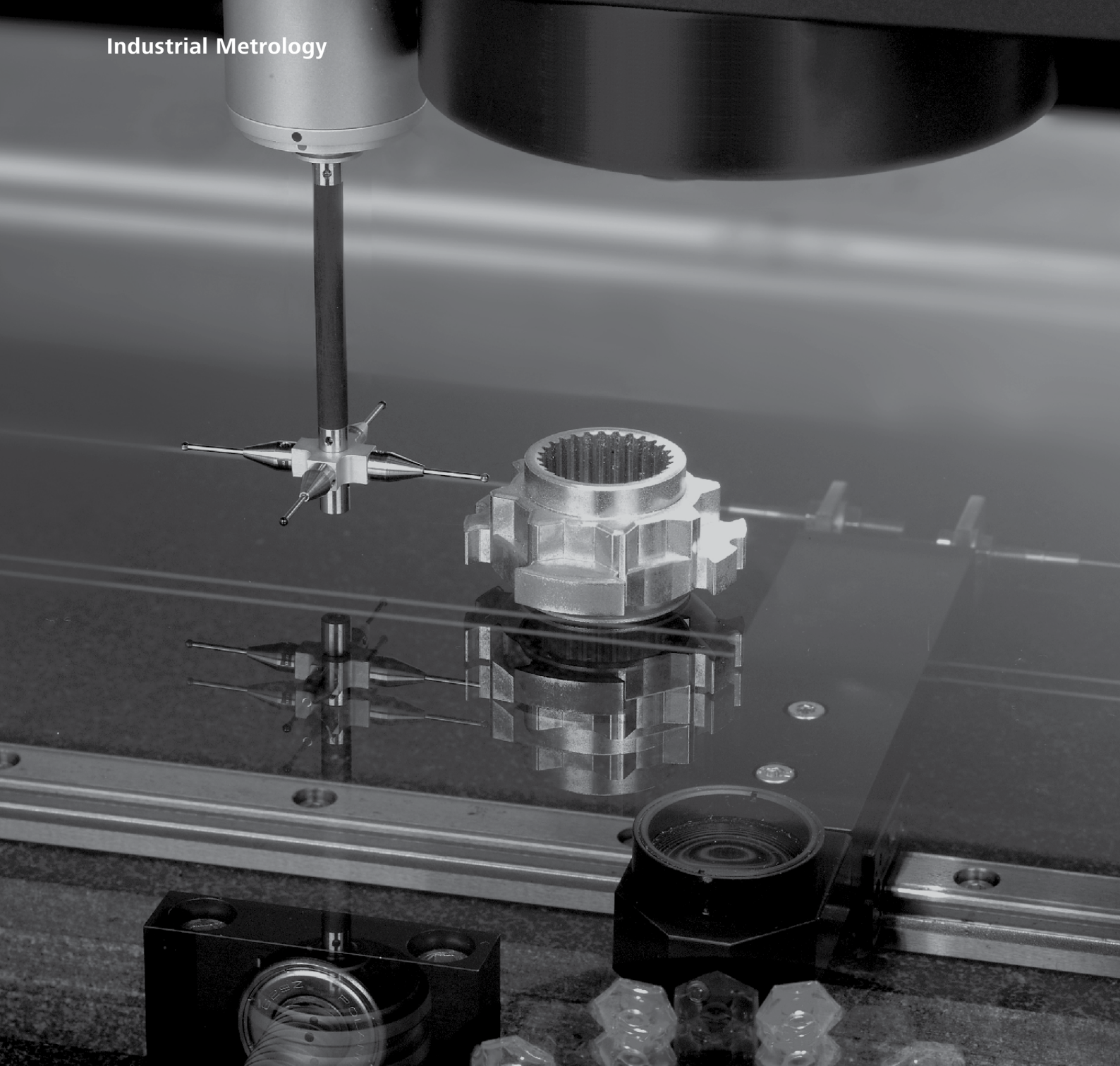
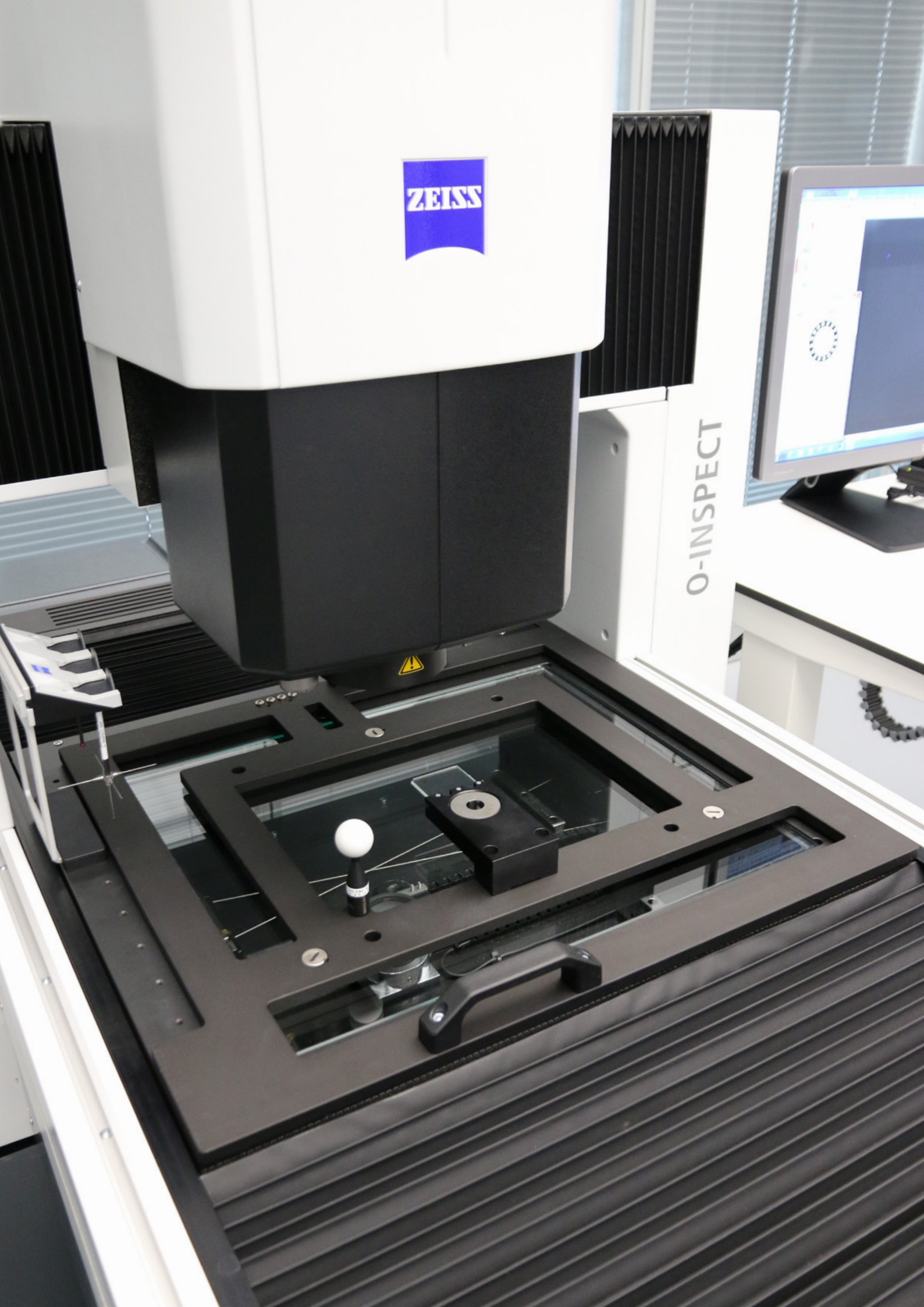




Probe System Equipment ZEISS O-INSPECT

Original accessories from the technology leader





ZEISS

O-INSPECT

ZEISS O-INSPECT

Original accessories from ZEISS

Use specially designed and optimized components for your ZEISS O-INSPECT. To obtain maximum performance and precision with your ZEISS O-INSPECT.

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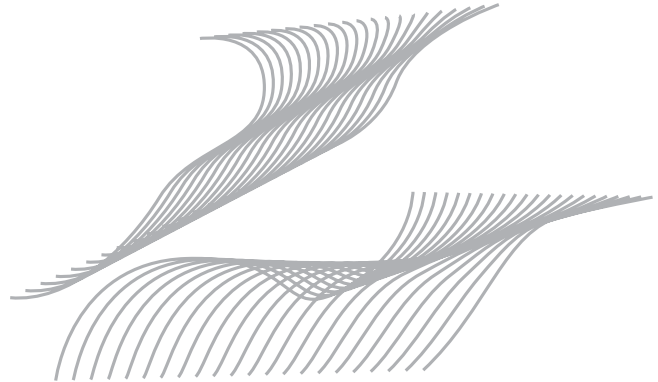
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Note

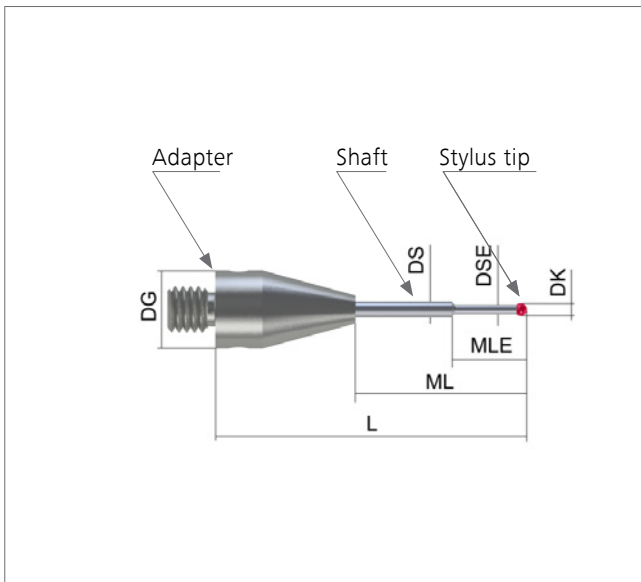
Subject to technical changes. Our range of products is directed at business customers. All dimensions in mm. Illustrations may differ. You will find our GTC on the Internet at: www.probes.zeiss.com

Useful information about ZEISS styli

A stylus normally consists of three components: adapter, shaft and stylus tip.



The following principle applies to all styli: they should be as bend resistant as possible in order to absorb the measuring force largely without deformation, so-called "stylus deflection". The key factors here are the shaft design and the transition to the adapter in which the shaft is mounted.



Legend

DK	Sphere diameter in mm
L	Total length in mm
ML	Measuring length in mm
DS	Shaft diameter in mm
DG	Diameter of base body in mm
MLE	Offset measuring length in mm
DSE	Offset shaft diameter in mm
B	Thickness / length



The adapter

The adapter is the connection between the connection thread and the shaft. It is important that the adapter is designed in such a way that it can withstand the measuring force that is introduced via the shaft in an optimum manner. Otherwise there will be an increased scatter of the probe measurements. In addition, the connection point to the extensions is always undercut to ensure optimum force fit. Depending on the measuring system being used, ZEISS uses M2, M3 and M5 connection threads.

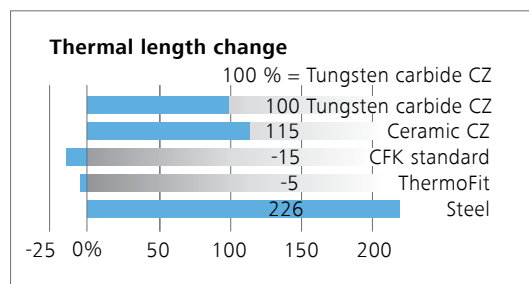
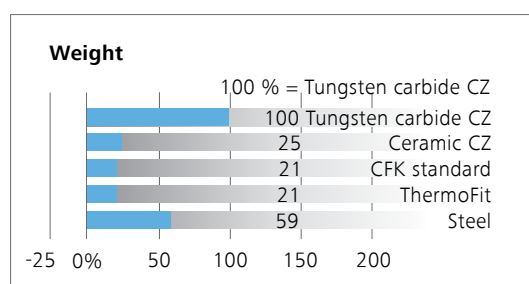
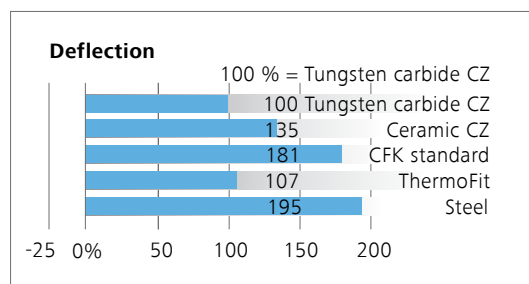
Conventional M3 styli may not be used in XXT stylus systems; the M3 XXT styli which are optimized for passive scanning should be used instead. The 1 mm larger diameter of the XXT adapter base body and the high-strength titanium alloy guarantee a considerably higher stiffness compared with conventional M3 styli.

The shaft

A distinction is made between a straight and an stepped shaft in the design. The stepped shaft has the advantage of a slightly greater shaft thickness DS, which reduces towards the stylus tip. The disadvantage is the smaller usable measuring range MLE with the shaft thickness DSE (compared with DS and ML with a straight stylus). The material and the cross-section have the greatest influence on the stylus stiffness, whereby the solid material is always stiffer than a tube. The key characteristics of the shaft are stiffness, weight and thermal linear expansion. The table shows that ZEISS ThermoFit styli optimize these three characteristics.

The stylus tip

The stylus tip can be a sphere, a disc, a cylinder or a variation of these, such as a half-sphere or a cylinder with a ball end. The stylus sphere is the stylus tip which is most used. The deviation from the ideal spherical shape is generally stated as the "Grade." ZEISS uses Grade 5 as standard and also Grade 3 spheres for high precision roundness tests. The most common sphere materials and their major areas of application are listed in the adjacent table.



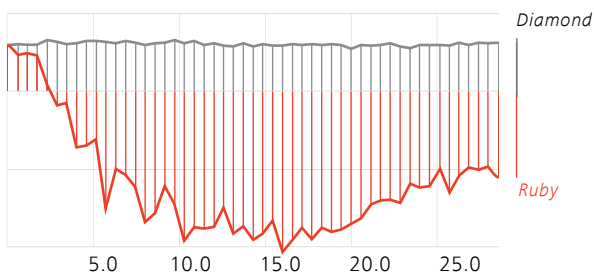
Material	Application	DK in mm
Ruby	Standard for almost all applications. Weaknesses with certain materials in combination with continuous scanning (wear or material build-up possible).	0.12 – 12
Silicon nitride	Same use as ruby, but possibly less material build-up when scanning aluminum.	1 – 12
Ceramic (aluminum oxide)	Use with large stylus sphere diameters and disc styli, for scanning rough surfaces, e.g. cast iron. Permits weight-optimized half-spheres.	8 – 45
Tungsten carbide	Permits sphere diameters in special sizes e.g. for gear measurement. Can be manufactured according to specifications. Very high weight.	2 – 30
Steel	Used mainly for disc styli. Is considerably softer than tungsten carbide, but larger diameters available.	30 – 100
Diamond	The hardest material in the world, virtually no wear and no material build-up during scanning.	1 / 2 / 3
Diamond-coated	The hardest material in the world as a coating, virtually no wear and no material build-up during scanning.	1 / 2 / 3 5 / 8

Measuring with diamond styli

Retains high-precision form also after extended use.

Diamond!scan

Circle - Diameter (mm)

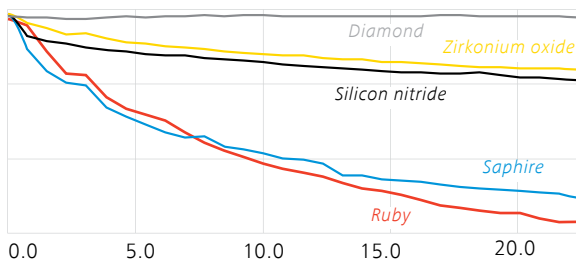


Stylus downtime (m)

Without material build-up

Notice the difference between a ruby stylus and a ZEISS Diamond!Scan stylus. The measured diameter of the diamond does not change. The sphere keeps its high-precision form resulting in continuously accurate measurement. This effect not only occurs when probing single points but also when the stylus scans the surface of the workpiece. For example, when the diameter and the form of a bore hole are scanned to record the maximum number of measuring points, an aluminum deposit can form on the equator of the ruby sphere, resulting in measurement error.

