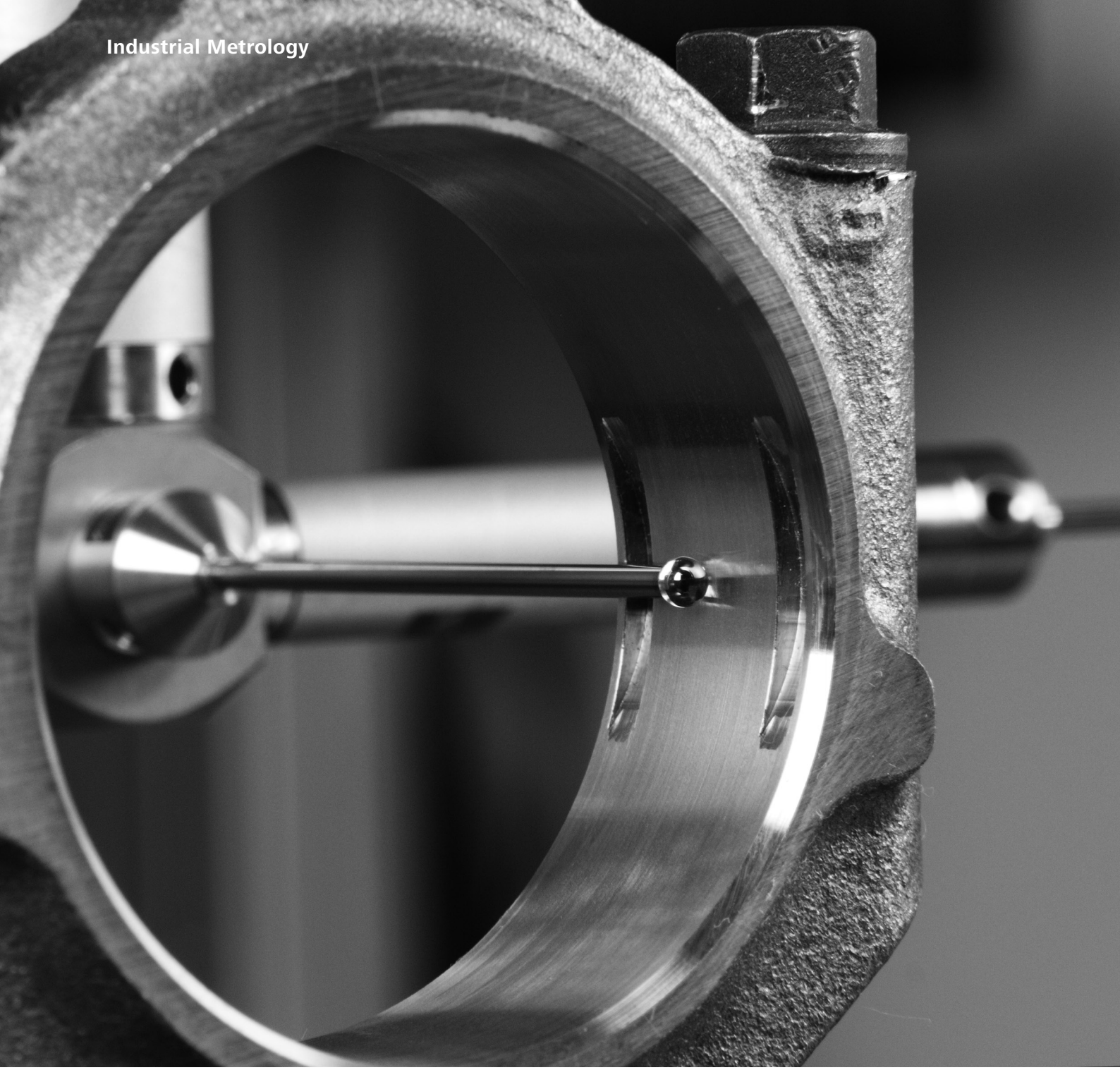
Industrial Metrology



Probe System Equipment VAST® from ZEISS

Original accessories from the technology leader

ZEISS

ZEISS
VAST

ZEISS VAST

Stylus System Equipment from ZEISS

Benefit from our extensive experience. As a manufacturer, we know what you need for your measuring machine, in order to be able to measure precisely and efficiently. You can save time and increase your productivity with our accessories, which have been designed for use with the ZEISS VAST probe.

Contents

Styli..... Page 4
- Diamond styli..... Page 6
- Styli with a ZEISS ThermoFit shaft..... Page 10
- Styli with a tungsten carbide shaft..... Page 12
- Special styli..... Page 16
- Styli without a thread..... Page 18
- Clampable star styli..... Page 20
- Ball probes..... Page 22
- Ball discs..... Page 23

Connecting elements..... Page 25
- Rigid connecting elements..... Page 25
- Rotary connecting elements..... Page 28

Extensions..... Page 36
- Extensions with cone receiver..... Page 36
- ZEISS ThermoFit silver..... Page 37
- Titanium extensions..... Page 38
- Inox and aluminum extensions..... Page 39

Adapter plates..... Page 40
- Adapter plates with plate extension..... Page 40
- Adapter plates..... Page 41

Temperature measurement with RST-T..... Page 42

ZEISS FixAssist stylus set-up device..... Page 43

Tools..... Page 44

Storage..... Page 46
- Probe cabinet..... Page 46
- Pallet cabinet..... Page 47

Calibration artifacts..... Page 48

Calibration bodies..... Page 50

Sensor racks..... Page 52
- Multi Sensor Rack..... Page 52
- ZEISS ProMax..... Page 54
- Sockets for adapter plates..... Page 56

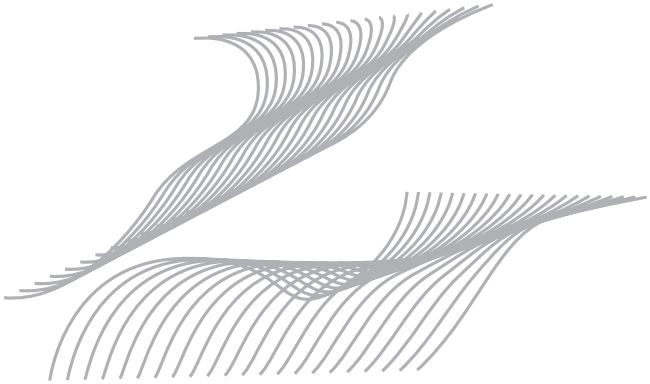
Pallet systems..... Page 57
- THETA 32..... Page 58
- THETA 55..... Page 60
- Temperature measurement ..... Page 62

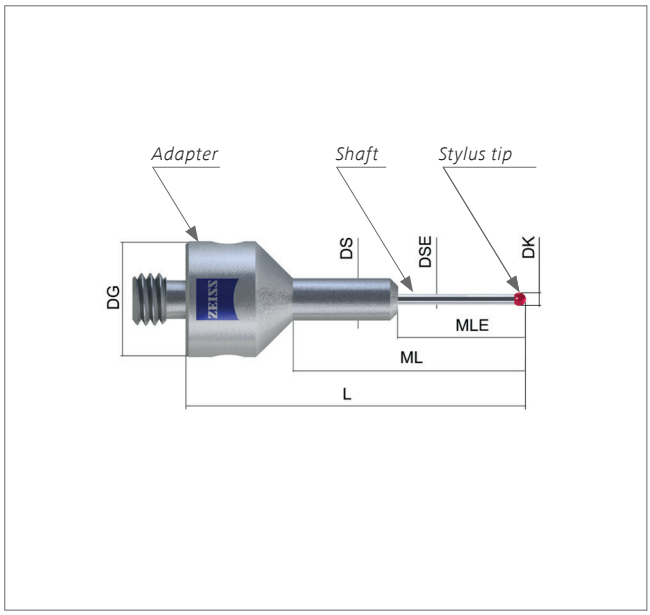
Stylus system kits..... Page 63

Note
Subject to technical changes and price alterations. 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 fact applies to all styli, that they should be as bend resistant as possible to be able to take up the measuring force as far as possible without deformation, the so-called „stylus deflection". The shaft structure and the transition to the adapter into which the shaft is fixed is decisive in this matter.

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 of the measuring cylinder in mm

The adapter

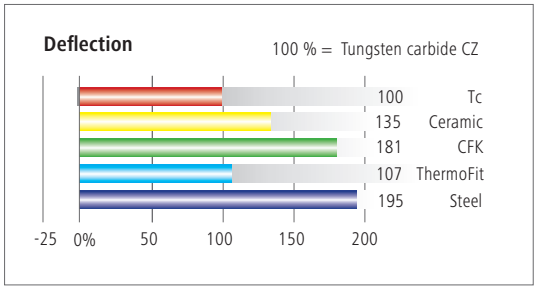
The adapter is the connection between the connection thread and the shaft. It is important that the adapter is designed in such a way that it can withstand the measuring force that is introduced via the shaft in an optimum manner. Otherwise there will be an increased scatter of the probe measurements. 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.

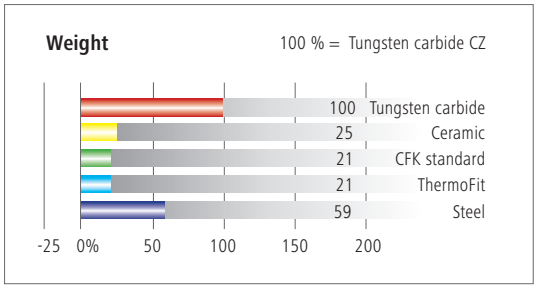
Conventional M3 styli may not be used in XXT stylus systems; the M3 XXT styli which are optimized for passive scanning should be used instead. The 1 mm larger diameter of the XXT adapter base body and the high-strength titanium alloy guarantee a considerably higher stiffness compared with conventional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

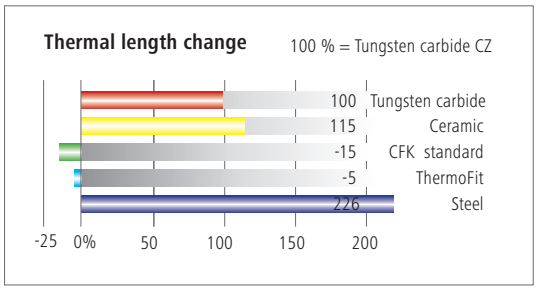
 © Carl Zeiss 3D Automation GmbH

The shaft

A distinction is made between a straight and a stepped shaft in the design. The stepped shaft has the advantage of as-lightly 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 to 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 in the shaft are stiffness, weight and thermal linear expansion. The table shows that ZEISS ThermoFit styli optimize these three characteristics.







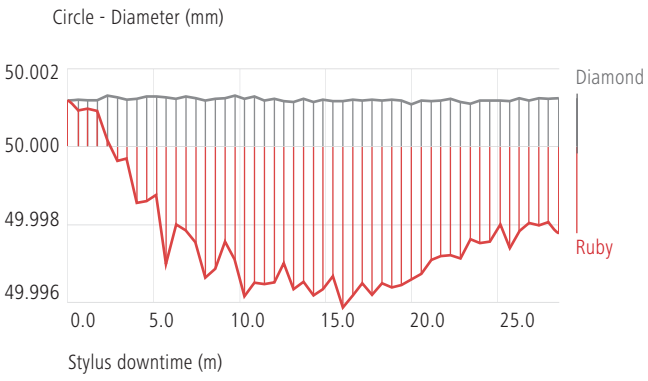
The stylus tip

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 most often used stylus tip. 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 (aluminium 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

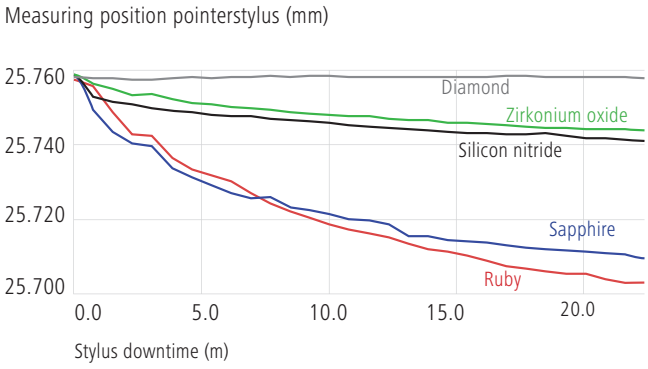
Measuring with diamond styli

Retains high-precision form also after extended use.



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.



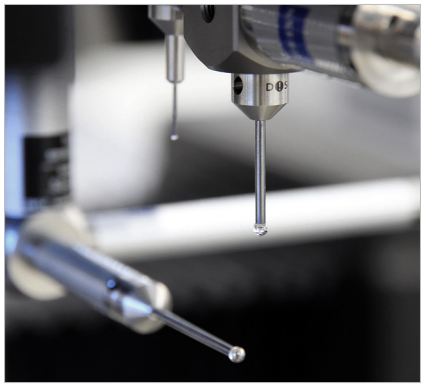
No wear

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 resutling in an accurate measurement of the flatness of this hard workpiece surface.

 © Carl Zeiss 3D Automation GmbH

Diamond styli

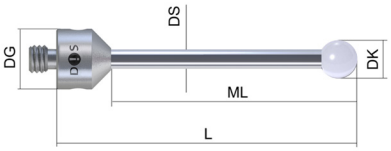
Diamond!Scan® from ZEISS



- The ZEISS Diamond!Scan sphere retains its original form
- Time-intensive checks, cleaning work and calibrations are a thing of the past
- Continuously accurate measuring results

ZEISS Diamond!Scan

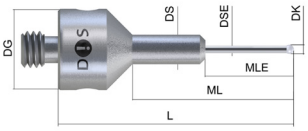
Adapter: M5
Shaft: Tungsten carbide, straight
Stylus tip: Diamond sphere
The deviation from the spherical form is less than 0.25 µm.
The diameter tolerance is +/-20 µm.



Item No.	DK	L	ML	DS	DG	Wt.(g)
626115-0209-020	2.00	20.00	9.00	1.00	11.00	5.6
626115-0209-034	2.00	34.00	24.5	1.50	11.00	6.5
626115-0309-025	3.00	25.00	15.00	2.00	11.00	6.7
626115-0309-033	3.00	33.00	23.00	2.00	11.00	7.1
626115-0309-050	3.00	50.00	40.00	2.00	11.00	7.8
626115-0309-058	3.00	58.00	48.00	2.00	11.00	8.2
626115-0309-064	3.00	64.00	54.00	2.00	11.00	8.5

ZEISS Diamond!Scan

Adapter: M5
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)
626115-0109-022	1.00	22.00	13.00	5.00	1.00	0.8	11.00	5.7
626115-0109-024	1.00	24.00	14.00	5.00	1.00	0.8	11.00	7.1
626115-0109-032	1.00	32.00	12.00	5.00	1.00	0.8	11.00	7.2
626115-0209-032	2.00	32.00	12.00	-	1.50	-	11.00	7.0
626115-0209-044	2.00	44.00	19.00	-	1.50	-	11.00	7.7

Innovative and long-lasting
Diamond or diamond-coated styli?

Following the extension of the ZEISS Diamond!Scan product range, we can now offer a diamond-coated stylus in addition to the solid diamond stylus. This opens up additional application areas.

The diamond-coated stylus is especially suitable for applications with components made of soft materials such as aluminum, titanium, or copper. There is no build-up of material on the diamond-coated ZEISSS Diamond!Scan stylus when aluminum parts are scanned.For measuring hard components made of ceramic or hard-coated surfaces, we recommend the use of a solid diamond stylus.

Since a probe starts to wear very quickly, solid diamond is more durable with respect to the application.
The solid diamond stylus should also be used to carry out discrete-point probing with high point loading.

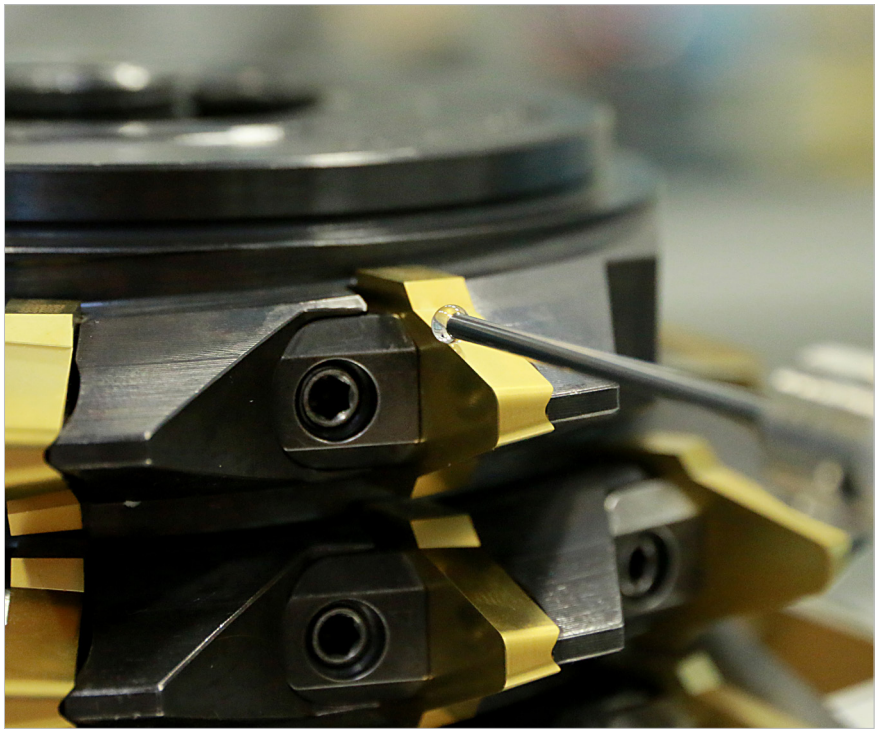
Another difference between diamond-coated spheres and solid diamond spheres is the roundness. Diamond-coated spheres have a roundness better than 150 µm (Grade 5). On the other hand, the maximum roundness of solid diamond spheres is defined as 250 µm (Grade 10). The diameters for a solid diamond sphere are limited to 1, 2 and 3 mm. We can offer you the coated diamond spheres in a larger range of variants ranging from 0.3 to 10 mm.

Advantages of solid diamond ZEISS Diamond!Scan styli:

- More robust with point loading
- High wear resistance on ceramic
- Roundness <250 µm (Grade 10)
- For universal use

Advantages of diamond-coated ZEISS Diamond!Scan styli:

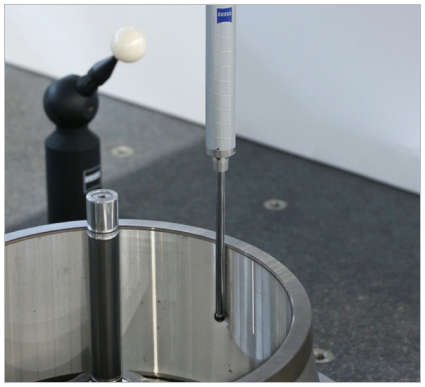
- No build-up of material when scanning aluminum
- Roundness <150 µm (Grade 5)
- Various sphere diameters possible
- Less expensive



 © Carl Zeiss 3D Automation GmbH

Diamond-coated styli

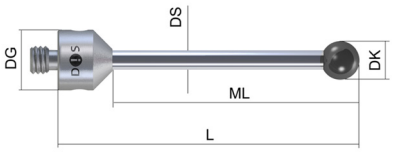
Diamond!Scan® from ZEISS



- The ZEISS Diamond!Scan sphere retains its original form
- Time-intensive checks, cleaning work and calibrations are a thing of the past
- Continuously accurate measuring results

ZEISS Diamond!Scan

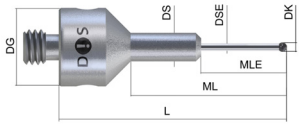
Adapter: M5
Shaft: Tungsten carbide, straight
Stylus tip: Diamond coated sphere
The deviation from the spherical form is less than 0.15 µm.
The diameter tolerance is +/-20 µm.



Item No.	DK	L	ML	DS	DG	Wt.(g)
626115-0219-020	2.05	20.00	9.00	1.00	11.00	5.6
626115-0219-030	2.05	30.00	20.00	1.50	11.00	6.4
626115-0219-034	2.05	34.00	24.00	1.50	11.00	6.1
626115-0319-025	3.05	25.00	15.00	2.00	11.00	7.0
626115-0319-033	3.05	33.00	23.00	2.00	11.00	7.1
626115-0319-040	3.05	40.00	30.00	2.00	11.00	7.3
626115-0319-050	3.05	50.00	40.00	2.00	11.00	7.7
626115-0319-064	3.05	64.00	54.00	2.00	11.00	8.4
626115-0319-085	3.05	85.00	75.00	2.00	11.00	9.3
626115-0519-050	5.05	50.00	40.00	3.50	11.00	9.0
626115-0519-075	5.05	75.00	65.00	3.50	11.00	13.0
626115-0819-064	8.05	63.50	50.50	6.00	11.00	29.0
626115-0219-032	2.05	32.00	12.00	1.50	11.00	7.4

ZEISS Diamond!Scan

Adapter: M5
Shaft: Tungsten carbide, stepped
Stylus tip: Diamond coated sphere
The deviation from the spherical form is less than 0.15 µm.
The diameter tolerance is +/-20 µm.



Item No.	DK	L	ML	MLE	DS	DSE	DG	Wt.(g)
626115-0119-032	1.05	32.00	22.00	5.00	4.00	1.00	11.00	7.2
626115-0219-044	2.05	44.00	19.00	19.00	1.50	1.50	11.00	8.1
626115-0219-058	2.05	58.00	33.00	33.00	1.50	1.50	11.00	8.5

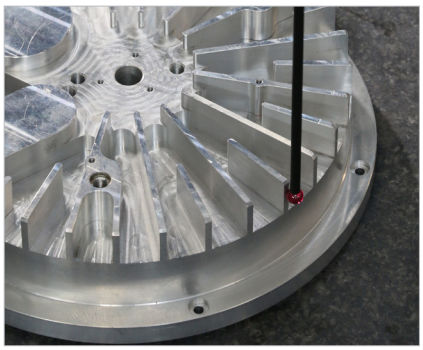
ThermoFit® from ZEISS

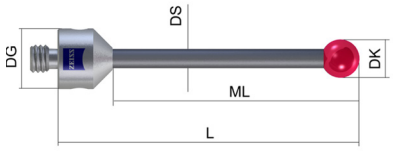
Styli

Styli with a ZEISS ThermoFit shaft combine three advantages:

- Thermal stability
- Light weight
- High bending strength

This design is well-suited for long styli and applications in production where the ambient temperature constantly changes.





Styli with thread

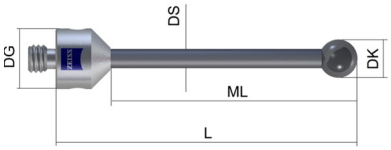
Adapter: M5
Shaft: ZEISS ThermoFit, straight
Stylus tip: Ruby sphere
Suitable for long styli.

Item No.	DK	L	ML	DS	DG	Wt.(g)
626105-0300-025	3.00	25.00	15.00	2.00	11.00	4.0
626105-0300-033	3.00	33.00	23.00	2.00	11.00	4.0
626105-0300-050	3.00	50.00	40.00	2.00	11.00	4.0
626105-0300-058	3.00	58.00	48.00	2.00	11.00	4.0
626105-0400-033	4.00	33.00	23.00	2.00	11.00	4.0
626105-0400-064	4.00	64.00	54.00	2.00	11.00	4.0
626105-0510-050	5.00	50.00	40.00	3.50	11.00	4.0
626105-0510-100	5.00	100.00	90.00	3.50	11.00	5.0
626105-0610-054	6.00	54.00	44.00	3.50	11.00	5.0
626105-0710-055	7.00	55.00	45.00	3.50	11.00	5.0
626105-0820-063	8.00	63.00	50.00	6.00	11.00	7.0
626105-0820-075	8.00	75.00	62.00	6.00	11.00	8.0
626105-0820-100	8.00	100.00	87.00	6.00	11.00	9.0
626105-0820-114	8.00	114.00	101.00	6.00	11.00	10.0
626105-0820-150	8.00	150.00	137.00	6.00	11.00	12.0
626105-0820-200	8.00	200.00	187.00	6.00	11.00	14.0
626105-1020-065	10.00	65.00	52.00	6.00	11.00	8.0
626105-1020-118	10.00	118.00	105.00	6.00	11.00	11.0
626105-1020-150	10.00	150.00	137.00	6.00	11.00	13.0
626105-1020-200	10.00	200.00	187.00	6.00	11.00	15.0
626105-1020-350	10.00	350.00	325.00	6.00	11.00	25.0
626105-1020-500	10.00	500.00	475.00	6.00	11.00	31.0
626105-1220-120	12.00	120.00	105.00	6.00	11.00	10.5
626105-1220-225	12.00	225.00	200.00	6.00	11.00	28.0
626105-1220-355	12.00	355.00	330.00	6.00	11.00	35.0

 © Carl Zeiss 3D Automation GmbH

Styli with thread

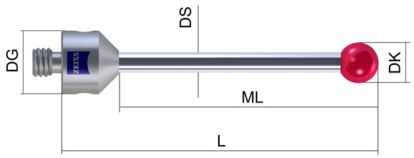
Adapter: M5
Shaft: ZEISS ThermoFit, straight
Stylus tip: Silicon nitride sphere
Suitable for long styli.



