

# MAHR SPOTLIGHTS

5|2017

 <p>MARCATOR 1087 Ri</p>	<p><b>INTRODUCTORY PRICING</b></p>  <p>MARSURF PS10</p>	<p>* Free Download</p>  <p>MARCOM Professional</p>
 <p>DIGIMAR 817 CLM</p>	 <p>Sign up to receive "Tips" from Mahr's Gaging Guru <a href="http://www.mahr.com/gagingtips">www.mahr.com/gagingtips</a></p>	 <p>MARVISION QM 300</p>
 <p>SETTING STANDARDS</p>	 <p>MARCONNECT i-STICK</p>	



**Mahr Federal Inc.** 1144 Eddy Street, Providence, RI 02905  
1-800-343-2050 · [www.mahr.com](http://www.mahr.com)

\* MARCOM PROFESSIONAL SOFTWARE INTERFACE FOR CONNECTING MEASURING INSTRUMENTS BY CABLE OR WIRELESS - NOW AVAILABLE TO DOWNLOAD FREE OF CHARGE - See page 4

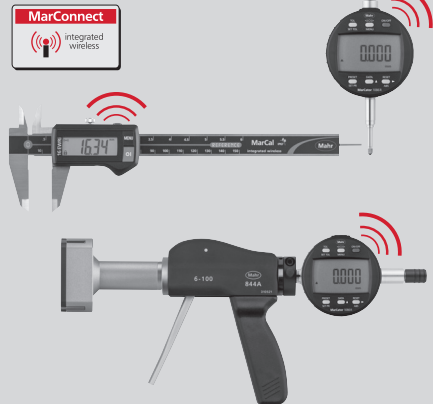
Promotion prices valid from May 1<sup>st</sup> through August 31<sup>st</sup> 2017

# MAHR CONNECTIVITY

## Sending measuring results

Data

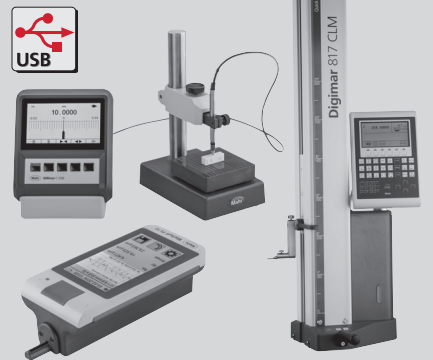
### Integrated wireless technology



### Retrofitted wireless technology



### Cable technology



MarCom Pro  
Free to d  
www.mahr.

# Master Discs Manufactured by Mahr

**GUARANTEED TO MEET AGD SPECS OR IT'S FREE!!**

## FEATURES

- ▶ The metrology laboratory in Providence, RI is ranked as one of the world's finest
- ▶ All measurements are traceable to the standards of the United States
- ▶ Grand Masters/Primary standards used in our measurement center have been certified by NIST
- ▶ Calibration system is certified to ISO 17025
- ▶ Our accreditation body is NVLAP. Lab Code 200605-0



**-15%**



Order any XX, steel, master ring or disc sized from 0.250 in - 4.0 in (6.3 mm - 100 mm) and take 15% off of the current list price. Use the code MAHRMASTER to receive your discount. This offer is valid through the end of this promotion.

### The Mahr Federal Inc. Setting Master Guarantee

When you purchase your setting master from Mahr Federal Inc. with certificate of size, Mahr guarantees that your master ring, plug or disc will be delivered to you within the tolerance grade specified. This guarantee assures your master ring, plug or disc will not require recertification at your incoming inspection. Should the master ring, plug or disc be out of specification within 30 days of receipt, and verified by Mahr, the company will repair or replace the master ring, plug or disc and issue full credit for its purchase price.

**Guaranteed to meet spec or it's FREE\***

\* The purchaser may not reject products unless their measurements exceed published tolerances by more than their uncertainty of measurement. In all cases, Mahr Federal Inc. inspection will be the final accepted measurement.

### Marsurf M 300 C Set Mobile Roughness Measuring Instrument

Perfect for accurate measurements in the production environment



#### Features

- Automatic profile detection and corresponding selection of filters and traversing length conforming to standards
- Individual sampling lengths and short cutoff can be selected
- Printing of R-profile (ISO/ASME/JIS), P-profile (MOTIF), material ratio curve, measuring record
- Measuring units ( $\mu\text{m}/\mu\text{inch}$ ) and standards (ISO/JIS/ASME/MOTIF) are selectable

#### M 300 C SET contents:

- M 300 or M 300 C evaluation instrument
- Cylindrical drive unit RD 18 C
- PHT 6-350 / 2  $\mu\text{m}$  or 5  $\mu\text{m}$  probe (conforming to standards)
- Roughness standard PRN 10 with a Mahr calibration certificate
- Height adjustment, probe protection, 1x USB cable (for connection to a PC), carrying case, etc.