Measuring position pointerstylus (mm)



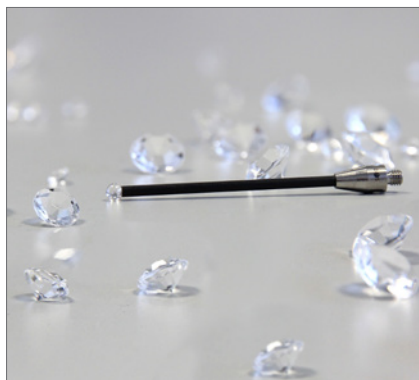
Stylus downtime (m)

No wear

If a coordinate measuring machine with a ruby stylus scans the flatness of a hard surface, the sphere can flatten in the course of the measurements. The following is critical: the wear starts immediately, even though ruby is one of the hardest materials in the world. Notice the difference when a ZEISS Diamond!Scan stylus is used. No flattening occurs. The sphere keeps its high-precision form and resulting in an accurate measurement of the flatness of this hard workpiece surface.

Diamond styli

Diamond!Scan® from ZEISS



- The elimination of time-intensive checks, cleaning work and calibrations
- Continuously accurate measuring results
- Continuous use

ZEISS Diamond!Scan

Adapter: M3 XXT titanium

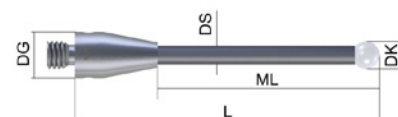
Shaft: ZEISS Thermo Fit, straight

Stylus tip: Diamond sphere

The deviation from the spherical form is less than 0.25 µm.

The diameter tolerance is +/-20 µm.

Item No.	DK	L	ML	DS	DG	Wt.(g)
626103-0309-033	3,00	33,00	24,00	2,00	5,00	0,7
626103-0309-040	3,00	40,00	31,00	2,00	5,00	0,8
626103-0309-050	3,00	50,00	41,00	2,00	5,00	0,8



ZEISS Diamond!Scan

Adapter: M3 XXT titanium

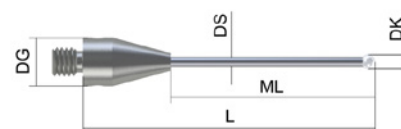
Shaft: Tungsten carbide, straight

Stylus tip: Diamond sphere

The deviation from the spherical form is less than 0.25 µm.

The diameter tolerance is +/-20 µm.

Item No.	DK	L	ML	DS	DG	Wt.(g)
626113-0209-030	2,00	30,00	21,00	1,50	5,00	1,2



ZEISS Diamond!Scan

Adapter: M3 XXT titanium

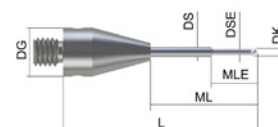
Shaft: Tungsten carbide, stepped

Stylus tip: Diamond sphere

The deviation from the spherical form is less than 0.25 µm.

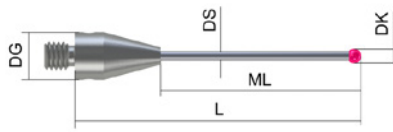
The diameter tolerance is +/-20 µm.

Item No.	DK	L	ML	MLE	DS	DSE	DG	Wt.(g)
626113-0109-019	1,00	19,00	10,00	5,00	1,00	0,80	5,00	1,0
626113-0109-020	1,00	20,00	11,00	5,00	1,00	0,80	5,00	1,0
626113-0109-030	1,00	30,00	21,00	5,00	1,00	0,80	5,00	1,0



Tungsten carbide shaft

Styli



Styli with thread

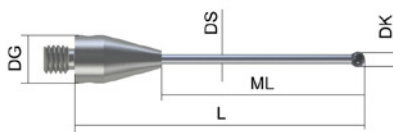
Adapters: M3 XXT, titanium

Shaft: Tungsten carbide, straight

Stylus tip: Ruby sphere

For standard applications with a high bending strength.

Item No.	DK	L	ML	DS	DG	Wt.(g)
626113-0080-014	0,80	14,00	5,00	0,60	5,00	0,6
626113-0100-014	1,00	14,00	5,00	0,80	5,00	0,6
626113-0100-017	1,00	17,00	8,00	0,80	5,00	0,7
626113-0103-020	1,00	20,00	11,00	0,80	5,00	0,7
626113-0141-024	1,35	24,00	15,00	1,00	5,00	0,8
626113-0150-014	1,50	14,00	5,00	1,00	5,00	0,7
626113-0150-017	1,50	17,00	8,00	1,00	5,00	0,7
626113-0150-020	1,50	20,00	11,00	1,00	5,00	0,7
626113-0150-030	1,50	30,00	22,50	1,00	4,00	0,9
626113-0150-035	1,50	35,00	26,00	1,00	5,00	0,9
626113-0151-040	1,50	40,00	31,00	1,00	5,00	1,0
626113-0151-025	1,50	25,00	16,00	1,00	5,00	0,8
626113-0200-014	2,00	14,00	5,00	1,00	5,00	0,7
626113-0200-017	2,00	17,00	8,00	1,00	5,00	0,7
626113-0200-020	2,00	20,00	11,00	1,00	5,00	0,7
626113-0200-025	2,00	25,00	16,00	1,00	5,00	0,8
626113-0200-030	2,00	30,00	21,00	1,00	5,00	0,8
626113-0200-035	2,00	35,00	26,00	1,50	5,00	1,3
626113-0201-040	2,00	40,00	31,00	1,50	5,00	1,5
626113-0250-020	2,50	20,00	11,00	1,50	5,00	1,0
626113-0250-025	2,50	25,00	16,00	1,50	5,00	1,1
626113-0250-030	2,50	30,00	21,00	1,50	5,00	1,2
626113-0250-035	2,50	35,00	26,00	1,50	5,00	1,3
626113-0250-040	2,50	40,00	31,00	1,50	5,00	1,5



Styli with thread

Adapters: M3 XXT, titanium

Shaft: Tungsten carbide, straight

Stylus tip: Silicon nitride sphere

For standard applications with a high bending strength.

Item No.	DK	L	ML	DS	DG	Wt.(g)
626113-0152-014	1,50	14,00	5,00	1,00	5,00	0,7
626113-0153-020	1,50	20,00	11,00	1,00	5,00	0,8
626113-0155-030	1,50	30,00	21,00	1,00	5,00	2,8
626113-0201-014	2,00	14,00	5,00	1,00	5,00	0,7
626113-0203-020	2,00	20,00	11,00	1,00	5,00	0,7
626113-0203-030	2,00	30,00	21,00	1,50	5,00	0,8
626113-0203-040	2,00	40,00	31,00	1,50	5,00	1,5
626113-0251-020	2,50	20,00	11,00	1,50	5,00	1,0
626113-0252-030	2,50	30,00	21,00	1,50	5,00	1,2
626113-0251-040	2,50	40,00	31,00	1,50	5,00	1,5

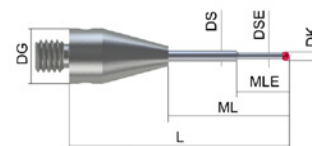
Styli with thread

Adapter: M3 XXT titanium

Shaft: Tungsten carbide, stepped

Stylus tip: Ruby sphere

For standard applications with a high bending strength.



Item No.	DK	L	ML	MLE	DS	DSE	DG	Wt.(g)
626113-0025-011	0,25	11,00	5,00	2,50	1,00	0,20	5,00	0,6
626113-0030-025	0,25	25,00	11,00	4,00	0,80	0,20	5,00	0,9
626113-0030-013	0,30	13,00	4,00	2,30	1,00	0,20	5,00	0,6
626113-0030-015	0,30	15,00	6,00	2,30	1,00	0,20	5,00	0,6
626113-0030-018	0,30	18,00	9,00	2,30	1,00	0,20	5,00	0,7
626113-0030-020	0,30	20,00	11,00	2,30	1,00	0,20	5,00	0,7
626113-0040-013	0,40	13,00	4,00	2,30	1,00	0,30	5,00	0,6
626113-0040-015	0,40	15,00	6,00	2,30	1,00	0,30	5,00	0,7
626113-0040-020	0,40	20,00	11,00	2,30	1,00	0,30	5,00	0,7
626113-0050-013	0,50	13,00	4,00	2,30	1,00	0,30	5,00	0,6
626113-0050-015	0,50	15,00	6,00	2,30	1,00	0,30	5,00	0,7
626113-0050-018	0,50	18,00	9,00	2,30	1,00	0,30	5,00	0,7
626113-0050-020	0,50	20,00	11,00	2,30	1,00	0,30	5,00	0,7
626113-0051-024	0,50	24,00	15,00	2,30	1,00	0,30	5,00	0,7
626113-0060-014	0,60	14,00	5,00	4,60	1,00	0,40	5,00	0,6
626113-0060-017	0,60	17,00	8,00	4,60	1,00	0,40	5,00	2,6
626113-0060-020	0,60	20,00	11,00	4,60	1,00	0,40	5,00	0,7
626113-0061-024	0,60	24,00	15,00	4,60	1,00	0,40	5,00	0,8
626113-0080-017	0,80	17,00	8,00	4,80	1,00	0,60	5,00	0,7
626113-0080-020	0,80	20,00	11,00	4,80	1,00	0,60	5,00	0,7
626113-0080-025	0,80	25,00	16,00	4,80	1,00	0,60	5,00	0,8
626113-0080-034	0,80	34,00	25,00	4,10	1,00	0,60	5,00	0,8
626113-0081-035	0,80	35,00	26,00	4,80	1,00	0,60	5,00	0,9
626113-0100-020	1,00	20,00	11,00	5,00	1,00	0,80	5,00	0,7
626113-0100-025	1,00	25,00	16,00	5,00	1,00	0,80	5,00	0,8
626113-0100-030	1,00	30,00	21,00	5,00	1,00	0,80	5,00	0,8
626113-0100-035	1,00	35,00	26,00	5,00	1,00	0,80	5,00	0,9
626113-0100-040	1,00	40,00	31,00	5,00	1,00	0,80	5,00	1,0

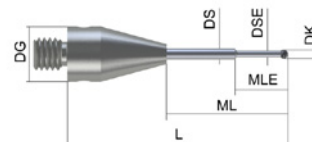
Styli with thread

Adapter: M3 XXT titanium

Shaft: Tungsten carbide, stepped

Stylus tip: Silicon nitride sphere

For standard applications with a high bending strength.



Item No.	DK	L	ML	MLE	DS	DSE	DG	Wt.(g)
626113-0102-020	1,00	20,00	11,00	5,00	1,00	0,80	5,00	0,7
626113-0101-025	1,00	25,00	16,00	5,00	1,00	0,80	5,00	0,8
626113-0101-035	1,00	35,00	26,00	5,00	1,00	0,80	5,00	0,9
626113-0105-030	1,00	30,00	21,00	5,00	1,00	0,80	5,00	0,9
626113-0101-040	1,00	40,00	31,00	5,00	1,00	0,80	5,00	1,0

ThermoFit® shaft from ZEISS

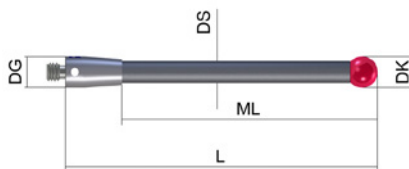
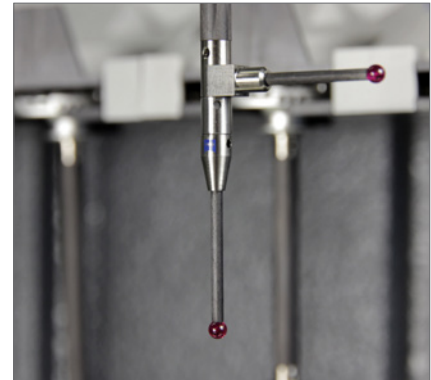
Styli



Our styli with a ZEISS ThermoFit shaft permit the design of large and complex stylus systems.

Advantages:

- High stiffness
- Light weight
- Thermally stable



Styli with thread

Adapter: M3 XXT titanium
 Shaft: ZEISS ThermoFit, straight
 Stylus tip: Ruby sphere

ZEISS ThermoFit styli are thermally stable and light weight, making them suitable for long lengths and complex stylus systems.

Item No.	DK	L	ML	DS	DG	Wt.(g)
626103-0300-025	3,00	25,00	16,00	2,00	5,00	0,7
626103-0300-033	3,00	33,00	24,00	2,00	5,00	0,7
626103-0300-040	3,00	40,00	31,00	2,00	5,00	0,8
626103-0300-042	3,00	42,00	33,00	2,00	5,00	0,8
626103-0300-050	3,00	50,00	41,00	2,00	5,00	0,8
626103-0300-058	3,00	58,00	49,00	2,00	5,00	1,0
626103-0300-059	3,00	59,00	50,00	2,00	5,00	1,0
626103-0300-065	3,00	65,00	56,00	2,00	5,00	1,0
626103-0300-075	3,00	75,00	66,00	2,00	5,00	1,0
626103-0300-084	3,00	84,00	75,00	2,00	5,00	1,6
626103-0300-100	3,00	100,00	91,00	2,00	5,00	1,1
626103-0300-125	3,00	125,00	116,00	2,00	5,00	1,3
626103-0401-050	4,00	50,00	41,00	2,00	5,00	1,0
626103-0500-030	5,00	30,00	21,00	3,50	5,00	1,1
626103-0500-040	5,00	40,00	31,00	3,50	5,00	1,2
626103-0500-050	5,00	50,00	41,00	3,50	5,00	1,4
626103-0500-060	5,00	60,00	51,00	3,50	5,00	1,5
626103-0501-075	5,00	75,00	66,00	3,50	5,00	1,8
626103-0600-050	6,00	50,00	40,00	3,50	5,00	1,5
626103-0610-070	6,00	70,00	61,00	3,50	5,00	1,8
626103-0600-100	6,00	100,00	91,00	3,50	5,00	2,4
626103-0800-030	8,00	30,00	30,00	5,00	5,00	1,9
626103-0830-050	8,00	50,00	50,00	5,00	5,00	2,1
626103-0830-070	8,00	70,00	70,00	5,00	5,00	2,6
626103-0830-100	8,00	100,00	100,00	5,00	5,00	2,7
626103-0800-125	8,00	125,00	125,00	5,00	5,00	2,9

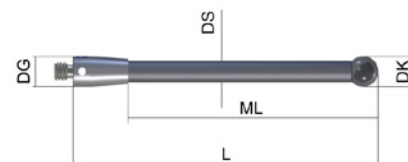
Styli with thread

Adapter: M3 XXT titanium

Shaft: ZEISS ThermoFit, straight

Stylus tip: Silicon nitride sphere

ZEISS ThermoFit styli are thermally stable and light weight, making them suitable for long lengths and complex stylus systems.



Item No.	DK	L	ML	DS	DG	Wt.(g)
626103-0301-025	3,00	25,00	16,00	2,00	5,00	0,7
626103-0301-033	3,00	33,00	24,00	2,00	5,00	0,7
626103-0305-040	3,00	40,00	31,00	2,00	5,00	0,8
626103-0301-042	3,00	42,00	33,00	2,00	5,00	0,8
626103-0301-050	3,00	50,00	41,00	2,00	5,00	0,8
626103-0301-058	3,00	58,00	49,00	2,00	5,00	1,0
626103-0301-065	3,00	65,00	56,00	2,00	5,00	1,0
626103-0301-075	3,00	75,00	66,00	2,00	5,00	1,0
626103-0301-084	3,00	84,00	75,00	2,00	5,00	1,6
626103-0301-100	3,00	100,00	91,00	2,00	5,00	2,1
626103-0301-125	3,00	125,00	116,00	2,00	5,00	2,5
626103-0402-050	4,00	50,00	41,00	2,00	5,00	1,0
626103-0502-030	5,00	30,00	21,00	3,50	5,00	1,1
626103-0501-040	5,00	40,00	31,00	3,50	5,00	1,2
626103-0502-050	5,00	50,00	41,00	3,50	5,00	1,4
626103-0501-060	5,00	60,00	51,00	3,50	5,00	1,5
626103-0500-075	5,00	75,00	66,00	3,50	5,00	1,8
626103-0601-050	6,00	50,00	41,00	3,50	5,00	1,5
626103-0600-070	6,00	70,00	61,00	3,50	5,00	1,8
626103-0601-100	6,00	100,00	91,00	3,50	5,00	2,4
626103-0801-030	8,00	30,00	30,00	5,00	5,00	1,9
626103-0801-050	8,00	50,00	50,00	5,00	5,00	2,1
626103-0801-070	8,00	70,00	70,00	5,00	5,00	2,6
626103-0800-100	8,00	100,00	100,00	5,00	5,00	2,7
626103-0801-125	8,00	125,00	125,00	5,00	5,00	2,9

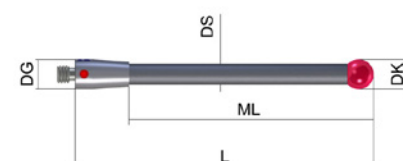
Reference styli

Adapter: M3 XXT titanium

Shaft: ZEISS ThermoFit, straight

Stylus tip: Ruby sphere

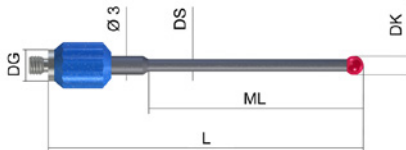
The reference stylus is provided with a red marking.