626105-0301-025	3.00	25.00	15.00	2.00	11.00	4.0
626105-0301-033	3.00	33.00	23.00	2.00	11.00	4.0
626105-0301-050	3.00	50.00	40.00	2.00	11.00	4.0
626105-0301-058	3.00	58.00	48.00	2.00	11.00	4.0
626105-0401-033	4.00	33.00	23.00	2.00	11.00	4.0
626105-0401-064	4.00	64.00	54.00	2.00	11.00	4.0
626105-0511-050	5.00	50.00	40.00	3.50	11.00	4.0
626105-0511-075	5.00	75.00	65.00	3.50	11.00	5.0
626105-0511-100	5.00	100.00	90.00	3.50	11.00	5.0
626105-0821-063	8.00	63.00	50.00	6.00	11.00	7.0
626105-0821-075	8.00	75.00	62.00	6.00	11.00	8.0
626105-0821-100	8.00	100.00	87.00	6.00	11.00	9.0
626105-0821-114	8.00	114.00	101.00	6.00	11.00	10.0
626105-0821-150	8.00	150.00	137.00	6.00	11.00	12.0
626105-0821-200	8.00	200.00	187.00	6.00	11.00	14.0
626105-1021-065	10.00	65.00	52.00	6.00	11.00	8.0
626105-1021-118	10.00	118.00	105.00	6.00	11.00	11.0
626105-1021-150	10.00	150.00	137.00	6.00	11.00	12.0
626105-1021-200	10.00	200.00	187.00	6.00	11.00	15.0
626105-1021-350	10.00	350.00	325.00	6.00	11.00	25.0
626105-1021-500	10.00	500.00	475.00	6.00	11.00	31.0

Tungsten carbide

Styli



Styli with thread

Adapter: M5

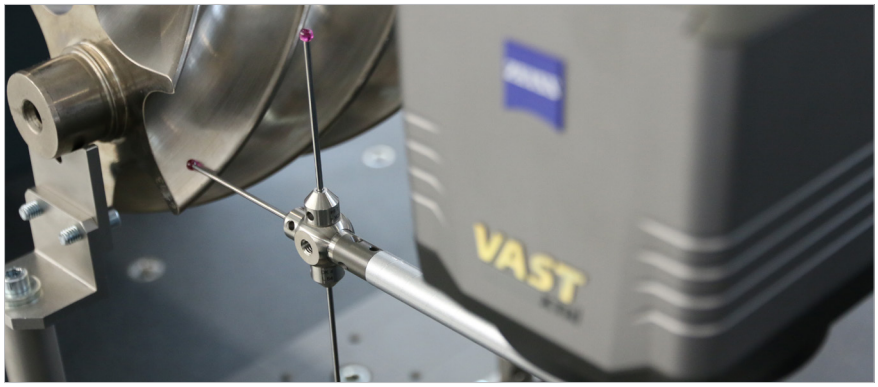
Shaft: Tungsten carbide, straight

Stylus tip: Ruby sphere

For standard applications with a high bending strength.

Item No.	DK	L	ML	DS	DG	Wt.(g)
626115-0140-033	1.35	32.85	23.85	1.00	11.00	5.5
626115-0150-033	1.50	33.00	24.00	1.00	11.00	5.5
626115-0200-020	2.00	20.00	9.00	1.00	11.00	5.7
626115-0200-034	2.00	33.50	24.50	1.50	11.00	5.8
626115-0204-040	2.00	40.00	30.00	1.50	11.00	6.6
626115-0250-020	2.50	20.00	10.00	1.50	11.00	6.0
626115-0250-034	2.50	34.00	25.00	1.50	11.00	6.0
602030-9010-000	3.00	25.00	15.00	2.00	11.00	4.0
600342-8020-000	3.00	33.50	23.50	2.00	11.00	4.4
626115-0301-040	3.00	40.00	30.00	2.00	11.00	7.1
602030-9011-000	3.00	50.00	40.00	2.00	11.00	5.0
600342-8021-000	3.00	58.00	48.00	2.00	11.00	5.5
600342-8025-000	4.00	33.50	23.50	2.00	11.00	4.0
000000-1005-246	4.00	40.00	30.00	2.00	11.00	6.0
626115-0402-050	4.00	50.00	40.00	2.00	11.00	7.6
602030-9012-000	4.00	64.00	54.00	2.00	11.00	6.0
626115-0500-040	5.00	40.00	28.00	3.50	11.00	11.0
602030-9013-000	5.00	50.00	40.00	3.50	11.00	9.0
600342-8022-000	5.00	53.00	43.00	3.50	11.00	9.8
602030-9015-000	5.00	75.00	65.00	3.50	11.00	13.0
626115-0502-080	5.00	80.00	70.00	3.50	11.00	19.0
600342-8026-000	6.00	54.00	44.00	3.50	11.00	10.0
626115-0600-068	6.00	68.00	58.00	3.50	11.00	13.0
600342-8027-000	7.00	55.00	45.00	3.50	11.00	10.0
600342-8023-000	8.00	63.50	50.50	6.00	11.00	25.0
602030-9016-000	8.00	75.00	62.00	6.00	11.00	30.0
602030-9017-000	8.00	100.00	87.00	6.00	11.00	40.0
600342-8024-000	8.00	114.50	101.50	6.00	11.00	49.0
600342-8029-000	10.00	65.50	52.50	6.00	11.00	27.0
602030-9018-000	10.00	118.00	105.00	6.00	11.00	47.0
626115-1200-065	12.00	65.00	52.00	6.00	11.00	32.0
626115-1200-118	12.00	118.00	105.00	6.00	11.00	62.0
626115-1400-065	14.00	65.00	52.00	6.00	11.00	33.0
626115-1402-118	14.00	118.00	105.00	6.00	11.00	64.0

 © Carl Zeiss 3D Automation GmbH



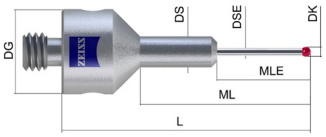
Styli with thread

Adapter: M5

Shaft: Tungsten carbide, stepped

Stylus tip: Ruby sphere

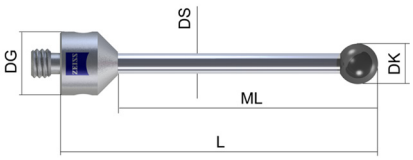
For standard applications with a high bending strength.



Item No.	DK	L	MLE	ML	DSE	DS	DG	Wt.(g)
602030-8062-000	1.35	32.00	12.00	22.00	1.00	4.00	11.00	4.0
602030-8063-000	1.35	44.00	19.00	34.00	1.00	4.00	11.00	7.3
602030-8064-000	1.50	32.00	12.00	22.00	1.00	4.00	11.00	6.7
602030-8065-000	1.50	44.00	19.00	34.00	1.00	4.00	11.00	7.2
602030-8066-000	2.00	32.00	12.00	22.00	1.50	4.00	11.00	7.2
602030-8067-000	2.00	44.00	19.00	34.00	1.50	4.00	11.00	5.0
602030-8068-000	2.00	58.00	33.00	48.00	1.50	4.00	11.00	5.0
602030-8069-000	2.50	32.00	12.00	22.00	1.50	4.00	11.00	4.0
602030-8070-000	2.50	44.00	19.00	34.00	1.50	4.00	11.00	5.0
602030-8071-000	2.50	58.00	33.00	48.00	1.50	4.00	11.00	5.0
626115-0021-025	0.20	25.00	1.30	14.00	0.10	1.00	11.00	4.3
626115-0030-022	0.30	21.80	2.30	12.80	0.20	1.00	11.00	6.0
626115-0050-022	0.50	22.00	2.50	13.00	0.30	1.00	11.00	6.0
626115-0060-022	0.60	22.10	4.60	13.10	0.40	1.00	11.00	5.4
626115-0080-022	0.80	22.30	4.80	13.30	0.60	1.00	11.00	6.0
602030-8060-000	0.80	32.00	4.80	12.00	0.60	1.00	11.00	6.6
626115-0100-022	1.00	22.50	5.00	12.50	0.80	1.00	11.00	5.6
602030-8061-000	1.00	32.00	5.00	12.00	0.80	1.00	11.00	7.1

Tungsten carbide

Styli



Styli with thread

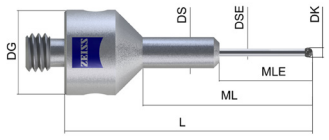
Adapter: M5

Shaft: Tungsten carbide, straight

Stylus tip: Silicon nitride sphere

For standard applications with a high bending and pressure strength.

Item No.	DK	L	ML	DS	DG	Wt.(g)
000000-1323-893	1.50	33.00	24.00	1.00	11.00	5.8
000000-1323-889	2.00	33.50	24.50	1.50	11.00	6.3
626115-0303-025	3.00	25.00	15.00	2.00	11.00	6.5
626115-0300-033	3.00	33.00	23.00	2.00	11.00	4.4
626115-0302-050	3.00	50.00	40.00	2.00	11.00	7.5
626115-0300-058	3.00	58.00	48.00	2.00	11.00	8.0
626115-0400-034	4.00	33.50	23.00	2.00	11.00	7.0
626115-0401-064	4.00	64.00	54.00	2.50	11.00	10.0
626115-0501-050	5.00	50.00	40.00	3.50	11.00	9.0
626115-0501-053	5.00	53.00	40.00	3.50	11.00	9.5
626115-0500-075	5.00	75.00	65.00	3.50	11.00	15.0
626115-0601-025	6.00	25.00	15.00	2.00	11.00	6.6
626115-0603-050	6.00	50.00	40.00	4.00	11.00	13.0
626115-0800-064	8.00	63.50	50.50	6.00	11.00	28.0
626115-0800-075	8.00	75.00	62.00	6.00	11.00	33.0
626115-0801-100	8.00	100.00	88.00	5.00	11.00	40.0
626115-0800-115	8.00	114.50	101.50	6.00	11.00	48.0
626115-1000-165	10.00	165.00	150.00	6.00	11.00	52.0
626115-1201-160	12.00	160.00	150.00	4.50	11.00	42.0



Styli with thread

Adapter: M5

Shaft: Tungsten carbide, stepped

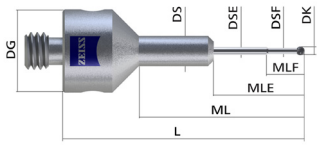
Stylus tip: Silicon nitride sphere

For standard applications with a high bending and pressure strength.

Item No.	DK	L	MLE	ML	DSE	DS	DG	Wt.(g)
626115-0200-032	2.00	32.00	12.00	22.00	1.50	4.00	11.00	7.0
626115-0203-044	2.00	44.00	19.00	34.00	1.50	4.00	11.00	7.7
626115-0250-032	2.50	32.00	12.00	22.00	1.50	4.00	11.00	7.0
626115-0250-044	2.50	44.00	19.00	34.00	1.50	4.00	11.00	7.8
626115-0250-058	2.50	58.00	33.00	48.00	1.50	4.00	11.00	5.0

 © Carl Zeiss 3D Automation GmbH

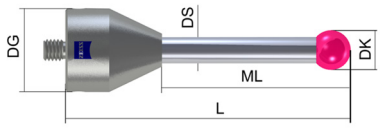
Styli with thread



Adapter: M5
Shaft: Tungsten carbide, stepped
Stylus tip: Silicon nitride sphere
For standard applications with a high bending and pressure strength.

Item No.	DK	L	ML	MLE	DS	DSE	DG	Wt.(g)
626115-0104-022	1.00	22.50	12.50	5.00	1.00	0.80	11.00	5.0
626115-0103-030	1.00	30.00	19.00	10.00	2.00	0.80	11.00	7.0
626115-0151-030	1.50	30.00	19.00	8.00	1.50	1.00	11.00	6.5
626115-0204-058	2.00	58.00	48.00	33.00	4.00	1.00	11.00	8.7

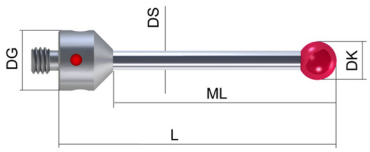
Styli with strengthened basic body



Adapter: M5
Shaft: Tungsten carbide, straight
Stylus tip: Ruby sphere
For applications in which the maximum stiffness of the stylus is required.

Item No.	DK	L	ML	DS	DG	Wt.(g)
626115-0300-035	3.00	34.50	16.50	2.00	19.00	20.0
600342-8124-000	8.00	114.50	92.50	6.00	19.00	57.0
600342-8128-000	9.00	64.50	42.50	6.00	19.00	38.0

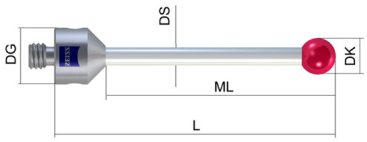
Reference stylus



Adapter: M5
Shaft: Tungsten carbide, straight
Stylus tip: Ruby sphere
The reference stylus is provided with a red marking.

Item No.	DK	L	ML	DS	DG	Wt.(g)
600342-8023-010	8.00	63.50	50.50	6.00	11.00	25.0

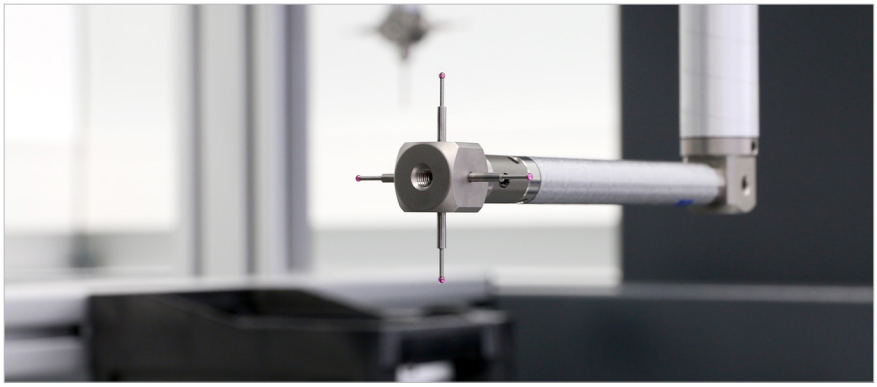
Ceramic shaft styli

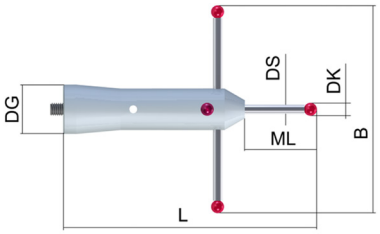


Adapter: M5
Shaft: Ceramic, straight
Stylus tip: Ruby
Is used when weight and magnetism are important.

Item No.	DK	L	ML	DS	DG	Wt.(g)
600342-8013-000	5.00	53.00	43.00	3.50	11.00	5.0
600342-8016-000	6.00	54.00	44.00	3.50	11.00	5.0
600342-8017-000	7.00	55.00	45.00	3.50	11.00	5.1
600342-8014-000	8.00	63.50	50.50	6.00	11.00	8.0
600342-8015-000	8.00	114.50	101.50	6.00	11.00	12.0
600342-8018-000	9.00	64.50	51.50	6.00	11.00	9.1
600342-8019-000	10.00	65.50	52.50	6.00	11.00	9.7

Special styli





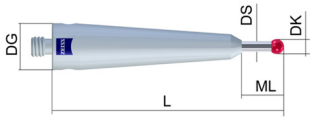
Star stylus

Adapter: M5

Stylus tip: Ruby

For measurements in different coordinate directions.

Item No.	DK	L	ML	DS	B	DG	Wt.(g)
600331-8093-000	5.00	98.00	28.00	3.50	80.00	19.00	70.0



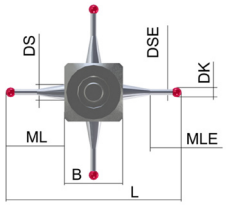
Cone shaft styli

Adapter: M5

Stylus tip: Ruby

Long stylus length with high bending strength and a small sphere diameter.

Item No.	DK	L	ML	DS	DG	Wt.(g)
602030-9019-000	1.00	55.00	4.00	0.80	11.00	12.0
602030-9020-000	1.50	55.00	5.00	1.00	11.00	11.0
602030-9021-000	2.00	55.00	5.00	1.50	11.00	11.0
602030-9022-000	2.50	55.00	5.00	2.00	11.00	11.6
602030-9023-000	3.50	55.00	10.00	2.50	11.00	11.0



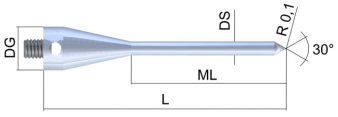
Cube star styli

Adapter: M5

Stylus tip: Ruby

Cube with permanently attached styli.

Item No.	DK	L	ML	MLE	DS	DSE	B	Wt.(g)
602030-9025-000	1.50	45.00	15.00	6.50	2.00	1.00	15.00	16.0
602030-9027-000	2.50	45.00	15.00	8.00	2.00	1.50	15.00	18.0



Pointer stylus

For scanning thread forms, marked points and lines.

Item No.	L	ML	DS	DG	Wt.(g)
600342-8051-000	61.00	39.00	3.50	11.00	12.0

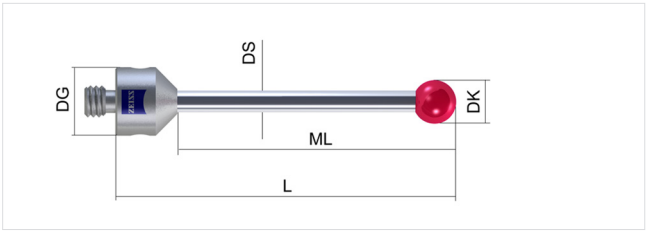
 © Carl Zeiss 3D Automation GmbH

Styli request form

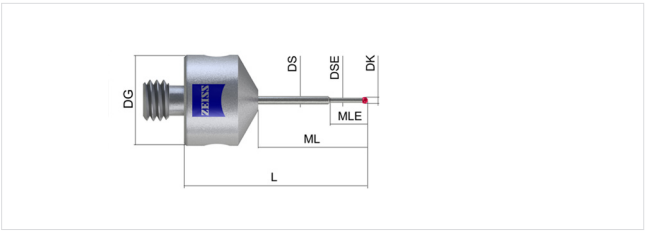
1. Choose your options
2. Include your contact details
3. Send us a fax on +49 7361 6336 29 or fill in the form on our webshop www.probes.zeiss.com.

With thread

☐ **Straight shaft**

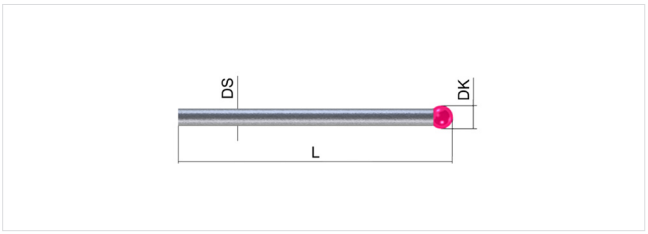


☐ **Stepped shaft**

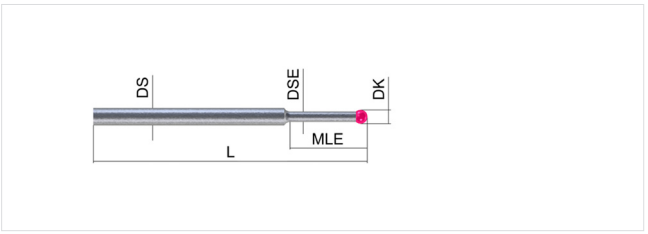


Without thread

☐ **Straight shaft**



☐ **Stepped shaft**



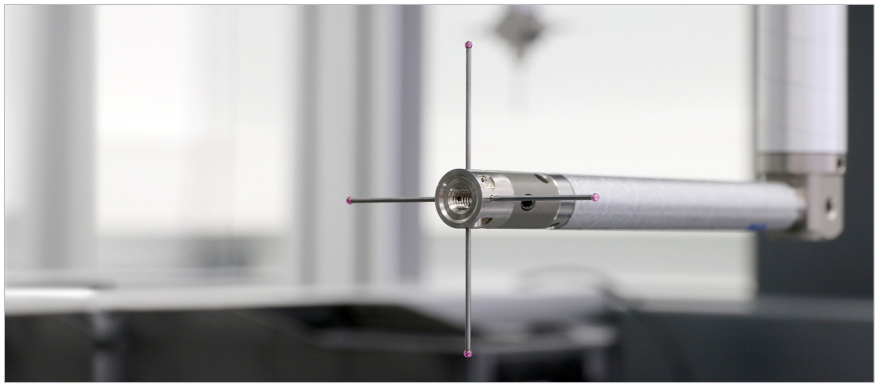
Styli	DK in mm	DS in mm	DSE in mm	L in mm	ML in mm	MLE in mm	TMAT*	SMAT*	Quantity
1									
2									
3									
4									

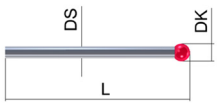
Sphere material (TMAT): Ruby (R), Silicon nitride (SiN), Diamond (DIAM) **Shaft material (SMAT):** Tungsten carbide (HM), ThermoFit® (TF), Ceramic (Ker)

Name, first Name:	**Department:**
Company:	**Postal code/place/state:**
Street:	**E-Mail:**
Phone:	**Fax:**

Styli without thread

Styli





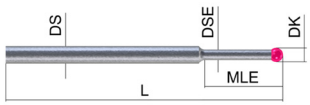
Styl without thread

Shaft: Tungsten carbide

Stylus tip: Ruby

For all standard applications. The styli are clamped in a holder.

Item No.	DK	L	ML	DS	DG	Wt.(g)
600341-8500-000	1.35	26.35	1.00	1.0	39.00	5.0
600341-8501-000	1.50	26.50	1.00	1.0	37.00	5.0
600341-8502-000	2.00	27.00	1.50	0.6	38.00	5.1
600341-8503-000	2.50	27.50	1.50	1.0	39.00	8.0
600341-8510-000	3.00	38.00	2.00	1.6	39.00	12.0
600341-8511-000	5.00	45.00	3.50	5.8	41.00	9.1



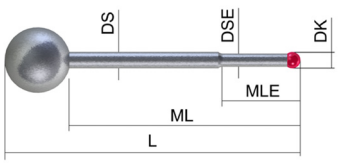
Styli without thread

Shaft: Tungsten carbide, stepped

Stylus tip: Ruby

For all standard applications. The styli are clamped in a holder.

