



COLLET SYSTEM
LZK-S



MULTI-PURPOSE COLLET SYSTEM

For challenging clamping geometries and varying tool diameters

The SwissChuck collet system – the insider's tip for efficient manufacturing!

The high-precision multi-blade clamping technology enables a clamping range of several millimetres covered with one interchangeable collet. The perfect clamping geometry (parallel clamping) across the entire clamping range warrants a consistent run out of less than 0.01mm.

Example: with the LZK-BS type chuck, the entire clamping range from $\varnothing 2.5$ to 42.5 can be covered with 7 interchangeable collets – see Page 5.

Besides keeping fewer parts in stock and the associated investment costs, changeover times are reduced and flexibility in the manufacturing process is considerably increased.

What is not possible with standardized collet systems can easily be solved with the SwissChuck collet system. The large clamping range of a single interchangeable collet enables an over-grip on workpieces with shoulders. Your machine set-up thus becomes more flexible and changing over to jaw chucks often becomes obsolete.

SwissChuck offers a comprehensive standard range. If no suitable collet is available, special customised collets can be made.

Advantages



- Parallel clamping across the entire stroke
- Large clamping range per interchangeable collet
- Short changeover times
- Sturdy, robust chuck
- High speed of rotation
- Suitable for thin-walled rings (number of clamping blades)
- Over-grip clamping possible

Function

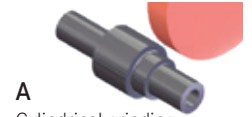


- Multi-blade interchangeable collets
- Axially fixed clamping position
- Actuation by power-operated clamping cylinder
- Mainly for turning and grinding processes



Explanation of symbols:
SwissChuck.com

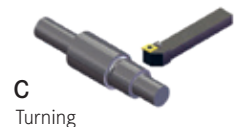
Suitability according
to machining process:



A
Cylindrical grinding



B
Eccentric cylindrical
or orbital pin grinding



C
Turning



D
Hard turning



E
Combination
Grinding/hard turning

Collet chuck type LZK-S

**Multi-blade collet chuck for external clamping:
thrust operated, with axially fixed clamping position**

- Axially fixed clamping position
- Run out $\leq 0.01\text{mm}$
- Clamping diameter up to 162 mm (chuck LZK-ES)
- Clamping of thin-walled workpieces with minimal deformation
- Large through-hole - suitable for bar stock
- High speed of rotation
- High clamping force
- Low centrifugal losses
- Resistant to contamination



