



KONTec KSC3

**Centric clamping vises for
maximum precision and
process reliability**

Proven maximum precision with even higher process reliability due to nickel-plated base body

Maximum precision with high clamping force and a very flat design – this is what the KSC3 centric clamping vises stand for. A new standout feature of the new generation is the nickel-plated base body, which provides optimal corrosion protection for the clamping vise, and significantly expands its areas of application compared to the previous model. Furthermore, the centric clamping vise features a unique and extremely wide range of system and top jaws on the market, providing it with maximum flexibility. The closed system with optimized chip drainage guarantees maximum process reliability. Thanks to the interface of the quick-change pallet system, the vise can be optimally combined with the large NSE3 and GFD modular system for the significant reduction of set-up times on machine tools.

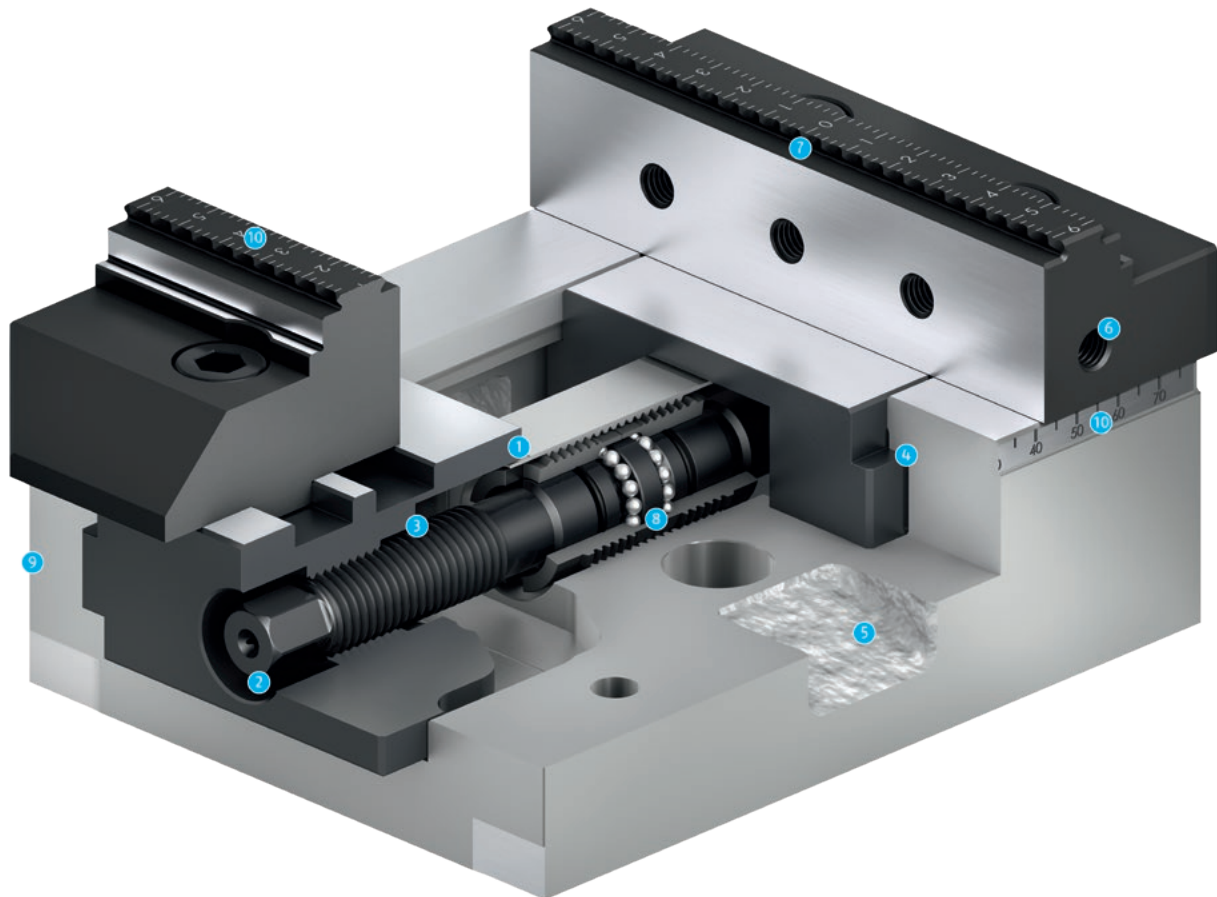


Advantages – Your benefits

- + Nickel-plated base body**
For optimal corrosion protection and an even wider range of applications
- + Laser-etched ruler**
Quick and precise pre-adjustment
- + Extremely flat design**
For maximum utilization of the machine room
- + Spindle encapsulated**
Dirt-resistant and low-maintenance clamping devices
- + High clamping forces**
For process reliable clamping without pre-stamping
- + Large clamping range**
High level of flexibility
- + Lateral drainage slots**
For drainage of coolant and chips
- + Ball bearing mounted, clearance-free spindle**
For highest repeat accuracy
- + Wide range of applications**
Suitable for rough and finished parts machining
- + Wide jaw program**
Optimal adaptation to new clamping tasks
- + Clamping by tension – prevents the base body from bending**
Maximum machining precision
- + Integrated NSE3 and GFD interface**
Minimization of set-up times. Can be flexibly combined with the large modular quick-change pallet system

Function KSC3

