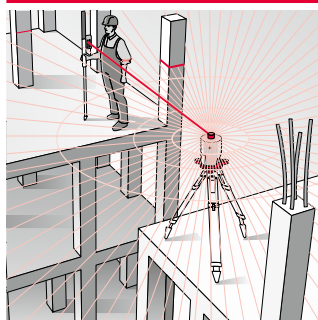


### Complete laser set comes in robust storage and transport case:

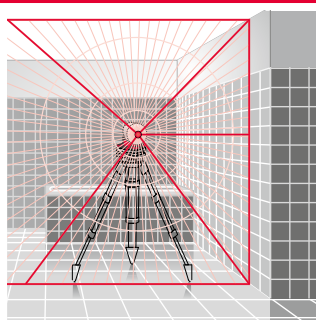
- Rotating laser topoMAT IPX5
- Electronic inclinometer
- Remote control
- Hand receiver
- Wall bracket
- Clamp for telescopic levelling staff
- Diagrammed operating manual
- Batteries are included in the scope of delivery



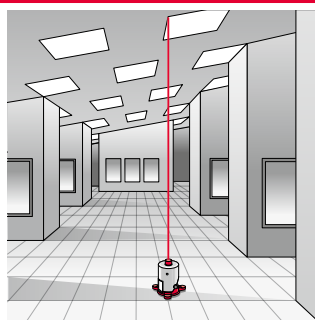
### Operating range



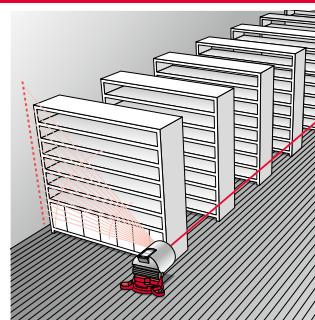
**Horizontal plane**



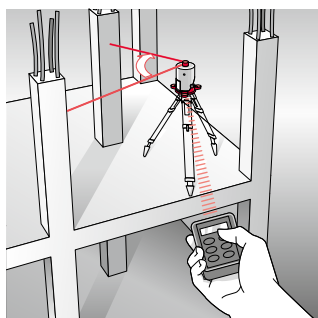
**Vertical plane**



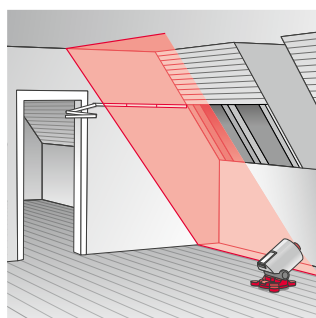
**Plumb line**



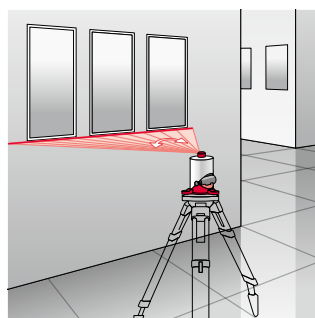
**90° angle**



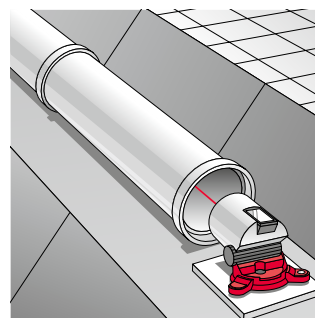
**Spot projection**



**Inclinations**



**Line projection**



**Working along the beam**

#### Technical Data topoMAT ipx5

<b>Type of laser</b>	Red diode laser, wavelength 635 nm
<b>Output</b>	< 1mW, Laser class 2
<b>Self-levelling range</b>	approx. $\pm 4^\circ$ corresponds to approx. $\pm 6\%$
<b>Levelling accuracy</b>	$\pm 2,6 \text{ mm}/30 \text{ m}$
<b>Levelling time</b>	typically < 30 sec.
<b>Laser range</b>	500 m diameter with detector
<b>Speed</b>	600/300/100 rotations per min
<b>Lines</b>	Scanning function with 15°, 30° and 45° spreading
<b>Remote control. dot/line</b>	slow and fast left/right
<b>Power supply</b>	3 x 1,5 Volt Mono LR 20
<b>Operating period</b>	approx. 70 hours
<b>Operating period</b>	IP55, rainproof
<b>Tripod connection size</b>	5/8 inch (surveyor's tripod)
<b>Weight</b>	2,3 kg
<b>Dimensions</b>	approx. 200 x 200 x 250 mm