Item No.	DK	L	MLE	DS	DSE	Wt.(g)
600341-8450-000	0.30	15.30	2.30	1.00	0.20	0.1
600341-8451-000	0.50	15.50	2.50	1.00	0.30	1.0
600341-8452-000	0.60	15.60	4.60	1.00	0.40	0.1
600341-8453-000	0.80	15.80	4.80	1.00	0.60	1.0
600341-8454-000	1.00	16.00	5.00	1.00	0.80	0.2



Swiveling styli

Adapter: Sphere

Shaft: Tungsten carbide

Stylus tip: Ruby

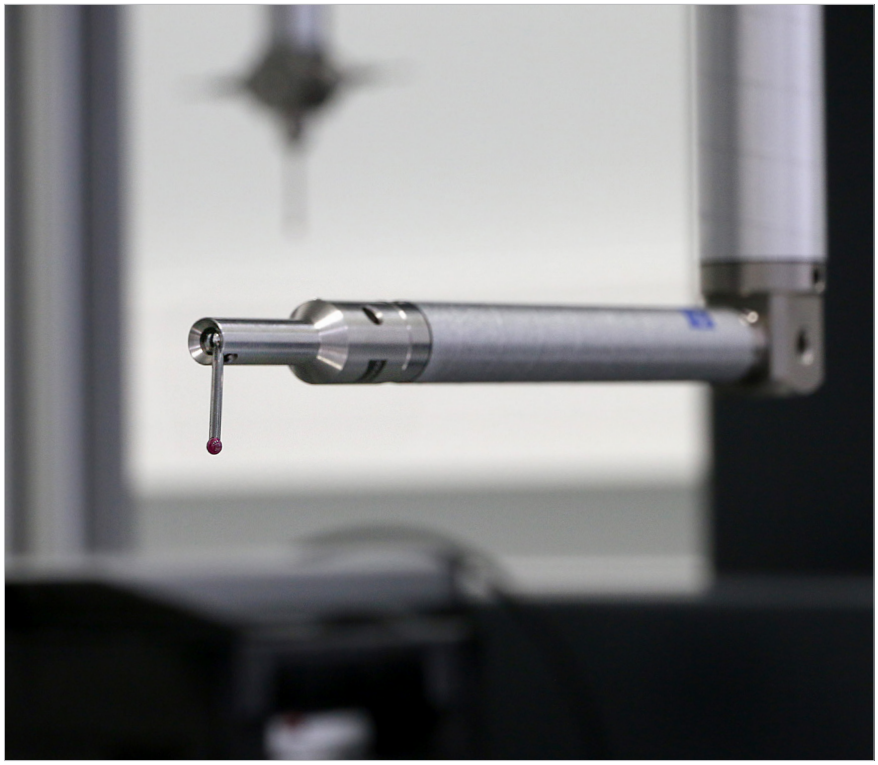
The styli are clamped in a holder.

Item No.	DK	L	ML	MLE	DS	DSE	Wt.(g)
600341-8183-000	1.00	17.50	13.50	5.00	1.00	0.80	1.0
600341-8185-000	2.00	28.50	24.50	-	1.50	-	1.0

 © Carl Zeiss 3D Automation GmbH

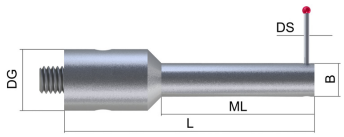
Styli holder

For styli without thread



Stylus holder single

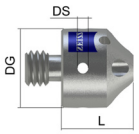
Styli without a thread and a shaft diameter of 1.5 mm can be clamped in the L-holder.



Item No.	L	ML	DS	B	Wt.(g)
600341-8160-000	45.00	22.00	1.50	6.00	16.0

Styli holder quintuple

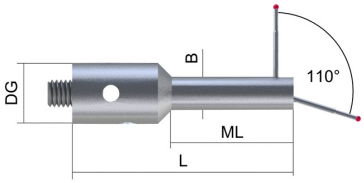
Styli without thread can be clamped in the holder with 5 positions.
Enables easy assembly of a star stylus.



Item No.	DG	L	DS	MAT	Wt.(g)
600341-8367-000	11.00	10.00	1.00	V2A	3.0
600341-8368-000	11.00	10.00	1.50	titanium	5.4
626115-5000-199	11.00	10.00	2.50	V2A	5.2

Styli holder for swiveling styli

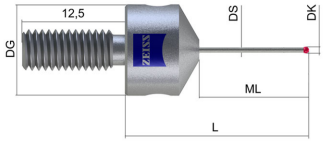
Swiveling styli can be inserted and clamped in the swivelling holder.



Item No.	L	ML	B	DG	Wt.(g)
600341-8180-000	40.00	22.00	6.00	11.00	15.0

Star styli with clamping systems

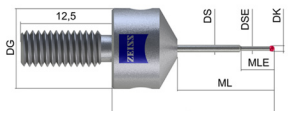
Star styli can be assembled using a combination of a stylus with a long thread, a slotted disc, and clamping disc, and clamping styli without a thread. The assembly can be screwed directly on to an extension or a cube.



Long-threaded styli , straight shaft

Adapter: M5 x 12,5
Shaft: Tungsten carbide, stepped
Stylus tip: Ruby
Permits the assembly of star styli with a slotted disc and a clamping disc.

Item No.	DK	L	ML	DS	DG	Wt.(g)
600342-8200-000	1.35	32.85	23.85	1.00	11.00	6.0
600342-8201-000	1.50	33.00	24.00	1.00	11.00	7.0
600342-8202-000	2.00	33.50	24.50	1.50	11.00	7.0
600342-8203-000	2.50	34.00	25.00	1.50	11.00	7.0
600342-8221-000	3.00	34.50	16.50	2.00	19.00	20.0
600342-8222-000	5.00	43.50	25.50	3.50	19.00	23.0

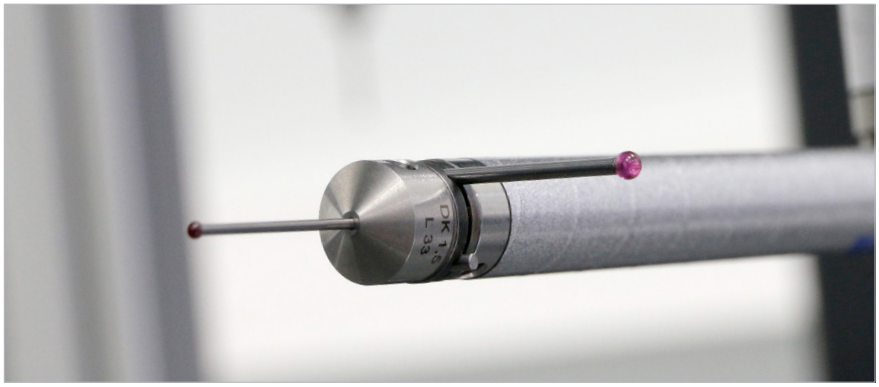


Long-threaded styli , stepped shaft

Adapter: M5 x 12,5
Shaft: Tungsten carbide, stepped
Stylus tip: Ruby
Permits the assembly of star styli with a slotted disc and a clamping disc.

Item No.	DK	L	ML	MLE	DS	DSE	DG	Wt.(g)
600342-8250-000	0.30	21.80	12.80	2.30	1.00	0.20	11.00	6.0
600342-8251-000	0.50	22.00	13.00	2.50	1.00	0.30	11.00	6.0
600342-8252-000	0.60	22.10	13.10	4.60	1.00	0.40	11.00	6.0
600342-8253-000	0.80	22.30	13.30	4.80	1.00	0.60	11.00	6.0
600342-8254-000	1.00	22.50	13.50	5.00	1.00	0.80	11.00	6.0

 © Carl Zeiss 3D Automation GmbH



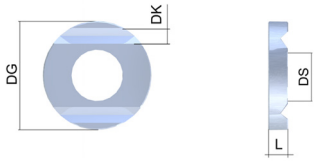
Clamping disc

The disc is clamped against the slotted disc on a long-threaded stylus.

Item No.	Description	DG	DS	L	DK
600341-0140-000	Clamping disc	11	5.1	1.5	-
600341-0141-000	Clamping disc	19	5.1	1.9	-

Slotted disc

Styli without a thread and tungsten carbide pins can be inserted and positioned in the slot.



Item No.	Description	DG	DS	L	DK
600341-0150-000	Slotted disc	11	5.1	2	1 / 1.5
600341-0151-000	Slotted disc	19	5.1	4	2 / 3.5

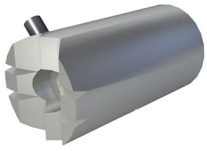
Tungsten carbide pin

Tungsten carbide pins are required for the assembly of clampable single-sided star styli.

Item No.	Description	DS	L
600341-0520-000	Tungsten carbide pin	1.0	1.5
600341-0521-000	Tungsten carbide pin	1.5	1.9
600341-0522-000	Tungsten carbide pin	2.0	2
600341-0523-000	Tungsten carbide pin	3.5	4

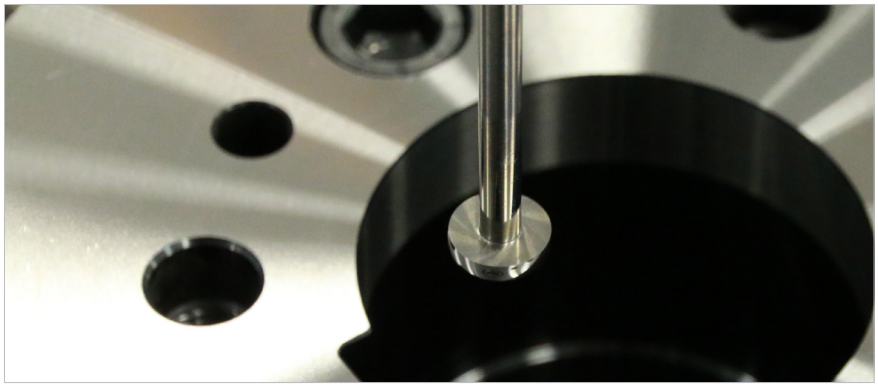
Assembly aid

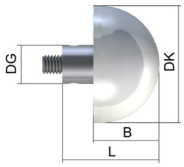
For the quick and easy assembly of clampable star styli. The size depends on the of the body diameter DG of the long-threaded stylus.



Item No.	Description
600341-8300-000	Assembly aid for star styli DG11
600341-8301-000	Assembly aid for star styli DG19

Ball probes

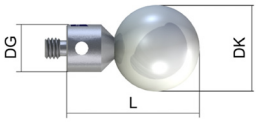




Hemisphere stylus

Adapter: M5
Shaft: Tungsten carbide
Stylus tip: Ceramic-hemisphere
A large sphere diameter with low weight.

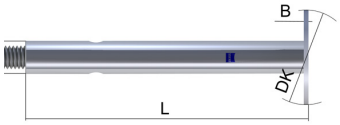
Item No.	DK	L	DS	B	DG	Wt.(g)
626105-1696-020	16.00	20.00	4.00	10.00	11.00	10.4
626105-2296-020	22.00	20.00	4.00	14.50	11.00	12.5
626105-3096-025	30.00	25.00	4.00	18.00	11.00	17.0



Ball stylus

Adapter: M5
Shaft: -
Stylus tip: Ceramic
Suitable for measuring deep holes.

Item No.	DK	L	DS	DG	Wt.(g)
000000-1294-772	15.00	28.00	5.00	11.00	20.0
626115-1600-028	16.00	28.00	5.00	11.00	20.0
626115-1800-028	18.00	28.00	5.00	11.00	22.0
626115-2000-033	20.00	33.00	5.00	11.00	29.0
626115-3000-043	30.00	43.00	5.00	11.00	67.0



Ball stylus disc

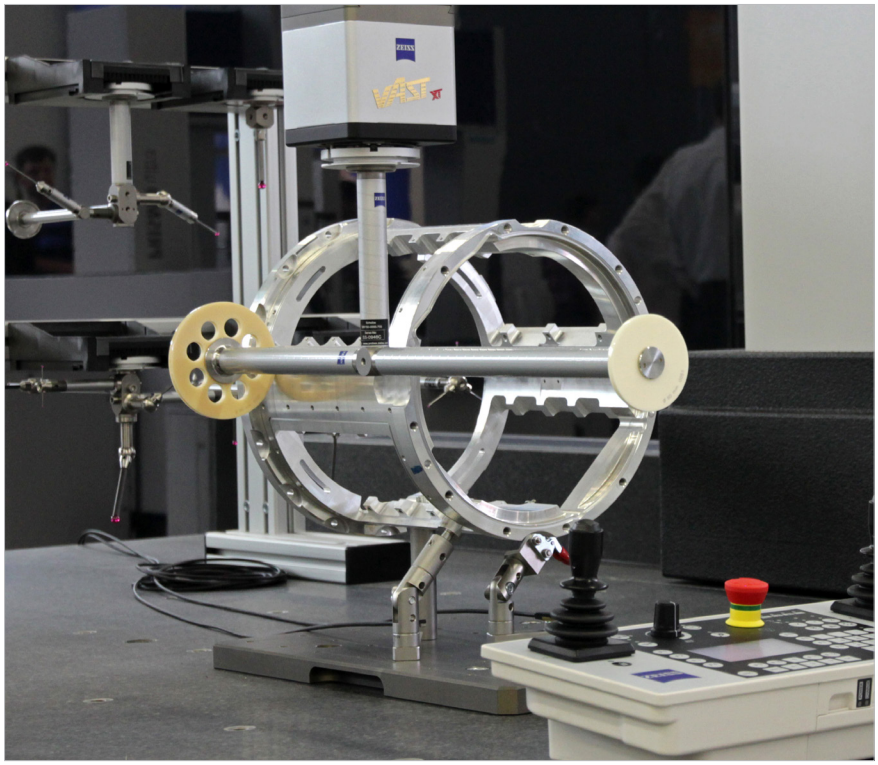
Adapter: M5
Shaft: -
Stylus tip: Steel
These ball disc styli have a shaft.

Item No.	DK	L	B	DG	Wt.(g)
600341-8090-000	10.00	21.50	1.50	7.00	3.0
600341-8095-000	15.00	21.50	1.50	10.00	6.0
000000-1165-629	15.00	40.00	1.00	7.00	5.0
602030-8091-000	20.00	60.00	1.00	7.00	8.0

 © Carl Zeiss 3D Automation GmbH

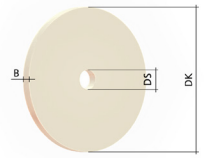
Ball disc

Aluminum oxide ceramics



Ball disc DS 8

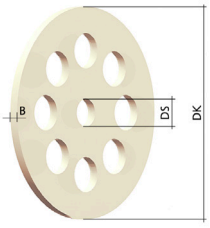
These aluminum oxide ceramic ball discs are characterized by their large diameters and light weight. They also have excellent form accuracy, with roundness of higher than 2 um.



Item No.	DK	DS	B	TMAT	Wt.(g)
626101-6000-004	60.00	8.00	4.00	ceramic	43.0
626101-3000-002	30.00	8.00	2.00	ceramic	5.0

Ball disc DS 16

These aluminum oxide ceramic ball discs are characterized by their large diameters and light weight. They also have excellent form accuracy, with roundness of higher than 2 um.



Item No.	DK	DS	B	TMAT	Wt.(g)
626101-2001-005	120.00	16.00	5.00	ceramic	169.0
626101-9000-005	90.00	16.00	5.00	ceramic	93.0

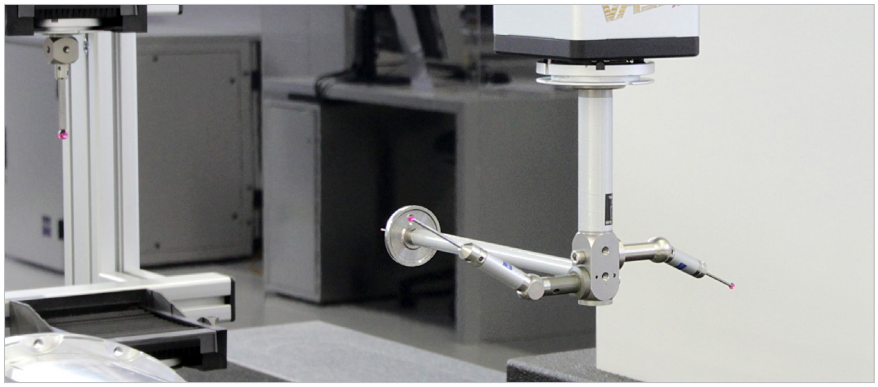
Adapter for ball discs

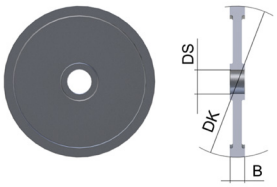
For securing ball discs to stylus extensions.

Item No.	Beschreibung	DS	TMAT	Wt.(g)
626105-6271-001	Adapter for ball disc	8	V2A	6.2
626105-6271-002	Adapter for ball disc	16	V2A	40.0

Ball disc

Tungsten carbide

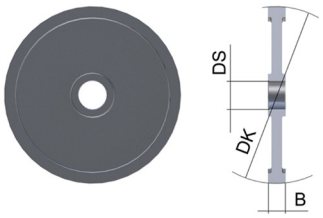




Ball disc DS5

Ball discs with an M5 through-thread are used in conjunction with long-threaded styli. The ball disc is made of hardened steel.

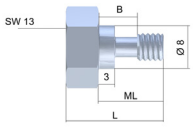
Item No.	DK	B	DS	TMAT	Wt.(g)
602030-0003-000	10.00	4.00	5.00	steel	2.0
602030-0004-000	15.00	4.00	5.00	steel	5.0
602030-0005-000	20.00	4.00	5.00	steel	9.0
602030-0006-000	30.00	4.00	5.00	steel	21.0
602030-0007-000	40.00	5.00	5.00	steel	42.0
602030-0008-000	50.00	5.00	5.00	steel	64.0
602030-0009-000	60.00	5.00	5.00	steel	89.0



Ball disc DS8

Ball discs with a smooth through-hole are used in conjunction with clamping screws. The ball disc is made of hardened steel.

Item No.	DK	B	DS	TMAT	Wt.(g)
602030-0010-000	15.00	4.00	8.00	steel	4.0
600341-0200-000	20.00	2.00	8.00	steel	4.0
602030-0011-000	20.00	4.00	8.00	steel	8.0
600341-0203-000	30.00	4.00	8.00	steel	10.0
600341-0204-000	40.00	4.00	8.00	steel	21.0
600341-0205-000	50.00	5.00	8.00	steel	36.0
600341-0206-000	60.00	6.00	8.00	steel	59.0



Clamping screw

For securing DS8 stylus discs.

Item No.	L	ML	B	SW
600341-0210-000	35.00	26.00	24.00	13.0
600341-0211-000	30.00	21.00	19.00	13.0
600341-0212-000	17.50	10.00	7.00	13.0

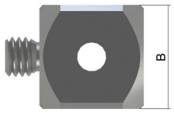
 © Carl Zeiss 3D Automation GmbH

Cube

Rigid connecting elements

Cube with thread pin

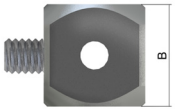
A fixed threaded stem is attached to one side of the cube.



Item No.	B	Wt.(g)	MAT
600341-8361-000	15.00	13.0	titanium
600341-8002-000	20.00	32.0	titanium

Cube with stucked in thread pin

Cube with a bonded M5 threaded pin for fixing.



Item No.	B	Wt.(g)	MAT
602030-8362-000	20.00	20.0	aluminum
602030-8363-000	15.00	7.9	aluminum

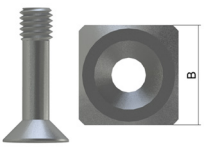
Cube with enclosed thread pin

Cube is secured with a headless screw (included).

Item No.	B	Wt.(g)	MAT
626115-6110-001	15.00	13.0	titanium
626115-6110-003	20.00	32.0	titanium

Cube with counterbore

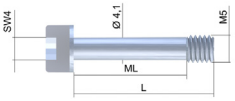
Cube with a countersink and countersunk screw for assembly.



Item No.	B	Wt.(g)	MAT
626115-6110-002	15.00	13.0	titanium

Screw

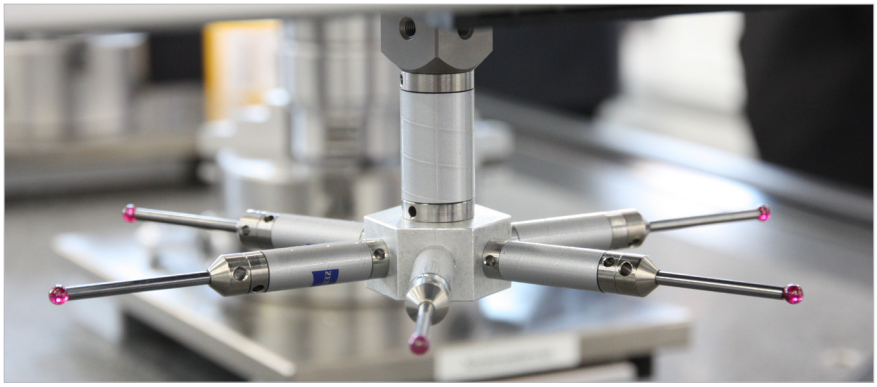
For connecting additionalcomponents to the cube. The screw length depends on the thickness of the component used.

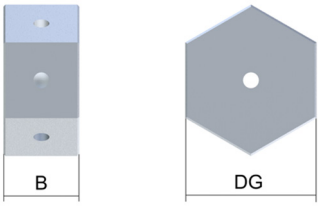


Item No.	L	ML	SW
626109-0015-000	20.00	15.00	4.0
626109-0016-000	25.00	20.00	4.0
626109-0017-000	27.00	22.00	4.0

Star piece

Rigid connecting elements

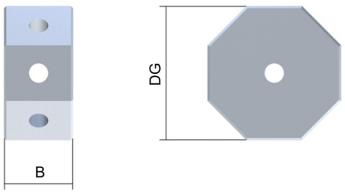




Star piece 6 x 60°

The star piece has six M5 threaded holes on the side for assembling a star stylus with a 60° spacing.

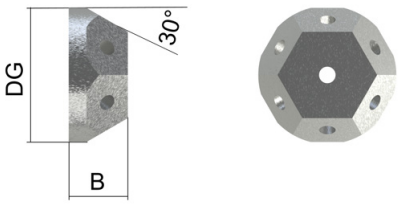
Item No.	DG	B	Wt.(g)	MAT
626105-6010-002	34.60	20.00	51.4	aluminum
626105-6110-001	34.00	20.00	86.8	titanium



Star piece 8 x 45°

The star piece has eight M5 threaded holes on the side for assembling a star stylus with a 45° spacing.

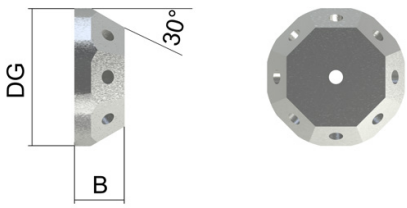
Item No.	DG	B	Wt.(g)	MAT
626105-6010-000	29.00	15.00	23.2	aluminum
626105-6110-000	29.00	15.00	39.6	titanium



Star piece 6 x 60° / 30°

The star piece has six M5 threaded holes on the side for assembling a star stylus with a 60° spacing and a 30° angular position.

Item No.	DG	B	Wt.(g)	MAT
626105-6110-031	34.00	15.00	47.0	titanium



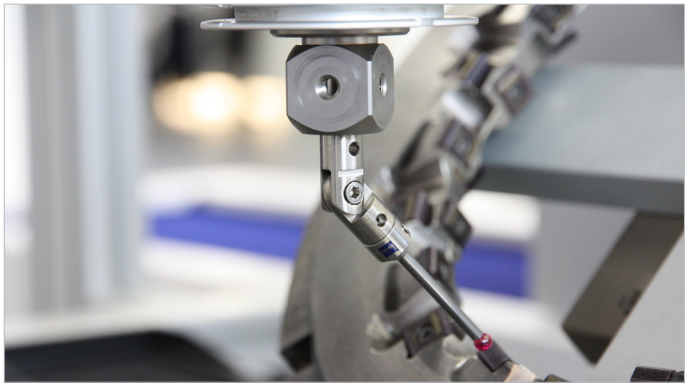
Star piece 8 x 45° / 30°

The star piece has eight M5 threaded holes on the side for assembling a star stylus with a 45° spacing and a 30° angular position.

Item No.	DG	B	Wt.(g)	MAT
626105-6110-030	41.00	15.00	66.0	titanium

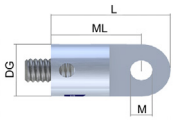
 © Carl Zeiss 3D Automation GmbH

Angle
Rigid connecting elements



End angle pieces with thread

End angle pieces enable you to position a stylus angled at less than 90° at the end of a stylus extension.