Item No.	DK	L	ML	DS	DG	Wt.(g)
626103-0501-030	5,00	30,00	21,00	3,50	5,00	1,1
626103-0501-050	5,00	50,00	41,00	3,50	5,00	1,4

Rändelstyli

Avoid damage from tools. These innovative styli have a light, non-slip plastic-coated adapter with knurling. This enables easy assembly by hand.



Styli with thread

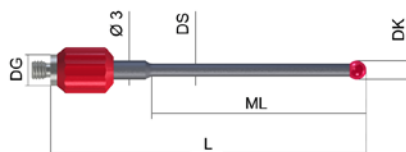
Adapter: M3 XXT plastic-coated

Shaft: ZEISS ThermoFit

Stylus tip: Ruby sphere

An innovative stylus can be mounted without tools.

Item No.	DK	L	ML	DS	DG	Wt.(g)
626103-0207-020	2,00	20,00	8,00	1,00	5,00	1,0
626103-0207-025	2,00	25,00	13,00	1,00	5,00	1,0
626103-0207-030	2,00	30,00	18,00	1,00	5,00	1,0
626103-0307-030	3,00	30,00	18,00	2,00	5,00	1,1
626103-0307-040	3,00	40,00	28,00	2,00	5,00	1,2
626103-0307-050	3,00	50,00	38,00	2,00	5,00	1,2
626103-0307-061	3,00	60,50	50,50	2,00	5,00	1,2
626103-0507-040	5,00	40,00	30,00	3,00	5,00	1,5
626103-0507-050	5,00	50,00	40,00	3,00	5,00	1,6
626103-0507-060	5,00	60,00	50,00	3,00	5,00	1,7
626103-0507-075	5,00	75,00	65,00	3,00	5,00	1,9
626103-0807-040	8,00	40,00	30,00	3,00	5,00	2,2



Reference styli

Adapter: M3 XXT plastic-coated

Shaft: ZEISS ThermoFit

Stylus tip: Ruby sphere

The reference styli can be mounted without tools and it is equipped with a red body.

Item No.	DK	L	ML	DS	DG	Wt.(g)
626103-0527-030	5,00	30,00	20,00	3,00	5,00	1,3
626103-0527-050	5,00	50,00	40,00	3,00	5,00	1,6

Special styli

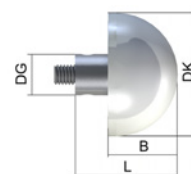
Our special styli for individual and unusual applications also enable us to offer suitable solutions for measurements:

- Large inner diameters
- Sheet metal measurements
- Extremely small drill holes



Hemisphere

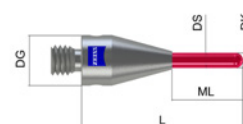
Adapter: M3 XXT titanium
 Shaft: -
 Stylus tip: Ceramic hemisphere
 A large sphere diameter with low weight.



Item No.	DK	L	B	DG	Wt.(g)
626103-1200-012	12,00	12,00	8,00	5,00	2,3
626103-1500-012	15,00	12,00	9,00	5,00	3,3
626103-2000-019	20,00	18,50	13,00	5,00	5,5

Ball cylinder styli

Adapter: M3 XXT titanium
 Shaft: -
 Stylus tip: Ruby cylindrical hemisphere
 Cylindrical probe tip with a half-sphere.



Item No.	DK	L	ML	DS	DG	Wt.(g)
626113-0100-016	1,00	16,00	7,00	1,00	5,00	0,7
626113-0151-016	1,50	16,00	7,00	1,50	5,00	0,6

Cone styli

Adapter: M3 XXT titanium
 Shaft: Tungsten carbide, straight
 Stylus tip: Ruby sphere
 Small sphere diameter with a high bending strength.

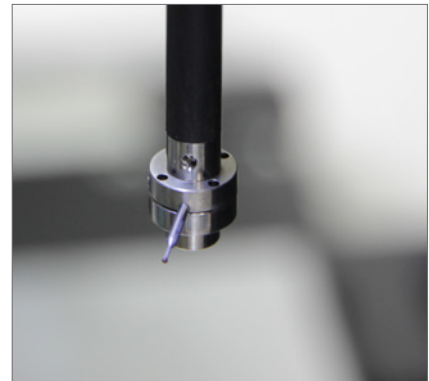
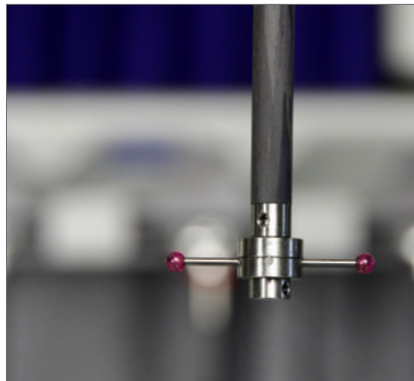


Item No.	DK	L	ML	DG	Wt.(g)
626103-0010-015	0,12	15,00	0,12	5,00	0,7
626103-0020-015	0,20	15,00	0,20	5,00	0,7
626103-0030-015	0,30	15,00	0,30	5,00	0,7

Clamping styli

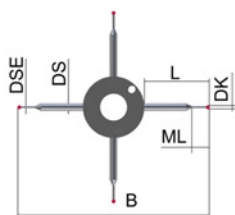
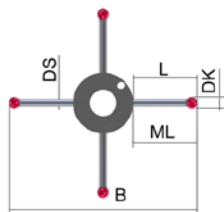
Star styli

Build extremely light and strong star styli. The styli are fastened in the desired angular position by means of a clamping screw. Use the ZEISS FixAssist XXT stylus set-up device for easy setting of the angle.



Star styli small

Adapter: Clamping system M3 XXT titanium
 Shaft: Tungsten carbide straight/stepped
 Stylus tip: Ruby sphere
 Very lightweight and small star styli.



Item No.	DK	L	ML	DS	B	DG	Wt.(g)
626103-0100-018	1,00	5,00	5,00	0,80	18,00	5,00	0,9
626103-0150-018	1,50	5,00	5,00	1,00	18,00	5,00	1,0
626103-0150-025	1,50	8,50	8,50	1,00	25,00	5,00	1,1
626103-0200-018	2,00	5,00	5,00	1,00	18,00	5,00	0,9
626103-0200-025	2,00	8,50	8,50	1,00	25,00	5,00	1,1

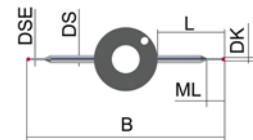
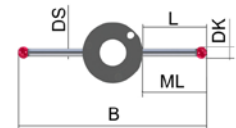
Item No.	DK	L	ML	DS	DSE	B	DG	Wt.(g)
626103-0030-016	0,30	4,00	2,30	1,00	0,20	16,00	5,00	0,9
626103-0050-016	0,50	4,00	2,30	1,00	0,30	16,00	5,00	0,9
626103-0050-025	0,50	8,50	2,30	1,00	0,30	25,00	5,00	1,2
626103-0060-018	0,60	5,00	4,60	1,00	0,40	18,00	5,00	0,9
626103-0060-025	0,60	8,50	4,60	1,00	0,40	25,00	5,00	1,1
626103-0080-018	0,80	5,00	4,80	1,00	0,60	18,00	5,00	0,8
626103-0080-025	0,80	8,50	4,80	1,00	0,60	25,00	5,00	1,0
626103-0100-025	1,00	8,50	5,00	1,00	0,80	25,00	5,00	1,1

T-styli small

Adapter: Clamping system M3 XXT titanium
 Shaft: Tungsten carbide, straight/stepped
 Stylus tip: Ruby sphere
 Very lightweight and small T-styli.

Item No.	DK	L	ML	DS	B	DG	Wt.(g)
626103-0100-218	1,00	5,00	5,00	0,80	18,00	5,00	1,0
626103-0150-218	1,50	5,00	5,00	1,00	18,00	5,00	1,0
626103-0150-225	1,50	8,50	8,50	1,00	25,00	5,00	1,1
626103-0200-218	2,00	5,00	5,00	1,00	18,00	5,00	1,0
626103-0200-225	2,00	8,50	8,50	1,00	25,00	5,00	1,1

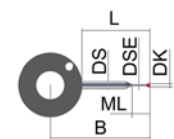
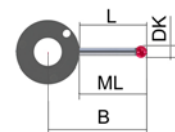
Item No.	DK	L	ML	DS	DSE	B	DG	Wt.(g)
626103-0030-216	0,30	4,00	2,30	1,00	0,20	16,00	5,00	0,9
626103-0030-225	0,30	8,50	2,30	1,00	0,20	25,00	5,00	1,0
626103-0050-216	0,50	4,00	2,30	1,00	0,30	16,00	5,00	0,9
626103-0050-225	0,50	8,50	2,30	1,00	0,30	25,00	5,00	1,0
626103-0060-218	0,60	5,00	4,60	1,00	0,40	18,00	5,00	0,9
626103-0060-225	0,60	8,50	4,60	1,00	0,40	25,00	5,00	1,0
626103-0080-218	0,80	5,00	4,80	1,00	0,60	18,00	5,00	0,9
626103-0080-225	0,80	8,50	4,80	1,00	0,60	25,00	5,00	1,0
626103-0100-225	1,00	8,50	5,00	1,00	0,80	25,00	5,00	1,0

**L-styli small**

Adapter: Clamping system M3 XXT titanium
 Shaft: Tungsten carbide, straight/stepped
 Stylus tip: Ruby sphere
 Very lightweight and small L-styli.

Item No.	DK	L	ML	DS	B	DG	Wt.(g)
626103-0100-418	1,00	5,00	5,00	0,80	9,00	5,00	0,9
626103-0150-418	1,50	5,00	5,00	1,00	9,00	5,00	0,9
626103-0150-425	1,50	8,50	8,50	1,00	12,50	5,00	1,0
626103-0200-418	2,00	5,00	5,00	1,00	9,00	5,00	0,9
626103-0200-425	2,00	8,50	8,50	1,00	12,50	5,00	1,0

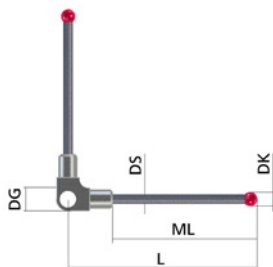
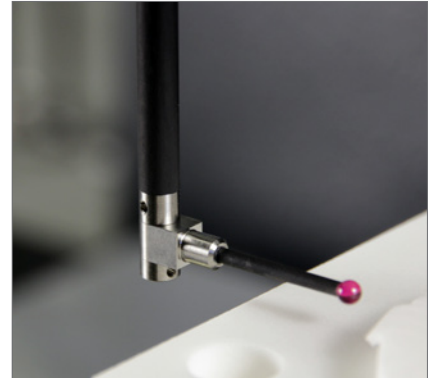
Item No.	DK	L	ML	DS	DSE	B	DG	Wt.(g)
626103-0030-416	0,30	4,00	2,30	1,00	0,20	8,00	5,00	0,9
626103-0030-425	0,30	8,50	2,30	5,00	0,20	12,50	5,00	1,0
626103-0050-416	0,50	4,00	2,30	1,00	0,30	8,00	5,00	0,9
626103-0050-425	0,50	8,50	2,30	1,00	0,30	12,50	5,00	1,0
626103-0060-418	0,60	5,00	4,60	1,00	0,40	9,00	5,00	0,9
626103-0060-425	0,60	8,50	4,60	1,00	0,40	12,50	5,00	0,9
626103-0080-418	0,80	5,00	4,80	1,00	0,60	9,00	5,00	0,9
626103-0080-425	0,80	8,50	4,80	1,00	0,60	12,50	5,00	0,9
626103-0100-425	1,00	8,50	5,00	1,00	0,80	12,50	5,00	1,0



Clamping styli

Clamping styli

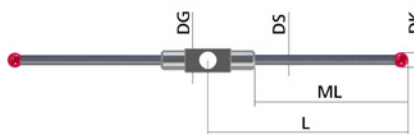
Lightweight 1/2 star styli, L-styli and T-styli systems can be assembled with these clampable styli. These are fastened in the desired angular position by means of a clamping screw, clamping extension or clamping styli. Use the ZEISS FixAssist XXT stylus set-up device for this.



1/2 Star styli 90°

Adapter: Clamping system M3 XXT titanium
 Shaft: ZEISS ThermoFit, straight
 Stylus tip: Ruby sphere

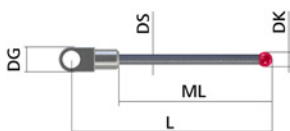
Item No.	DK	L	ML	DS	DG	Wt.(g)
626103-0303-020	3,00	20,00	11,00	2,00	5,00	1,4
626103-0303-030	3,00	30,00	21,00	2,00	5,00	1,5
626103-0303-040	3,00	40,00	31,00	2,00	5,00	1,6



T-styli

Adapter: Clamping system M3 XXT titanium
 Shaft: ZEISS ThermoFit, straight
 Stylus tip: Ruby sphere

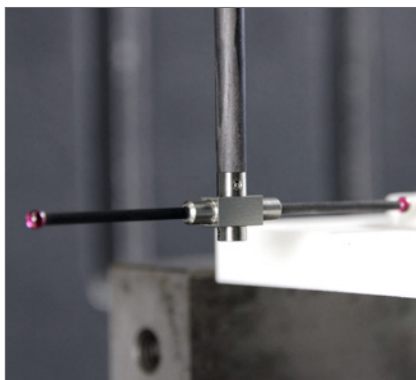
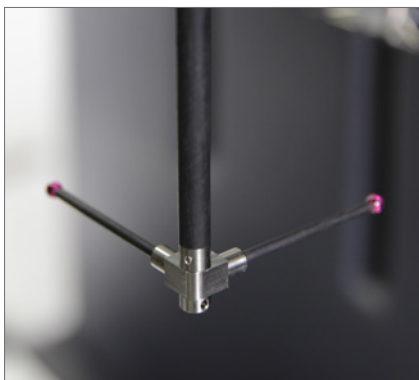
Item No.	DK	L	ML	DS	DG	Wt.(g)
626103-0304-020	3,00	20,00	11,00	2,00	5,00	1,4
626103-0304-030	3,00	30,00	21,00	2,00	5,00	1,5
626103-0304-040	3,00	40,00	31,00	2,00	5,00	1,6



L-styli

Adapter: Clamping system M3 XXT titanium
 Shaft: ZEISS ThermoFit, straight
 Stylus tip: Ruby sphere

Item No.	DK	L	ML	DS	DG	Wt.(g)
626103-0302-020	3,00	20,00	11,00	2,00	5,00	0,8
626103-0302-030	3,00	30,00	21,00	2,00	5,00	0,9
626103-0302-040	3,00	40,00	31,00	2,00	5,00	1,0



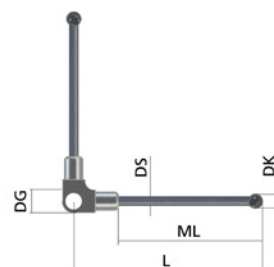
1/2 Star styli 90°

Adapter: Clamping system M3 XXT titanium

Shaft: ZEISS ThermoFit, straight

Stylus tip: Silicon nitride sphere

Item No.	DK	L	ML	DS	DG	Wt.(g)
626103-0313-020	3,00	20,00	11,00	2,00	5,00	1,4
626103-0313-030	3,00	30,00	21,00	2,00	5,00	1,5
626103-0313-040	3,00	40,00	31,00	2,00	5,00	1,6



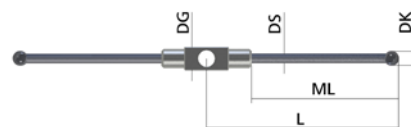
T-Styli

Adapter: Clamping system M3 XXT titanium

Shaft: ZEISS ThermoFit, straight

Stylus tip: Silicon nitride sphere

Item No.	DK	L	ML	DS	DG	Wt.(g)
626103-0314-020	3,00	20,00	11,00	2,00	5,00	1,4
626103-0314-030	3,00	30,00	21,00	2,00	5,00	1,5
626103-0314-040	3,00	40,00	31,00	2,00	5,00	1,6



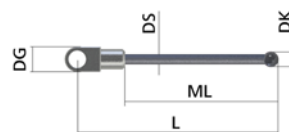
L-Styli

Adapter: Clamping system M3 XXT titanium

Shaft: ZEISS ThermoFit, straight

Stylus tip: Silicon nitride sphere

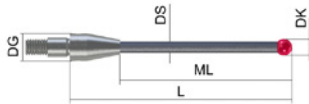
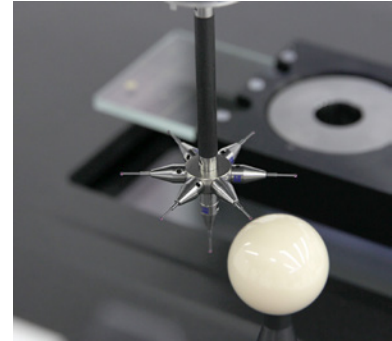
Item No.	DK	L	ML	DS	DG	Wt.(g)
626103-0312-020	3,00	20,00	11,00	2,00	5,00	0,8
626103-0312-030	3,00	30,00	21,00	2,00	5,00	0,9
626103-0312-040	3,00	40,00	31,00	2,00	5,00	1,0



Clamping styli

Clamping styli

For the construction of clamped styli systems you need clamping elements. Screws, extensions and styli are available for this purpose.

