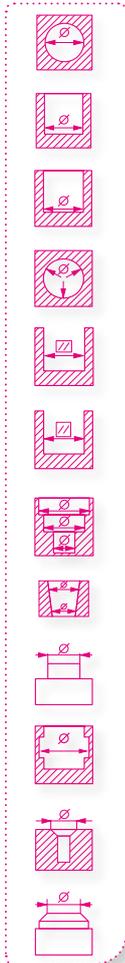


HEXAACON



 English

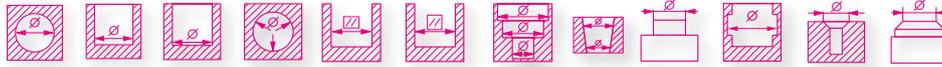
Ø

μ-precision measuring heads and chamfer measuring instruments • Overall catalog

Notes

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HEXAACON



Hexacon Messtechnik GmbH specializes in the area of precision hole and chamfer measurement.

We manufacture high-precision hole measuring heads according to your individual diameter specifications. Applications range from manual measurement to fully automated measurement. We also offer an extensive line of system accessories.

The repeat accuracy of our hole measuring heads at IT 8 is $< 1\mu$.

100% Made in Germany

All Hexacon PMK precision measuring heads and chamfer measuring heads, chamfer probes and insertion measuring instruments are tough, reliable, high-precision metrology equipment made 100% here in Germany! This allows the strictest of quality requirements and standards for quality assurance to be met.

Our system accessories, such as gauge holders, centering holders and depth extensions are also made in our own facilities, 100% Made in Germany. The accessories are in stock in the warehouse.

Know-how and years of experience

Our engineering services in the area of technical and production technology development since 1996 guarantee you perfect measurement problem solutions in the area of precision hole and chamfer measurement.

Many years of experience in consulting and the implementation of customer-specific problems offer you a high level of know-how for measurement tasks in production as well as in quality assurance.

Titanium nitride coating

All Hexacon PMK's are manufactured of high-quality tool-grade steel and treated at no extra charge with a quality-improving titanium nitride coating. This has been our standard for many years.

TiN coating provides very good hardness, about 2200 HV, as well as corrosion resistance with outstanding sliding and friction characteristics. TiN coatings also slide easily to prevent the measurement object from tilting and sticking during the measurement procedure. This results in less wear and longer life for measurement tools, as well as greater cost-effectiveness.



Precision measuring points

The measuring points in the PMK measuring heads are precision fabricated from tough, high-quality coated hard metal. Diamond measuring points of synthetic diamond are available upon request. (Not for blind hole variants and outer diameter measuring heads)

Repair capability and service

All our hole and chamfer measuring instruments are not only robust, but are also outstandingly capable of repair. Our services include the delivery of original replacement parts up to and including complete refurbishment and remanufacture of worn measuring tools to as-new condition, as well as recalibration of metrology equipment.

Advantages of our products at a glance:

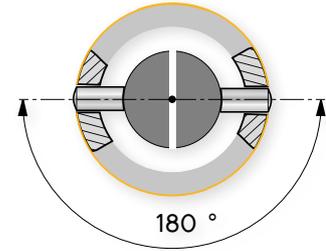
- **Top quality and precision in fabrication and measurement accuracy.**
- **Robust, field-ready metrology equipment for effective, rational measurement.**
- **TiN coating provides higher service life at no additional cost.**
- **Refined system accessories, for both manual and automated measurement.**
- **Flexible adaptation and modification to customer specifications as well as special solutions are possible.**
- **Great prices and short delivery times**
- **100% Made in Germany**

 Company headquartered in Dieburg,
Hessen. Germany



Hole measuring instruments

HEXAACON



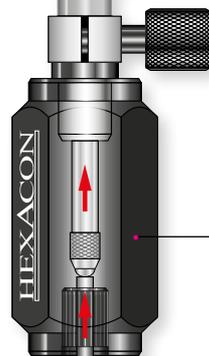
Functional principle

PMK precision hole measuring heads • TiN coated

For quality assurance in fabrication and in testing.



Dial gauge

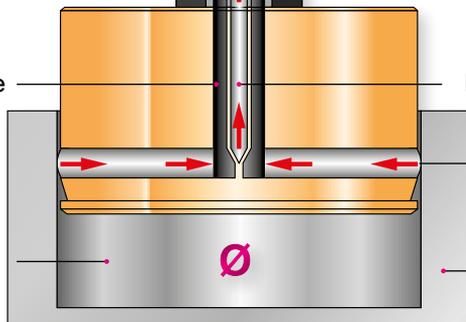


Holder

Drive needle housing

Drive needle

Drilling measuring-object



Measuring point

Workpeace

PMK precision meas. heads • Functional description

PMK measuring heads are used for the reliable, rapid precision measurement of **diameters and form errors** in holes of a wide variety of types.

The purely mechanical measurement principle uses hardened metal measuring points to probe the hole, then guide the force through measurement rods into the housing onto a hardened, conically ground drive needle.

A measurement gauge holder, with or without drive needle, connects the measuring head to corresponding displays such as analog or digital dial gauges using inductive measuring probes, measuring columns or automatic computer measurement systems.

By sliding into the depth of the hole during the measurement process, any **conicity in the hole** can be measured as well. TiN is advantageous here.

Using a rotational probing movement into the hole, additional **form errors in the hole** can be measured:

Elliptical form errors, which often occur in drilled holes, can be detected and measured with high precision using **2-point measuring heads**.

Polygonal form errors, which frequently occur in turned or cast parts, can be measured with equal precision using **3-point measuring heads**.

Measuring heads are available in round, conical, parallel, rectilinear or square shapes.

We also provide multi-point measuring heads as well as corresponding dial gauge holders and depth extensions, measurement stands, dial gauges and additional accessories.

All Hexacon measuring heads are 100% Made in Germany.

Measuring principle



2-point meas.



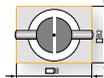
3-point meas.



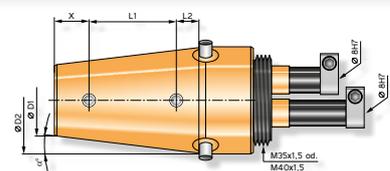
Parallel meas.



Parallel square



Parallel rectangle



Conical multi-point measuring head

Hole measuring instruments

Properties and calibration

PMK precision hole measuring heads • TiN coated

Diameters from 6 - 280 mm • Repeat accuracy at IT 8 down to $< 1\mu$.

HEXAACON



Factory calibration of measuring heads

Upon request you can receive a [factory calibration certificate](#) for the measuring head.

For hole measuring heads we guarantee a repeat accuracy [less than \$1\mu\$](#) , and that accuracy is often even exceeded, as shown again and again by measurement protocols.

Long-lasting precision metrology equipment

Due to the mature design, robust construction and high-quality machining, we provide particularly reliable, long-lasting precision metrology equipment.

Cleaning, service

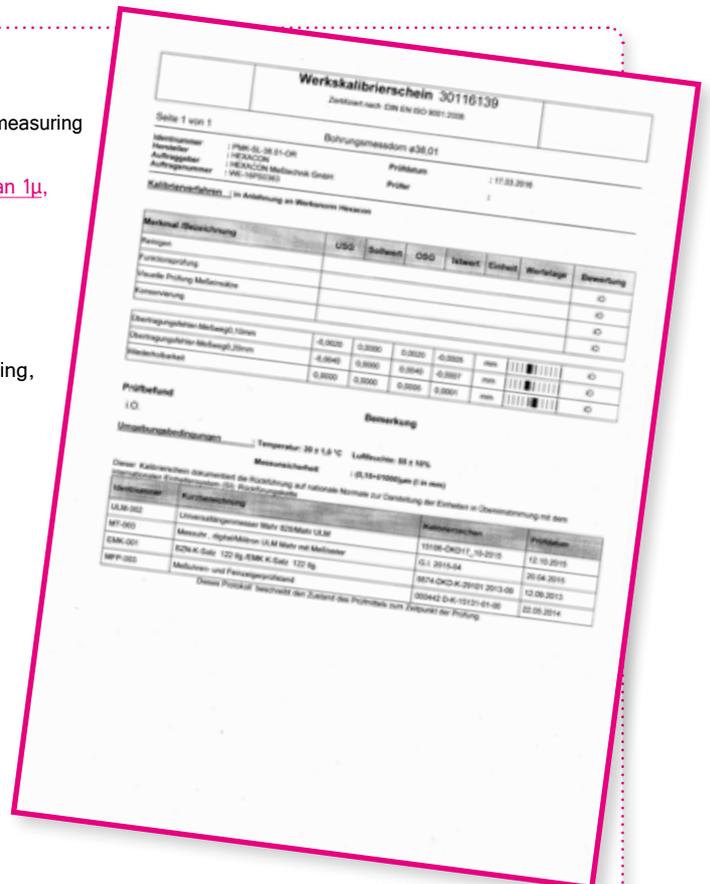
The titanium nitride coating give PMK measuring heads dirt- and water-repelling qualities and make them easy to clean and service.

For worn parts such as springs or drive needles, we keep all spare parts in stock in the warehouse.

Repair

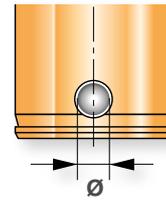
When necessary, these measuring heads are easy to repair and restore to like-new condition and can also be recertified upon request.

Hexacon Messtechnik GmbH produces high-quality precision metrology instruments for industry and handicraft businesses.



Hole measuring instruments

HEXAACON



PMK - technical characteristics

Measuring points • Diameters and radii

Measuring points • Diameters and radii

The measuring points in all Hexacon PMK precision measuring heads are made of coated hard metal, ground and polished. They are extremely tough, with a long service life.

The measuring points are suitable not only for measuring steels, but also aluminum workpieces!

Diamond measuring points, PKD-MKO upon request. Not available for blind hole variants and outer diameter measuring heads.

Measuring points • Diameters and radii for PMK-NO and PMK-XK

PMK	PMK body diameter Ø mm	Outer measuring point Ø mm	Radius measuring point mm
Type 02	6-8	3	2
	8-20	3	2
Type 03	15-25	4.5	2.5
	25-30	4.5	4.5
	30-35	4.5	6.5
	35-40	4.5	8.5
	40-46	4.5	10.5
	46-55	4.5	13.0
	55-65	4.5	16.0
	65-300	4.5	20.0

Measuring points • Diameters and radii for PMK-EF

PMK-EF	PMK body diameter Ø mm	Outer measuring point Ø mm	Radius measuring point mm
Type 02	10-20	3	2
Type 03	15-40	4.5	2.5
	40-50	4.5	2.5
	50-280	4.5	2.5

Product directory

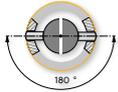
HEXAACON



PMK precision hole measuring heads • TiN coated

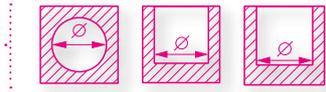
Diameters from \varnothing 6 - 280 mm • Repeat accuracy at IT 8 down to $< 1\mu$.

2-point measurement



2-point hole measurement heads with insertion groove:

X dimension: Normal
 X dimension: Short
 X dimension: Blind hole



PMK • NO [Page 12](#)
 PMK • XK [Page 14](#)
 PMK • SL [Page 16](#)

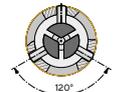
For automated measurement

2-point hole measurement heads with insertion chamfer:

X dimension: Normal
 X dimension: Short
 X dimension: Normal • 2-zone diameter.....
 X dimension: Short • 2-zone diameter

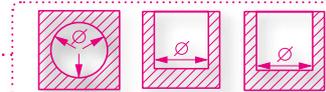
PMK • NO-EF [Page 18](#)
 PMK • XK-EF [Page 20](#)
 PMK • NO-EF-2D [Page 22](#)
 PMK • XK-EF-2D [Page 24](#)

3-point measurement



3-point hole measurement heads with insertion groove:

X dimension: Normal
 X dimension: Short



PMK • NO-3P [Page 26](#)
 PMK • XSO-3P [Page 28](#)

For automated measurement

3-point hole measurement heads with insertion chamfer:

X dimension: Normal
 X dimension: Short
 X dimension: Normal • 2-zone diameter.....
 X dimension: Short • 2-zone diameter

PMK • NO-3P-EF [Page 30](#)
 PMK • XSO-3P-EF [Page 32](#)
 PMK • NO-3P-EF-2D [Page 34](#)
 PMK • XSO-3P-EF-2D [Page 36](#)

Parallel meas., square



2-point parallel hole measuring heads, square form:

Width 8-15 mm X dimension: normal, short, blind hole
 Width 15-40 mm X dimension: normal, short, blind hole



PMK • O2-PA [Page 38](#)
 PMK • O3-PA [Page 39](#)

Parallel meas., round



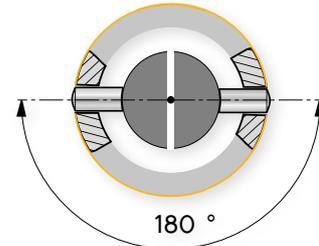
2-point parallel hole measuring heads, round form:

Width 8-15 mm X dimension: normal, short, blind hole
 Width 15-40 mm X dimension: normal, short, blind hole

PMK • O2-PA [Page 40](#)
 PMK • O3-PA [Page 42](#)

Product directory

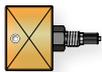
HEXAACON



Special precision measuring heads • Outer meas. heads

Conical and multi-point meas. heads • Insertion measuring devices

Parallel measurement, rectangle



2-point parallel hole measuring heads, rectilinear form

Width 40–130 mm, X dimension: normal, short, blind hole PMK • NO-03-PA



Page 44

Crankshaft meas. instrument



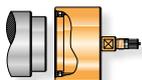
2-point crankshaft parallel measuring head

X dimension: 3 mm and up PMK • KW



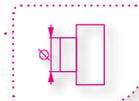
Page 46

Outer meas. heads



2-point precision outer measuring head

X dimension • Normal PMK • AM

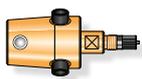


Page 48

Precision special measuring heads PMK • SO

Page 49

Tapered meas. heads



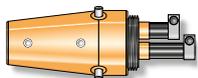
Precision measuring heads in conical variant

X dimension • Normal PMK • KE



Page 50

Multi-point tapered meas. heads



Multi-point measuring heads in conical variant

Conical measurement PMK • KE



Page 52

Multi-point meas. heads



Multi-point hole measuring heads

Up to 4 measuring points PMK • ME



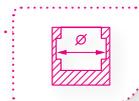
Page 54

Insertion measuring



PMK-ES • Insertion measuring instrument

With large measuring range up to 15 mm PMK • ES



Page 56

Product directory

HEXACON



Dial gauge holders, centering holders and depth extensions

Angle brackets, depth stops, stands and adjustment rings.

Dial gauge holders for PMK measuring heads

Holder and accessories, example application			Page 58
Holder and accessories, overview			Page 59
Dial gauge holder for PMK-02 meas. heads	M6x0.75 thread	HM-02	Page 60
Dial gauge holder for PMK-03 meas. heads	M10x1 thread	HM-03	Page 62
Dial gauge holder for PMK-03 rotating	M10x1 thread	HM 03-150-RO	Page 63
Dial gauge holder for heavy meas. heads	M6x0.75 thread	HA-V2	Page 64
Dial gauge holder for heavy meas. heads	M10x1 thread	HA-V3	Page 64
Dial gauge holder for inductive meas. heads	M6x0.75 thread	HT-V2	Page 65
Dial gauge holder for inductive meas. heads	M10x1 thread	HT-V3	Page 65

Centering holders for PMK measuring heads for automated measurement

Centering holder - floating holder	M6x0.75 thread	ZH-PMK-02	Page 66
Centering holder - floating holder	M10x1 thread	ZH-PMK-03	Page 66
Centering holder with anti-turning protection	M6x0.75 thread	ZH-PMK-02-VDS	Page 68
Centering holder with anti-turning protection	M10x1 thread	ZH-PMK-03-VDS	Page 68
Centering holder with mounting flange	M10x1 thread	ZH-LKM-03-50	Page 70
Centering holder with destruction protection	M10x1 thread	ZH-PMK-03-50-L	Page 71

Dial gauge holders in modular system for custom setup

Modular measuring systems, \varnothing 8H7 dial gauge connection		MB	Page 72
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Depth extensions for dial gauge holders - with drive needle

Depth extension, also temperature stable	M6x0.75 thread	VL-02	Page 74
Depth extension, also temperature stable	M10x1 thread	VL-03	Page 75

Angle pieces for measuring heads and depth extensions

90° angle piece for PMK-02	M6x0.75 thread	WS-02	Page 76
90° angle piece with integrated PMK	M6x0.75 thread	WS-SO-02	Page 76
90° angle piece with integrated PMK	M10x1 thread	WS-SO-03	Page 76
90° angle piece for PMK-03	M10x1 thread	WS-03	Page 77
Thread reducers	M10x1 thread	RS	Page 77

Depth stops for PMK measuring heads

Clamping ring depth stops	\varnothing 6 mm to \varnothing 85 mm	TA-KR-V	Page 78
Depth stops for PMK-02 meas. heads	M6x0.75 thread	TA-02	Page 79
Depth stops as depth measuring head	Example application	TA-02-45	Page 79
Depth stops for PMK-03 meas. heads	M10x1 thread	TA-03	Page 80

Equipment stands and measuring stands

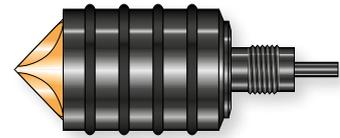
Equipment stands, extensible up to 6 stands		GS-PMK-1	Page 82
Measurement stand suitable for larger workpieces		UMS-01	Page 84
Measurement stand with integrated centering holder		UMS-02	Page 85

Adjustment rings with nominal DIN 2250 - C standard dimensions

Adjustment rings		Adjustment rings DIN 2250	Page 86
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Product directory

HEXAACON



Precision inner and outer chamfer measuring instruments,

dial gauges, test workstation, inductive measuring probes.

Precision inner and outer chamfer measuring instruments

Functional principle of chamfer measuring instruments [Page 87](#)

Inner and outer chamfer measuring instruments

Inner chamfer	Measuring instruments for 90° chamfers	FM-SB	Page 88
Outer chamfers	Measuring instruments for 90° chamfers.....	FM-FB	Page 89
Inner chamfer	Measuring instruments for 60° chamfers.....	FM-SA	Page 90
Outer chamfers	Measuring instruments for 60° chamfers.....	FM-FA	Page 91
Inner chamfer	Measuring instruments for 127° chamfers	FM-SC	Page 92
Outer chamfers	Measuring instruments for 127° chamfers	FM-FC	Page 93

Prismatic chamfer probe for 90° chamfers

Chamfer probe 90° For 90° workpieces FT-01 [Page 94](#)
with dial gauge

Analog chamfer special dial gauges

Special dial gauges for 90° chamfers · With 0.01 mm display accuracy AD-FM [Page 95](#)

Analog precision indicators and dial gauges, digital dial gauges, dial gauge test stand, inductive measuring probes

Analog dial gauges for PMK measuring heads [Page 97](#)

Dial gauge · Precision indicator	Scale division value	0.001 mm.....	MU-01-0001-1	Page 98
Dial gauge · Concentric scale arrangement	Scale division value	0.01 mm.....	MU 01-001	Page 98
Dial gauge · Precision indicator	Scale division value	0.001 mm.....	MU 02-0001	Page 98
Dial gauge	Scale division value	0.01 mm.....	MU 02-001	Page 99
Digital dial gauge	Numeric step value	0.01 mm.....	MU 04-001	Page 99
Digital dial gauge · With factor setting	Numeric step value	0.001 mm.....	MU 05-0001	Page 99

Test workstation for dial gauges and precision indicators

Test workstation for dial gauges MU-PS [Page 100](#)
and precision indicators Based on DIN 878 and DIN 875

Inductive measuring probes for PMK measuring heads and chamfer measuring instruments

Inductive measuring probes	Resolution 0.1 µm - TiN coated.....	IT-101	Page 101
Inductive measuring probes (with radial cable arrangement)	Resolution 0.1 µm - TiN coated.....	IT-102	Page 101

Example applications

Assembly examples for different elements [Page 102](#)

Notes

Notes page [Page 103](#)



Precision measuring heads · PMK

2-point precision measuring heads

3-point precision measuring heads

Multi-point precision measuring heads

2-point PMK · Precision measuring heads



- PMK with insertion groove with normal X-dimension, short X-dimension and blind hole X-dimension
- PMK with insertion chamfer for automatic measurement with normal X-dimension and short X-dimension
- PMK with insertion chamfer and two diameters for automatic measurement with normal X-dimension and short X-dimension

3-point PMK · Precision measuring heads



- PMK with insertion groove with normal X-dimension and short X-dimension
- PMK with insertion chamfer for automatic measurement with normal X-dimension and short X-dimension
- PMK with insertion chamfer and two diameters for automatic measurement with normal X-dimension and short X-dimension

2-point PMK · Precision parallel measuring heads



PMK measuring heads in square form, round form, or rectilinear form with normal or short X-dimension, or crankshaft parallel measuring heads

2-point PMK · Outer measuring instrument



2-point PMK · Cone measuring heads



2-point PMK · Multi-point tapered measuring heads



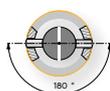
2-point PMK · Multi-point measuring heads



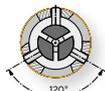
2-point PMK · Insertion measuring instrument



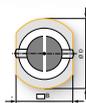
Measuring principle



2-point meas.



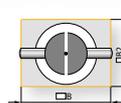
3-point meas.



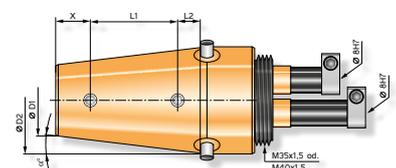
Parallel meas.



Parallel square



Parallel rectangle



Conical multi-point measuring head

2-point hole meas. heads

PMK NO • Normal X-dimension • TiN coating

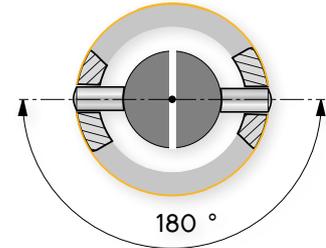
Measurement of through holes. Repeat accuracy at IT 8 < 1 μ .

\varnothing 6 - 280 mm



Diamond measuring points,
PMK-NO upon request.

HEXA CON



Normal X dim. 5 mm
M6x0.75 mm thread

PMK NO-02

\varnothing 6 - 8 mm

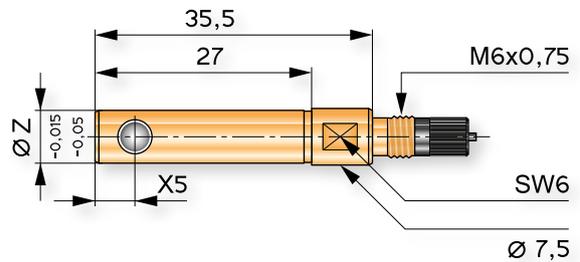
PMK-NO-02 • Precision meas. head in normal variant

\varnothing 6-8 mm, delivered with standard X dimension of 5 mm and M6x0.75 thread. Repeat accuracy at IT 8 < 1 μ . The meas. range is 0.15 mm and can be extended to up to 0.6 mm upon request. Self-centering, with insertion chamfer.

Specify the smallest hole dimension when ordering.

Ordering example:

\varnothing workpiece = 6 H7 = PMK - NO - 02 - 6



Normal X dim. 5 mm
M6x0.75 mm thread

PMK NO-02

\varnothing 8 - 20 mm

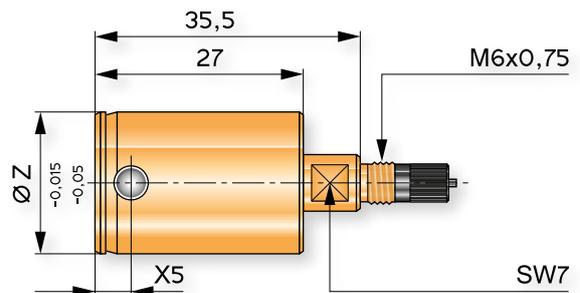
PMK-NO-02 • Precision meas. head in normal variant

\varnothing 8-20 mm, delivered with standard X dimension of 5 mm and M6x0.75 thread. Repeat accuracy at IT 8 < 1 μ . The meas. range is 0.15 mm and can be extended to up to 0.6 mm upon request. Self-centering, with insertion groove.

Specify the smallest hole dimension when ordering.

Ordering example:

\varnothing workpiece = 18 H7 = PMK - NO - 02 - 18



Normal X dim. 6 mm
M10 x 1 mm thread

PMK NO-03

\varnothing 15 - 40 mm

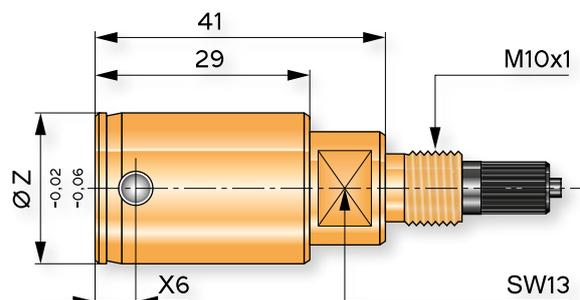
PMK-NO-03 • Precision meas. head in normal variant

\varnothing 15-40 mm, delivered with standard X dimension of 6 mm and M10x1 thread. Repeat accuracy at IT 8 < 1 μ . The meas. range is 0.2 mm and can be extended to up to 0.8 mm upon request. Self-centering, with insertion groove.

Specify the smallest hole dimension when ordering.

Ordering example:

\varnothing workpiece = 38 H7 = PMK - NO - 03 - 38



2-point PMK-NO hole measuring heads with normal X dimension and titanium nitride coating measure precise diameters, ovality by rotation during the measuring procedure, and conicity or deformation of the hole.

The repeat accuracy of our 2-point measuring heads at IT 8 is $< 1\mu$.

All Hexacon PMK's are manufactured of high-quality tool-grade steel and treated at no extra charge with a quality-improving titanium nitride coating. TiN coating provides very good hardness, about 2200 HV, as well as corrosion resistance with very good sliding and friction characteristics. The improved service life results in high cost-effectiveness as well as protection of the measurement object. The measurement points are fabricated from coated hard metal. Diamond measuring points upon request.



Normal X dim. 6 mm
M10 x 1 mm thread

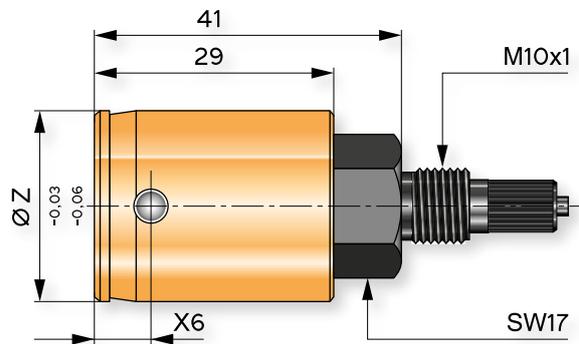
PMK NO-03 **Ø 40 - 50 mm**

PMK-NO-03 · Precision meas. head in normal variant

Ø 40-50 mm, delivered with standard X dimension of 6 mm and M10x1 thread. Repeat accuracy at IT 8 $< 1\mu$. The meas. range is 0.2 mm and can be extended to up to 0.8 mm upon request. Self-centering, with insertion groove. Specify the smallest hole dimension when ordering.

Ordering example:

Ø workpiece = 42 ± 0.05 = PMK - NO - 03 - 41,95



PMK NO-03 **Ø 50 - 280 mm**



Normal X dim. starting at 7.5 mm
M10 x 1 mm thread

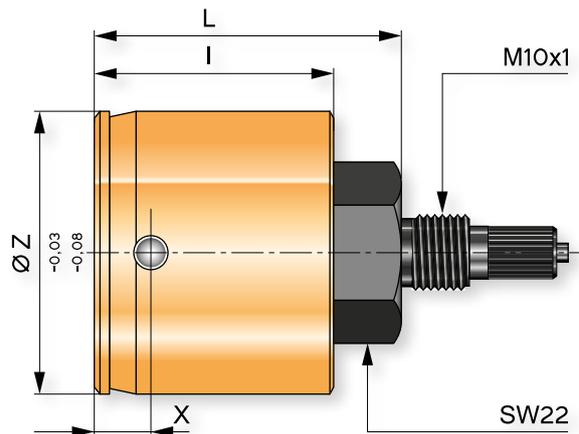
PMK-NO-03 · Precision meas. head in normal variant

Ø 50-280 mm, delivered with standard X dimension and M10x1 thread. Repeat accuracy at IT 8 $< 1\mu$. The meas. range is 0.2 mm and can be extended to up to 0.8 mm upon request. Self-centering, with insertion groove. Specify the smallest hole dimension when ordering.

Ordering example:

Ø workpiece = 94 D10 = PMK - NO - 03 - 94,12

Ø Z	X	I	L
> 50 - 100	7.5	33.5	42.5
> 100 - 280	10	36	45



Accessories



Depth extension
starting on page 74

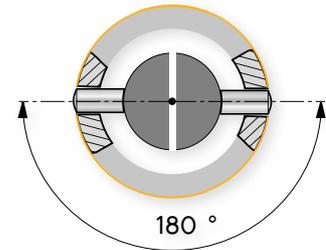


Dial gauge holder
starting on page 60

PMK · NO · 2-point

2-point hole meas. heads

HEXA CON



PMK XK • Short X-dimension • TiN coating

Measure blind holds close to the bottom of the hole.
Repeat accuracy at IT 8 < 1 μ .

\varnothing 6 - 280 mm



Diamond measuring points,
PMK-NO upon request.

PMK XK-02

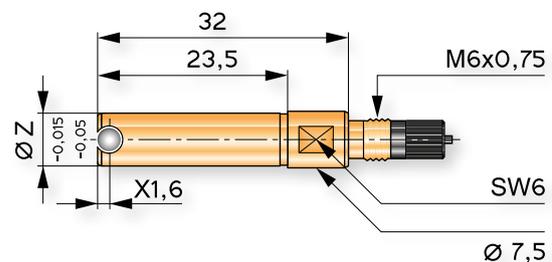
\varnothing 6 - 8 mm

PMK-XK-02 • Precision meas. head with short X dim.

\varnothing 6-8 mm, delivered with X dimension of 1.6 mm and M6x0.75 thread. Repeat accuracy at IT 8 < 1 μ .
The meas. range is 0.15 mm and can be extended to up to 0.6 mm upon request. Self-centering, with insertion chamfer.
Specify the smallest hole dimension when ordering.

Ordering example:

\varnothing workpiece = 6 H7 = PMK - XK - 02 - 6



Short X dim. 1.6 mm
M6x0.75 mm thread

PMK XK-02

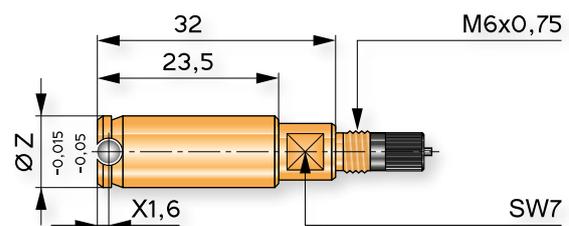
\varnothing 8 - 20 mm

PMK-XK-02 • Precision meas. head with short X dim.

\varnothing 8-20 mm, delivered with X dimension of 1.6 mm and M6x0.75 thread. Repeat accuracy at IT 8 < 1 μ .
The meas. range is 0.15 mm and can be extended to up to 0.6 mm upon request. Self-centering, with insertion groove.
Specify the smallest hole dimension when ordering.

Ordering example:

\varnothing workpiece = 18 H7 = PMK - XK - 02 - 18



Short X dim. 1.6 mm
M6x0.75 mm thread

PMK XK-03

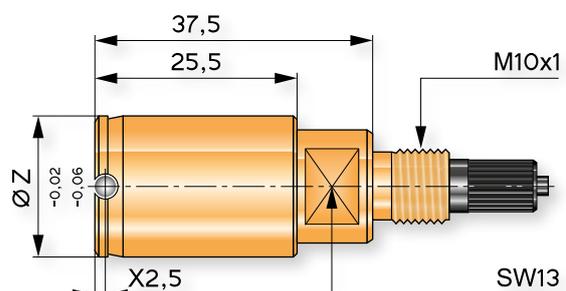
\varnothing 15 - 40 mm

PMK-XK-03 • Precision meas. head with short X dim.

\varnothing 15-40 mm, delivered with X dimension of 2.5 mm and M10x1 thread. Repeat accuracy at IT 8 < 1 μ .
The meas. range is 0.2 mm and can be extended to up to 0.8 mm upon request. Self-centering, with insertion groove.
Specify the smallest hole dimension when ordering.

Ordering example:

\varnothing workpiece = 38 H7 = PMK - XK - 03 - 38



Short X dim. 2.5 mm
M10 x 1 mm thread

2-point PMK-NK hole measuring heads with short X dimension and titanium nitride coating measure blind holes close to the bottom of the hole and measure precise diameters, ovality by rotation during the measuring procedure, and the conicity or deformation of the hole.

The repeat accuracy of our 2-point measuring heads at IT 8 is $< 1\mu$.

All Hexacon PMK's are manufactured of high-quality tool-grade steel and treated at no extra charge with a quality-improving titanium nitride coating. TiN coating provides very good hardness, about 2200 HV, as well as corrosion resistance with very good sliding and friction characteristics. The improved service life results in high cost-effectiveness as well as protection of the measurement object. The measurement points are fabricated from coated hard metal. Diamond measuring points upon request.

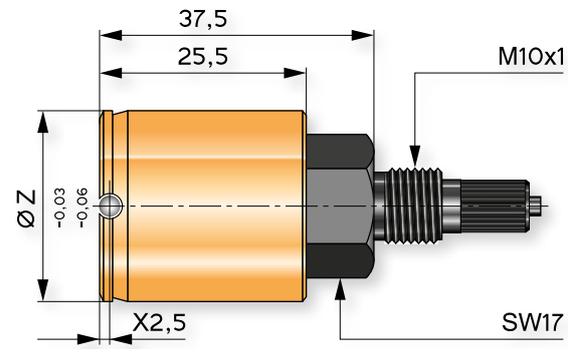


PMK XK-03 **Ø 40 - 50 mm**

Short X dim. 2.5 mm
M10 x 1 mm thread

PMK-XK-03 · Precision meas. head with short X dim.
 ø 40-50 mm, delivered with X dimension of 2.5 mm and M10x1 thread. Repeat accuracy at IT 8 $< 1\mu$.
 The meas. range is 0.2 mm and can be extended to up to 0.8 mm upon request. Self-centering, with insertion groove.
 Specify the smallest hole dimension when ordering.

Ordering example:
 Ø workpiece = 42 ± 0.05 = PMK - XK - 03 - 41,95



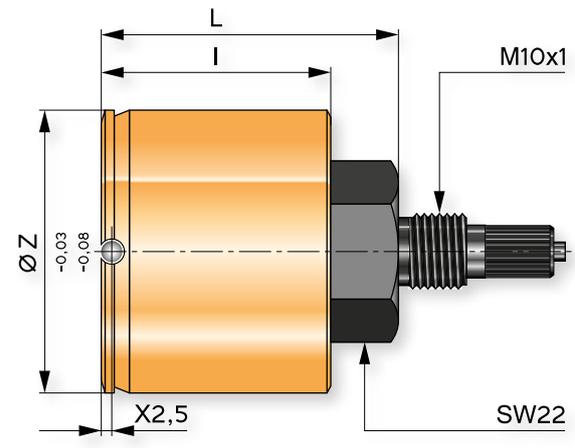
PMK · XK · 2-point

PMK XK-03 **Ø 50 - 280 mm**

Short X dim. 2.5 mm
M10 x 1 mm thread

PMK-XK-03 · Precision meas. head with short X dim.
 ø 50-280 mm, delivered with X dimension 2.5 mm and M10x1 thread. Repeat accuracy at IT 8 $< 1\mu$.
 The meas. range is 0.2 mm and can be extended to up to 0.8 mm upon request. Self-centering, with insertion groove.
 Specify the smallest hole dimension when ordering.

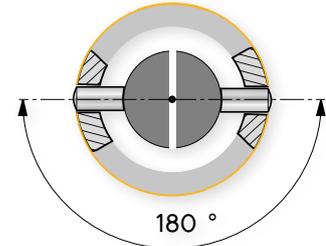
Ordering example:
 Ø workpiece = 62 ± 0.05 = PMK - XK - 03 - 61,95



Ø Z	X	I	L
> 50 - 130	2.5	28.5	37.5
> 130 - 280	2.5	28.5	37.5

2-point hole meas. heads

HEXAACON



PMK SL • Blind hole measuring heads • TiN coating

Measure deep into the bottom of the hole.
Repeat accuracy at IT 8 < 1 μ .

\varnothing 10 - 130 mm



Diamond measuring points not available
for PMK-SL variant.

PMK SL-02

\varnothing 10 - 20 mm



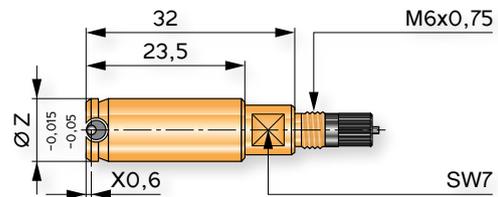
Short X dim. 0.6 mm
M6x0.75 mm thread

PMK-SL-02 • Precision meas. head with blind hole X dim.

\varnothing 10-20 mm, delivered with very short X dimension of 0.6 mm and M6x0.75 thread. Repeat accuracy at IT 8 < 1 μ . Their measuring range is 0.15 mm. Self-centering, with insertion groove. Specify the smallest hole dimension when ordering.

Ordering example:

\varnothing workpiece = 12 H7 = PMK - SL - 02 - 12



PMK SL-03

\varnothing 15 - 40 mm



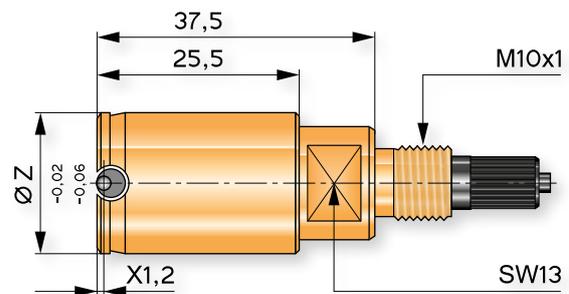
Short X dim. 1.2 mm
M10 x 1 mm thread

PMK-SL-03 • Precision meas. head with blind hole X dim.