<b>PROMO PRICE</b>
<b>\$4,749</b>
<b>LIST PRICE</b>
<b>\$5,430</b>

ORDER NO. 6910431P  
OR 6910438P

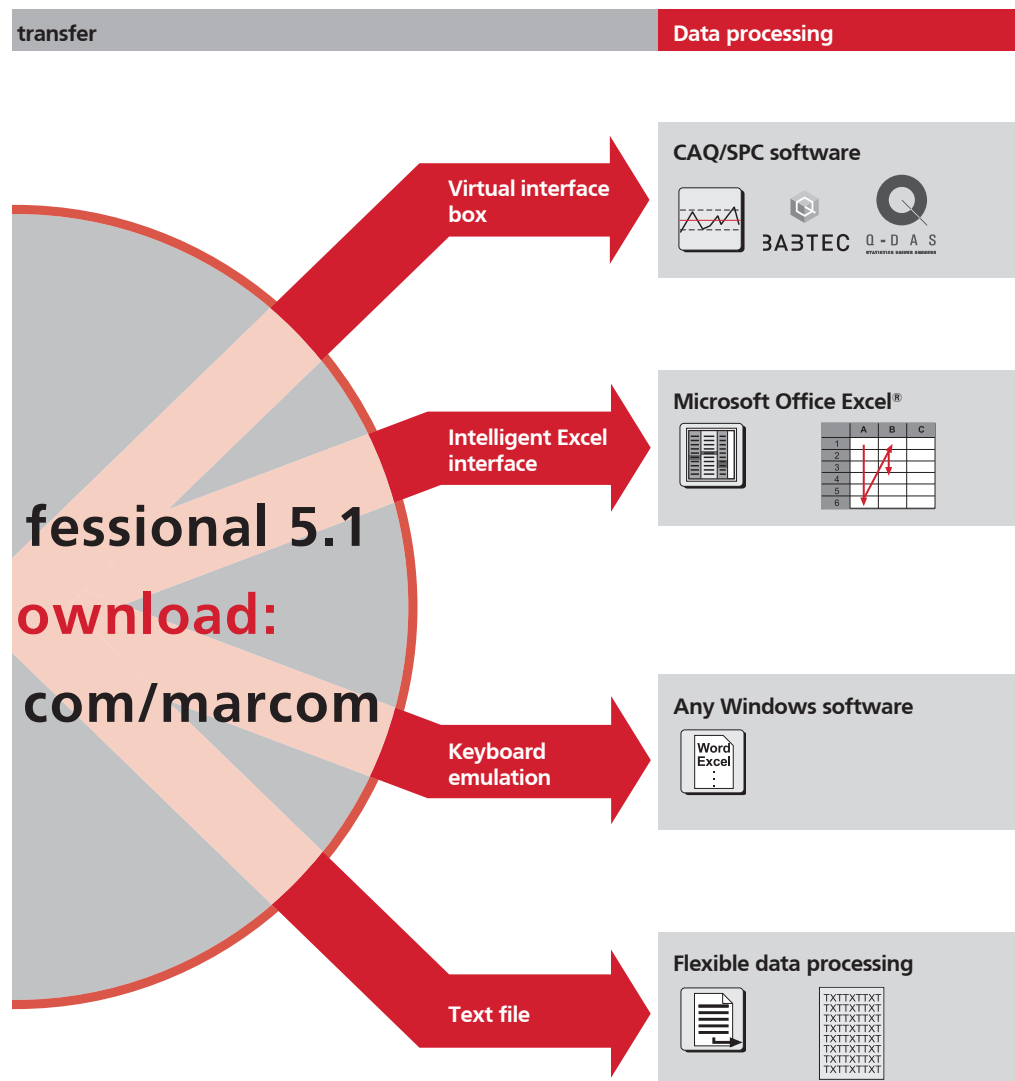
**-12%**

**Note:** An additional separate MarSurf RD 18 C2 drive unit for transverse tracing for M 300 C is also available!



Order no.	6910431P (w/2 $\mu\text{m}$ Probe Tip)	6910438P (w/5 $\mu\text{m}$ Probe Tip)
List price		5,430.00
Offer price		4,749.00
Measuring range		350 $\mu\text{m}$ (0.014")
Parameters		Ra, Rz (Ry (JIS equivalent to Rz), Rz (JIS), Rq, Rmax, Rp, RpA (ASME), Rpm (ASME), Rpk, Rk, Rvk, Mr1, Mr2, A1, A2, Vo, Rt, R3z, RPC, Rmr (tp (JIS, ASME) equivalent to Rmr), RSm, RSk, S, CR, CF, CL, R, Ar, Rx, Rv
Stylus tip	$\mu\text{m}$	2 $\mu\text{m}$ or 5 $\mu\text{m}$
Calibration function		Dynamic
Memory		Store up to 40,000 results and up to 30 profiles
Dimensions (L x W x H) of the drive unit	mm/in	139 x 26mm (5.5" x 1")
Dimensions (L x W x H) of the evaluation instrument	mm	190 x 140 x 75mm (7.5" x 5.5" x 3")
Weight of the drive unit	g	approx. 300
Weight of the evaluation unit	kg	approx. 1
Measuring principle		Stylus method
Probe		Inductive skidded probe
Measuring force	N	0.75 mN

**HIGHLIGHT:** Our contribution to Industry 4.0: You can now download MarCom Professional software free of charge!



### MarConnect i-Stick Wireless receiver for measuring instruments with integrated wireless

The MarConnect i-Stick is a wireless receiver for Mahr's measuring instruments. You can simply transfer your measured values directly to your PC via proven wireless technology with the i-Stick.

<b>PROMO PRICE</b>
<b>\$148</b>
<b>LIST PRICE</b>
<b>\$164</b>
<b>ORDER NO. 4102220P</b>

**-10%**



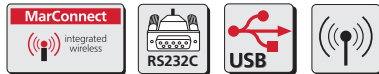
<b>Order No.</b>	<b>4102220P</b>
<b>List Price</b>	\$164
<b>Promo Price</b>	<b>\$148</b>
<b>Scope of Supply</b>	USB Wireless receiver for Mahr Measuring Instruments
<b>Channels</b>	3
<b>Connectable Devices with Integrated Wireless</b>	8 per Stick
<b>Radio Frequency MHz</b>	2400
<b>Distance of Radio Wave</b>	up to 6 m / 19.6 ft
<b>For Measuring Instruments</b>	MarCal 16 EWRI / 30 EWRI MarCator 1086 Ri / 1087 Ri / 1087 Bri

### MarCom Professional 5.1 Software-Interface

MarCom Professional 5.1 software transfers measuring values directly into MS Excel or via a keyboard code into any Windows® program or SPC software using a virtual interface box.



**For free download**  
[www.mahr.com/marcom](http://www.mahr.com/marcom)



<b>PROMO PRICE</b>
<b>FREE</b>
<b>LIST PRICE</b>
<b>\$406</b>

<b>Order No.</b>	<b>4102212</b>
<b>List Price</b>	\$406
<b>Promo Price</b>	<b>FREE</b>
<b>Connected Wireless Receivers for the i-Stick</b>	4
<b>Connectable Devices with Integrated Wireless</b>	32
<b>Connected Wireless Receivers for the e-Stick</b>	1
<b>Connectable Sender Modules for the e-Stick</b>	8
<b>Connected Wireless Receivers FM 2</b>	1
<b>Connectable Sender Modules for the Wireless Receivers FM 2</b>	100
<b>Devices to be Connected with a USB Interface</b>	128
<b>Connectable USB Foot Switches</b>	128
<b>Devices to be Connected with an RS232C Interface</b>	2
<b>Virtual Interface Boxes (8 Inputs)</b>	4

### MarSurf M 300 Set Mobile Roughness Measuring Instrument

Perfect for accurate measurements in the production environment

#### Features

- Automatic profile detection and corresponding selection of filters and traversing length conforming to standards
- Individual sampling lengths and short cutoff can be selected
- Printing of R-profile (ISO/ASME/JIS), P-profile (MOTIF), material ratio curve, measuring record
- Measuring units (µm/µinch) and standards (ISO/JIS/ASME/MOTIF) are selectable