Item No.	L	ML	DG	M	MAT	Wt.(g)
626105-6901-001	22.50	17.00	11.00	5	titanium	6.0
626105-6190-005	33.00	20.00	11.00	3	titanium	7.0

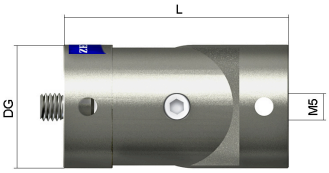
Knuckle joint DG11 with thread

For the assembly of angled stylus systems. The angular adjustment takes place at right angles to the main axis by means of the movable knuckle joint.

Item No.	DG	L	Wt.(g)
600342-9002-000	11.00	30.00	11.0

Knuckle joint DG20 with thread

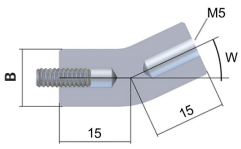
For the assembly of angled stylus systems. The angular adjustment takes place at right angles to the main axis by means of the movable knuckle joint.



Item No.	DG	L	Wt.(g)
626105-6280-070	20.00	36.00	43.0

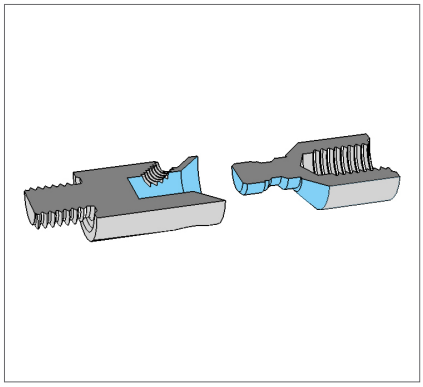
Angle pieces with thread

In addition to the standard angles, we will manufacture any desired angle block for you on request.



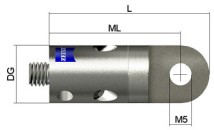
Item No.	B	W (°)	Wt.(g)
626105-6020-015	12.00	15.00	11.0
626105-6020-030	12.00	30.00	11.0
626105-6020-045	12.00	45.00	11.0
626105-6020-060	12.00	60.00	11.0
626105-6020-075	12.00	75.00	11.0

Rotary connecting elements



These connecting elements form a rotary unit with a cone receiver and an end piece with a cone adapter.
Three robust pins with a female thread provide high clamping forces. For use in a production environment, the connection can be laser welded.

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



Rotary end angle element

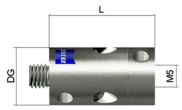
The end angle element consists of a 90° end angle piece with a cone adapter and a cone receiver.

Item No.	DG	B	L	ML	MAT	Wt.(g)
626105-6280-010	11.00	5.50	30.5	25.00	titanium	9.6

Rotary knuckle joint

The knuckle element consists of a knuckle joint with a cone adapter and a cone receiver.

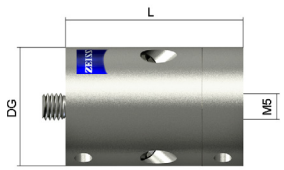
Item No.	L	DG	MAT	Wt.(g)
626105-6280-040	40.00	11.00	titanium	16.0



Rotary element DG11

The rotary element consists of a rotary joint with a cone adapter and a cone receiver.

Item No.	L	DG	MAT	Wt.(g)
626105-6280-020	20.00	11.00	titanium	7.2
626105-6280-030	30.00	11.00	titanium	11.3



Rotary element DG20

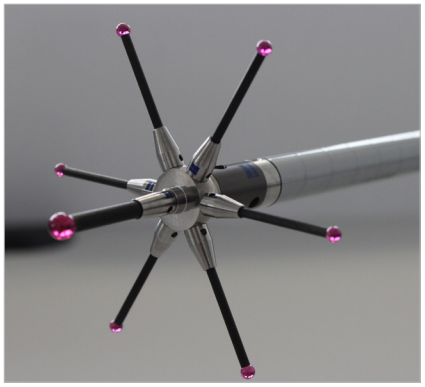
The rotary element consists of a rotary joint with a cone adapter and a cone receiver. For attaching additional connecting elements with a threaded connection.

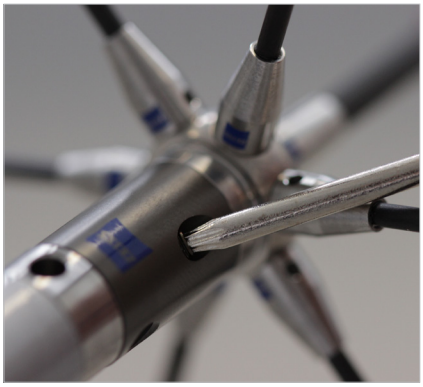
Item No.	DG	L	Wt.(g)
626105-6280-090	20.00	30.00	40.0

 © Carl Zeiss 3D Automation GmbH

Star elements

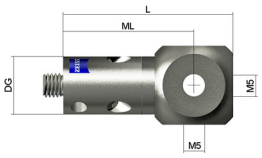
Rotary connecting elements





Rotary cube element, 4 x 90°

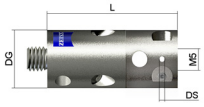
The cube element consists of a cube for mounting M5 styli and a cone receiver.



Item No.	DG	B	L	ML	MAT	Wt.(g)
626105-6280-080	11.00	15.00	32.50	25.00	titanium	18.0

Rotary star element, 4 x 90°

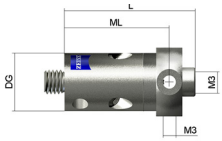
The star element consists of a star piece for mounting styli without a thread and a cone receiver.



Item No.	L	DS	DG	MAT	Wt.(g)
626105-6280-050	25.00	1.00	11.00	titanium	11.50

Rotary star element, 4 x 90°

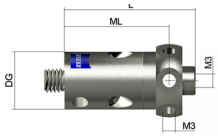
The star element consists of a star piece for mounting M3 XXT styli and a cone receiver.



Item No.	L	ML	DG	MAT	Wt.(g)
626105-6280-060	25.00	20.00	11.00	titanium	10.0

Rotary star element, 6 x 60°

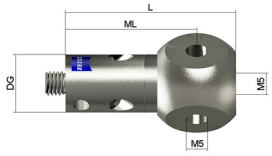
The star element consists of a star piece for mounting M3 XXT styli and a cone receiver.



Item No.	L	ML	DG	MAT	Wt.(g)
626105-6280-110	25.00	5.00	11.00	titanium	10.00

Rotary star element, 3 x 120°

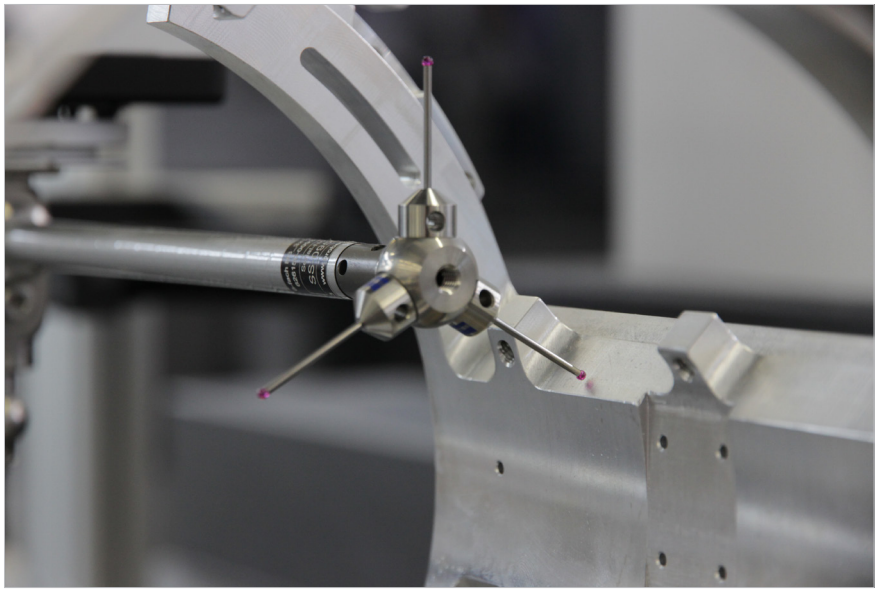
The star element consists of a star piece for mounting M5 styli and a cone receiver.

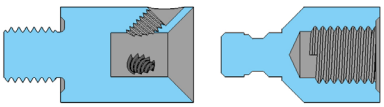


Item No.	L	ML	DG	MAT	Wt.(g)
626105-6280-100	32.50	25.00	11.00	titanium	19.0

Connecting element with cone adapter

Rotary connecting elements

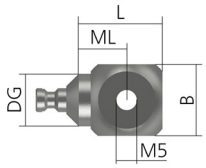




Extension with cone adapter

Connecting element with cone adapter

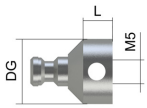
These connecting pieces have a cone adapter and are inserted in an extension with a cone receiver. This forms a rotary connection which is fixed with three internal pins.
You will find the relevant extensions with a cone receiver for the assembly of rotary connections on page 36 of this catalog.



Cube with cone adapter, 4 x 90°

Up to five styli from the M5 product range can be fixed to this cube at an angle of 90°.

Item No.	DG	B	L	ML	MAT	Wt.(g)
626107-6280-070	11.00	15.00	17.50	10.00	titanium	13.0



Rotary piece with cone adapter

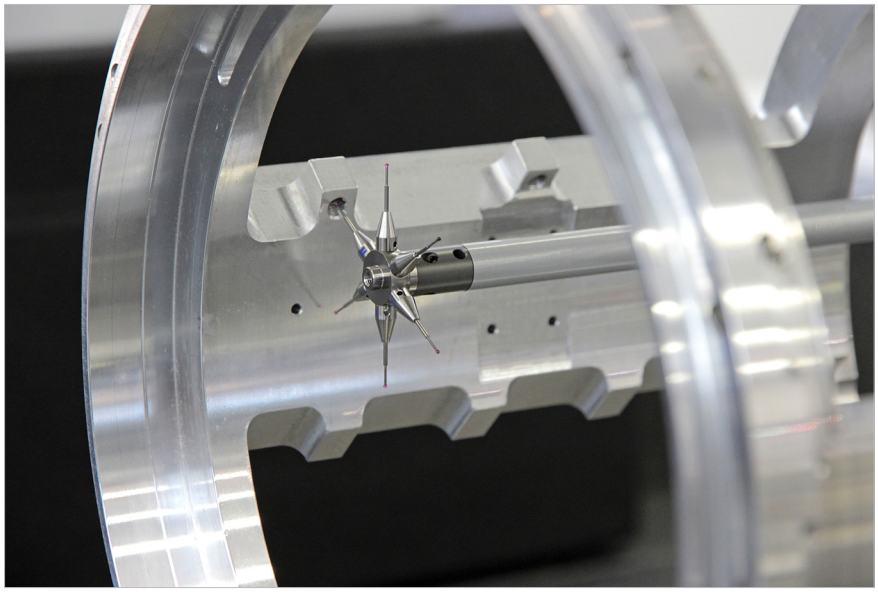
The rotary joint has an M5 threaded hole.

Item No.	L	DG	MAT	Wt.(g)
626107-6280-020	5.00	11.00	titanium	2.5
626107-6280-030	15.00	11.00	titanium	6.9

 © Carl Zeiss 3D Automation GmbH

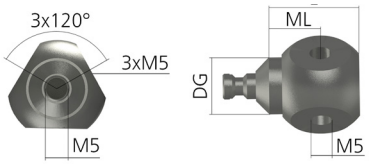
Star elements with cone adapter

Rotary connecting elements



Star element with cone adapter, 3 x 120°

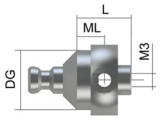
The star piece is provided with four M5 threads, three of which are arranged at an angle of 120°.



Item No.	L	ML	DG	MAT	Wt.(g)
626107-6280-090	17.50	10.00	11.00	titanium	15.0

Star element with cone adapter, 4 x 90°

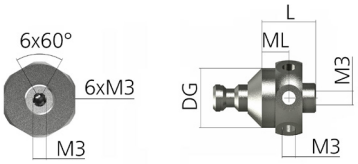
Up to five styli from the M3 XXT product range can be fixed to this star piece, four of which are arranged at an angle of 90°.



Item No.	L	ML	DG	MAT	Wt.(g)
626107-6280-060	10.00	5.00	11.00	titanium	5.0

Star element with cone adapter, 6 x 60°

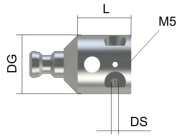
Up to seven styli from the M3 XXT product range can be fixed to this star piece, six of which are arranged at an angle of 60°.



Item No.	L	ML	DG	MAT	Wt.(g)
626107-6280-100	10.00	5.00	11.00	titanium	5.0

Star element with cone adapter, 4 x 90°

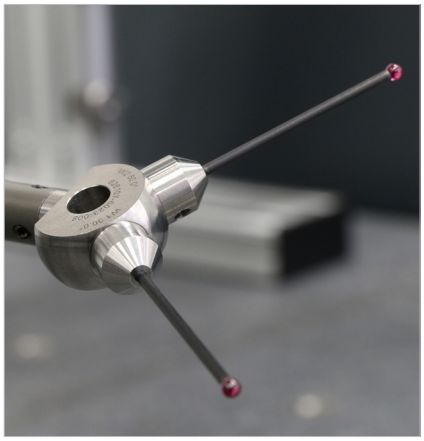
Up to five styli can be fixed to this star piece. Four styli without thread and with diameter of 1mm in angle of 90° and one stylus with M5 thread.

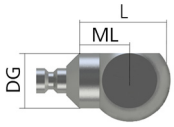


Item No.	L	DS	DG	MAT	Wt.(g)
626107-6280-050	10.00	1.00	11.00	titanium	4.10

Angle with cone adapter

Rotary connecting elements

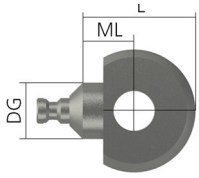




Blank angle with cone adapter

The blank angle enables you to assemble angle blocks easily and quickly and insert them in a cone receiver, or we manufacture the required angle block for you according to your specifications. Use the adjacent request form for this purpose.

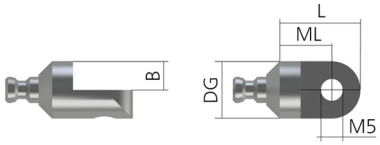
Item No.		L	ML	DG	MAT	Wt.(g)
626107-6020-000	Blank	16.00	10.00	11.00	titanium	11.0
626107-6020-xxx	Angle	16.00	10.00	11.00	titanium	-



Double blank angle with cone adapter

The double blank angle enables you to assemble angle blocks easily and quickly and insert them in a cone receiver, or we manufacture the required angle block for you according to your specifications. Use the adjacent request form for this purpose.

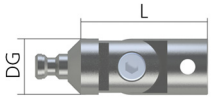
Item No.		DG	ML	MAT	Wt.(g)
626107-6023-000	Blank	11.00	10.00	titanium	18.0
626107-6023-xxx	Angle	11.00	10.00	titanium	-



End angle element with cone adapter, 1 x 90°

A stylus with M5 thread can be mounted on this end angle piece at an angle of 90°.

Item No.	DG	B	L	ML	MAT	Wt.(g)
626107-6280-010	11.00	5.50	15.50	10.00	titanium	4.7



Knuckle joint with cone adapter

A stylus with M5 thread can be mounted on this knuckle joint at any desired spatial angle.

Item No.	DG	L	MAT	Wt.(g)
626107-6280-040	11.00	19.00	titanium	11.2

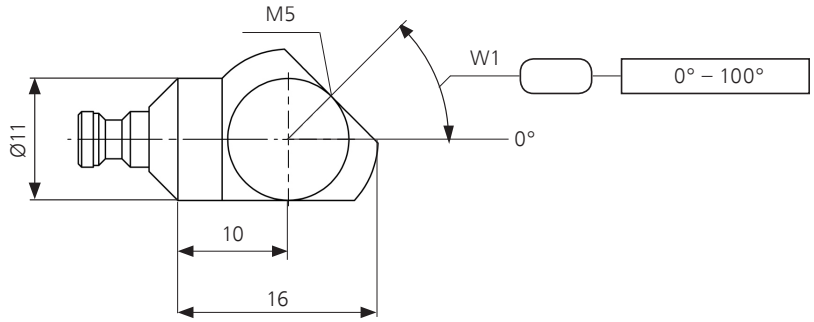
 © Carl Zeiss 3D Automation GmbH

Request form

1. Enter the angle into the corresponding fields
2. Fill in your desired quantity
3. Include your contact details
3. Send us a fax on +49 7361 6336 29 or fill in the form on our webshop www.probes.zeiss.com.

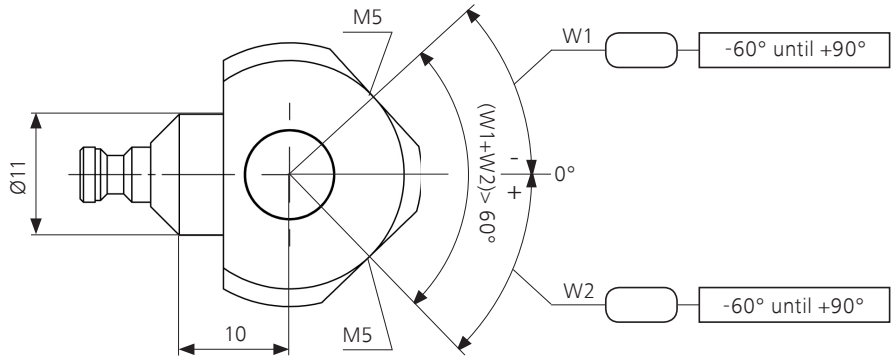
Single angle with cone adapter

Quantity: ____



Double angle with cone adapter

Quantity: ____



Name, first name:	Department:
Company:	Postal code/ place/state:
Street:	E-Mail:
Phone:	Fax:

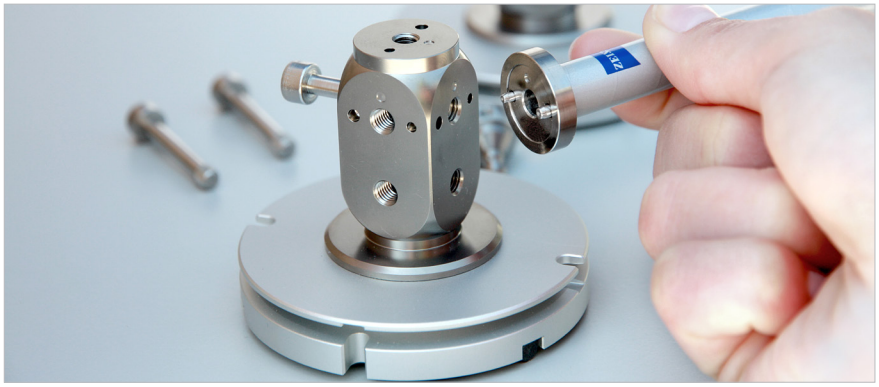
Stylus systems for series measurement

ThermoFit® Pro from ZEISS

ZEISS ThermoFit Pro is a unique modular system for assembling ZEISS VAST stylus systems. With just a few carefully matched elements, you create stylus systems suitable for series production with excellent stiffness and thermal stability.

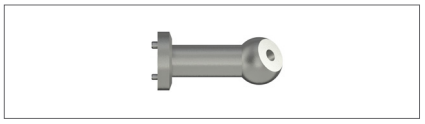
Stylus systems must remain stable and aligned at all times during series measurements in order to guarantee meaningful measuring results. Our innovative ZEISS ThermoFit Pro system for ZEISS VAST stylus systems accomplishes this task.
In ZEISS ThermoFit Pro, extensions are inserted in the cube of the adapter plate and screwed on, so that they cannot rotate. They come with a fixed-mounted rotary joint receiver. You insert connecting elements with a cone adapter as well as angle pieces or star pieces directly in this cone receiver and align them precisely. This is easy and saves time. We fix the alignment of the rotary joints for you, e.g. by laser welding, for use in the production environment. We process prefabricated angle block and spatial angle blanks made of high-grade titanium alloy for you quickly and precisely, or you produce the angle blocks yourself using our blank parts. All the blanks are available as adjustable components in the „Stylus System Creator" (SSC) offline software stylus kit (e.g. in CALYPSO Planner, CALIGO or iDA). As a result, you do not have to have any complex special angle blocks laboriously constructed and manufactured here, you simply use the available elements. You thereby considerably shorten the initial phase of your measuring plans. We will be pleased to support you. Please request a copy of our catalog.

 © Carl Zeiss 3D Automation GmbH

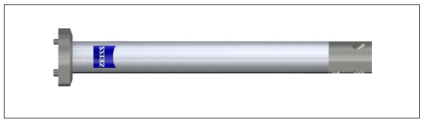


The modular system has plug-in connections instead of threads. Individual components are accurately positioned with the plug connection and fixed to the rear of the cube with a screw. Individual styli or complete branches of a configuration can subsequently be exchanged without compromising the overall system.

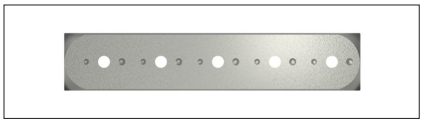
Plate extensions and cubes
Plate extensions and cubes of the ZEISS ThermoFit Pro system form the basis for the design of stylus systems. Extensions, angle blocks or multiple holders can be quickly and easily fixed here. The plug-in connection enables attached components to be inserted with high angle accuracy and protected against twisting. This is a major advantage when changing styli.



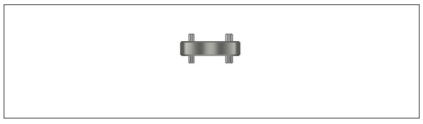
Spatial angle blocks
An angle block or spatial angle block can be manufactured from a sphere blank through simple processing.



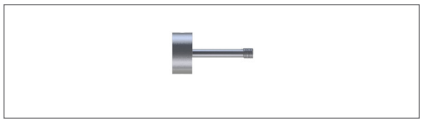
Extensions
These extensions have a twist-proof plug-in connection and an integrated cone receiver in which connecting elements with a cone adapter are attached and aligned.



Multiple holders
Complex stylus systems can be constructed using these receivers.

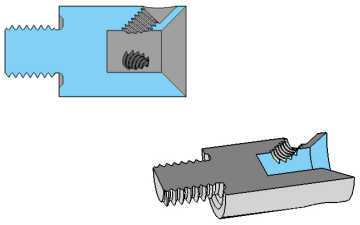


Index disc
The index disc locks the multiple holder together with the cube.



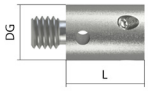
Screws
Screws are used to fix the individual components.

Extensions with cone receiver



Extensions with cone receiver

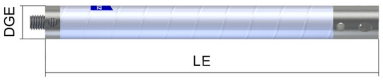
ZEISS ThermoFit silver stylus extensions are unbeatable in scanning applications. They combine maximum thermal stability, bending, torsional rigidity and are light weight.
They maintain a constant length with changing temperatures. Furthermore, they have virtually no thermal torsion in contrast to conventional carbon fiber extensions.



Extensions with cone receiver

This titanium receiver enables rotary connections to be constructed. The cone receiver enables various connecting elements with a cone adapter to be used (see pages 30 to 32).

Item No.	LE	DGE	Wt.(g)
626107-1015-105	15.00	11.00	5.0



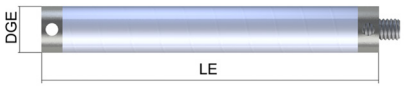
ZEISS ThermoFit silver with cone receiver / diameter 11 mm

These extensions have a cone receiver in which various individually available rotary, angle and star pieces with a cone adapter are inserted (see pages 30 to 32).

Item No.	LE	DGE	Wt.(g)
626107-1050-105	50.00	11.00	13.0
626107-1060-105	60.00	11.00	14.0
626107-1070-105	70.00	11.00	15.0
626107-1080-105	80.00	11.00	15.0
626107-1090-105	90.00	11.00	16.0
626107-1100-105	100.00	11.00	17.0
626107-1110-105	110.00	11.00	18.0
626107-1130-105	130.00	11.00	19.0
626107-1160-105	160.00	11.00	21.0
626107-1190-105	190.00	11.00	24.0
626107-1210-105	210.00	11.00	25.0
626107-1260-105	260.00	11.00	29.0
626107-1310-105	310.00	11.00	33.0
626107-1410-105	410.00	11.00	40.0

 © Carl Zeiss 3D Automation GmbH

ZEISS ThermoFit silver



ZEISS ThermoFit silver / diameter 11 mm

Extensions made of thermally stable carbon fiber tubes with a winding technique especially designed for metrology.