SCHUNK KONTEC KSC3 centric clamping vises are manual direct clamping devices. The drive is provided by a spindle protected within a completely closed system. The force builds up directly without a force amplifier and is linear. Both jaws open or close synchronously. The adjustable center with ball bearing is pre-loaded and free from play. The clamping force depends on the torque.



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| <ul style="list-style-type: none"> 1 Encapsulated system
Offers optimal protection against coolant and chips 2 Recessed hexagonal connection
Reduces the interfering contour 3 Spindle drive
For the highest of clamping forces 4 Long slide
Offers optimal support for O.D.- and I.D. clamping 5 Drainage slots
For coolant and chips 6 Mounting thread
For workpiece stops | <ul style="list-style-type: none"> 7 System jaw with grip step and smooth clamping surface
Enables first and second-side machining with only one jaw 8 Ball bearing mounted, clearance-free spindle
For highest repeat accuracy 9 Low height design
Expands your machine's workspace 10 Laser-etched ruler
For fast positioning of the system jaws and the workpiece |
|--|--|

100% compatibility with the KSC generation

The clamping vises of the KSC3 generation are 100% compatible with the clamping vises of the KSC generation. This means that existing KSC clamping vises can be replaced 1:1 by KSC3 clamping vises or combined with one another.



Optimal corrosion protection

The base body of the KSC3 clamping vise has been completely nickel-plated, resulting in the best possible corrosion protection even in demanding environments.



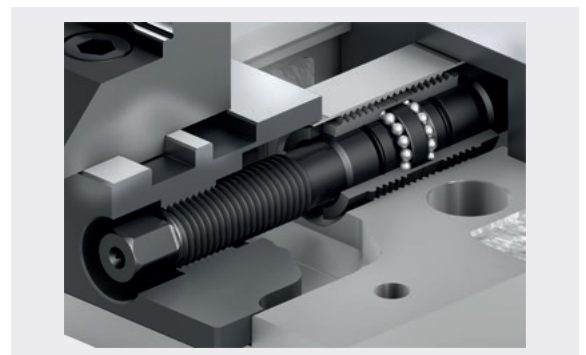
Laser-etched ruler

Laser-cut scales on the base bodies and system jaws make it easier to align the system jaws and workpieces, resulting in reduced set-up times.



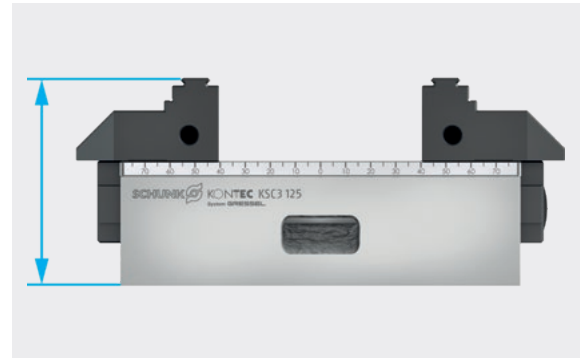
Encapsulated system

The spindle drive is protected against the penetration of coolant and chips. The spindle is always sealed, regardless of the clamping position. This ensures a continuously reliable functioning and clamping force.



Extremely flat design

Due to the extremely flat design, the KSC3 only takes up a small amount of space in the machine. In addition, the clamping vise offers the best accessibility for 5-sided machining, especially in combination with a console.