\varnothing 15-40 mm, delivered with very short X dimension of 1.2 mm and M10x1 thread. Repeat accuracy at IT 8 < 1 μ . The meas. range is 0.2 mm and can be extended to up to 0.3 mm upon request. Self-centering, with insertion groove. Specify the smallest hole dimension when ordering.

Ordering example:

\varnothing workpiece = 20 H7 = PMK - SL - 03 - 20



PMK SL-03

\varnothing 40 - 50 mm



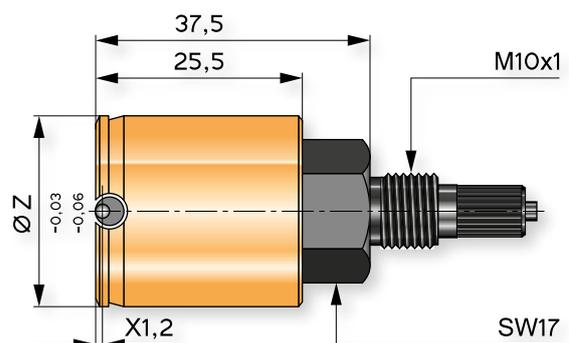
Short X dim. 1.2 mm
M10 x 1 mm thread

PMK-SL-03 • Precision meas. head with blind hole X dim.

\varnothing 40-50 mm, delivered with very short X dimension of 1.2 mm and M10x1 thread. Repeat accuracy at IT 8 < 1 μ . The meas. range is 0.2 mm and can be extended to up to 0.3 mm upon request. Self-centering, with insertion groove. Specify the smallest hole dimension when ordering.

Ordering example:

\varnothing workpiece = 44 D10 = PMK - SL - 03 - 44,08



2-point PMK-SL hole measuring heads with blind hole X dimension and titanium nitride coating measure deep into the hole and measure precise diameters, ovality by rotation during the measuring procedure, and the conicity or deformation of the hole.

The repeat accuracy of our 2-point measuring heads at IT 8 is $< 1\mu$.

All Hexacon PMK's are manufactured of high-quality tool-grade steel and treated at no extra charge with a quality-improving titanium nitride coating. TiN coating provides very good hardness, about 2200 HV, as well as corrosion resistance with very good sliding and friction characteristics. The improved service life results in high cost-effectiveness as well as protection of the measurement object. The measurement points are fabricated from coated hard metal.



PMK SL-03 **Ø 50 - 130 mm**

PMK-SL-03 · Precision meas. head with blind hole X dim.

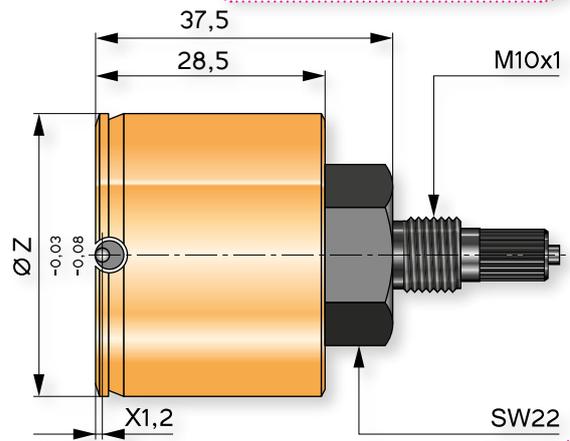
Ø 50-130 mm, delivered with very short X dim. of 1.2 mm and M10x1 thread. Repeat accuracy at IT 8 $< 1\mu$. The meas. range is 0.2 mm and can be extended to up to 0.3 mm upon request. Self-centering, with insertion groove. Specify the smallest hole dimension when ordering.

Ordering example:

Ø workpiece = 124 D10 = PMK - SL - 03 - 124,15



Short X dim. 1.2 mm
M10 x 1 mm thread



PMK · SL · 2-point

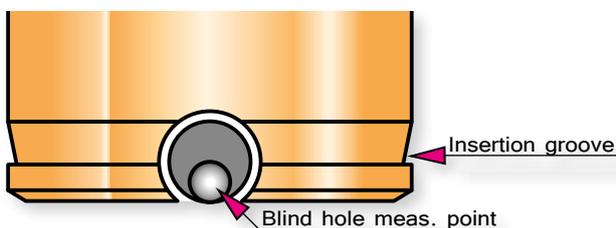
Blind hole measuring heads

Blind hole measuring head measures deep into the bottom of the hole

PMK-SL · Blind hole measuring heads

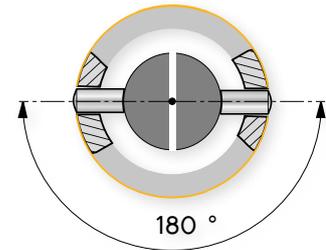
The position and special geometry of the measuring points in blind hole measuring heads permit precision measurement deep into the bottom of the hole.

The insertion groove permits the precision guidance of the measuring head and prevents tilting during insertion into the measurement object.



2-point hole meas. heads

HEXAACON



PMK-NO-EF • Meas. heads for automated measurement

The special geometry of the measuring heads with insertion chamfers prevents sticking. Also used with our ZH-PMK centering holders.

∅ 10 - 280 mm



Diamond measuring points,
PMK-NO-EF upon request.

NEW!

PMK NO-02-EF

∅ 10 - 20 mm



Normal X dim. 5 mm
M6x0.75 thread

Meas. point radius R = 2 mm

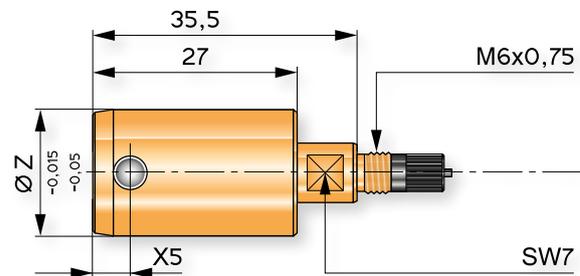
PMK-NO-02-EF • Meas. head for automated meas.

∅ 10-20 mm, delivered with standard X dimension of 5 mm and M6x0.75 thread. Repeat accuracy at IT 8 < 1μ. The measurement range is 0.15 mm and can be extended to up to 0.6 mm upon request. Self-centering, with insertion chamfer.

Specify the smallest hole dimension when ordering.

Ordering example:

∅ workpiece = 18 ^{H7} = PMK - NO - 02 - EF - 18



PMK NO-03-EF

∅ 15 - 40 mm



Normal X dim. 6 mm
M10 x 1 mm thread

Meas. point radius R = 2.5 mm

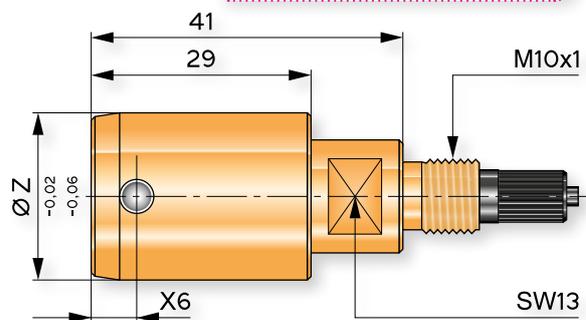
PMK-NO-03-EF • Meas. head for automated meas.

∅ 15-40 mm, delivered with standard X dimension of 6 mm and M10x1 thread. Repeat accuracy at IT 8 < 1μ. The measurement range is 0.2 mm and can be extended to up to 0.8 mm upon request. Self-centering, with insertion chamfer.

Specify the smallest hole dimension when ordering.

Ordering example:

∅ workpiece = 38 ^{H7} = PMK - NO - 03 - EF - 38



PMK NO-03-EF

∅ 40 - 50 mm



Normal X dim. 6 mm
M10 x 1 mm thread

Meas. point radius R = 2.5 mm

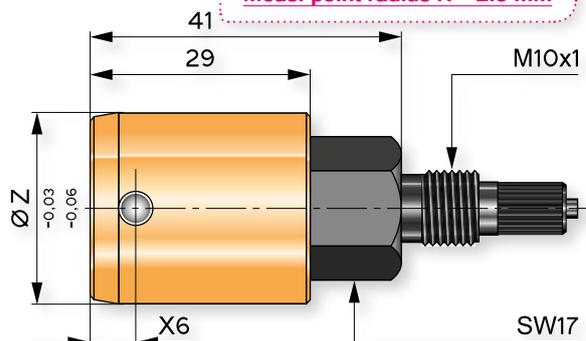
PMK-NO-03-EF • Meas. head for automated meas.

∅ 40-50 mm, delivered with standard X dimension of 6 mm and M10x1 thread. Repeat accuracy at IT 8 < 1μ. The measurement range is 0.2 mm and can be extended to up to 0.8 mm upon request. Self-centering, with insertion chamfer.

Specify the smallest hole dimension when ordering.

Ordering example:

∅ workpiece = 42 ± 0.05 = PMK - NO - 03 - EF - 41,95



2-point PMK-NO-EF hole measuring head for automated measurement with normal X dimension. The special geometry with insertion chamfer prevents sticking during the measuring process. Also used in combination with centering holders.

The repeat accuracy of our 2-point measuring heads at IT 8 is $< 1\mu$.

All Hexacon PMK's are manufactured of high-quality tool-grade steel and treated at no extra charge with a quality-improving titanium nitride coating. TiN coating provides very good hardness, about 2200 HV, as well as corrosion resistance with very good sliding and friction characteristics. The improved service life results in high cost-effectiveness as well as protection of the measurement object. The measurement points are fabricated from coated hard metal. Diamond measuring points upon request.



PMK NO-03-EF **Ø 50 - 280 mm**



Normal X dimension
M10 x 1 mm thread

Meas. point radius R = 2.5 mm

PMK-NO-03-EF · Meas. head for automated meas.

Ø 50-280 mm, delivered with standard X dimension and M10x1 thread. Repeat accuracy at IT 8 $< 1\mu$.

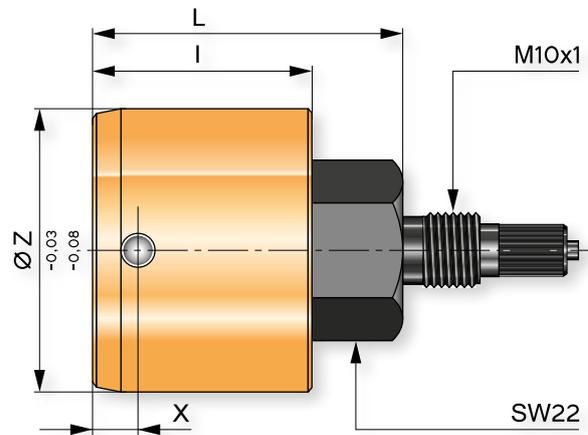
The measurement range is 0.2 mm and can be extended to up to 0.8 mm upon request. Self-centering, with insertion chamfer.

Specify the smallest hole dimension when ordering.

Ordering example:

Ø workpiece = 84 D10 = PMK - NO - 03 - EF - 84,12

Ø Z	X	I	L
> 50 - 100	7.5	33.5	42.5
> 100 - 280	10	36	45



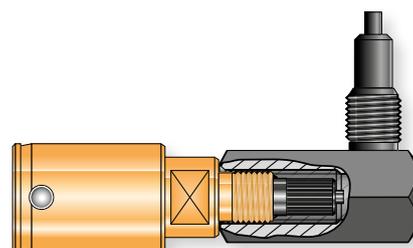
PMK - Automated measurement

Example application:

Angle pieces for measuring heads

are available for PMK-02 with M6x0.75 threads and for PMK-03 with M10x1 mm.

Data starting on page 76.



Angle extensions
starting on page 76.

2-point hole meas. heads

PMK-XSO-EF • Meas. heads for automated measuring

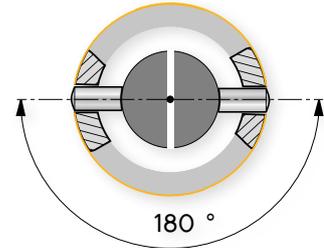
The special geometry of the measuring heads with insertion chamfers prevents sticking. Also ideal in combination with our ZH-PMK centering holders.

∅ 10 - 280 mm



Diamond measuring points,
PMK-XSO-EF upon request.

HEXA CON



NEW!

PMK XSO-02-EF

∅ 10 - 20 mm

PMK-XSO-02-EF • Meas. head for automated meas.

∅ 10-20 mm, delivered with short X dimension of 3 mm and M6x0.75 thread. Repeat accuracy at IT 8 < 1μ. The measurement range is 0.15 mm and can be extended to up to 0.6 mm upon request. Self-centering. The insertion chamfer prevents sticking. Specify the smallest hole dimension when ordering.

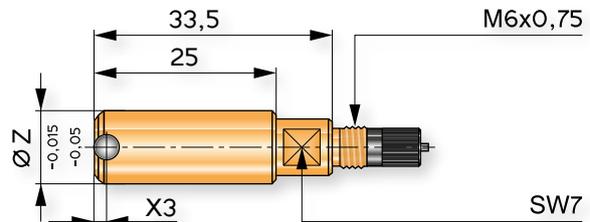
Ordering example:

∅ workpiece = 18 H7 = PMK - XSO - 02 - EF - 18



Short X dimension 3 mm
M6x0.75 mm thread

Meas. point radius R = 2 mm



PMK XSO-03-EF

∅ 15 - 40 mm

PMK-XSO-03-EF • Meas. head for automated meas.

∅ 15-40 mm, delivered with short X dimension of 3.5 mm and M10x1 thread. Repeat accuracy at IT 8 < 1μ. The measurement range is 0.2 mm and can be extended to up to 0.8 mm upon request. Self-centering. The insertion chamfer prevents sticking. Specify the smallest hole dimension when ordering.

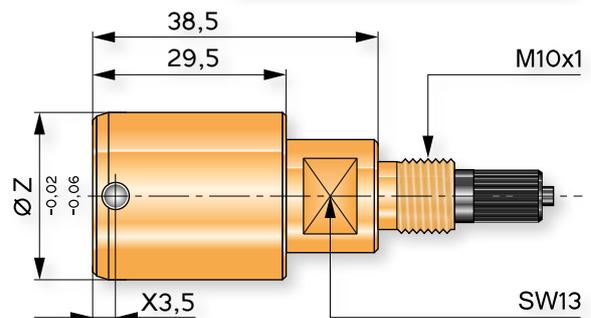
Ordering example:

∅ workpiece = 38 H7 = PMK - XSO - 03 - EF - 38



Short X dim. 3.5 mm
M10 x 1 mm thread

Meas. point radius R = 2.5 mm



PMK XSO-03-EF

∅ 40 - 50 mm

PMK-XSO-03-EF • Meas. head for automated meas.

∅ 40-50 mm, delivered with short X dimension of 3.5 mm and M10x1 thread. Repeat accuracy at IT 8 < 1μ. The measurement range is 0.2 mm and can be extended to up to 0.8 mm upon request. Self-centering. The insertion chamfer prevents sticking. Specify the smallest hole dimension when ordering.

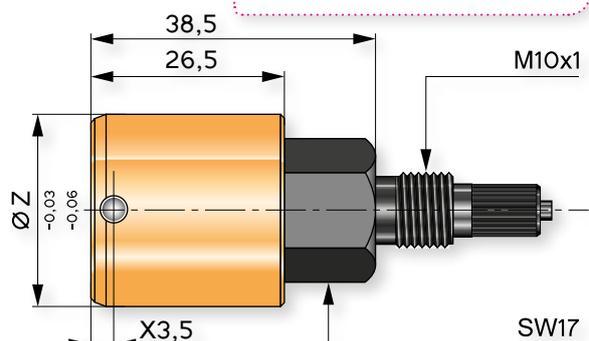
Ordering example:

∅ workpiece = 42 ± 0.05 = PMK - XSO - 03 - EF - 41,95



Short X dim. 3.5 mm
M10 x 1 mm thread

Meas. point radius R = 2.5 mm



2-point PMK-XSO-EF measuring heads for automated measurement. The special geometry of the measuring heads with insertion chamfer prevents sticking during the measuring process. Also used in combination with our ZH-PMK centering holders.

The repeat accuracy of our 2-point measuring heads at IT 8 is $< 1\mu$.

All Hexacon PMK's are manufactured of high-quality tool-grade steel and treated at no extra charge with a quality-improving titanium nitride coating. TiN coating provides very good hardness, about 2200 HV, as well as corrosion resistance with very good sliding and friction characteristics. The improved service life results in high cost-effectiveness as well as protection of the measurement object. The measurement points are fabricated from coated hard metal. Diamond measuring points upon request.



PMK XSO-03-EF **Ø 50 - 280 mm**

Meas. point radius R = 2.5 mm

PMK-XSO-03-EF · Meas. head for automated meas.

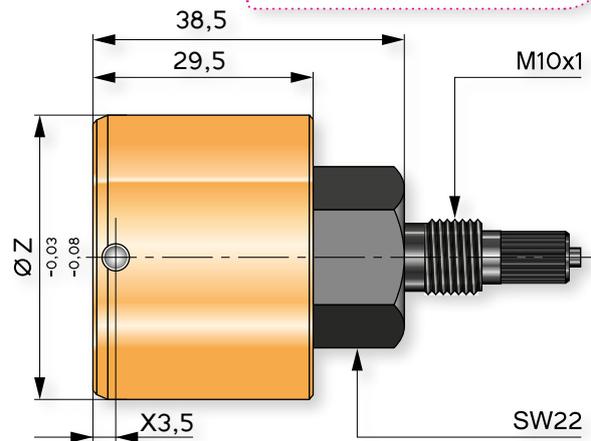
Ø 50-280 mm, delivered with standard X dimension 3.5 mm and M10x1 thread. Repeat accuracy at IT 8 $< 1\mu$. The measurement range is 0.2 mm and can be extended to up to 0.8 mm upon request. Self-centering. The insertion chamfer prevents sticking. Specify the smallest hole dimension when ordering.

Ordering example:

Ø workpiece = 64 D10 = PMK - XSO - 03 - EF - 64,1



Short X dim. 3.5 mm
M10 x 1 mm thread



PMK · Automated meas.

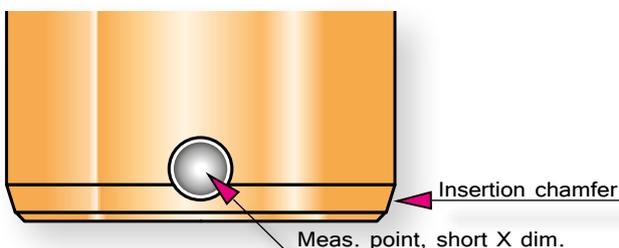
EF measuring heads

PMK-XSO-EF · Meas. heads with insertion chamfer for automated meas.

The insertion chamfer permits reliable guidance of the measuring head and prevents sticking during insertion into the measurement object.

The position of the measuring points in meas. heads with short X dim. (XSO) permits precision measurement right up close to the bottom of the hole.

Meas. heads with insertion chamfer (EF) for automated measurement



2-point hole meas. heads

PMK-NO-EF-2D • Meas. heads for automated measuring

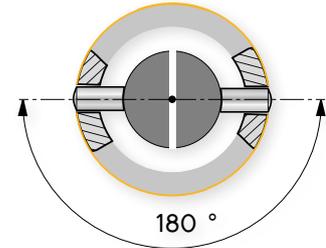
The special geometry of meas. heads with insertion chamfer and 2-zone diameter prevent sticking, even for deeper measurements.

∅ 10 - 280 mm



Diamond measuring points,
PMK-NO-EF-2D upon request.

HEXA CON



PMK NO-02-EF-2D ∅ 10 - 20 mm

PMK-NO-02-EF-2D • Meas. head for automated meas.

∅ 10-20 mm, delivered with standard X dimension of 5 mm and M6x0.75 thread. Repeat accuracy at IT 8 < 1µ. The measurement range is 0.15 mm and can be extended to up to 0.6 mm upon request. Self-centering, with insertion chamfer, tapered measuring body prevents sticking. Specify the smallest hole dimension when ordering.

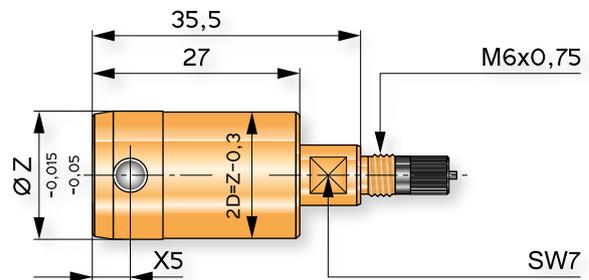
Ordering example:

∅ workpiece = 18 H7 = PMK - NO - 02 - EF - 2D - 18



Normal X dim. 5 mm
M6x0.75 mm thread

Meas. point radius R = 2 mm



PMK NO-03-EF-2D ∅ 15 - 40 mm

PMK-NO-03-EF-2D • Meas. head for automated meas.

∅ 15-40 mm, delivered with standard X dimension 6 mm and M10x1 thread. Repeat accuracy at IT 8 < 1µ. The measurement range is 0.2 mm and can be extended to up to 0.8 mm upon request. Self-centering, with insertion chamfer, tapered measuring body prevents sticking. Specify the smallest hole dimension when ordering.

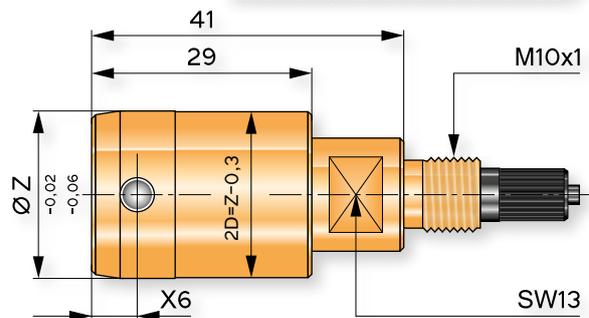
Ordering example:

∅ workpiece = 38 H7 = PMK - NO - 03 - EF - 2D - 38



Normal X dim. 6 mm
M10 x 1 mm thread

Meas. point radius R = 2.5 mm



PMK NO-03-EF-2D ∅ 40 - 50 mm

PMK-NO-03-EF-2D • Meas. head for automated meas.

∅ 40-50 mm, delivered with standard X dimension 6 mm and M10x1 thread. Repeat accuracy at IT 8 < 1µ. The measurement range is 0.2 mm and can be extended to up to 0.8 mm upon request. Self-centering, with insertion chamfer, tapered measuring body prevents sticking. Specify the smallest hole dimension when ordering.

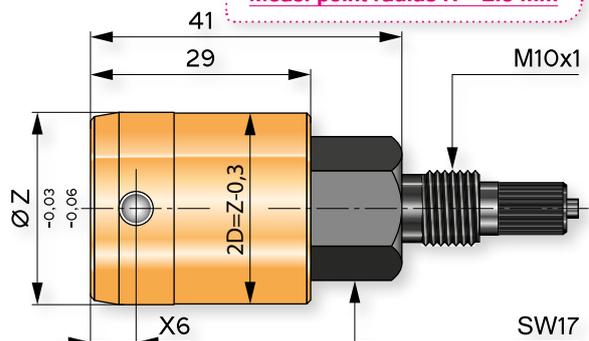
Ordering example:

∅ workpiece = 42 ± 0.05 = PMK - NO - 03 - EF - 2D - 41,95



Normal X dim. 6 mm
M10 x 1 mm thread

Meas. point radius R = 2.5 mm



2-point PMK-NO-EF-2D hole meas. head for automated meas. with normal X dimension. The special geometry of the measuring heads with insertion chamfers (EF) and the second diameter tapered towards the back (2D) prevent sticking even for a deeper measurement.

The repeat accuracy of our 2-point measuring heads at IT 8 is $< 1\mu$.

All Hexacon PMK's are manufactured of high-quality tool-grade steel and treated at no extra charge with a quality-improving titanium nitride coating. TiN coating provides very good hardness, about 2200 HV, as well as corrosion resistance with very good sliding and friction characteristics. The improved service life results in high cost-effectiveness as well as protection of the measurement object. The measurement points are fabricated from coated hard metal. Diamond measuring points upon request.



PMK NO-03-EF-2D $\varnothing 50 - 280 \text{ mm}$

Meas. point radius R = 2.5 mm

PMK-NO-03-EF-2D · Meas. head for automated meas.

$\varnothing 50-280 \text{ mm}$, delivered with standard X dimension and M10x1 thread. Repeat accuracy at IT 8 $< 1\mu$.

The measurement range is 0.2 mm and can be extended to up to 0.8 mm upon request. Self-centering, with insertion chamfer, tapered measuring body prevents sticking. Specify the smallest hole dimension when ordering.

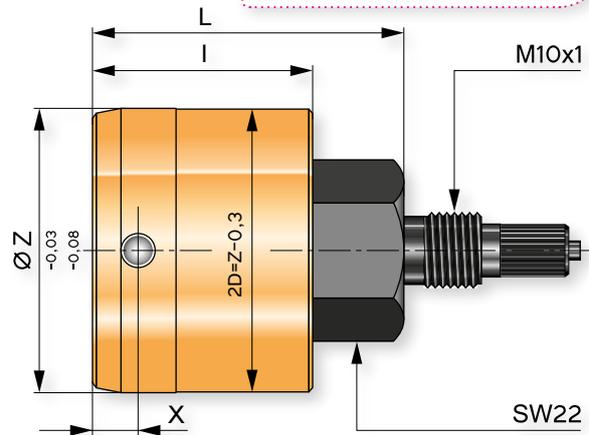
Ordering example:

$\varnothing \text{ workpiece} = 84 \text{ D10} = \text{PMK - NO - 03 - EF - 2D - 84,12}$

	$\varnothing Z$	X	I	L
>	50 - 100	7.5	33.5	42.5
>	100 - 280	10	36	45

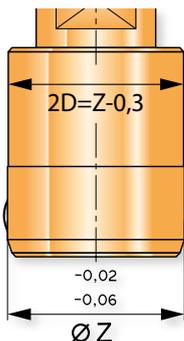


Normal X dim. 6 mm
M10 x 1 mm thread



PMK - Automated measurement

EF-2D measuring heads



PMK-NO-EF-2D · Measuring heads for automated measurement

The special geometry of the measuring heads with insertion chamfer and second, tapered diameter prevents sticking during the measurement process, even for deeper measurements.

The measuring point radius can be adapted upon request for measuring heads with insertion chamfer.

Insertion chamfer and 2 tapered diameters prevent sticking

2-point hole meas. heads

PMK-XSO-EF-2D • Meas. heads for automated measuring

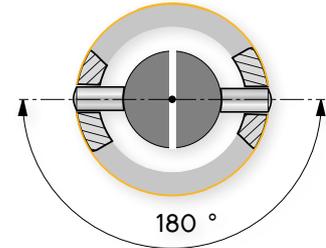
The special geometry of meas. heads with insertion chamfer and 2-zone diameter prevent sticking, even for deeper measurements.

∅ 10 - 280 mm



Diamond measuring points,
PMK-XSO-EF-2D upon request.

HEXA CON



NEW!

PMK XSO-02-EF-2D ∅ 10 - 20 mm

Meas. point radius R = 2 mm

PMK-XSO-02-EF-2D • Meas. head for automated meas.

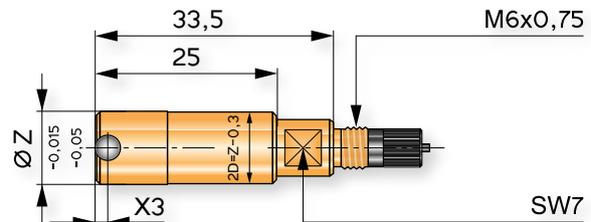
∅ 10-20 mm, delivered with short X dimension of 3 mm and M6x0.75 thread. Repeat accuracy at IT 8 < 1μ. The measurement range is 0.15 mm and can be extended to up to 0.6 mm upon request. Self-centering, with insertion chamfer, tapered measuring body prevents sticking. Specify the smallest hole dimension when ordering.

Ordering example:

∅ workpiece = 18 H7 = PMK - XSO - 02 - EF - 2D - 18



Short X dim. 3 mm
M6x0.75 mm thread



PMK XSO-03-EF-2D ∅ 15 - 40 mm

Meas. point radius R = 2.5 mm

PMK-XSO-03-EF-2D • Meas. head for automated meas.

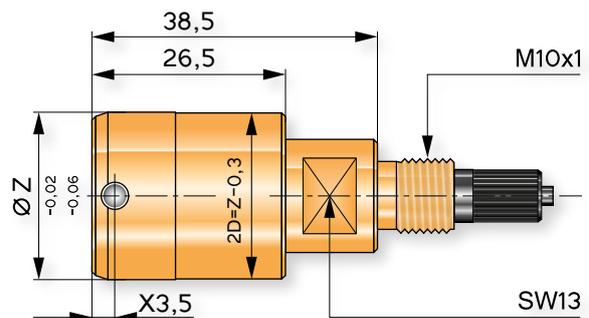
∅ 15-40 mm, delivered with short X dimension of 3.5 mm and M10x1 thread. Repeat accuracy at IT 8 < 1μ. The measurement range is 0.2 mm and can be extended to up to 0.8 mm upon request. Self-centering, with insertion chamfer, tapered measuring body prevents sticking. Specify the smallest hole dimension when ordering.

Ordering example:

∅ workpiece = 38 H7 = PMK - XSO - 03 - EF - 2D - 38



Short X dim. 3.5 mm
M10 x 1 mm thread



PMK XSO-03-EF-2D ∅ 40 - 50 mm

Meas. point radius R = 2.5 mm

PMK-XSO-03-EF-2D • Meas. head for automated meas.

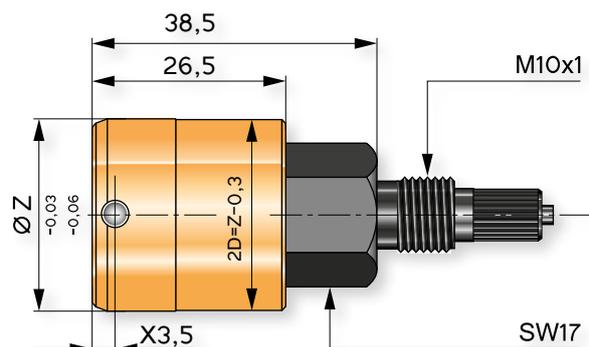
∅ 40-50 mm, delivered with short X dimension of 3.5 mm and M10x1 thread. Repeat accuracy at IT 8 < 1μ. The measurement range is 0.2 mm and can be extended to up to 0.8 mm upon request. Self-centering, with insertion chamfer, tapered measuring body prevents sticking. Specify the smallest hole dimension when ordering.

Ordering example:

∅ workpiece = 42 ± 0.05 = PMK - XSO - 03 - EF - 2D - 41,95



Short X dim. 3.5 mm
M10 x 1 mm thread



2-point PMK-NO-2D measuring heads for automated measurement. The special geometry of the measuring heads with insertion chamfers and the second diameter tapered towards the back prevent sticking even for a deeper measurement.

The repeat accuracy of our 2-point measuring heads at IT 8 is $< 1\mu$.

All Hexacon PMK's are manufactured of high-quality tool-grade steel and treated at no extra charge with a quality-improving titanium nitride coating. TiN coating provides very good hardness, about 2200 HV, as well as corrosion resistance with very good sliding and friction characteristics. The improved service life results in high cost-effectiveness as well as protection of the measurement object. The measurement points are fabricated from coated hard metal. Diamond measuring points upon request.



PMK XSO-03-EF-2D $\varnothing 50 - 280$ mm

Meas. point radius R = 2.5 mm

PMK-XSO-03-EF-2D · Meas. head for automated meas.

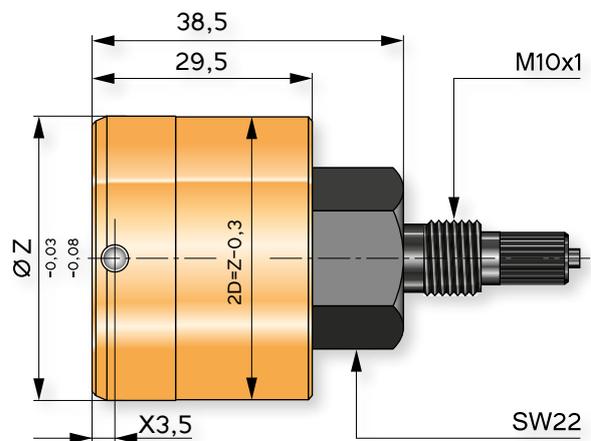
$\varnothing 50-280$ mm, delivered with standard X dimension 3.5 mm and M10x1 thread. Repeat accuracy at IT 8 $< 1\mu$. The measurement range is 0.2 mm and can be extended to up to 0.8 mm upon request. Self-centering, with insertion chamfer, tapered measuring body prevents sticking. Specify the smallest hole dimension when ordering.

Ordering example:

\varnothing workpiece = 64 D10 = PMK - XSO - 03 - EF - 2D - 64.08



Short X dim. 3.5 mm
M10 x 1 mm thread



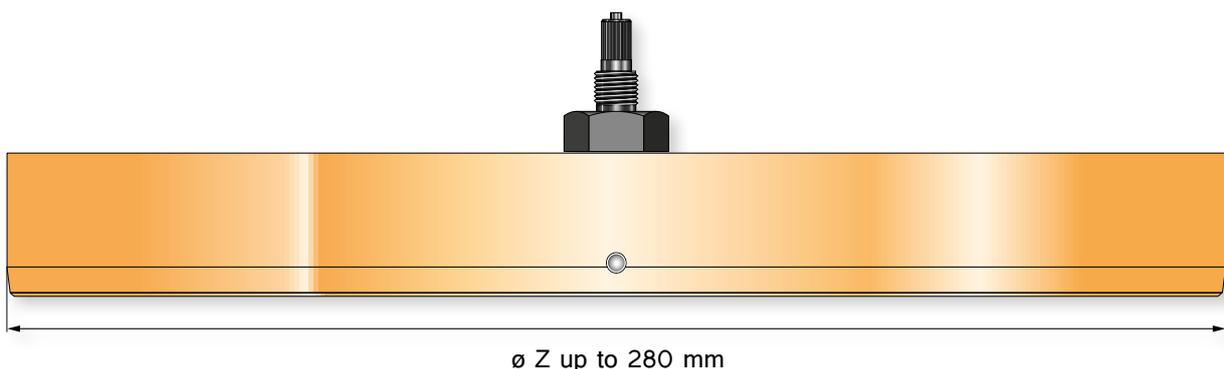
PMK - Automated measurement

PMK in 2-point measurement technology with normal X-dimension or short X-dimension are available in different variants of diameter Z = $\varnothing 6$ mm up to 280 mm in the standard version !

Other dimensions and special needs upon request.

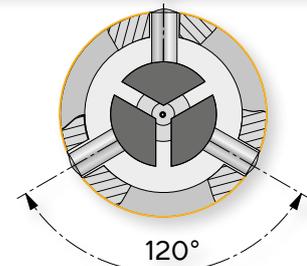


$\varnothing Z$ up to 280 mm



3-point hole meas. heads

HEXA CON



PMK-NO-03-3P • 3-point measuring heads

Innovative "true" 3-point precision measurement technology precisely measures polygonal form errors in holes.

Ø 15 - 100 mm



Diamond measuring points,
PMK-NO-03-P upon request.

PMK NO-03-3P

Ø 15 - 40 mm

PMK-NO-03-3P • Precision meas. head in 3-point design

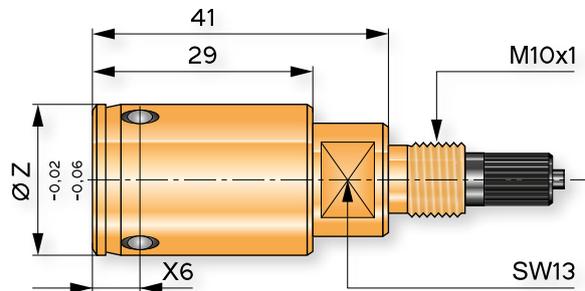
Ø 15-40 mm, delivered with X dimension of 6 mm and M10x1 thread. Repeat accuracy at IT 8 < 1µ.
The meas. range is 0.2 mm and can be extended to up to 0.6 mm upon request. Self-centering, with insertion groove. Specify the smallest hole dimension when ordering.

Ordering example:

Ø workpiece = 20 H7 = PMK - NO - 03 - 3P - 20



Normal X dim. 6 mm
M10 x 1 mm thread



PMK NO-03-3P

Ø 40 - 50 mm

PMK-NO-03-3P • Precision meas. head in 3-point design

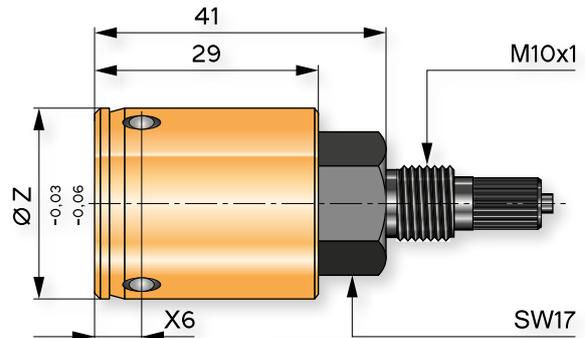
Ø 40-50 mm, delivered with X dimension of 6 mm and M10x1 thread. Repeat accuracy at IT 8 < 1µ.
The meas. range is 0.2 mm and can be extended to up to 0.6 mm upon request. Self-centering, with insertion groove. Specify the smallest hole dimension when ordering.

Ordering example:

Ø workpiece = 44 H7 = PMK - NO - 03 - 3P - 44



Normal X dim. 6 mm
M10 x 1 mm thread



PMK NO-03-3P

Ø 50 - 100 mm

(PMK-NO-03-3P > 100mm on request.)

PMK-NO-03-3P • Precision meas. head in 3-point design

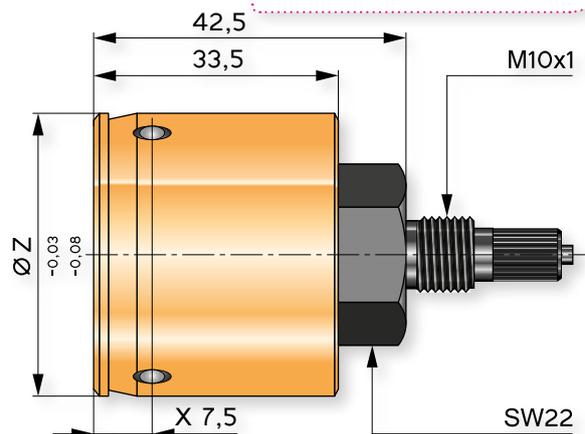
Ø 50-100 mm, delivered with X dimension of 7.5 mm and M10x1 thread. Repeat accuracy at IT 8 < 1µ.
The meas. range is 0.2 mm and can be extended to up to 0.6 mm upon request. Self-centering, with insertion groove. Specify the smallest hole dimension when ordering.