Item No.	LE	DGE	Wt.(g)
626107-1040-100	40.00	11.00	9.0
626107-1050-100	50.00	11.00	10.0
626107-1060-100	60.00	11.00	11.0
626107-1070-100	70.00	11.00	11.0
626107-1075-100	75.00	11.00	12.0
626107-1080-100	80.00	11.00	12.0
626107-1090-100	90.00	11.00	13.0
626107-1100-100	100.00	11.00	14.0
626107-1120-100	120.00	11.00	15.0
626107-1150-100	150.00	11.00	17.0
626107-1180-100	180.00	11.00	19.0
626107-1200-100	200.00	11.00	21.0
626107-1250-100	250.00	11.00	24.0
626107-1300-100	300.00	11.00	27.0
626107-1400-100	400.00	11.00	34.0

ZEISS ThermoFit silver / diameter 20 mm

Extensions made of thermally stable carbon fiber tubes with a winding technique especially designed for metrology.

Item No.	LE	DGE	Wt.(g)
626107-2040-100	40.00	20.00	26.0
626107-2050-100	50.00	20.00	28.0
626107-2060-100	60.00	20.00	29.0
626107-2070-100	70.00	20.00	30.2
626107-2075-100	75.00	20.00	31.0
626107-2080-100	80.00	20.00	32.0
626107-2090-100	90.00	20.00	33.0
626107-2100-100	100.00	20.00	34.0
626107-2120-100	120.00	20.00	37.0
626107-2150-100	150.00	20.00	41.0
626107-2180-100	180.00	20.00	45.0
626107-2200-100	200.00	20.00	48.0
626107-2250-100	250.00	20.00	55.0
626107-2300-100	300.00	20.00	62.0
626107-2400-100	400.00	20.00	75.0
626107-2500-100	500.00	20.00	89.0
626107-2600-100	600.00	20.00	103.0

Titanium extensions

Titanium extensions are suitable for the assembly of rigid styli. They are made of titanium tubes from a length of 40 mm for weight reasons. The end caps are large-area soldered, which provides an extremely good connection to the tube. This prevents stress fractures that occur with welded extensions.

Titanium / diameter 11 mm

These extensions are produced of solid material up to a length of 35 mm.

Item No.	LE	DGE	Wt.(g)
602030-9044-000	10.00	11.00	4.0
602030-9045-000	15.00	11.00	6.0
602030-9046-000	20.00	11.00	7.0
602030-9047-000	25.00	11.00	9.6
000000-1251-674	30.00	11.00	12.0
602030-9049-000	40.00	11.00	14.0
602030-9051-000	50.00	11.00	15.0
602030-9053-000	60.00	11.00	14.0
602030-9055-000	75.00	11.00	19.0
602030-9057-000	80.00	11.00	19.0
602030-9059-000	90.00	11.00	20.0
602030-9061-000	100.00	11.00	22.0
602030-9063-000	120.00	11.00	30.0
602030-9065-000	150.00	11.00	29.0

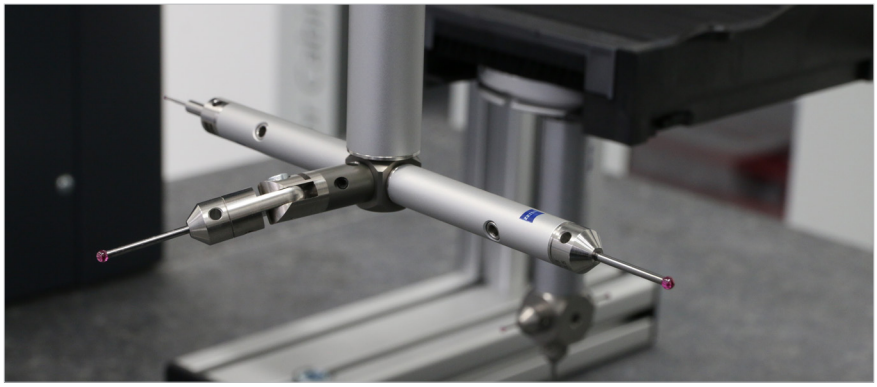
Titanium / diameter 18 mm

These extensions are produced of titanium tubes.

Item No.	LE	DGE	Wt.(g)
626117-2010-030	10.00	18.00	10.3
626117-2015-030	15.00	18.00	15.9
602030-9048-000	25.00	18.00	26.0
602030-9050-000	40.00	18.00	43.0
602030-9052-000	50.00	18.00	35.0
602030-9054-000	60.00	18.00	38.0
602030-9056-000	75.00	18.00	42.0
602030-9058-000	80.00	18.00	41.0
602030-9060-000	90.00	18.00	47.0
602030-9062-000	100.00	18.00	50.0
602030-9064-000	120.00	18.00	56.0
602030-9066-000	150.00	18.00	68.0
602030-9067-000	200.00	18.00	67.0
602030-9068-000	250.00	18.00	67.5
602030-9069-000	300.00	18.00	84.5

 © Carl Zeiss 3D Automation GmbH

Aluminum and inox extensions



Inox / diameter 11 mm

Extensions made of stainless steel have a high stiffness. They are used in standard applications in which weight is unimportant.

Item No.	LE	DGE	Wt.(g)
600341-0250-000	10.00	11.00	6.0
600341-0251-000	15.00	11.00	9.0
600341-0252-000	20.00	11.00	13.0
600341-0254-000	40.00	11.00	28.0
600341-0256-000	60.00	11.00	42.0
600341-0258-000	80.00	11.00	58.0
600341-0260-000	100.00	11.00	73.0

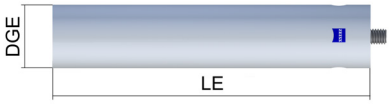
Aluminum / diameter 11 mm

These stylus extensions are made of solid aluminum material with a diameter of 11 mm. The surface is anodized.

Item No.	LE	DGE	Wt.(g)
600341-8261-000	40.00	11.00	10.0
600341-8262-000	60.00	11.00	14.0
600341-8263-000	80.00	11.00	19.0
600341-8264-000	100.00	11.00	24.0
600341-8265-000	120.00	11.00	30.0

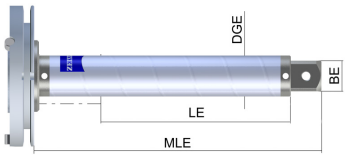
Aluminum / diameter 20 mm

These stylus extensions are manufactured from aluminum tubes and are therefore very light with a diameter of 20 mm. The surface is anodized.



Item No.	LE	DGE	Wt.(g)
600341-8425-000	40.00	20.00	32.0
600341-8424-000	60.00	20.00	37.0
600341-8423-000	80.00	20.00	43.0
600341-8422-000	100.00	20.00	50.0
600341-8421-000	150.00	20.00	68.0
600341-8420-000	200.00	20.00	96.0

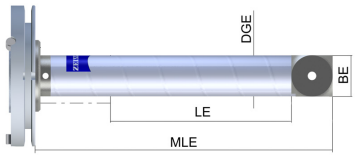
Adapter plates
with plate extension



Adapter plates ZEISS VAST with ZEISS ThermoFit silver and cube 15

This adapter plate has a ZEISS ThermoFit plate extension with an aligned 15 cube. The cube has five M5 connections.

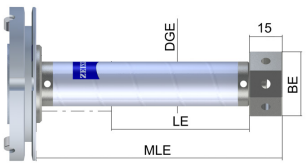
Item No.	LE	MLE	BE	DGE	Wt.(g)
626107-2025-930	25.00	66.50	15.00	20.00	167.0
626107-2040-930	40.00	81.50	15.00	20.00	169.0
626107-2050-930	50.00	91.50	15.00	20.00	171.0
626107-2060-930	60.00	101.50	15.00	20.00	173.0
626107-2080-930	80.00	121.50	15.00	20.00	175.0
626107-2100-930	100.00	141.50	15.00	20.00	177.0
626107-2120-930	120.00	161.50	15.00	20.00	179.0
626107-2150-930	150.00	191.50	15.00	20.00	184.0



Adapter plates ZEISS VAST with ZEISS ThermoFit silver and cube 20

This adapter plate has a ZEISS ThermoFit plate extension with an aligned 20 cube. The cube has five M5 connections.

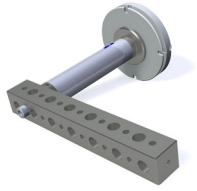
Item No.	LE	MLE	BE	DGE	Wt.(g)
626107-2025-910	25.00	71.50	20.00	20.00	181.0
626107-2040-910	40.00	86.50	20.00	20.00	183.0
626107-2050-910	50.00	96.50	20.00	20.00	185.0
626107-2060-910	60.00	106.50	20.00	20.00	187.0
626107-2080-910	80.00	126.50	20.00	20.00	189.0
626107-2100-910	100.00	146.50	20.00	20.00	191.0
626107-2120-910	120.00	166.50	20.00	20.00	193.0
626107-2150-910	150.00	196.50	20.00	20.00	198.0



Adapter plates ZEISS VAST with ZEISS ThermoFit silver and star piece

This adapter plate has a ZEISS ThermoFit plate extension with a star piece. The star piece has eight M5 connections at an angle of 45°.

Item No.	LE	MLE	BE	DGE	Wt.(g)
626107-2070-950	70.00	110.50	29.00	20.00	200.0



Adapter Plate ZEISS VAST with multiple holder

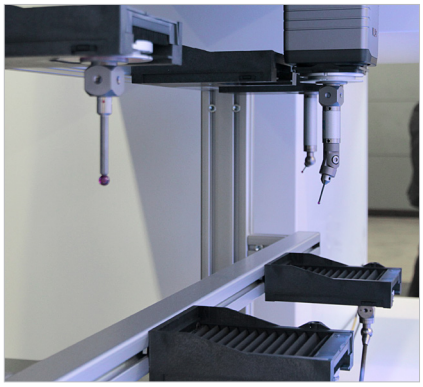
This adapter plate has a multiple holder.
Several styli and extensions can be mounted.

Item No.	Description
626107-2070-951	Adapter plate ZEISS VAST, M5, multiple holder

 © Carl Zeiss 3D Automation GmbH

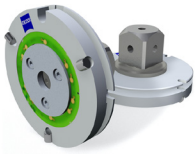
Adapter plates

Original ZEISS adapter plates for ZEISS VAST probes have a programmed ID chip. The „Quick Stylus Change“ and „Fly Scan“ options only function with this original ID chip. Another advantage of an active ID chip is the 100% identification in the system; this prevents incorrect operation and increases safety during stylus change.



Adapter plate ZEISS VAST with cube

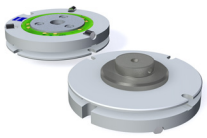
This adapter plate has an aligned 20 cube. Five M5 connections can accommodate styli and extensions. The reference adapter plate is marked with a red ring.



Item No.	Description
600667-9601-000	Adapter plate with ID-Chip active, 158g
600667-9602-000	Reference adapter plate ZEISS VAST with ID-Chip active, 158g
600667-9611-000	Adapter plate ZEISS VAST with ID-Chip active, 2 pcs., 158g / pcs.

Adaper plate ZEISS VAST with M5 receiver

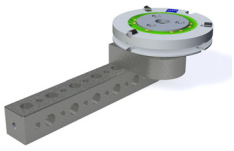
This adapter plate has an M5 threaded receiver. As a result of their flat design, they are ideally suited for utilizing the Z measuring range.



Item No.	Description
626107-2000-940	Adapter plate ZEISS VAST with M5 receiver

Adaper plate ZEISS VAST with multiple holder

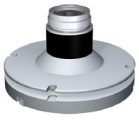
This adapter plate has a multiple holder made of titanium. A total of 26 M5 connections can accommodate styli and extensions.



Item No.	Description
626107-2000-951	Adapter plate ZEISS VAST, M5, multiple holder

Adaper plate ZEISS VAST for RST-T

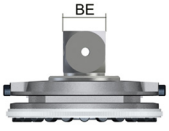
This adapter plate can accommodate the RST / VAST temperature probe.



Item No.	Description
600667-9603-000	Adapter plate for temperature probe RST-T / VAST

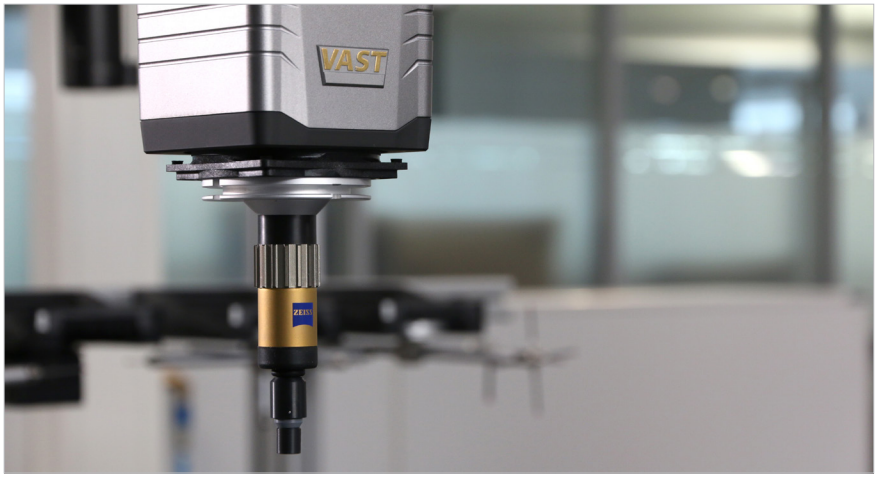
Adaper plate ZEISS VAST XTR with cube

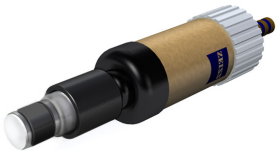
For the probe head VAST XTR with built-in rotation axis of 15° intervals. This allows the probe to be positioned at the right angle to the component.



Item No.	Description
600664-9700-000	Adapter plate ZEISS VAST XTR with cube, BE 20

Temperature measurement
Probe head RST-T





Temperature probe head RST-T / ZEISS VAST

For recording the workpiece temperature. The temperature probe can be attached to the special adapter plate for RST-T.

Item No.	Description
600661-9670-000	Temperature probe head RST-T/ZEISS VAST „gold“

Exchange sensor for RST-T

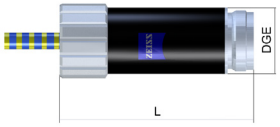
Simple sensor change by hand.

Item No.	Description
600661-8600-000	Temperature sensor PT-100 RST-T

RST knuckle joint

For setting angles between 0° and 90

Item No.	LE	DGE	Wt.(g)
600661-9225-000	94.00	24.00	97.0



Probe head extension

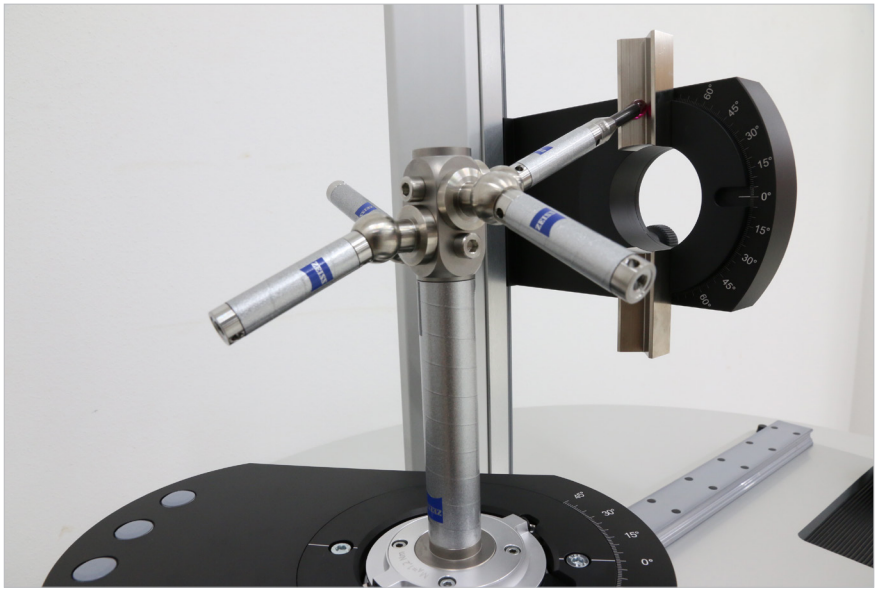
The RST probe can be connected to an RDS or DSE adapter plate with the probe extensions from ZEISS ThermoFit.

Item No.	LE	DGE	Wt.(g)
600661-8420-000	60.00	24.00	46.0
600661-8421-000	100.00	24.00	56.0
600661-8422-000	200.00	24.00	78.0
600661-8423-000	300.00	24.00	100.0
600661-8424-000	400.00	24.00	124.0
600661-8426-000	600.00	24.00	175.0
600661-8435-000	350.00	24.00	114.1

 © Carl Zeiss 3D Automation GmbH

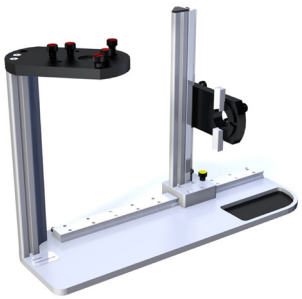
FixAssist® from ZEISS

Stylus set-up device



ZEISS FixAssist VAST linear

An adapter plate with styli can be set up on the ZEISS FixAssist VAST linear alignment device and mounted. The angle around the CMM Z-axis and around a horizontal axis can be adjusted precisely and reproducibly.



Your advantages:

- No machine utilization for pre-alignment
- Simple operation, prevents damage to styli
- Quick, reproducible stylus assembly
- High level of safety through optimally adjusted styli

Item No.	Description
626109-9120-000	ZEISS FixAssist VAST linear. incl. toolkit

ZEISS FixAssist XTR

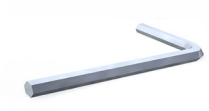
An adapter plate with styli can be set up on the ZEISS FixAssist VAST linear alignment device and mounted. The angle around the CMM Z-axis and around a horizontal axis can be adjusted precisely and reproducibly.

Your advantages:

- No machine utilization for pre-alignment
- Simple operation, prevents damage to styli
- Quick, reproducible stylus assembly
- High level of safety through optimally adjusted styli

Item No.	Description
626109-9160-000	ZEISS FixAssist XTR linear. incl. toolkit

Tools



Hexagon wrench

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

Item No.	Description
602030-0042-000	Hexagon wrench DIN 911, SW 0,9
602030-0002-000	Hexagon wrench DIN 911, SW 1,5
602030-0021-000	Hexagon wrench DIN 911, SW 2,5
000000-0015-247	Hexagon wrench DIN 911, SW 3
000000-0015-248	Hexagon wrench DIN 911, SW 4

Pin wrench

Use on both sides for mounting styli.

Item No.	Description
602030-0027-000	Pin wrench, 1,7
602030-0222-000	Pin wrench, 2,9

Torx screwdrivers for rotary connection elements

Especially for ZEISS M5 rotary connecting elements.

Item No.	Description
626109-0035-000	Torx screwdriver T6
626109-0047-000	Torx screwdriver T8
626109-0044-000	Torx screwdriver TX20

Screw set for M5 cone receiver

Replacement set of ten Torx screws for securing the M5 rotary connecting elements to the cone receiver.

Item No.	Description
626119-0001-019	Screw set for M5 cone receiver, 10 pcs.

Two pin wrench

These wrenches are used for clamping holders with ball discs.

Item No.	Description
626109-0041-000	Two pin wrench 13x2,5
626109-0042-000	Two pin wrench 25x3

Hook wrench

For mounting extensions and styli.

Item No.	Description
626109-0012-000	Hook wrench DG11
626109-0013-000	Hook wrench DG20
626119-0001-000	Hook wrench set 5xDG11 and 5xDG20

Tool Kit VAST

13-piece tool box for mounting M5 stylus systems.

Item No.	Description
626109-9010-000	Tool Kit for VAST

Content	Quantity	Description
626109-9010-000	1	Torque hex wrench 2Nm, 2,5 mm
626109-0012-000	2	Hook wrench DG20
626109-0013-000	2	Hook wrench DG11
600341-0260-000	1	Stylus extension, M5, V2A, DGE11, LE100
602030-0222-000	2	Pin wrench 2,9
602030-0002-000	1	Hex wrench, SW 1,5
000000-0015-245	1	Hex wrench, SW 2,0
602030-0021-000	1	Hex wrench, SW 2,5
000000-0015-247	1	Hex wrench, SW 3,0
000000-0015-248	1	Hex wrench, SW 4

Tool Kit XTR

15-piece tool box for mounting M5 stylus systems.

Item No.	Description
626109-9010-100	Tool Kit for VAST XTR

Content	Quantity	Description
626109-9052-000	1	Torque hex wrench 2Nm, 2,5 mm
626109-0012-000	2	Hook wrench DG20
626109-0013-000	2	Hook wrench DG11
600341-0260-000	1	Stylus extension, M5, V2A, DGE11, LE100
602030-0222-000	2	Pin wrench 2,9
602030-0002-000	1	Hex wrench, SW 1,5
626109-0035-000	3	Torx screwdriver T6
602030-0021-000	1	Hex wrench, SW 2,5
000000-0015-247	1	Hex wrench, SW 3,0
000000-0015-248	1	Hex wrench, SW 4

Torque hex wrench

This screwdriver with a 2.5 mm hexagon blade is for loosening and tightening screws on an adapter plate.

Item No.	Description
626109-0010-000	Torque hex wrench 2 Nm fix, for VAST
626109-0051-000	Torque hex wrench 1,5 Nm fix, for VAST XTR

XXT styli assembly pliers

For XXT styli mounting.

Item No.	Description
626109-0056-000	XXT styli assembly pliers

Storage
Probe cabinet

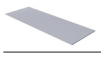
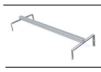
Probe cabinet MSC

For the secure storage of your stylus systems. This robust cabinet with the dimensions W 1000 x D 400 x H 2000 mm is equipped with five height-adjustable racks and 30 VAST probe sockets.

Item No.	Description
626100-9025-100	Probe cabinet MSC with glass doors, 30 sockets, VAST
626100-9025-000	Probe cabinet MSC with sheet doors, 30 sockets, VAST

Configurate your probe cabinet

	Item No.	Description
	626100-9015-000	Probe cabinet MSC with sheet doors,1000 x 400 x 2000mm (W/D/H) without sockets, incl. 5 racks
	626100-9015-100	Probe cabinet MSC with glass doors, 1000 x 400 x 2000 mm (W/D/H) without sockets, incl. 5 racks

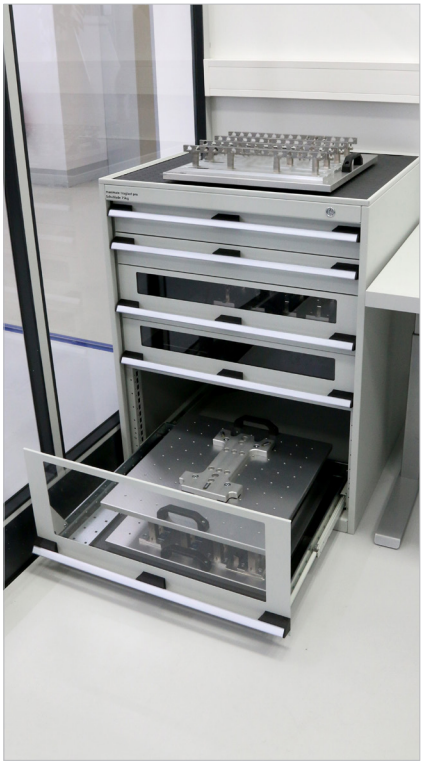
	Item No.	Description
	626100-8023-000	Shelf for probe cabinet MSC, powder-coated, distributed load max. 60kg, width 930 mm
	626100-8024-000	Additional level bar for probe cabinet MSC, incl. packing, working width 930 mm
	626100-8011-010	Probe socket VAST for Tasterschrank MSC, width 100 mm
	626100-8012-000	Probe socket ST/ST3 for probe cabinet MSC, width 80 mm
	626100-8013-000	Probe socket DSE for probe cabinet MSC, width 130 mm
	626100-8014-000	Probe socket RDS for probe cabinet MSC, width 100 mm
	626100-8015-000	Probe socket XXT for probe cabinet MSC, width 50 mm
	626100-8021-000	Pallet for 67 M5 styli for probe cabinet MSC, width 287 mm x depth 205 mm
	626100-8022-000	Tool tray for probe cabinet MSC, width 210 mm x depth 105 mm

Storage
Pallet cabinet

You can store your pallets securely in the pallet cabinets, and they are protected from dust and dirt. Furthermore, you can use the cabinet to prepare the pallets. The pallet cabinets have 5 drawers at various heights:

- 2x 100 mm with a closed front
- 2x 175 mm front with a window
- 1x 350 mm front with a window

The drawers can be fully pulled out and are interlocked. Individual labelling can be inserted in the handles. The complete pallet cabinet can be locked. The top drawer can be used to store tools. Partition walls and non-slip mats are available for the equipment.