Jaw change with just two screws

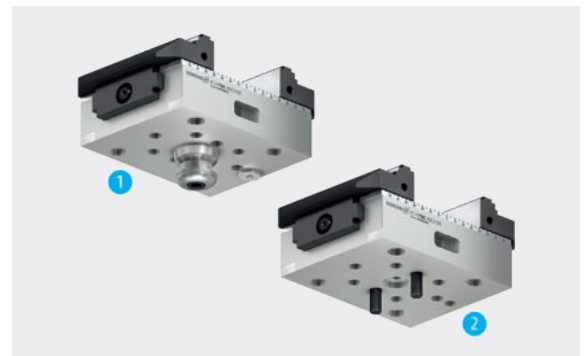
The system jaws can be changed very quickly and easily by loosening just two screws. Tools such as a cordless screwdriver speed up the changing process even more. Replacement of complete base jaws is not necessary here.



Mounting options

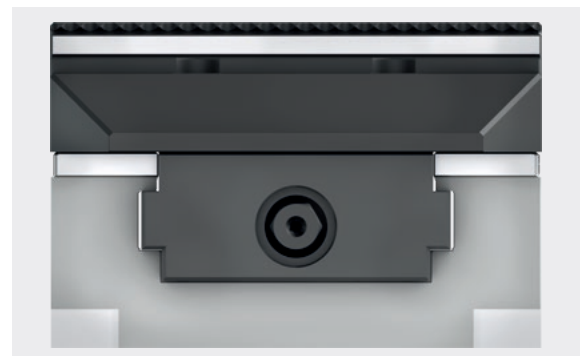
The KSC3 offers several options for mounting on the machine table, which are built into the base body. The centric clamping vise can be used for minimizing the set-up time. It can be mounted on the NSE3 or GFD quick-change pallet modules using the previously prepared interface of the quick-change pallet system. Alternatively, the clamping vise can be fastened via screws.

- ❶ Mounting via quick-change pallet system
- ❷ Mounting via screws



Sealing of the jaw guidance

The base jaw is fitted with high precision into the base jaw guidance. This results in minimal gap dimensions, whereby the base jaw guidance is optimally protected against falling chips.



Visual marking of the end position

The end positions of the KSC3 are visually marked. This means that the end position can be determined quickly and easily. This can prevent possible damage due to clamping outside the permitted clamping range.



Improved interfering contour

The hexagonal connection has been countersunk in the base body for sizes 80 – 130, 125 – 160 and 160 – 280. This results in an improved interfering contour of up to 22 mm for the KSC3 125-160 as compared to the KSC 125-160.



Design as a single-acting vise

Specifically for second-side machining, the KSC3 is also available as a single-acting vise. The base body of the KSC3-K has a fixed jaw with a continuous crosswise slot in the base body. This ensures high process reliability and angular accuracy for finish machining.

1 Movable jaw

The movable jaw is moved by the spindle and contacts the workpiece.

2 Fixed jaw

The fixed jaw is fixed in position by a crosswise slot in the base body. As a result, all workpieces have the same reference point, regardless of size.



Optimal accessibility due to consoles



By using consoles, the clamping vises can be lifted off the machine table. This allows improved accessibility of the machine spindle to the workpiece, especially when machining with 5-axis machines. There are different consoles depending on the vise size. With the help of mounting sets, the clamping vises can then be attached to the consoles.

- | | |
|--|---|
| <p>1 KSC3 80-130
Console SKQ 80/125-1 (ID 1363520) + mounting set GMS-1 KSC 80 (ID 1363522)</p> <p>2 KSC3 80-190
Console SKQ 80/125-1 (ID 1363520) + mounting set GMS-1 KSC 80 (ID 1363522)</p> <p>3 KSC3 125-160
Console SKQ 80/125-1 (ID 1363520) + mounting set GMS-1 KSC 125/160 (ID 1368859)</p> | <p>4 KSC3 125-235
Console SKQ 125-2 (ID 1423758) + mounting set GMS-1 KSC 125/160 (ID 1368859)</p> <p>5 KSC3 125-300
Console SKQ 125-2 (ID 1423758) + mounting set GMS-1 KSC 125/160 (ID 1368859)</p> <p>6 KSC3 160-280
Console SKQ 160-1 (ID 1423759) + mounting set GMS-1 KSC 125/160 (ID 1368859)</p> |
|--|---|

Floating version



When clamping long workpieces, vibration and deformation of the workpiece may occur. To effectively counteract these vibrations and deformations, "floating" centric clamping vises can be used between the outer clamping areas. Due to the compensation, the system jaws contact the workpiece and hold it in position.

1 KSC3 clamping vise in standard version

Clamping vises of standard design are used for the two outer clamping areas.