#### M 300 SET contents:

- M 300 evaluation instrument
- RD 18 drive unit with integrated standard
- PHT 6-350 / 2 µm or 5 µm probe (conforming to standards)
- Height adjustment, probe protection, 2x USB cable, carrying case, etc.
- Includes Mahr Calibration certificate



<b>PROMO PRICE</b>
<b>\$4,749</b>
<b>LIST PRICE</b>
<b>\$5,430</b>

**-12%**

**ORDER NO. 6910401P**  
**OR 6910411P**



Order no.	6910401P (w/2µm Probe Tip)	6910411P (w/5µm Probe Tip)
<b>List price</b>		<b>5,430.00</b>
<b>Promo price</b>		<b>4,749.00</b>
<b>Measuring range</b>		350 µm (0.014")
<b>Parameters</b>		Ra, Rz (Ry (JIS) equivalent to Rz), Rz (JIS), Rq, Rmax, Rp, RpA (ASME), Rpm (ASME), Rpk, Rk, Rvk, Mr1, Mr2, A1, A2, Vo, Rt, R3z, Rpc, Rmr (tp (JIS, ASME) equivalent to Rmr), RSm, RSk, S, CR, CF, CL, R, Ar, Rx, Rv
<b>Stylus tip</b>	µm	2 µm or 5 µm
<b>Calibration function</b>		Dynamic
<b>Memory</b>		Store up to 40,000 results and up to 30 profiles
<b>Dimensions (L x W x H) of the drive unit</b>	mm/in	130 x 70 x 50mm (5.1" x 2.7" x 2")
<b>Dimensions (L x W x H) of the evaluation instrument</b>	mm/in	190 x 140 x 75mm (7.5" x 5.5" x 3")
<b>Weight of the drive unit</b>	g	approx. 300
<b>Weight of the evaluation unit</b>	kg	approx. 1
<b>Measuring principle</b>		Stylus method
<b>Probe</b>		Inductive skidded probe
<b>Measuring force</b>	N	0.75 mN

## MarSurf PS10

The NEW MarSurf® PS10 is a practical roughness measuring unit for mobile use. Using a smartphone-like 4.3 in TFT touch screen display, operation is fast, intuitive and user friendly. Our next generation MarSurf PS 10 measures 31 roughness parameters, incorporates a removable drive and provides laboratory level performance on the shop floor.



**LIST PRICE**  
**\$2,660**

**ORDER NO. 6910230 & 6910232**

With removable drive, touch display and intuitive operation the PS10 is versatile and easy to use.



Increased versatility with removable drive



Use as a portable gage or stand mounted

Order No.	6910230	6910232
Introductory Price	<b>\$2,660</b>	
Measuring Principle	Skid Probe System	
Number of Parameters	31 (DIN/ISO, JIS, ASME, MOTIF)	
Measuring Range	350 µm / 0.014 in	
Profile Resolution	8 nm / 3 µin	
Internal Memory	3,900 Profiles, 1500 pdf-files, 500,000 Results, Memory can be Extended with micro SD-Card up to 32 GB	
Description	PS10 Kit with 2 µm Probe Tip	PS10 Kit with 5 µm Probe Tip

## MarCal 16 EWri Wireless Kit

Wireless data transmission capability is integrated within MarCal digital calipers using proven wireless technology. These calipers are easy-to-read with a large clear digital display and include a number of advanced features such as lapped guideways, a reference system that retains the zero position setting and a number of product options and accessories.



**PROMO PRICE**  
**\$336**  
**LIST PRICE**  
**\$373**  
**ORDER NO. 2121610P**

**-10%**



**REFERENCE**



Order No.	List Price	Promo Price	Measuring Range	Resolution	Depth Rod	Friction Wheel
2121610P*	\$373	<b>\$336</b>	150 mm / 6 in	0.01 mm / 0.0005 in	<input type="checkbox"/>	<input type="checkbox"/>
2121611P*	\$373	<b>\$336</b>			<input type="checkbox"/>	<input type="checkbox"/>