Ordering example:

Ø workpiece = 98 H7 = PMK - NO - 03 - 3P - 98



Normal X dim. 7.5 mm
M10 x 1 mm thread



3-point PMK-NO measuring heads with titanium nitride coating. This unique measurement technology implements true 3-point measurement to measure polygons, dimensions, and form errors in holes that other measuring instruments can't, or can't easily, measure.

The repeat accuracy of our 3-point measuring heads at IT 8 is $< 1\mu$.

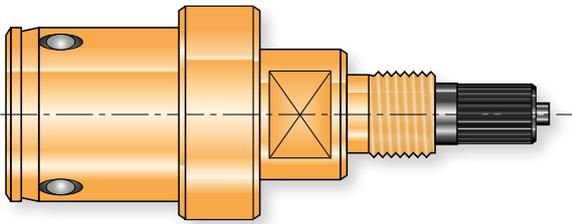
All Hexacon PMK's are manufactured of high-quality tool-grade steel and treated at no extra charge with a quality-improving titanium nitride coating. TiN coating provides very good hardness, about 2200 HV, as well as corrosion resistance with very good sliding and friction characteristics. The improved service life results in high cost-effectiveness as well as protection of the measurement object. The measurement points are fabricated from coated hard metal. Diamond measuring points upon request.



PMK measuring heads with integrated depth stop

Upon request, depth stops integrated into the measuring body are available for nearly all variants.

Depth stops integrated in the housing

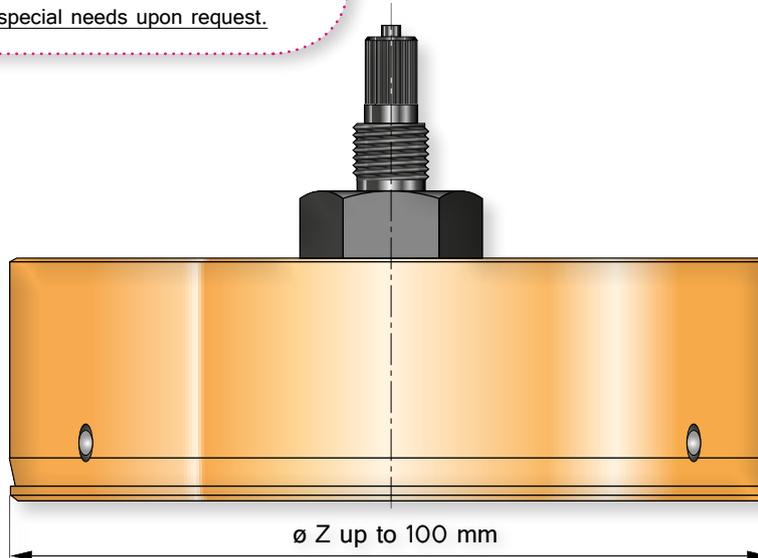


PMK in 3-point measuring technology with normal X-dimension or short X-dimension is available depending on variants **from a diameter of Z = \varnothing 15 to 100 mm** in the standard version.

Other dimensions and special needs upon request.



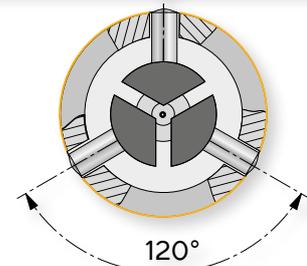
All 3-point meas. heads are available up to \varnothing 100 mm!



PMK · NO · 3-point

3-point hole meas. heads

HEXAACON



PMK-XSO-03-3P • 3-point meas. heads with short X dim.

Innovative "true" 3-point precision measurement technology precisely measures polygonal form errors in holes.

Ø 15 - 100 mm



Diamond measuring points,
PMK-XSO-03-3P upon request.

NEW!



Short X dim. 3.5 mm
M10 x 1 mm thread

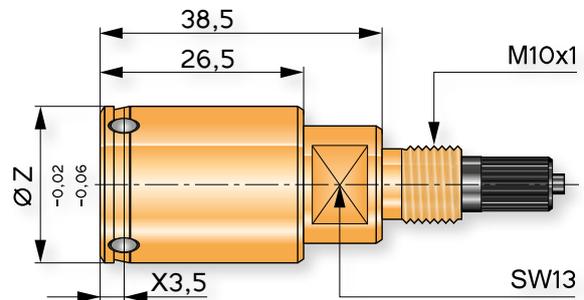
PMK XSO-03-3P Ø 15 - 40 mm

PMK-XSO-03-3P • Precision meas. head in 3-point design

Ø 15-40 mm, delivered with short X dimension of 3.5 mm and M10x1 thread.. Repeat accuracy at IT 8 < 1µ. The meas. range is 0.2 mm and can be extended to up to 0.6 mm upon request. Self-centering, with insertion groove. Specify the smallest hole dimension when ordering.

Ordering example:

Ø workpiece = 20 ^{H7} = PMK - XSO - 03 - 3P - 20



Short X dim. 3.5 mm
M10 x 1 mm thread

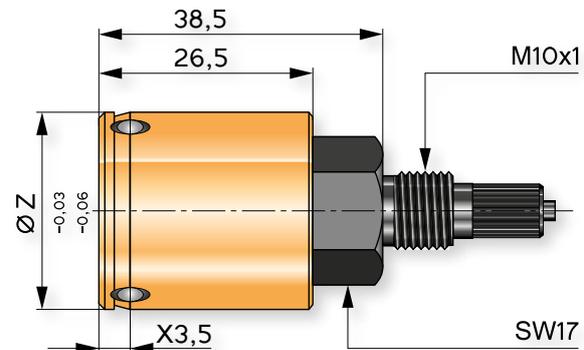
PMK XSO-03-3P Ø 40 - 50 mm

PMK-XSO-03-3P • Precision meas. head in 3-point design

Ø 40-50 mm, delivered with short X dimension of 3.5 mm and M10x1 thread. Repeat accuracy at IT 8 < 1µ. The meas. range is 0.2 mm and can be extended to up to 0.6 mm upon request. Self-centering, with insertion groove. Specify the smallest hole dimension when ordering.

Ordering example:

Ø workpiece = 44 ^{H7} = PMK - XSO - 03 - 3P - 44



Short X dim. 3.5 mm
M10 x 1 mm thread

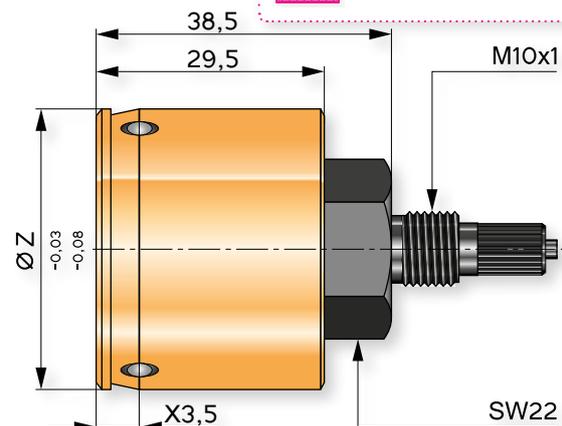
PMK XSO-03-3P Ø 50 - 100 mm

PMK-XSO-03-3P • Precision meas. head in 3-point design

Ø 50-100 mm, delivered with short X dimension of 3.5 mm and M10x1 thread. Repeat accuracy at IT 8 < 1µ. The meas. range is 0.2 mm and can be extended to up to 0.6 mm upon request. Self-centering, with insertion groove. Specify the smallest hole dimension when ordering.

Ordering example: (> 100 mm on request.)

Ø workpiece = 98 ^{H7} = PMK - XSO - 03 - 3P - 98



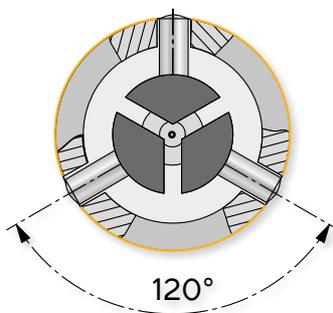
3-point PMK-XSO-03-3P measuring heads with titanium nitride coating measure close to the bottom of the hole. This unique measurement technology implements true 3-point measurement to measure polygons, dimensions, and form errors in holes that other measuring instruments can't, or can't easily, measure.

The repeat accuracy of our 3-point measuring heads at IT 8 is $< 1\mu$.

All Hexacon PMK's are manufactured of high-quality tool-grade steel and treated at no extra charge with a quality-improving titanium nitride coating. TiN coating provides very good hardness, about 2200 HV, as well as corrosion resistance with very good sliding and friction characteristics. The improved service life results in high cost-effectiveness as well as protection of the measurement object. The measurement points are fabricated from coated hard metal. Diamond measuring points upon request.



All 3-point meas. heads are available up to \varnothing 100 mm!



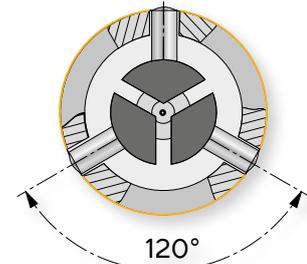
PMK in 3-point measuring technology with normal X-dimension or short X-dimension is available depending on variants

from a diameter of $Z = \varnothing$ 15 to 100 mm in the standard version.

Other dimensions and special needs upon request.

3-point hole meas. heads

HEXAACON



PMK NO-03-3P-EF • 3-point meas. heads for automated meas.

“True” 3-point precision meas. technology. The special geometry of the meas. heads with insertion chamfer (EF) prevents sticking.

∅ 15 - 100 mm



Diamond measuring points,
PMK-NO-03-3P-EF upon request.

NEW!

PMK NO-03-3P-EF ∅ 15 - 40 mm



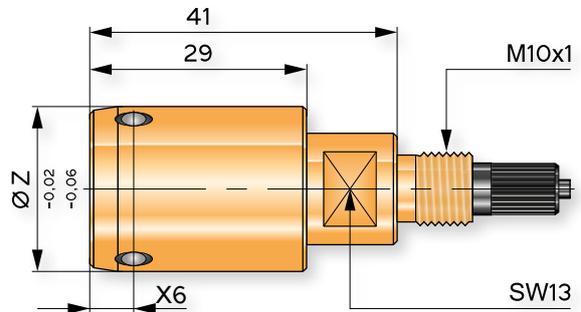
Normal X dim. 6 mm
M10 x 1 mm thread

PMK-NO-03-3P-EF • Precision meas. head in 3-point design

∅ 15-40 mm, delivered with X dimension of 6 mm and M10x1 thread. Repeat accuracy at IT 8 < 1µ. The measurement range is 0.2 mm and can be extended to up to 0.6 mm upon request. Self-centering, with insertion chamfer.

Ordering example:

∅ workpiece = 20 ^{H7} = PMK - NO - 03 - 3P - EF - 20



PMK NO-03-3P-EF ∅ 40 - 50 mm



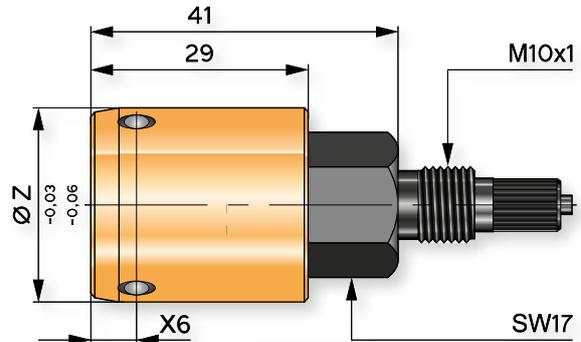
Normal X dim. 6 mm
M10 x 1 mm thread

PMK-NO-03-3P-EF • Precision meas. head in 3-point design

∅ 40-50 mm, delivered with X dimension of 6 mm and M10x1 thread. Repeat accuracy at IT 8 < 1µ. The measurement range is 0.2 mm and can be extended to up to 0.6 mm upon request. Self-centering, with insertion chamfer.

Ordering example:

∅ workpiece = 44 ^{H7} = PMK - NO - 03 - 3P - EF - 44



PMK NO-03-3P-EF ∅ 50 - 100 mm



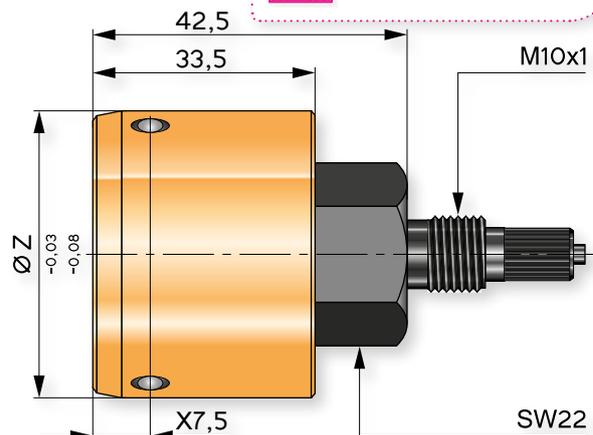
Normal X dim. 7.5 mm
M10 x 1 mm thread

PMK-NO-03-3P-EF • Precision meas. head in 3-point design

∅ 50-100 mm, delivered with X dimension of 7.5 mm and M10x1 thread. Repeat accuracy at IT 8 < 1µ. The measurement range is 0.2 mm and can be extended to up to 0.6 mm upon request. Self-centering, with insertion chamfer.

Ordering example: (> 100 mm on request.)

∅ workpiece = 98 ^{H7} = PMK - NO - 03 - 3P - EF - 98



3-point PMK-NO-03-3P-EF precision measuring heads for automated measurement of diameters. The special geometry of the measuring heads with insertion chamfer prevents sticking during the measuring process.

The repeat accuracy of our 3-point measuring heads at IT 8 is $< 1\mu$.

All Hexacon PMK's are manufactured of high-quality tool-grade steel and treated at no extra charge with a quality-improving titanium nitride coating. TiN coating provides very good hardness, about 2200 HV, as well as corrosion resistance with very good sliding and friction characteristics. The improved service life results in high cost-effectiveness as well as protection of the measurement object. The measurement points are fabricated from coated hard metal. Diamond measuring points upon request.



Automated meas. · 3-point

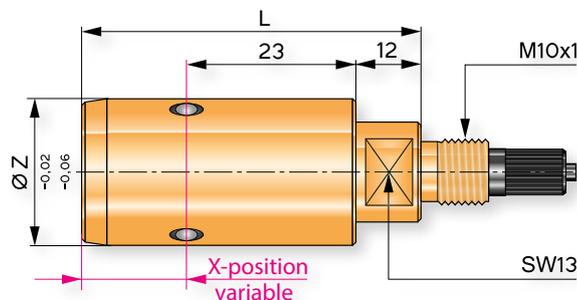
PMK XV

Variable X-dim.

NEW!



3-point measuring head
with variable X dimension



PMK-XV · Precision measuring head with variable X-dimension

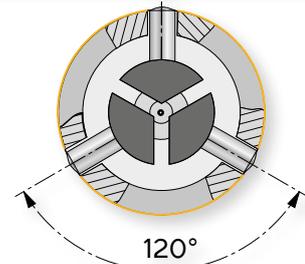
PMK in 3-point measurement technology available with modified housing dimensions depending on variant.

This allows, for example, variable positioning of the X-dimension due to a longer housing form.

Details upon request.

3-point hole meas. heads

HEXAACON



3-point PMK-XSO-03-3P-EF • For automated measurement

With short X-dimension of 3.5 mm.

Ø 15 - 100 mm



Diamond measuring points,
PMK-XSO-03-3P-EF upon request.

NEW!

PMK XSO-03-3P-EF Ø 15 - 40 mm

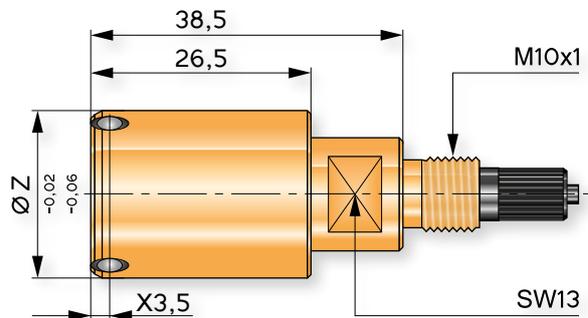
Meas. point radius R = 2.5 mm

PMK-XSO-03-3P-EF • Precision meas. head in 3-point design
Ø 15-40 mm, delivered with X dimension of 3.5 mm and M10x1 thread. Repeat accuracy at IT 8 < 1µ.
The measurement range is 0.2 mm and can be extended to up to 0.6 mm upon request. Self-centering, with insertion chamfer.
Specify the smallest hole dimension when ordering.

Ordering example:
Ø workpiece = 20 H7 = PMK - XSO - 03 - 3P - EF - 20



Short X dim. 3.5 mm
M10 x 1 mm thread



PMK XSO-03-3P-EF Ø 40 - 50 mm

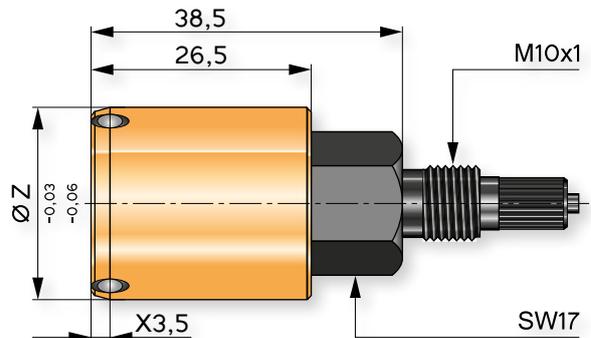
Meas. point radius R = 2.5 mm

PMK-XSO-03-3P-EF • Precision meas. head in 3-point design
Ø 40-50 mm, delivered with X dimension of 3.5 mm and M10x1 thread. Repeat accuracy at IT 8 < 1µ.
The measurement range is 0.2 mm and can be extended to up to 0.6 mm upon request. Self-centering, with insertion chamfer.
Specify the smallest hole dimension when ordering.

Ordering example:
Ø workpiece = 44 H7 = PMK - XSO - 03 - 3P - EF - 44



Short X dim. 3.5 mm
M10 x 1 mm thread



PMK XSO-03-3P-EF Ø 50 - 100 mm

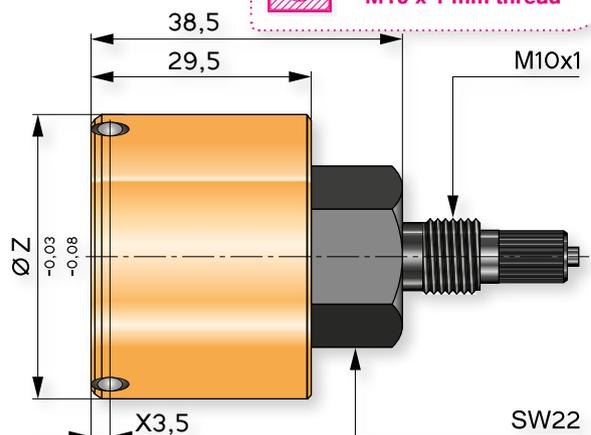
Meas. point radius R = 2.5 mm

PMK-XSO-03-3P-EF • Precision meas. head in 3-point design
Ø 50-100 mm, delivered with X dimension of 3.5 mm and M10x1 thread. Repeat accuracy at IT 8 < 1µ.
The measurement range is 0.2 mm and can be extended to up to 0.6 mm upon request. Self-centering, with insertion chamfer.
Specify the smallest hole dimension when ordering.

Ordering example: (> 100mm on request.)
Ø workpiece = 98 H7 = PMK - XSO - 03 - 3P - EF - 98



Short X dim. 3.5 mm
M10 x 1 mm thread



3-point PMK-XSO-03-3P-EF precision meas. heads for automated measurement of diameters, with short X dimension. The special geometry of the measuring heads with insertion chamfers and the second diameter tapered towards the back prevent sticking during measurement.

The repeat accuracy of our 3-point measuring heads at IT 8 is $< 1\mu$.

All Hexacon PMK's are manufactured of high-quality tool-grade steel and treated at no extra charge with a quality-improving titanium nitride coating. TiN coating provides very good hardness, about 2200 HV, as well as corrosion resistance with very good sliding and friction characteristics. The improved service life results in high cost-effectiveness as well as protection of the measurement object. The measurement points are fabricated from coated hard metal. Diamond measuring points upon request.



Automated meas. · 3-point

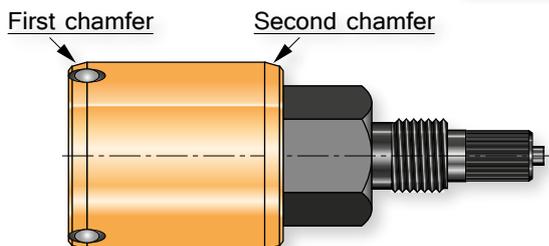
2-chamfer measuring heads

Two chamfer measuring heads for automated measuring

PMK-2EF-2D • Measuring heads for automated measurement

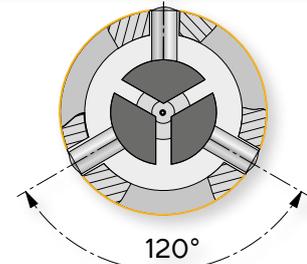
The special geometry of the measuring heads with two-sided insertion chamfers (2EF) prevents sticking both during insertion as well as during retraction of the measuring head during the automated measuring process.

The second chamfer on the measuring head can be implemented in nearly all 2-point and 3-point measuring heads with NO, XK, and SL X-dimensions.



3-point hole meas. heads

HEXAACON



PMK NO-03-3P-EF-2D • 3-point measuring heads for automated measuring The special geometry of the measuring heads with insertion chamfer and 2 tapered diameters prevents sticking.

∅ 15 - 100 mm



Diamond measuring points,
PMK NO-03-3P-EF-2D upon request.

NEW!

PMK NO-03-3P-EF-2D ∅ 15 - 40 mm

Meas. point radius R = 2.5 mm

PMK-NO-03-3P-EF-2D • Precision meas. head in 3-point design

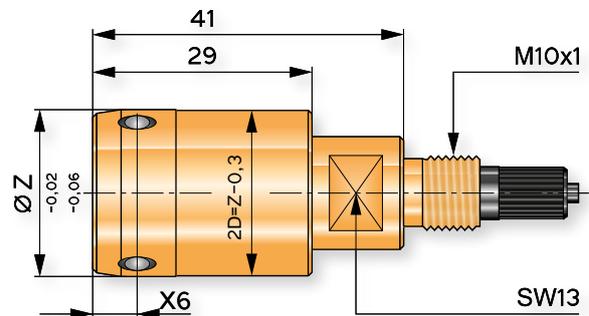
∅ 15-40 mm, delivered with X dimension of 6 mm and M10x1 thread. Repeat accuracy at IT 8 < 1μ. The measurement range is 0.2 mm and can be extended to up to 0.6 mm upon request. Self-centering, with insertion chamfer. Tapered measuring body prevents sticking. Specify the smallest hole dimension when ordering.

Ordering example:

∅ workpiece = 20 H7 = PMK - NO - 03 - 3P - EF - 2D - 20



Normal X dim. 6 mm
M10 x 1 mm thread



PMK NO-03-3P-EF-2D ∅ 40 - 50 mm

Meas. point radius R = 2.5 mm

PMK-NO-03-3P-EF-2D • Precision meas. head in 3-point design

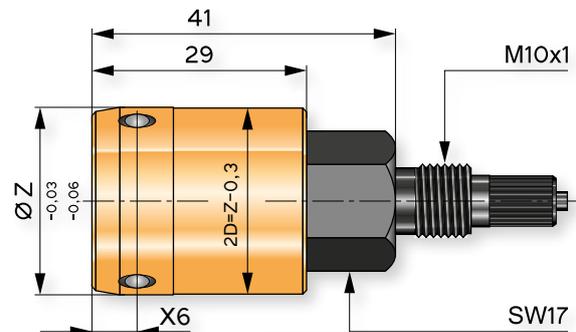
∅ 40-50 mm, delivered with X dimension of 6 mm and M10x1 thread. Repeat accuracy at IT 8 < 1μ. The measurement range is 0.2 mm and can be extended to up to 0.6 mm upon request. Self-centering, with insertion chamfer. Tapered measuring body prevents sticking. Specify the smallest hole dimension when ordering.

Ordering example:

∅ workpiece = 44 H7 = PMK - NO - 03 - 3P - EF - 2D - 44



Normal X dim. 6 mm
M10 x 1 mm thread



PMK NO-03-3P-EF-2D ∅ 50 - 100 mm

Meas. point radius R = 2.5 mm

PMK-NO-03-3P-EF-2D
∅ > 100mm upon request

PMK-NO-03-3P-EF-2D • Precision meas. head in 3-point design

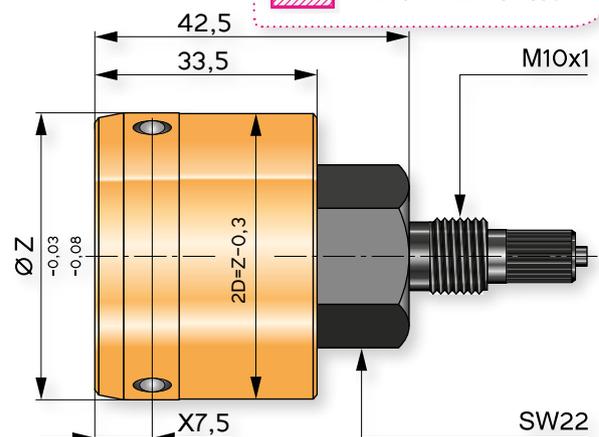
∅ 50-100 mm, delivered with X dimension of 7.5 mm and M10x1 thread. Repeat accuracy at IT 8 < 1μ. The measurement range is 0.2 mm and can be extended to up to 0.6 mm upon request. Self-centering, with insertion chamfer. Tapered measuring body prevents sticking. Specify the smallest hole dimension when ordering.

Ordering example:

∅ workpiece = 98 H7 = PMK - NO - 03 - 3P - EF - 2D - 98



Normal X dim. 7.5 mm
M10 x 1 mm thread



3-point PMK-NO-03-3P-EF-2D precision measuring heads for automated measurement of diameters. The special geometry of the measuring heads with insertion chamfers and the second diameter tapered towards the back prevent sticking even for a deeper measurement.

The repeat accuracy of our 3-point measuring heads at IT 8 is $< 1\mu$.

All Hexacon PMK's are manufactured of high-quality tool-grade steel and treated at no extra charge with a quality-improving titanium nitride coating. TiN coating provides very good hardness, about 2200 HV, as well as corrosion resistance with very good sliding and friction characteristics. The improved service life results in high cost-effectiveness as well as protection of the measurement object. The measurement points are fabricated from coated hard metal. Diamond measuring points upon request.



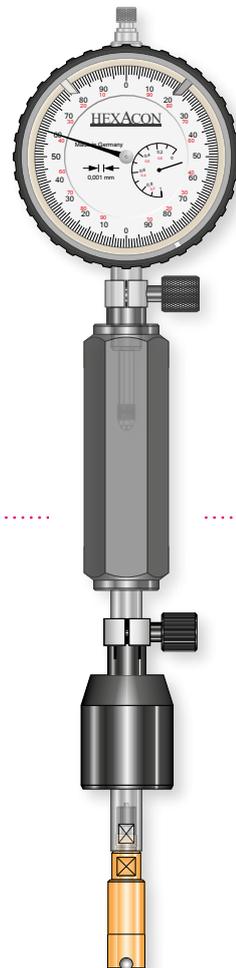
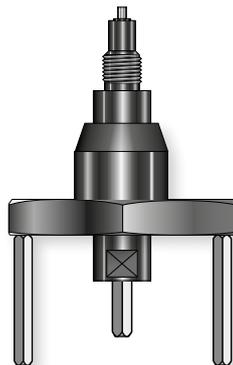
Automated meas. · 3-point

Example application:

Accessories

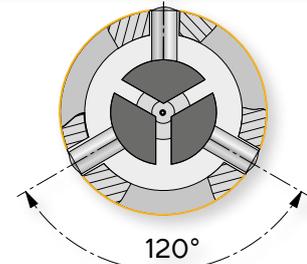
Depth stops for PMK
starting on page 78

Depth stop - clamping ring



3-point hole meas. heads

HEXAACON



PMK XSO-03-3P-EF-2D • 3-point meas heads for automated measuring

With short X-dimension of 3.5 mm.

ø 15 - 100 mm



Diamond measuring points,
PMK XSO-03-3P-EF-2D upon request.

NEW!

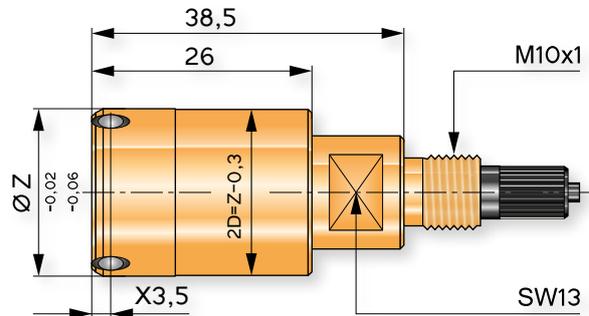
PMK XSO-03-3P-EF-2D ø 15 - 40 mm

PMK-XSO-03-3P-EF-2D • 3-point precision meas. head

ø 15-40 mm, delivered with X dimension of 3.5 mm and M10x1 thread. Repeat accuracy at IT 8 < 1µ. The meas. range is 0.2 mm and can be extended to up to 0.6 mm upon request. Self-centering, with insertion chamfer. Tapered measuring body prevents sticking. Specify the smallest hole dimension when ordering.

Ordering example:

ø workpiece = 20 ^{H7} = PMK - XSO - 03 - 3P - EF - 2D - 20



Short X dim. 3.5 mm
M10 x 1 mm thread

Meas. point radius R = 2.5 mm

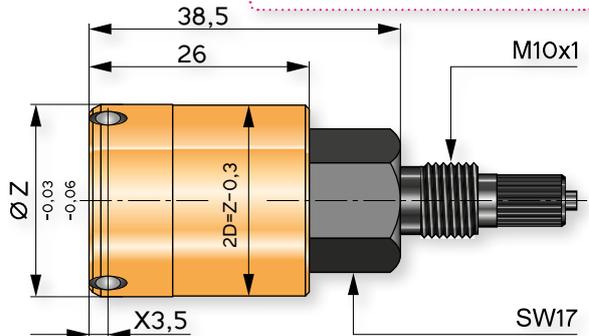
PMK XSO-03-3P-EF-2D ø 40 - 50 mm

PMK-XSO-03-3P-EF-2D • 3-point precision meas. head

ø 40-50 mm, delivered with X dimension of 3.5 mm and M10x1 thread. Repeat accuracy at IT 8 < 1µ. The meas. range is 0.2 mm and can be extended to up to 0.6 mm upon request. Self-centering, with insertion chamfer. Tapered measuring body prevents sticking. Specify the smallest hole dimension when ordering.

Ordering example:

ø workpiece = 44 ^{H7} = PMK - XSO - 03 - 3P - EF - 2D - 44



Short X dim. 3.5 mm
M10 x 1 mm thread

Meas. point radius R = 2.5 mm

PMK XSO-03-3P-EF-2D ø 50 - 100 mm

Meas. point radius R = 2.5 mm

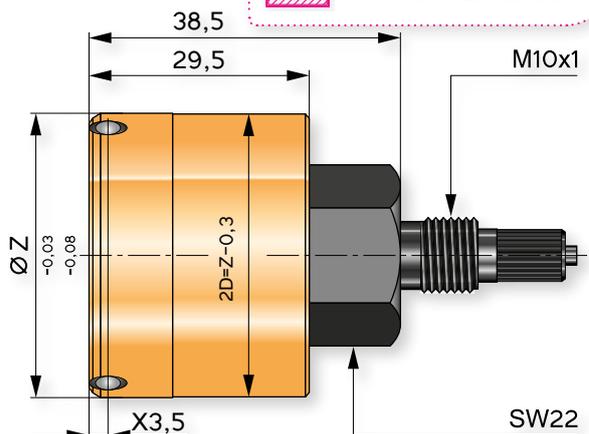
PMK-XSO-03-3P-EF-2D
ø > 100mm upon request

PMK-XSO-03-3P-EF-2Z • 3-point precision meas. head

ø 50-100 mm, delivered with X dimension of 3.5 mm and M10x1 thread. Repeat accuracy at IT 8 < 1µ. The meas. range is 0.2 mm and can be extended to up to 0.6 mm upon request. Self-centering, with insertion chamfer. Tapered measuring body prevents sticking. Specify the smallest hole dimension when ordering.

Ordering example:

ø workpiece = 98 ^{H7} = PMK - XSO - 03 - 3P - EF - 2D - 98



Short X dim. 3.5 mm
M10 x 1 mm thread

3-point PMK-XK-03-3P-EF-2D precision measuring heads for automated measurement of diameters, with short X dimension.

The special geometry of the measuring heads with insertion chamfers and the second diameter tapered towards the back prevent sticking even for a deeper measurement.

The repeat accuracy of our 3-point measuring heads at IT 8 is $< 1\mu$.

All Hexacon PMK's are manufactured of high-quality tool-grade steel and treated at no extra charge with a quality-improving titanium nitride coating. TiN coating provides very good hardness, about 2200 HV, as well as corrosion resistance with very good sliding and friction characteristics. The improved service life results in high cost-effectiveness as well as protection of the measurement object. The measurement points are fabricated from coated hard metal. Diamond measuring points upon request.

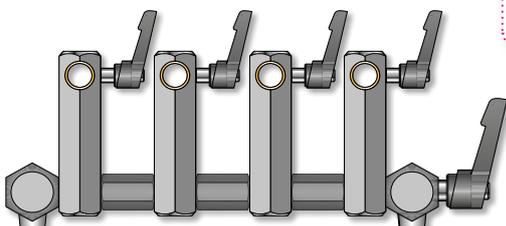


Automated meas. · 3-point

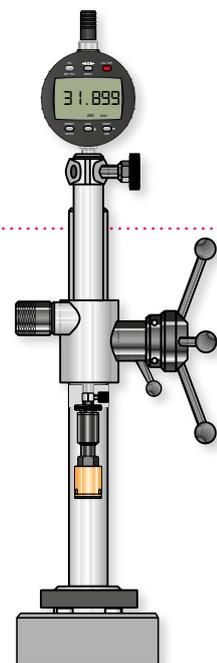
Example application:

Device stands and measurement stands permit reliable, efficient measurement.

On the largest workpieces in series or in testing. Starting on page 82.



Extensible to up to 6 points!



Square parallel meas. heads

HEXAACON

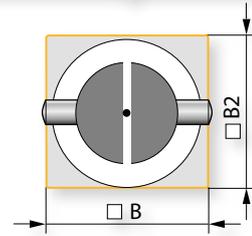
PMK-02-PAQ • Parallel measuring heads, square form.

Measuring square forms · Thread M6x0.75 mm.

B 8 - 15 mm



Diamond measuring points, PMK-02-PAQ-NO and PMK-02-PAQ-XK upon request.



NEW!

PMK NO-02-PAQ **Ø 8 - 15 mm**

PMK-NO-02-PAQ • Square meas. head in normal variant

B 8-15 mm, delivered with X dimension of 5 mm and M6x0.75 thread. Repeat accuracy at IT 8 < 1µ.

The measurement range is 0.15 mm and can be extended to up to 0.6 mm upon request.

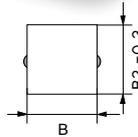
Specify the smallest dimension B of the parallels when ordering.

Ordering example:

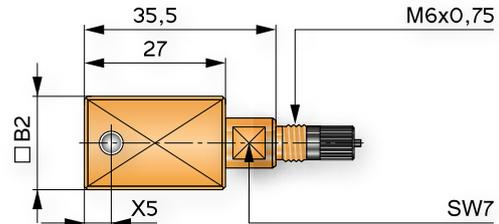
B workpiece = 14 H7 = PMK - NO - 02 - PAQ - 14



Normal X dim. 5 mm
M6x0.75 mm thread



Tolerance B
- 0.015
- 0.05



PMK XK-02-PAQ **Ø 8 - 15 mm**

PMK-XK-02-PAQ • Square meas. head, short X dimension

B 8-15 mm, delivered with short X dimension of 1.6 mm and M6x0.75 thread. Repeat accuracy at IT 8 < 1µ.

The measurement range is 0.15 mm and can be extended to up to 0.6 mm upon request.

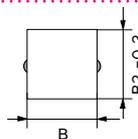
Specify the smallest dimension B of the parallels when ordering.

Ordering example:

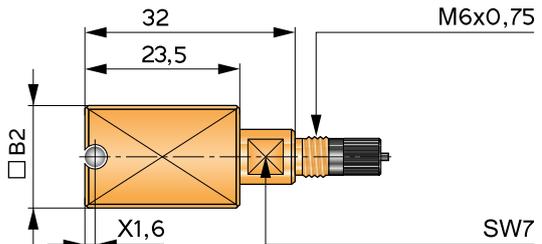
B workpiece = 14 H7 = PMK - XK - 02 - PAQ - 14



Short X dim. 1.6 mm
M6x0.75 mm thread



Tolerance B
- 0.015
- 0.05



PMK SL-02-PAQ **Ø 10 - 15 mm**

PMK-SL-02-PAQ • Square meas. head in blind hole variant

B 10-15 mm, delivered with very short X dimension of 0.6 mm and M6x0.75 thread. Repeat accuracy at IT 8 < 1µ.

Their measuring range is 0.15 mm.

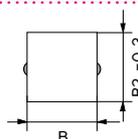
Specify the smallest dimension B of the parallels when ordering.

Ordering example:

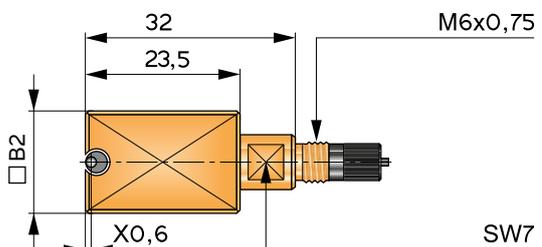
B workpiece = 15 H7 = PMK - SL - 02 - PAQ - 15



Blind hole X dim. 0.6 mm
M6x0.75 mm thread



Tolerance B
- 0.015
- 0.05



2-point PMK-PAQ square parallel measuring heads with titanium nitride coating precisely measure the parallelism of two surfaces.

The repeat accuracy of our 2-point measuring heads at IT 8 is <math> < 1\mu </math>.