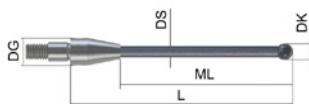


Clamping styli

Adapter: Clamping system M3 XXT titanium
 Shaft: ZEISS ThermoFit, straight
 Stylus tip: Ruby sphere

For attaching clampable M3 XXT connecting elements and styli.

Item No.	DK	L	ML	DS	DG	Wt.(g)
626103-0301-020	3,00	20,00	11,00	2,00	5,00	0,7
626103-0301-030	3,00	30,00	21,00	2,00	5,00	0,8
626103-0301-040	3,00	40,00	31,00	2,00	5,00	0,8



Clamping styli

Adapter: Clamping system M3 XXT titanium
 Shaft: ZEISS ThermoFit, straight
 Stylus tip: Silicon nitride sphere

For attaching clampable M3 XXT connecting elements and styli.

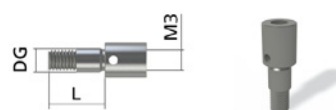
Item No.	DK	L	ML	DS	DG	Wt.(g)
626103-0311-020	3,00	20,00	11,00	2,00	5,00	0,7
626103-0311-030	3,00	30,00	21,00	2,00	5,00	0,8
626103-0311-040	3,00	40,00	31,00	2,00	5,00	0,8



Clamp screw

For securing M3 XXT probes connecting elements and styli.

Item No.	DG	L	Wt.(g)
626103-6110-004	3,50	8,00	0,5

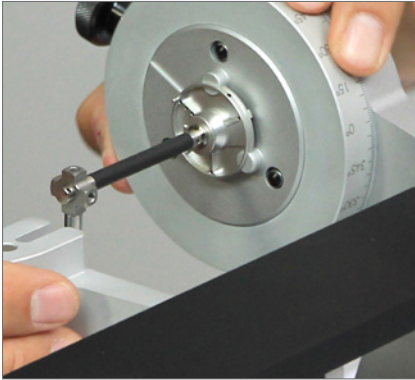


Clamp screw with M3 female thread

For securing M3 XXT probes connecting elements and styli. The integrated M3 internal thread permits the use of an additional M3 XXT stylus.

Item No.	DG	L	Wt.(g)
626103-6110-005	3,50	8,00	0,7

Clamped connecting elements



These clampable connecting elements are fixed by means of clamping screws, clamping extensions or clamping styli and can therefore be adjusted by rotation. The ZEISS FixAssist XXT is a practical alignment aid.

Cube 90 degree, M3 XXT, single

One M3 XXT stylus can be mounted.

Item No.	B	L	MAT	Wt.(g)
626103-6110-001	5.00	6.50	titanium	0.6



Cube 180 degree, M3 XXT, double

Two M3 XXT styli can be mounted on the side at an angle of 180°.

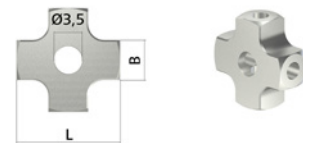
Item No.	B	L	MAT	Wt.(g)
626103-6110-002	5.00	13.00	titanium	1.1



Cube, M3 XXT, four-sided

Four M3 XXT styli can be mounted on the side at an angle of 90°.

Item No.	B	L	MAT	Wt.(g)
626103-6110-003	5.00	13.00	titanium	1.8



Cube, M3 XXT, six-sided

Six M3 XXT styli can be mounted on the side at an angle of 60°.

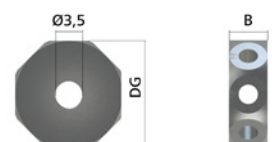
Item No.	DG	B	MAT	Wt.(g)
626103-6110-006	12.00	5.00	titanium	1.8



Cube, M3 XXT, eight-sided

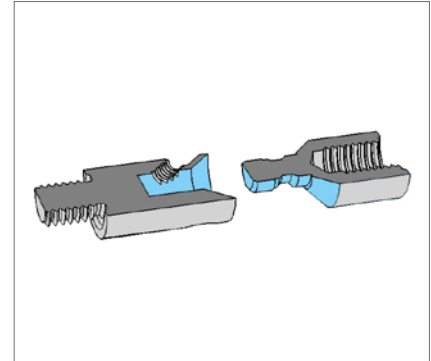
Eight M3 XXT styli can be mounted on the side at an angle of 45°.

Item No.	DG	B	MAT	Wt.(g)
626103-6110-007	14.00	5.00	titanium	2.3

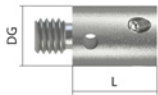
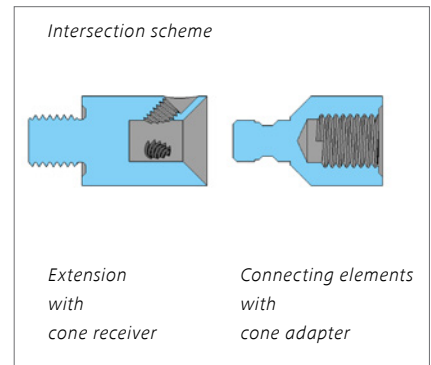


Rotary connecting elements M3 XXT

Our ZEISS M3 XXT rotary joints are made of titanium and are based on a zero-play conical connection. Three robust M1.2 tapped studs provide high clamping forces.



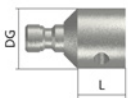
- Quick and secure assembly
- Optimum accessibility through a slim design
- Easy to adjust
- Can be used multiple times



Rotary joint receiver M3 XXT

This connecting element converts a M3 thread to a cone receiver. Various connecting elements with a cone adapter can be inserted in this.

Item No.	L	DG	MAT	Wt.(g)
626103-6180-002	7.00	5.00	titanium	0.5



Rotary joint M3 XXT, rotary

Any desired M3 components can be mounted with the M3 XXT rotary joint made of titanium.

Item No.		L	DG	MAT	Wt.(g)
626103-6180-011	without rotary joint	4.00	5.00	titanium	0.4
626103-6180-010	with rotary joint	11.00	5.00	titanium	0.9



Knuckle joint M3 XXT, rotary

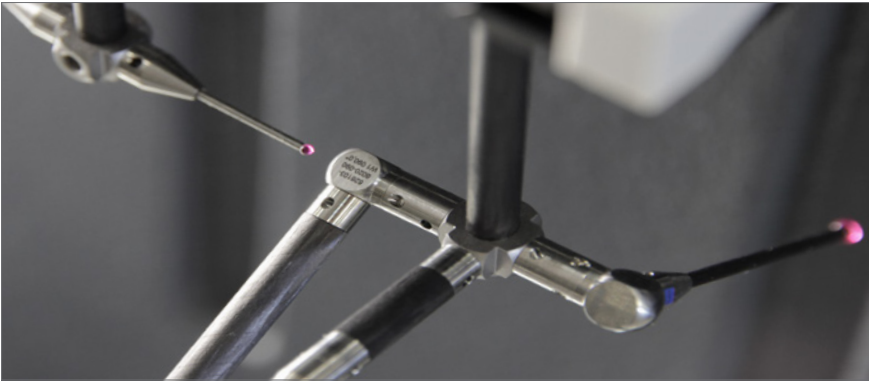
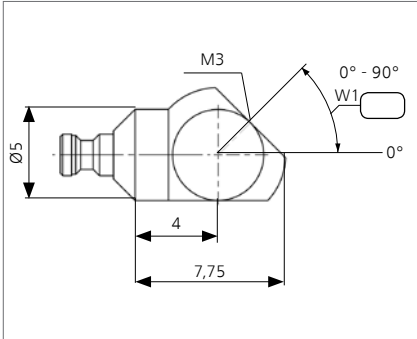
The knuckle joint made of titanium can accommodate a stylus or an extension with an M3 XXT thread. The knuckle joint has an adjustable angular range of 0° -/+ 90°.

Item No.		L	DG	MAT	Wt.(g)
626103-6180-021	without rotary joint	12.00	5.00	titanium	1.0
626103-6180-020	with rotary joint	19.00	5.00	titanium	1.6

Conical inserts

We produce your angle

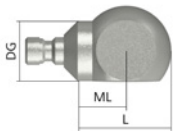
You can send us a fax on +49 7361 6336 29 or an email to orders@3d-net.de. Please state your desired angle block between 0° and 90° in your enquiry as well as the quantity.



Angle block M3 XXT, blank, rotary

You can quickly and easily produce a custom angle block for your applications from this blank with a cone adapter.

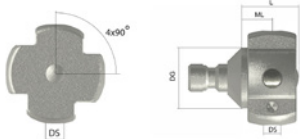
Item No.	L	ML	DG	MAT	Wt.(g)
626103-6020-000	7,75	4,00	5,00	titanium	1,0



Star stylus piece 4x90°

Using the angle block, any solid angle can be created. Up to 4 styli without thread and diameter 1,5mm can be mounted to the star adapter.

Item No.	L	DG	ML	B	DS	MAT	Wt.(g)
626103-6180-004	4.70	5.00	2,5	7,9	1,5	titanium	2,0



Star stylus piece 3x120°

Using the angle block, any solid angle can be created. Up to 3 styli without thread and diameter 1,5mm can be mounted to the star adapter.

Item No.	L	DG	ML	B	DS	MAT	Wt.(g)
626103-6180-003	4.70	5.00	2,5	7,9	1,5	titanium	1,8



Extensions

ThermoFit® from ZEISS

Stylus extensions permit the assembly of long styli and the measurement of features which are difficult to access on workpieces.

ZEISS ThermoFit extensions have a longer and therefore more stable base body made of a high-strength titanium. They thereby provide very high stiffness and are considerably lighter compared to standard steel or titanium extensions. Longer stylus systems can therefore be built without exceeding the load limits of the probe. Select lengths from 20 mm to 150 mm from our range of extensions. Special lengths are available by request.

Advantage

- High bending and torsional strength
- Assembly of more complex systems
- Light weight
- High thermal stability

Benefits

- Faster scanning with high precision possible
- Fewer stylus systems required
- Measurement with variable ambient temperatures (e.g. in the production)

To sum up

The specially wound carbon fiber ZEISS ThermoFit also enables you to obtain precise results at higher measuring speeds and with fluctuating ambient temperatures.



ZEISS ThermoFit clamping extensions

These clamping extensions are used to fix components of the M3 XXT clamping system. It has an M3 internal thread..

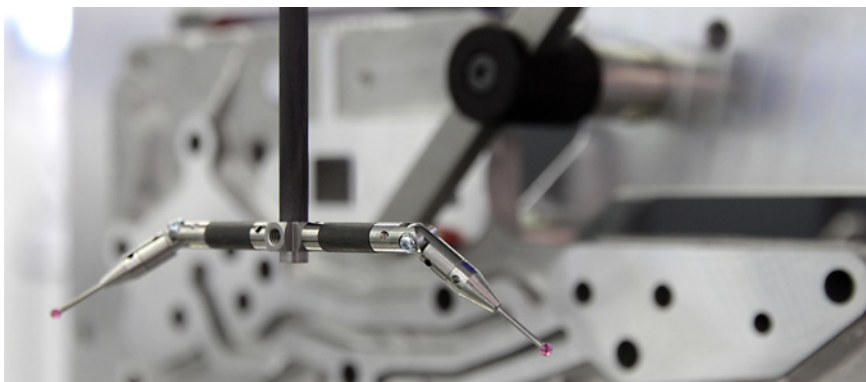
Item No.	LE	DGE	Wt.(g)
626103-5020-010	20,00	5,00	1,3
626103-5045-010	45,00	5,00	1,5



ZEISS ThermoFit clamping extensions with conical receiver

These clamping extensions are used to fix components of the M3 XXT clamping system. It has a cone receiver into which connecting elements with a cone adapter are inserted.

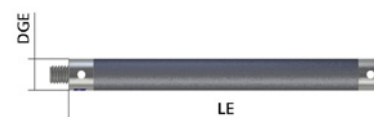
Item No.	LE	DGE	Wt.(g)
626103-5020-015	21,00	5,00	1,4
626103-5045-015	46,00	5,00	1,7



ZEISS ThermoFit extensions

These carbon fibre extensions have an M3 internal thread.

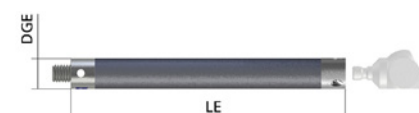
Item No.	LE	DGE	Wt.(g)
626103-5020-000	20,00	5,00	1,2
626103-5025-000	25,00	5,00	1,3
626103-5030-000	30,00	5,00	1,3
626103-5040-000	40,00	5,00	1,4
626103-5050-000	50,00	5,00	1,5
626103-5060-000	60,00	5,00	1,7
626103-5065-000	65,00	5,00	1,7
626103-5075-000	75,00	5,00	1,7
626103-5080-000	80,00	5,00	1,8
626103-5100-000	100,00	5,00	2,0
626103-5130-000	130,00	5,00	2,5
626103-5150-000	150,00	5,00	2,7



ZEISS ThermoFit extensions with conical receiver

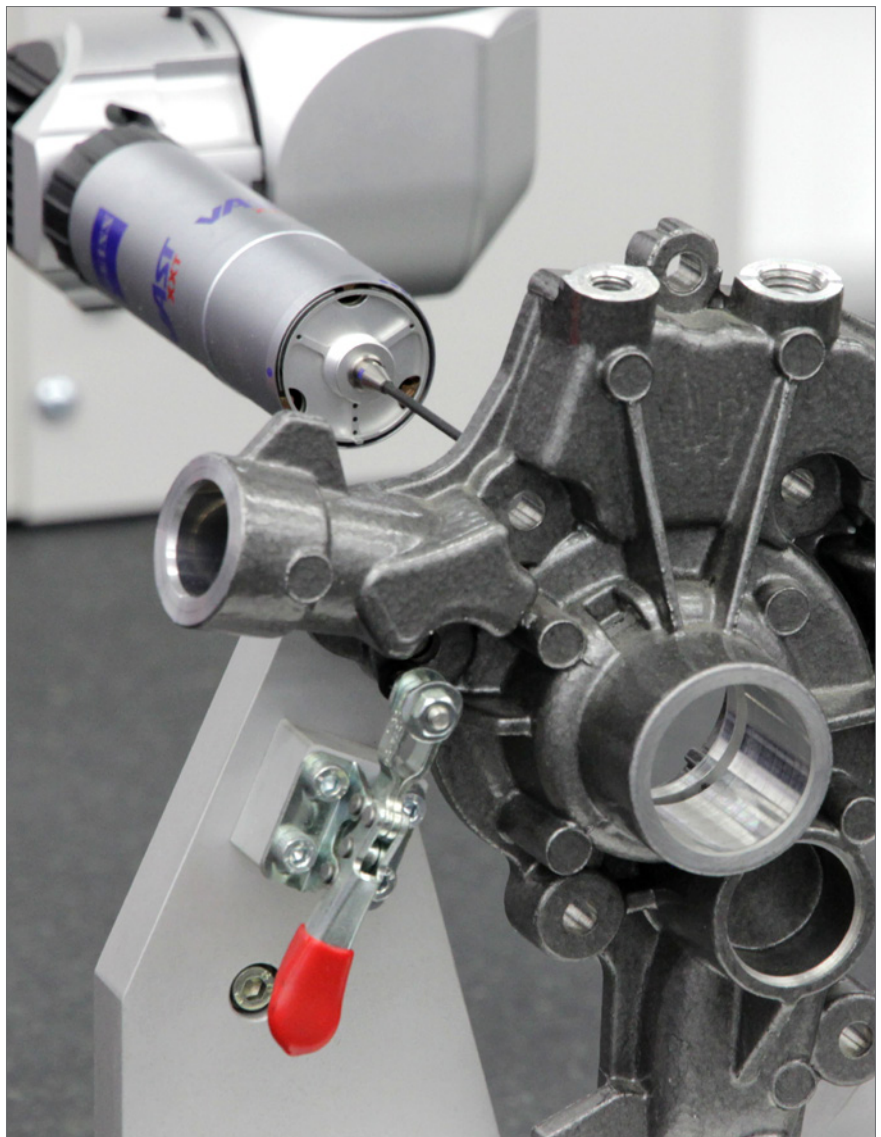
These carbon fibre extensions have a cone receiver into which connecting elements with a cone adapter are inserted.

