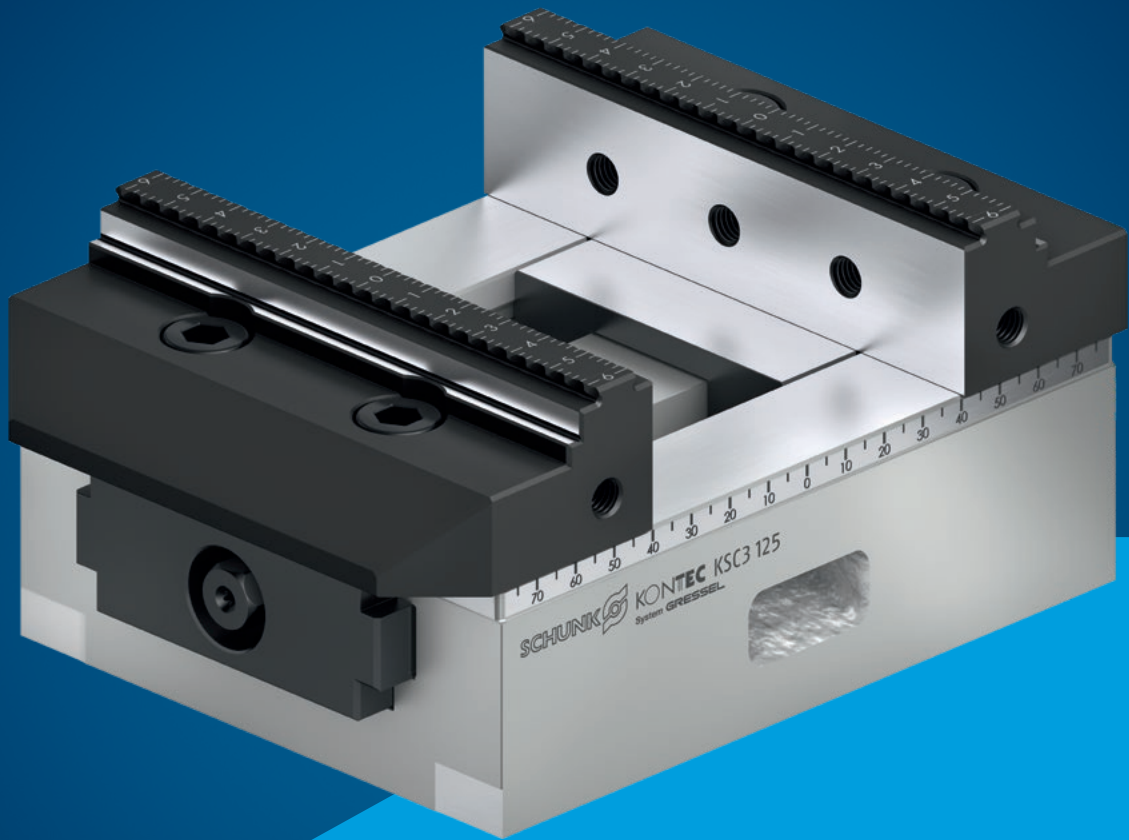




KONTec KSC3

**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.

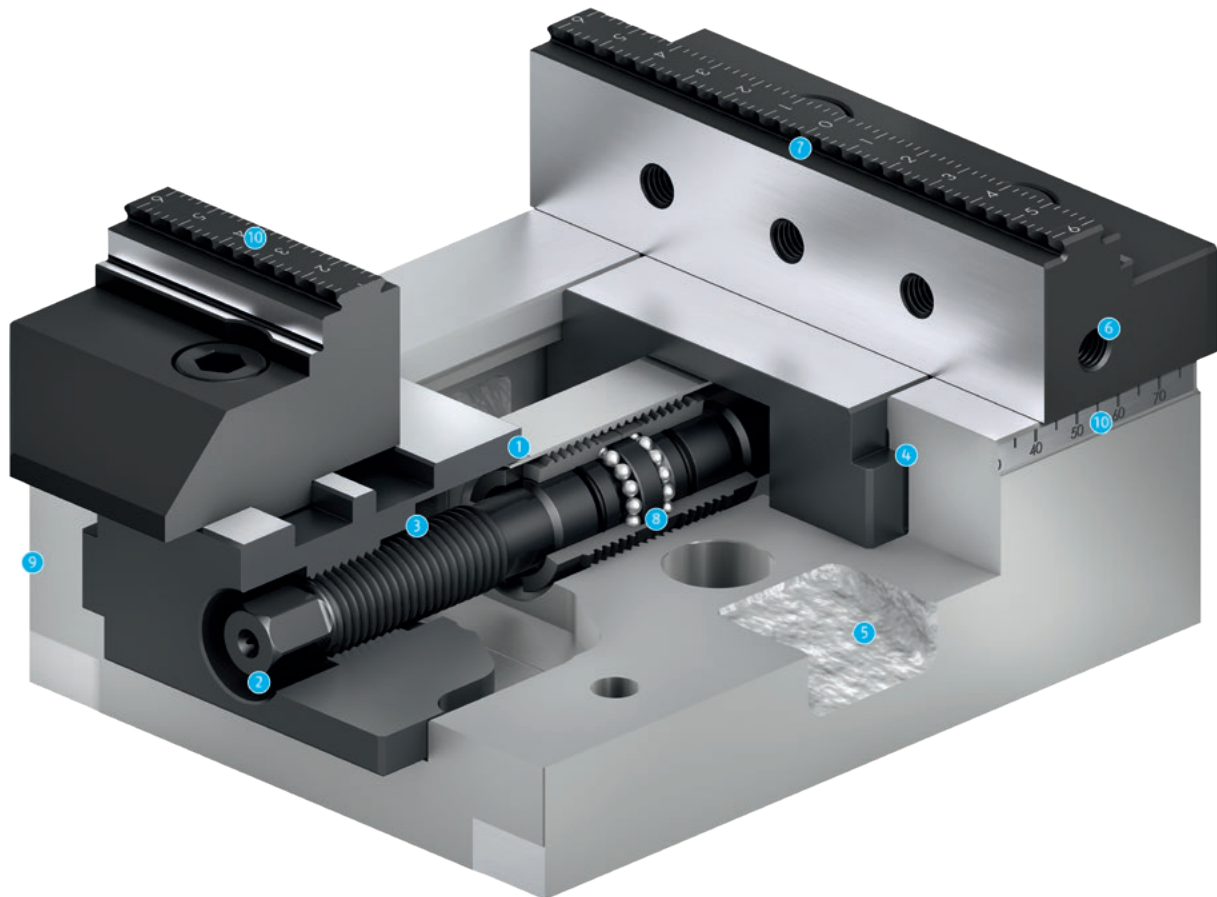


Advantages – Your benefits

- + 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.



- 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
- 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

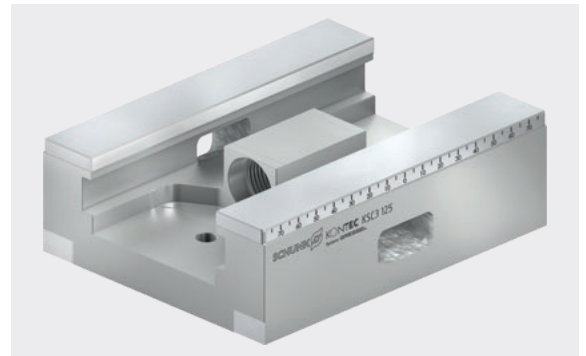
100% compatibility with the KSC generation

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.