#### Technical Data Remote Control

<b>Range</b>	up to 50 m depending on position in direction of receiver lens
<b>Power supply</b>	9 V block 6 LR61
<b>Operating period</b>	depending on the degree of utilization

#### Technical Data Receiver

<b>Range</b>	approx. 250 m
<b>Degree of protection</b>	IP67, waterproof
<b>Power supply</b>	2 x 1,5 Volt Mignon AA LR6
<b>Operating period</b>	depending on the degree of utilization

# NAUTILUS IPX7

- Does not know what "bad weather" means
- Use it under severe conditions on the construction site
- Set it up, switch it on and begin (single-button-control)
- Robust, accurate and safe by means of ESP (Electronic Safety Program)
- Line-powered or accumulator



**Electronic Safety Program:**  
automatic laser stop  
in case of shocks or changes  
in position



**With rechargeable battery**  
(Ni-MH; without memory effect)



**Waterproof IP67 compliant**

Robust aluminium casing

Shock protection with a  
circulating plastic shock absorber



**Waterproof**  
IP67 compliant

**Photodiode hand receiver to**  
ensure optimum functioning of  
the laser within a working  
range up to a distance of 250 m

- Acoustic and optical receiving signal
- LCD display at the front side for easy and practical handling

**NAUTILUS  
IPX7  
in Action:**  
[www.ciecanada.com](http://www.ciecanada.com)



**The complete set with the  
practical carrying bag:**

- NAUTILUS IPX7.
- Receiver with staff clamp
- Charging set
- Operating instruction
- Accumulator set (Ni-MH) and batteries for the receiver

## Technical Data Rotationslaser

Type of laser	red diode laser, wave length 635 nm
Output	< 1 mw; laser class 2
Self-levelling range	approx. $\pm 4^\circ$ corresponds to $\pm 6\%$
Levelling accuracy	$\pm 2,6$ mm/30 m
Levelling time	< 30 sec.
Operating range	-10° C to 50° C
Range	500 m Ø with receiver
Speed	600 rotations/min.
Power supply	line-powered or accumulator (Ni-MH) 4 x 1,2 V Baby, size A, LR14
Service life	50 hrs

Protective system	waterproof IP 67 compliant
Tripod connection size	5/8 inch (tripod)
Dimensions	ca. 170 x 170 x 220 mm
Weight	2,5 kg

## Technical Data Receiver

Range	250 m
Protective system	waterproof IP 67 compliant
Power supply	2 x 1.5 Volt Mignon AA LR6
Service life	according to usage



## Crank-Operated Tripod

- Especially recommended for the rotating laser topoMAT and NAUTILUS
- Sturdy light metal design
- Ground spikes
- Circular bubble
- Connecting thread 5/8 inch
- min. length 112 cm, max. length 242 cm
- Crank lift 350mm
- Weight 5760 g

**Order no.:** 711 312

**Laser can be set up on this tripod at a minimum height of less than 1m.**



## Surveyor's Tripod

- Sturdy light metal design
- Ground spikes
- Connecting thread 5/8 inch
- Min. length 105 cm, max. length 160 cm
- Weight 5860 g

**Order no.:** 711 317

**Further tripod designs on request**



## Surveyor's Tripod (no illustration)

- Sturdy light metal design
- Ground spikes
- Connecting thread 5/8 inch
- min. length 58 cm, max. length 85 cm
- Weight 3920 g

**Order no.:** 711 315

## Photo Tripod

- Robust photo tripod recommended for Torpedo 3, autoCROSS 3 and autoMAGiC
- Tripod connection size 1/4 "
- Robust, made from light metal with handhold and vial
- Opening height ,min 0,6 m up to 1,7 m
- Weight: 1,35 kg
- Max carriage weight: 3 kg

**Order no.:** 711 212-02





# Rules

Rules and folding rules made of wood, plastic or metal still are the measuring instruments in trade and industry for longitudinal measuring. For different applications with regard to precision, or to certain impacts, like humidity and heat, BMI always offers the right measure for you.

## ADVANTAGES

### Wooden folding rules

- Strong quality beechwood
- High breaking resistance
- Strong joint spring give the BMI rule a long life and good handling features
- Joints with permanent greasing
- Durable varnish