All Hexacon PMK's are manufactured of high-quality tool-grade steel and treated at no extra charge with a quality-improving titanium nitride coating. TiN coating provides very good hardness, about 2200 HV, as well as corrosion resistance with very good sliding and friction characteristics. The improved service life results in high cost-effectiveness as well as protection of the measurement object. The measurement points are fabricated from coated hard metal. Diamond measuring points upon request.



NEW!

PMK NO-03-PAQ $\varnothing 15 - 40 \text{ mm}$

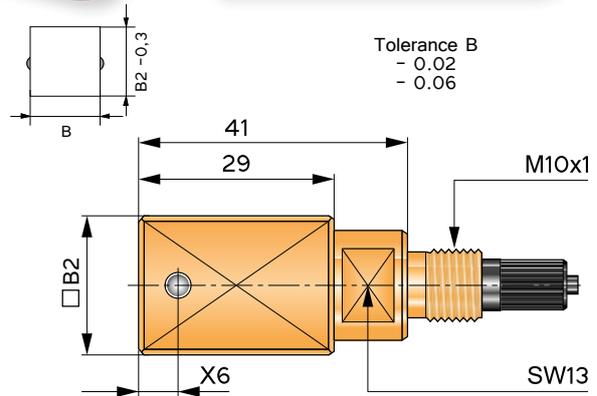
Normal X dim. 6 mm
M10 x 1 mm thread

PMK-NO-03-PAQ · Square meas. head in normal variant

B 15-40 mm, delivered with X dimension 6 mm and M10x1 thread. Repeat accuracy at IT 8 <math> < 1\mu </math>. The measurement range is 0.2 mm and can be extended to up to 0.8 mm upon request. Specify the smallest dim. B of the parallels when ordering.

Ordering example:

B workpiece = 18 H7 = PMK - NO - 03 - PAQ - 18



PMK XK-03-PAQ $\varnothing 15 - 40 \text{ mm}$

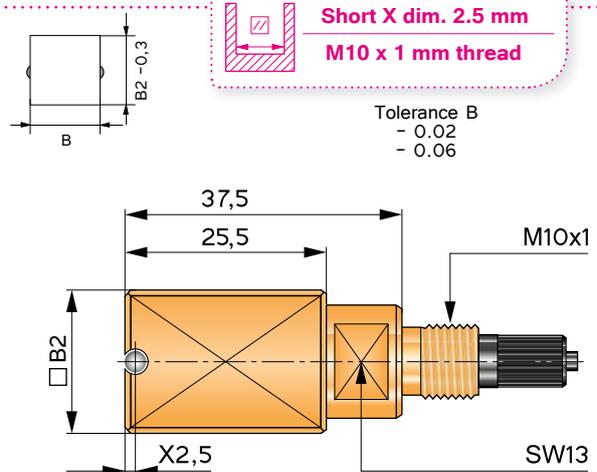
Short X dim. 2.5 mm
M10 x 1 mm thread

PMK-XK-03-PAQ · Square meas. head in normal variant

B 15-40 mm, delivered with short X dimension of 2.5 mm and M10x1 thread. Repeat accuracy at IT 8 <math> < 1\mu </math>. The measurement range is 0.2 mm and can be extended to up to 0.8 mm upon request. Specify the smallest dim. B of the parallels when ordering.

Ordering example:

B workpiece = 35 H7 = PMK - XK - 03 - PAQ - 35



PMK SL-03-PAQ $\varnothing 15 - 40 \text{ mm}$

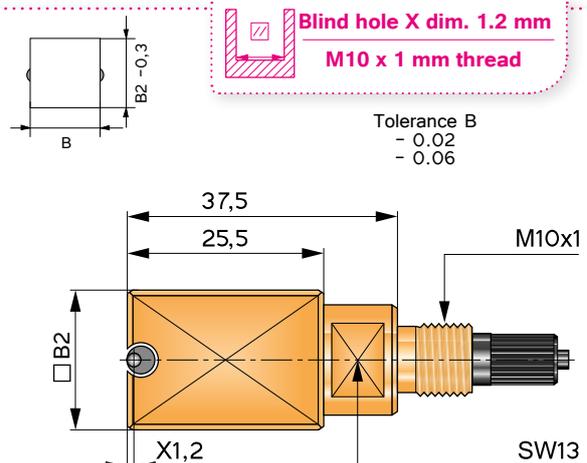
Blind hole X dim. 1.2 mm
M10 x 1 mm thread

PMK-SL-03-PAQ · Square meas. head in blind hole variant

B 15-40 mm, delivered with very short X dimension 1.2 mm and M10x1 thread. Repeat accuracy at IT 8 <math> < 1\mu </math>. The measurement range is 0.2 mm and can be extended to up to 0.3 mm upon request. Specify the smallest dim. B of the parallels when ordering.

Ordering example:

B workpiece = 34 D10 = PMK - SL - 03 - PAQ - 34.08



PMK · PAQ · Square form

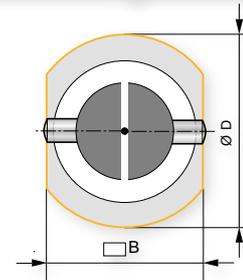
2-point parallel meas. head

HEXA CON

PMK-02-PA • Precision parallel measuring heads

Precise measurement of parallel surfaces.

B 8 - 15 mm



Diamond measuring points upon request for PMK-NO-02-PA and PMK-XK-02-PA variant.

NEW!



Normal X dim. 5 mm
M6x0.75 mm thread

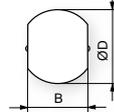
PMK NO-02-PA **Ø 8 - 15 mm**

PMK-NO-02-PA • Parallel meas. head in normal variant

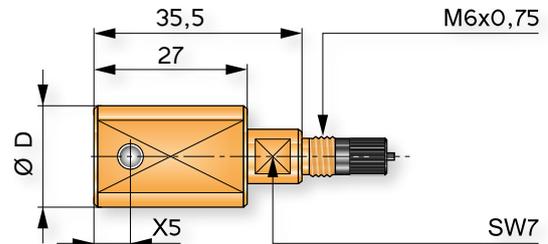
B 8-15 mm, delivered with normal X dimension of 5 mm and M6x0.75 thread. Repeat accuracy at IT 8 < 1µ. The measurement range is 0.15 mm and can be extended to up to 0.6 mm upon request. Specify the smallest dim. B of the parallels when ordering.

Ordering example:

B workpiece = 14 H7 = PMK - NO - 02 - PA - 14



Tolerance B
- 0.015
- 0.05



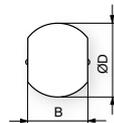
PMK XK-02-PA **Ø 8 - 15 mm**

PMK-XK-02-PA • Parallel meas. head, short X dimension

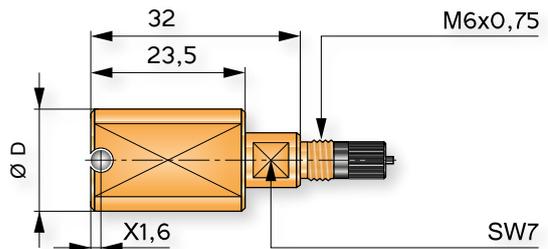
B 8-15 mm, delivered with short X dimension of 1.6 mm and M6x0.75 thread. Repeat accuracy at IT 8 < 1µ. The measurement range is 0.15 mm and can be extended to up to 0.6 mm upon request. Specify the smallest dim. B of the parallels when ordering.

Ordering example:

B workpiece = 14 H7 = PMK - XK - 02 - PA - 14



Tolerance B
- 0.015
- 0.05



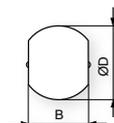
PMK SL-02-PA **Ø 10 - 15 mm**

PMK-SL-02-PA • Parallel meas. head, blind hole variant

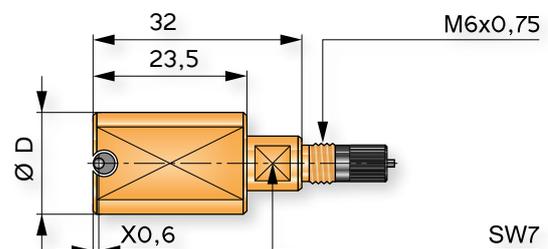
B 10-15 mm, delivered with very short X dimension of 0.6 mm and M6x0.75 thread. Repeat accuracy at IT 8 < 1µ. The measurement range is 0.15 mm and can be extended to up to 0.3 mm upon request. Specify the smallest dim. B of the parallels when ordering.

Ordering example:

B workpiece = 15 H7 = PMK - SL - 02 - PA - 15



Tolerance B
- 0.015
- 0.05



2-point PMK-02-PA parallel measuring heads with titanium nitride coating precisely measure the parallelism of two surfaces.

The repeat accuracy of our 2-point measuring heads at IT 8 is < 1μ.

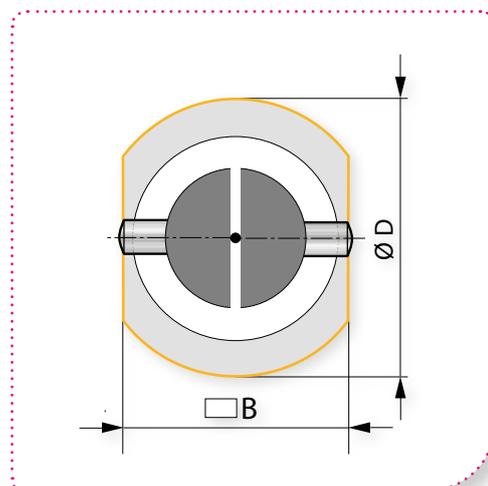
All Hexacon PMK's are manufactured of high-quality tool-grade steel and treated at no extra charge with a quality-improving titanium nitride coating. TiN coating provides very good hardness, about 2200 HV, as well as corrosion resistance with very good sliding and friction characteristics. The improved service life results in high cost-effectiveness as well as protection of the measurement object. The measurement points are fabricated from coated hard metal. Diamond measuring points upon request.



PMK · PA · Parallel meas.

Body diameter for parallel measuring heads

Tolerance	PMK body diameter
□ B - 0.015 - 0.05	Ø D ± 0.2
8 mm	11.3 mm
9 mm	12.7 mm
10 mm	14.1 mm
11 mm	15.6 mm
12 mm	17.0 mm
13 mm	18.4 mm
14 mm	19.8 mm
15 mm	21.2 mm



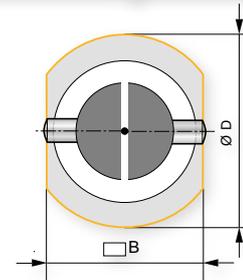
2-point parallel meas. heads

HEXAACON

PMK-03-PA • Precision parallel measuring heads

Precise measurement of parallel surfaces.

B 15 - 40 mm



Diamond measuring points, PMK-NO-03-PA and PMK-XK-03-PA upon request.

NEW!

PMK NO-03-PA Ø 15 - 40 mm

PMK-NO-03-PA • Parallel meas. head in normal variant

B 15-40 mm, delivered with X dimension of 6 mm and M10x1 thread. Repeat accuracy at IT 8 < 1µ. The measurement range is 0.2 mm and can be extended to up to 0.8 mm upon request. Specify the smallest dim. B of the parallels when ordering.

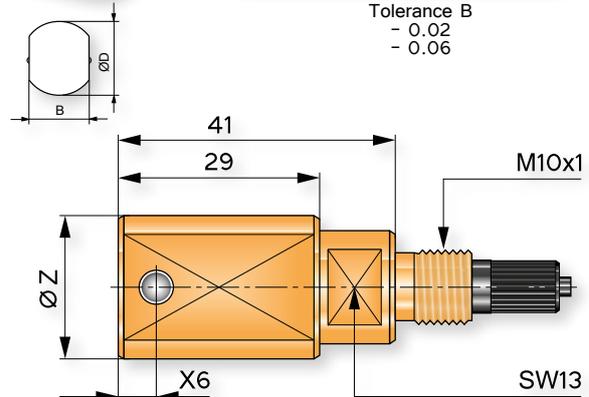
Ordering example:

B workpiece = 18 H7 = PMK - NO - 03 - PA - 18



**Normal X dim. 6 mm
M10 x 1 mm thread**

Tolerance B
- 0.02
- 0.06



PMK XK-03-PA Ø 15 - 40 mm

PMK-XK-03-PA • Parallel meas. head, short X dimension

B 15-40 mm, delivered with short X dimension of 2.5 mm and M10x1 thread. Repeat accuracy at IT 8 < 1µ. The measurement range is 0.2 mm and can be extended to up to 0.8 mm upon request. Specify the smallest dim. B of the parallels when ordering.

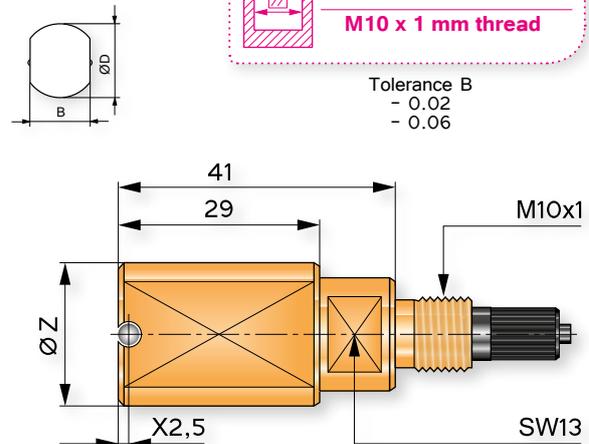
Ordering example:

B workpiece = 35 H7 = PMK - XK - 03 - PA - 35



**Short X dim. 2.5 mm
M10 x 1 mm thread**

Tolerance B
- 0.02
- 0.06



PMK SL-03-PA Ø 15 - 40 mm

PMK-SL-03-PA • Parallel meas. head, blind hole variant

B 15-40 mm, delivered with very short X dimension 1.2 mm and M10x1 thread. Repeat accuracy at IT 8 < 1µ. The measurement range is 0.2 mm and can be extended to up to 0.3 mm upon request. Specify the smallest dim. B of the parallels when ordering.

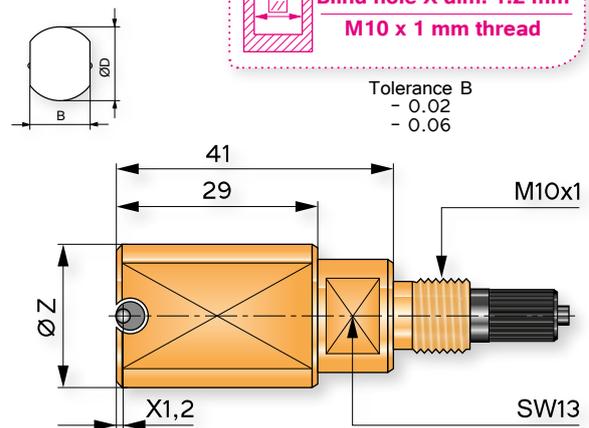
Ordering example:

B workpiece = 34 D10 = PMK - SL - 03 - PA - 34,08



**Blind hole X dim. 1.2 mm
M10 x 1 mm thread**

Tolerance B
- 0.02
- 0.06



2-point PMK-03-PA parallel measuring heads with titanium nitride coating precisely measure the parallelism of two surfaces.

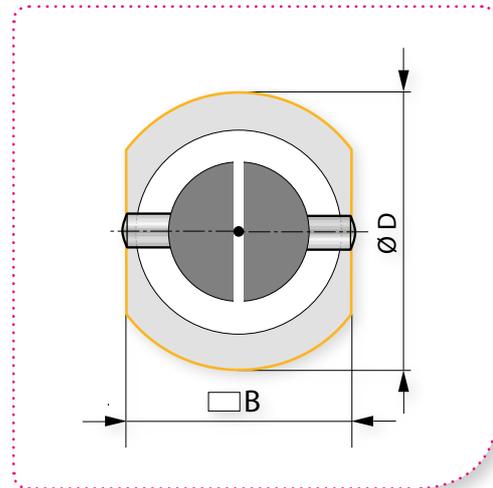
The repeat accuracy of our 2-point measuring heads at IT 8 is $< 1\mu$.

All Hexacon PMK's are manufactured of high-quality tool-grade steel and treated at no extra charge with a quality-improving titanium nitride coating. TiN coating provides very good hardness, about 2200 HV, as well as corrosion resistance with very good sliding and friction characteristics. The improved service life results in high cost-effectiveness as well as protection of the measurement object. The measurement points are fabricated from coated hard metal. Diamond measuring points upon request.



Body diameter for parallel measuring heads

Tolerance	PMK body diameter $\varnothing D$
$\square B - 0.02$ $- 0.06$	$\varnothing D \pm 0.2$
15 mm	21.2 mm
15.5 mm	21.9 mm
16 mm	22.6 mm
16.5 mm	23.3 mm
17 mm	24.0 mm
17.5 mm	24.7 mm
18 mm	25.5 mm
18.5 mm	26.2 mm
19 mm	26.9 mm
19.5 mm	27.6 mm
20 mm	28.3 mm
21 mm	29.7 mm
22 mm	31.1 mm
23 mm	32.5 mm
24 mm	33.9 mm
25 mm	35.6 mm
26 mm	36.8 mm
27 mm	38.2 mm
28 mm	39.6 mm
29 mm	41.0 mm
30 mm	42.4 mm
32 mm	45.3 mm
35 mm	49.5 mm
36 mm	50.9 mm
38 mm	53.7 mm
40 mm	56.6 mm



PMK · PA · Parallel meas.

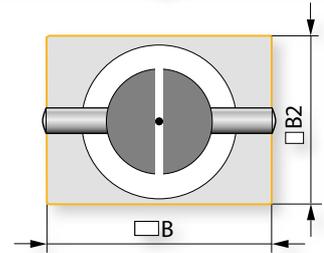
2-point parallel meas. heads

HEXAACON

PMK-03-PA • Precision parallel measuring heads

Precise measurement of parallel surfaces.

B 40 - 130 mm



Diamond measuring points, PMK-NO-03-PA and PMK-XK-03-PA upon request.

NEW!



Normal X dim. 6 mm
M10 x 1 mm thread

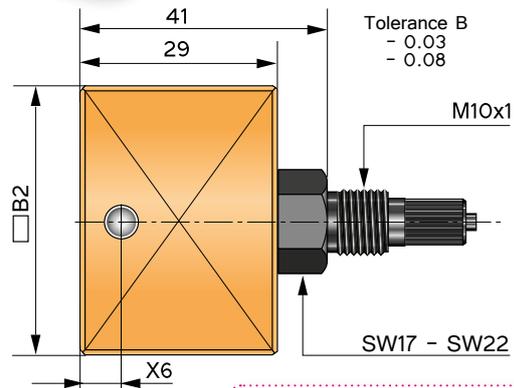
PMK NO-03-PA \varnothing 40 - 130 mm

PMK-NO-03-PA • Parallel meas. head in normal variant

B 40-130 mm, delivered with X dimension of 6 mm and M10x1 thread. Repeat accuracy at IT 8 < 1 μ . The meas. range is 0.2 mm and can be extended to up to 0.8 mm upon request. B2 = approx. 25-30 mm -0.3 mm. Specify the smallest dim. B of the parallels when ordering.

Ordering example:

B workpiece = 88 H7 = PMK - NO - 03 - PA - 88



Short X dim. 2.5 mm
M10 x 1 mm thread

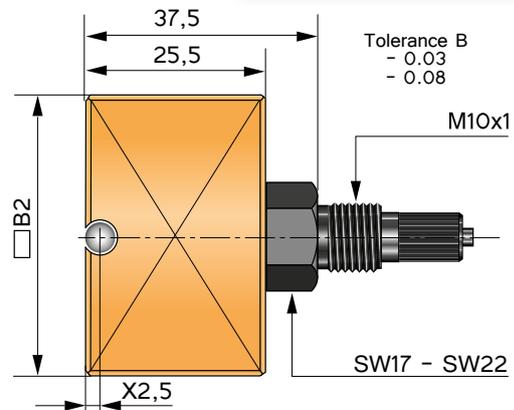
PMK XK-03-PA \varnothing 40 - 130 mm

PMK-XK-03-PA • Parallel meas. head with short X dim.

B 40-130 mm, delivered with short X dimension of 2.5 mm and M10x1 thread. Repeat accuracy at IT 8 < 1 μ . The meas.range is 0.2 mm and can be extended to up to 0.8 mm upon request. B2=approx.25-30 mm-0.3 mm. Specify the smallest dim. B of the parallels when ordering.

Ordering example:

B workpiece = 45 H7 = PMK - XK - 03 - PA - 45



Blind hole X dim. 1.2 mm
M10 x 1 mm thread

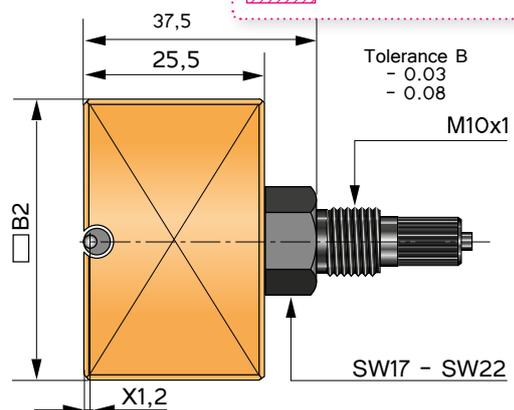
PMK SL-03-PA \varnothing 40 - 130 mm

PMK-SL-03-PA • Parallel meas. head in blind hole variant

B 40-130, delivered with very short X dimension 1.2 mm and M10x1 thread. Repeat accuracy at IT 8 < 1 μ . The meas. range is 0.2 mm and can be extended to up to 0.3 mm upon request. B2=approx.25-30 mm-0.3 mm. Specify the smallest dim. B of the parallels when ordering.

Ordering example:

B workpiece = 64 D10 = PMK - SL - 03 - PA - 64,1



2-point PMK-NO-03-PA parallel measuring heads with titanium nitride coating precisely measure the parallelism of two surfaces.

The repeat accuracy of our 2-point measuring heads at IT 8 is $< 1\mu$.

All Hexacon PMK's are manufactured of high-quality tool-grade steel and treated at no extra charge with a quality-improving titanium nitride coating. TiN coating provides very good hardness, about 2200 HV, as well as corrosion resistance with very good sliding and friction characteristics. The improved service life results in high cost-effectiveness as well as protection of the measurement object. The measurement points are fabricated from coated hard metal. Diamond measuring points upon request.



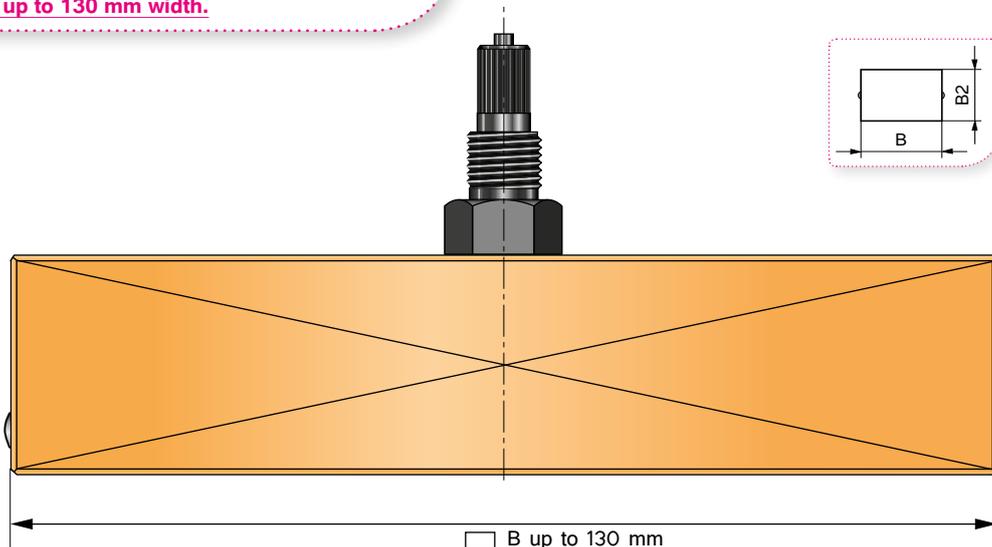
PMK · PA · Parallel meas.

PMK-PA · Parallel meas. head delivered up to B = 130 mm

Parallel measuring heads are available with normal X-dimension, short X-dimension and blind hole X-dimension in standard variant.

Available up to 130 mm width.

Parallel measuring heads up to width = 130 mm



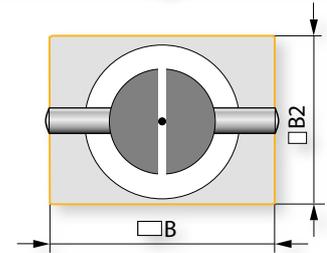
Crankshaft measuring heads

HEXAACON

PMK-KW • Crankshaft parallel measuring heads

With precision 2-point technology.

B 6 mm and up



Diamond measuring points,
PMK-KW upon request.

NEW!



X dim. 2 mm and up
M 6x0.75 mm thread

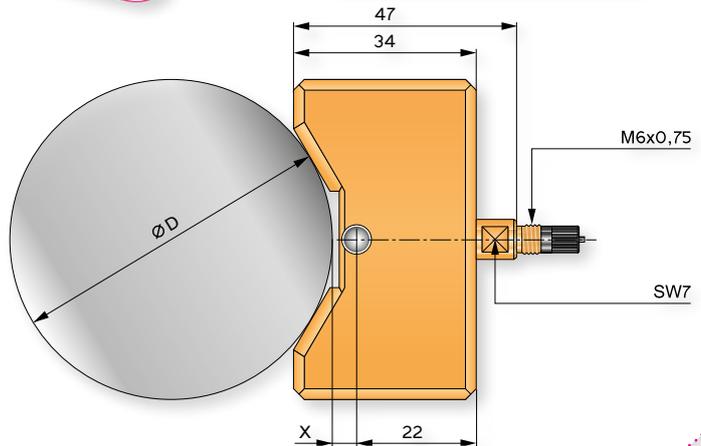
PMK 02-KW **Ø 6 - 20 mm**

PMK-02-KW • Crankshaft parallel measuring head

available with M6x0.75 mm thread and X dimension 2 mm and up. Width from 6 to 20 mm. Illustration may differ.

Ordering example:

B workpiece = 14 H7 = PMK - 02 - KW - X - 14



X dim. 3 mm and up
M10 x 1 mm thread

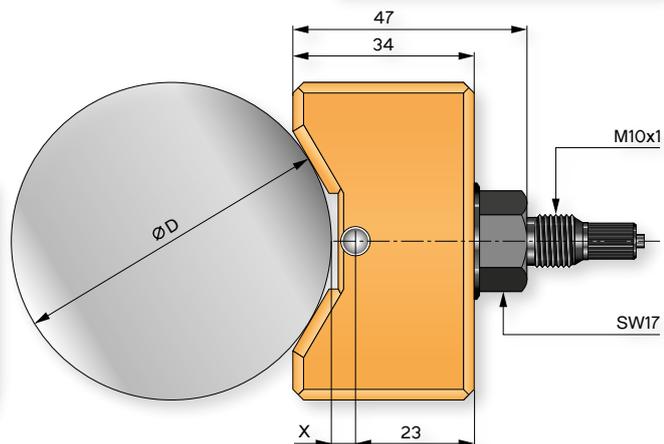
PMK 03-KW **Ø 15 mm and up**

PMK-03-KW • Crankshaft parallel measuring head

available with M10x1mm thread and X dimension 3 mm and up. Width 15 mm and up. Illustration may differ.

Ordering example:

B workpiece = 30 H7 = PMK - 03 - KW - X - 30



PMK-KW parallel crankshaft measuring heads with titanium nitride coating precisely measure the parallelism of two surfaces. In variants with connection threads in M6x0.75 and M10x1.

The repeat accuracy of our 2-point measuring heads at IT 8 is <math> < 1\mu </math>.

All Hexacon PMK's are manufactured of high-quality tool-grade steel and treated at no extra charge with a quality-improving titanium nitride coating. TiN coating provides very good hardness, about 2200 HV, as well as corrosion resistance with very good sliding and friction characteristics. The improved service life results in high cost-effectiveness as well as protection of the measurement object. The measurement points are fabricated from coated hard metal. Diamond measuring points upon request.



Notes

A large, empty rectangular area with a red dotted border, intended for taking notes.

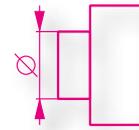
Outer measuring heads

HEXAACON

PMK-AM 2-point outer measuring heads

Precision measurement of outer diameters.

For shaft ends and the like

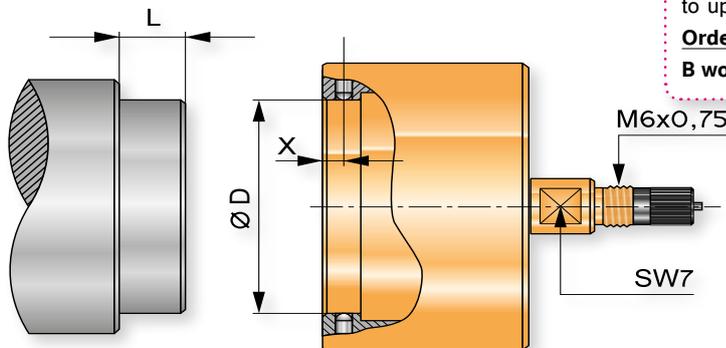


NEW!



X dimension 5 mm
M6x0.75 mm thread

PMK 02-AM Outer meas. head



PMK-02-AM • Outer measuring head in normal variant

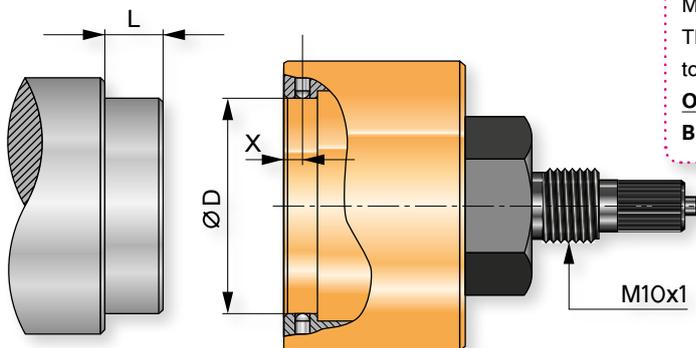
ø 8–15 mm, delivered with X dimension of 5 mm and M6x0.75 thread. Repeat accuracy at IT 8 < 1µ. The measurement range is 0.2 mm and can be extended to up to 0.6 mm upon request. Self-centering.

Ordering example:

B workpiece = 14 H7 = PMK - 02 - AM - 14



PMK 03-AM Outer meas. head



X dimension 5 mm
M10 x 1 mm thread

PMK-03-AM • Outer measuring head in normal variant

ø 15 mm and up, delivered with X dimension of 5 mm and M10x1 thread. Repeat accuracy at IT 8 < 1µ. The measurement range is 0.2 mm and can be extended to up to 0.8 mm upon request. Self-centering.

Ordering example:

B workpiece = 40 H7 = PMK - 03 - AM - 40



2-point PMK-AM outer diameter measuring heads with titanium nitride coating precisely measure the outer diameter at shaft ends.

In variants with connection threads in M6x0.75 and M10x1.

The repeat accuracy of our 2-point outer measuring heads at IT 8 is < 1µ.

All Hexacon PMK's are manufactured of high-quality tool-grade steel and treated at no extra charge with a quality-improving titanium nitride coating. TiN coating provides very good hardness, about 2200 HV, as well as corrosion resistance with very good sliding and friction characteristics. The improved service life results in high cost-effectiveness as well as protection of the measurement object. The measurement points are fabricated from coated hard metal.

PMK special measuring heads

Modification of measuring heads according to customer request

PMK XV

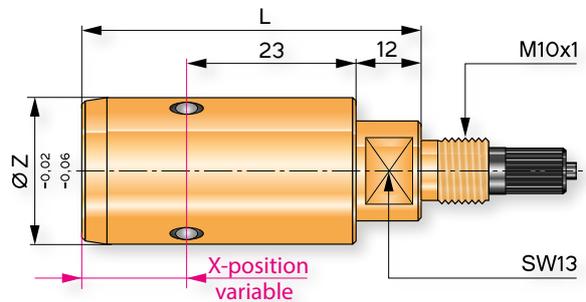
Variable X-dim.

PMK-XV · Precision meas. head with variable X dimension

Many of our precision meas. heads are available with modified housing dimension, depending on the variant. The longer housing form means the X dim. can be positioned variably.

Details upon request.

NEW!



PMK · AM · Outer measurement

PMK

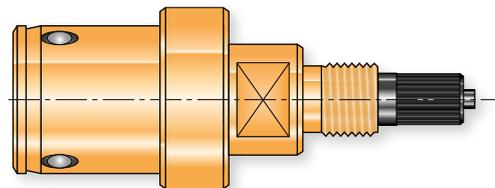
Depth stop

PMK measuring heads with integrated depth stop

Upon request, depth stops integrated into the measuring body are available for different variants.

Details upon request.

NEW!



PMK 2-EF

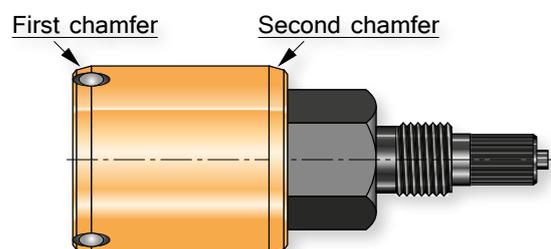
2-insertion chamfers

PMK measuring heads with 2-insertion chamfers

Prevent sticking during automated measurement.

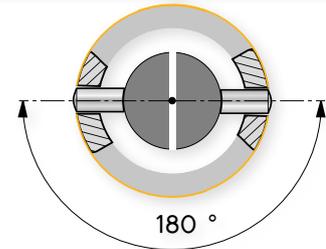
Details upon request.

NEW!



2-point conical meas. head

HEXAACON



PMK-NO-KE • Precision meas. heads in conical variant

With short X-dimension, repeat accuracy at IT 8 < 1 μ .

\varnothing 8 - 280 mm



Diamond measuring points,
PMK-NO/KE upon request.

NEW!

PMK NO-02-KE

\varnothing 8 - 20 mm



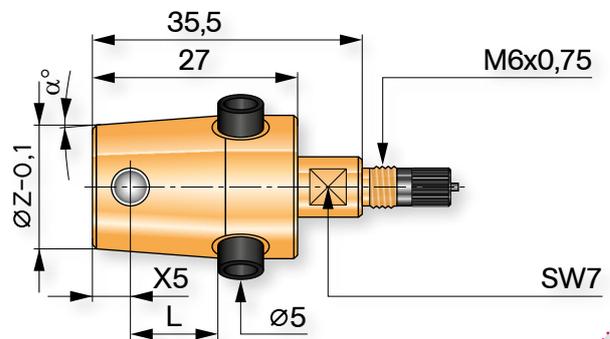
Normal X dim. 5 mm
M6x0.75 mm thread

PMK-NO-02-KE • Precision meas. head in conical variant

\varnothing 8-20 mm, delivered with standard X dimension of 5 mm and M6x0.75 thread. Repeat accuracy at IT 8 < 1 μ . The measurement range is 0.15 mm and can be extended to up to 0.6 mm upon request. Self-centering. Specify Z, angle α° , L, and conical slope when ordering.

Ordering example:

\varnothing workpiece = 18 ^{H7} = PMK - NO - 02 - KE - 18



PMK NO-03-KE

\varnothing 15 - 40 mm



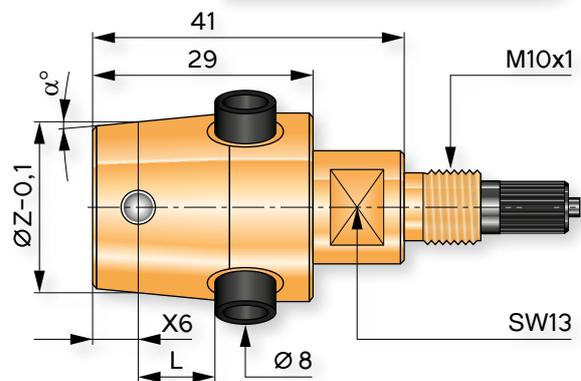
Normal X dim. 6 mm
M10 x 1 mm thread

PMK-NO-03-KE • Precision meas. head in conical variant

\varnothing 15-40 mm, delivered with standard X dimension of 6 mm and M10x1 thread. Repeat accuracy at IT 8 < 1 μ . The measurement range is 0.2 mm and can be extended to up to 0.8 mm upon request. Self-centering. Specify Z, angle α° , L, and conical slope when ordering.

Ordering example:

\varnothing workpiece = 38 ^{H7} = PMK - NO - 03 - KE - 38



PMK NO-03-KE

\varnothing 40 - 50 mm



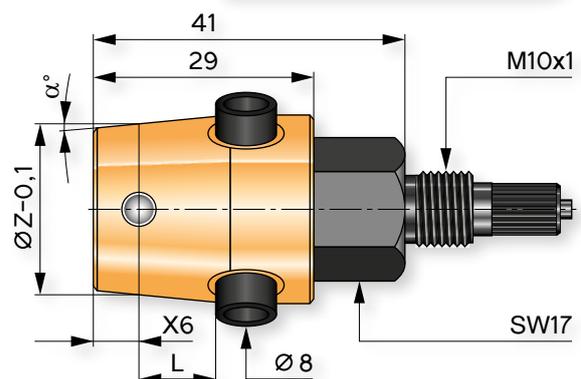
Normal X dim. 6 mm
M10 x 1 mm thread

PMK-NO-03-KE • Precision meas. head in conical variant

\varnothing 40-50 mm, delivered with standard X dimension of 6 mm and M10x1 thread. Repeat accuracy at IT 8 < 1 μ . The measurement range is 0.2 mm and can be extended to up to 0.8 mm upon request. Self-centering. Specify Z, angle α° , L, and conical slope when ordering.

Ordering example:

\varnothing workpiece = 45 ^{H7} = PMK - NO - 03 - KE - 45



2-point PMK-KE conical hole measuring heads with titanium nitride coating measure precision diameters at a defined depth, ovality by rotating during the measurement process, and form errors in the hole.

The repeat accuracy of our 2-point measuring heads at IT 8 is $< 1\mu$.

All Hexacon PMK's are manufactured of high-quality tool-grade steel and treated at no extra charge with a quality-improving titanium nitride coating. TiN coating provides very good hardness, about 2200 HV, as well as corrosion resistance with very good sliding and friction characteristics. The improved service life results in high cost-effectiveness as well as protection of the measurement object. The measurement points are fabricated from coated hard metal. Diamond measuring points upon request.