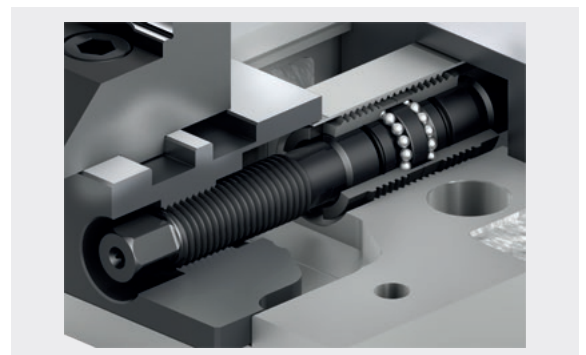
Laser-etched ruler

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.



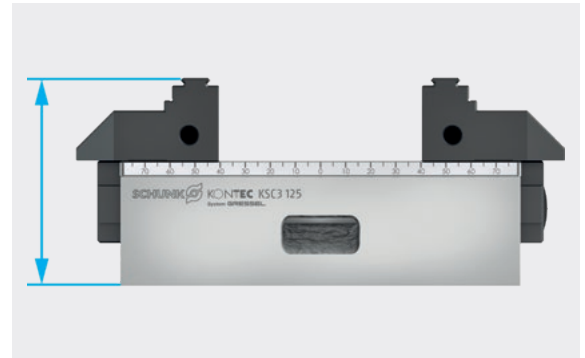
Encapsulated system

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

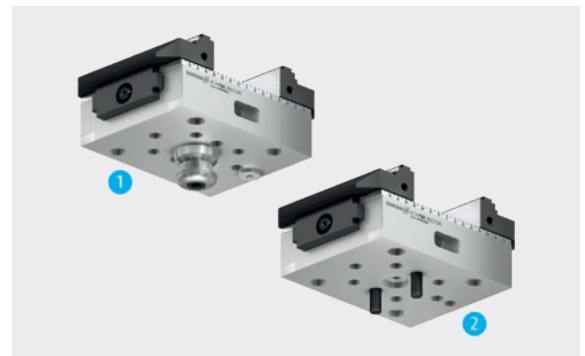
The system jaws can be changed very quickly and easily by loosening just two screws. Tools such as a cordless screwdriver speed up the changing process even more. Replacement of complete base jaws is not necessary here.



Mounting options

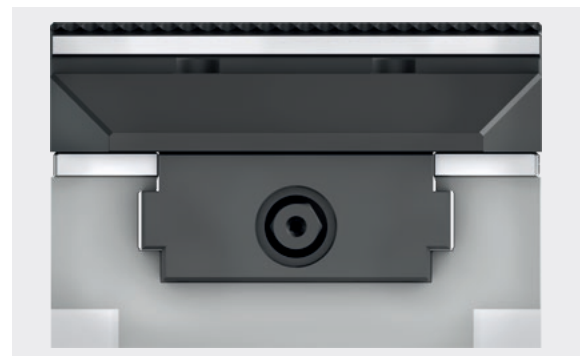
The KSC3 offers several options for mounting on the machine table, which are built into the base body. The centric clamping vise can be used for minimizing the set-up time. It can be mounted on the NSE3 or GFD quick-change pallet modules using the previously prepared interface of the quick-change pallet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

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



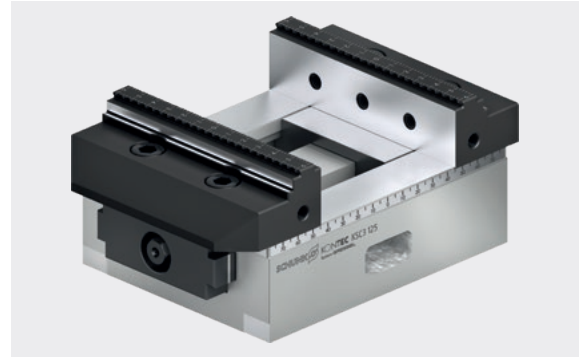
Sealing of the jaw guidance

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.