Pallet cabinet, small

For the storage of THETA 32 (one pallet per drawer) and THETA RT (up to 4 pallets per drawer) pallets. Outside dimensions: (W/D/H) 525 x 525 x 1000 mm, useful dimensions 400 x 400 mm.

Item No.	Description
626109-9222-200	Pallet cabinet, small

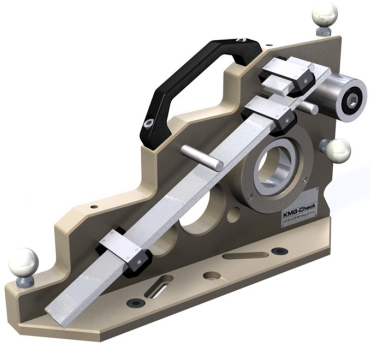
Pallet cabinet, large

For the storage of (W/D/H) 800 x 750 x 1000 mm OMEGA 322, OMEGA 543, THETA 55 or TAS pallets (one pallet per drawer in each case). Outside dimensions: (W/D/H) 800 x 750 x 1000 mm, useful dimensions 675 x 625 mm.

Item No.	Description
626109-9222-300	Pallet cabinet, large

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 CMM-Check

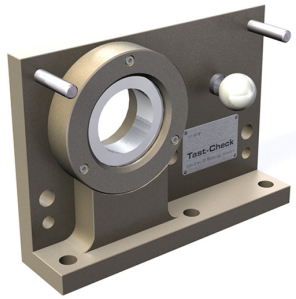
The CMM check can be used to check CMMs in accordance [with DIN EN ISO 10360] and VDI/VDE 2617. The following characteristics can be measured with the calibration artifact:

- Probing behaviour of the probing system
- Scanning properties of the probing system
- CMM as a form measuring machine including filter characteristics
- Linear measuring errors
- Four-axis errors for CMM with rotary table (optional)

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

- One adjustment ring, diameter 50 mm
- One ceramic sphere, diameter 30 mm
- One Flick standard
- Precision cylinder with two ground flat areas
- Two parallel gauge blocks, 50 mm and 400 mm
- Two ceramic spheres (optional), diameter 30 mm

Item No.	Description
000000-1103-602	ZEISS CMM-Check
626001-0290-000	ZEISS CMM-Check option rotary table



Probe-Check

The Probe-Check can be used for testing the probing and scanning behaviour of the probe in combination with the coordinate measuring machine according to VDI/VDE 2617. The basis of the calibration artifact is a torsionally rigid base body on which a ceramic sphere, diameter 30 mm, and an adjustment ring, diameter 50 mm, are mounted. Both standards are high-precision and calibrated. It goes without saying that the calibration artifact can be used on CMMs of all manufacturers.

Item No.	Description
000000-1103-639	Probe Check

ZEISS Multisensor-Check

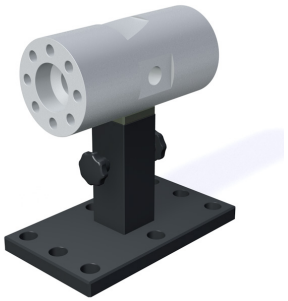
ZEISS Multisensor-Check for the standardised checking of coordinate measuring machines with tactile/optical sensors. The universal, calibrated calibration artifact is supplied with the respective control and analysis software. The multi-sensor check can be used to check coordinate measuring machines in accordance with [DIN EN ISO 10360 10360] 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
- One precision ceramic sphere, diameter 25 mm
- Two parallel gauge blocks, lengths 50 mm and 200 mm
- One glass scale, length 200 mm, with 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

Multi-Feature-Check



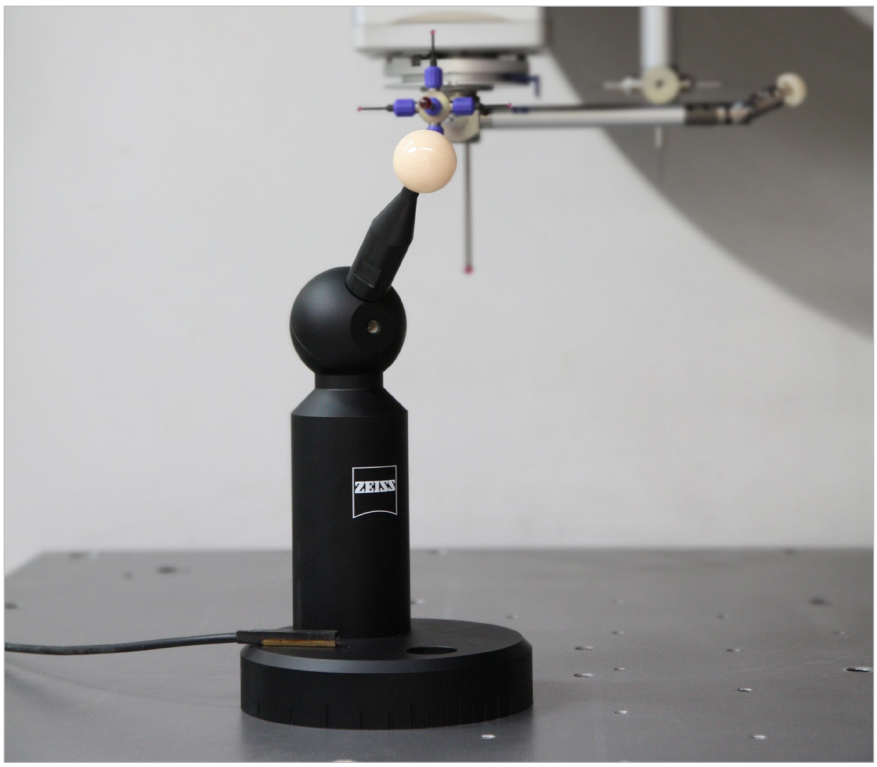
Measurement process suitability for almost all the dimensional, form and positional errors found in coordinate measuring technology. Measuring uncertainties specific to the respective coordinate measuring machine can therefore be determined and a statement made about the measurement process suitability. For example, the following inspection criteria of the universal calibration artifact can be selected depending on the user's parts spectrum. Measuring uncertainties specific to the respective coordinate measuring machine can be determined for this and a statement made about the measurement process suitability:

- Diameter, length, angle
- Straightness, flatness, roundness, cylindricity
- Parallelism, rectangularity, inclination, position, concentricity, coaxiality, symmetry
- Radial run-out, axial run-out, total radial run-out, total axial run-out

  When using this procedure, the measuring uncertainties and the measurement process suitability are determined with consideration given to
- the current local temperatures, with workpiece-like material and workpiece-like surface influences.

Item No.	Description
626001-0730-000	Multi-Feature-Check

Reference spheres and holders



Each coordinate measuring machine and each sensor, irrespective of whether it is tactile or optical, has individualrequirements for the calibration process. We therefore offer you reference spheres with various surface characteristics and diameters.

The RSH rotary holding system is available in various sizes and holds up to three reference spheres at the same time for maximum flexibility. We offer thermally stable reference sphere holders made of Invar or carbon fibre for use in the production environment.

RSH Set

Optimum application depending on the machine type is possible as the reference sphere holder is available in three heights. The set consists of a reference sphere holder, a reference sphere with a certificate, assembly material and tools.

Item No.	H	DK	Description
600332-9265-000	214	30	Reference sphere holder RSH-214 with reference sphere
600332-9266-000	364	30	Reference sphere holder RSH-364 with reference sphere
600332-9267-000	514	30	Reference sphere holder RSH-514 with reference sphere

Reference sphere RS

For mounting on all M6 thread systems. The length from the base body to the middle of the sphere is 70.1 mm. Reference spheres are supplied 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

Reference sphere holder RSH

The holder is available in three different heights. It can therefore be optimally adjusted to the requirements for different machine sizes.

Item No.	H	Description
600332-9165-000	214	Basic set RSH-214 without reference sphere
600332-9166-000	364	Basic set RSH-364 without reference sphere
600332-9167-000	514	Basic set RSH-514 without reference sphere

Reference sphere ZEISS ThermoFit

Optimally suited for use in the production environment. The low-expansion ZEISS ThermoFit foot with twin calibration stand is especially suitable for calibrating stylus systems which face upwards and downwards. Reference spheres are not supplied.

Item No.	Description
626106-9110-000	Twin calibration stand for reference sphere ZEISS ThermoFit L200
626106-9010-000	Twin calibration stand for reference sphere ZEISS ThermoFit L200

Reference sphere Invar

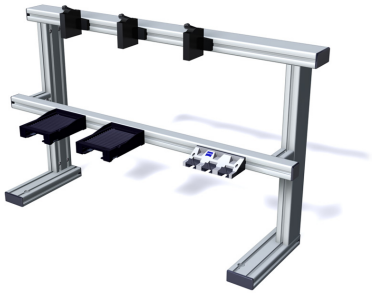
Our Invar steel reference sphere holders are extremely resistant to bending with low thermal expansion in the event of fluctuations in the ambient temperature. As a result, they are optimally suited for use in the production environment. Twin calibration stands are especially suitable for calibrating stylus systems which face upwards and downwards. Reference spheres are available as accessories and not included in our scope of supply.

Item No.	Description
626106-9130-100	Twin calibration stand for reference sphere , Invar L300
626106-9140-100	Twin calibration stand for reference sphere , Invar L400
626106-9030-100	Single calibration stand for reference sphere Invar L300
626106-9040-100	Single calibration stand for reference sphere , Invar L400

Sensor Racks
Multi Sensor Rack

Sensor Racks

The Multi Sensor Rack (MSR) from ZEISS makes all the stylus systems available which you require for your measurements. The Cooridinate measuring machine (CMM) changes the stylus systems during the measuring process, depending on which one is needed. This enables a continuous process.



Multi Sensor Rack

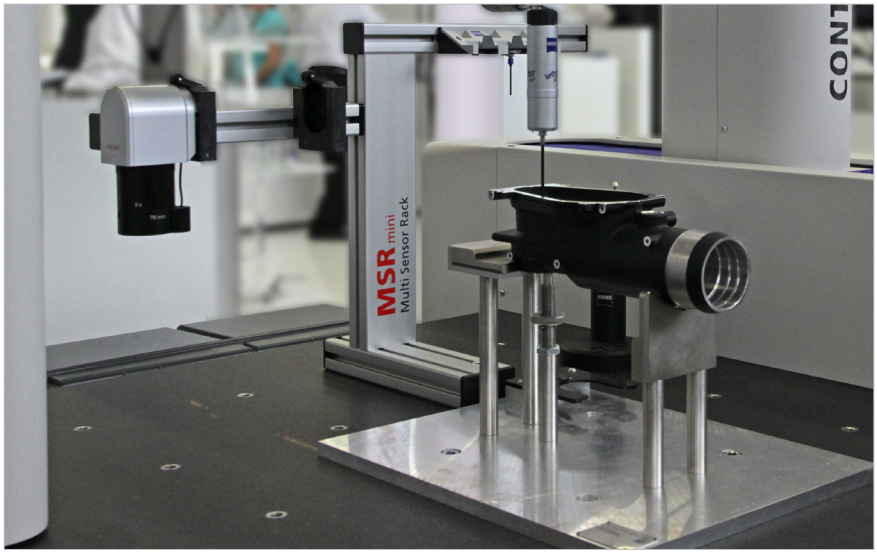
The Multi Sensor Rack is a stylus and sensor changing system for all bridge-type measuring machines. A high degree of flexibility is provided by the free choice for sockets. The CMM changes the stylus systems and sensors. In this regard, the ZEISS MSR is positioned within the measuring volume of the CMM. Stylus and sensor sockets are not included.

Item No.	L	H	X	Description
626100-9302-000	800	550	700	MSR, ACCURA, PRISMO, CONTURA
626100-9302-010	800	450	700	MSR, ACCURA, PRISMO, SPECTRUM
626100-9302-100	800	450	900	MSR
626100-9312-000	1000	550	900	MSR, ACCURA, PRISMO
626100-9372-000	1000	540	900	MSR, XENOS
626100-9322-000	1100	550	1000	MSR, CONTURA DT/XT/G2
626100-9322-010	1100	450	1000	MSR, SPECTRUM
626100-9322-020	1100	700	1000	MSR, CONTURA 2G/U-Stein
626100-9332-000	1250	800	1200	MSR, ACCURA PRISMO
626100-9342-000	1600	800	1600	MSR, ACCURA PRISMO
626100-9342-010	1600	800	1600	MSR, MMZ-G / -T

Additional level for ZEISS MSR

For extension of your Multi Sensor Rack. The width of the third level depends on the width of the basic module. The ZEISS MSR can be set along the Y-axis of your coordinate measuring machine. Additional levels are supplied without probe sockets.

Item No.	Description
626100-9303-000	Additional level MSR X=700,L=800, incl. fixturing
626100-9313-000	Additional level MSR X=900,L=1000, incl. fixturing
626100-9323-000	Additional level MSR X=1000,L=1100, incl. fixturing
626100-9333-000	Additional level MSR X=1200,L=1250, incl. fixturing
626100-9343-000	Additional level MSR X=1600,L=1600, incl. fixturing
626100-8390-000	Fastening angle for MSR



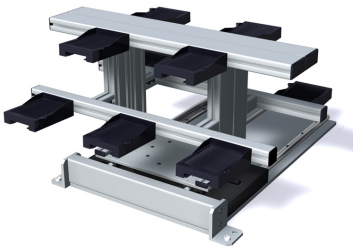
Multi Sensor Rack mini

A simple and flexible changer rack for coordinate measuring machines with a small measuring range. Probe sockets are available separately.

Item No.	Description
626100-9392-000	Multi Sensor Rack mini W720/H450

Multi Sensor Rack duplex

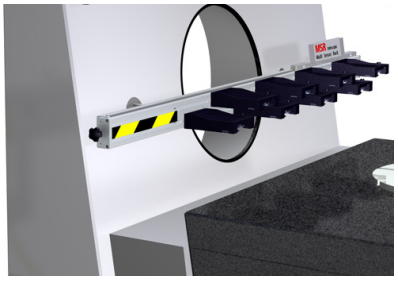
The rotatable ZEISS MSR enables stylus systems to be provided on two sides of a coordinate measuring machine. The ZEISS MSR is moved manually out of the measuring range, turned by 180 degrees and re-fixed in the measuring range with repeated accuracy. Probe sockets are not included.



Item No.	B1	H	X	Description
626100-9304-000	80	480	700	MSR duplex, ACCURA, PRISMO
626100-9314-000	1010	580	900	MSR duplex, ACCURA, PRISMO
626100-9324-000	1260	880	1200	MSR duplex, ACCURA, PRISMO
626100-9334-000	1010	880	-	MSR duplex CenterMax

Multi Sensor Rack extendable

The pull-out ZEISS MSR-T stylus rack enables ergonomic loading of your ZEISS CenterMax with stylus configurations. The stylus rack level can be pulled out by approx. 1100 mm to the front or back of the ZEISS CenterMax after loosening the locking screw.



Item No.	Description
626100-9305-000	MSR-T for CenterMax, incl. 8 VAST racks
626100-9305-100	MSR-T for CenterMax without racks

Racks
ProMax® from ZEISS

ZEISS ProMax is an automatically movable stylus changer rack for ZEISS coordinate measuring machines. The changer rack moves automatically out of the measuring range when a stylus system is not required. Existing measuring plans do not have to be changed.

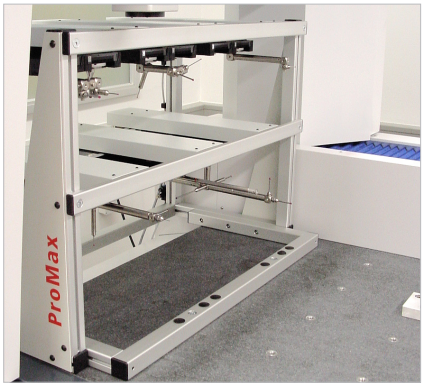
Different stylus systems are usually provided in the measuring range for measurement on a CMM. 10 to 15 stylus systems are often required for complex workpieces. This means that up to 25% of the measuring range is used by the changer rack.

The capacity of the CMM is restricted by the fixed changer rack, especially when measuring large workpieces which require large stylus systems. The solution: The ZEISS ProMax automatically moves the stylus systems out of the measuring range when a stylus change is not needed for the moment. The respective linear module is then moved into the measuring range for the change, so that the stylus system can be picked up by the sensor. ZEISS ProMax is fully integrated in the control system. Existing measuring programs therefore do not have to be customized.

ZEISS ProMax has a modular design, meaning that it can be individually tailored to the dimensions of the CMM. The linear modules with the probe sockets can be flexibly mounted horizontally and vertically.

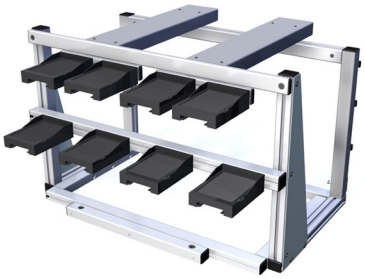
Please contact us with regard to the correct selection of the ZEISS ProMax. Apart from the dimensions, detailed information about your CMM, such as the software revision and configuration of the machine, is also required.

 © Carl Zeiss 3D Automation GmbH



ZEISS ProMax

For the provision of stylus systems outside the measuring range.
An automatically operated changer rack. Supplied without probe sockets.



Item No.	Machine	Levels / rigor	Linear modules	Space for racks	Incl. racks
000000-1152-179	CONTURA	2/0	4	8	0
000000-1152-180	PRISMO 5 / ACCURA 5	1/1	2	4	0
000000-1152-181	PRISMO 7 / ACCURA 7	2/0	6	12	0
000000-1152-182	PRISMO 10 / UPMC 1200	3/0	12	15	0
626100-9430-000	GageMax, side attachment	2/0	2	8	8
626100-9510-000	CenterMax	2/0	2	10	10
626100-9100-000	Micura	1/0	1	4	0
626100-9410-000	GageMax	1/0	1	4	4

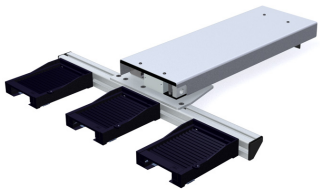
Linear modules

For extending your ZEISS ProMax system. Just give us a call, we will be pleased to advise you and give you a quotation for the installation and integration in your existing system.

Item No.	Description
000000-1152-184	Linear modules 300 for ProMax, stroke 300 mm
000000-1152-185	Linear modules 500 for ProMax, stroke 500 mm
000000-1152-186	Passive box for ProMax, to integrate fixed probe sockets

Additional level ZEISS ProMax

For extending your existing ZEISS ProMax system.
Probe sockets are not included.

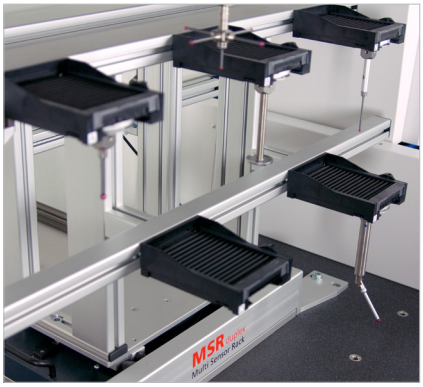


Item No.	Description
626100-9440-000	2. flexible level for ProMax -G GageMax
626100-8510-000	3. flexible level for ProMax-C CenterMax

Racks for adapter plates

For ZEISS MSR or ZEISS ProMax

Probe sockets are used storing your stylus systems on a Multi Sensor Rack or a ZEISS ProMax. Quick and easy assembly.



Probe socket ZEISS VAST

This probe socket can hold ZEISS VAST adapter plates.

Item No.	Description
600660-8365-000	Probe socket MT / VAST

Probe socket ZEISS VAST XTR

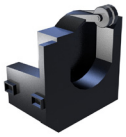
This probe socket can hold XTR adapter plate.

Item No.	Description
600664-8600-000	Probe socket VAST XTR

Probe socket ST / ST3

This probe socket can hold ST/ST3 adapter plate.

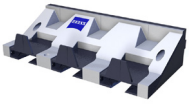
Item No.	Description
000000-1068-454	Probe socket ST/ST3



Probe socket RDS

This probe socket can hold RDS adapter plate.

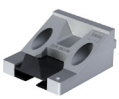
Item No.	Description
621770-8040-000	Probe socket RDS



Probe socket with 3 slots for ZEISS VAST XXT

Probe socket with 3 slots for ZEISS VAST XXT probe adaptors

Item No.	Description
620161-8510-000	Probe socket VAST XXT



Probe socket with 1 slot for ZEISS VAST XXT

Probe socket with 1 slot for ZEISS VAST XXT probe adaptors.

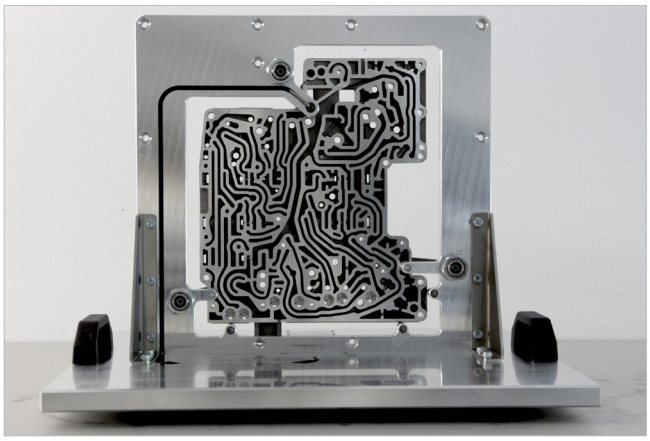
Item No.	Description
620161-8511-000	Probe socket XXT, single

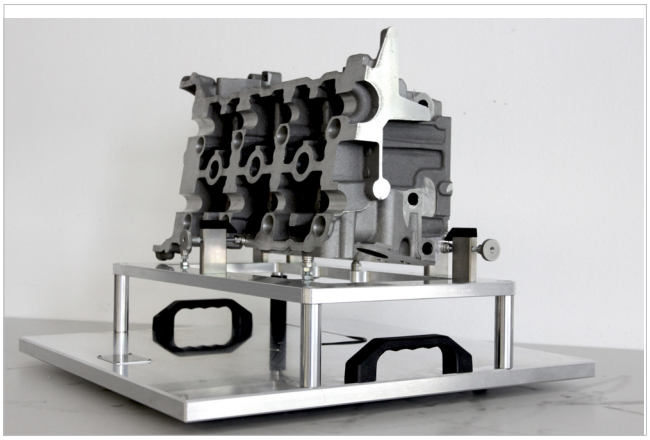
Standard holding fixture

The stable frame construction guarantees high stability.

Holding fixtures for ZEISS coordinate measuring machines. They are manufactured by us in quality within a very short time and guarantee an international standard for the clamping of components.

The stable frame construction guarantees high stability and optimum component accessibility. Measuring programs for six-sided measurement are drastically simplified. Standardized, tried-and-tested clamping concepts and the option for integrated workpiece temperature measurement make the design an ideal solution for worldwide series production.