\* Starter set includes an i-Stick wireless receiver

**PROMO PRICE**  
**\$193**  
**LIST PRICE**  
**\$214**  
**ORDER NO. 4103400P**

**-10%**

## MarCal 16 EWri Digital Caliper



**REFERENCE**

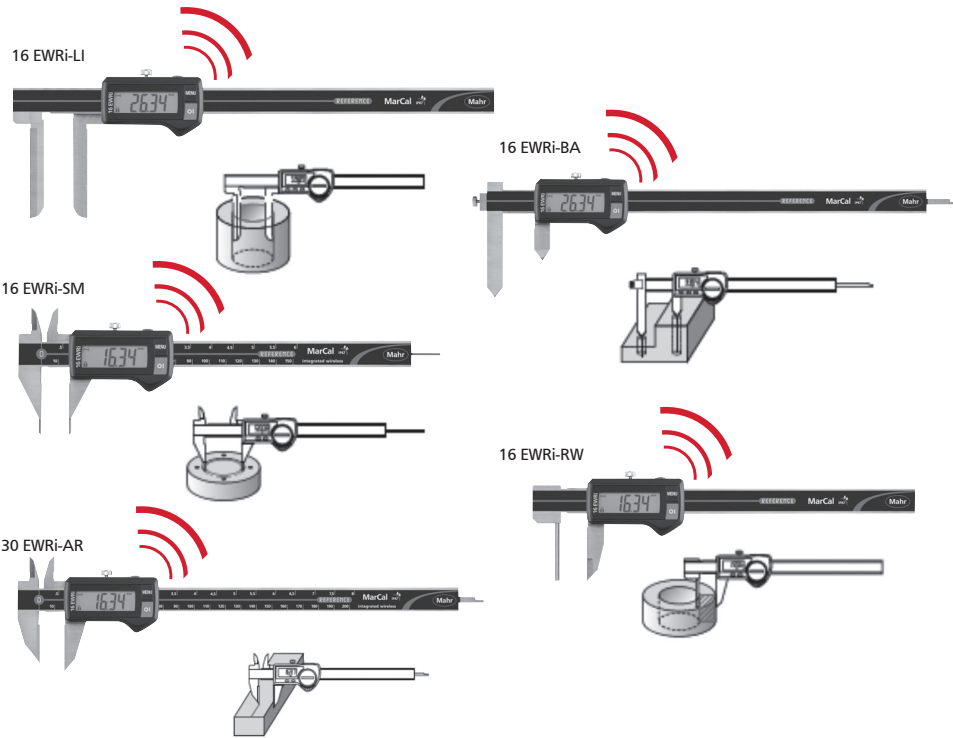


Order No.	List Price	Promo Price	Measuring Range	Resolution	Error Limit G	Depth Rod	Friction Wheel
4103400P	\$214	<b>\$193</b>	150 mm / 6 in	0.01 mm / 0.0005 in	0.03 mm / 0.001 in	<input type="checkbox"/>	<input type="checkbox"/>
4103401P	\$214	<b>\$193</b>				<input type="checkbox"/>	<input type="checkbox"/>
4103402P	\$214	<b>\$193</b>				<input type="checkbox"/>	<input type="checkbox"/>
4103403P	\$214	<b>\$193</b>				<input type="checkbox"/>	<input type="checkbox"/>
4103404P	\$248	<b>\$225</b>	200 mm / 8 in	0.01 mm / 0.0005 in	0.03 mm / 0.001 in	<input type="checkbox"/>	<input type="checkbox"/>
4103405P	\$248	<b>\$225</b>				<input type="checkbox"/>	<input type="checkbox"/>
4103406P	\$371	<b>\$335</b>	300 mm / 12 in	0.01 mm / 0.0005 in	0.04 mm / 0.0015 in	<input type="checkbox"/>	<input type="checkbox"/>
4103407P	\$371	<b>\$335</b>				<input type="checkbox"/>	<input type="checkbox"/>

## MARCAL- The New Wireless Caliper Standard

Digital Calipers for special applications

Mahr offers a range of calipers for special applications featuring our state-of-the-art measuring system with integrated wireless. The range includes special calipers, universal calipers, right through to depth gauges.



Order No.	Model	List Price	Promo Price	Description	Measuring Range	Resolution
4103372P	16 EWRI-C	\$399	<b>\$360</b>	Ceramic Outer Measuring surfaces	0-6"/0-150mm	0.0005"/0.01mm
4103373P	16 EWRI-H	\$475	<b>\$425</b>	Carbide Outer Measuring Surfaces	0-6"/0-150mm	
4103382P	16 EWRI-AR	\$385	<b>\$346</b>	Scribing Caliper	0-8"/0-200mm	
4103376P	16 EWRI-SM	\$560	<b>\$500</b>	Caliper with Pointed Jaws	0-6"/0-150mm	
4103384P	16 EWRI-BA	\$595	<b>\$535</b>	Caliper with Center distance jaws	0.4-8.3"/10-210mm	
4103381P	16 EWRI-RW	\$630	<b>\$565</b>	Caliper for wall thickness	0-6"/0-150mm	
4103385P	16 EWRI-LI	\$810	<b>\$730</b>	Caliper with inner blades	0.4-8.3"/10-200mm	

Find out more in our catalog or on our website:  
[www.mahr.com](http://www.mahr.com)

Need some more information? Our technical advisers will be happy to answer any questions you may have.

## Millimar C 1200 Compact Amplifier



Millimar compact amplifiers are easy to use and allow users to view analog scale, digital readout, or both. These evaluation instruments are highly accurate and insensitive to environmental influences.

<b>PROMO PRICE</b>
<b>\$1,260</b>
<b>LIST PRICE</b>
<b>\$1,400</b>

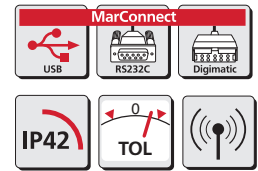
**ORDER NO. 5312010P**

**-10%**

### New Features

- Dynamics
- Asymmetric Tolerances
- Lock out

Order No.		5312010P
List Price		\$1,400
Promo Price		<b>\$1,260</b>
Digital	μm/in	± 5000 / ± 0.194"
Display Range Analog	μm/in	± 5000, ± 2000 / ± 0.19", ± 0.07" ± 1000, ± 300 / ± 0.03", ± 0.01" ± 100, ± 30 / ± 0.003", ± 0.001" ± 10, ± 3 / ± 0.0003", ± 0.0001"
Resolution	μm/μinch	10, 1, 0.1 / 100", 10", 5"



## Millimar P2004 M Inductive Probe

Robust construction and precise friction less ball bearing, provide high performance.



▲ with 8mm diameter

<b>PROMO PRICE</b>
<b>\$333</b>
<b>LIST PRICE</b>
<b>\$416</b>

**ORDER NO. 5323010P**

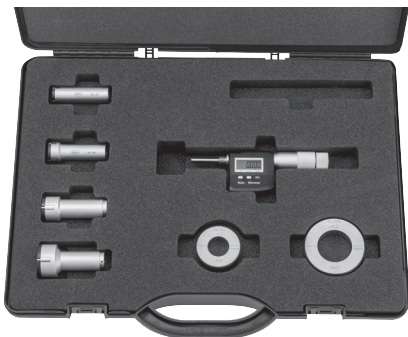
**-20%**

Order No.		5323010P
List Price		\$416
Promo Price		<b>\$333</b>
Product		P2004 M
Measuring Range	mm/in	± 2 / ± 0.078"
Measuring Force	N	0.75
Repeatability f <sub>w</sub>	μm	0.1
Hysteresis f <sub>u</sub>	μm	0.5





### Micromar 44 EWR Self-centering Digital Micrometer Sets



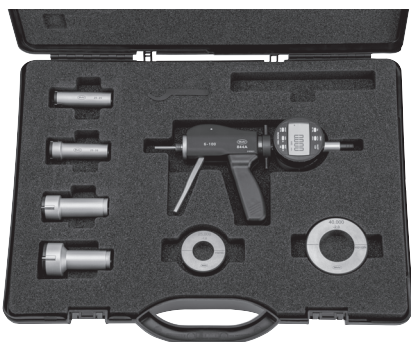
These Digital Inside Micrometers 44 EWR are versatile, self-centering three-point internal micrometers for the accurate and efficient direct-measurement of internal diameters. Three anvils, evenly spaced at 120° apart, contact the internal wall surfaces for true alignment with the axis of the bore for accurate ID measurement of through holes, blind holes and centering shoulders.