2 KSC3 clamping vise in floating design

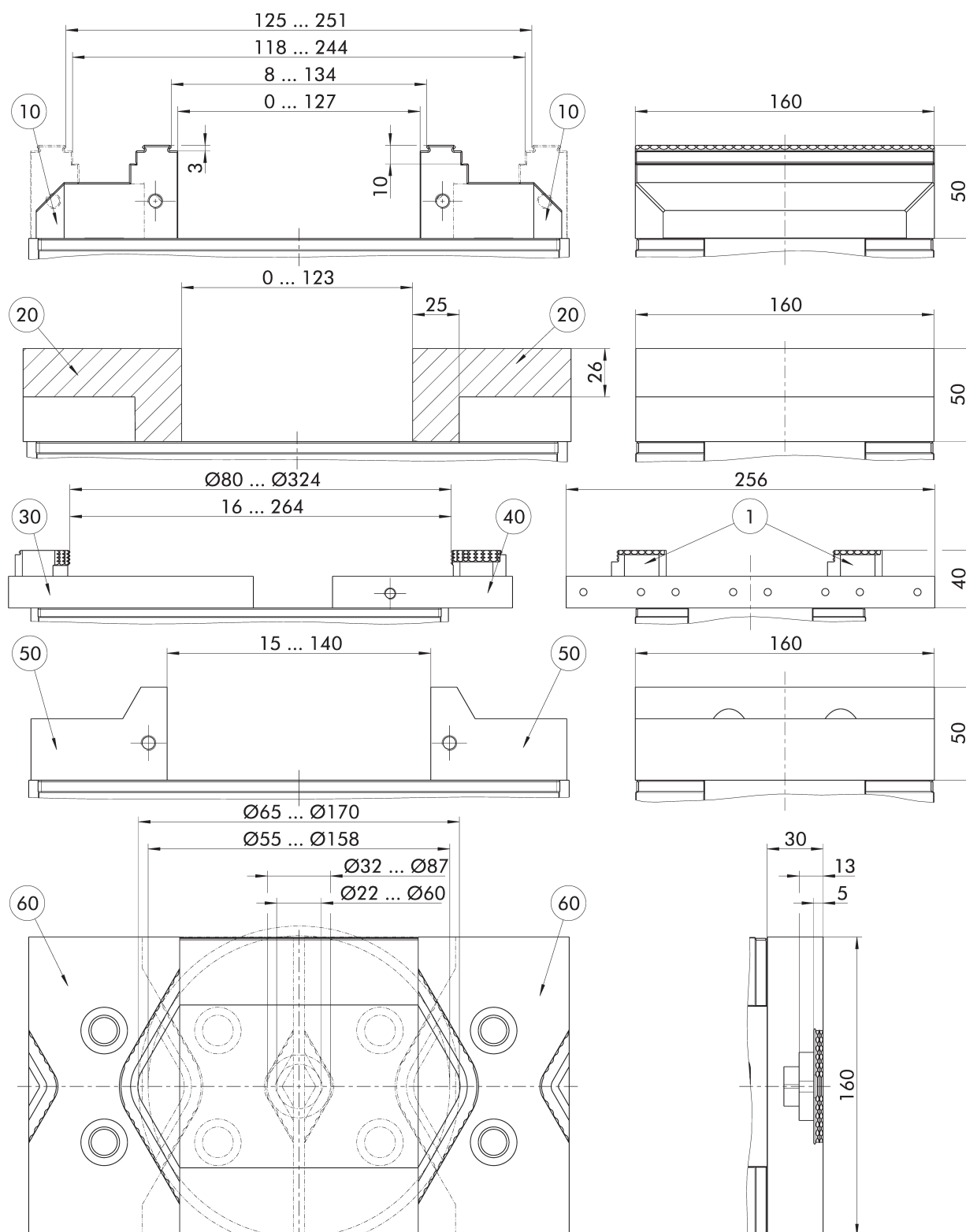
Clamping vises with compensation are used for all internal clamping areas to avoid deformation of the workpiece.

3 Maximum length compensation

Size 80: ± 3 mm

Size 125: ± 5 mm

Size 160: ± 5 mm



Suitable system jaws with position number on the next page.
Subject to technical changes.