### Plastic folding rules

- Precisely embossed graduation layout
- Resistant to many environmental impacts

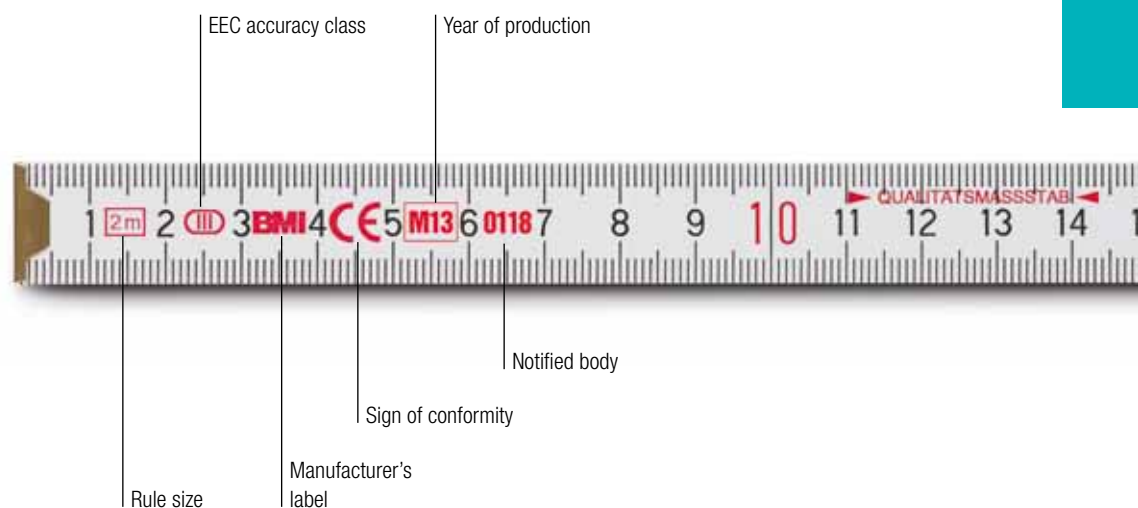
### Aluminium folding rules

- Good stand
- High accuracy (EC II)
- Excellent readability
- Resistant to many environmental impacts and heat

### Flexible and rigid rules

- Rustless
- High accuracy (EC II)
- Signed, anti-abrasive graduation

You can spot quality rules from these imprints:

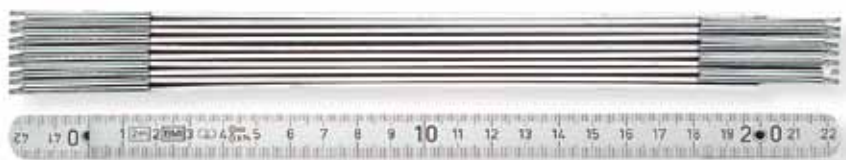




# Metal Rules

## 961 silver color with black graduation

Cold-hammered special aluminium alloy, nature-coloured, 1,4 mm thick, section height 14 mm. Digits and graduations deep etched and laid out black. The rule has precision-latching, nickel-plated steel springs. Rounded edges. EC accuracy class II.



	2 m mm-graduation	2 m mm/Inch-graduation	1 m mm-graduation	1 m mm/Inch-graduation
Order no.	961 2000 44W	961 2000 45W	961 1000 44W	961 1000 45W

## 961 black with silver graduation

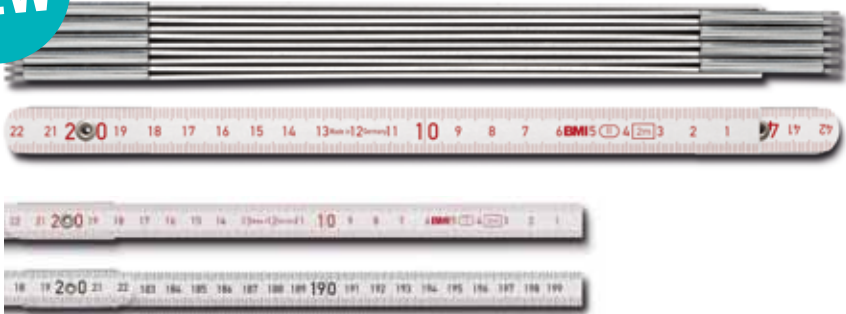
Cold-hammered special aluminium alloy, black anodized, 1,4 mm strong, section height 14 mm. Digits and graduations are deep etched and appear white on black ground. This extremely weather-resistant surface allows non-reflective reading. The rule has precision-latching nickel-plated steel springs. Rounded edges. EC accuracy class II.