Item No.	LE	DGE	Wt.(g)
626103-5020-005	21,00	5,00	1,2
626103-5025-005	26,00	5,00	1,2
626103-5030-005	31,00	5,00	1,3
626103-5040-005	41,00	5,00	1,4
626103-5050-005	51,00	5,00	1,5
626103-5060-005	61,00	5,00	1,6
626103-5070-005	71,00	5,00	1,8
626103-5080-005	81,00	5,00	1,9
626103-5100-005	101,00	5,00	2,1



ZEISS adapter plates

Several stylus systems are often required, in order to be able to measure all the features of a workpiece. Automatic stylus system change by your CMM is therefore an advantage. This requires specially encoded adapter plates. We offer you various adapter plates with an ID chip.



Adapter plates ZEISS VAST XXT TL2 / TL4 with extensions

The adapter plate with an encoded ID chip is designed for universal use. It has a fixed-mounted ZEISS ThermoFit extension with an M3 internal don't hyphenate.

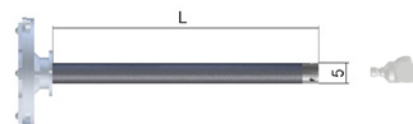
Item No.	System	L	Wt.(g)
620161-8065-000	TL2 / TL4	75,00	5,4



Adapter plates ZEISS VAST XXT with extensions, conical receiver

These adapter plates with an encoded ID chip are designed for universal use. They have a fixed-mounted ZEISS ThermoFit extension with a cone receiver into which connecting elements with a cone adapter are inserted.

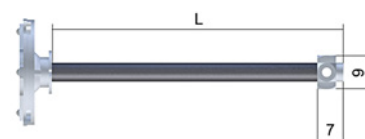
Item No.	System	L	Wt.(g)
626103-8031-053	TL1	53,00	5,5
626103-8033-053	TL3	53,00	5,5
626103-8032-076	TL2 and TL4	76,00	5,8



Adapter plates ZEISS VAST XXT TL1 / TL3 with star styli

These adapter plates are equipped with an encoded ID chip. They have a fixed-mounted ZEISS ThermoFit extension with an aligned 5-sided cube. This enables extremely lightweight star styli to be assembled.

Item No.	System	L	Wt.(g)
626103-8031-055	TL1	55,00	6,26
626103-8033-055	TL3	55,00	6,26
626103-8031-075	TL1	75,00	6,33
626103-8033-075	TL3	75,00	6,33



Adapter plates ZEISS VAST XXT TL1 / TL3

These adapter plates with an encoded ID chip are designed for universal use in the assembly of your stylus systems

Item No.	System	Description	Wt.(g)
620161-8075-000	TL3	Adapter plates VAST XXT TL3 ZSH-28-B-0-M3	4,6 g
620161-8055-000	TL1	Adapter plates VAST XXT TL1 ZSH-28-A-0-M3	4,6 g



Reference adapter plates ZEISS VAST XXT

These adapter plates with an encoded ID chip are used to measure with the reference adapter and have a red marking.

Item No.	System	Description	Wt.(g)
620161-8058-000	TL1	Reference-adapter plates ZSH-28-A-REF-TL1-M3	4,6 g
620161-8078-000	TL3	Reference-adapter plates ZSH-28-B-REF-TL3-M3	4,6 g



Tools



XXT stylus assembly pliers

Styli, screws and extensions can be mounted in the XXT system with these specially made XXT stylus assembly pliers.

Item No.	Description
----------	-------------

626109-0056-000	XXT stylus assembly pliers
-----------------	----------------------------



Micro torque screwdriver for conical connections

The blade is replaceable and available in a set.

Item No.	Description
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626109-0054-000	Micro torque screwdriver 0.05Nm TX1
626109-0055-000	Replacement blade TX1 for micro torque screwdriver
626109-0058-000	Set replacement blades TX1 for micro torque screwdriver, 5 pcs.



Screw set for cone receivers M3 XXT

Set of six M1.2 Torx replacement screws for fixing the M3 XXT conical connection with rotary connecting elements.

Item No.	Description
----------	-------------

626119-0001-041	Set replacement screw for conical connection , DG5, M3XXT, 6 pcs.
-----------------	---



XXT styli assembly aid

The assembly tool is pressed on the side of the extension when you screw on a stylus with a pin or hook wrench.

Item No.	Description
----------	-------------

626109-0026-000	XXT styli assembly aid
-----------------	------------------------



Torx screwdrivers for conical connections M3 XXT

Especially for rotary connection components M3 XXT from ZEISS

Item No.	Description
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626109-0059-000	Set torx screwdriver T1, angled, 5 pcs.
-----------------	---



Pin wrench ZEISS standard

Use on both sides for mounting styli.

Item No.	Description
----------	-------------

000000-0015-323	Pin wrench, 1.1
602030-0222-000	Pin wrench, 2.9



Hex wrench

The hexagon wrench is used for tightening cylinder-head screws.

Item No.	Description
----------	-------------

602030-0042-000	Hex wrench DIN 911, SW 0.9
602030-0002-000	Hex wrench DIN 911, SW 1.5
000000-0015-245	Hex wrench DIN 911, SW 2
602030-0021-000	Hex wrench DIN 911, SW 2.5
000000-0015-247	Hex wrench DIN 911, SW 3
000000-0015-248	Hex wrench DIN 911, SW 4

FixAssist® XXT from ZEISS

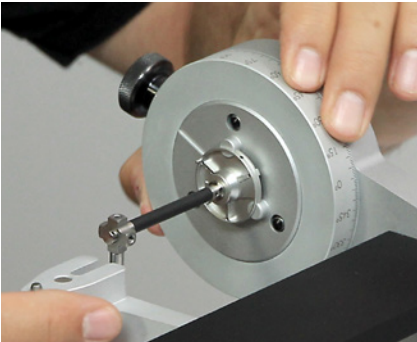
Rapid and precise



Simplifies the design of M3 XXT stylus systems

ZEISS FixAssist XXT makes it easier for measurement engineers to align the styli quickly and precisely. You not only increase your efficiency but also prevent stylus collisions during measurement.

To set M3 XXT stylus systems with the ZEISS FixAssist, the operator clamps the adapter plate in the machine using magnets. The stylus system is then turned to the desired position by means of a wheel. With the help of an appropriate adapter, the stylus angle is aligned and fixed via a set screw.



ZEISS FixAssist XXT

Alignment device for assembling M3 XXT stylus systems with tools and adapters S1, KT and W1. Used to set spatial angle pieces, star styli, clampable styli and clampable star styli.

Item No.	Description
626109-9140-200	ZEISS FixAssist XXT, including a tool kit for mounting styli systems

Adapter sets for knuckle joint

Knuckle joint angles can be set precisely with this adapter set for ZEISS FixAssist XXT.

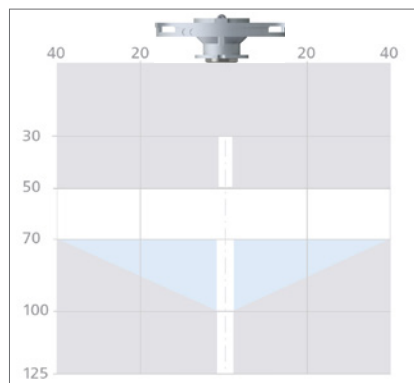
Item No.	Description
626109-9140-300	ZEISS FixAssist XXT adapter sets for knuckle joints



Your specially designed stylus system

Our stylus experts will create a design for you with CAD and send you a quotation.

ZEISS VAST XXT TL1

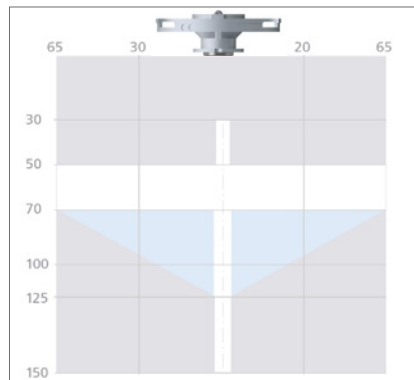


- Sketch the desired structure of your stylus system
- Include your contact details
- Please send the enquiry by fax to +49 7361 6336 29
- Or fill in the form in our webshop at www.probes.zeiss.com.

All dimensions in mm

- Area of reduced dynamic performance
- Area not allowed

ZEISS VAST XXT TL3



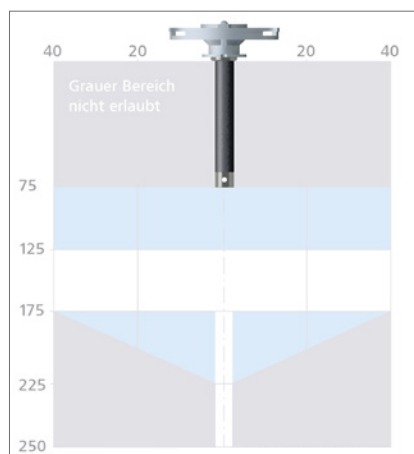
Shaft material (SMAT)

- ☐ Tungsten carbide (HM)
- ☐ Carbon fibre / ZEISS ThermoFit (TF)

Sphere material (TMAT)

- ☐ Ruby (R)
- ☐ Silicon nitride (SiN)

ZEISS VAST XXT TL2 / TL4



Company: _____

Department: _____

Name, First: _____

Address: _____

Zip / City: _____

State: _____

Phone: _____

E-mail: _____

Fax: _____

Storage

Protected storage



Probe cabinet compact for XXT

This compact probe cabinet protects the sensitive XXT stylus systems. Three special holders for XXT plates are included in the probe cabinet. These can be freely positioned on the rear wall. Additional probe sockets can be ordered to allow you to fully utilize the 500 mm x 500 mm space provided in the cabinet.

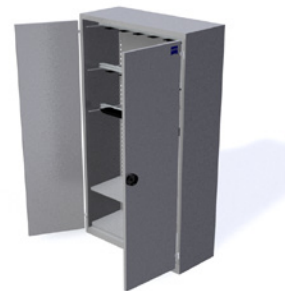
Item No.	Description
626100-9023-000	Probe cabinet compact for XXT
626100-9023-100	XXT probe socket for probe cabinet XXT
626100-9023-110	Set 5 psc. XXT probe socket for probe cabinet



Probe cabinet ZEISS MSC

Multi Sensor Cabinet to store probe configurations, styli and accessories. Design with sheet doors, lock, external dimensions WxDxH 1000x400x2000 mm. Incl. two mounting bars with 16 XXT probe sockets, one bar with two tool trays and one shelf. Position, height and depth of the bars are adjustable.

Item No.	Description
626100-9026-000	Probe cabinet MSC, W 1000 x D 400 x H 2000, 16 XXT-sockets
626100-9015-000	Probe cabinet, W1000 x D 400 x H 2000, without sockets, metal doors
626100-9015-100	Probe cabinet, W1000 x D 400 x H 2000, without sockets, glass doors
626100-8023-000	Shelf, distributed load max. 60 kg, width 990 mm
626100-8024-000	Additional level bar for probe cabinet MSC, working width 930 mm
626100-8015-000	Probe socket XXT for probe cabinet MSC, width 50 mm
626100-8022-000	Tool tray for probe cabinet MSC, width 210 mm x depth 105 mm



Pallet cabinet large

In the pallet cabinets, all kind of pallets can be stored safely from dust and dirt. Furthermore, the cabine can be used to prepare your workpiece. The pallet cabinet large is 800 x 750 x 1000 mm.

Art.-Nr.	Description
626109-9222-300	Pallet cabinet large



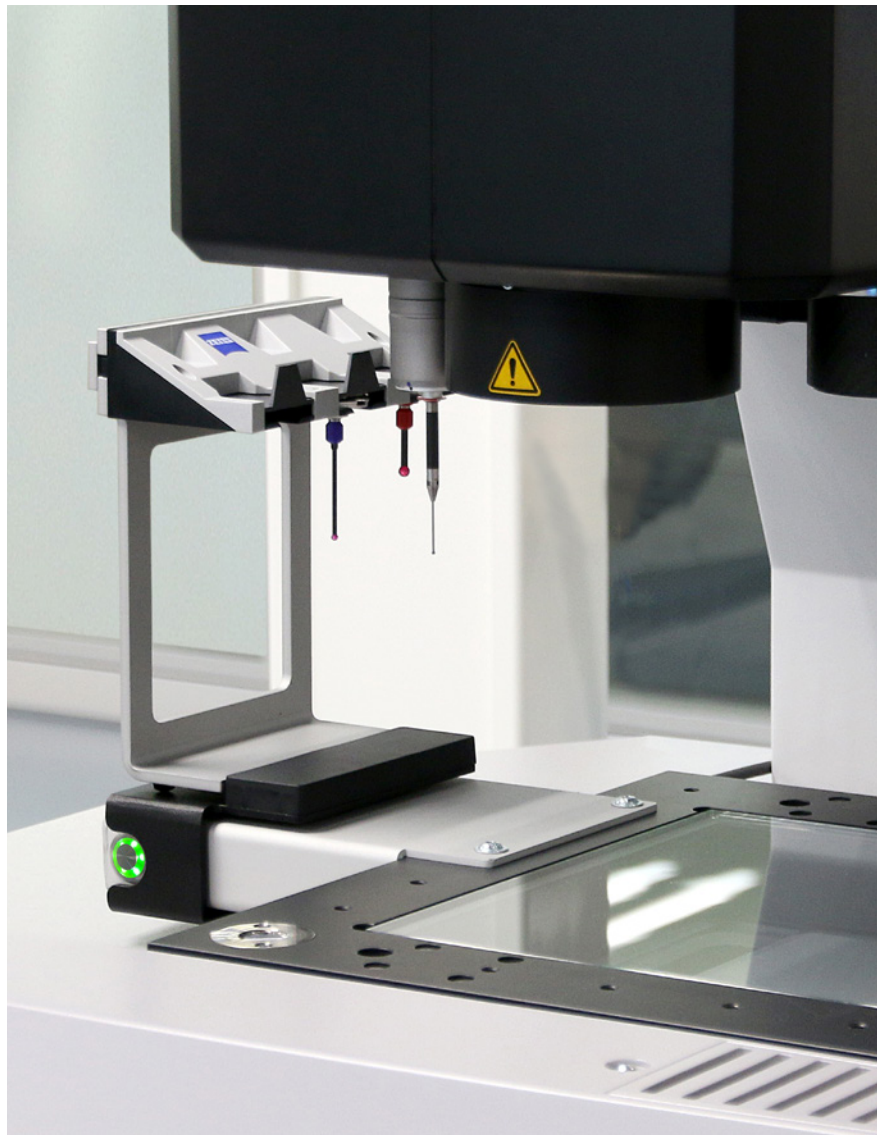
Automatically moving changer rack

ProMax® from ZEISS for O-INSPECT 322

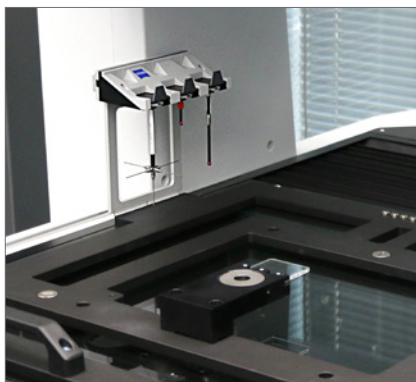
The ZEISS ProMax automatic changer rack is an extension of the ZEISS MSR. It enables you to use the complete measuring range. ZEISS ProMax automatically moves the stylus systems out of the measuring range when they are no longer needed. As a result, you do not lose any of the measuring range of the CMM and can also measure and bypass larger components without any problems.