- ① 6-way reversal grip jaw (ID 0430803), 6-way reversal carbide grip jaw (ID 1395550)

Technical data

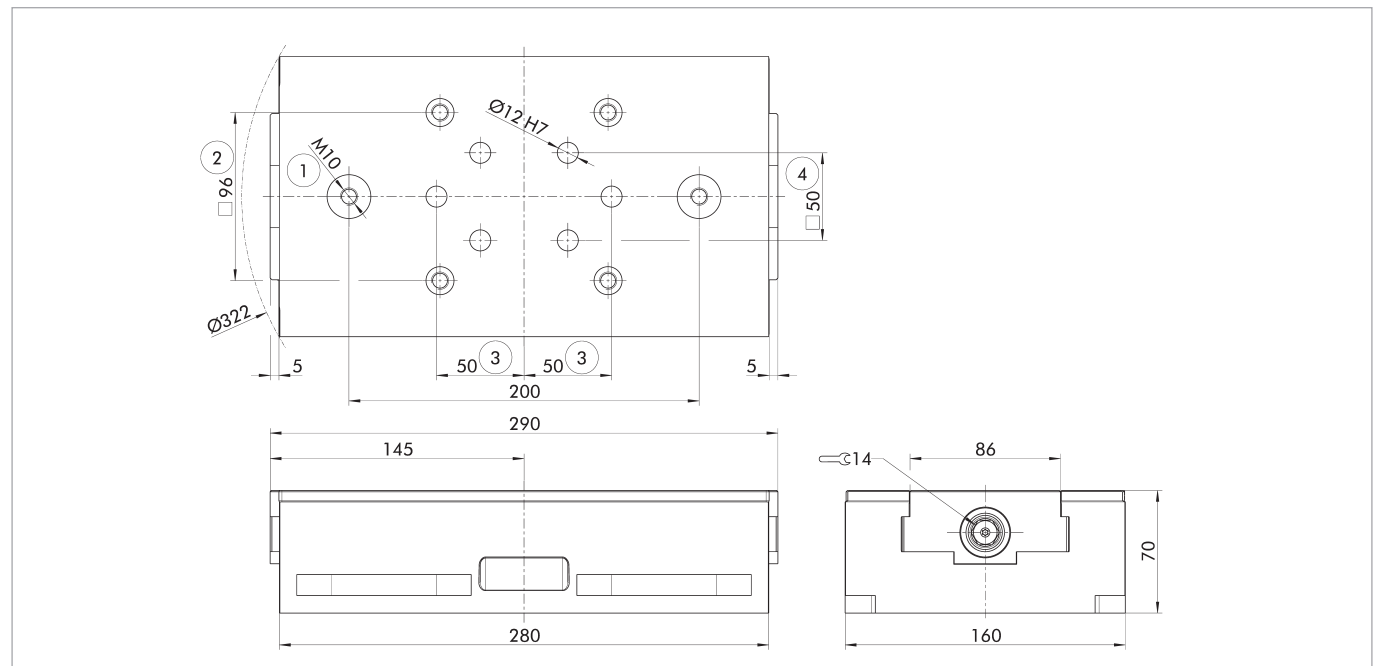
Description	ID	Width of the clamping vise [mm]	Max. clamping force [kN]	Max. torque [Nm]	Length compensation [mm]	Weight [kg]
KSC3 160-280	1514250	160	50	175		25
KSC3 160-280-S	1514255	160	50	175	±5	25

Scope of delivery

Vise, operating manual; without system jaws

Suitable system jaws

Description	Pos.	Description	ID	Width [mm]	Depth [mm]	Height [mm]	Weight [kg]
Reversible grip jaw	10	SGWB-G3-B 160-81-50	0432614	160	81	50	3.4
Aluminum jaw	20	SGAL-B 160-85-50	0432623	160	85	50	2
Swivel plate	30	SGP-3 256-170-22	0432615	256	170	22	7.4
Adapter plate	40	SGA-3 256-125-22	0432616	256	125	22	5.5
5-axis jaw	50	SG5A-B 160-73-50	0432617	160	73	50	3.6
Prism jaw vertical	60	SGVA-B 160-30-81	1468524	160	81	30	2.7



- ① Prepared for NSE3 and GFD clamping pins
- ② Prepared for GFD-SP mini clamping pin Ø20 h6
- ③ Prepared for alignment pins Ø12m6
- ④ Prepared for M12 screws

System jaws

Reversible grip jaw

Design as movable jaw.
With grip step 3 mm (up to 22 HRC) and a smooth clamping surface on both sides.



Suitable for	Description	Interface	ID
KSC3 160-280	SGWB-G3-B 160-81-50	W-160	0432614

Reversible carbide-grip jaw

Design as movable jaw.
With carbide-grip step 3 mm (up to 58 HRC) and smooth clamping face on both sides.