A sample part and associated drawing of the workpiece is required with the order.



PMK NO-03-KE **Ø 50 - 280 mm**



Normal X dim. 6 mm
M10 x 1 mm thread

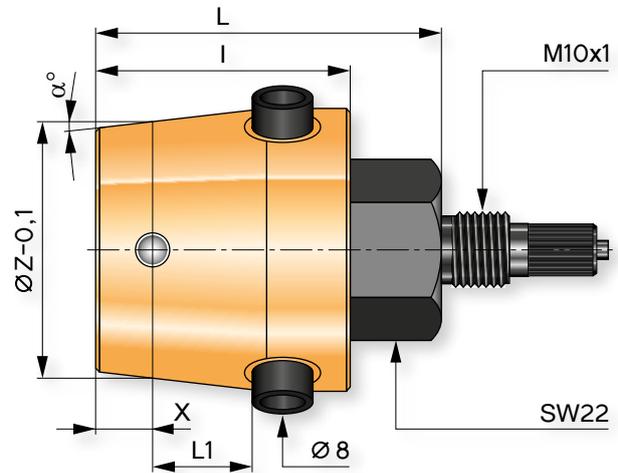
PMK-NO-03-KE · Precision meas. head in conical variant

Ø 50-280 mm, delivered with standard X dimension and M10x1 thread. Repeat accuracy at IT 8 $< 1\mu$. The measurement range is 0.2 mm and can be extended to up to 0.8 mm upon request. Self-centering. Specify Z, angle α° , L, and conical slope when ordering.

Ordering example:

Ø workpiece = 34 D10 = PMK - NO - 03 - KE - 34,08

Ø Z	X	I	L
> 50 - 100	7.5	33.5	42.5
> 100 - 280	10	36	45



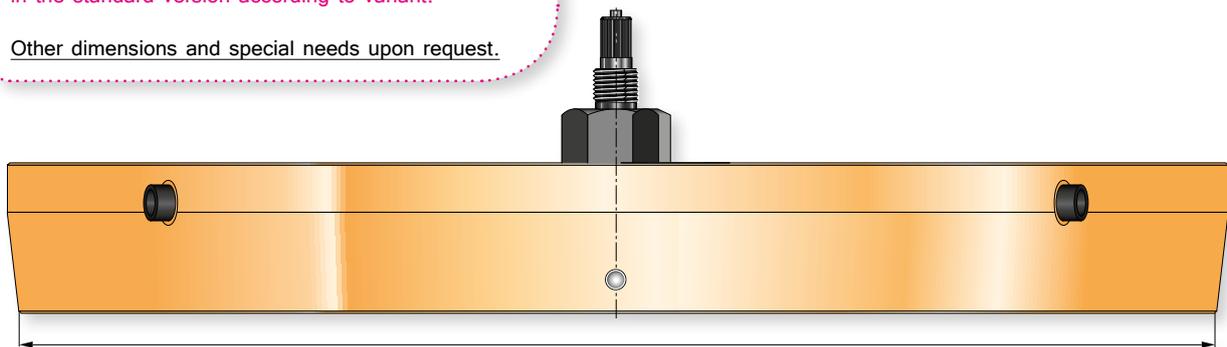
PMK · KE · Conical meas.

Conical PMK-NO-KE in 2-point measurement technology available with normal X-dimension or short X-dimension and **from 6 mm to 280 mm diameter Z** in the standard version according to variant.

Other dimensions and special needs upon request.



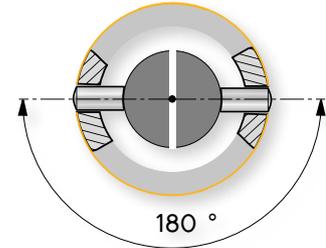
Conical measuring heads
up to width = Ø 280 mm



Ø Z up to 280 mm

Conical measuring heads

HEXAACON



PMK-ME-KE • Multi-point meas. heads in conical variant

With integrated dial gauge or inductive probe holders.

Integrated holder \varnothing 8H7

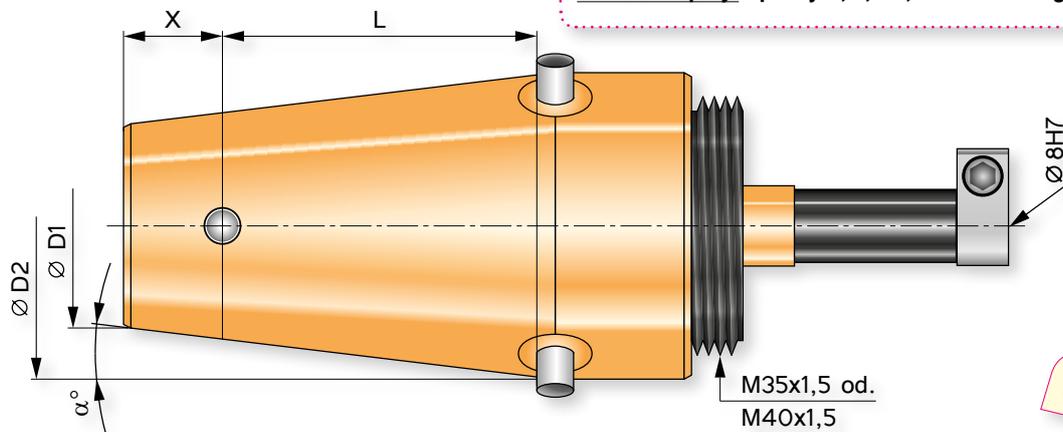
Conical measurement

PMK ME-KE Conical measuring head

PMK-ME-KE • 2-point conical precision measuring head

delivered with integrated holder for inductive measuring probes \varnothing 8H7 mm. Thread for handle M35x1.5 mm or M40x1.5 mm. With insertion chamfer. Depth stop using Allen screws.

In order inquiry: Specify X, L, D1, D2 and α° angle.



Multi-point conical head

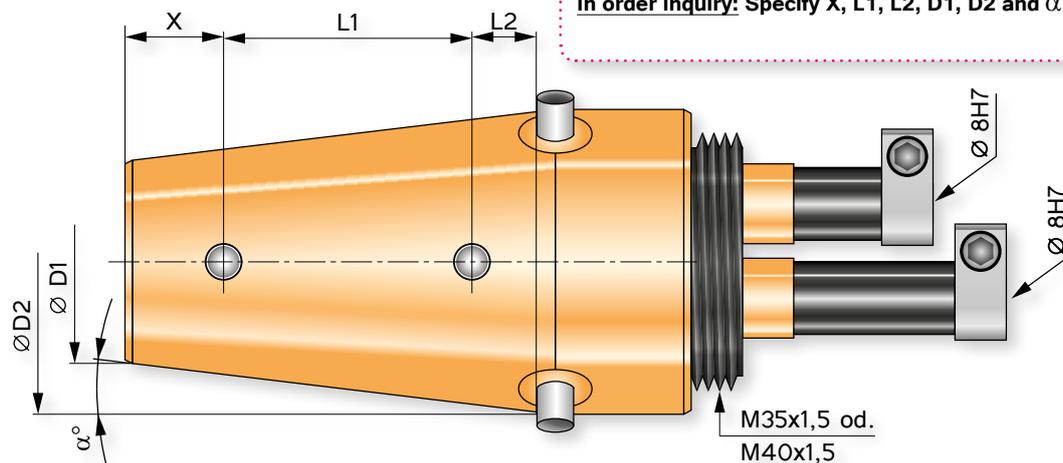
PMK ME-KE Multi-point conical meas. head

PMK-ME-KE • Multi-point conical precision measuring head

delivered with integrated holder for inductive meas. probes \varnothing 8H7 mm. Thread for handle M35x1.5 mm or M40x1.5 mm.

With insertion chamfer. Depth stop using Allen screws.

In order inquiry: Specify X, L1, L2, D1, D2 and α° angle.



2-point PMK-KE conical and multi-point conical measuring heads with titanium nitride coating measure precision diameters at a defined depth, ovality by rotating during the measurement process and form errors in the hole.

The repeat accuracy of our 2-point measuring heads at IT 8 is $< 1\mu$.

All Hexacon PMK's are manufactured of high-quality tool-grade steel and treated at no extra charge with a quality-improving titanium nitride coating. TiN coating provides very good hardness, about 2200 HV, as well as corrosion resistance with very good sliding and friction characteristics. The improved service life results in high cost-effectiveness as well as protection of the measurement object. The measurement points are fabricated from coated hard metal. Diamond measuring points upon request.



HM ME-M35

Handle for PMK-ME-KE

For PMK-ME-KE

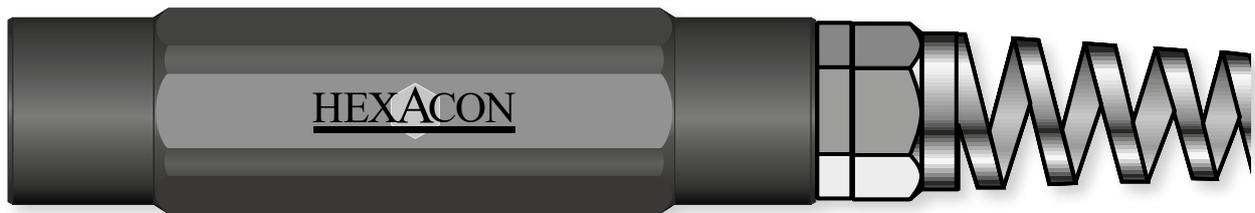
NEW!

HM-ME-M35/M40 • Handle for PMK-ME-KE

Robust handle of aluminum for reliable protection and handling of PMK-ME-KE conical metrology instrument.

Thread M35x1.5 • Order no.: HM-ME-M35x1.5

Thread M40x1.5 • Order no.: HM-ME-M40x1.5

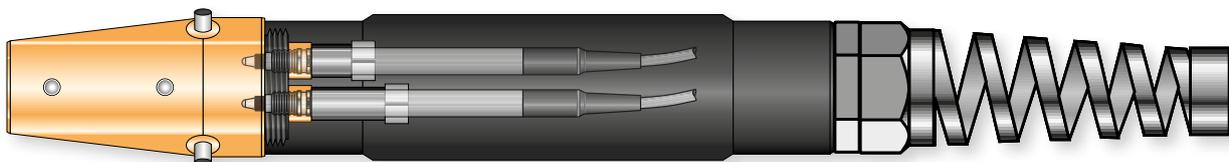


PMK • KE • Conical meas.

Illustration:

PMK-ME-KE conical measuring instrument with HM-ME-M35 handle and inductive probes mounted.

Application example



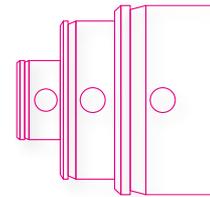
Multi-point measuring heads

HEXAACON

PMK-ME • Multi-point measuring heads

With precision multi-point measurement technology

Integrated holder \varnothing 8H7



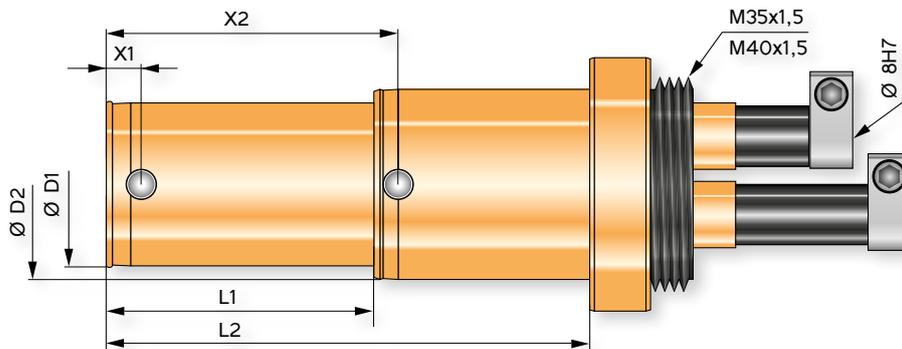
Two-point measuring head

PMK ME Two-point meas. head

PMK-ME-2P • Two-point precision measuring head

delivered with integrated holder for inductive measuring probes with \varnothing 8H7 mm. Integrated depth stop can be implemented for example using the housing geometry. Threaded connection for handle M35x1.5 mm or M40x1.5 mm.

In order inquiry: Specify \varnothing D1, D2, L1, L2, X1, X2.



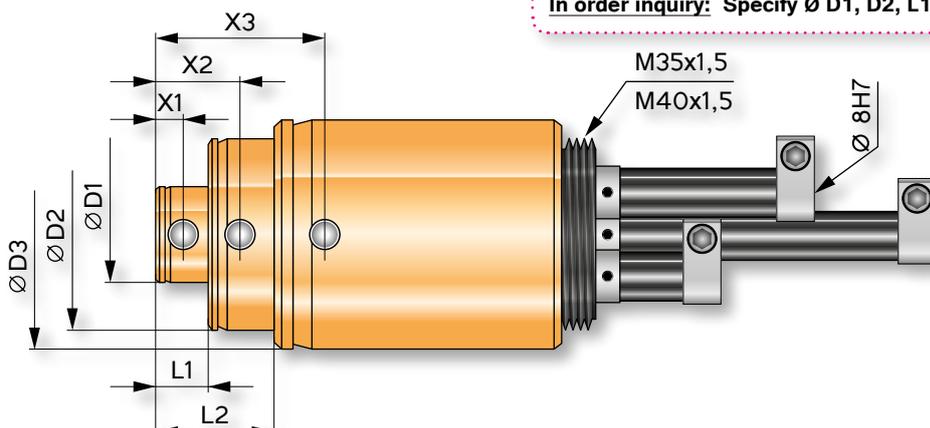
Multi-point meas. head

PMK ME Multi-point meas. head

PMK-ME • Multi-point precision measuring head

delivered with integrated holder for inductive measuring probes with \varnothing 8H7 mm. Integrated depth stop can be implemented for example using the housing geometry. Threaded connection for handle M35x1.5 mm or M40x1.5 mm.

In order inquiry: Specify \varnothing D1, D2, L1, L2, X1, X2.



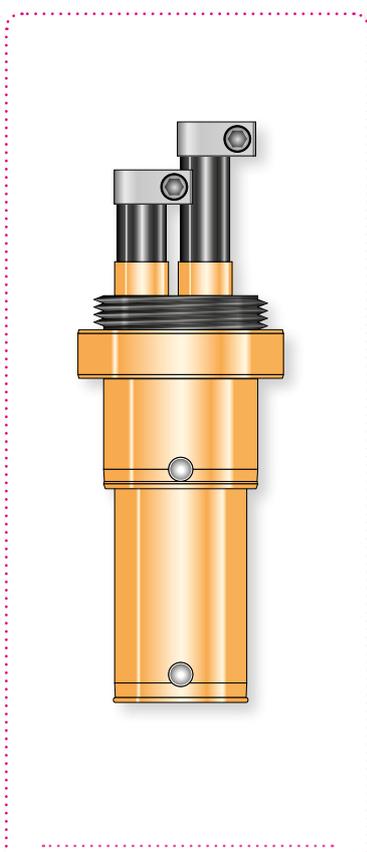
2-point PMK-ME multi-point measuring heads precisely measure the dimensions and form of two or more diameters. The measuring heads are delivered with integrated \varnothing 8H7 mm dial gauge holder for inductive measuring probes. An integrated depth stop can be implemented using a clamping ring, stop screws or the housing structure. Thread for handle M35x1.5 mm or M40x1.5 mm.

The repeat accuracy of our 2-point measuring heads at IT 8 is $< 1\mu$. All Hexacon PMK's are manufactured of high-quality tool-grade steel and treated at no extra charge with a quality-improving titanium nitride coating. TiN coating provides very good hardness, about 2200 HV, as well as corrosion resistance with very good sliding and friction characteristics. The improved service life results in high cost-effectiveness as well as protection of the measurement object. The measurement points are fabricated from coated hard metal. Diamond measuring points upon request.

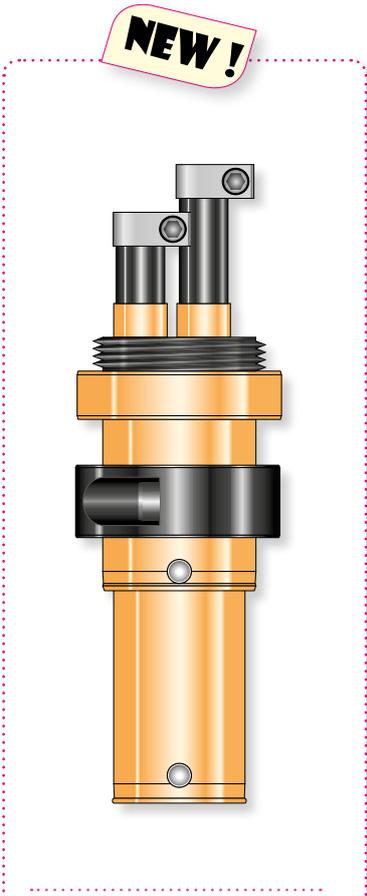


Depth stops

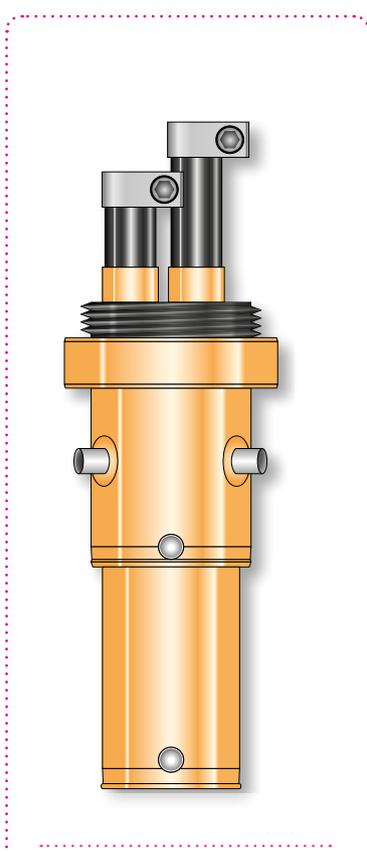
Application examples



Application example:
PMK-ME
Two-point measuring head with housing structure as depth stop.



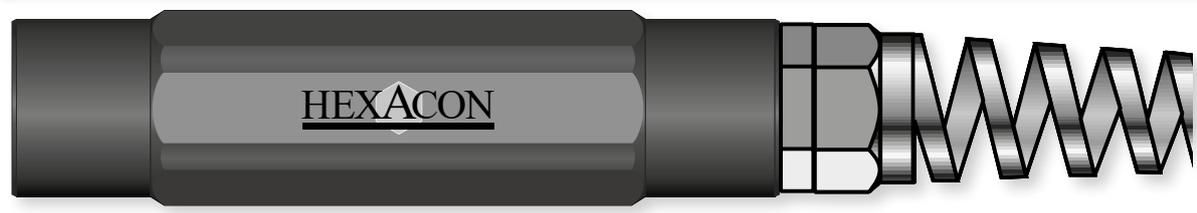
Application example:
PMK-ME
Two-point measuring head with adjustable TA-KR-V clamping ring as depth stop.



Application example:
PMK-ME
Two-point measuring head with stop screws as depth stop.

Multi-point PMK - ME

HM-ME-M35/M40 • Handle for PMK-ME-KE Robust handle of aluminum for reliable protection and handling of multi-point measuring instrument PMK-ME-KE. **Thread M35x1.5 - order no.: HM-ME-M35x1.5 • Thread M40x1.5 - order no.: HM-ME-M40x1.5**



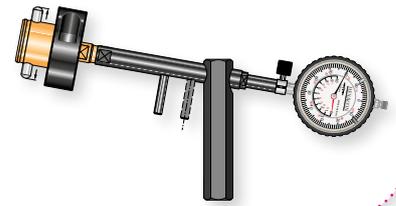
Insertion meas. instruments

HEXAACON

PMK-ES • Insertion measuring instruments

and special pistol holder with ventilation.

15 mm meas. range



HM 03-AL-25

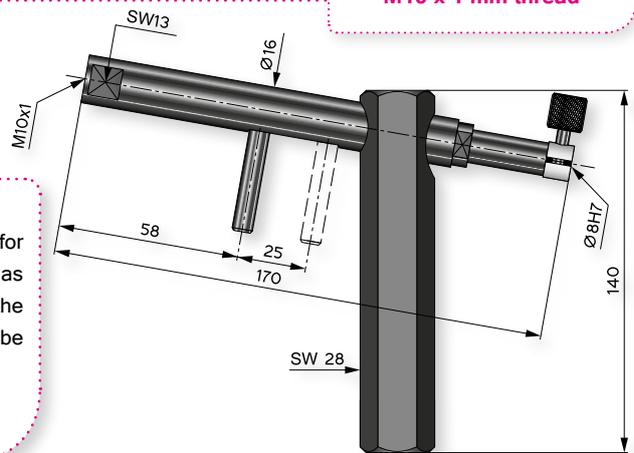
With ventilation

HM-03-AL-25 • Special holder with ventilation for PMK-ES

For insertion measurement. For retraction of the meas. points for insertion measuring instrument, see below for the PMK-ES as well as for PMK with offset measuring points. Pulling back the measurement stroke on the holder, the measuring points can be extended or retracted by max. 15 mm $\varnothing D - \varnothing d$.

Order no.: HM - 03 - AL - 25

M10 x 1 mm thread



PMK ES

For insertion meas.



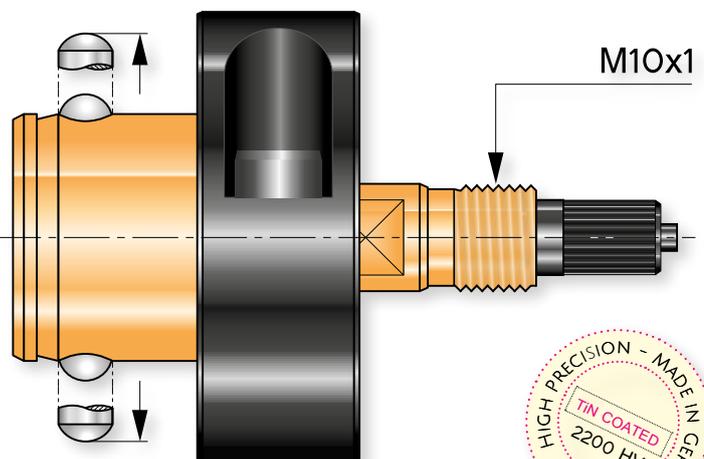
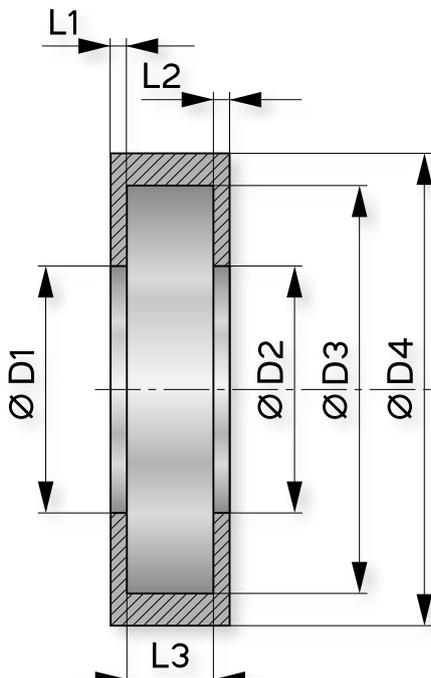
Normal X dim. 15 mm
M10x1 mm thread

PMK-ES • Precision meas. head for insertion meas.

\varnothing 15 mm and up, delivered with X dimension of 15 mm and M10x1 thread. Diameter differences of up to 15 mm can be measured. Ideal for insertion measurement. Self-centering, with insertion groove. Depth stop clamping ring included in delivery. Specify the smallest hole dimension when ordering.

Ordering example:

\varnothing workpiece = 20 H7 = PMK - ES - 03 - 20



PMK-ES insertion measuring instrument with large measurement range and special pistol holder measures precision diameter differences up to 15 mm. With integrated measuring gauge holder and M10x1 stop thread as well as depth stop clamping ring.

The repeat accuracy of our 2-point insertion measuring heads at IT 8 is < 1/100 mm.

All Hexacon PMK's are manufactured of high-quality tool-grade steel and treated at no extra charge with a quality-improving titanium nitride coating. TiN coating provides very good hardness, about 2200 HV, as well as corrosion resistance with very good sliding and friction characteristics. The improved service life results in high cost-effectiveness as well as protection of the measurement object. The measurement points are fabricated from coated hard metal. Diamond measuring points upon request.



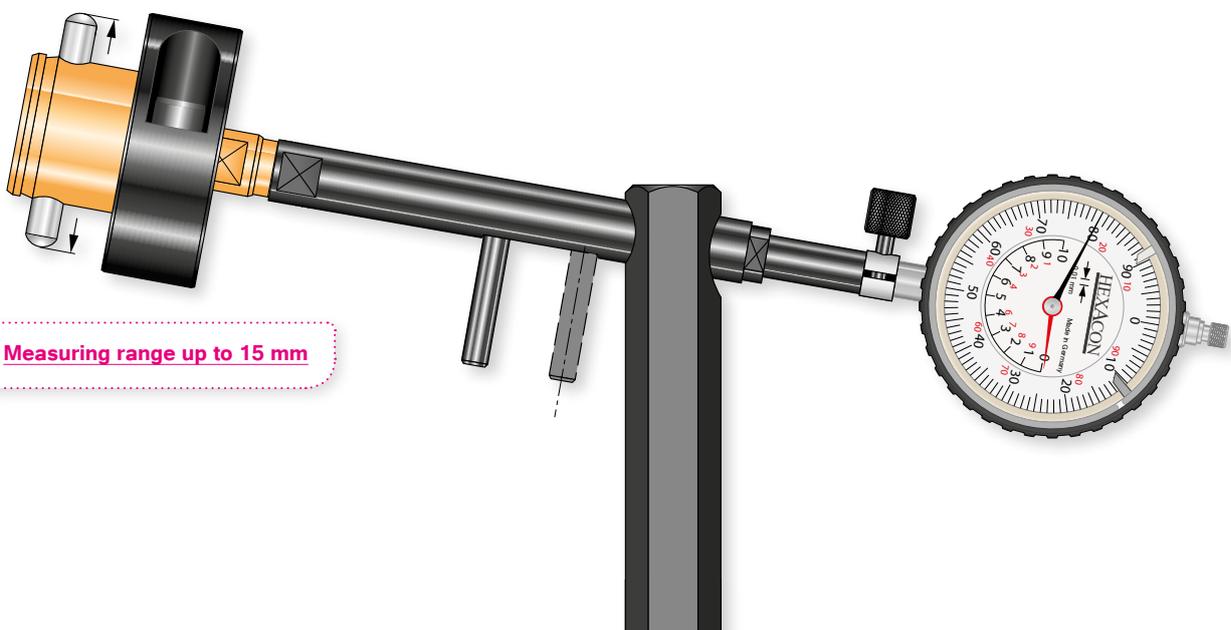
Normal X dim. 15 mm
M10 x 1 mm thread

Measuring set for insertion measuring

PMK-ES · Complete set for insertion measurement
Consisting of: Measuring head, depth stops, pistol handle and dial gauge.

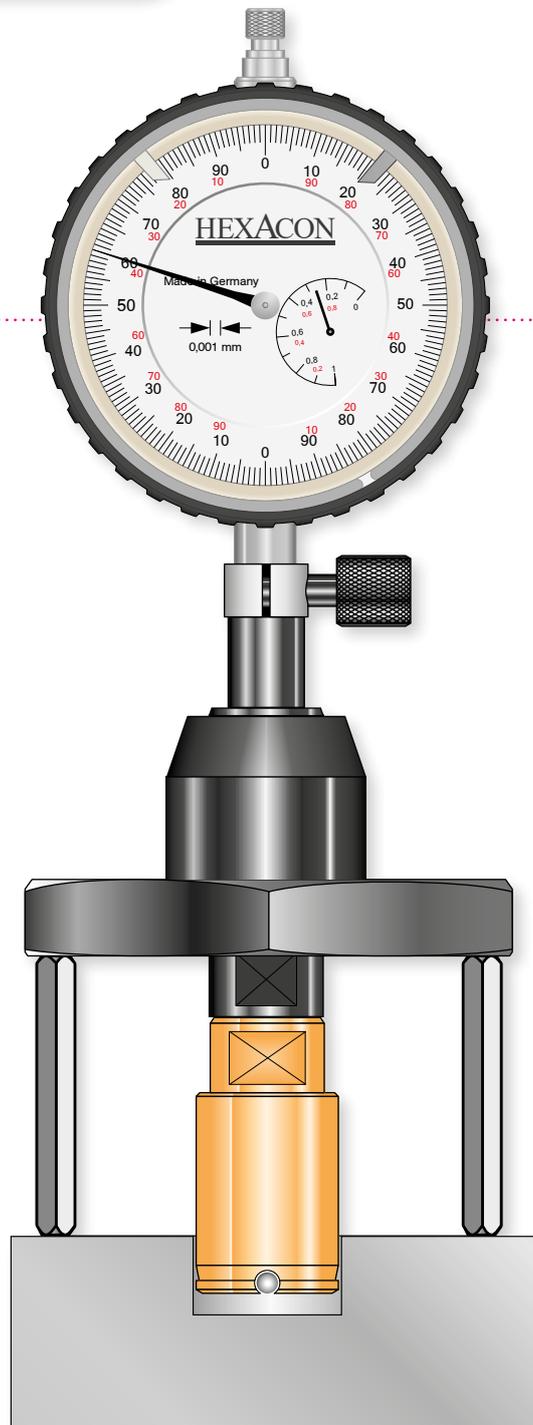
ø 15 mm and up, delivered with X-dimension of 15 mm and M10x1 thread. Diameter differences of up to 15 mm can be measured. Ideal for insertion measurement. Self-centering, with insertion groove. Depth stop clamping ring included in delivery.

Measuring range up to 15 mm



Holders and accessories

System accessories for precision measuring heads



Example application:

PMK measuring head with HM 03-GS-60 holder, MU 01-0001-1
 dial gauge and TA-03 depth stop base body



Dial gauge and accessories for PMK

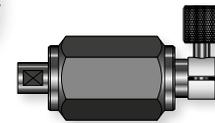
Extensions for dial gauge holder, device stand and measurement stand

- Dial gauge holder for PMK measuring heads
PMK-02 = M6x0.75 mm thread
- Dial gauge holder for PMK measuring heads
PMK-03 = M10x1 mm thread
- Dial gauge holder for heavy or robust dial gauges
- Measurement holder for inductive measuring heads
- Centering holder for automated measurement
- Dial gauge holder in modular measuring system



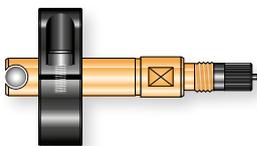
Measurement gauge holder for inductive measuring heads

- Dial gauge holder
- Centering holder

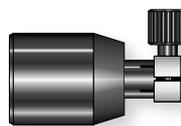


- Extensions for dial gauge holders with drive needle
- Angle pieces for PMK measuring heads
- Depth stop clamping rings for PMK measuring heads
- Depth stops in modular system for PMK

Depth stop clamping ring



TA-02 depth stop



- Dial gauge
- Dial gauge holder
- Angle piece
- Extension
- Measuring head



- Device stand for serial measurement of compact workpieces
- Measurement stands suitable for larger workpieces
- Measurement stand integrated centering holder

- Dial gauge
- Dial gauge holder
- Angle piece
- Depth extension
- Depth stop
- Device stand



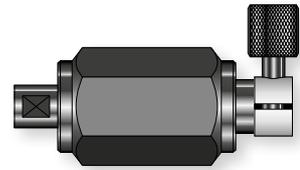
Standard dial gauge holders

HEXAACON

HM-02 dial gauge holders for PMK-02 measuring heads

With \varnothing 8H7 dial gauge connection and knurled screw.

M6 x 0.75 mm thread



HM 02-32

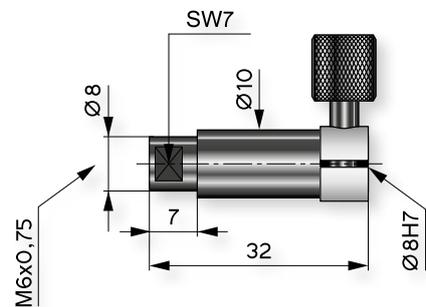
Dial gauge holder

M6 x 0.75 mm thread

HM-02-32 · Dial gauge for PMK-NO-02

Short variant 32 mm length, diameter 10 mm, delivered with M6 x 0.75 mm thread.
Standard dial gauge shaft \varnothing 8mm H7.
For special dial gauges, short.

Order no.: HM-02-32



HM 02-50

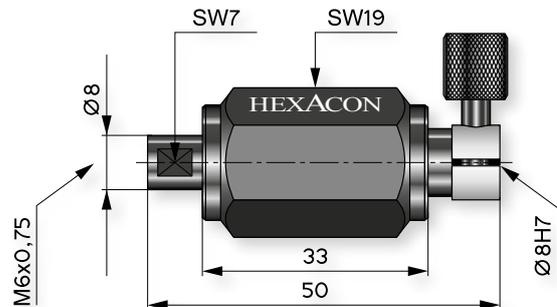
Dial gauge holder

M6 x 0.75 mm thread

HM-02-50 · Standard dial gauge holder for PMK-NO-02

Short variant 50 mm length, diameter 8 mm H7, delivered with M6 x 0.75 mm thread.

Order no.: HM-02-50



HM 02-100

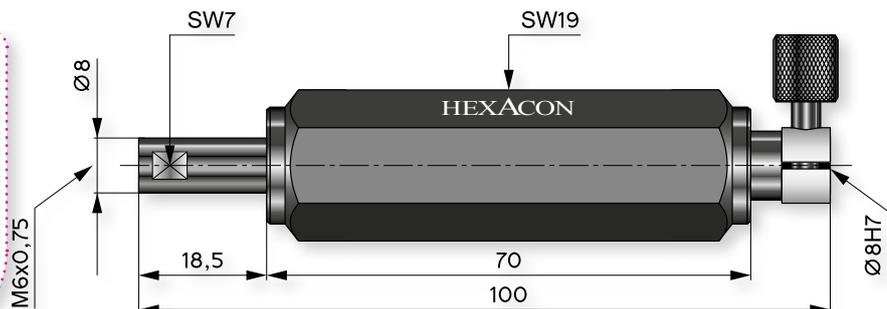
Dial gauge holder

M6 x 0.75 mm thread

HM-02-100 · Standard dial gauge holder for PMK-NO-02

Normal variant 100mm length, diameter 8 mm H7, delivered with M6 x 0.75 mm thread.

Order no.: HM-02-100

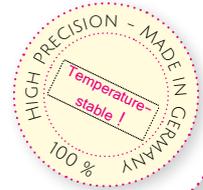


Dial gauge holder for PKM measuring heads of size 02 = M6 thread, 8H7 dial gauge connection.

Suitable for all precision measuring heads in cylindrical, conical, or parallel form with M6x0.75 mm thread.

All variants in stable aluminium housing. With knurled screw.

To avoid falsifying the measurement results due to heat from the hands, the HM-02-150 size **temperature-stable steel (!)** is used.



HM 02-150

Dial gauge holder

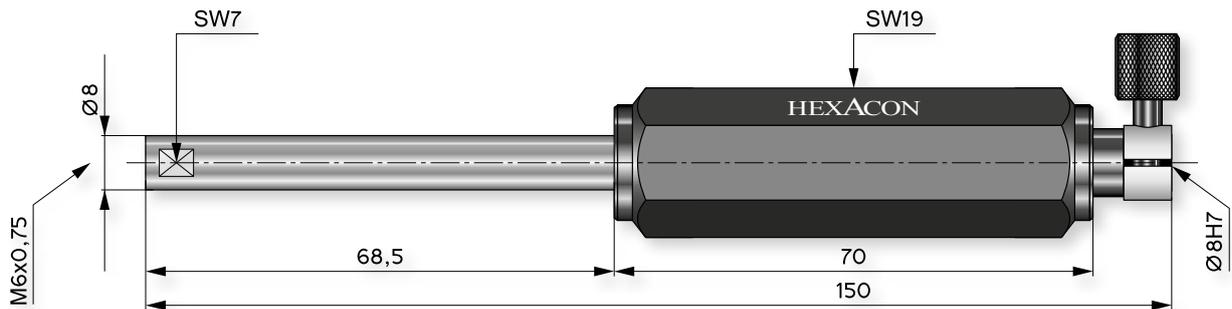
M6 x 0.75 mm thread



HM-02-150 · Standard dial gauge holder for PMK-NO-02

Long variant 150 mm length, diameter 8 mm H7, delivered with M6 x 0.75 mm thread.

Order no.: HM-02-150

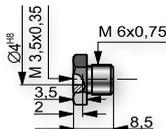


M6x0.75 dial gauge holder

RS 01-02

Thread reducer

RS-01-02 · Thread reducer for the use of measuring heads with M3.5x0.35 mm thread on HM-02 holders or VL-02 extension with M6x0.75 mm thread.



Order no.: RS - 01 - 02

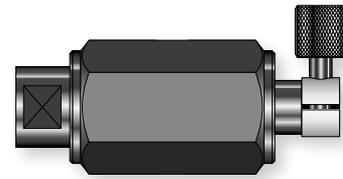
Standard dial gauge holder



Dial gauge holder for PMK-03 meas. heads • M10x1 thread

With \varnothing 8H7 dial gauge connection and knurled screw.

M10x1 mm thread



NEW!

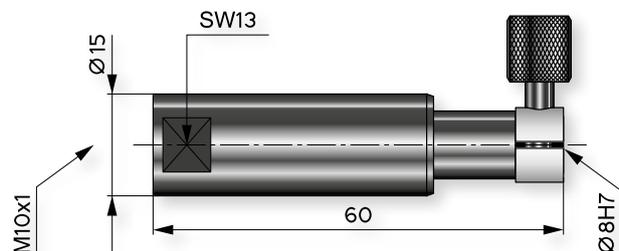
HM 03-GS-60 Dial gauge holder

M10 x 1 mm thread

HM-03-GS-60 • Standard dial gauge holder for PMK-NO-03

Short, round variant 60 mm length, diameter 15 mm, delivered with M10x1 mm thread and knurled screw. The \varnothing 8 mm H7 standard dial gauge shaft is suitable for all types of analog and digital dial gauges and inductive measuring probes.