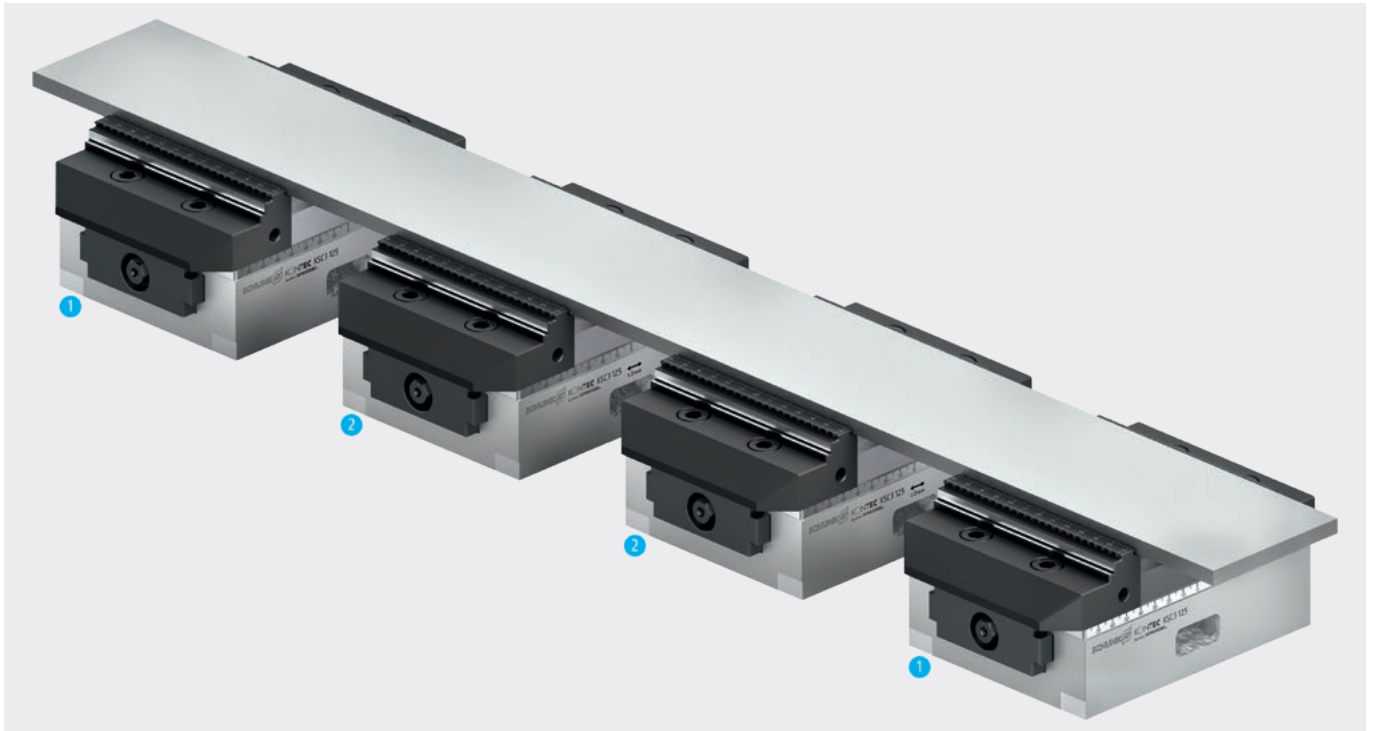
Optimal accessibility due to consoles



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

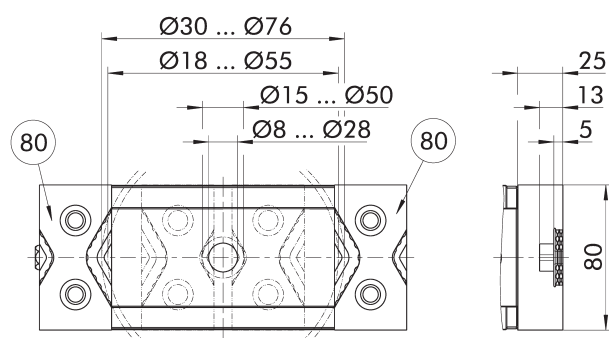
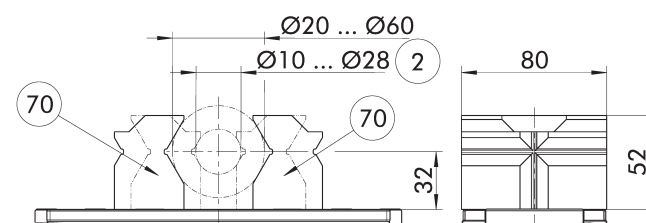
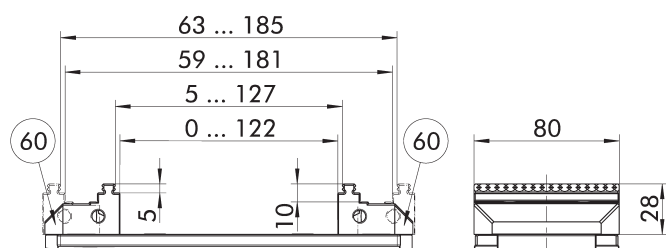