DIN 863-4

REFERENCE

Order No.	Model	List Price	Promo Price	Measuring Range	Setting Rings	Resolution
4191160P	44 EWR	\$3030	<b>\$2575</b>	0.25-.47"/6-12mm	8mm, 10mm	0.00005"/0.001mm
4191161P	44 EWR	\$2890	<b>\$2450</b>	.47-.77"/12-20mm	16mm	
4191162P	44 EWR	\$4140	<b>\$3500</b>	.77-2"/50-50mm	25mm, 40mm	
4161163P	44 EWR	\$4920	<b>\$4175</b>	2-4"/50-100mm	60mm, 85mm	

### Micromar 44 EWR Self-centering Digital Micrometer Sets



The Pistol Micrometer 844 A enables the user to make measurements more accurately and quicker than ever before. Once the reference bore diameter is set in the Digital Indicator, it retains the setting for the entire battery life. Therefore no longer repeated origin setting (presetting) is necessary. In combination with the quick retraction and release pistol handle measuring through and blind bores and centering shoulders has never been faster.

Lock icon

REFERENCE

Order No.	Model	List Price	Promo Price	Measuring Range	Setting Rings	Resolution
4487760P	844 AS	\$3160	<b>\$2680</b>	0.25-.47"/6-12mm	8mm, 10mm	0.00002"/0.0005mm
4487761P	844 AS	\$3080	<b>\$2600</b>	.47-.77"/12-20mm	16mm	
4487762P	844 AS	\$3910	<b>\$3320</b>	.77-2"/50-50mm	25mm, 40mm	
4487763P	844 AS	\$4190	<b>\$3560</b>	2-4"/50-100mm	60mm, 85mm	

### MARCAL- The New Wireless Caliper Standard

16 EWRI-SA



16 EWRI-AI



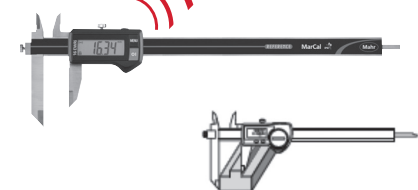
16 EWRI-NA



16 EWRI-S



16 EWRI-VS



Order No.	Model	List Price	Promo Price	Description	Measuring Range	Resolution
4103377P	16 EWRI-SA	\$749	<b>\$675</b>	Caliper with inward pointed tips	0-5.5"/0-140mm	0.0005"/0,01mm
4103379P	16 EWRI-AA	\$645	<b>\$580</b>	Caliper with inward pointed anvils	0-6"/0-150mm	
4103378P	16 EWRI-SI	\$740	<b>\$665</b>	Caliper with Outward pointed tips	0.8-6.7"/20-170mm	
4103380P	16 EWRI-AI	\$705	<b>\$635</b>	Caliper with outward pointed anvils	0.4-6.3"/10-160mm	
4103374P	16 EWRI-NA	\$725	<b>\$650</b>	Caliper with narrow jaws	0-6"/0-150mm	
4103375P	16 EWRI-S	\$500	<b>\$450</b>	Caliper with pointed jaws	0-6"/0-150mm	
4103383P	16 EWRI-VS	\$625	<b>\$560</b>	Caliper with offset, moving jaws	0-8"/0-200mm	

Find out more in our catalog or on our website: [www.mahr.com](http://www.mahr.com)

Need some more information? Our technical advisers will be happy to answer any questions you may have.

## Digital Indicators MarCator 1086 R / 1086 Ri

Fixed Resolution

The 1086 digital indicators with fixed resolution incorporate the reference system which automatically stores the zero position for further measurements. All 1086 digital indicators come standard with MarConnect. If you need to document your data, we have integrated wireless indicators which offer integrated wireless data transmission, the optimal solution for transmitting your measured values to a PC.



▲ 12,5 mm



▲ 25 mm

PROMO PRICE
\$315
LIST PRICE
\$371

ORDER NO. 4337130P

**-15%**

The MarVision QM 300 is a full-featured measuring station designed for fast, close to the manufacturing process evaluation of cutting inserts or flat components such as punch and stamped parts. This instrument has a large field of view for fast multiple dimension measurements. The quick measure feature automatically recognizes pre-programmed parts and makes the required measurements without operator influence, improving performance and productivity.

PROMO PRICE
\$23,640
LIST PRICE
\$27,810

ORDER NO. 4247803P

**-15%**



▲ M3-Software with Touchscreen-PC  
*(Similar to illustration; depends upon the PC manufacturer)*



▲ QM 300



▲ Punched Parts



▲ Gears



▲ Rubber Seals/Rings

### REFERENCE



Order No.	Model	List Price	Promo Price	Measuring Range	Resolution	Wireless
4337130P	1086 R	\$371	\$315	12,5 mm / 0.5 in	0,01 mm / 0.0005 in	
4337131P	1086 R	\$485	\$412	25 mm / 1 in		
4337132P	1086 R	\$809	\$687	50 mm / 2 in		
4337133P	1086 R	\$1,060	\$900	100 mm / 4 in		
4337134P	1086 Ri	\$428	\$363	12,5 mm / 0.5 in		X
4337135P	1086 Ri	\$500	\$425	25 mm / 1 in		X

All indicators with 8 mm stem diameter

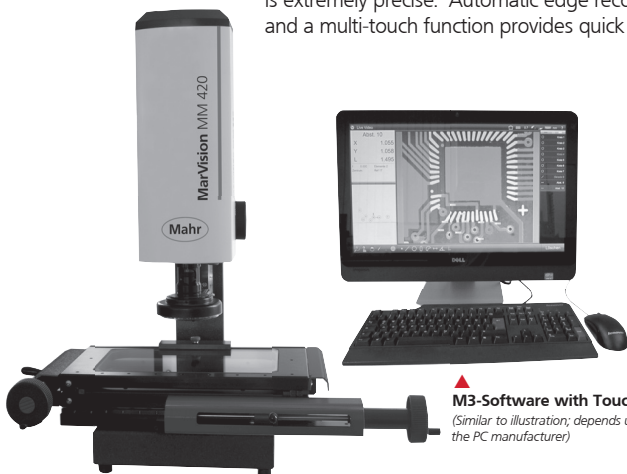
Order No.	4247803P	4247804P	4247805P
List Price	\$27,810	\$35,810	\$40,140
Promo Price	\$23,640	\$30,438	\$34,119
Measuring Range/Image Field	32 mm x 24 mm / 1.25 in x 1 in	57 mm x 42 mm / 2.3 in x 1.6 in	96 mm x 72 mm / 3.8 in x 2.8 in
Height Adjustment	30 mm / 1.18 in		
Measurement Error E <sub>z</sub>	4.0+L/50 (L in mm)	4.5+L/50 (L in mm)	7.5+L/50 (L in mm)
Camera System	5 Megapixel USB 3		
Incident Light	LED Ring Light		
Transmitted Light	LED Telecentric		
Dimensions QM 300 D x W x H	330 mm x 230 mm x 580 mm / 13 in x 9 in x 23 in	330 mm x 240 mm x 720 mm / 13 in x 9.5 in x 28.4 in	340 mm x 250 mm x 820 mm / 13.4 in x 10 in x 32.3 in