Suitable for	Description	Interface	ID
KSC3 160-280	SGWB-CG3-B 160-81-50		1395527

Reversible grip jaw

Design as movable jaw.
With grip step 5 mm (up to 22 HRC) and a smooth clamping surface on both sides.



Suitable for	Description	Interface	ID
KSC3 160-280	SGWB-G5-B 160-81-50	W-160	1522330

Reversible carbide-grip jaw

Design as movable jaw.
With carbide-grip step 5 mm (up to 58 HRC) and smooth clamping surface on both sides.



Suitable for	Description	Interface	ID
KSC3 160-280	SGWB-CG5-B 160-81-50	W-160	1497022

Aluminum jaw

Design as movable jaw.
Used for rework at the customer site e.g. for incorporating contours or special shapes.



Suitable for	Description	Interface	ID
KSC3 160-280	SGAL-B 160-85-50		0432623

Swivel plate

Used – in combination with adapter plates and 6-way reversal jaws – to clamp bulky workpieces.



Suitable for	Description	Interface	ID
KSC3 160-280	SGP-3 256-170-22	W-38	0432615

Adapter plate

Used – in combination with swivel plates and 6-way reversal jaws – to clamp bulky workpieces.



Suitable for	Description	Interface	ID
KSC3 160-280	SGA-3 256-125-22	W-38	0432616

5-axis jaw

Design as movable jaw.
One side with smooth clamping surface and threads for mounting top jaws.



Suitable for	Description	Interface	ID
KSC3 160-280	SG5A-B 160-73-50	W-160	0432617

Prism jaw vertical

Design as movable jaw.
For vertical clamping of round workpieces. With grip step 5 mm (up to 22 HRC) and a smooth clamping surface on both sides.

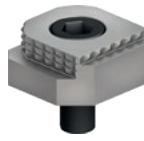


Suitable for	Description	Interface	ID
KSC3 160-280	SGVA-B 160-30-81		1468524

Top jaws

6-way reversible jaws grip

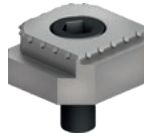
With five grip steps as well as a coated clamping face.



Description	Width mm	Height mm	Depth mm	Interface	ID
GBG-6W 38-38-18	38.5	18	38.2	W-38	0430803

6-way reversible jaw carbide grip

With five carbide grip steps as well as a smooth clamping face.



Description	Width mm	Height mm	Depth mm	Interface	ID
GBCG-6W 38-38-18	38.5	18	38.2	W-38	1395550

Jaw profiled

For increasing the friction between jaw and workpiece without clamping impressions.



Description	Width mm	Height mm	Depth mm	Interface	ID
GBD 160-50-13.5	160	50	13.5	W-160	1373350

Serrated jaw

For increasing the friction between jaw and workpiece with minimal clamping impressions.



Description	Width mm	Height mm	Depth mm	Interface	ID
GBC 160-50-14.4	160	50	14.4	W-160	1373269

Ground jaw

With a completely ground clamping face.



Description	Width mm	Height mm	Depth mm	Interface	ID
GBP 160-50-13.5	160	50	13.5	W-160	1373281

Soft jaw

Hardenable jaws for rework at the customer site, e.g. for incorporating contours or special shapes.



Description	Width mm	Height mm	Depth mm	Interface	ID
GBW 160-50-20	160	50	20	W-160	1373289

Stepped jaw

With ground step, 8 mm.



Description	Width mm	Height mm	Depth mm	Interface	ID
GBS 160-50-13.5-8	160	50	13.5	W-160	1373328

Stepped jaw

With coated step, 5 mm.



Description	Width mm	Height mm	Depth mm	Interface	ID
GBS-W 160-50-13.5-5	160	50	13.5	W-160	1395511

Stepped jaw

With grip step, 3 mm.
For embossed clamping of unhardened materials up to 22 HRC.



Description	Width mm	Height mm	Depth mm	Interface	ID
GBS-G3 160-50-13.5	160	50	13.5	W-160	1373332

Stepped jaw

With grip step, 5 mm.
For embossed clamping of unhardened materials up to 22 HRC.



Description	Width mm	Height mm	Depth mm	Interface	ID
GBS-G5 160-50-13.5	160	50	13.5	W-160	1373335

Stepped jaw

With grip step, 8 mm.
For embossed clamping of unhardened materials up to 22 HRC.



Description	Width mm	Height mm	Depth mm	Interface	ID
GBS-G8 160-50-13.5	160	50	13.5	W-160	1373340

Stepped jaw

With carbide grip step, 3 mm.
For embossed clamping of hardened materials up to 58 HRC.