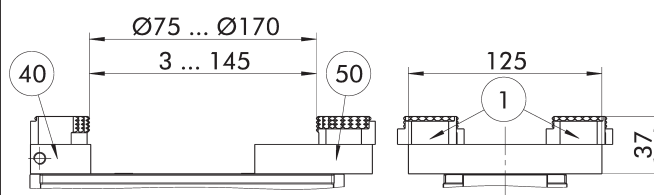
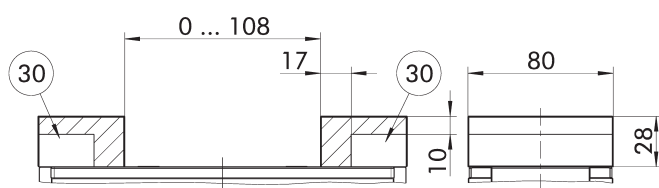
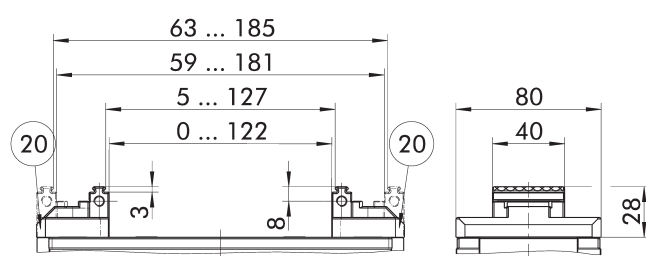
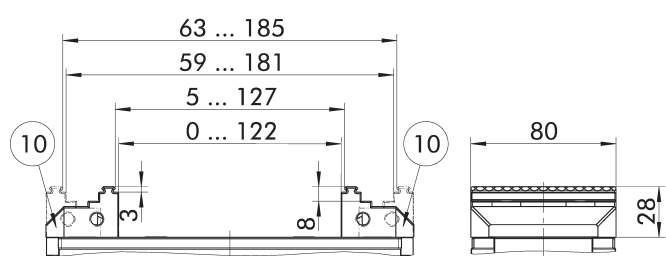
Clamping vises with compensation are used for all internal clamping areas to avoid deformation of the workpiece.