Accessories for Microscopes: See Dimensional Metrology Catalog, Chapter 18



### MarVision MM 420 Workshop Measuring Microscope

The MarVision MM 420 video measuring microscope with image processing is designed for the measurement and/or dimensioning of geometric elements and is extremely precise. Automatic edge recognition detects low contrast features and a multi-touch function provides quick and continuous variable magnification.



**M3-Software with Touchscreen-PC**  
(Similar to illustration; depends upon the PC manufacturer)

<b>PROMO PRICE</b>
<b>\$25,390</b>
<b>LIST PRICE</b>
<b>\$29,870</b>
<b>ORDER NO. 26083801P</b>

**-15%**

Order No.	26083801P	26084001P	26084201P
List Price	\$29,870	\$31,910	\$40,250
Promo Price	<b>\$25,390</b>	<b>\$27,125</b>	<b>\$34,210</b>
Measuring Range X/Y*	200 mm / 100 mm	250 mm / 170 mm	400 mm / 250 mm
	7.9 in / 3.9 in	9.80 in / 6.7 in	15.7 in / 9.8 in
Z Travel	200 mm / 400 mm** 7.9 in / 15.8 in**		
Measuring Table Dimensions	370 mm x 210 mm / 14.6 in x 8.3 in	420 mm x 280 mm / 16.5 in x 11.0 in	600 mm x 480 mm / 23.6 in x 18.9 in
Max. Table Load	20 kg / 44 lbs		
Measuring System:	Built-In Incremental Measuring Scale		
- Resolution	0.001 µm / 0.00005 in		
- MPE E <sub>1</sub> X / Y in µm (L in mm)	1.9 +(L/100)	3.9 +(L/100)	
- MPE E <sub>2</sub> XY in µm (L in mm)	2.9 +(L/100)	4.9 +(L/100)	
Working Distance	85 mm / 3.3 in		
Max. Height of Test Piece	ca. 65 mm / 300 mm** 2.6 in / 11.8 in**	300 mm / 11.8 in	
Illumination	LED Incident and Transmitted Light, Individually Adjustable		
Dimensions* H x W x D	700 mm x 650 mm x 550 mm	700 mm x 700 mm x 600 mm	800 mm x 1000 mm x 900 mm
	27.6 in x 25.6 in x 21.6 in	27.6 in x 27.6 in x 23.6 in	31.5 in x 39.4 in x 35.4 in
Magnification***	Zoom 35-225x		

\* Measuring table is centered  
\*\* Extensions are optional  
\*\*\* On screen  
# Specialized table sizes are available upon request, up to 1000 x 250 mm travel path

Accessories for Microscopes: see Dimensional Metrology catalog, Chapter 18

### Digital Indicators MarCator 1086 R/ 1086 Ri/ 1086 WR/ 1086 WRi

Selectable Resolution

The 1086 digital indicators with selectable resolution offer large display and wet-proof models, and incorporate the reference system which automatically stores the zero position for further measurements. All 1086 digital indicators come standard with MarConnect. If you need to document your data, we have integrated wireless indicators which offer integrated wireless data transmission, the optimal solution for transmitting your measured values to a PC.

<b>PROMO PRICE</b>
<b>\$390</b>
<b>LIST PRICE</b>
<b>\$459</b>
<b>ORDER NO. 4337620P</b>

**-15%**

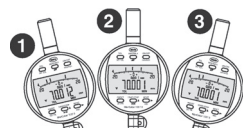


Order No.	Model	List Price	Promo Price	Measuring Span	Resolution	Wireless	Wet-Proof
4337620P	1086 R	\$459	<b>\$390</b>	12,5 mm / 0.5 in	0.0005 mm, 0.001 mm, 0.002 mm, 0.005 mm, 0.01 mm / 0.00002 in, 0.00005 in, 0.0001in, 0.0002 in, 0.0005 in		
4337621P	1086 R	\$541	<b>\$459</b>	25 mm / 1 in			
4337622P	1086 R	\$907	<b>\$770</b>	50 mm / 2 in			
4337623P	1086 R	\$1,140	<b>\$969</b>	100 mm / 4 in			
4337650P*	1086 R	\$459	<b>\$390</b>	12,5 mm / 0.5 in			
4337651P*	1086 R	\$541	<b>\$459</b>	25 mm / 1 in			
4337624P	1086 Ri	\$515	<b>\$438</b>	12,5 mm / 0.5 in		X	
4337625P	1086 Ri	\$577	<b>\$490</b>	25 mm / 1 in		X	
4337626P	1086 Ri	\$943	<b>\$800</b>	50 mm / 2 in		X	
4337627P	1086 Ri	\$1,160	<b>\$986</b>	100 mm / 4 in		X	
4337628P**	1086 Ri	\$593	<b>\$504</b>	25 mm / 1 in		X	
4337640P	1086 WR	\$567	<b>\$482</b>	12,5 mm / 0.5 in			X
4337641P	1086 WR	\$617	<b>\$524</b>	25 mm / 1 in			X
4337142P	1086 WRi	\$608	<b>\$516</b>	12,5 mm / 0.5 in		X	X
4337143P	1086 WRi	\$670	<b>\$570</b>	25 mm / 1 in		X	X

Note all indicators with 8mm stem except \* 3/8in stem diameter. \*\* No gaging spring

## Digital Indicators MarCator 1087 R/ 1087 ZR/ 1087 Ri/ 1087 BR / 1087 BRi

Selectable Resolution



Bore Gage Version

12,5 mm Dynamic Capability

The 1087 digital indicators, with dynamic capabilities and analog bar graph, provide easy readings of MIN/MAX/MAX-MIN conditions and incorporate the reference system which automatically stores the zero position for further measurements. All 1087 digital indicators come standard with MarConnect. If you need to document your data, we have integrated wireless indicators which offer integrated wireless data transmission, the optimal solution for transmitting your measured values to a PC. The BR version is specifically designed for adjustable bore gage use and greatly enhances operator ease of use.