Description	Width mm	Height mm	Depth mm	Interface	ID
GBS-CG3 160-50-13.5	160	50	13.5	W-160	1431232

Stepped jaw

With carbide grip step, 5 mm.
For embossed clamping of hardened materials up to 58 HRC.



Description	Width mm	Height mm	Depth mm	Interface	ID
GBS-CG5 160-50-15.5	160	50	15.5	W-160	1431233

Stepped jaw with T-slot

With grip step, 5 mm.
T-slot for mounting the positioning strip.



Description	Width mm	Height mm	Depth mm	Interface	ID
GBS-G5-T 160-50-20	160	50	20	W-160	0430250

Stepped jaw with T-slot

With grip step, 8 mm.
T-slot for mounting the positioning strip.



Description	Width mm	Height mm	Depth mm	Interface	ID
GBS-G8-T 160-50-20	160	50	20	W-160	0430249

Positioning bar

To suit all stepped jaws with T-slot.



Description	Width mm	Height mm	Depth mm	Interface	ID
GPL 160-32-13.5	160	32	13.5	W-160	0430251

Grip jaw

For embossed clamping of unhardened materials up to 22 HRC.



Description	Width mm	Height mm	Depth mm	Interface	ID
GBG 160-50-13.5	160	50	13.5	W-160	1373285

Prism jaw, ground

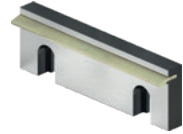
For precise clamping of round workpieces.
100 = Ø11 - Ø41 mm.
125 = Ø14 - Ø48 mm.
160 = Ø16 - Ø60 mm.



Description	Width mm	Height mm	Depth mm	Interface	ID
GVA 160-50-19.5	160	50	19.5	W-160	1373345

Spring leaf pull-down jaw

For an active jaw pull-down function with a light clamping impression on the workpiece for more precise machining results.



Description	Width mm	Height mm	Depth mm	Interface	ID
GFA 160-50-13.5	160	50	13.5	W-160	1373306

Spring plate pull-down jaw

For an active jaw pull-down function without clamping impressions on the workpiece for more precise machining results.



Description	Width mm	Height mm	Depth mm	Interface	ID
GFB 160-45-12	160	45	12	W-160	0432629
GFB 160-49-12	160	49	12	W-160	0430266

Precision pull-down jaw

For an active jaw pull-down function without clamping impressions on the workpiece for more precise machining results.



Description	Width mm	Height mm	Depth mm	Interface	ID
GBN-P 160-50-27.5	160	50	27.5	W-160	0430148

Accessories

Clamping force tester

For measuring the jaw clamping force of stationary clamping devices.



Suitable for	Description	ID
KSC3 160-280	IFT SST Set	1475766

Clamping pin GFD-SP mini

Clamping pin for form-fit connection of GFD mini set-up systems with clamping devices from SCHUNK.

1 set = 4 pieces.



Suitable for	Description	ID
KSC3 160-280	GFD-SP mini Ø20-h6	1602023

Standard clamping pins

Clamping pin for positive connection with NSE3 clamping modules.

With shortened fastening screw.



Suitable for	Description	ID
KSC3 160-280	SPA 40-K	0432369
KSC3 160-280	SPB 40-K	0432370

Clamping pin GFD-SP

Clamping pin for positive connection with GFD set-up stations.



Suitable for	Description	ID
KSC3 160-280	GFD-SP 40	0433600

Torque wrench 20 – 200 Nm

Serves for applying a defined torque.

With 1/2" square drive



Suitable for	Description	ID
KSC3 160-280	GSH-D 20-200	0432487

Actuating lever, articulated

For convenient clamping range presetting

With 1/2" square drive



Suitable for	Description	ID
KSC3 160-280	GSH-G 1/2"	0432478

Hexagonal insert SW 14

Suitable for square drive 1/2".



Suitable for	Description	ID
KSC3 160-280	GSK-I SW14-1/2"	0432619

Sealing plug

For thread in the base body.



Suitable for	Description	ID
KSC3 160-280	GVSS M10x12	1323002

Workpiece stop

Workpiece stop with minimum space requirements and continuously adjustable stop slide.

Including stop slider 40 and 80 mm.



Suitable for	Description	ID
KSC3 160-280	GWSA M8-23	1645258

Magnetic workpiece stop, small

For quick and easy attachment to system jaws or vises.