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)

② Same clamping ranges for vertical clamping

Technical data

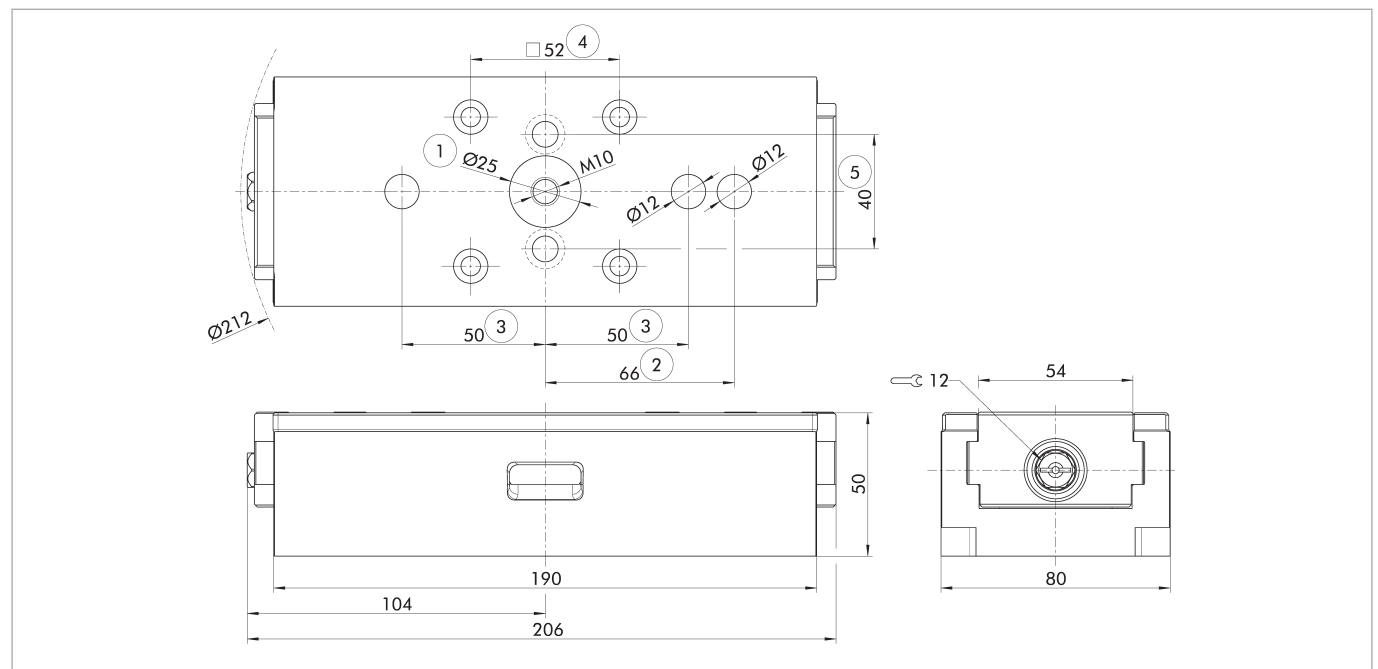
Description	ID	Vise included	Width of the clamping vise [mm]	Max. clamping force [kN]	Max. torque [Nm]	Length compensation [mm]	Weight [kg]
KSC3 80-190	1514208		80	25	90		4.5
KSC3 80-190-S	1514220		80	25	90	±3	4.5
KSC3 grip 80-190	1514207	Reversible grip jaw	80	25	90		5.5

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 80-40.3-28	0432715	80	40.3	28	0.5
Reversible grip jaw	20	SGWB-G3-B 40-40.3-28	1514379	40	40.3	28	0.4
Aluminum jaw	30	SGAL-B 80-48-28	0432718	80	48	28	0.4
Swivel plate	40	SGP-3 125-76-19	0432720	125	76	19	1.3
Adapter plate	50	SGA-3 125-39-19	0432719	125	39	19	0.7
Reversible grip jaw	60	SGWB-G5-B 80-41.5-28	1514364	80	41.5	28	0.5
Prismatic jaw	70	SGVA-B 80-38.5-52	1395548	80	52	38.5	1.1
Prism jaw vertical	80	SGVA-B 80-25-40	1468522	80	40	25	0.6



- ① Prepared for NSE3 and GFD clamping pins
- ② Prepared for indexing pin IXB V1-K
- ③ Prepared for GFD-IXB indexing pin or alignment pins Ø 12m6
- ④ Prepared for GFD-SP mini clamping pin Ø16 h6
- ⑤ Prepared for M8 screws

System jaws

Reversible soft grip jaw

Design as movable jaw.
With a special 5 mm grip step on both sides to enable clamping of soft materials such as aluminum or plastic.