Advantages

- Automatic stylus change
- Full utilization of measurement area
- Prevention of collisions



ZEISS sensor racks



ZEISS ProMax for ZEISS O-INSPECT 322

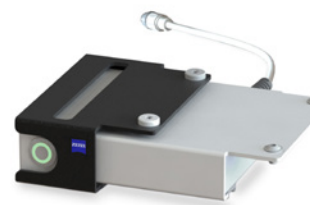
The ZEISS ProMax for ZEISS O-INSPECT 322 enables you to use the complete measuring range even if a changer rack is used. ZEISS ProMax automatically moves the MSR outside the measuring range during the measurement. Measurements with a white light sensor and an MSR are only possible with ZEISS ProMax. It is completely integrated in the machine control system – all measuring programs can continue to be used after the installation without any changes. Supplied without an MSR.

Item No.	Description
626100-9700-000	ProMax for O-INSPECT 322

Sensor rack ZEISS O-INSPECT

Accommodation of up to three ZEISS VAST XXT adapter plates.
Mounting in the measuring range by means of the magnetic base.

Item No.	Description
626100-9382-020	MSR O-INSPECT 322 3-fold, H 142,5mm
626100-9382-002	MSR O-INSPECT 442 / 543 / 863 3-fold, H 142,5mm



Sensor rack for ZEISS O-INSPECT 322, 5+1

Accommodates up to six ZEISS VAST XXT adapter plates. Five probe sockets can be changed via the CNC run. One socket can only be used manually. Mounting in the measuring range by means of the magnetic base.

Item No.	Description
626100-9382-021	MSR O-INSPECT 322 5+1, H 142,5mm, supplied with probe sockets.



Desktop sensor rack

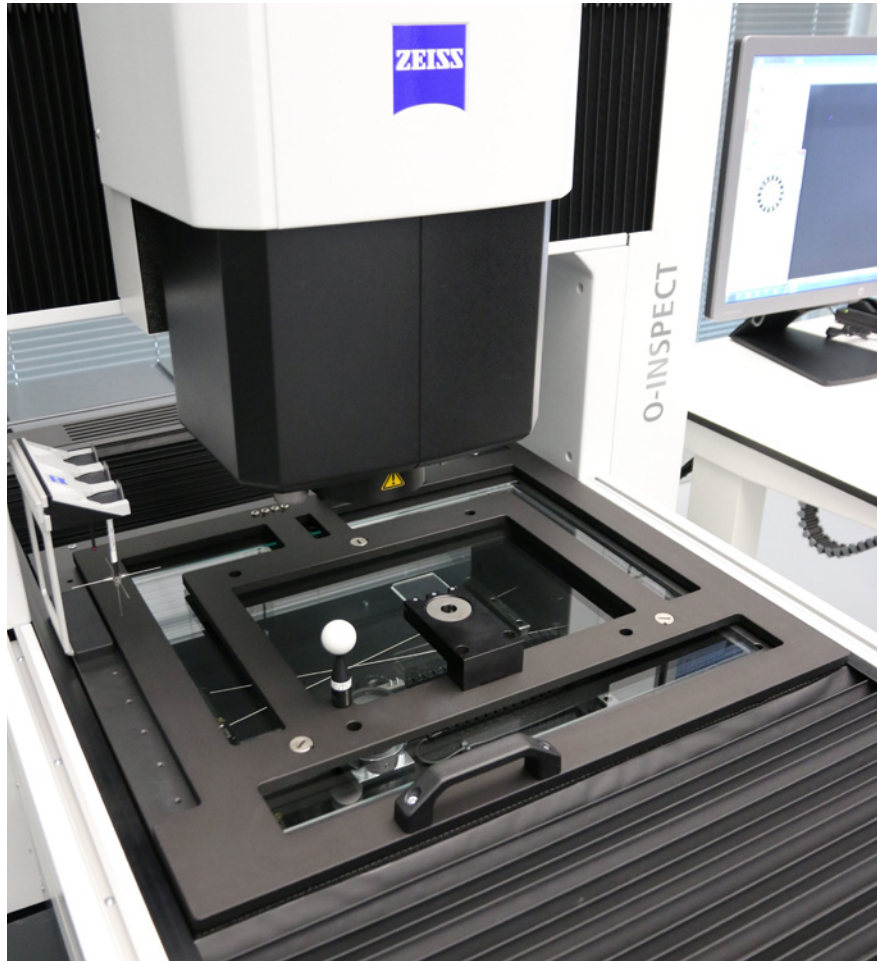
Socket for four XXT adapter plates. Can be extended to six sockets. Is used in the assembly and for the provision of stylus systems. Cannot be used as a changer rack on the CMM.

Item No.	Description
626119-0003-000	Socket for adapter plates, 4 sockets ZEISS VAST XXT



ZEISS reference bodies

Each coordinate measuring machine and each sensor, irrespective of whether it is tactile or optical, has individual requirements for the calibration process.



Reference sphere holder RSH

Reference sphere holder RSH-105-B OI, with tool in storage case (without reference sphere).

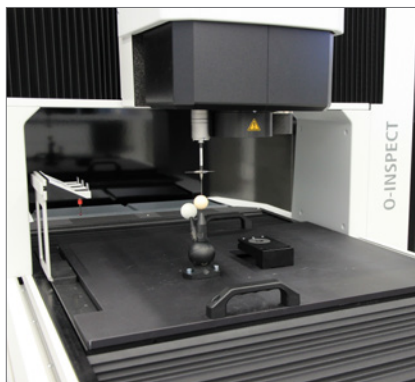
Item No.	Description
600332-9485-000	Reference sphere holder RSH-105-B OI



Reference spheres RS

The reference spheres can be mounted on all RSH systems. They have a ceramic sphere and a M6 thread. The length from the middle of the sphere to the base is 70,1 mm. All reference spheres come with a certificate.

Item No.	System	DK	L	DG	TMAT	Wt.(g)
600332-8444-000	M6	15,00	77,60	18,00	ceramic	100,00
600332-8445-000	M6	25,00	82,60	18,00	ceramic	114,00
600332-8446-000	M6	30,00	85,10	18,00	ceramic	132,00
600332-8443-000	M6	8,00	74,10	18,00	ceramic	91,00



Optical gauges

The optical reference template is required for calibrating the ZEISS ViScan camera and should be run at regular intervals and after a collision. The ratio of μ to pixels is determined in the X and Y direction.



Item No.	Description
600779-0020-000	Optical gauges, for transmitted light, uncalibrated
600779-0020-010	Optical gauges, for transmitted light, calibrated with certificate
660779-0020-020	Calibration for optical gauges

Adjustment ring

This adjustment ring has a diameter of 16mm. It is used to cross-check the tactile/optical stylus data.



Item No.	Description
622810-0105-000	Adjustment ring $\varnothing = 16$ mm

Calibration standard holder, optic-tactile

Fixture for ring gage, diameter 16 mm, and an optical reference template.



Item No.	Description
622810-8016-010	Calibration template holder, optical-tactile

Calibration template for RT-axis

Calibration template for RT-axis and styli kit for ZEISS O-INSPECT is used for calibration of the axis. Stylus with appropriate calibration stylus, without calibration.

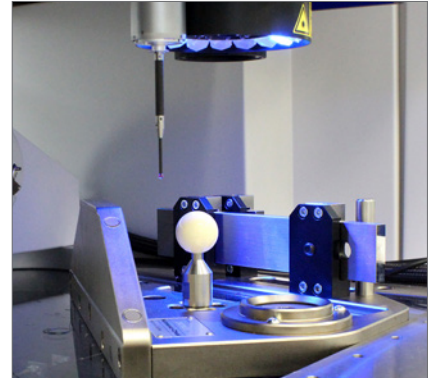
Item No.	Description
626106-0059-000	Calibration template for RT-axis and styli kit for O-INSPECT



ZEISS calibration artifacts

Calibration artifacts

enable an independent in-process inspection of your coordinate measuring machine or contour measuring machine. They are used to determine the inspection criteria-specific measuring uncertainty and measurement process suitability.



ZEISS Multisensor-Check

The Multisensor-Check for the standardized checking of coordinate measuring machines with tactile/optical sensors. The universal, calibrated calibration artifact is supplied with the respective control and analysis software. The Multisensor-Check can be used to check coordinate measuring machines according to DIN EN ISO 10360-2 and VDI/VDE 2617:

- Probing behaviour of the probing system
- Scanning properties of the probing system
- Length measurement deviation

Probing error, length measurement deviation through tactile and optical check.

The basis of the calibration artifact is a torsionally rigid base body on which high-precision, calibrated measuring standards are mounted:

- One special adjustment ring for tactile and optical measurements, diameter 16 mm
- One precision ceramic sphere, diameter 25 mm
- Two parallel gauge blocks, lengths 50 mm and 200 mm
- One glass scale, length 200 mm.

The glass scale has precise, circular markings for checking the probing error and a division scale for checking the length measurement deviation.

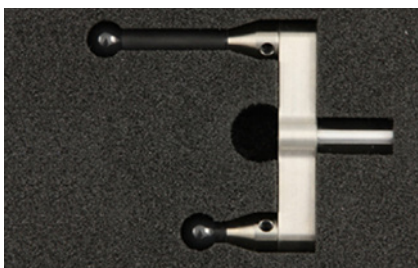
Item No.	Description
626001-0830-000	Multisensor-Check

ZEISS Alpha-Check

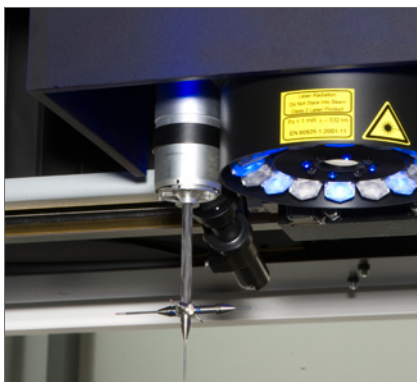
Alpha Check axis for RT O-INSPECT, calibrated with certificate.

- 1x ThermoFit stylus SiN, DK10, L25
- 1xThermoFit stylusSiN, DK10, L50
- Shipping case

Item No.	Description
626106-0058-000	Alpha-Check axis for RT O-INSPECT, calibrated



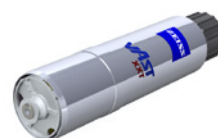
ZEISS probes



Scanning sensors ZEISS VAST XXT

Passive scanning sensors for use with a ZEISS RDS probe holder.
Restrictions on request.

Item No.	Description
620161-9110-000	VAST XXT TL1 ID D encoded 18 pole, complete
620161-9018-000	VAST XXT TL2/TL4 ID D encoded 18 pole, complete
620161-9130-000	VAST XXT TL3 ID D encoded 18 pole, complete



Cleaning and care

Cleaning swabs

The special cleaning swabs, made of knitted polyester, help with the cleaning of hemisphere discs, reference spheres and calibration templates.

Item No.	Description
626119-0010-007	Swabs Knitted Polyester 1,6mm, (500 pcs,)
626119-0010-008	Swabs Knitted Polyester 3,2mm, (500 pcs,)
626119-0010-009	Swabs Knitted Polyester 6,4mm, (500 pcs,)



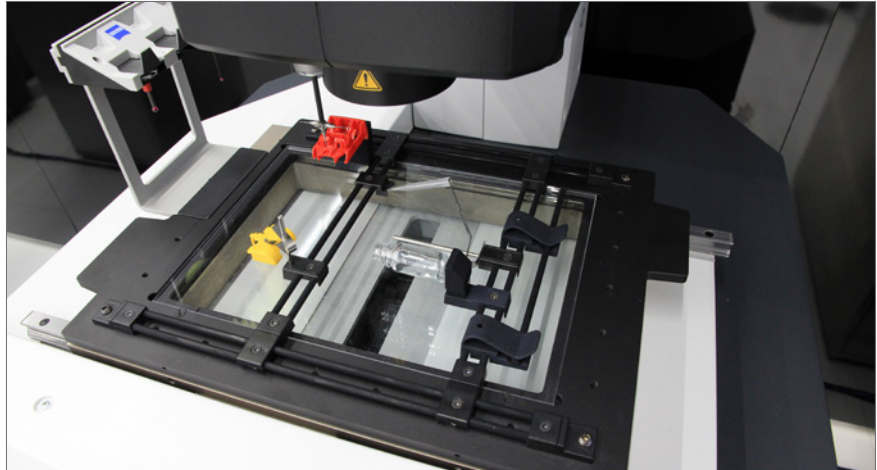
Cleaning material

Cleanliness is essential for precision measurements. The workpiece must be cleaned before the measurement in order to obtain optimum measuring results.

Item No.	Description
000000-1359-469	Microfiber cleaning tissue
626119-0010-006	Polyamide-stretch-glove with PU coated palm
000000-0424-218	Cleaning cloths Absorbond TX409,9" x9" (300 pcs)



Pallet system OMEGA 322



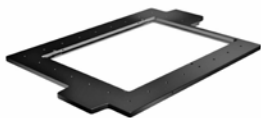
The OMEGA 322 pallet system is designed for the ZEISS O-INSPECT 322. The OMEGA 543 calibration comfort pallet or the OMEGA 863 pallet holding system also enable use on larger ZEISS O-INSPECT pallet systems. The measurement range of 300 x 200 mm can be fully utilized while you profit from the advantages of the pallet system:

Advantages

- Workpieces are clamped away from the measuring machine and valuable machine capacity is used for the actual measurement.
- Reduced downtimes.
- The workpiece is quickly and repeatably aligned by means of the 3-point holder.
- The calibration pallet also enables calibration with repeated accuracy in the middle of the measuring volume
- Pallets can be also used on the ZEISS O-INSPECT 543 or 863 with adaptation.

OMEGA 322 Frame

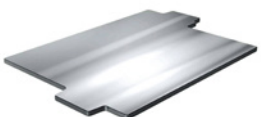
The pallet consists of an aluminum frame with a translucent pane on which workpieces are placed. The pane is available in clear glass or acrylic glass versions. The black-coated frame has holes for the attachment of the railed clamping system.



Item No.	Description
626109-9510-020	OMEGA 322 Frame, clear
626109-9510-022	OMEGA 322 Frame, acrylic

OMEGA 322 Basic

This pallet blank is for customized holding fixtures. The necessary holes can be drilled by the customer.



Item No.	Description
626109-9510-030	OMEGA 322 basic, aluminum



OMEGA 322 Adjustable frame

The pallet consists of a translucent pane on which workpieces are placed. The pallet can be aligned horizontally by $\pm 0.5^\circ$ with the lateral height adjustment screws. The frame has holes for the attachment of the railed clamping system.

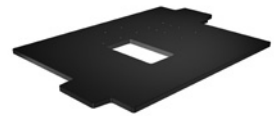
Item No.	Description
626109-9510-010	OMEGA 322 adjustable frame, clear
626109-9510-012	OMEGA 322 adjustable frame, acrylic glass



OMEGA 322 Calibration

This pallet ensures quick and precise implementation of your calibration process. All the holes and openings required for mounting the reference bodies are provided. Reference standards must be ordered separately.

Item No.	Description
626109-9510-000	OMEGA 322 Calibration without reference standards



OMEGA 322 Grid

The pallet has an M4 grid and additional holes for attachment of the railed clamping system. A screw guard prevents damage to the glass CMM table board.