Advantages:

- Horizontal or vertical component position
- Minimal interference contours for optimum accessibility of the measuring points
- Reduced extent of work for the creation of measuring programs and dimensioning of stylus systems
- High stiffness
- Integrated temperature measurement
- Extremely short lead times
- Simple cost structure
- Spare parts in stock

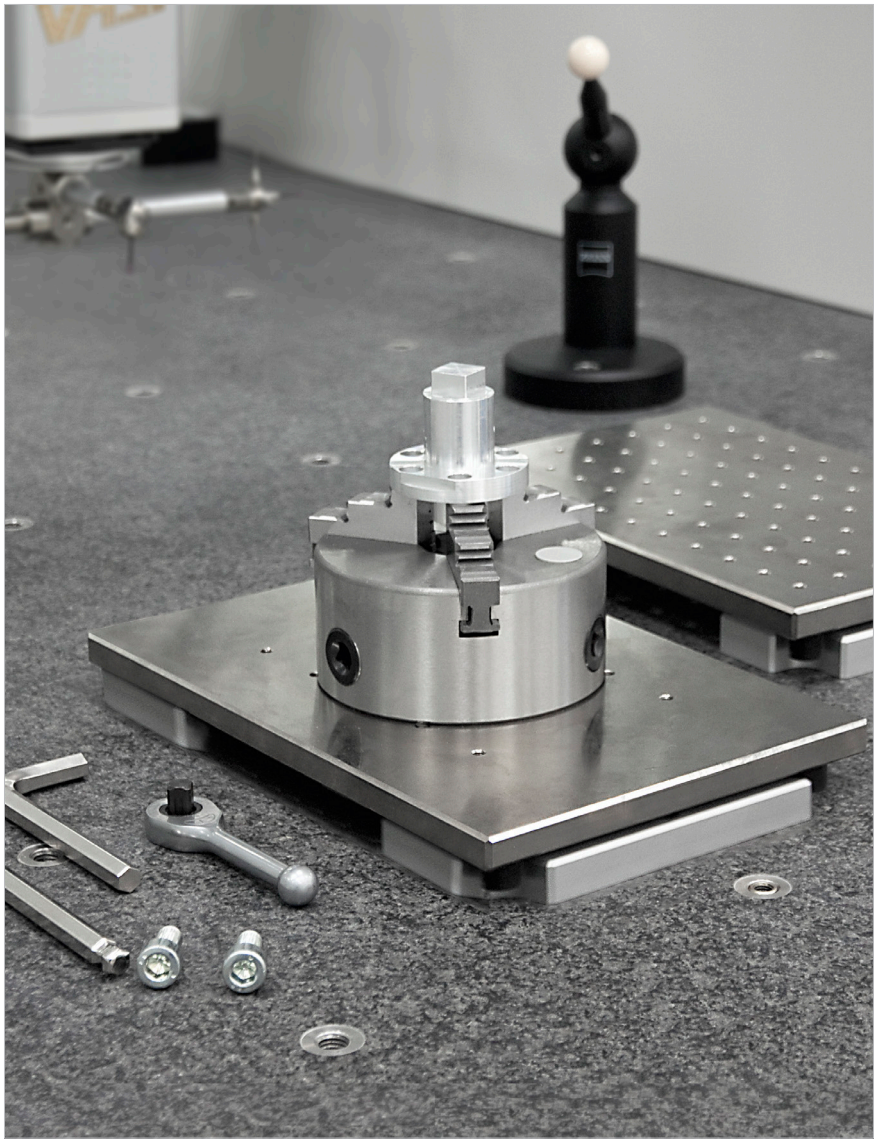
Prerequisites:

- CAD model of the component
- List of characteristics
- One component can be clamped per fixture
- Maximum size of the components 350 x 550 mm (shadow)

Please call us at +49 7361 6336 0 or send an E-Mail at orders@3d-net.de.

Pallet system THETA 32

The THETA 32 pallet system is designed for universal use and is easy to handle as a result of its size with the dimensions 300 x 200 mm. The pallets with chucks or a vice provide an efficient solution for changing clamping fixtures.



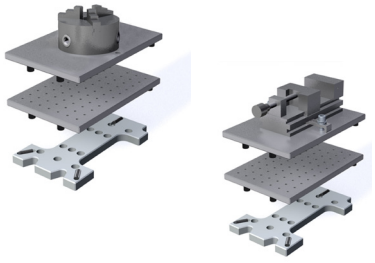
Advantages

- 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.
- The workpiece is quickly and repro ducibly aligned by means of the static 3-point holder.

 © Carl Zeiss 3D Automation GmbH

THETA 32 Set

Consisting of a base mounting, an interchangeable pallet with a grid and a pallet with a vice or a 3-jaw chuck depending on the set.



Item No.	Description
626109-9220-130	THETA 32 Set M6 grid with vice
626109-9220-140	THETA 32 Set M6 grid with 3-jaw chuck
626109-9220-131	THETA 32 Set 1/4“ grid with vice
626109-9220-141	THETA 32 Set 1/4“ grid with 3-jaw chuck

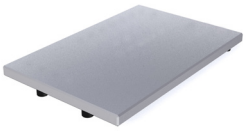
THETA 32 Base mounting

The holder is installed in the measuring range of your CMM and is used to mount THETA 32 pallets quickly with a high repeat accuracy.

Item No.	Description
626109-9220-010	THETA 32 base mounting

THETA 32 Basic

This interchangeable pallet has no hole pattern and is used to construct individual fixtures.



Item No.	Description
626109-9220-050	THETA 32 Basic steel

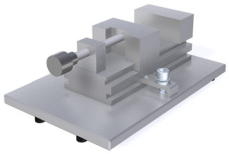
THETA 32 Grid

This interchangeable pallet has an M6 hole grid with a spacing of 25 mm. individual fixtures can therefore be assembled.

Item No.	Description
626109-9220-020	THETA 32, M6 grid, 25x25 steel

THETA 32 with vice

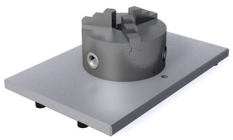
This interchangeable pallet includes a vice with a jaw width of 73 mm and a maximum jaw opening of 100 mm. The vice is mounted on the pallet with brackets and can be moved on the plate.



Item No.	Description
626109-9220-030	THETA 32 with vice

THETA 32 with 3-jaw chuck

This interchangeable pallet includes a mounted 125 mm 3-jaw chuck. A ratchet wrench for manipulating the chuck is also supplied.

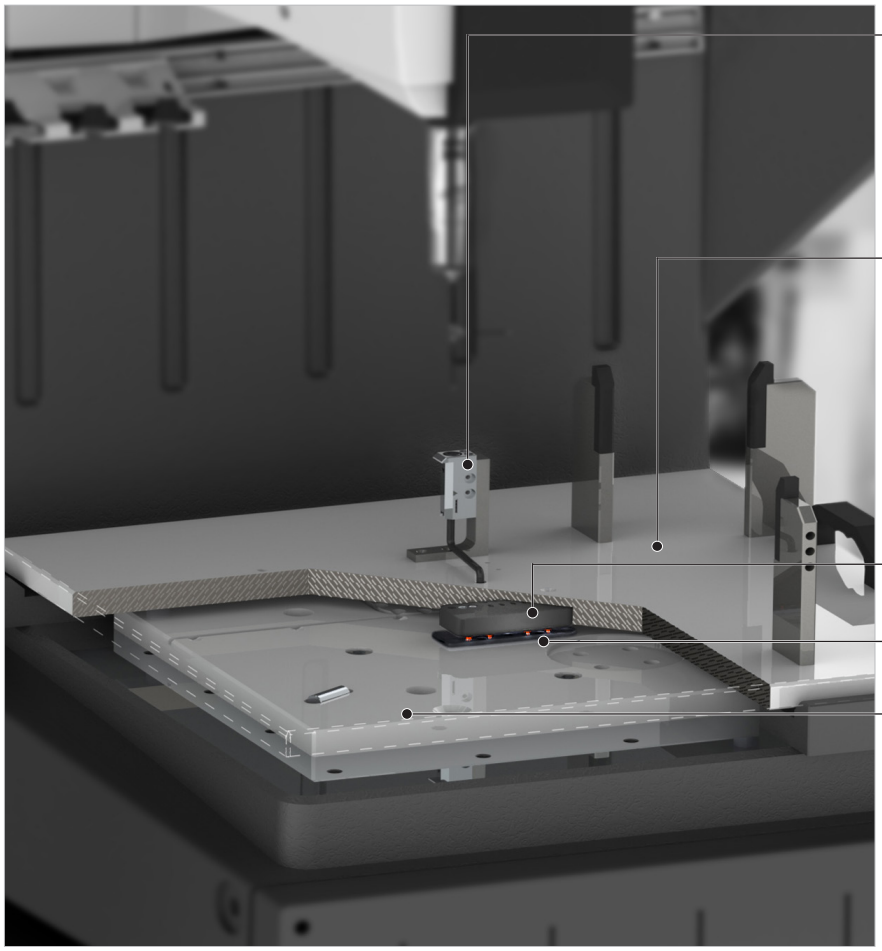


Item No.	Description
626109-9220-040	THETA 32 with 3-jaw chuck

Pallet system THETA 55

System with temperature sensor

Automatically record your temperature directly on the workpiece when changing your pallets. Accurate results and efficient working increase your throughput.



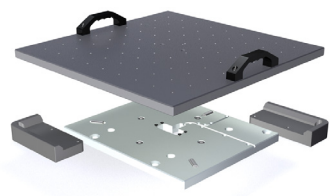
Temperature sensor
Your component tolerances are compensated for by means of the spring-mounted bearing of the temperature sensors.

THETA 55 pallet with contact unit on the pallet side
When you place your THETA 55 workpiece pallet on the base mounting, the integrated temperature sensor is automatically connected to your CMM.

Contact unit on pallet side

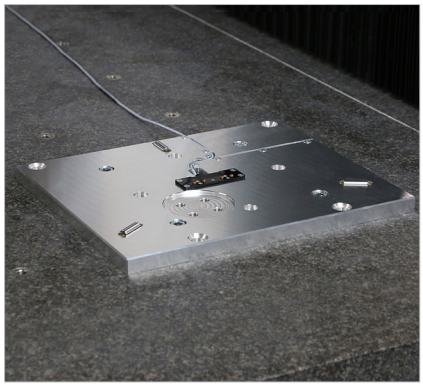
Contact unit on CMM side

THETA 55 base mounting with contact unit on the CMM side
The base mounting is mounted on your CMM. The contact unit integrated on the CMM side is connected to the temperature input of your CMM.



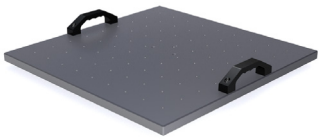
THETA 55 Set
The changeover interface set consists of a workpiece pallet (either with or without M6 grid holes, 50 x 50 mm) and a base mounting plate which is mounted on the coordinate measuring machine. The base mounting plate is available for a CMM with M12 or M10 fixing holes. The base mounting and pallet are prepared for the installation of the temperature transmission interface.

Item No.	Description
626109-9220-622	THETA 55 Set M12 with M6 grid 50x50
626109-9220-652	THETA 55 Set M12 Basisc
626109-9220-620	THETA 55 Set M10 with M6 grid 50x50
626109-9220-650	THETA 55 Set M10 Basic



THETA 55 Pallet

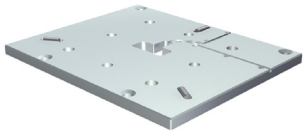
The 500 x 500 mm workpiece pallet is made of aluminium and provided with two carrying handles. It is prepared for the installation of a temperature transmission interface. Two versions are available:
M6 threaded holes in a 50 x 50 mm grid and without holes.



Item No.	Description
626109-9220-520	THETA 55 with M6 grid 50x50
626109-9220-550	THETA 55 Basic

THETA 55 Base mounting

The base mounting is mounted on the CMM table. It is supplied with the appropriate fixing material.



Item No.	Description
626109-9220-512	THETA 55 Base mounting M12
626109-9220-510	THETA 55 Base mounting M10

Contact unit on CMM side

This unit is installed in the base mounting plate, incl. cable (3 m) with a SUB-D socket for connection to the CMM. An adapter cable with a DIN connector is required depending on the CMM.

Item No.	Description
626140-9121-500	TSM-50 contact unit on CMM side SUB-D, 3m
626140-9131-000	Adapter cable DIN male / SUB-D female,3m

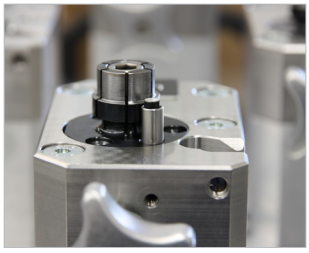
Contact unit on pallet side

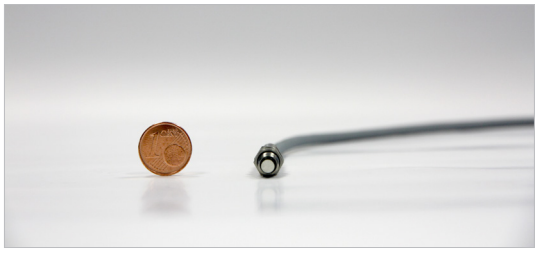
The contact unit is installed in the THETA 55 pallet and is used for transmitting the temperature sensor signals to the contact unit on the CMM side. The sensor can be directly connected via clamping contacts.

Item No.	Description
626140-9122-500	TSP-50 contact unit on pallet side with clamping contacts

Temperature measurement

Pallet system THETA 55





Temperature sensor mini

This Pt 100 1/10 DIN miniature sensor can be directly installed in workpiece holding fixtures, in order to record the workpiece temperature. With dimensions of Ø6.5 x 32mm and a spring deflection of approx. 2 mm, the sensor can also be installed in confined spaces.

Item No.	Description
626140-9113-200	Temperature sensor (mini) open cable head, 1,5m

Temperature sensor mini, angled

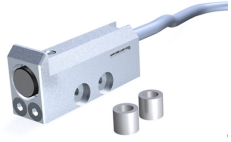
This Pt 100 1/10 DIN angled miniature sensor can be directly installed in workpiece holding fixtures, in order to record the workpiece temperature. With dimensions of Ø6.5 x 32mm and a spring deflection of approx. 2 mm, the sensor can also be installed in confined spaces.

Item No.	Description
626140-9113-210	Temperature sensor (mini) angled, open cable head, 1,5m

Articulated arms for temperature sensors mini

The articulated arm is used to hold a temperature sensor (mini) and can be manually aligned on the workpiece. Various thread adapters are available for the assembly.

Item No.	Description
626140-9134-000	Articulated arms for temperature sensors (mini) without thread adapter
626140-9134-001	Articulated arms for temperature sensors (mini) with M6 thread adapter
626140-9134-002	Articulated arms for temperature sensors (mini) with M10 thread adapter
626140-9134-003	Articulated arms for temperature sensors (mini) with M12 thread adapter
626140-9134-004	Hinged bracket for temperature sensors (mini) with 1/4“ thread adapter



Temperature sensors large

These sensors can be directly integrated in the clamping fixture. They are provided with a spring-loaded sensor head, an open cable end (3 m) and wire end sleeves. Available with a plastic or steel housing.

Item No.	Description
626140-9111-200	Temperature sensors with plastic housing, open cable head 3m
626140-9112-200	Temperature sensors with steel housing, open cable head 3m

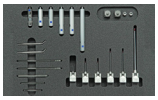
ZEISS M5 Stylus Kits

Find the right stylus kits as original equipment for any ZEISS coordinate measuring machine. A quick start saves time! Here is our recommendation:

ZEISS CONTURA®
ZEISS ACCURA®
ZEISS MICURA®
ZEISS PRISMO®
ZEISS XENOS
ZEISS GageMax®
ZEISS CenterMax®

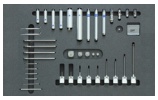
Stylus Kit Basic **626115-9170-000**

This kit with 13 parts includes three aluminum extensions DG11 L40 to L100 and six ruby styli DK1.5 and DK3 with a tungsten carbide shaft.



Stylus Kit Standard **626115-9100-000**

This kit with 13 parts includes three aluminum extensions DG11 L40 to L100 and six ruby styli DK0.5 and DK8 with cone adapter.

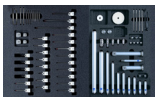


Stylus Kit Advanced **626115-9110-000**

This kit with 41 parts includes nine aluminum extensions L40 to L100, six ruby styli DK0,5 to DK8 and different cone adapter.

Stylus Kit Profi **626115-9120-000**

This kit with 53 parts includes extensions L40 to L200, ruby styli DK1 to DK8 DS8, ball discs made of ceramic and cone adapter.



Stylus Kit Expert **626115-9130-000**

This kit with 80 parts includes ThermoFit extensions L60 to L300, plate extensions and ruby styli DK0,3 to DK8 and ball discs made of ceramic.

Stylus Kit Star styli **626115-9140-000**

This kit with 35 parts includes four ruby styli with thread DK3, 16 ruby styli without thread DK0,3 to DK1 and one extension with cone adapter.

Stylus Kit Star styli M3 XXT **626115-9150-000**

This kit with 37 parts includes M5 stylus DK1 or DK3, M3 XXT stylus DK0,3 to DK3, one extension with cone adapter and rotary connection elements.

Stylus Kit Ball discs **626115-9160-000**

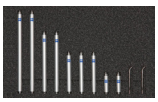
This kit with 12 parts includes ThermoFit extensions DG20, L100 or L300, three ball discs made of ceramic DK30 and DK60 with adapter DS8.

Stylus Kit ZEISS ThermoFit Profi **626107-9010-000**

This kit with 59 parts includes ThermoFit plate-/ extensions L40 to L300, silicon nitride styli DK3 to DK10 and connection elements.

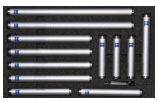
Stylus Kit ZEISS ThermoFit, Standard **626107-9011-000**

This kit with 25 parts includes ThermoFit plate-/ extensions L60 bis L180, silicon nitride styli DK3 to DK8, ruby styli DK1,5 to DK2 and connection elements.



Extension Kit ZEISS ThermoFit, DG11 **626107-9013-100**

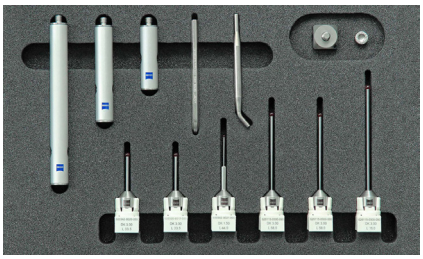
This kit with eleven parts includes nine ThermoFit extensions DG11 with lenghts from L50 to L200 and two pin wrenches.



Extension Kit ZEISS ThermoFit, DG20 **626107-9014-100**

This kit with 14 parts includes twelve ThermoFit extensions DG20 with lenghts from L100 to L300 and two pin wrenches.

Stylus Kits



ZEISS CONTURA
ZEISS ACCURA
ZEISS MICURA
ZEISS PRISMO
ZEISS XENOS
ZEISS GageMax
ZEISS CenterMax

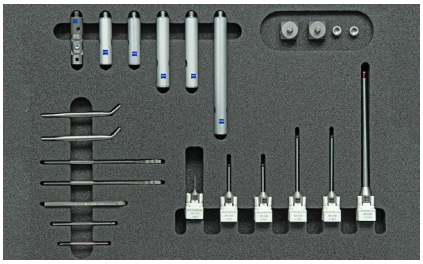
Stylus Kit Basic

The stylus kit contains a basic set of styli with a tungsten carbide shaft and ruby spheres, aluminum extensions, a cube as well as tools.
The kit consists of 13 parts.

Item No.	Description
626115-9170-000	Stylus Kit M5, Basic

Inhalt

600341-8264-000	1	Stylus extension, M5, aluminum, DGE11, LE100
600341-8262-000	1	Stylus extension, M5, aluminum, DGE11, LE60
600341-8261-000	1	Stylus extension, M5, aluminum, DGE11, LE40
000000-0015-248	1	Hex wrench DIN 911, SW4
000000-0015-328	1	Pin wrench 2,9
600341-8361-000	1	Cube, M5, titanium, B15, with threaded stem
626109-0015-000	1	Screw for cube, M5, V2A, L20, ML15
600342-8020-000	2	Stylus, M5, tungsten carbide, ruby, DK3, DS2, L33,5, ML23,5
602030-8065-000	1	Stylus, M5, stepped, DK1,5, DS4, DSE1, L44, ML19
600342-8021-000	2	Stylus with thread, M5, tungsten carbide, ruby, DK3, DS2, L58, ML48
626115-0301-075	1	stylus with thread, M5, DG11, DK3, DS2, L75, ML65



ZEISS CONTURA
ZEISS ACCURA
ZEISS MICURA
ZEISS PRISMO
ZEISS XENOS
ZEISS GageMax
ZEISS CenterMax

Stylus Kit Standard

The stylus kit contains a basic set of styli with a tungsten carbide shaft and ruby spheres, aluminum extensions as well as tools.
The kit consists of 23 parts.

Item No.	Description
626115-9100-000	Stylus Kit M5, Standard

Inhalt

626105-6280-040	1	Rotary-knuckle-joint M5, titanium, DG11, L40
600341-8261-000	2	Stylus extension, M5, aluminum, DGE11, LE40
600341-8262-000	2	Stylus extension, M5, aluminium, DGE11, LE60
600341-8264-000	1	Stylus extension, M5, aluminium, DGE11, LE100
600341-8361-000	2	Cube, M5, titanium, B15, with threaded stem
626109-0015-000	2	Screw for cube, M5, V2A, L20, ML15
602030-0222-000	2	Screw for cube, DG5, DS2,9, L70
626109-0012-000	2	Pin wrench DG11
000000-0015-248	1	Hex wrench (DIN 911) SW 4mm
602030-0021-000	1	Hex wrench DIN 911, SW 2,5 mm
626109-0035-000	1	Torx srewdriver T6
626115-0050-022	1	Stylus with thread, M5, stepped, tungsten carbide, ruby, 0,5x22
600342-8020-000	2	Stylus with thread, M5, tungsten carbide, ruby, DK3, L33,5
600342-8021-000	2	Stylus with thread, M5, tungsten carbide, ruby DK3, L58
600342-8024-000	1	Stylus with thread, M5, tungsten carbide, ruby, DK8, L114,5

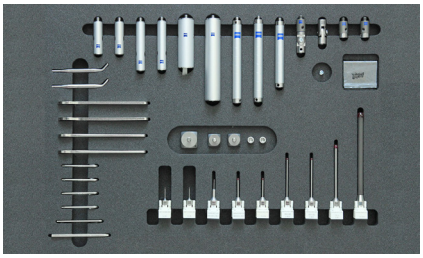
Stylus Kit Advanced

The stylus kit contains an extended set of various styli and extensions, connecting elements and the appropriate tools.
The kit consists of 41 parts.

Item No.	Description
626115-9110-000	Stylus Kit M5, Standard

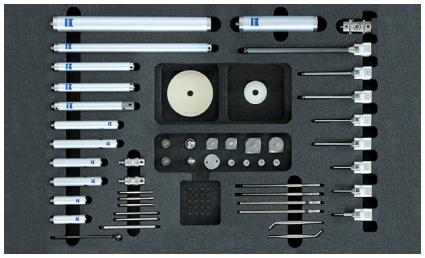
Inhalt

600341-8261-000	2	Stylus extension, M5, aluminum, DGE11, LE40
600341-8262-000	2	Stylus extension, M5, aluminum, DGE11, LE60
600341-8424-000	1	Stylus extension, M5, aluminum, DGE20, LE60
600341-8422-000	1	Stylus extension, M5, aluminum, DGE20, LE100
626107-1100-100	2	Stylus extension, M5, ThermoFit silver, DGE11, LE100
626107-1080-100	1	Stylus extension, M5, ThermoFit silver, DGE11, LE80
626105-6280-040	1	Rotary-knuckle-joint M5, titanium, DG11, L40
600342-9002-000	1	Knuckle-joint, M5, titanium, DG11, L30 with screw
626105-6280-020	2	Rotary joint, M5, titanium, DG11, L20
626119-0001-019	1	Set of screws for cone adapter, M3 (10 pcs.)
602030-0222-000	2	Pin wrench, DG5, DS2,9, L70
626109-0013-000	2	Hook wrench DIN 1810B, DG20
626109-0012-000	2	Hook wrench DIN 1810B, DG11
626109-0035-000	4	Torx wrench T6, angled, steel
602030-0021-000	1	Hex wrench DIN 911, SW 2,5
000000-0015-248	1	Hex wrench DIN 911 SW 4
600341-8002-000	1	Cube, M5, titanium, B20, with screw
600341-8361-000	2	Cubel, M5, titanium, B15, with screw
626109-0016-000	1	Screw for cube, M5, V2A, L20, ML20
626109-0015-000	1	Screw for cube, M5, V2A, L20, ML15
626115-0050-022	2	Stylus with thread, M5, stepped, tungsten carbide, ruby, DK0,5, L22
602030-8061-000	1	Stylus with thread, M5, stepped, tungsten carbide, ruby, DK1, L32
600342-8020-000	2	Stylus with thread, M5, tungsten carbide, ruby, DK3, L33,5
600342-8021-000	2	Stylus with thread, M5, tungsten carbide, ruby, DK3, L58
602030-9015-000	1	Stylus with thread, M5, tungsten carbide, ruby, DK5, L75
626105-0820-114	1	Stylus with thread, M5, ThermoFit, ruby, DK8, L114



ZEISS CONTURA
ZEISS ACCURA
ZEISS MICURA
ZEISS PRISMO
ZEISS XENOS
ZEISS GageMax
ZEISS CenterMax

Stylus Kits



ZEISS CONTURA

ZEISS ACCURA

ZEISS MICURA

ZEISS PRISMO

ZEISS XENOS

ZEISS GageMax

ZEISS CenterMax

Stylus Kit Profi

The stylus kit contains an extended set of various styli and extensions, connecting elements and the appropriate tools.
The kit consists of 53 parts.