	2 m mm-graduation	2 m mm/Inch-graduation	1 m mm-graduation	1 m mm/Inch-graduation
Order no.	961 2000 44S	961 2000 45S	961 1000 44S	961 1000 45S

## 961 Lefthander Aluminium rule, silver color

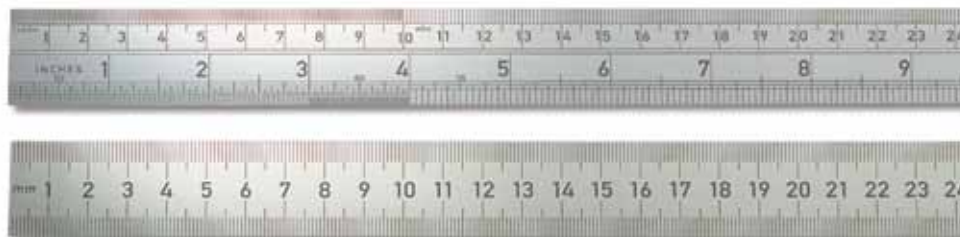
Silver color like item 961 silver color with black graduation (above) however one side is graduated from right to left (red graduation). Well suited for lefthanders.



	2 m mm-graduation	1 m mm-graduation
Order no.	961 2000 94W	961 1000 94W

## 966

Rigid steel measuring rules made of **stainless**, hard-rolled spring band steel. For graduations available see matrix. Ultra-modern manufacturing processes ensure sharp graduation contours. The graduation is largely anti-abrasive, and withstands chemicals, grease and oil. Its matt finish allows good reading. Rounded edges. EC accuracy class for metric graduation.



With additional graduation on the rear on request.

Order no.	Length in mm		Inch	Cross section in mm*	Graduation top edge	Graduation bottom edge
<b>966 0300 60</b>	300		12	30 x 1,0	1/2, 1/1 mm	1/16, 1/32, 1/64"
<b>966 0500 60</b>	500		20	30 x 1,0	1/2, 1/1 mm	1/16, 1/32, 1/64"
<b>966 0600 60</b>	600		24	30 x 1,0	1/2, 1/1 mm	1/16, 1/32, 1/64"
<b>966 1000 60</b>	1000		39	30 x 1,0	1/2, 1/1 mm	1/16, 1/32, 1/64"
<b>966 0300 40</b>	300		12	30 x 1,0	1/1 mm	1/1 mm
<b>966 0500 40</b>	500		20	30 x 1,0	1/1 mm	1/1 mm
<b>966 0600 40</b>	600		24	30 x 1,0	1/1 mm	1/1 mm
<b>966 1000 40</b>	1000		39	30 x 1,0	1/1 mm	1/1 mm
<b>966 1000 30</b>	1000		39	30 x 1,0	1/2 mm	1/1 mm
<b>966 1500 30</b>	1500		59	30 x 1,0	1/2 mm	1/1 mm
<b>966 2000 30</b>	2000		78	30 x 1,0	1/2 mm	1/1 mm
<b>966 3000 30</b>	3000*		00	30 x 1,0	1/2 mm	1/1 mm