Item No.	Description
626109-9510-031	OMEGA 322 with M4 grid 25x25
626109-9510-032	OMEGA 322 with M4 grid 15x15



Rail clamping system for ZEISS O-INSPECT 322

For the assembly of positioning or clamping fixtures for optical and tactile measurements. Can be directly attached to the machine table or OMEGA 322 pallets.

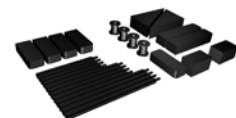
Item No.	Description
626109-9511-000	Rail clamping system basic kit for O-INSPECT



Plastic clamping system

Brackets made of highly stable plastic hold workpieces securely without damaging them. Assembly is provided on the M4 grid pallet.

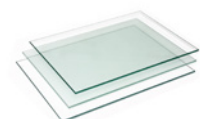
Item No.	Description
626109-9511-100	Plastic clamping system basic kit for O-INSPECT



Spare glass for pallet system OMEGA 322

Spare glass for the frame pallets are available in a clear glass and acrylic pane.

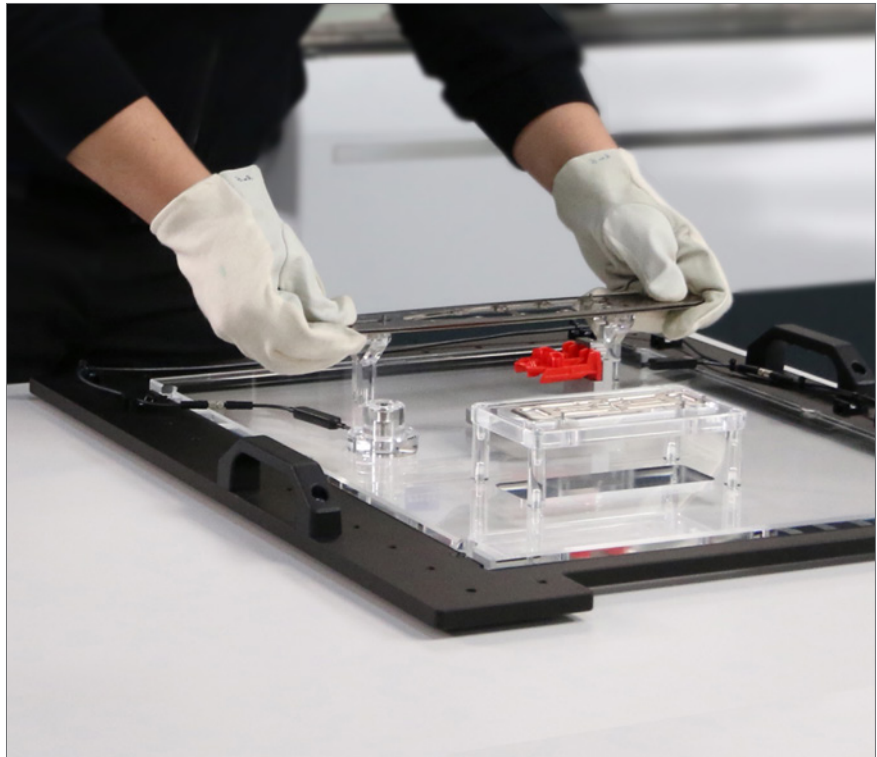
Item No.	Description
626109-8510-010	Spare glass panes for frame pallets OMEGA 322, clear
626109-8510-012	Spare glass panes for frame pallets OMEGA 322, acrylic



Pallet system OMEGA 543

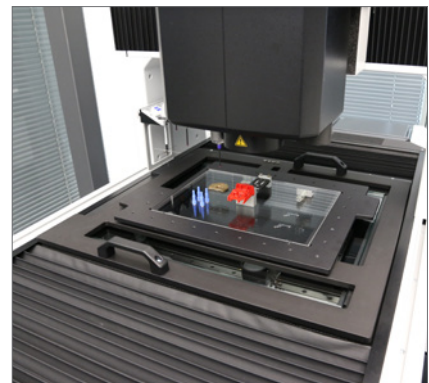
with temperature interface

The measurement range of 500 x 400 mm can be fully utilized. It features an integrated temperature interface, designed specifically for the ZEISS O-INSPECT 543. The contact unit is already fixed-mounted in the machine, meaning that the OMEGA 543 pallet with temperature interface can simply be placed on it. All the pallets are prepared for the simple retrofitting of the temperature measurement on the workpiece. Comfort pallets are characterized in particular by their light weight.



Advantages

- 3-point holder is quickly and repeatably aligned.
- The calibration pallet enables strange hyphenation with repeated accuracy in the middle of the measuring volume.
- Workpieces are clamped away from the measuring machine and valuable machine capacity is used for the actual measurement.
- Pallets are changed in an instant, which also shortens the downtimes.



OMEGA 543 Frame

The frame pallet has holes for the attachment of the railed clamping system. A pane is integrated for the optical measurement.

Item No.	Description
626109-9512-027	OMEGA 543 Frame, acrylic, with temperature interface
626109-9512-022	OMEGA 543 Frame, acrylic
626109-9512-025	OMEGA 543 Frame, clear, with temperature interface
626109-9512-020	OMEGA 543 Frame, clear



OMEGA 543 Adjustable frame

The pallet has all the characteristics of the OMEGA 543 frame. In addition, the pallet can be horizontally aligned by $\pm 0.5^\circ$ with the lateral height adjustment screws.

Item No.	Description
626109-9512-015	OMEGA 543 adjustable frame, clear, with temperature interface
626109-9512-010	OMEGA 543 adjustable frame, clear
626109-9512-017	OMEGA 543 adjustable frame, acrylic glas, with temperature interface
626109-9512-012	OMEGA 543 adjustable frame, acrylic glas



OMEGA 543 Comfort frame

This weight-reduced pallet weighing 5.38 kg has bores for the attachment of the railed clamping system and a pane for optical measurements.

Item No.	Description
626109-9512-023	OMEGA 543 Frame comfort, clear
626109-9512-024	OMEGA 543 Frame comfort, acrylic



OMEGA 543 Calibration

The calibration pallet is prepared for mounting the reference sphere for O-INSPECT, a glass standard and an adjustment ring. Reference bodies must be ordered separately (or not included).

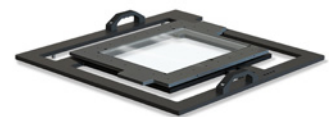
Item No.	Description
626109-9512-000	OMEGA 543 Calibration



OMEGA 543 Comfort calibration

The weight-reduced pallet weighing 6 kg has all the characteristics of the Remove the quotation marks of this pallet can be used as an adapter pallet for OMEGA 322 pallets.

Item No.	Description
626109-9512-001	OMEGA 543 Comfort calibration
626109-9512-006	OMEGA 543 Comfort calibration, with temperature interface



OMEGA 543 RT

The pallet offers three different positions for simple clamping of the RT rotary table on ZEISS O-INSPECT 543. A reference sphere holder can also be mounted. The rotary table, rotary holding system and reference sphere are available separately.

Item No.	Description
626109-9512-039	OMEGA 543 RT





OMEGA 543 Basic

This pallet blank is for customized holding fixtures. The necessary holes can be drilled by the customer.

Item No.	Description
626109-9512-035	OMEGA 543 Basic, with temperature interface
626109-9512-030	OMEGA 543 Basic



OMEGA 543 Grid M4

This pallet has an M4 grid and additional holes for attachment of the railed clamping system. A screw guard prevents damage to the glass CMM table board.

Item No.	Description
626109-9512-036	OMEGA 543 M4 grid 25x25, with temperature interface
626109-9512-031	OMEGA 543 M4 grid 25x25
626109-9512-037	OMEGA 543 M4 grid 15x15, with temperature interface
626109-9512-032	OMEGA 543 M4 grid 15x15



OMEGA 543 M4 Grid, comfort

This weight-reduced pallet weighing 8 kg has an inscribed M4 grid of 25 x 25 mm but no screw guard.

Item No.	Description
626109-9512-041	OMEGA 543 M4 grid comfort 25x25



Rail clamping system for ZEISS O-INSPECT 543

For the assembly of positioning or clamping fixtures for optical and tactile measurements. Can be directly attached to the machine table of the ZEISS O-INSPECT 543 or OMEGA 543 pallets.

Item No.	Description
626109-9513-000	Rail clamping system basic kit for ZEISS O-INSPECT 543



MSP for OMEGA pallet systems

For retrofitting OMEGA 543 pallets. Connection of up to four temperature sensors. The MCA signal converter is required to connect this interface to ZEISS O-INSPECT.

Item No.	Description
626140-9144-032	MSP Pallet side contact unit
626140-9144-010	MCA signal converter for temperature interface



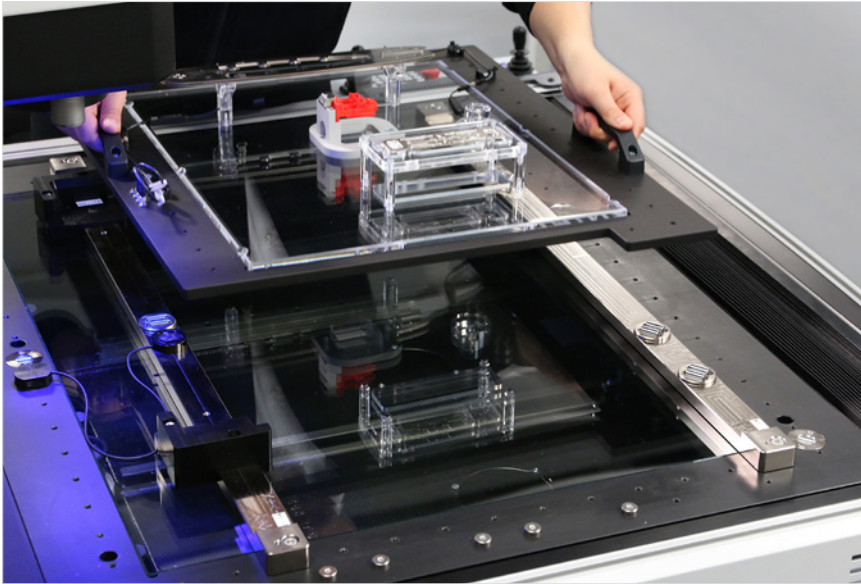
Temperature sensors

The sensors are connected by means of an MSP contact unit on the pallet side. Depending on requirements, you can choose between a straight sensor, an angled sensor and a magnetic sensor.

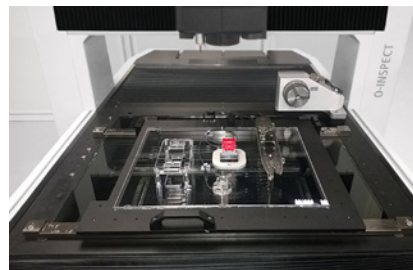
Item No.	Description
626140-9141-010	Temperature sensor (small) straight, M5 interface
626140-9141-012	Temperature sensor (small) angled, M5 interface
626140-9141-014	Temperature sensor (small) magnetic, M5 interface

Pallet system for ZEISS O-INSPECT 863

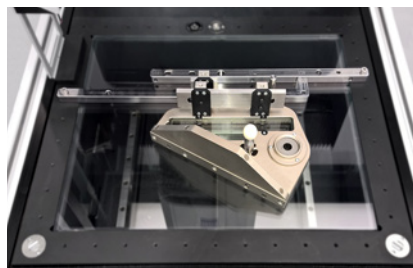
Pallet holding system for OMEGA pallets



You can use all OMEGA pallets on your O-INSPECT 863. You only need the pallet holding system. This consists of two strips which can be converted from the OMEGA 543 to the OMEGA 322 pallet system and vice versa in just a few simple steps. You can also use the temperature interface with the Modbus extension here.



The recording also allows you to repeat the setup of your ZEISS Multisensor-Check.



Pallet holding system for ZEISS O-INSPECT 863

The holder permits the use of OMEGA 322 and 543 pallets on the ZEISS O-INSPECT 863. The two strips are screwed on at the appropriate distance. The pallets can be positioned with repeated accuracy via the 3-point holder. An extension also enables the temperature interface to be used.



Item No.	Description
626109-9515-007	OMEGA 863 Pallet holding system, T
626140-9144-034	Extension for Modbus temperature interface

ZEISS styli kits M3 XXT

A quick start



Save time!

Find the right original equipment for stylus system components for your ZEISS coordinate measuring machine. Here is our recommendation:

		ZEISS DuraMax	ZEISS O-INSPECT	ZEISS RDS
626103-9021-000	Stylus kit for small components	●	●	●
626103-9022-000	Stylus kit for large components	●		●
626103-9023-000	Stylus Kit for large star styli	●	●	●
626103-9024-000	Stylus kit, small	●	●	●
626103-9025-000	Stylus kit, large	●		●
626103-9026-000	Stylus kit TL3 profi	●		●
626103-9058-000	Stylus kit TL3, Star styli, ZEISS ThermoFit long	●		●
626103-9031-000	Stylus system kit TL1, star styli, ZEISS ThermoFit		●	
626103-9033-000	Stylus system kit TL3, Star styli, ZEISS ThermoFit	●	●	●
626103-9040-000	Stylus system kit TL1, Star styli small		●	
626103-9041-000	Stylus system kit TL3, Star styli small	●	●	●
626103-9042-000	Stylus system kit TL1, Rändel-Star styli		●	
626103-9043-000	Stylus system kit TL3, Rändel-Star styli		●	●
626103-9034-000	Stylus system kit TL3, Star styli for gear measurement			●
626103-9080-000	Stylus system professional building kit TL1, FixAssist XXT		●	
626103-9090-000	Stylus system professional building kit TL3, FixAssist XXT	●	●	●

Stylus kit M3 XXT, for small workpieces

Stylus kit for the ZEISS VAST XXT probe. The kit comprises nine parts selected for the measurement of small workpieces.

Item No.	Description
626103-9021-000	Stylus kit 1, ZEISS VAST XXT, for small workpieces
Content	
626113-0150-030	1 Styli with thread, M3 XXT, tungsten carbide, ruby, DK1,5, L30
626103-0300-033	1 Styli with thread, M3 XXT, ThermoFit, ruby, DK3, L33
626103-0300-050	1 Styli with thread, M3 XXT, ThermoFit, ruby, DK3, L50
626103-0500-050	1 Styli with thread, M3 XXT, ThermoFit, ruby, DK5, L50
626103-0500-075	1 Styli with thread, M3 XXT, ThermoFit, silicon nitride, DK5, L75
626109-0018-000	2 Hook wrench DG5
000000-0015-323	1 Pin wrench 1,1, ZEISS Norm 1170
626109-0026-000	1 XXT Styli assembly aid

Stylus kit M3 XXT, large star styli

Star styli stylus kit for ZEISS VAST XXT probe. The kit comprises eight parts.

Item No.	Description
626103-9023-000	Stylus kit star styli for ZEISS VAST XXT probe
Content	
626103-5050-000	1 Stylus extension, M3 XXT, ThermoFit, DG5, L50
626103-0301-040	1 Clamping styli with thread, M3 XXT, ThermoFit, ruby, DK3, L40
626103-0302-040	1 Stylus for 1/4 star, M3 XXT, ThermoFit, ruby, DK3, L40
626103-0303-040	1 Stylus for 1/2 star 90°, M3 XXT, ThermoFit, ruby, DK3, L40
626109-0018-000	2 Hook wrench DG5
000000-0015-323	1 Pin wrench 1,1, ZEISS Norm 1170
626109-0026-000	1 XXT Styli assembly aid

Stylus kit M3 XXT, small

The kit comprises 15 pieces, to build different stylus kits for ZEISS VAST XXT TL3 probe.