Order no.: HM-03-GS-60



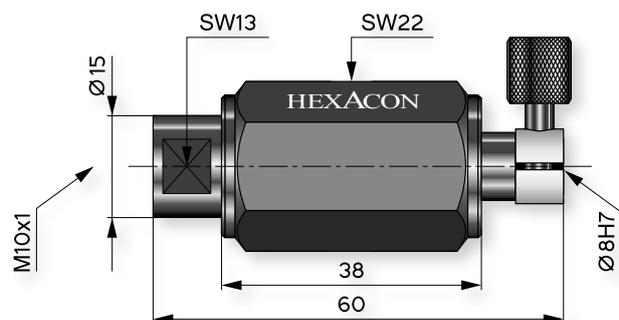
HM 03-60 Dial gauge holder

M10 x 1 mm thread

HM-03-60 • Standard dial gauge holder for PMK-NO-03

Short variant 60 mm length, SW 22 mm, delivered with M10x1 mm thread and knurled screw. The \varnothing 8mm H7 standard dial gauge shaft is suitable for all types of analog and digital dial gauges and inductive measuring probes.

Order no.: HM-03-60

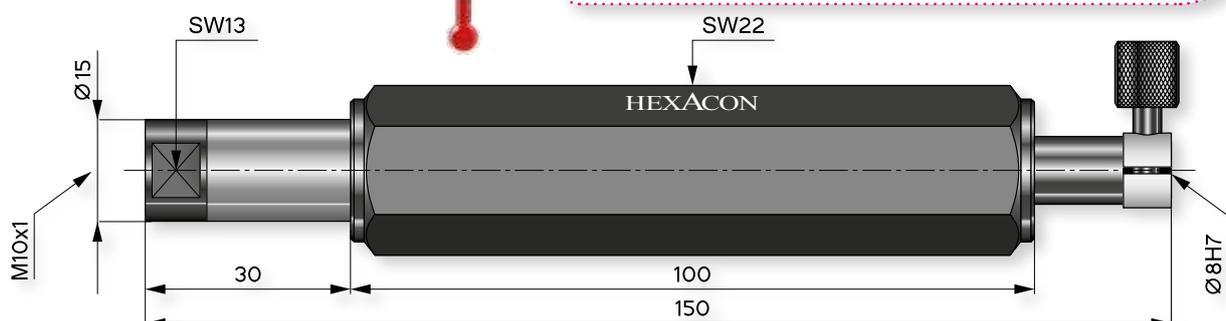


HM 03-150 Dial gauge holder

M10 x 1 mm thread

HM-03-150 • Dial gauge holder

Normal variant 150mm length, SW 22, delivered with M10x1 mm thread. Dial gauge shaft \varnothing 8mm H7. **Order no.: HM-03-150**



Dial gauge holder to hold analog or digital dial gauges and inductive measuring probes with standard 8H7 connection on precision measuring heads with M10x1 mm thread.

All Hexacon dial gauge holders are fabricated of high-quality steel. The model HM-03-150 and HM-03-150-RO are fabricated of **temperature-stable precision steel !**



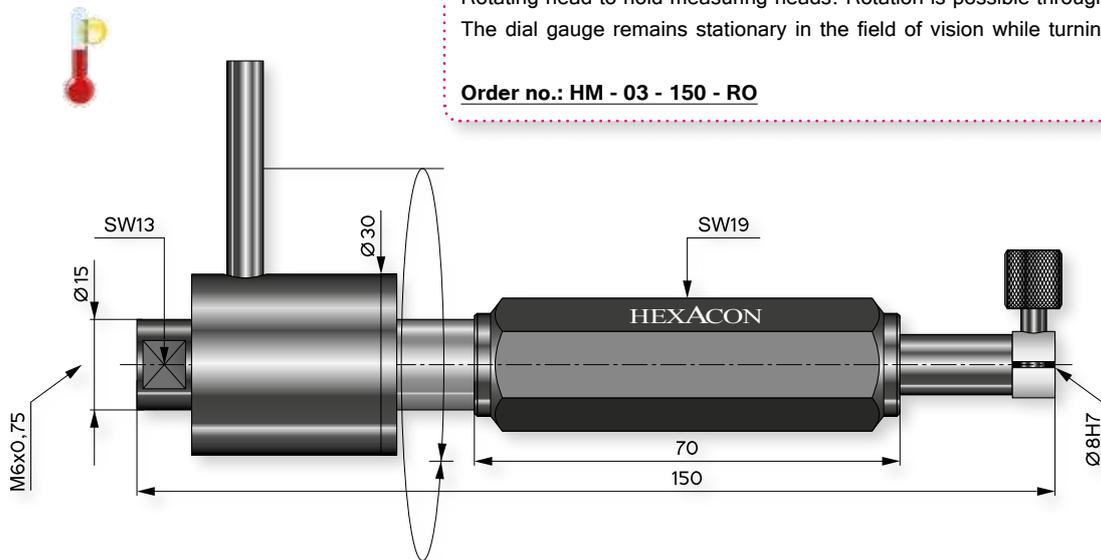
Thread reducers make it possible to use measuring heads with smaller threads such as M6x0.75 mm or M3.5x0.35 mm on holders with M10x1 mm threads, with or without drive pin.

M10 x 1 mm thread

HM 03-150-RO Dial gauge holder · Rotating

PMK special holder: For measuring roundness, ovality, or (with the 3-point PMK) polygonal error on fixed, clamped or heavy workpieces. Rotating head to hold measuring heads. Rotation is possible through 360°. The dial gauge remains stationary in the field of vision while turning.

Order no.: HM - 03 - 150 - RO

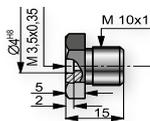


Dial gauge holder for M10x1

RS 01-03 Thread reducer

RS-01-03 · Thread reducer

for the use of measuring heads with M3.5x0.35 mm thread on HM-03-60 holders.

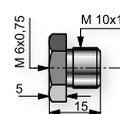


Order no.: RS - 01 - 03

RS 02-03 Thread reducer

RS-02-03 · Thread reducer

for the use of measuring heads with M6x0.75 mm thread on HM-03-60 holders.

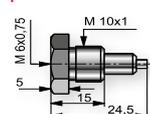


Order no.: RS - 02 - 03

RS 02-03-L Thread reducer

RS-02-03-L · Thread reducer

for the use of measuring heads with M6x0.75 mm thread on HM-03 holders or VL-03 extension 50 mm or longer with drive pin and M10x1 mm thread.



Order no.: RS - 02 - 03 - L

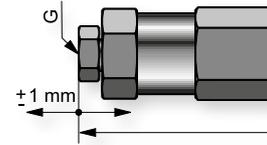
Special dial gauge holder

HEXAACON

Dial gauge holder for heavy or robust dial gauges

With \varnothing 8H7 dial gauge connection.

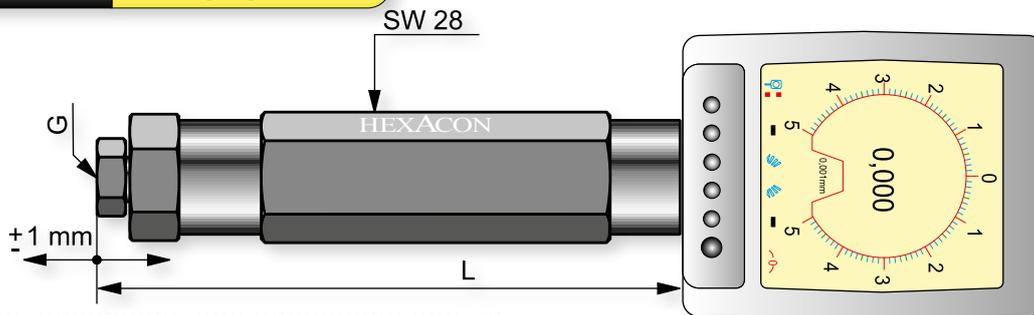
With adjusting nut



M6 x 0.75 mm thread

HA V2

Dial gauge holder



HA-V2 • Holder for heavy or robust dial gauges

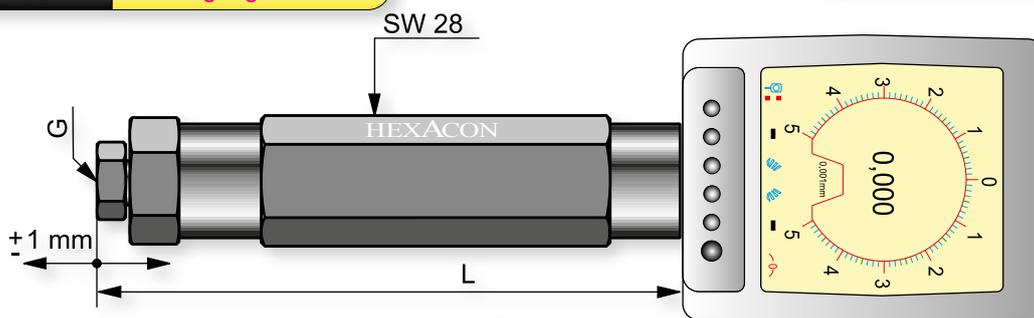
By adjusting the adjusting nut (G), the dial gauge can easily be adjusted. No awkward handling.

Order no.:	Thread (G)	Length
HA - V2 - K	M6 x 0.75 mm	60 mm
HA - V2 - L	M6 x 0.75 mm	140 mm

M10 x 1 mm thread

HA V3

Dial gauge holder



HA-V3 • Holder for heavy or robust dial gauges

By adjusting the adjusting nut (G), the dial gauge can easily be adjusted. No awkward handling.

Order no.:	Thread (G)	Length
HA - V3 - K	M10x1 mm	60 mm
HA - V3 - L	M10x1 mm	140 mm

PMK special dial gauge holder for holding heavy dial gauges and inductive measuring probes.

Suitable for precision measuring heads with M6x0.75 mm or M10x1 mm threads. With standard 8H7 connection. The adjusting nut permits the comfortable, efficient adjustment of dial gauges and measuring probes.

The holders are made of steel, and the housing of aluminium.



Holder for inductive probes

With adjusting nut, \varnothing 8H7 dial gauge connection.

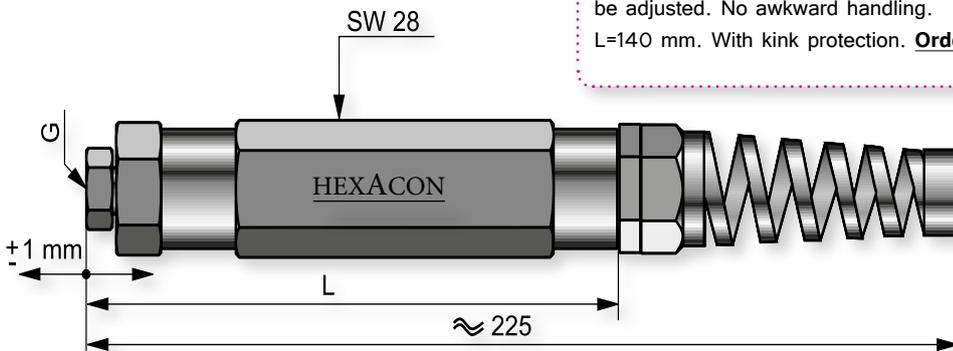
M6 x 0.75 mm thread

HT V2 Holder for inductive probes

HT-V2 · Holder for inductive measuring probes

By adjusting the M6x0.75 adjusting nut (G), the dial gauge can easily be adjusted. No awkward handling.

L=140 mm. With kink protection. **Order no.:** HT-V2



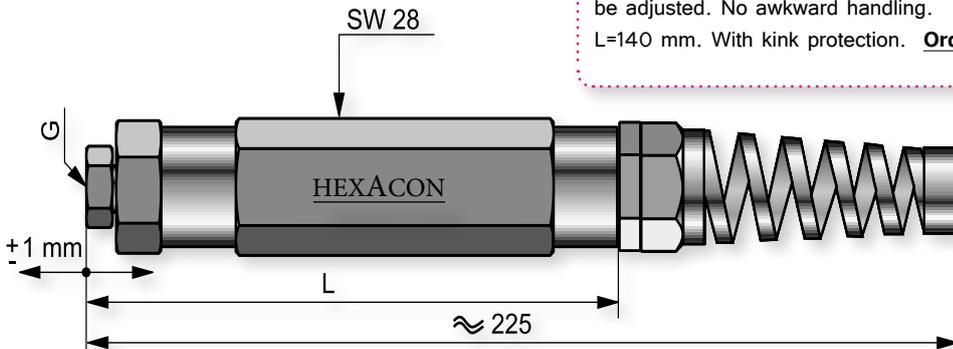
M10 x 1 mm thread

HT V3 Holder for inductive probes

HT-V3 · Holder for inductive measuring probes

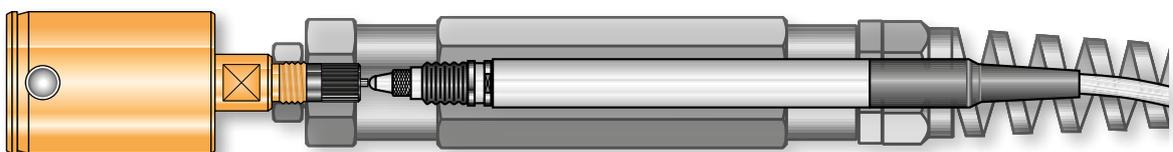
By adjusting the M10x1 adjusting nut (G), the dial gauge can easily be adjusted. No awkward handling.

L=140 mm. With kink protection. **Order no.:** HT-V3



Application example

HT-V2 / HT-V3 · Holder with PMK measuring head and inductive probe.



Special dial gauge holder

Centering holders

HEXAACON

ZH-PMK • Centering holders for automated measurement

With 8mm/H7 dial gauge connection and M6x0.75 mm or M10x1 mm thread.

With adjusting nut



ZH PMK-02-13

ø 13 mm

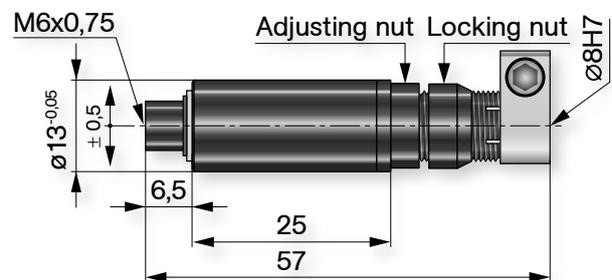
M6 x 0.75 mm thread

ZH-PMK-02-13 • Centering holder with M6x0.75 thread

for automated measurement, ø 13 mm, length 57 mm. Axial freedom of movement ±0.5 mm, clamping ring with Allen screw.

Order no.:

ZH-PMK-02-13



ZH PMK-02-20

ø 20 mm

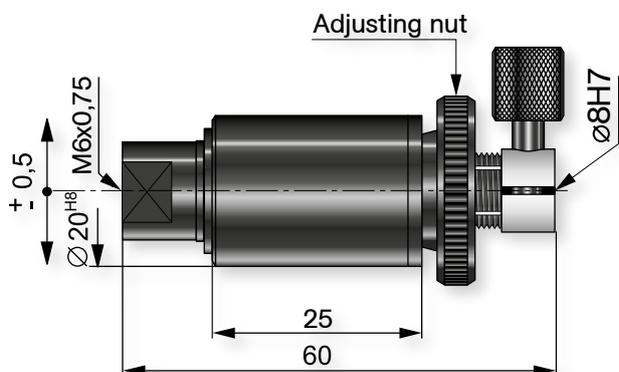
M6 x 0.75 mm thread

ZH-PMK-02-20 • Centering holder with M6x0.75 thread

for automated measurement, ø 20 mm, length 60 mm. Axial freedom of movement ±0.5 mm, clamping ring with knurled screw.

Order no.:

ZH-PMK-02-20



ZH PMK-03-20

ø 20 mm

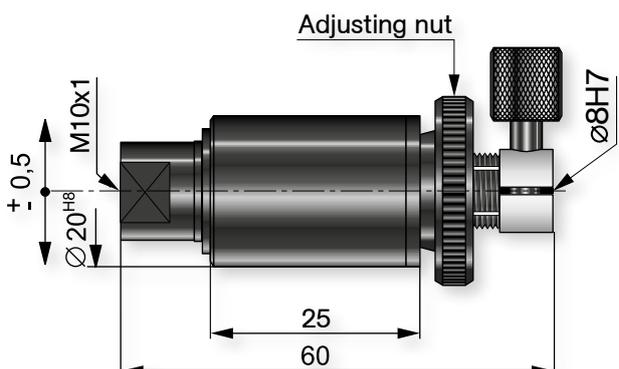
M10 x 1 mm thread

ZH-PMK-03-20 • Centering holder with M10x1 thread

for automated measurement, ø 20 mm, length 60 mm. Axial freedom of movement ±0.5 mm, clamping ring with knurled screw.

Order no.:

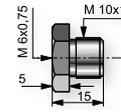
ZH-PMK-03-30



Centering holder for automated measurement compensate for axial errors in centering of the workpiece and prevent damages to both the measuring head and the measurement object.

The axial freedom of movement is ± 0.5 mm. The set nut fastens the play once adjusted. Available with M6x0.75 mm or M10x1 mm threads.

Thread reducers make it possible to use measuring heads with smaller threads such as M6x0.75 mm or M3.5x0.35 mm on holders and float holders with M10x1 mm threads.



ZH PMK-03-30

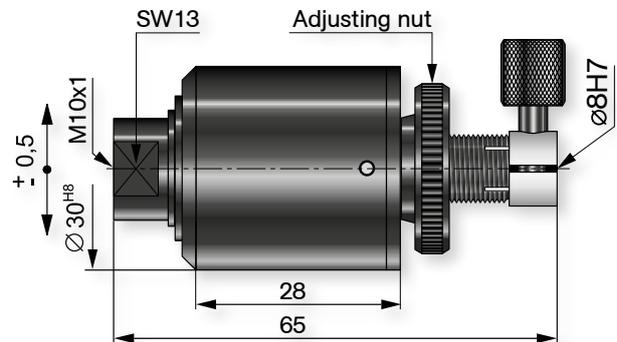
$\varnothing 30$ mm

M10 x 1 mm thread

ZH-PMK-03-30 · Centering holder with M10x1 thread

for automated measurement, $\varnothing 30$ mm, length 65 mm. Axial freedom of movement ± 0.5 mm, clamping ring with knurled screw.

Order no.:
ZH-PMK-03-30



Centering holder

Application examples



ZH-PMK-03-20 · Centering holder with cylindrical PMK measuring head and analog precision indicator.



ZH-PMK-03-20 · Centering holder with chamfered measuring head and analog special dial gauge.



ZH-PMK-03-30 · Centering holder with conical PMK measuring head and digital display with factor setting.

Centering holders

ZH-PMK-VDS • Centering holders for automated meas.

M6x0.75 mm or M10x1 mm threads.

With twist protection

NEW!

ZH PMK-02-VDS

ø 13 mm

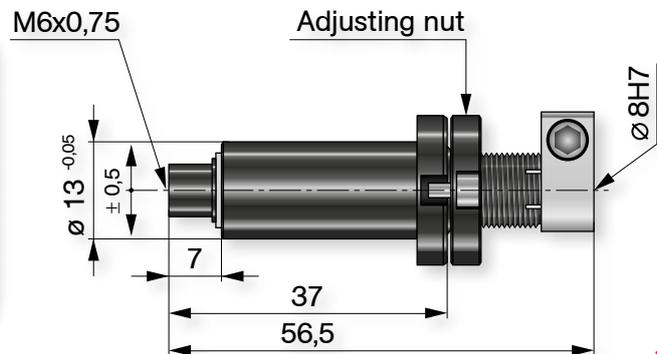
M6 x 0.75 mm thread

ZH-PMK-02-VDS-13 • Centering holder

for automated measurement, with M6x0.75 mm thread, ø 13 mm, length 57 mm. Axial freedom of movement ±0.5 mm, clamping ring with Allen screw.

Order no.:

ZH-PMK-02-VDS-13



NEW!

ZH PMK-03-VDS

ø 20 mm

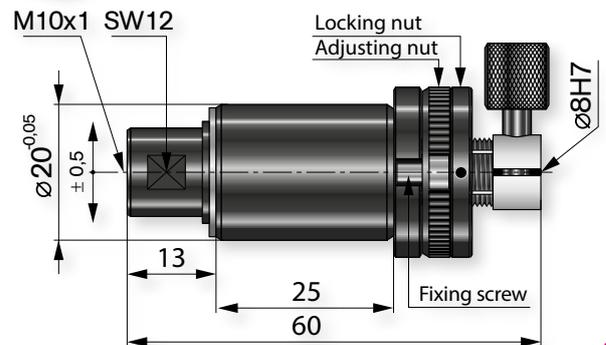
M10 x 1 mm thread

ZH-PMK-03-VDS-20 • Centering holder

for automated measurement, with M6x0.75 mm thread, ø 20 mm, length 60 mm. Axial freedom of movement ±0.5 mm, clamping ring with knurled screw.

Order no.:

ZH-PMK-03-VDS-20



NEW!

ZH PMK-03-VDS

ø 30 mm

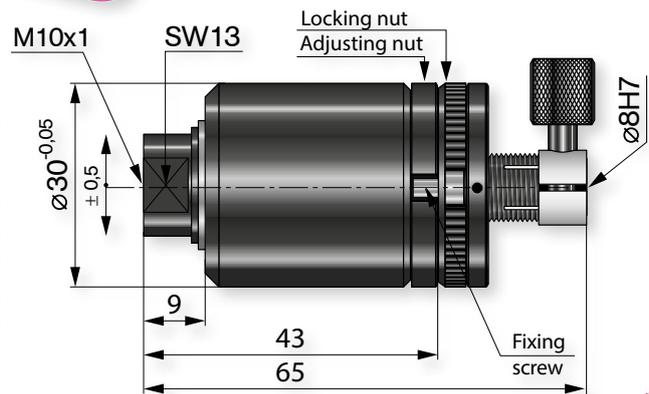
M10 x 1 mm thread

ZH-PMK-03-VDS-30 • Centering holder

for automated measurement, with M6x0.75 mm thread, ø 30 mm, length 65 mm. Axial freedom of movement ±0.5 mm, clamping ring with knurled screw.

Order no.:

ZH-PMK-03-VDS-30

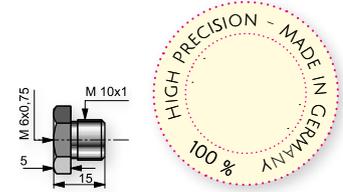


Centering holder for automated measurement compensate for axial errors in centering of the workpiece and prevent damage to both, the measuring head and the measurement object.

The twist protection prevents the display from twisting when the workpiece rotates.

The axial freedom of movement is ± 0.5 mm. The set nut fastens the play once adjusted. Available with M6x0.75 mm or M10x1 mm threads.

Thread reducers make it possible to use measuring heads with smaller threads such as M6x0.75 mm or M3.5x0.35 mm on holders and float holders with M10x1 mm threads.



VDS centering holder

Application examples



ZH-PMK-03-VDS-20 · Center. holder
with cylindrical PMK meas. head and analogue precision indicator.



ZH-PMK-03-VDS-20 · Center. holder
with chamfered meas. head and analogue special dial gauge.



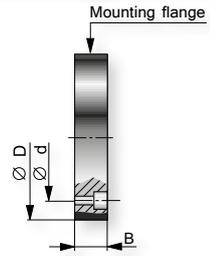
ZH-PMK-03-VDS-20 · Center. holder
with conical PMK measuring head and digital display with factor setting.

Centering holders

HEXAACON

ZH-LKM • PMK centering holders

M10 x 1 mm thread

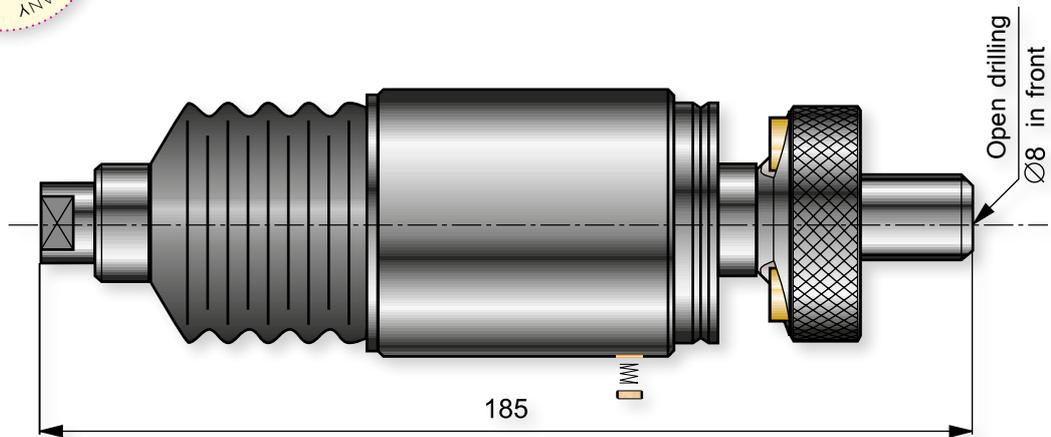


ZH LKM-03-50 Centering holder

ZH-LKM-03-50 centering holder, for mounting in automatic feed units, available with ZH-FL mounting flange for installation in system parts and air measuring heads.

Other functions and dimensions like the ZH-PMK-03-50-L centering holder.

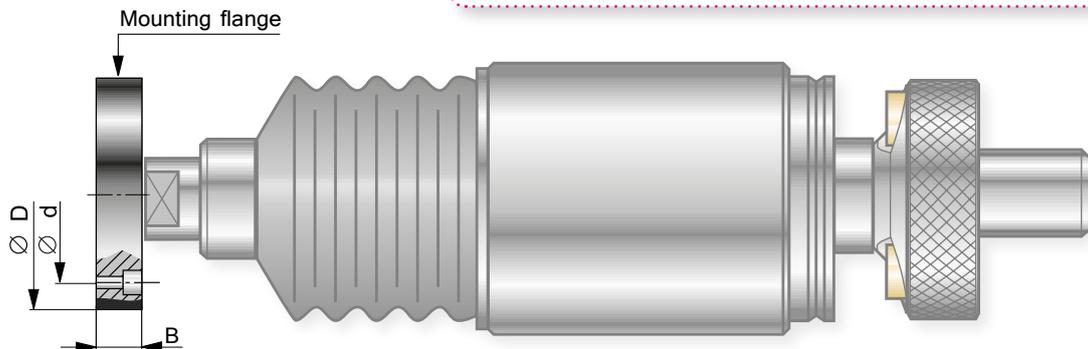
Order no.: ZH - LKM - 03 - 50



ZH MFL Mounting flange

ZH-MFL mounting flange, for holding of ZH-LKM-03-50 centering holder. Specify D, d, and B when ordering.

Order no.: ZH - MFL



Modular measuring systems

Dial gauge holders for custom setup,

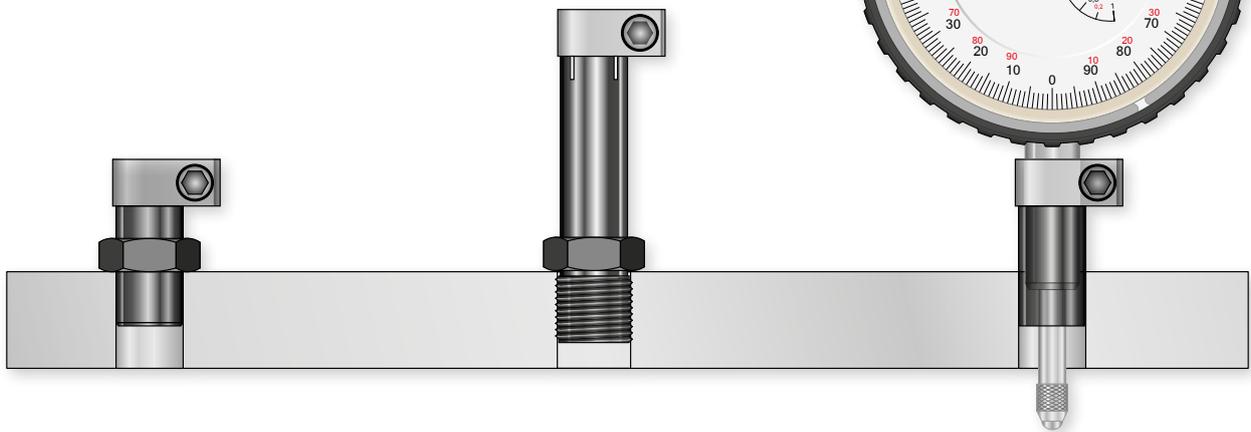
without drive needle. For clamping, gluing, or screw fastening.

HEXAACON

Ø8H7



Modular measuring systems • Mechanism setup



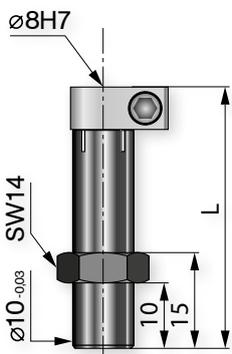
MB-DR-25

MB-GS-50

MB-30

MB • DR

Dial gauge holder



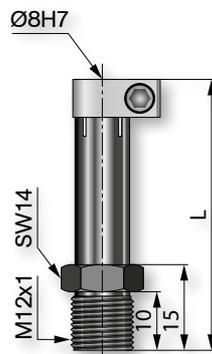
MB-DR • Dial gauge holder for clamping

for holding dial gauges and inductive measuring probes.

Order no.	Length	Order no.	Length
MB-DR-25	25mm	MB-DR-30	30mm
MB-DR-50	50mm	MB-DR-75	75mm
MB-DR-100	100mm		

MB • GS

Dial gauge holder



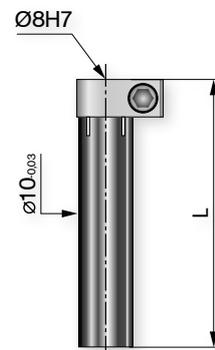
MB-GS • Dial gauge holder for screw fastening

to hold dial gauges and inductive measuring probes.

Order no.	Length	Order no.	Length
MB-GS-25	25mm	MB-GS-30	30mm
MB-GS-50	50mm	MB-GS-75	75mm
MB-GS-100	100mm		

MB

Dial gauge holder



MB • Dial gauge holder for clamping

for holding dial gauges and inductive measuring probes.

Order no.	Length	Order no.	Length
MB-20	20mm	MB-25	25mm
MB-30	30mm	MB-50	50mm
MB-75	75mm	MB-100	100mm

The modular measuring system offers helpful elements for the designer.

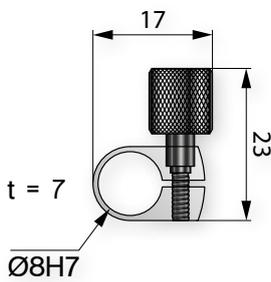
in the measuring setup. The variety of types for screw or adhesive fastening, with or without stop, can be used for many applications.

The holders are provided by default with a clamping ring with Allen screw SW 2,5 mm. Starting from a length of 30 mm they are also available with **double clamping rings** or **knurled screw M3**.



MB KS-RS

Clamping ring



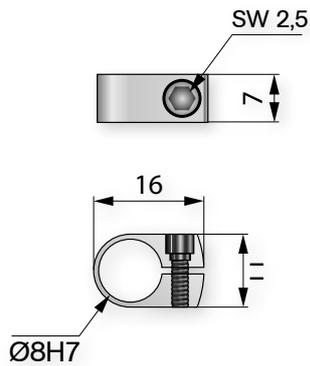
MB-KS-RS • Clamping ring with knurled screw

Note: The standard holder has only one clamping ring !

Order no.: MB-KS-RS

MB KS

Clamping ring



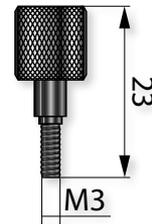
MB-KS • Clamping ring with Allen screw SW 2,5 mm

Note: The standard holder has only one clamping ring !

Order no.: MB-KS

MB RS-M3

Knurled screw



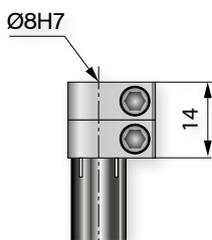
MB-RS-M3 • Knurled screw • M3

Note: The standard holder has only one clamping ring !

Order no.: MB-RS

MB • KS-2

Double clamping ring



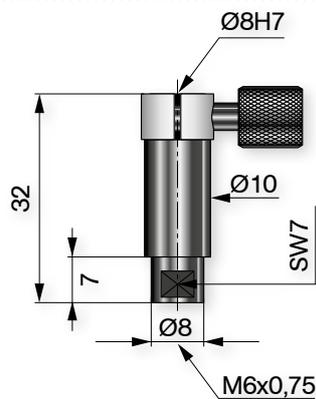
MB-KS-2 • Double clamping rings with Allen screw, SW 2,5 mm

Note: The standard holder has only one clamping ring !

Order no.: MB-30-KS-2

HM • 02-32

Dial gauge holder



HM-02-32 • Standard dial gauge holder

with knurled screw, 32 mm length, ø 10 mm, delivered with M6 x 0.75 mm thread. Standard dial gauge shaft. Ø 8mm/H7.

Order no.: HM-02-32

Depth extensions

HEXAACON

Extensions for dial gauge holders with drive needle

M6x0.75 mm and M10x1 mm threads.

Up to 250 mm in length

Extensions of
80 mm and up
temperature-stable



M6 x 0.75 thread

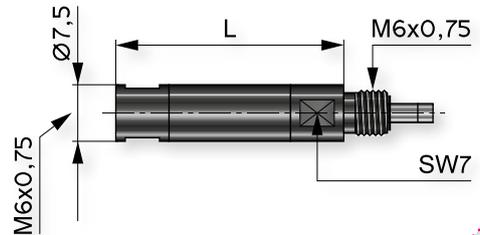
VL 02-7.5

Depth extension

VL - 02 - 7.5 · Standard depth extension for PMK-NO-02

Short, round variant 20 mm to 65 mm in length, \varnothing 7.5 mm, delivered with M6 x 0.75 thread.

Length	Order no.
20 mm	VL-02-20-7.5
30 mm	VL-02-30-7.5
40 mm	VL-02-40-7.5
50 mm	VL-02-50-7.5
65 mm	VL-02-65-7.5



M6 x 0.75 thread

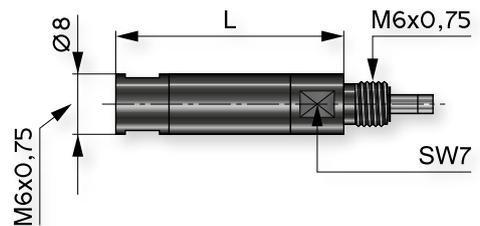
VL 02

Depth extension

VL - 02 · Standard depth extension for PMK-NO-02

Short, round variant 20 mm to 65 mm in length, \varnothing 8 mm, delivered with M6 x 0.75 thread.

Length	Order no.
20 mm	VL-02-20
30 mm	VL-02-30
40 mm	VL-02-40
50 mm	VL-02-50
65 mm	VL-02-65



M6 x 0.75 thread

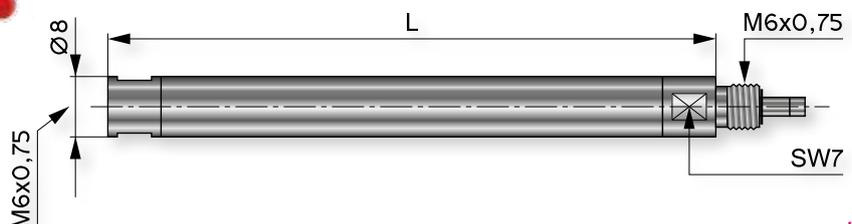
VL 02

Depth extension

VL - 02 · Temperature-stable depth extension for PMK-NO-02

Variant from 80 to 250 mm in length, diameter 8 mm, delivered with M6 x 0.75 thread.

Length	Order no.
80 mm	VL-02-80
100 mm	VL-02-100
125 mm	VL-02-125
150 mm	VL-02-150
250 mm	VL-02-250



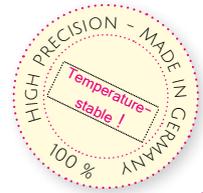
Depth extensions for measurement of deep holes from 20 mm to 250 mm length.

Model VL-02 with M6x0.75 mm thread is suitable for all PMK-02 measuring heads and holders in HM-02 size - M6x0,75 mm.

Model VL-03 with M10x1 mm thread is suitable for all PMK-03 measuring heads and holders in HM-03 size - M10x1 mm.

Multiple extensions can be combined.

Lengths up to 65 mm are fabricated from tool steel. For lengths of 80 mm and up, we use exclusively **temperature-stabilized steel**. This influences the measurement result from for example the heat of hands only to a very slight extent. The drive pin is fabricated from hardened steel.



Thread reducers permit the use of measuring heads with smaller threads on larger holders and extensions.

M10 x 1 mm thread

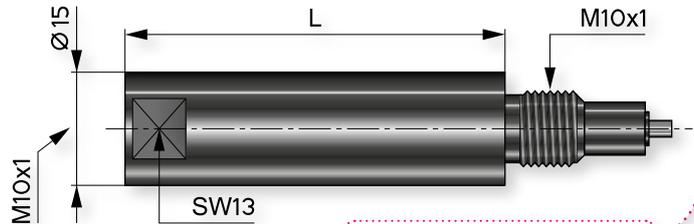
VL 03

Depth extension

VL - 03 · Standard depth extension for PMK-NO-03

Short variant 50 mm length, ø 15 mm, delivered with M10 x 0.1 mm thread.

Length	Order no.
50 mm	VL-03-50
65 mm	VL-03-65



M10x1 mm thread

VL 03

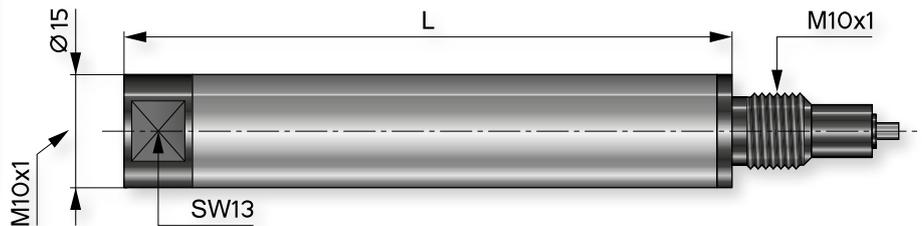
Depth extension

VL - 03 · Temperature-stable depth extension for PMK-NO-03

Variant from 80 to 250 mm in length, ø 15 mm, delivered with M10 x 0.1 mm thread.