Suitable for	Description	Interface	ID
KSC3 80-190	SGWB-SG5-B 80-40.3-28		1514366

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 80-190	SGWB-G3-B 80-40.3-28	W-80-1	0432715

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 80-190	SGWB-CG3-B 80-40-28		1514368

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 80-190	SGWB-G5-B 80-41.5-28		1514364

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 80-190	SGWB-CG5-B 80-40-28		1514375

Reversible jaw with embossed profile

Design as movable jaw.
With a special grip on both sides for clamping pre-embossed workpieces simply and securely.



Suitable for	Description	Interface	ID
KSC3 80-190	SGWB-GL-B 80-40-28		1514377

Reversible grip jaw

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



Suitable for	Description	Interface	ID
KSC3 80-190	SGWB-G3-B 40-40.3-28		1514379

Reversible carbide-grip jaw

Design as movable jaw.
Jaw width 40 mm, with carbide-grip step 3 mm (up to 58 HRC) and a smooth clamping face on both sides.



Suitable for	Description	Interface	ID
KSC3 80-190	SGWB-CG3-B 40-40.3-28		1414567

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 80-190	SGAL-B 80-48-28		0432718

Steel 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 80-190	SGS-B 80-48-28		1367467

Swivel plate

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



Suitable for	Description	Interface	ID
KSC3 80-190	SGP-3 125-76-19	W-38	0432720

Adapter plate

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



Suitable for	Description	Interface	ID
KSC3 80-190	SGA-3 125-39-19	W-38	0432719

Reversible smooth jaw

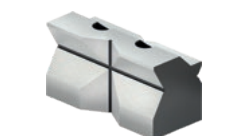
Design as movable jaw.
Ground steps, for precise OP20 machining.



Suitable for	Description	Interface	ID
KSC3 80-190	SGWB-S4-B 80-40.3-28		1497516
KSC3 80-190	SGWB-S8-B 80-40-28		1518693

Prismatic jaw

Design as movable jaw.
For the horizontal and vertical clamping of round materials.



Suitable for	Description	Interface	ID
KSC3 80-190	SGVA-B 80-38.5-52		1395548

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 80-190	SGVA-B 80-25-40		1468522

Central grip jaw

Floating version for clamping of two
workpieces in one set-up. Both sides are
prepared for mounting spring plates or
top jaws.

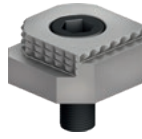


Suitable for	Description	Interface	ID
KSC3 80-190	SGM-G3 80-16-28		1474205
KSC3 80-190	SGM-G3 80-24-28		1474206

Top jaws

6-way reversible jaws grip

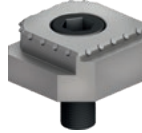
With five grip steps as well as a coated clamping face.



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

Stepped jaw

With coated step, 5 mm.



Description	Width mm	Height mm	Depth mm	Interface	ID
GBS-W 80-28-10-5	80	28	10	W-80-1	1395509

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 80-28-10	80	28	10	W-80-1	1326805

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 80-24-9	80	24.3	9	W-80-1	0432736

Universal stepped jaw

Versatile stepped jaw with ground step.



Description	Width mm	Height mm	Depth mm	Interface	ID
GPE 80-28-10-5	80	28	10	W-80-1	0432721

Accessories

Clamping force tester

For measuring the jaw clamping force of stationary clamping devices.



Suitable for	Description	ID
KSC3 80-190	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 80-190	GFD-SP mini Ø16 h6	1561291

Standard clamping pins

Clamping pin for positive connection with NSE3 clamping modules. With shortened fastening screw.