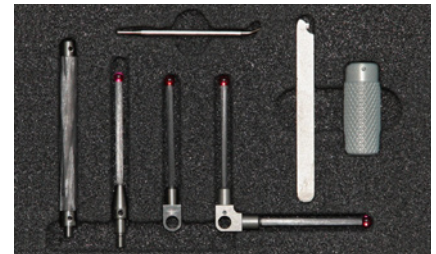
Item No.	Description
626103-9024-000	Stylus kit small for ZEISS VAST XXT
Content	
626103-6110-004	1 Clamp screw, M3 XXT, titanium
626103-6110-005	2 Clamp screw with internal thread, M3 XXT,
626109-0026-000	1 Assembly aid for XXT-Stylus
000000-0015-323	2 Pin wrench 1,1 ZEISS Norm 1170
626103-6110-001	1 Cube 90°, M3 XXT, single, titanium
626103-6110-001	1 Cube 180°, M3 XXT, double, titanium
626103-6110-003	1 Star cube, M3 XXT, titanium
626103-6180-001	1 Knuckle joint, M3 XXT, titanium
626103-5050-000	1 Stylus extension, M3 XXT, ZEISS ThermoFit, L50
626103-0300-050	1 Stylus, M3 XXT, ZEISS ThermoFit, ruby, DK3, L50
626113-0050-013	2 Stylus, M3 XXT, stepped, DK0,5, L13, ML4, MLE2,3
626113-0080-014	2 Stylus, M3 XXT, tungsten carbide, ruby, DK0,8, L14



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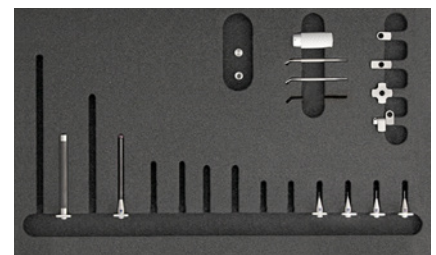
RDS



DuraMax

O-INSPECT

RDS



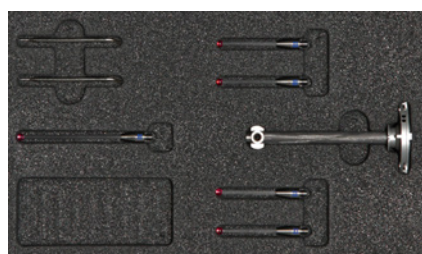
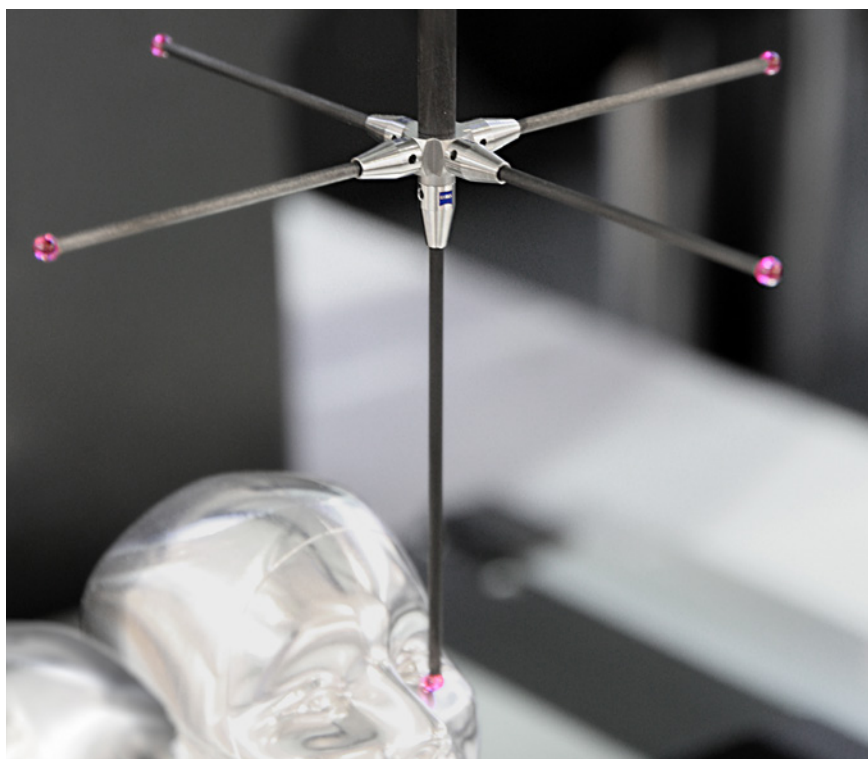
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Star styli kits

Adapter plate with an aligned 5-sided cube



DuraMax

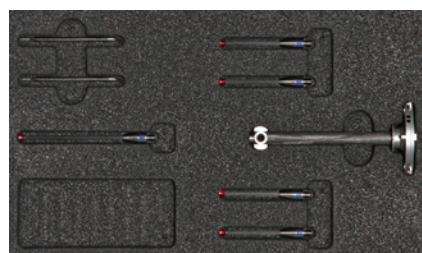
O-INSPECT

RDS

Stylus system kit M3 XXT TL1, star styli

The kit comprises 8 pieces, to build simple styli, star styli or T- and L-styli.

Item No.	Description
626103-9031-000	Stylus system kit M3 XXT TL1 for star styli ZEISS ThermoFit
Content	
000000-0015-323	2 Pin wrench 1,1. CZ 1170
626103-0300-050	1 Styli with thread, M3 XXT, ThermoFit, ruby, DK3, L75
626103-8031-055	1 Adapter plate with star element TL1 ZSH-28-B-55-5X-M3, L55
626103-0300-033	4 Styli with thread, M3 XXT, ThermoFit, ruby, DK3, L33



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Stylus system kit M3 XXT TL3, star styli

The kit comprises 8 pieces, to build simple styli, star styli or T- and L-styli.

Item No.	Description
626103-9033-000	Stylus system kit M3 XXT TL3 for star styli ZEISS ThermoFit
Content	
000000-0015-323	2 Pin wrench 1,1. CZ 1170
626103-0300-050	1 Styli with thread, M3 XXT, ThermoFit, ruby, DK3, L75
626103-8033-055	1 Adapter plate with star element TL1 ZSH-28-B-55-5X-M3, L55
626103-0300-033	4 Styli with thread, M3 XXT, ThermoFit, ruby, DK3, L33

Stylus kit M3 XXT TL1, star styli small

The kit comprises 8 pieces, to build simple styli, star styli or T- and L-styli.

Item No.	Description
626103-9040-000	Stylus system kit for ZEISS VAST XXT TL1, for star styli small
Content	
626103-8031-055	1 Star stylus holder VAST XXT,ZSH-28-A-55-5X-TL1-M3
626113-0100-030	2 Styli, M3 XXT, stepped, tungsten carbide, ruby, DK1, L30
626113-0050-020	2 Styli, M3 XXT, stepped, tungsten carbide, ruby, DK0,5, L20
626113-0200-030	1 Styli, M3 XXT, tungsten carbide, ruby, DK0,5, L20
000000-0015-323	2 Pin wrench 1.1, CZ 1170

Stylus kit M3 XXT TL3, star styli small

The kit comprises 8 pieces, to build simple styli, star styli or T- and L-styli.

Item No.	Description
626103-9041-000	Stylus system kit for ZEISS VAST XXT TL3, for star styli small
Content	
626103-8033-055	1 Star stylus holder VAST XXT,ZSH-28-A-55-5X-TL1-M3
626113-0100-030	2 Styli, M3 XXT, stepped, tungsten carbide, ruby, DK1, L30
626113-0050-020	2 Styli, M3 XXT, stepped, tungsten carbide, ruby, DK0,5, L20
626113-0200-030	1 Styli, M3 XXT, tungsten carbide, ruby, DK0,5, L20
000000-0015-323	2 Pin wrench 1.1, CZ 1170

Stylus kit M3 XXT TL1, star styli with Rändelstyli

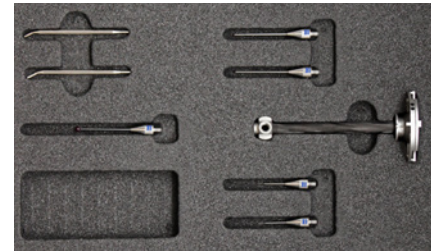
The kit comprises 6 pieces, to build simple styli, star styli or T- and L-styli.

Item No.	Description
626103-9042-000	Stylus system kit for ZEISS VAST XXT TL1, for Star styli with Rändelstyli
Content	
626103-8031-055	1 Star stylus adapterplate VAST XXT,ZSH-28-A-55-5X-TL1-M3
626103-0307-030	4 Rändelstyli with thread, M3 XXT, ThermoFit, ruby, DK3, L30
626103-0307-050	1 Rändelstyli with thread, M3 XXT, ThermoFit, ruby, DK3, L50

Stylus kit M3 XXT TL3, star styli with Rändelstyli

The kit comprises 6 pieces, to build simple styli, star styli or T- and L-styli.

Item No.	Description
626103-9043-000	Stylus system kit for ZEISS VAST XXT TL3, for Star styli with Rändelstyli
Content	
626103-8033-055	1 Star stylus adapter plate VAST XXT,ZSH-28-A-55-5X-TL3-M3
626103-0307-030	4 Rändelstyli with thread, M3 XXT, ThermoFit, ruby, DK3, L30
626103-0307-050	1 Rändelstyli with thread, M3 XXT, ThermoFit, ruby, DK3, L50



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Stylus system professional building kit for ZEISS VAST M3 XXT TL1

ZEISS FixAssist XXT, incl. S1, W1 and KT entry-level adapters, as well as a tool set for mounting M3 XXT stylus systems. This enables spatial angles, star styli and clampable star styli to be set up and adjusted.

Item No.	Description	
626103-9080-000	Stylus system professional building kit for ZEISS VAST M3 XXT TL1	
Content		
626109-9140-200	1	FixAssist XXT incl. adapter set S1, W1, KT, tool kit
626109-9140-300	1	FixAssist XXT adapter set for knuckle joints
620161-8055-000	5	Adapter plate for VAST XXT TL1
626103-5030-000	1	Stylus extension M3 XXT, ThermoFit, DGE5, LE30
626103-5060-000	1	Stylus extension , M3 XXT, ThermoFit , DGE5, LE60
626103-5030-005	1	Stylus extension with conical receiver, M3 XXT, ThermoFit, LE31
626103-5060-005	1	Stylus extension with conical receiver, M3 XXT, ThermoFit, LE61
626103-6180-002	2	Conical receiver M3XXT, titanium, DGE5, LE7
626103-6020-090	1	Angle block with cone adapter 90°, DG5, titanium, DG5, L7,75, ML4
626103-6180-021	3	Knuckle joint, DG5, titanium , DG5, L12
626103-6020-045	1	Angle block with cone adapter 45°, DG5, titanium, DG5, L7,75, ML4
626103-6110-004	2	Clamp screw, M3 XXT, L8, DG3,5,
626103-6110-005	1	Clamp screw with female thread, M3 XXT, L8, DG3,5
626103-0300-033	5	Stylus, M3 XXT, ThermoFit, ruby, DG5, DK3, DS2, L33, ML24
626103-0301-050	3	Stylus, M3 XXT, ThermoFit, ruby, DG5, DK3, DS2, L50, ML41
626103-0100-018	2	Cube with star styli M3 XXT, DG5, DS0,8, DK1, L5, ML5, B18
626103-0050-016	1	Cube M3 XXT, stepped, DG5, DS1, DSE0,3, DK0,5, L4, ML2,3, B16



DuraMax

O-INSPECT

RDS

Stylus system professional building kit for ZEISS VAST XXT TL3

ZEISS FixAssist XXT, incl. S1, W1 and KT entry-level adapters, as well as a tool set for mounting M3 XXT stylus systems. This enables spatial angles, star styli and clampable star styli to be set up and adjusted.

Item No.	Description	
626103-9090-000	Stylus system professional building kit for ZEISS VAST M3 XXT TL3	
Content		
626109-9140-200	1	FixAssist XXT incl. adapterset S1, W1, KT, tool kit
626109-9140-300	1	FixAssist XXT adapterset for knuckle joints
620161-8075-000	5	Adapter plate ZSH-28-B-0-M3 für VAST XXT TL3
626103-5030-000	1	Stylus extension, M3 XXT, ThermoFit, DGE5, LE30
626103-5060-000	1	Stylus extension, M3 XXT, ThermoFit , DGE5, LE60
626103-5030-005	1	Stylus extension with conical receiver M3 XXT, ThermoFit, LE31
626103-5060-005	1	Stylus extension with conical receiver, M3 XXT, ThermoFit, LE61
626103-6180-002	2	Conical receiver M3XXT, titanium, DGE5, LE7
626103-6020-090	1	Angle block with cone adapter 90°, DG5, titanium, DG5, L7,75, ML4
626103-6180-021	3	Knuckle joint, DG5, titanium , DG5, L12
626103-6020-045	1	Angle block with cone adapter 45°, DG5, titanium, DG5, L7.75, ML4
626103-6110-004	2	Clamp screw, M3 XXT, L8, DG3.5,
626103-6110-005	1	Clamp screw with female thread, M3 XXT, L8, DG3.5
626103-0300-033	5	Stylus, M3 XXT, ThermoFit, ruby, DG5, DK3, DS2, L33, ML24
626103-0301-050	3	Stylus, M3 XXT, ThermoFit, ruby, DG5, DK3, DS2, L50, ML41
626103-0100-018	2	Cube with star styli M3 XXT, DG5, DS0,8, DK1, L5, ML5, B18
626103-0050-016	1	Cube M3 XXT, stepped, DG5, DS1, DSE0.3, DK0.5, L4, ML2.3, B16

Better than gold

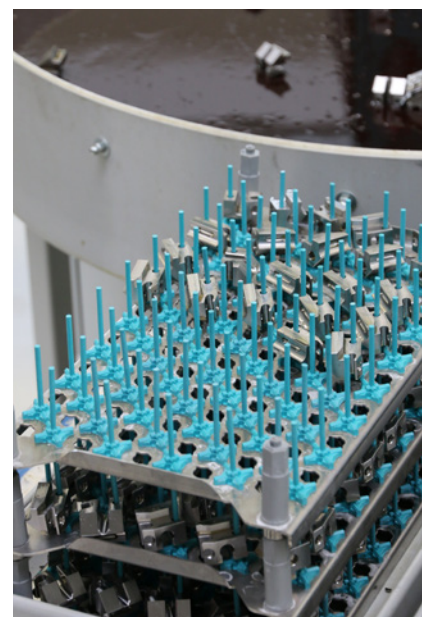
Just under two decades ago, Haager GmbH & Co. KG still pretty much produced only hooks, eyes and other accessory articles made of precious metals for the jewelry industry. Today, the company generates 90 percent of its revenue with accessory parts for manufacturers of medical technology products. Amongst other things, Haager guarantees the precision required for this by means of a ZEISS O-INSPECT and the stylus set-up device ZEISS FixAssist.

Geared up for the zero defect strategy

„It goes without saying that the requirements with respect to the precision and surface quality are considerably higher in medical technology than in the jewelry industry. But the basic requisites for accomplishing this were definitely available“, says Stephan Lehnert, quality assurer at Haager. He knows one thing for sure: In future, medical technology manufacturers will wish to integrate the parts from their suppliers in their products without inspection for time and cost reasons. And suppliers who do not define the so-called zero defect strategy as a specific goal will be very quickly on the outside looking in – permanently. Lehnert can understand this: for example, a metal part for endoscopy manufactured in Pforzheim is provided with a lens and a chip in Japan. If the metal part for 17 euros from Pforzheim does not comply with the promised quality, the manufacturer throws more than 3,000 euros away according to Lehnert. The employees of Haager GmbH therefore give top priority to the issue of quality and put their faith in a ZEISS O-INSPECT for high-precision measurement of the tolerances for shape and position.

Quality and processes under control

„We looked at several measuring machines, and the precision and the easy handling of the ZEISS O-INSPECT impressed us“. Haager produces a large number of parts in small batch sizes and can save many hours of labor if the measuring program can be programmed quickly. The family-owned company is saving even more time now that it is also working with the



ZEISS FixAssist. This stylus set-up device enables probe systems to be assembled a good deal faster. It also prevents shaft contact and therefore corrupted measuring results. Lehnert knows that something like this can easily occur. He remembers a customer complaint, which had a positive outcome for Haager in the end thanks to the FixAssist. „After we explained that our angle adjustments are precise, because we work with the FixAssist, our customer’s quality managers came to see for themselves. They assembled their styli on our ZEISS FixAssist XXT in no time at all. And lo and behold: Their results agreed with ours afterwards.“ For Lehnert, who has worked at Haager since 2011, this permanent and mutual struggle for compliance with the required quality standards makes his job „extremely challenging“. Apart from the relative insusceptibility of the industry to crises, this man, who learned his trade in a pure jewelry company, personally feels that medical technology is „better than gold“.



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