Suitable for	Description	ID
KSC3 160-280	GWSA-M 60 x 15	1391293

Magnetic workpiece stop, large

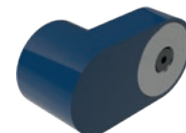
For quick and easy attachment to system jaws or vises.



Suitable for	Description	ID
KSC3 160-280	GWSA-M 115 x 15	1391331

Extensions

As an accessory for the magnetic workpiece stops.



Suitable for	Description	ID
KSC3 160-280	GWSA-V Ø68 x 30	1394477

Clamping screws for clamping claws

Used in combination with clamping claws for fastening clamping devices.



Suitable for	Description	T-slot	ID
KSC3 160-280	GSC-S M10-T12	12 mm/M10	0432043
KSC3 160-280	GSC-S M12-T14	14 mm/M12	0432044
KSC3 160-280	GSC-S M14-T16	16 mm/M14	0432045
KSC3 160-280	GSC-S M16-T18	18 mm/M16	0432046
KSC3 160-280	GSC-S M16-T20	20 mm/M16	1550423
KSC3 160-280	GSC-S M16-T22	22 mm/M16	1550424

Clamping screws for base body

Used for directly attaching clamping devices via the base body.



Suitable for	Description	T-slot	ID
KSC3 160-280	GSC-G-1 M10-T12	12 mm/M10	0430422
KSC3 160-280	GSC-G-1 M12-T14	14 mm/M12	0430423
KSC3 160-280	GSC-G-1 M12-T16	16 mm/M12	0430424
KSC3 160-280	GSC-G-1 M12-T18	18 mm/M12	0430425

Fitting screws

For precise position orientation and mounting of manual clamping vises on the machine table.



Suitable for	Description	ID
KSC3 160-280	GPSC-2 Ø12f7-M12	0490546

Alignment and centering set

For quick and easy alignment and fastening on T-slot tables.



Suitable for	Description	T-slot	ID
KSC3 160-280	GAZ-3 T12	12 mm	0430418
KSC3 160-280	GAZ-3 T14	14 mm	0430419
KSC3 160-280	GAZ-3 T16	16 mm	0430420
KSC3 160-280	GAZ-3 T18	18 mm	0430421

Workpiece Supports Set

Set of workpiece supports – width 160 mm

Suitable for system jaws H = 50 mm. Heights = 15, 30, 40, 45, and 47 mm.



Suitable for	Description	ID
KSC3 160-280	GWU-S 160-50	1394231

Cylinder pin set

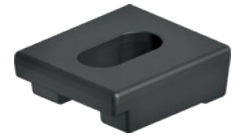
For easier assembly of the clamping device on the machine table.



Suitable for	Description	ID
KSC3 160-280	GZS Ø12m6	1373755

Clamping claws

For quick and easy mounting of SCHUNK clamping devices.



Suitable for	Description	ID
KSC3 160-280	GSPR-A 50-57	0490604

Angular console

For lifting off the clamping device from the machine table and increased accessibility.



Suitable for	Description	ID
KSC3 160-280	SKQ 160-1	1423759

Assembly set

For quick and easy assembly of KSC3 vises on an angular console.



Suitable for	Description	ID
KSC3 160-280	GMS-1 KSC 125/160	1368859

Cover screw

Used to cover unused clamping insert mounting holes on pendulum and adapter plates.



Suitable for	Description	ID
KSC3 160-280	GCS Ø22-M12	1307880

Workpiece supports

Workpiece supports – width 160 mm

In different heights.

1 Set = 2 pieces



Suitable for	Description	Height mm	ID
KSC3 160-280	GWU-M 160-15	15	1464957
KSC3 160-280	GWU-M 160-22	22	1461402
KSC3 160-280	GWU-M 160-30	30	1538303
KSC3 160-280	GWU-M 160-37	37	1443672
KSC3 160-280	GWU-M 160-40	40	1504993
KSC3 160-280	GWU-M 160-41	41	1597020
KSC3 160-280	GWU-M 160-42	42	1410170
KSC3 160-280	GWU-M 160-43	43	1534944
KSC3 160-280	GWU-M 160-44	44	1484499
KSC3 160-280	GWU-M 160-45	45	1410169
KSC3 160-280	GWU-M 160-46	46	1497132
KSC3 160-280	GWU-M 160-47	47	1410166



**H.-D. SCHUNK GmbH & Co.
Spanntechnik KG**

Lothringer Str. 23
D-88512 Mengen
Tel. +49-7572-7614-1300
Fax +49-7572-7614-1039
CMM@de.schunk.com
schunk.com