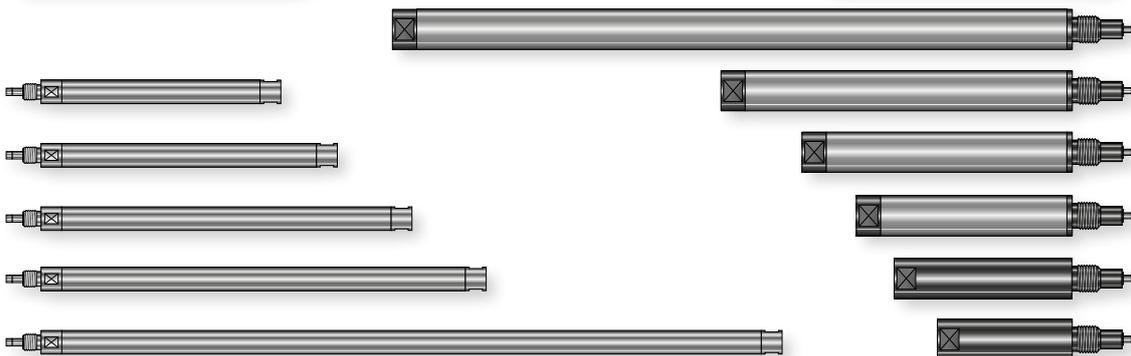
Length	Order no.
80 mm	VL-03-80
100 mm	VL-03-100
125 mm	VL-03-125
150 mm	VL-03-150
250 mm	VL-03-250



VL-02 Depth extension with M6x0,75 mm thread

VL-02 Depth extension M10x1 mm thread

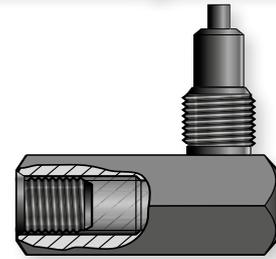
80 mm and up



80 mm and up

Angle extensions

HEXAACON



PMK WS angle pieces for PMK measuring heads

With M6x0.75 mm or M10x1 mm threads.

Modular system

WS - 02

Angle piece

WS-02 · 90° angle piece for PMK-02

with M6x0.75 mm thread. square body.

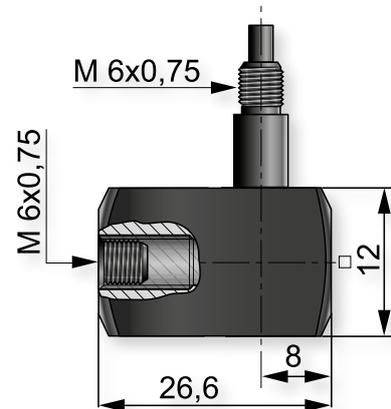
12 mm wrench size.

Can be combined with HM-02 measuring gauge holder.

Can be combined with VL-02 depth extensions.

Ordering example: WS - 02

M6 x 0.75 mm thread



WS - 03

Angle piece

WS-03 · 90° angle piece for PMK-03

with M10x1 mm thread. Hexagonal body.

17 mm wrench size.

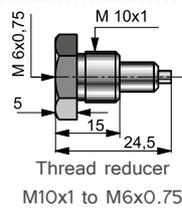
Can be combined with HM-03 measuring gauge holder.

Can be combined with VL-03 depth extensions.

Can be combined with GS device stands.

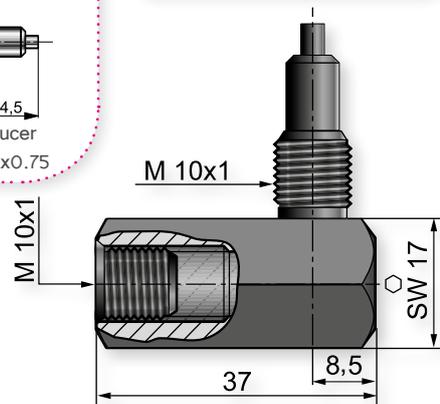
Can be combined with TA depth stops.

Ordering example: WS - 03



Thread reducer
M10x1 to M6x0.75

M10 x 1 mm thread



WS SO-02

PMK and angle piece

WS-SO-02 · 90° angle piece with PMK-02 meas. head

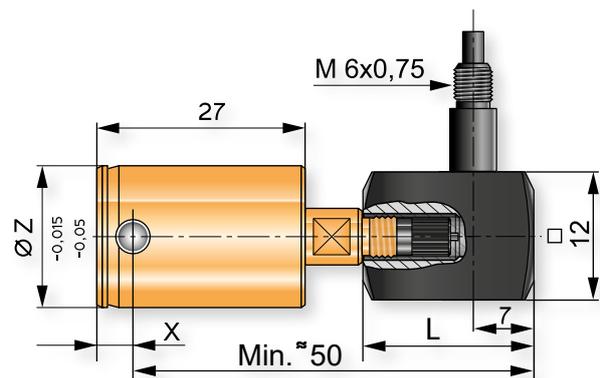
with M6x0.75 mm thread. Square body, 12mm wrench size

PMK-02 measuring head and angle piece are delivered as an integrated unit. L depends on the individual variant.

Cannot be unmounted.

Ordering example: WS - 02 - SO

M6 x 0.75 mm thread



Angle pieces WS for PMK measuring heads in the modular system, also for use in device stands.

As hand-held measuring instruments, they are used to improve readings in difficult-to-reach measurement positions.

Combination option: Can be combined with VL depth extensions.

Combination option: Can be combined with GS device stands. (in combination with VL depth extensions)

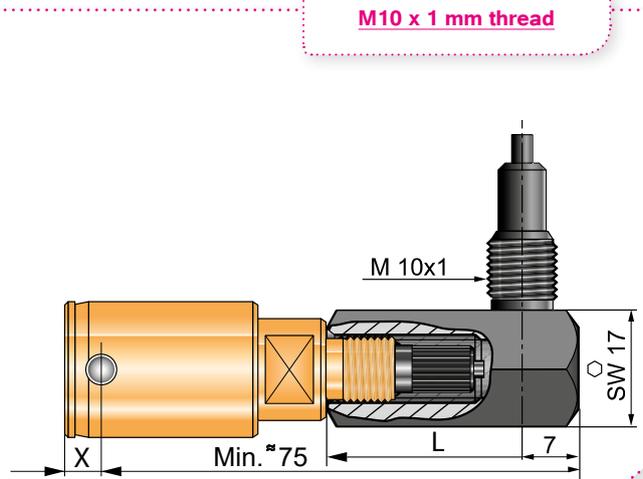
Combination option: Can be combined with TA depth stops. (in combination with VL depth extensions)



WS SO-03 PMK and angle piece

WS-SO-03 · 90° angle piece with PMK-02 meas.head with M10x1 mm thread. Hexagonal body, 17 mm wrench size. **PMK-03 measuring head and angle piece are delivered as an integrated unit.** L depends on the individual variant. Cannot be unmounted.

Ordering example: WS - 03 - SO



M10 x 1 mm thread

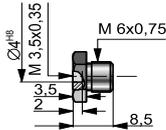
Angle pieces

Thread reducers

RS 01-02 Thread reducer

RS-01-02 thread reducer

For the use of measuring heads with M3.5x0.35 mm thread on HM-02 holders.



Order no.: RS - 01 - 02

WS-03 angle extension

with GS device stand, VL-03 depth extension and TA-03 depth stop **in modular system.**

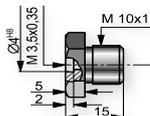
TIPP!



RS 01-03 Thread reducer

RS-01-03 thread reducer

for the use of measuring heads with M3.5x0.35 mm thread on HM-03-60 holders.

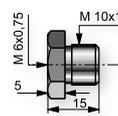


Order no.: RS - 01 - 03

RS 02-03 Thread reducer

RS-02-03 thread reducer

for the use of measuring heads with M6x0.75 mm thread on HM-03-60 holders.

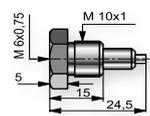


Order no.: RS - 02 - 03

RS 02-03-L Thread reducer

RS-02-03-L thread reducer

for the use of measuring heads with M6x0.75 mm thread on HM-03 holders or VL-03 extension **50 mm or longer with drive pin** and M10x1 mm thread.



Order no.: RS - 02 - 03 - L

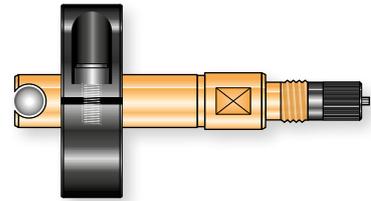
Depth stop clamping rings

HEXAACON

TA-KR • Depth stops for PMK measuring heads

Permits measurements in defined hole depths.

Adjustable



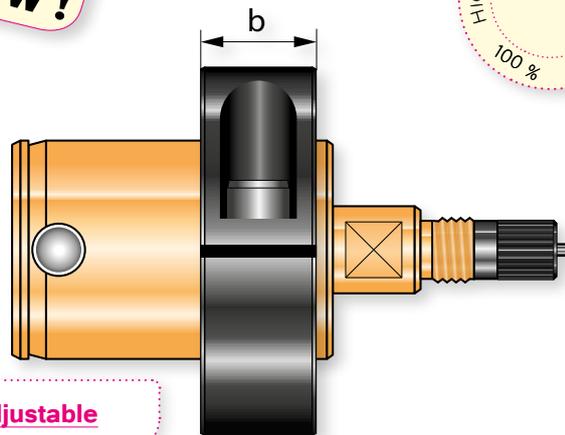
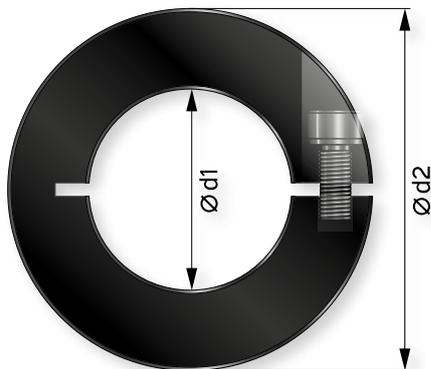
TA-KR-V depth stop clamping ring. The adjustable steel Hexacon depth stop clamping rings are specially fabricated to fit the individual dimensions of your PMK and are mounted on the body of the PMK measuring head. Their position on the measuring head is variably adjustable to permit measurements at defined hole depths. Inner bore and flat surface are fabricated in a single clamping step. The back is marked with a V notch. Measurement errors due to the tilt effect during measurement are avoided by precision guiding at a right angle.

Clamping rings represent an easy-to-use, robust, flexible solution as an adjustable depth stop. The clamping rings are fabricated of burnished, unhardened steel. Standard inner diameters are available from 6–85 mm. Other dimensions upon request.

The inner bore is about 0.1mm less than the nominal diameter of the measuring head.

TA-KR-V Depth stop clamping ring

NEW!



Adjustable

TA-KR-V depth stop clamping ring

d1 (mm)	d2 (mm)	b (mm)	d1 (mm)	d2 (mm)	b (mm)
6–8	16	9	30–34	54	15
7–9	18	9	34–38	57	15
9–11	24	9	38–42	60	15
11–13	28	11	42–48	73	19
13–15	30	11	48–55	78	19
15–17	34	13	55–60	82	19
17–19	36	15	60–65	88	19
19–21	40	15	65–70	93	19
21–23	42	15	70–75	98	19
23–26	45	15	75–80	103	19
26–30	48	15	80–85	108	19

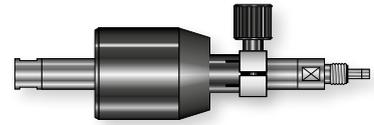
Depth stops

TA-02 depth stops for PMK-02 measuring heads · Bell form

Permits measurements in defined hole depths.

Adjustable

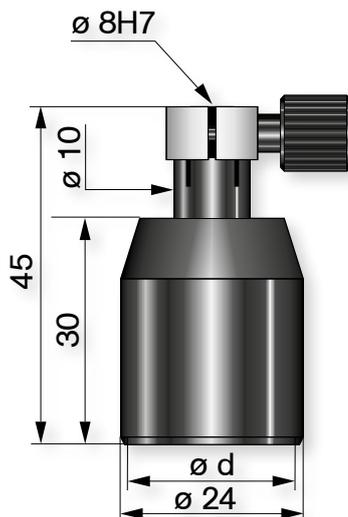
HEXAACON



TA 02 - 45 Depth stop bell

For VL-02 extension

NEW!



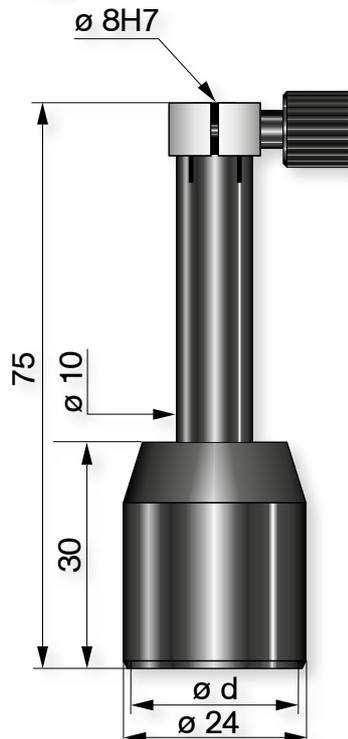
TA-02-45 depth stop

can be clamped to VL-02 extension
Specify inner diameter when ordering.
Order no.: TA-02-45

TA 02 - 75 Depth stop bell

For VL-02 extension

NEW!



TA-02-75 depth stop

can be clamped to VL-02 extension
Specify inner diameter when ordering.
Order no.: TA-02-75

TA 02 - 45 Depth measuring

Example application:

NEW!



TA-02-45 as depth measuring head

with several dial gauges and dial gauge extensions on request.
Order no.: TM-02-45

TA-02 depth stop · bell form The adjustable Hexacon depth stops can be clamped on VL-02 depth extensions. Their position on the extension is variably adjustable to permit measurements at defined hole depths.

Measurement errors are also prevented by the precision guiding at a right angle.

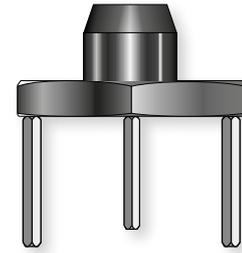
Depth stops represent an easy-to-use, robust, flexible solution as an adjustable depth stop. The clamping rings are fabricated of unhardened steel. **Lengths from 45-75 mm are available.**

Other dimensions upon request.



Depth stops

HEXAACON

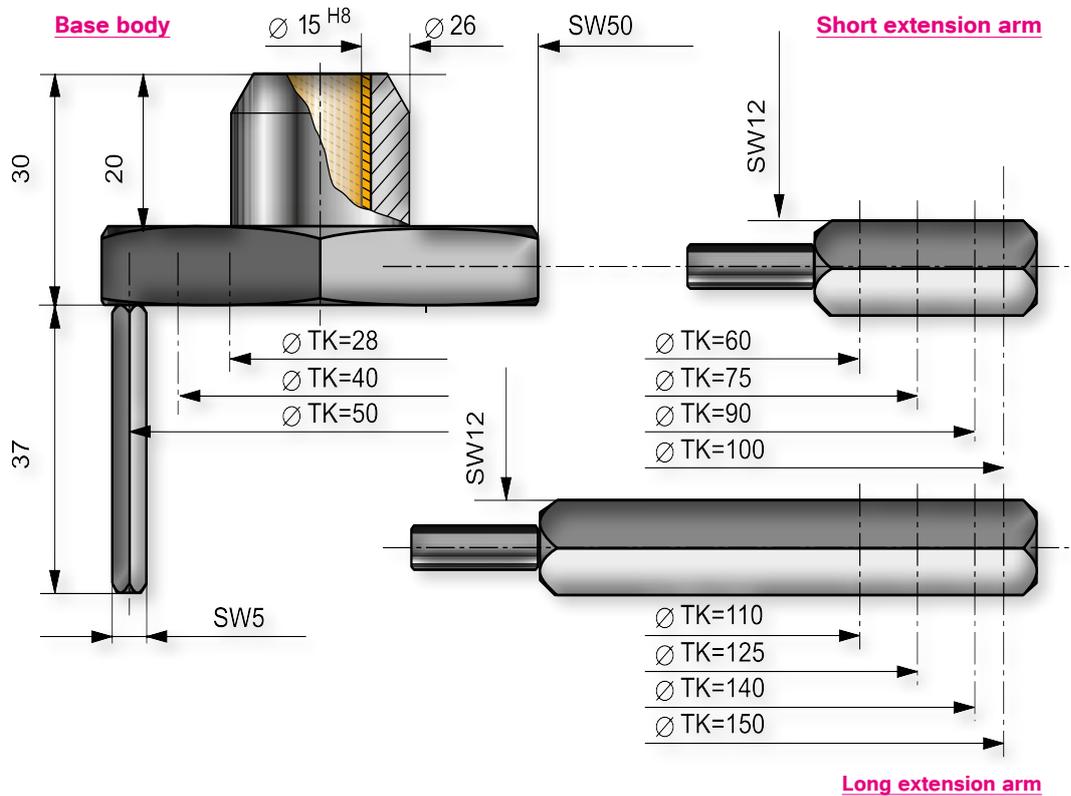


Depth stops for hole measuring heads in a modular system

Can be combined with different extension arms and [GS device stand](#).

TA - 03

Depth stops



Depth stops in the modular system.

The TA-03 base body can be converted using the TA-03-A1 and TA-03-A2 extension arms to support larger arcs from \varnothing 28 mm to 150 mm.

Depth stops for PMK,

can be clamped to: - HM holder - 03 - 150
- VL extension - 03

Order no.:

TA - 03	- Base body	- \varnothing TK 28 - 50 mm
TA - 03 - A1	- Short extension arm	- \varnothing TK 60 - 100 mm
TA - 03 - A2	- Long extension arm	- \varnothing TK 110 - 150 mm

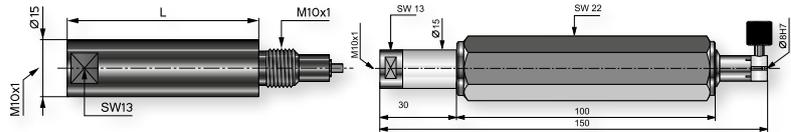
Depth stops in a modular system permit flexible applications for measuring workpieces at a defined depth, both at through holes, near the bottom of the hole, and in blind holes.

The hexagonal **TA-03 base body** as three arc diameters of \varnothing 28 mm, \varnothing 40 mm, and \varnothing 50 mm and can be clamped and adjusted on the **HM-03-150 holder** and the **VL-03 extensions** in lengths from 50 to 255 mm.

Three included spacer bolts are screwed into the base body at one of the three diameters and hold the measurement object at the optimum distance.

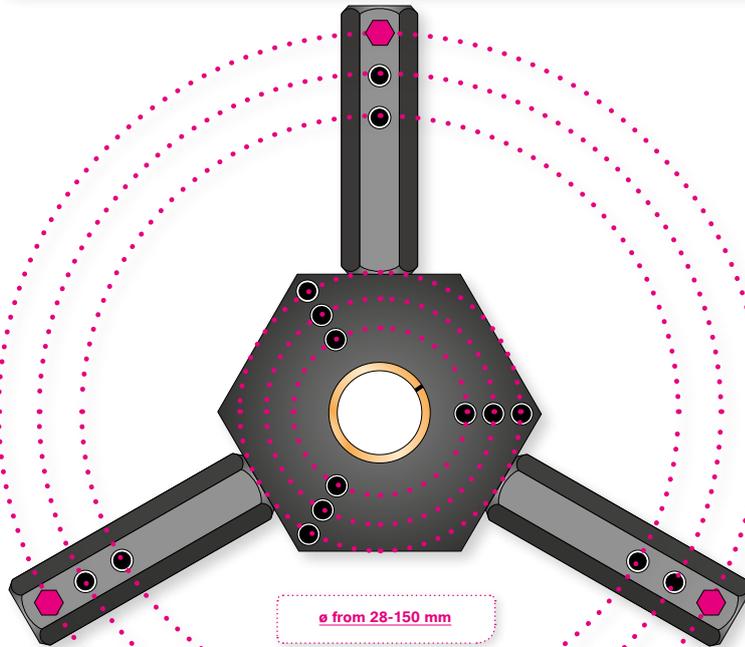
The TA-03-A1 and TA-03-A2 extension arms can be used to extend the hole diameter flexibly from \varnothing 60-100 mm and \varnothing 110-150 mm.

VL 03 Depth extension



VL-03-65 Extension

HM-03-150 Holder



Length:	Order no.:
50 mm	VL-03-50
65 mm	VL-03-65

Temperature-stable steel

Length:	Order no.:
80 mm	VL-03-80
100 mm	VL-03-100
125 mm	VL-03-125
150 mm	VL-03-150
250 mm	VL-03-250



Depth stops

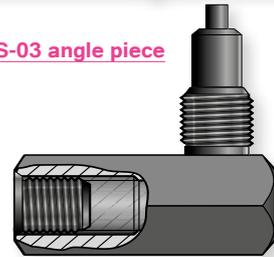
Device stands

GS device stands - for the series meas. of compact workpieces

Up to 6 stands can be combined.

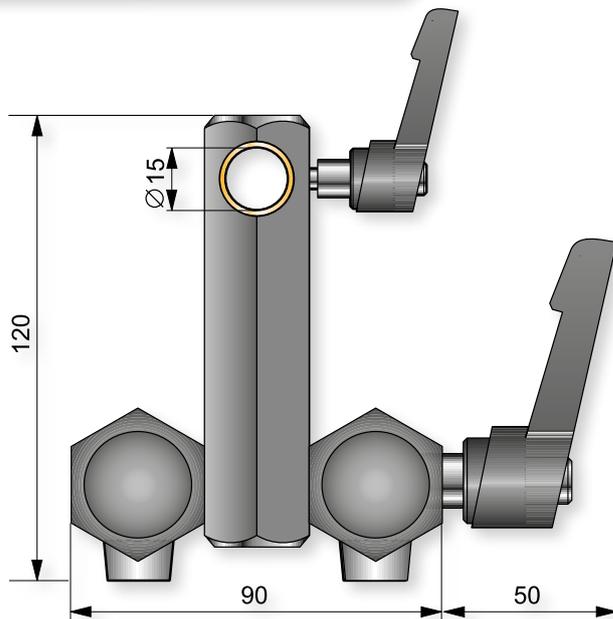
HEXAACON

WS-03 angle piece



GS PMK-1

Device stand



Technical data:

Workpiece Ø: max. 170 mm
 Workpiece height: max. 280 mm
 L x W x H: about 200 x 150 x 500 mm

Order number: GS-PMK-1

TIPP!



HM-03-GS-60 dial gauge holder

can be combined with the GS device stand.

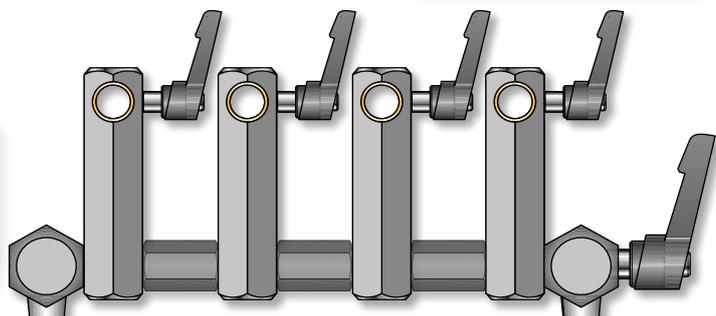
Gauge display here is in the horizontal orientation.

GS PMK-4

Device stands

GS-4 device stand:

The GS device stand can be extended upon request to up to 6 measurement points.



Extensible to up to 6 points!

GS device stands for PMK measuring heads.

The use of the device stand simplifies handling significantly during stationary measurement.

The combination of holders, extensions, angle pieces, and depth stops permits individual, flexible applications for the rational measurement of smaller parts. The device stand for PMK can be extended to up to 6 points !

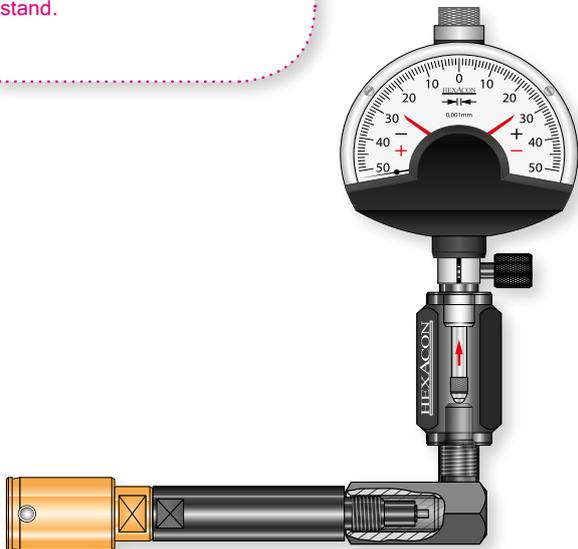
Extension with multiple stands elements into one unit permits measurements with different measuring heads in one compact measuring stand unit.



Device stands

Application example

WS-03 angle piece, with VS-03 depth extension and HM-03-60 dial gauge holder completes the GS-PMK device stand.



Application example

VL-03 depth extension with TA-03 depth stop, WS-03 angle piece and HM-03-60 dial gauge holder round out the device stand to form a comfortable measuring station. Dial gauge in **vertical orientation**.



Measurement stands

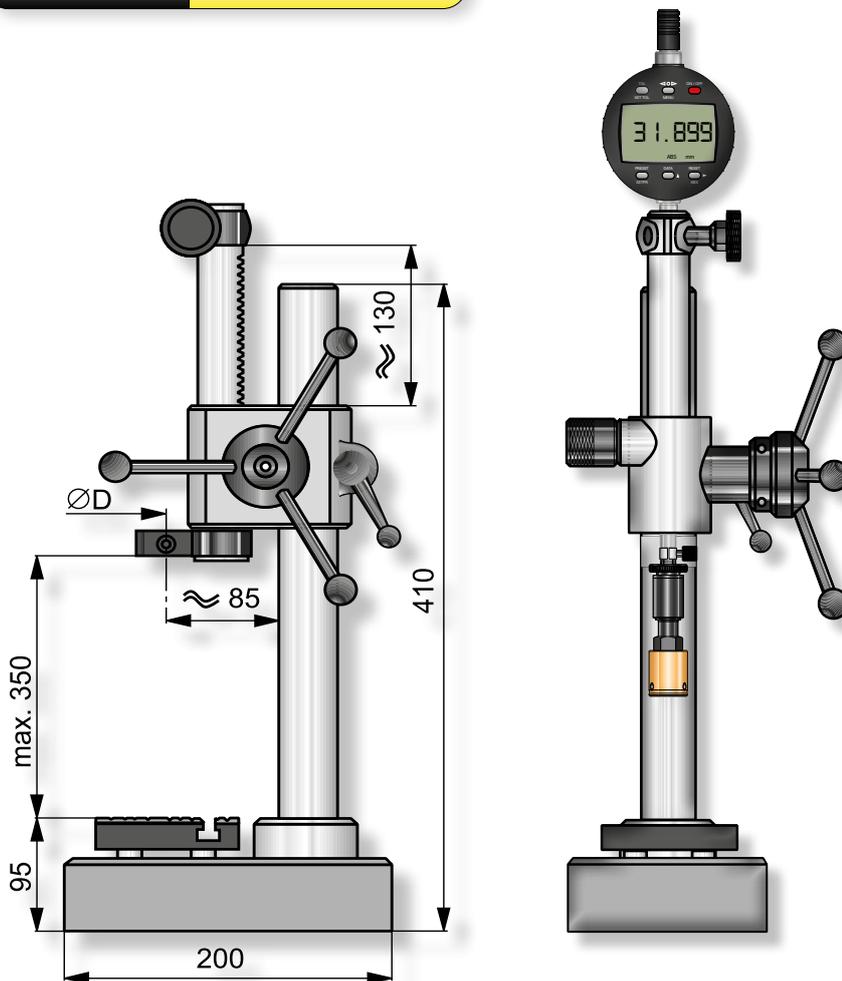
HEXACON

Measurement stands suitable for larger workpieces

permits effective series hole measurement and chamfer measurement.

UMS - 1

Measurement stand



TIPP!

Special variants:

Longer measurement columns as well as modified drives are possible.

Ceramic measurement table upon request.

ZH-PMK-03-60 meas. gauge holder



Centering holders simplify the centered insertion of the measuring head into the workpiece.

UMS-1 universal measurement stand

The UMS-1 is perfect for measurement tasks on larger workpieces. Simple handling is possible in combination with our precision measuring heads and chamfer measuring heads. Dial gauge holders or floating holders to hold mechanical or electronic distance sensors can be included.

Technical data:

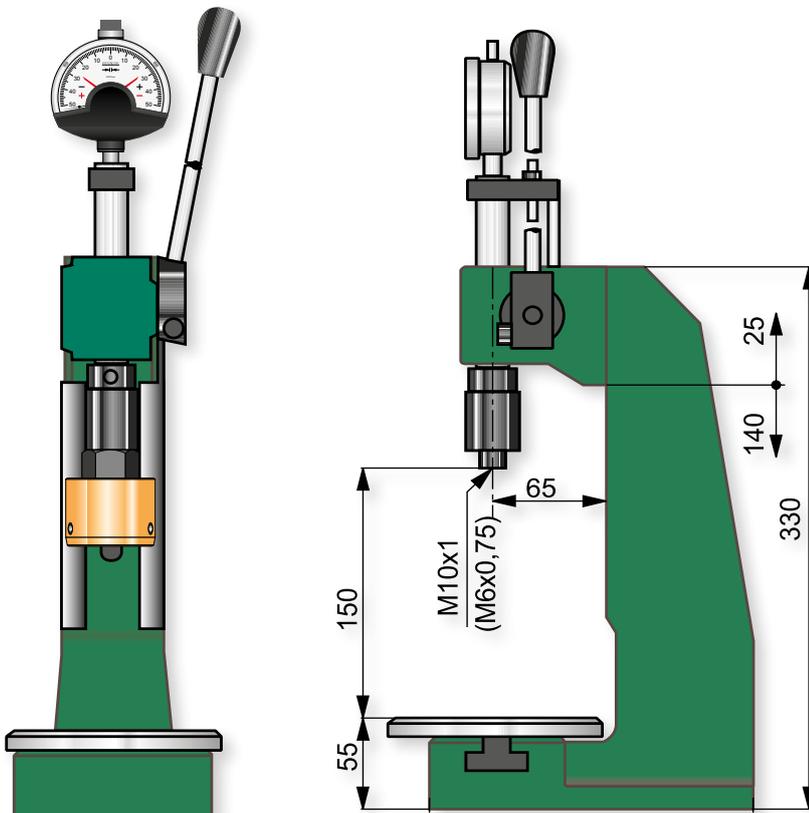
Workpiece Ø: max. 170 mm
Workpiece height: max. 280 mm
L x W x H: about 200 x 150 x 500 mm

Order number: UMS - 1

UMS-2 universal measurement stand

The UMS-2, in combination with the different PMK measuring heads, is perfect for measurements in the μ range. The fully new concept of the measurement axis in the feed axis with the integrated centering holder largely eliminates measurement and angle errors due to unloading. The centering holder (included standard) can be blocked or released for radial floating. The stable, rigid design also permits reliable depth measurement.

UMS - 2 Measurement stand



Standard accessory:

Measurement table \varnothing 125 mm

Centering holder with floating axis compensation.

Depth stop to limit measurement depth.
Interchangeable stand head for other stands.

Ceramic measuring table upon request.

Workpiece \varnothing max. 140 mm

Technical data:

Workpiece \varnothing : max. 140 mm

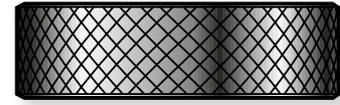
Workpiece height: max. 130 mm

Measuring head holder: M10 x 1 / M6 x 0.75 · Weight about 10 kg

Order number: UMS - 2

Adjustment rings

HEXAACON



Adjustment rings with nominal DIN 2250 C standard dimensions.

Adjustment rings compliant with DIN 2250 C standard dimensions

Adjustment rings / control rings made of first-class gauge steel, hardened, tempered, grounded and finely lapped. The adjustment rings are labeled with the actual dim. Tolerance for the hole is JS4.

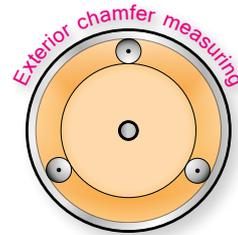
Adjustment rings DIN 2250-C

Ausführung	Nenndurchmesser d1	Baumaße						
		b1	b2	d2	d3	e	k	
	1 - 2,5	4		22				
	> 2,5 - 3							
	> 3 - 5	5						
	> 5 - 6							
	> 6 - 10	8		32				
	> 10 - 15	10		38				
	> 15 - 18							
	> 18 - 20	12		45				
	> 20 - 25	14		53				
	> 25 - 30							
	> 30 - 32	16		63				
	> 32 - 40	18		71				
	> 40 - 50			85				
	> 50 - 60	20		100				
	> 60 - 70			112				
> 70 - 80	24		125					
> 80 - 90			140					
> 90 - 100			160					
	> 100 - 110		14	170	132	113	3	
	> 110 - 120				180	140		
	> 120 - 130	28	16		190	150		4
	> 130 - 140				200	160	14	
	> 140 - 150		18		212	170		
	> 150 - 160				224	180	15	5
	> 160 - 170		20		236	190	16	
	> 170 - 180				250	200	17	
	> 180 - 190	32			265	212	18,5	
	> 190 - 200		22		280	224	20	6
	> 200 - 212				300	236	22	
	> 212 - 224		25		315	250	24	
	> 224 - 236				335	265	26	7
	> 236 - 250				355	280		
	> 250 - 265		28		375	300	27,5	8
> 265 - 280		36		400	315			
> 280 - 300			32	425	335	32,5		
> 300 - 315				450	355	35	9	

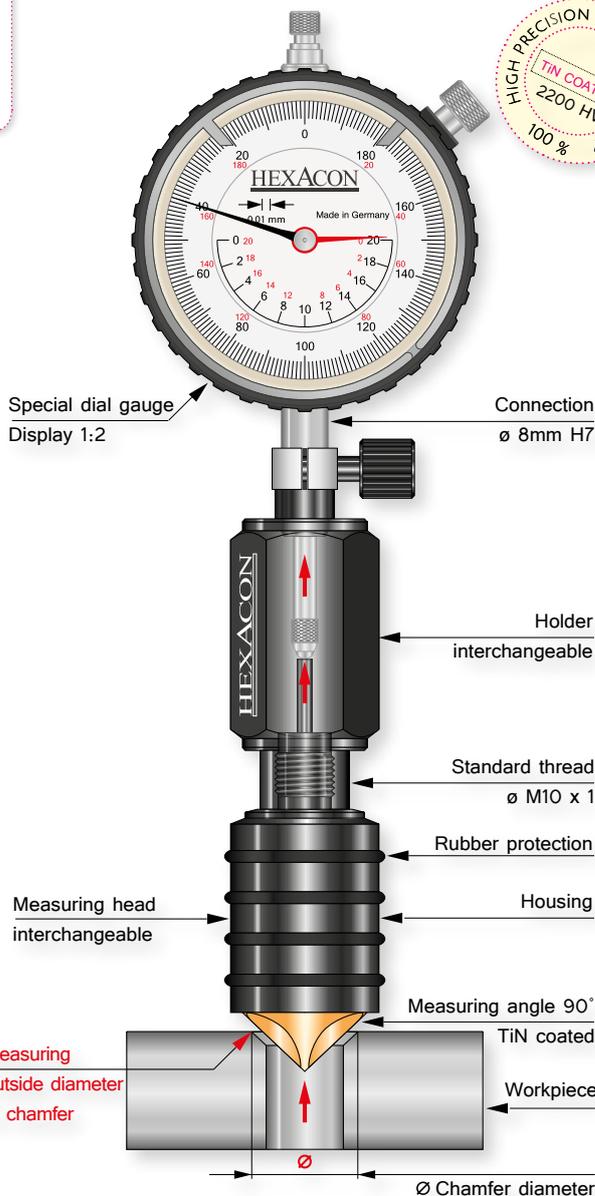
Chamfer measurement

Functional principle of chamfer measurement

HEXAACON



Display resolution 0.01 mm



Precision interior and exterior chamfer measuring instruments with titanium nitride coating.

We offer interior and exterior chamfer measuring instruments with measuring angles of 90°, 60° and 127° in standard variants.

They are suitable for quick precision measurement of chamfers, depressions and holes, both for one-time measurement or for series measurement.

Their wide measuring range of up to 20 mm is a great advantage.

In their purely mechanical measuring principle, the measuring cone probes the chamfer, depression or hole and directs the force within the housing onto a hardened, ground drive needle and then to the display.

A dial gauge holder connects the measuring head to corresponding displays such as analog or digital dial gauges, inductive measuring probes, measuring columns, or automated computer measuring systems.

The removable HM-03-60 dial gauge holders are included in the standard scope of delivery and permit the flexible handling of different measuring heads.

For example, at 90° measuring angles, measuring heads of different sizes as well as interior and exterior measuring heads can easily be swapped while still using the same holders, gauges, or measuring systems.

The quality-improving titanium nitride coating, with high hardness values - about 2200 HV - and outstanding sliding and friction characteristics, is included in the standard scope of delivery at no extra cost. It gives our precision metrology equipment its outstanding service life.

Other measuring angles upon request.

All Hexacon metrology equipment 100% Made in Germany

The special dial gauges with 1:2 display scale for 90° measuring angles conveniently show the size of the outer diameter of the chamfer directly in millimeters! That eliminates conversion and reading errors. The dial gauges are equally suitable for either interior or exterior measurement. We offer these special dial gauges for precision measuring heads with diameters from 0.5 to 80 mm, each with a 20 mm measuring range.

The special analog dial gauge with 1/100 mm display accuracy and a 20 mm measuring range is included in the standard scope of delivery with all 90° measuring heads!

TIPP!

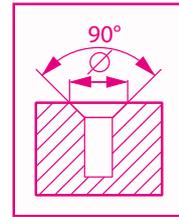
Chamfer measuring 90°

Interior chamfer measuring instruments for 90° chamfers

Standard variant including holder and gauge.

Measuring range 20 mm

HEXAACON



Principle: Cone

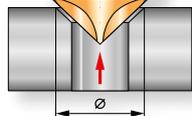
FM SB-01 90° Ø 0.5 – 20 mm

FM SB-02 90° Ø 20 – 40 mm

The special dial gauge displays the result of the chamfer directly in mm!



Clamping shaft
Ø 8h7mm

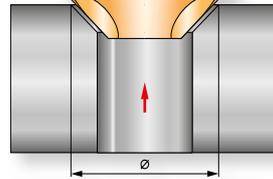


Dial gauge included

The special dial gauge displays the result of the chamfer directly in mm!