PROMO PRICE
\$464
LIST PRICE
\$546

ORDER NO. 4337660P

**-15%**

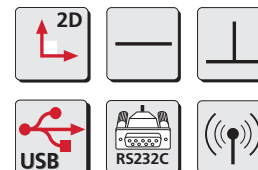
## Digimar 817 CLM Height Measuring Instrument

The Digimar 817 CLM offers a wide range of measurement functions in both 1D and 2D, including dynamic measurement functions with analog display such as Max, Min and Max/Min. Operation is easy, with self-explanatory ISO standard icons, operator prompts, and menus in several different languages.

PROMO PRICE
\$6,448
LIST PRICE
\$8,060

**-20%**

ORDER NO. 4429010P



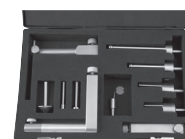
Optional accessory for squareness checks



Order No.	Model	List Price	Promo Price	Measuring Range	Resolution	Wireless	Bore Gage Version
4337660P	1087 R	\$546	\$464	12,5 mm / 0.5 in	0.0005 mm, 0.001 mm, 0.002 mm, 0.005 mm, 0.01 mm / 0.00002 in, 0.00005 in, 0.0001 in, 0.0002 in, 0.0005 in		
4337661P	1087 R	\$629	\$534	25 mm / 1 in			
4337670P*	1087 ZR	\$546	\$464	12,5 mm / 0.5 in			
4337671P*	1087 ZR	\$629	\$534	25 mm / 1 in			
4337663P	1087 Ri	\$593	\$504	12,5 mm / 0.5 in		X	
4337665P	1087 Ri	\$598	\$508	25 mm / 1 in		X	
4337662P	1087 BR	\$629	\$534	12,5 mm / 0.5 in			X
4337664P	1087 BRi	\$696	\$591	12,5 mm / 0.5 in			X

Note all indicators with 8mm stem except \* 3/8in stem diameter.

Order No.	4429010P	4429011P	4429012P
List Price	\$8,060	\$8,570	\$15,300
Promo Price	\$6,448	\$6,850	\$12,240
Measuring Range	0-50 mm / 0-4 in	0-600 mm / 0-24 in	0-1000 mm / 0-40 in
Range of Application	520 mm / 20.47 in	770 mm / 30.31 in	1170 mm / 46.06 in
Resolution	0.01 mm, 0.005 mm, 0.001 mm, 0.0005 mm, 0.0001 mm / 0.001 in, 0.0005 in, 0.0001 in, 0.00005 in, 0.00001 in		
Error Limit	(1.8 + L/600) L in mm		
Repeatability: Bore	1 µm		
Repeatability: Plane	0.5 µm		
Perpendicularity Error in µm	≤5 µm	≤6 µm	≤10 µm
Operating Time Max.	Up to 12 hours		
Measuring Force	1.0 +/-0.2 N		
Permissible Relative Air Humidity Non-Condensed	65%		
Working Temperature	20 °C / 68 °F		
Operating Temperature	10 °C - 40 °C / 50 °F - 104 °F		



Digimar Probe Accessory Set

Order No.	4429018P	4429019P
List Price	\$1,140	\$1,650
Promo Price	\$912	\$1,320
Probe Set	817 ts2	817 ts1

### Digimar 816 CL Height Measuring Instrument



The Digimar 816 CL height gage provides highly accurate measurements without complicated procedures. Robust design and user-friendly operation combine with advanced features and functionality to improve dimensional measurement on the shop floor or in the lab.

PROMO PRICE	
\$5,150	LIST PRICE
\$5,730	

ORDER NO. 4429030P

**-10%**



▲ Ideal for fast, in production part inspection



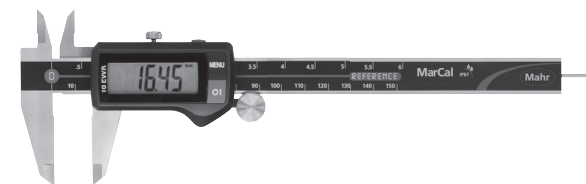
Order No.	4429030P	4429031P
List Price	\$5,730	\$6,160
Promo Price	<b>\$5,150</b>	<b>\$5,545</b>
Measuring Range	0-350 mm / 0-14 in	0-600 mm / 0-24 in
Range of Application From...To	540 mm / 21.26 in	770 mm / 30.31 in
Resolution	0.01 mm, 0.001 mm / 0.0001 in, 0.00005 in	
Error Limit	(2.8 + L/300) L in mm	
Repeatability: Bore	3 µm	
Repeatability: Plane	2 µm	
Perpendicularity Error in µm	≤15 µm	≤20 µm
Operating Time Max.	Up to 14 h	
Measuring Force	1.0 +/- 0.2 N	
Permissible Relative Air Humidity Non-Condensed	65%	
Working Temperature	20 °C / 68 °F	
Operating Temperature	10 °C - 40 °C / 50 °F - 104 °F	

### MarCal 16 EWR Digital Caliper with Reference System, Protection Class IP67 No Output

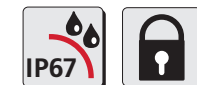
The MarCal 16 EWR features a new ergonomic design with lapped guideways and larger display, and offers IP67 protection against dust, coolants and lubricants, extended three-year battery life, and an innovative zero reference system, which automatically stores the zero position for further measurements. Available for next day delivery.