Item No.	Description
626115-9120-000	Stylus Kit M5, Profi

Inhalt

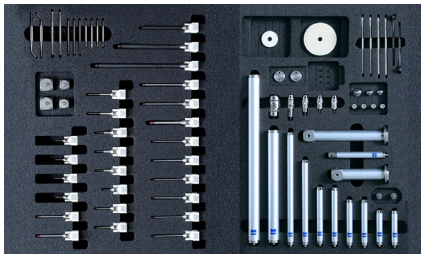
626107-2200-100	1	Stylus extension, M5, ThermoFit silver, DGE20, LE200
626107-1200-100	1	Stylus extension, M5, ThermoFit silver, DGE11, LE200
626107-1100-100	2	Stylus extension, M5, ThermoFit silver, DGE11, LE100
626107-1100-105	1	Stylus extension with cone adapter, ThermoFit, DGE11, LE100
600341-8263-000	2	Stylus extension, M5, aluminum, DGE11, LE80
600341-8262-000	2	Stylus extension, M5, aluminum, DGE11, LE60
600341-8261-000	2	Stylus extension, M5, aluminum, DGE11, LE40
626109-0041-000	1	Two pin spanner DIN 3116A, pin measure Ø2,5x3mm, pin distance 13mm
626107-2100-100	1	Stylus extension, M5, ThermoFit silver, DGE20, LE10
626101-6000-004	1	Ball disc alumina ceramic, DK60, B4, adapter DS8
626101-3000-002	1	Ball disc alumina ceramic, DK30, B2, adapter DS8
626107-1015-105	2	Stylus extension with cone adapter, titanium, DGE11, LE15
626107-6280-070	1	Cube M5 cone receiver TF-Pro, M5, titanium, L17,5, ML10, B15, DG11
600341-8361-000	2	Cube, M5, titanium, B15
600341-8002-000	2	Cube, M5, titanium, B20
626107-6280-040	2	Knuckle joint with cone adapter, titanium, DG11, L19
626107-6280-010	1	Terminal angle with cone adapter, titanium, DG11, L15,5, ML10, B5,5
626105-6271-001	1	Adapter for ball disc with DS8, M5
626109-0015-000	2	Screw for cube, M5, V2A, L20, ML15
626109-0016-000	2	Screw for cube, M5, V2A, L25, ML20
626109-0035-000	3	Torx wrench T6, angled, steel
602030-0021-000	2	Hex wrench DIN 911, SW 2,5
000000-0015-248	1	Hex wrench DIN 911 SW 4
626119-0001-019	2	Set of screws for cone adapter, M3 (10 pcs.)
626109-0012-000	2	Hook wrench DIN 1810B, Dmr. 11x2,8 mm
626109-0013-000	2	Hook wrench DIN 1810B, Dmr. 20x2,8 mm
602030-0222-000	2	Pin wrench , DG5, DS2,9, L70
626105-6280-070	1	Knuckle joint, M5, DG20, titanium, L36
626105-0820-150	1	Stylus, M5, ThermoFit, ruby, DG11, DK8, DS6, L150, ML137
602030-9015-000	2	Stylus, M5, ruby, DG11, DK5, DS3, L75, ML65
600342-8021-000	2	Stylus, M5, ruby, DGE11, DK3, DS2, L58, ML48
600342-8020-000	1	Stylus, M5, DG11, DK3, DS2, L33,5, ML23,5
602030-8061-000	2	Stylus, M5, DG11, DK1, DS1, DSE0,8, L32, ML12, MLE5

 © Carl Zeiss 3D Automation GmbH

Stylus Kit Expert

The kit consists of 80 parts.

Item No.		Description
626115-9130-000		Stylus Kit M5, Expert
Inhalt		
626105-0510-075	1	Stylus, M5, ThermoFit, ruby, DG11, DK5, DS3,5, L75, ML65
626105-0820-114	1	Stylus, M5, ThermoFit, ruby, DG11, DK8, DS6, L114, ML101
626105-0820-150	1	Stylus, M5, ThermoFit, ruby, DG11, DK8, DS6, L150, ML137
602030-9015-000	2	Stylus, M5, DG11, DK5, DS3, L75, ML65
600342-8023-000	1	Stylus, M5, DG11, DK8, DS6, L63,5, ML50,5
626115-0300-058	2	Stylus, M5, DG11, DK3, DS2, L58, ML48
600342-8021-000	4	Stylus, M5, DGE11, DK3, DS2, L58, ML48
602030-8067-000	1	Stylus, M5, DG11, DK2, DS1,5, L44, ML19
602030-8065-000	1	Stylus, M5, DG11, DK1,5, DS4, DSE1, L44, ML19
602030-8061-000	1	Stylus, M5, DG11, DK1, DS1, DSE0,8, L32, ML12, MLE5
602030-8060-000	2	Stylus, M5, DG11, DK0,8, DS1, DSE0,6, L32,ML12,LE4,8
626115-0100-022	1	Stylus, M5, DG11, DK1, DS1, DSE0,8, L22,5, ML12,5, MLE5
600342-8020-000	2	Stylus, M5, DG11, DK3, DS2, L33,5, ML23,5
626115-0030-022	2	Stylus, M5, DG11, DK0,3, DS1, DSE0,2,L21,8,ML12,8,LE2,3
626115-0050-022	2	Stylus, M5, DG11, DK0,5, DS1, DSE0,3, L22, ML13, MLE2,5
602030-9013-000	2	Stylus, M5, nDGE11, DK5, DS3,5, L50, ML40
600341-8361-000	2	Cube, M5, titanium, B15
600341-8002-000	2	Cube, M5, titanium, B20
626109-0035-000	4	Torx screwdriver T6, angled, steel
602030-0021-000	3	Hex wrench DIN 911, SW 2,5
000000-0015-248	2	Hex wrench DIN 911 SW 4
000000-0015-348	2	Pin wrench, DG5, DS2,9, L70
626107-2300-100	1	Stylus extension, M5, ThermoFit silver, DGE20, LE300
626107-2200-100	1	Stylus extension, M5, ThermoFit silver, DGE20, LE200
626107-1200-100	1	Stylus extension, M5, ThermoFit silver, DGE11, LE200
626107-1150-100	1	Stylus extension, M5, ThermoFit silver, DGE11, LE150
626107-1100-100	2	Stylus extension, M5, ThermoFit silver, DGE11, LE100
626107-1080-100	2	Stylus extension, M5, ThermoFit silver, DGE11, LE80
626107-1060-100	2	Stylus extension, M5, ThermoFit silver, DGE11, LE60
626107-1015-105	2	Stylus extension with cone adapter, titanium, DGE11, LE15
626107-2050-110	1	Plate extension, M5, ThermoFit silver, cube 20, DGE20, LE50
626107-1100-105	1	Stylus extension with cone adapter, ThermoFit silver, DGE11, LE100
626107-2100-110	1	Palte extension, M5, ThermoFit silver, cube 20, DGE20, LE100
626105-6280-070	1	Knuckle joint, M5, DG20, titanium, L36
626105-6280-040	1	Rotary knuckle joint, M5, titanium, DG11, L40
600342-9002-000	1	Knuckle joint, M5, titanium, DG11, L30
626107-6280-040	2	Knuckle joint with cone adapter, titanium, DG11, L19
626109-0015-000	2	Screw for cube, M5, V2A, L20, ML15
626109-0016-000	2	Screw for cube, M5, V2A, L25, ML20
626105-6271-001	2	Adapter for ball disc with DS8, M5
626119-0001-019	2	Set of screws for cone adapter, M3 (10 pcs.)
626107-6280-070	1	Cube 15 with cone adapter TF-Pro, M5, titanium, L17,5, ML10, DG11
626107-6280-010	2	Terminal angle with cone adapter, titanium, DG11, L15,5, ML10, B5,5
626101-3000-002	1	Ball disc alumina ceramic, DK30, B2, adapter DS8
626101-6000-004	1	Ball disc alumina ceramic, DK60, B4, adapter DS8
626109-0012-000	2	Hook wrench DIN 1810B, Dmr. 11x2,8 mm
626109-0013-000	2	Hook wrench DIN 1810B, Dmr. 20x2,8 mm
626109-0041-000	2	Two pin spanner DIN 3116A, Ø2,5 x 3mm, pin distance 13mm



ZEISS CONTURA

ZEISS ACCURA

ZEISS MICURA

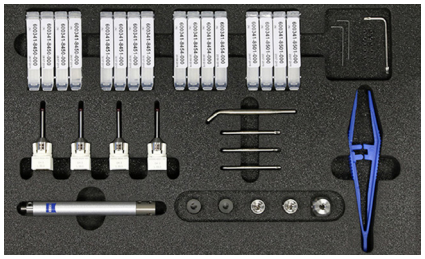
ZEISS PRISMO

ZEISS XENOS

ZEISS GageMax

ZEISS CenterMax

Stylus Kits
Star styli



ZEISS CONTURA
ZEISS ACCURA
ZEISS MICURA
ZEISS PRISMO
ZEISS XENOS
ZEISS GageMax
ZEISS CenterMax

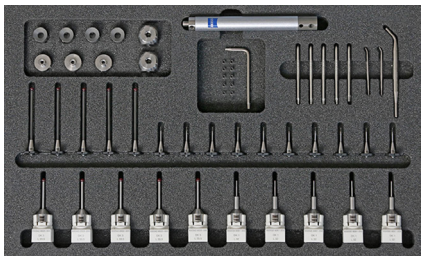
Stylus Kit star styli

The stylus kit is used to assemble the star stylus using styli without a thread and rotary holders or a cube with a cone adapter and M5 styli. The kit consists of 35 parts.

Item No.	Description
626115-9140-000	Stylus Kit M5, Star styli

Inhalt

600341-8450-000	1	Stylus, tungsten carbide, ruby, DK0,3, DS1, DSE0,2, L15,3, MLE2,3
600341-8451-000	1	Stylus, tungsten carbide, ruby, DK0,5, DS1, DSE0,3, L15,5, MLE2,5
600341-8454-000	2	Stylus without thread, tungsten carbide, ruby, DK1, DS1, DSE0,8, L16, MLE5
600341-8501-000	1	Stylus without thread, tungsten carbide, ruby, DK1,5, DS1, L26,5
602030-0042-000	2	Hex wrench DIN 911, SW0,9
626119-0001-019	2	Screw set, M3 (10 pcs.), incl. torx wrench T6
600342-8020-000	2	Stylus M5, tungsten carbide, ruby, DG11, DK3, DS2, L33,5, ML23,5
602030-0222-000	1	Pin wrench 2,9, DG5, DS2,9, L70
626109-0035-000	1	Torx wrench T6, angled, steel
626109-0022-000	1	Plastic tweezers for stylus handling, blue
626107-1100-105	1	Stylus extension with cone adapter, ThermoFit, DGE11, LE100
626107-1015-105	2	Stylus extension with cone adapte, titanium, DGE11, LE15
626107-6280-050	1	Star styli holder with cone adapter 1 mm, titanium, DG11, L10, DS1
626107-6280-070	2	Cube 15 with cone adapter, M5, titanium, L17,5, ML10, B15, DG11



ZEISS CONTURA
ZEISS ACCURA
ZEISS MICURA
ZEISS PRISMO
ZEISS XENOS
ZEISS GageMax
ZEISS CenterMax

Stylus Kit star styli with M3 XXT

The stylus kit is used to assemble the star stylus with M3 XXT stylus and rotary star elements. The kit consists of 37 parts.

Item No.	Description
626115-9150-000	Stylus Kit M5, star styli with M3 XXT styli

Inhalt

626107-1015-105	4	Stylus extension with cone receiver, titanium, DGE11, LE100
626107-6280-070	2	Cube 15 with cone adapter, M5, titanium, L17,5, ML10, B15, DG11
626107-6280-060	3	Cone adapter with quintuble star receiver M3 XXT, DG11, L10, ML5
626107-1100-105	1	Stylus extension with cone receiver, ThermoFit silver, DGE11, LE100
626119-0001-019	2	Set of screws for cone adapter, M3 (10 pcs.), incl. Torx screwdriver T6
626109-0035-000	5	Torx wrench T6, angled, steel
000000-0015-323	2	Pin wrench, 1,1
602030-0222-000	1	Pin wrench, 2,9
626103-0300-050	5	Stylus M3 XXT, ThermoFit, ruby, DG5, DK3, DS2, L50, ML41
626113-0050-020	5	Stylus M3 XXT, ruby, DG5, DK0,5, L20, ML11, MLE2,3, DS1, DSE0,3
626113-0030-020	5	Stylus M3 XXT, ruby, DG5, DK0,3, L20, ML11, MLE2,3, DS1, DSE0,2
600342-8020-000	5	Stylus M5, tungsten carbide, ruby, DG11, DK3, DS2, L33,5, ML23,5
602030-8061-000	1	Stylus M5, stepped, ruby, DG11, DK1, L32, ML12, MLE5, DS1, DSE0,8

 © Carl Zeiss 3D Automation GmbH

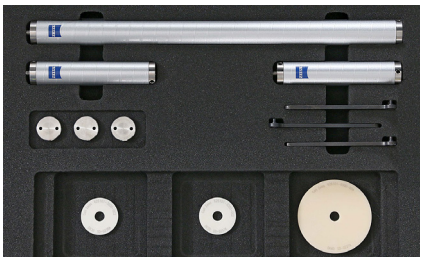
Stylus Kit with disc styli

The stylus kit contains ZEISS ThermoFit extension and ceramic disc styli.
The kit consists of 12 parts.

Item No.	Description
626115-9160-000	Stylus Kit M5, disc styli

Inhalt

626107-2300-100	1	Stylus extension, ThermoFit silver, DGE20, LE300
626107-2100-100	2	Stylus extension, ThermoFit silver, DGE20, LE100
626105-6271-001	3	Adapter for ball disc with DS8
626109-0041-000	3	Two pin spanner 13x2,5
626101-3000-002	2	Ball disc ceramic, DK30, B2, adapter DS8
626101-6000-004	1	Ball disc ceramic, DK60, B4, adapter DS8



ZEISS CONTURA
ZEISS ACCURA
ZEISS MICURA
ZEISS PRISMO
ZEISS XENOS
ZEISS GageMax
ZEISS CenterMax

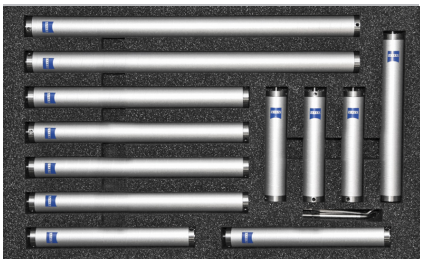
Extension Kit M5, ZEISS ThermoFit DG20

The stylus kit contains various ZEISS ThermoFit silver extensions with a diameter of 20 mm and tooling.
The kit consists of 14 parts.

Item No.	Description
626107-9014-100	Extension Kit M5, ZEISS ThermoFit DG20

Inhalt

626107-2100-100	3	Stylus extension, M5, ThermoFit silver, DG20, L100
626107-2150-100	3	Stylus extension, M5, ThermoFit silver, DG20, L150
626107-2200-100	4	Stylus extension, M5, ThermoFit silver, DG20, L200
626107-2300-100	2	Stylus extension, M5, ThermoFit silver, DG20, L300
000000-0015-328	2	Pin wrench 2,9, CZ 1170



ZEISS CONTURA
ZEISS ACCURA
ZEISS MICURA
ZEISS PRISMO
ZEISS XENOS
ZEISS GageMax
ZEISS CenterMax

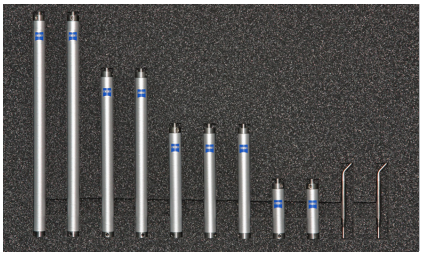
Extension Kit M5, ZEISS ThermoFit DG11

The stylus kit contains various ZEISS ThermoFit silver extensions with a diameter of 11 mm and tooling.
The kit consists of 11 parts.

Item No.	Description
626107-9013-100	Extension Kit M5, ZEISS ThermoFit DG11

Inhalt

626107-1050-100	2	Stylus extension, M5, ThermoFit silver, DG11, L50
626107-1100-100	3	Stylus extension, M5, ThermoFit silver, DG11, L100
626107-1150-100	2	Stylus extension, M5, ThermoFit silver, DG11, L150
626107-1200-100	2	Stylus extension, M5, ThermoFit silver, DG11, L200
000000-0015-328	2	Pin wrench 2,9, CZ 1170



ZEISS CONTURA
ZEISS ACCURA
ZEISS MICURA
ZEISS PRISMO
ZEISS XENOS
ZEISS GageMax
ZEISS CenterMax

Stylus Kits

ZEISS CONTURA

ZEISS ACCURA

ZEISS MICURA

ZEISS PRISMO

ZEISS XENOS

ZEISS GageMax

ZEISS CenterMax

Stylus Kit M5, ZEISS ThermoFit standard

The stylus and extension kit from the M5 system with ZEISS ThermoFit components and the appropriate tools consists of a total of 23 parts.

Item No.	Description
626107-9011-000	Stylus Kit M5, ZEISS ThermoFit standard

Inhalt

626107-2050-110	1	Plate extension with cube 20, M5, ThermoFit silver, DGE20, LE50
626107-2060-100	1	Stylus extension, M5, ThermoFit silver, DGE20, LE80
626107-2080-100	1	Stylus extension, M5, ThermoFit silver, DGE20, LE80
626107-2180-100	1	Stylus extension, M5, ThermoFit silver, DGE20, LE180
626107-1060-100	1	Stylus extension, M5, ThermoFit silver, DGE11, LE60
626107-1080-100	1	Stylus extension, M5, ThermoFit silver, DGE11, LE80
626107-1120-100	1	Stylus extension, M5, ThermoFit silver, DGE11, LE120
626105-0511-075	1	Stylus with thread, M5, ThermoFit, silicon nitride, DK5, L75
626105-0821-114	1	Stylus with thread, M5, ThermoFit, silicon nitride, DK8, L114
626105-0301-033	2	Stylus with thread, M5, ThermoFit, silicon nitride, DK3, L33
602030-8066-000	1	Stylus with thread, M5, stepped, tungsten carbide, ruby, DK2, L32,
602030-8064-000	1	Stylus with thread, M5, stepped, tungsten carbide, ruby, DK1,5, L32,
600341-8361-000	2	Cube 90°, M5, titanium, B15
626105-6280-020	1	Rotary joint, M5, titanium, L20
626109-0015-000	1	Screw for cube, M5, V2A, L20
626109-0016-000	1	Screw for cube, M5, V2A, L25
626109-0017-000	1	Screw for cube, M5, V2A, L27
000000-0015-247	1	Hex wrench, SW3
000000-0015-248	1	Hex wrench, SW4
626109-0012-000	2	Hook wrench DG11
626109-0013-000	2	Hook wrench DG20

 © Carl Zeiss 3D Automation GmbH

Stylus Kit M5, ZEISS ThermoFit profi

The stylus and extension kit from the M5 system with ZEISS ThermoFit components and the appropriate tools consists of a total of 59 parts.

Item No.		Description
626107-9010-000		Stylus Kit M5, ZEISS ThermoFit profi

Inhalt

626107-2050-110	2	Plate extension with cube 20, M5, ThermoFit silver, DGE20, LE50
626107-2100-110	1	Plate extension with cube 20, M5, ThermoFit silver, DGE20, LE100
626107-1040-100	2	Stylus extension, M5, ThermoFit silver, DGE11, LE40
626107-1050-100	2	Stylus extension, M5, ThermoFit silver, DGE11, LE50
626107-1060-100	2	Stylus extension, M5, ThermoFit silver, DGE11, LE60
626107-1080-100	2	Stylus extension, M5, ThermoFit silver, DGE11, LE80
626107-1100-100	2	Stylus extension, M5, ThermoFit silver, DGE11, LE100
626107-2050-100	1	Stylus extension, M5, ThermoFit silver, DGE20, LE50
626107-2080-100	1	Stylus extension, M5, ThermoFit silver, DGE20, LE80
626107-2100-100	1	Stylus extension, M5, ThermoFit silver, DGE20, LE100
626107-2150-100	1	Stylus extension, M5, ThermoFit silver, DGE20, LE150
626107-2200-100	1	Stylus extension, M5, ThermoFit silver, DGE20, LE200
626107-2300-100	1	Stylus extension, M5, ThermoFit silver, DGE20, LE300
600341-0260-000	1	Stylus extension, M5, V2A, DGE11, LE100
626105-0301-058	3	Stylus with thread, M5, ThermoFit, silicon nitride, DK3, L58
626105-0511-050	3	Stylus with thread, M5, ThermoFit, silicon nitride, DK5, L50
626105-0511-075	3	Stylus with thread, M5, ThermoFit, silicon nitride, DK5, L75
626105-0821-114	2	Stylus with thread, M5, ThermoFit, silicon nitride, DK8, L114
626105-0821-150	2	Stylus with thread, M5, ThermoFit, silicon nitride, DK8, L150
626105-1021-200	1	Stylus with thread, M5, ThermoFit, silicon nitride, DK10, L200
600341-8002-000	2	Cube, M5, titanium, B20
600341-8361-000	4	Cube, M5, titanium, B15
626105-6280-020	2	Rotary joint, M5, titanium, DG11, L20
600342-9002-000	2	Knuckle joint, M5, titanium, DG11, L30
626109-0015-000	1	Screw for cube, M5, V2A, L20
626109-0016-000	1	Screw for cube, M5, V2A, L25
626109-0017-000	1	Screw for cube, M5, V2A, L27
626109-0010-000	1	Torque screwdriver 2Nm
602030-0002-000	1	Hex wrench, SW1,5, galvanized
000000-0015-245	1	Hex wrench, SW2, galvanized
602030-0021-000	1	Hex wrench, SW2,5, galvanized
000000-0015-247	1	Hex wrench, SW3, galvanized
000000-0015-248	1	Hex wrench, SW4, galvanized
626109-0012-000	2	Hook wrench DG11
626109-0013-000	2	Hook wrench DG20
602030-0222-000	2	Pin wrench 2,9, DG5

ZEISS CONTURA

ZEISS ACCURA

ZEISS MICURA

ZEISS PRISMO

ZEISS XENOS

ZEISS GageMax

ZEISS CenterMax

Carl Zeiss
3D Automation GmbH
Carl-Zeiss-Str. 32
73431 Aalen
Germany

Phone: +49 (0)7361 6336 0
Fax: + 49 (0)7361 6336 29

Email: orders@3d-net.de
www.probes.zeiss.com

626119-0006-012 Printed in Germany CZ-08/2017
Subject to change in design and scope of delivery and as a result of ongoing technical development.
© concept, text and design: Carl Zeiss 3D Automation GmbH