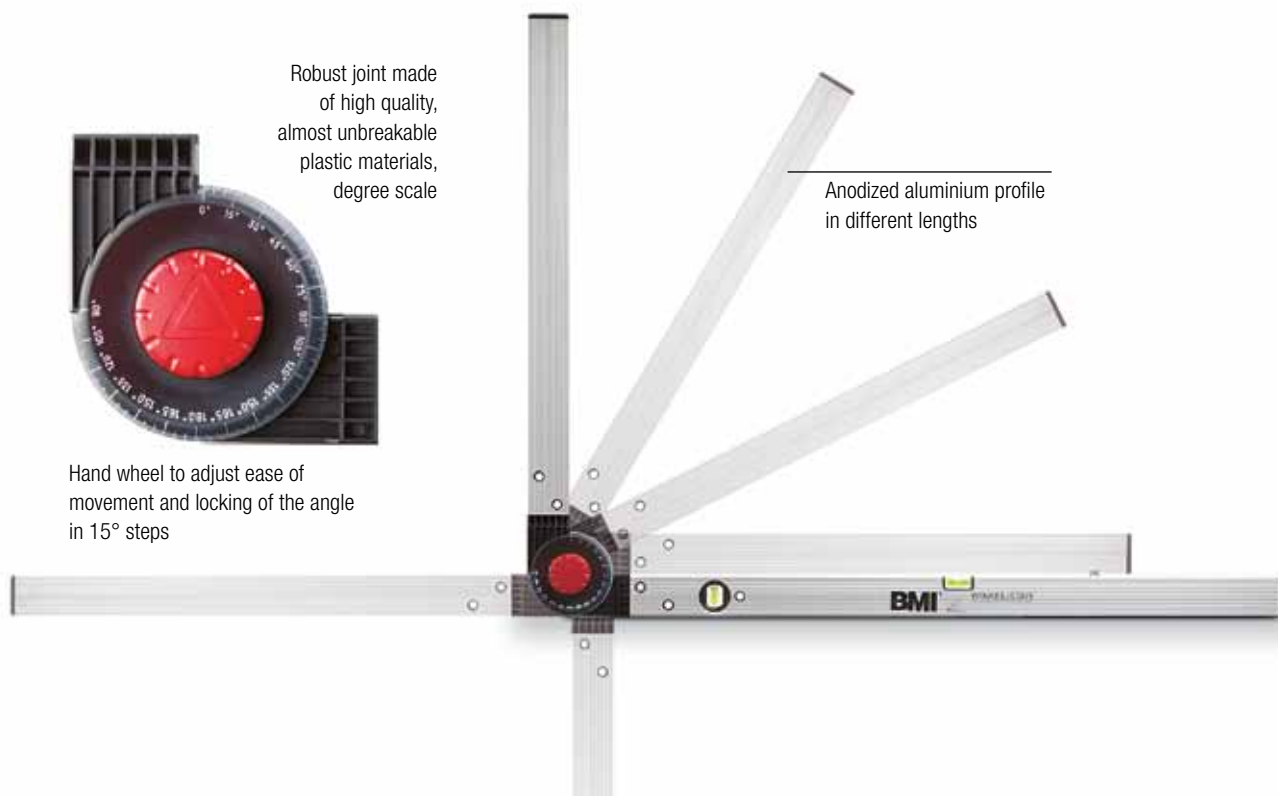
\* Tolerance of widths  $\pm 0,5$  mm

## 427 BMI roll-up rule

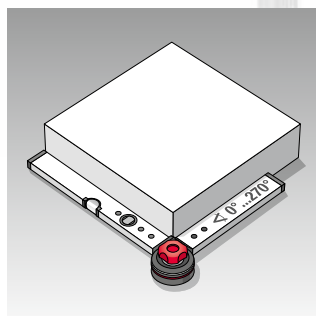


Stainless steel tape, white enamelled, unbreakable, long lifetime, tape rolls out on its own; very stable when it is rolled out; handy when it is rolled in; only 50mm diameter; convex tape allows precise measurement and marking.

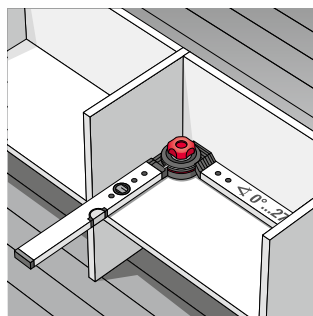
Order-no.	Length in mm	Width	
<b>42705041.30</b>	500	19	
<b>42710041.30</b>	1000	19	



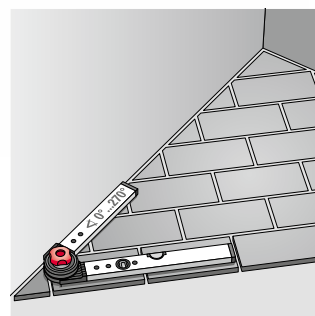
Robust foldable angle level for variable transfer or taking of angles of **0° to 270°**. The angles can be fixed in 15° steps. With the built-in vials it can also be used as a spirit level. Easy transport. Available in different sizes.



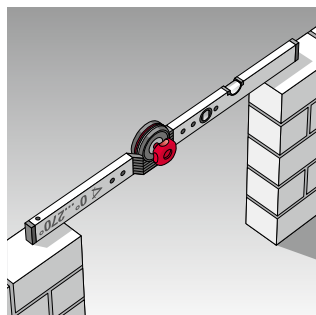
Outer 90° angle



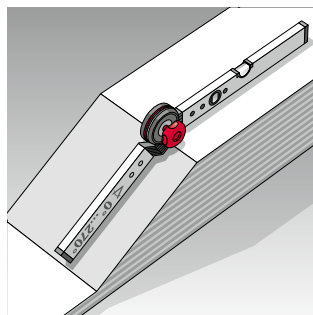
Inner 90° angle



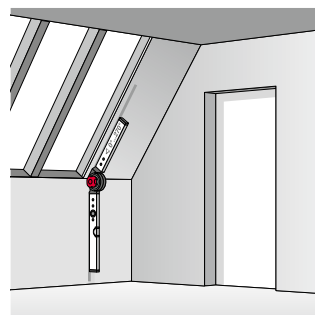
45° angle



Works as a level



Gradient/slope works



Works as a bevel

Order no.	Short leg	Long leg
715 060 080	60 cm	80 cm
715 060 120	60 cm	120 cm
715 100 150	100 cm	150 cm
715 100 200	100 cm	200 cm

# BMI®

# Measuring Instruments

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