Clamping shaft
Ø 8h7mm



Dial gauge included

Precision interior chamfer measuring instrument with titanium nitride coating.

Interior chamfer measuring instruments with a 90° measuring cone quickly and accurately measure the largest diameter of chamfers, depressions and holes. Their measuring accuracy is 0.01 mm.

The special analog dial gauge included, with its 1:2 scale division, shows the result of the largest chamfer diameter directly in mm with no conversion needed. The display accuracy is 0.01 mm. The special dial gauge is suitable for interior or exterior cone measuring instruments with 90° measuring angles.

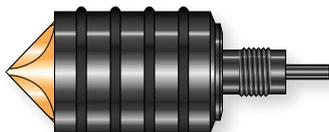
The HM-03-60 dial gauge holder, also included, is removable to permit its use and combination with other components in our accessory line.

Particularly convenient is not only the large measuring range of about 20 mm, but also the long service life of the measuring head thanks to the titanium nitride treatment.

Measuring range:	Cone:	Order no.:	Measuring range:	Cone:	Order no.:
Ø 0.5- 20	90°	FM-SB-01	Ø 60 - 80	90°	FM-SB-04
Ø 20 - 40	90°	FM-SB-02	Ø 80 - 100	90°	FM-SB-05
Ø 40 - 60	90°	FM-SB-03	Ø 100 - 120	90°	FM-SB-06

The special dial gauge is included in the standard scope of delivery up to a 80 mm diameter! The dial gauge holder is always included in the delivery.

The special dial gauges and holders are identical for interior and exterior measurement of the same size at 90°, and the measuring heads are interchangeable.



TIPP!

Precision exterior chamfer measuring instrument with titanium nitride coating.

Standard exterior chamfer measuring instruments with 90° measuring angles are used for quick precision measurement of the diameter of exterior chamfers and shaft ends. Their wide measuring range of about 20 mm is a great advantage.

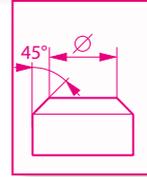
For all 90° variants up to a diameter of 80 mm, the measuring head, special dial gauge and dial gauge holder are provided together as a kit! For larger diameters, we recommend digital dial gauges with a factor setting.



Exterior chamfer measuring instruments for 90° chamfers

Standard variant includes holder and analog gauge.

Principle:



Bell

FM FB-01 90°

Ø 5 - 20 mm

FM FB-04 90°

Ø 60 - 80 mm

The special dial gauge displays the result of the chamfer directly in mm!



Clamping shaft
Ø 8h7mm

Dial gauge included

For larger diameters of over 80 mm, we recommend digital dial gauges with a factor setting!



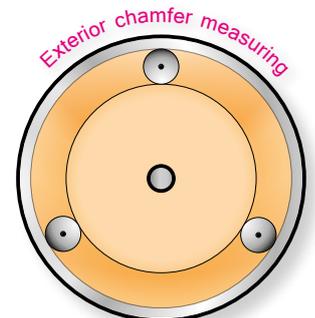
Clamping shaft
Ø 8h7mm

Dial gauge not included

Digital dial gauge not included in scope of delivery.

Measuring range:	Cone:	Order no.:	Measuring range:	Cone:	Order no.:
Ø 15 - 20	90°	FM-FB-01	Ø 60 - 80	90°	FM-FB-04
Ø 20 - 40	90°	FM-FB-02	Ø 80 - 100	90°	FM-FB-05
Ø 40 - 60	90°	FM-FB-03	Ø 100 - 120	90°	FM-FB-06

For comparative measurements a reference workpiece or configuration master is required!



Chamfer measuring 90°

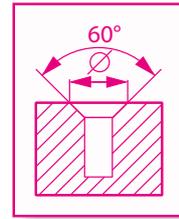
Chamfer measuring 60°

Interior chamfer measuring instruments for 60° chamfers

Standard variant including holder.

Measuring range 10 mm

HEXAACON



Principle: Cone

FM SA-01 60° Ø 0.5 - 12 mm

FM SA-04 60° Ø 30 - 41 mm

The HM-03-60 dial gauge holder is included!

NEW!



Dial gauge not included

The HM-03-60 dial gauge holder is included!

NEW!



Dial gauge not included

Precision interior chamfer measuring instrument with titanium nitride coating.

Interior chamfer measuring instruments with a 90° measuring cone quickly and accurately measure the largest diameter of chamfers, depressions and holes. Their measuring accuracy is 0.01 mm.

The HM-03-60 dial gauge holder, also included, is removable to permit its use and combination with other components in our accessory line.

Particularly convenient is not only the large measuring range of about 20 mm, but also the long service life of the measuring head thanks to the titanium nitride treatment.

Measuring range:	Cone:	Order no.:	Measuring range:	Cone:	Order no.:
Ø 0.5- 12	60°	FM-SA-01	Ø 60 - 71	60°	FM-SA-07
Ø 10 - 21	60°	FM-SA-02	Ø 70 - 81	60°	FM-SA-08
Ø 20 - 31	60°	FM-SA-03	Ø 80 - 91	60°	FM-SA-09
Ø 30 - 41	60°	FM-SA-04	Ø 90 - 101	60°	FM-SA-10
Ø 40 - 51	60°	FM-SA-05	Ø 100 - 111	60°	FM-SA-11
Ø 50 - 61	60°	FM-SA-06	Ø 110 - 121	60°	FM-SA-12

The dial gauge holder is always included in the delivery. The special dial gauge is not included!

TIPP!

The special dial gauges and holders are identical for interior and exterior meas. of the same size at 60°, and the measuring heads are interchangeable.



Precision exterior chamfer measuring instrument with titanium nitride coating.

Standard exterior chamfer measuring instruments with 60° measuring angles are used for quick precision measurement of the diameter of exterior chamfers and shaft ends. Their wide measuring range of about 10 mm is a great advantage.

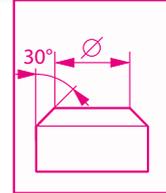


For all 60° variants we recommend digital dial gauges with a factor setting.

Exterior chamfer measuring instruments for 60° chamfers

Standard variant includes holder.

Principle:



Bell

FM FA-01 60° **Ø 5 - 12 mm**

FM FB-04 60° **Ø 60 - 80 mm**

For all 60° variants we recommend digital dial gauges with a factor setting.

NEW!



The HM-03-60 dial gauge holder is included !

For all 60° variants we recommend digital dial gauges with a factor setting.

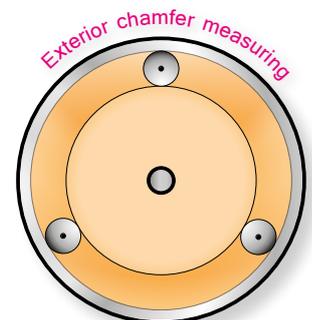
NEW!



The HM-03-60 dial gauge holder is included !

Measuring range:	Cone:	Order no.:	Measuring range:	Cone:	Order no.:
Ø 5 - 12	60°	FM-FA-01	Ø 60 - 71	60°	FM-FA-07
Ø 10 - 21	60°	FM-FA-02	Ø 70 - 81	60°	FM-FA-08
Ø 20 - 31	60°	FM-FA-03	Ø 80 - 91	60°	FM-FA-09
Ø 30 - 41	60°	FM-FA-04	Ø 90 - 101	60°	FM-FA-10
Ø 40 - 51	60°	FM-FA-05	Ø 100 - 111	60°	FM-FA-11
Ø 50 - 61	60°	FM-FA-06	Ø 110 - 121	60°	FM-FA-12

For comparative measurements a reference workpiece or configuration master is required.



Chamfer measuring 60°

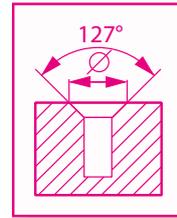
Chamfer measuring 127°

Interior chamfer measuring instruments for 127° chamfers

Standard variant including holder.

Measuring range 20 mm

HEXAACON



Principle: Cone

FM SC-01 127° Ø 0.5 - 20 mm

FM SC-02 127° Ø 20 - 40 mm

For all 127° variants we recommend digital dial gauges with a factor setting.

NEW!



Clamping shaft Ø 8h7mm

The HM-03-60 dial gauge holder is included!

Dial gauge not included

For all 127° variants we recommend digital dial gauges with a factor setting.

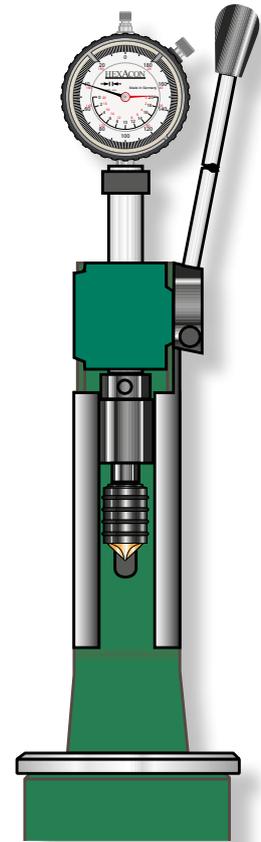
NEW!



Clamping shaft Ø 8h7mm

The HM-03-60 dial gauge holder is included!

Dial gauge not included



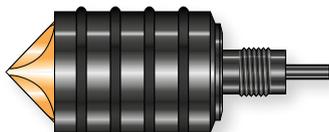
Measuring stand · MS-1

TIPP!

Effective chamfer measurement is possible using the MS-1 measuring stand along with the ZH centering holder.

Measuring range:	Cone:	Order no.:	Measuring range:	Cone:	Order no.:
Ø 05 - 20	127°	FM-SC-01	Ø 60 - 80	127°	FM-SC-04
Ø 20 - 40	127°	FM-SC-02	Ø 80 - 100	127°	FM-SC-05
Ø 40 - 60	127°	FM-SC-03	Ø 100 - 120	127°	FM-SC-06

The special dial gauges and holders are identical for interior and exterior measurement of the same size at 127°, and the measuring heads are interchangeable.



Precision exterior chamfer measuring instrument with titanium nitride coating.

Standard exterior chamfer measuring instruments with 127° measuring angles are used for quick precision measurement of the diameter of exterior chamfers and shaft ends. Their wide measuring range of about 20 mm is a great advantage.

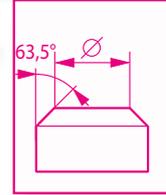


For all 127° variants we recommend digital dial gauges with a factor setting.

Exterior chamfer measuring instruments for 127° chamfers

Standard variant includes holder.

Principle:



Bell

FM FC-01 127°

Ø 5 - 20 mm

FM FC-04 127°

Ø 60 - 80 mm

For all 127° variants we recommend digital dial gauges with a factor setting.

NEW!



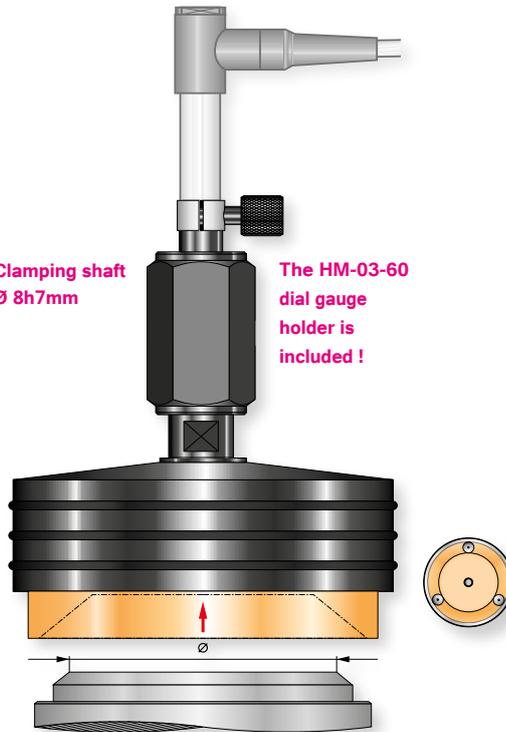
Clamping shaft Ø 8h7mm

The HM-03-60 dial gauge holder is included!

Dial gauge not included

For all 127° variants we recommend digital dial gauges with a factor setting or inductive probes, page 101.

NEW!



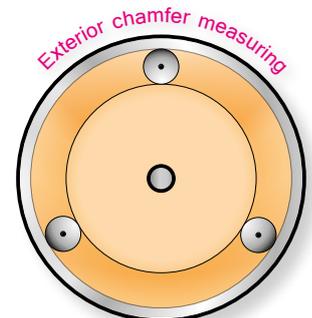
Clamping shaft Ø 8h7mm

The HM-03-60 dial gauge holder is included!

Inductive probe not included

Measuring range:	Cone:	Order no.:	Measuring range:	Cone:	Order no.:
Ø 05 - 20	127°	FM-FC-01	Ø 60 - 80	127°	FM-FC-04
Ø 20 - 40	127°	FM-FC-02	Ø 80 - 100	127°	FM-FC-05
Ø 40 - 60	127°	FM-FC-03	Ø 100 - 120	127°	FM-FC-06

For comparative measurements a reference workpiece or configuration master is required.



Chamfer measuring 127°

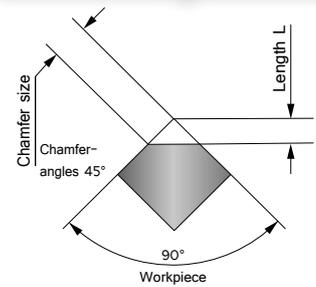
Chamfer probe 45°

Precision 45° chamfer probe

Precise measurement of chamfer with 45° angles on 90° workpieces.

Measuring range 10 mm

HEXAACON

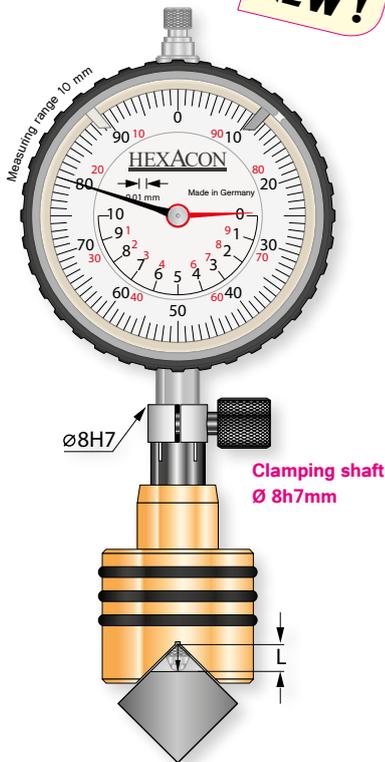


FT - 01

45° chamfer probe

Includes dial gauge. The dial gauges have concentric indicator arrangement. Measuring accuracy is 0.01 mm.

NEW!



Dial gauge included

We recommend also digital dial gauges with a factor setting.



Dial gauge not included

Determination of the chamfer size

Chamfer size F	Length L
0.1 mm	0.07 mm
0.2 mm	0.14 mm
0.3 mm	0.21 mm
0.4 mm	0.28 mm
0.5 mm	0.35 mm
0.6 mm	0.42 mm
0.7 mm	0.49 mm
0.8 mm	0.57 mm
0.9 mm	0.64 mm
1.0 mm	0.71 mm
1.5 mm	1.06 mm
2.0 mm	1.41 mm
2.5 mm	1.76 mm
3.0 mm	2.12 mm
3.5 mm	2.47 mm

The determination of the chamfer size is via the table display

$L = \text{Chamfer size } F \times 0.7071$

$\text{Chamfer size } F = \text{Length } L : 0.7071$

The setting or conversion factor is 1.4142.

FT-01 precision 45° chamfer probe with titanium nitride coating.

Prismatic measurement principle. Measures precision chamfers with 45° angles on 90° workpieces.

Diameter 30mm. Set includes dial gauge, display accuracy of 1/100mm.

Standard dial gauge connection, diameter 8H7 mm. Can also be combined with other analog and digital dial gauges as well as inductive measuring probes.

Order no.: FT-01 including analog dial gauge • Order no.: FT-01-X without dial gauge.

Digital dial gauges with factor setting capability allow direct display in mm.

The setting or conversion factor is 1.4142.

The special dial gauge is included in the standard scope of delivery.

TIPP!

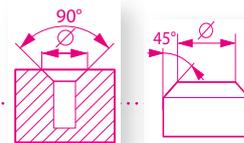
Chamfer dial gauges

Analog mechanical special precision dial gauges

for 90° measuring heads with a large measuring range of 20 mm.

Display scale with a 1:2 scale · Display accuracy 0.01 mm.

HEXAACON

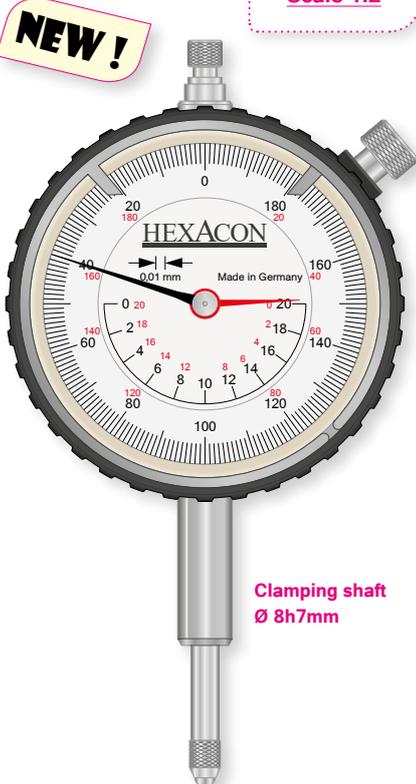


DIN EN ISO 463 / DIN 874 dial gauge

for interior and exterior chamfer measurement. Measuring range 10 mm.

AD FM-01 90° Ø 0.5 – 20 mm

Scale 1:2



Clamping shaft
Ø 8h7mm

Measuring: Cone: Order no.:

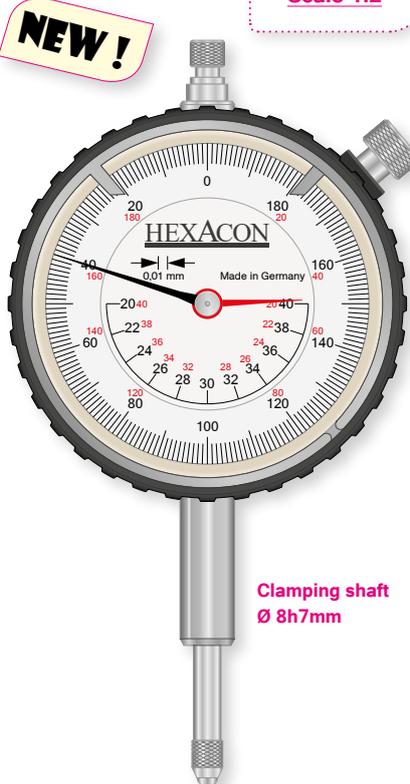
Ø 05 – 20 90° AD-FM-01

Measuring force 0.7 N ± 10 %

Interior and exterior chamfer meas.

AD FM-02 90° Ø 20 – 40 mm

Scale 1:2



Clamping shaft
Ø 8h7mm

Measuring: Cone: Order no.:

Ø 20 – 40 90° AD-FM-02

Measuring force 0.7 N ± 10 %

Interior and exterior chamfer meas.

AD FM-03 90° Ø 40 – 60 mm

Scale 1:2



Clamping shaft
Ø 8h7mm

Measuring: Cone: Order no.:

Ø 40 – 60 90° AD-FM-03

Measuring force 0.7 N ± 10 %

Interior and exterior chamfer meas.

Analog mechanical special precision dial gauges for 90° measuring heads with display scale directly in mm and a large measuring range.

The dial gauges have concentric indicator arrangement as well as a display scale with a 1:2 scale, permitting convenient read-off of the measured value directly in millimeters for 90° measurement. This eliminates reading errors. The measuring range is about 20 mm and display accuracy is 0.01 mm. Clamping shaft Ø 8H6 mm. With fastening screw to prevent unintentional twisting of the scale. Outer ring Ø 58 mm. Threaded measurement tip M2.5.

The special analog dial gauge is already included in the standard scope of delivery for 90° measuring heads!

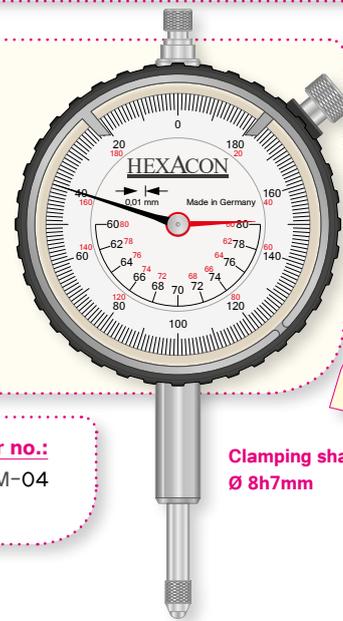
AD FM-04 90° Ø 60 – 80 mm

Interior and exterior chamfer measuring.

Measuring: Cone: Order no.:

Ø 40 – 60 90° AD-FM-04

Measuring force 0.7 N ± 10 %



Clamping shaft
Ø 8h7mm

NEW!

Notes

Analog precision indicators and dial gauges

Digital dial gauges

Dial gauge test stand

Inductive probes

Analog dial gauges and precision indicators

for hole measuring heads

Dial gauge

Scale division value 0.001 mm

Dial gauge concentric scale arrangement

Scale division value 0.01 mm

Precision indicator

Scale division value 0.001 mm

Precision indicator

Scale division value 0.01 mm

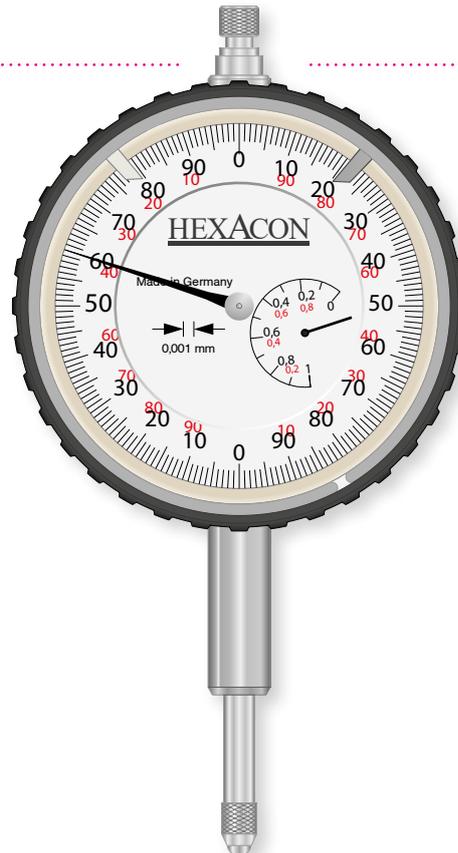
Digital dial gauges for hole meas. heads

Digital dial gauges

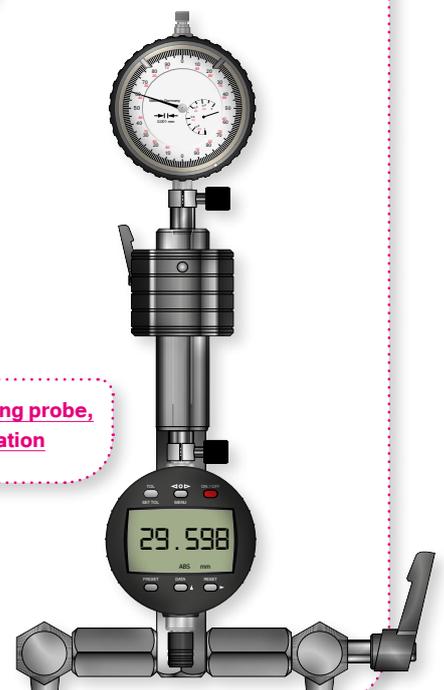
Numerical step 0.01 mm

Digital dial gauges

Numerical step 0.001 mm



**Inductive measuring probe,
measuring test station**



Analog dial gauges

Analog dial gauges and precision indicators for PMK meas. heads

as well as other measurement tasks.

HEXAACON

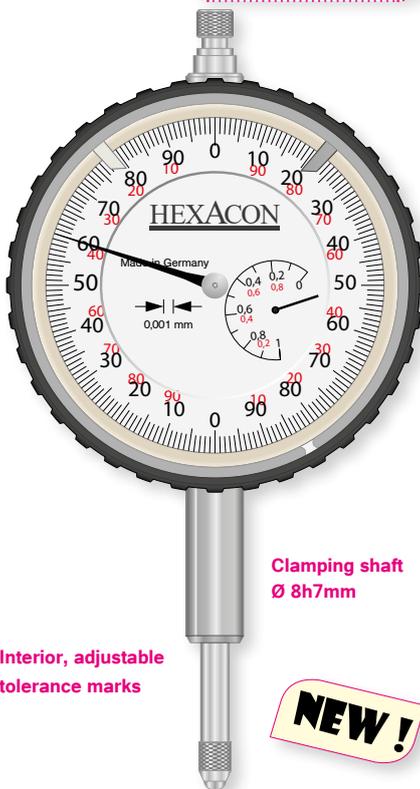


Dial gauge test tips
M2.5 mm thread

MU 01-0001-1

Dial gauge

Resolution 0.001 mm



Clamping shaft
Ø 8h7mm

Interior, adjustable
tolerance marks

NEW!

Scale division value 0.001 mm

Measurement span 1 mm
1 indicator rotation 0.2 mm
Starting measuring force 0.7 N ± 10%
Ø 58 mm, DIN EN ISO 463

MU 01-001

Meas. range 10 mm

Resolution 0.01 mm



Clamping shaft
Ø 8h7mm

Interior, adjustable
tolerance marks

NEW!

Scale division value 0.01 mm

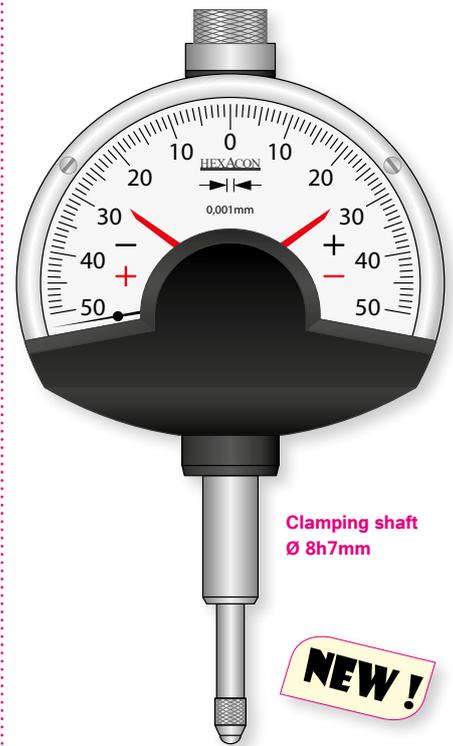
Measurement span 10 mm
1 indicator rotation 1 mm
Starting measuring force 0.7 N ± 10%
Ø 58 mm, DIN EN ISO 463 / DIN 878

MU 02-0001

Dial gauge

Resolution 0.001 mm

With free stroke and collision protection



Clamping shaft
Ø 8h7mm

NEW!

Scale division value 0.001 mm

Measurement span 0.1 mm
Scale numbering 50-0-50
Starting measuring force 1.0 N ± 10%
Ø 62 mm, DIN 879-1

Analog mechanical precision dial gauges and precision indicators with display accuracy of 0.01 mm and 0.001 mm.

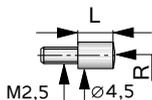
The refined design, the use of high-quality materials, and the mature precision-manufactured measurement mechanism guarantee the outstanding quality of our precision dial gauges and precision indicators. Measuring bolts and clamping shaft are made of high-resistance stainless steel. The measuring bolt is lapped. Clamping shaft Ø 8h7.

MU TS-L

Meas. insert for dial gauge

HM-meas. inserts for dial gauges.

R= 2,5; 4,5; 6,5; 20



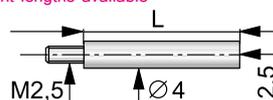
Order no.: Specify MU -TS - L, R

MU VL-L

Extension for dial gauge

Extensions for dial gauges.

Different lengths available



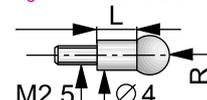
Order no.: Specify MU - VL - L, L

MU TS-L

Ball insert for dial gauge

Ball inserts for dial gauges.

Different lengths and radii available



Order no.: Specify MU - R5 - L, L+R

With M2.5 thread

Digital dial gauge

Digital dial gauge for PMK meas. heads and chamfer meas. instruments

as well as other measurement tasks. MU 05-0001 with factor setting.

MU 02-001

Dial gauge

Resolution 0.01 mm

With free stroke and collision protection



Clamping shaft
Ø 8h7mm

NEW!

Scale division value 0.01 mm

Measurement span 0.5 mm
Scale numbering 25-0-25
Starting measuring force 1.1 N ± 10%
Ø 62 mm, DIN 879-1

MU 04-001

Digital dial gauge

Resolution 0.01 mm



Clamping shaft
Ø 8h7mm

NEW!

Numerical step 0.01 mm

Measurement span 12.5 mm
Starting meas. force 0.5-1 N ± 10%

MU 05-0001

Digital dial gauge

Resolution 0.001 mm

With factor setting



Clamping shaft
Ø 8h7mm

NEW!

Numeric step value 0.001 mm with factor setting

Measurement span 12.5 mm
Starting meas. force 0.5-1 N ± 10%

Digital mechanical precision dial gauges and precision indicators with display accuracy of 0.01 mm and 0.001 mm.

High-contrast, large, easily readable LCD display, control and display part can turn 280°. Lifting cap with dust protection function on end of measuring bolt. Clamping shaft and measuring bolts of hardened stainless steel. Ø 8h7 mm

Dial gauges with inch displays are available upon request.

Dial gauge test stand

HEXAACON

Test station for dial gauges and precision indicators

for analog and digital dial gauges based on DIN 878 and DIN 875.

DIN 878
DIN 875

MU - PS

Dial gauge test stand



Repeat accuracy at IT 8 down to $< 1\mu$.

Dial gauge test station

The test station permits the testing of analog and digital dial gauges and precision indicators using a calibrate reference gauge or using inductive measuring probes and a measurement system.

By rotating the set screw, the measurement path and measured value display change, permitting the precision comparison of reference and test object.



Test workstation for dial gauges and precision indicators.

The dial gauge test stand supports the testing of dial gauges and precision indicators with a test distance of up to 30 mm.

Permits the testing of dial gauges, precision indicators and lever gauges for compliance with DIN 878, 875, 2270, ASME/ANSIB 89.1.10 M 1987, the VDI/VDE DGQ 261 directives or factory standards.

Stand order no.: MU-PS · Display and probe order no.: MU-EL **Standard delivery without dial gauge or ind. meas. probe.**

Inductive measuring probes

Inductive measuring probes for PMK measuring heads and chamfer measuring instruments

Inductive measuring probes have very high resolution at a very attractive price. They also have a long service life and are easily repaired. With standard 8h6 connection.

TiN coated, resolution 0.01 μm .

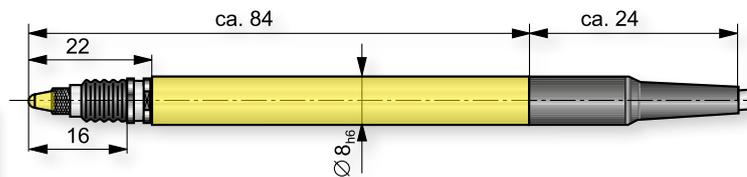
IT - 101

Inductive meas. probes

Inductive measuring probe

Resolution 0.01 μm , measurement stroke ± 1 mm, total stroke 4.6 mm. Measuring force 0.63 N $\pm 20\%$ ball guide zero-play • Measurement insert 3 mm ball, M2.5 mm thread, replaceable. Temperature range -10 to $+65$ $^{\circ}\text{C}$, easy to repair. Titanium nitride coated.

Order no.: IT-101



Dial gauge tester

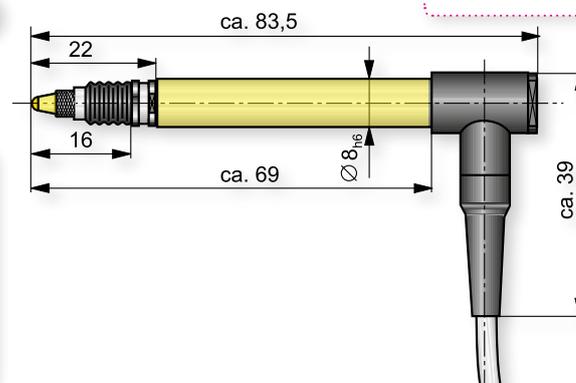
IT - 102

Inductive meas. probes

Inductive measuring probe

Resolution 0.01 μm , measurement stroke ± 1 mm, total stroke 4.6 mm. Measuring force 0.63 N $\pm 20\%$ ball guide zero-play • Measurement insert 3 mm ball, M2.5 mm thread, replaceable. Temperature range -10 to $+65$ $^{\circ}\text{C}$, easy to repair. Titanium nitride coated.

Order no.: IT-102



Radial cable guide

Meas. probes adjustable

HT - V2

Inductive probe holder

HT-V2 · Holder for inductive measuring probes

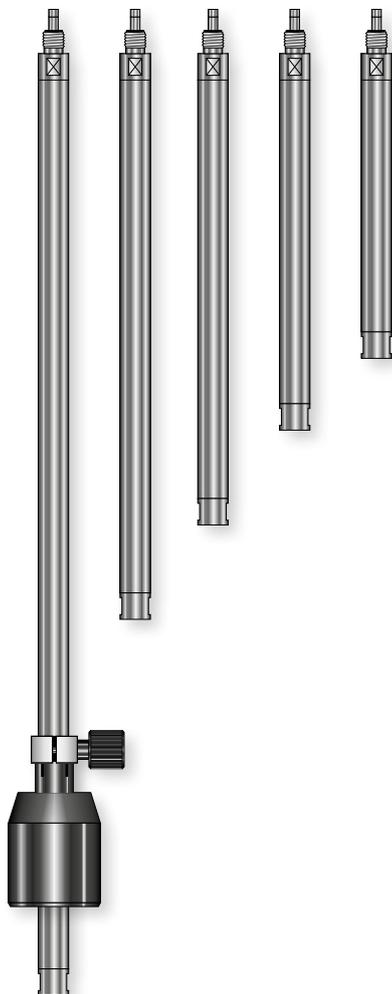
By adjusting the M6x0.75 adjusting nut (G), the inductive probe can easily be adjusted. No awkward handling. L=140 mm.

With kink protection. Order no.: HT-V2



Example applications

VL-02 depth extension · M6x0.75

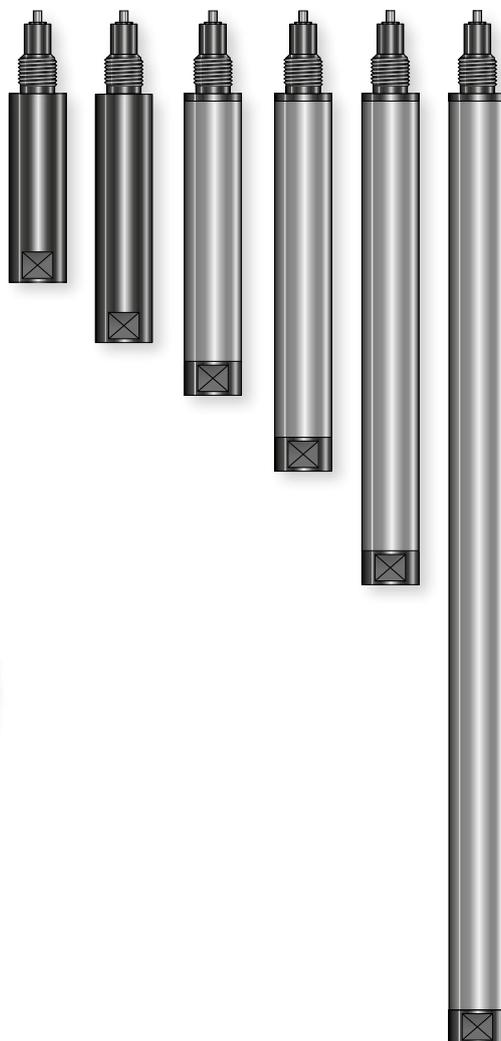


TA-02 depth stop
adjustable, clamped on
VL-02 extension

Accessories in modular system:

An extensive offering of carefully coordinated system accessories such as dial gauge holders, depth extensions, depth stops and centering holders offer flexible, efficient handling in a wide variety of measurement tasks, both for manual and for automated measurement.

VL-03 depth extension · M10x1



HEXAACON



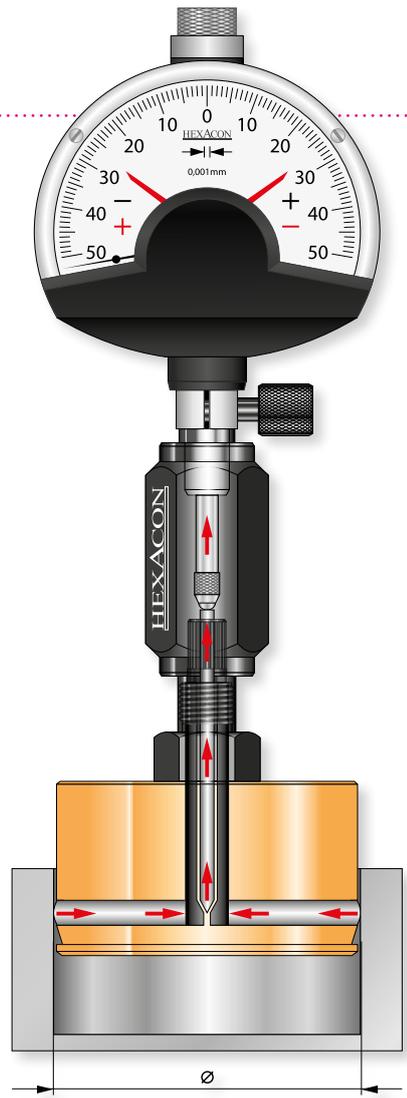
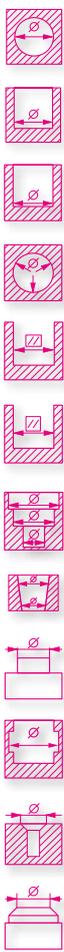
TA-03 depth stop, adjustable,
clamped onto HM-03-GS-60 holder
with PMK-03-XK measuring head

Notes

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Precision hole and chamfer measuring instruments

HIGH PRECISION - MADE IN GERMANY
 TIN COATED
 2200 HV
 100 %



Hole measuring instruments



Chamfer meas. instruments



fm-design · create-com.de



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