PROMO PRICE	
\$155	LIST PRICE
\$185	

ORDER NO. 4103301P



REFERENCE



**-15%**

Order No.	List Price	Promo Price	Measuring Range	Resolution	Error Limit G	Depth Rod	Friction Wheel
4103300P	\$185	<b>\$155</b>	150 mm / 6 in	0.01 mm / 0.0005 in	0.03 mm	<input type="checkbox"/>	<input type="checkbox"/>
4103302P	\$185	<b>\$155</b>				<input type="checkbox"/>	<input type="checkbox"/>
4103301P	\$185	<b>\$155</b>				<input type="checkbox"/>	<input type="checkbox"/>
4103303P	\$185	<b>\$155</b>				<input type="checkbox"/>	<input type="checkbox"/>

### MarCal 16 EWR Digital Caliper with Reference System, Protection Class IP67 and Output

PROMO PRICE	
\$187	LIST PRICE
\$221	

ORDER NO. 4103064P



REFERENCE



**-15%**

Order No.	List Price	Promo Price	Measuring Range	Resolution	Error Limit G	Depth Rod	Friction Wheel
4103064P	\$221	<b>\$187</b>	150 mm / 6 in	0.01 mm / 0.0005 in	0.03 mm / 0.001 in	<input type="checkbox"/>	<input type="checkbox"/>
4103066P	\$221	<b>\$187</b>				<input type="checkbox"/>	<input type="checkbox"/>
4103065P	\$221	<b>\$187</b>				<input type="checkbox"/>	<input type="checkbox"/>
4103067P	\$221	<b>\$187</b>	200 mm / 8 in	0.01 mm / 0.0005 in	0.03 mm / 0.001 in	<input type="checkbox"/>	<input type="checkbox"/>
4103068P	\$256	<b>\$217</b>				<input type="checkbox"/>	<input type="checkbox"/>
4103069P	\$256	<b>\$217</b>				<input type="checkbox"/>	<input type="checkbox"/>
4103070P	\$383	<b>\$325</b>	300 mm / 12 in	0.04 mm / 0.0015 in	0.04 mm / 0.0015 in	<input type="checkbox"/>	<input type="checkbox"/>
4103071P	\$383	<b>\$325</b>				<input type="checkbox"/>	<input type="checkbox"/>

### MarCal 16 ER Digital Caliper

The MarCal 16 ER features a new ergonomic design with lapped guideways - perfect for your daily measurement needs. Supplied with case, battery and operating instructions.



REFERENCE

PROMO PRICE
\$117
LIST PRICE
\$130

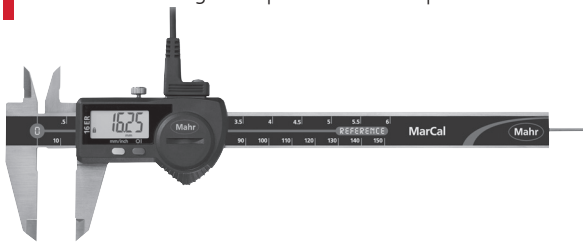
**-10%**

ORDER NO. 4103010P

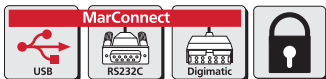


Order No.	List Price	Promo Price	Measuring Range	Resolution	Error Limit G	Depth Rod	Friction Wheel
4103010P	\$130	\$117	150 mm / 6 in	0.01 mm / 0.0005 in	0.03 mm	<input type="checkbox"/>	<input type="checkbox"/>
4103011P	\$130	\$117				<input type="checkbox"/>	<input type="checkbox"/>
4103012P	\$130	\$117				<input type="checkbox"/>	<input type="checkbox"/>
4103013P	\$130	\$117				<input type="checkbox"/>	<input type="checkbox"/>

### MarCal 16 ER Digital Caliper with Data Output



REFERENCE



PROMO PRICE
\$144
LIST PRICE
\$160

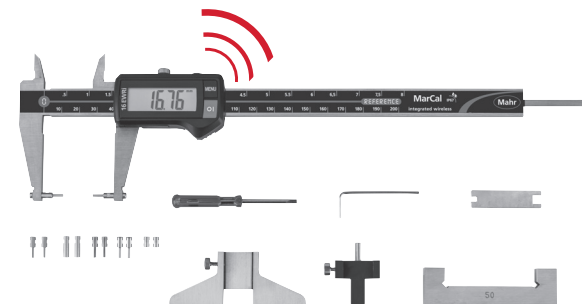
ORDER NO. 4103014P

**-10%**

Order No.	List Price	Promo Price	Measuring Range	Resolution	Error Limit G	Depth Rod	Friction Wheel
4103014P	\$160	\$144	150 mm / 6 in	0.01 mm / 0.0005 in	0.03 mm / 0.001 in	<input type="checkbox"/>	<input type="checkbox"/>
4103015P	\$160	\$144				<input type="checkbox"/>	<input type="checkbox"/>
4103018P	\$217	\$195	200 mm / 8 in		0.04 mm / 0.0015 in	<input type="checkbox"/>	<input type="checkbox"/>
4103020P	\$340	\$306	300 mm / 12 in			<input type="checkbox"/>	<input type="checkbox"/>
4103016P	\$160	\$144	150 mm / 6 in	0.01 mm / 0.0005 in	0.03 mm / 0.001 in	<input type="checkbox"/>	<input type="checkbox"/>
4103017P	\$160	\$144				<input type="checkbox"/>	<input type="checkbox"/>
4103019P	\$217	\$195	200 mm / 8 in		0.04 mm / 0.0015 in	<input type="checkbox"/>	<input type="checkbox"/>
4103021P	\$340	\$306	300 mm / 12 in			<input type="checkbox"/>	<input type="checkbox"/>

### MarCal 16 EWR-V / 16 EWri-V Digital Universal Caliper

The MarCal 16 EWri-V is a versatile precision measuring kit which can be employed in production. The kit contains interchangeable contacts to meet virtually any measurement application. The Ri-V incorporates the integrated wireless transmitter.



REFERENCE

PROMO PRICE
\$495
LIST PRICE
\$585

**-15%**

ORDER NO. 4118807P



Order No.	List Price	Promo Price	Measuring Range	Resolution	Depth Rod	Wireless
4118807P	\$585	\$495	0-200 mm / 0-8 in	0,01 mm / 0.0005 in	Rectangular	<input type="checkbox"/>
4118907P	\$630	\$535				<input checked="" type="checkbox"/>

### Micromar 40 ER Digital Micrometer

Micromar 40 ER digital micrometers ensure maximum precision and a long working life with their carbide tipped measuring faces, robust frame construction and precision ground spindle.



REFERENCE

PROMO PRICE
\$199
LIST PRICE
\$234

**-15%**

ORDER NO. 4151601P



Order No.	List Price	Promo Price	Measuring Range	Resolution	Spindle Thread Pitch	IP40	IP65	MarConnect
4151601P	\$234	\$199	0-25 mm / 0-1 in	0.001 mm / 0.00005 in	0.635 mm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4151721P	\$258	\$220	0-25 mm / 0-1 in	0.001 mm / 0.00005 in	0.635 mm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4151705P	\$284	\$240	0-25 mm / 0-1 in	0.001 mm / 0.00005 in	0.635 mm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>