Suitable for	Description	ID
KSC3 80-190	SPA 40-K	0432369

Indexing pin

Used as an anti-rotation protection for VERO-S modules with anti-rotation protection V1.



Suitable for	Description	ID
KSC3 80-190	IXB V1-K	0432371

Clamping pin GFD-SP

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



Suitable for	Description	ID
KSC3 80-190	GFD-SP 40	0433600

Indexing pin GFD

Indexing pins for position orientation of clamping pallets and clamping devices on GFD set-up stations.



Suitable for	Description	ID
KSC3 80-190	GFD-IXB	1367937

Torque wrench 10 – 100 Nm

Serves for applying a defined torque. With 1/2" square drive



Suitable for	Description	ID
KSC3 80-190	GSH-D 10-100	0432477

Actuating lever, articulated

For convenient clamping range presetting With 1/2" square drive



Suitable for	Description	ID
KSC3 80-190	GSH-G 1/2"	0432478

Hexagonal insert SW 12

Suitable for square drive 1/2".



Suitable for	Description	ID
KSC3 80-190	GSK-I SW12-1/2"	0432479

Sealing plug

For thread in the base body.



Suitable for	Description	ID
KSC3 80-190	GVSS M10x12	1323002

Hexagonal adapter

Hexagonal adapter for increasing the wrench size from A/F 12 to A/F 27.



Suitable for	Description	ID
KSC3 80-190	GAD-6 SW12-SW27	1317853

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 80-190	GWSA M8-23	1645258

Magnetic workpiece stop, small

For quick and easy attachment to system jaws or vises.



Suitable for	Description	ID
KSC3 80-190	GWSA-M 60 x 15	1391293

Magnetic workpiece stop, large

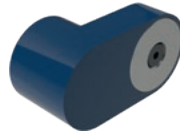
For quick and easy attachment to system jaws or vises.



Suitable for	Description	ID
KSC3 80-190	GWSA-M 115 x 15	1391331

Extensions

As an accessory for the magnetic workpiece stops.



Suitable for	Description	ID
KSC3 80-190	GWSA-V Ø68 x 30	1394477

Clamping screws for base body

Used for directly attaching clamping devices via the base body.



Suitable for	Description	T-slot	ID
KSC3 80-190	GSC-G-1 M10-T12	12 mm/M10	0430422
KSC3 80-190	GSC-G-1 M12-T14	14 mm/M12	0430423
KSC3 80-190	GSC-G-1 M12-T16	16 mm/M12	0430424
KSC3 80-190	GSC-G-1 M12-T18	18 mm/M12	0430425

Cylinder pin set

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



Suitable for	Description	ID
KSC3 80-190	GZS Ø12m6	1373755

Angular console

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



Suitable for	Description	ID
KSC3 80-190	SKQ 80/125-1	1363520

Assembly set

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



Suitable for	Description	ID
KSC3 80-190	GMS-1 KSC 80	1363522

Cover screw

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



Suitable for	Description	ID
KSC3 80-190	GCS Ø22-M12	1307880

Workpiece Supports Set

Set of workpiece supports – width 80 mm

Suitable for system jaws H = 28 mm with grip level 3 mm.
Heights = 5, 10, 15, 20, and 22 mm.



Suitable for	Description	ID
KSC3 80-190	GWU-S grip 80-28	1394225

Workpiece supports

Workpiece supports – width 80 mm

In different heights.

1 Set = 2 pieces



Suitable for	Description	Height mm	ID
KSC3 80-190	GWU-M 80-5	5	1465960
KSC3 80-190	GWU-M 80-10	10	1465956
KSC3 80-190	GWU-M 80-15	15	1460327
KSC3 80-190	GWU-M 80-20	20	1411113
KSC3 80-190	GWU-M 80-22	22	1411114



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