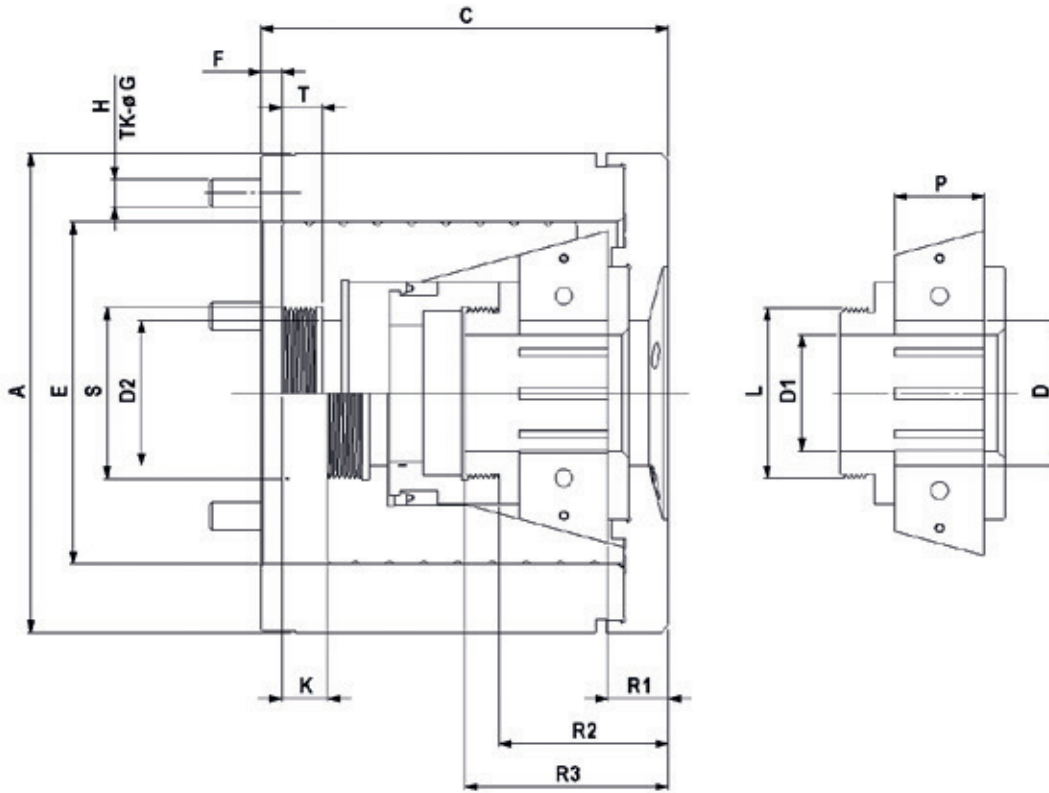
LZX-S – selection criteria

- Largest workpiece diameter:
 - Illustration on page 5
- Over-grip clamping required:
 - required clamping range of a collet
 - possibly special clamping range required
- Clamping diameter range:
 - which interchangeable collets are needed - see on page 5
- **SwissChuck is happy to advise you about the optimal choice of the clamping system.**

LZX-S -
Interchangeable collet



LZX-S - Collet chuck



Collet chuck type Type LZK-S

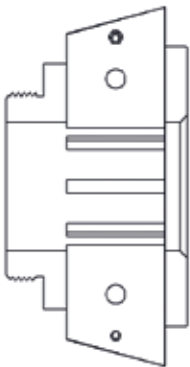
Variables	Units	LZK-AS	LZK-BS	LZK-US	LZK-CS	LZK-DS	LZK-ES
A	mm	92	140	190	220	250	330
C	mm	80	119	145	161	184	210
D2	mm	25	42.5	66	83	104	164
E	mm	60	100	140	160	190	275
F	mm	5	6	6	6	6	6
G	mm	76	118	164	185	220	300
H	Thread	6 x M6	6 x M8	6 x M8	6 x M8	6 x M10	6 x M12
K stroke	mm	9	13.5	19	19	21	32
L	Thread	M32x1	M50x1.5	M80x1.5	M92x1.5	M115x1..5	Ø 174 g6
P	mm	16	26	45	45	48	55
R1	mm	11	17.5	22	24.0	28	38
R2	mm	34	43.5	74	76	83.0	103
R3	mm	40	59.5	84	86	98.0	109
S	Thread	M32x1.5	M50x1.5	M72x1.5	M92x1.5	M115x1.5	M120x1.5
T	mm	8	12	15	15	15	20
Actuation	kN (max)	20	35	40	50	60	70
Clamping force	kN (max)	40	70	80	100	120	140
n max	1/min	6300	6300	6000	4500	4000	3500
Weight *	kg	3.2	11.0	25	42	55	98
Moment of inertia *	kgm ²	0.004	0.030	0.125	0.283	0.503	1.620

* with collet

For weight D and D2, see table on page 6

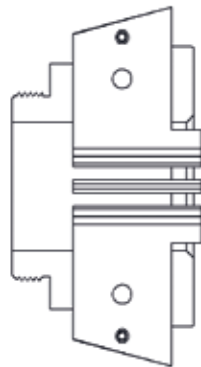
LZK-S - COLLET RANGE

Basic version O



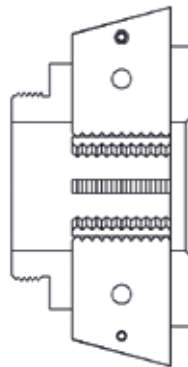
Blade Form N

Extended guide length

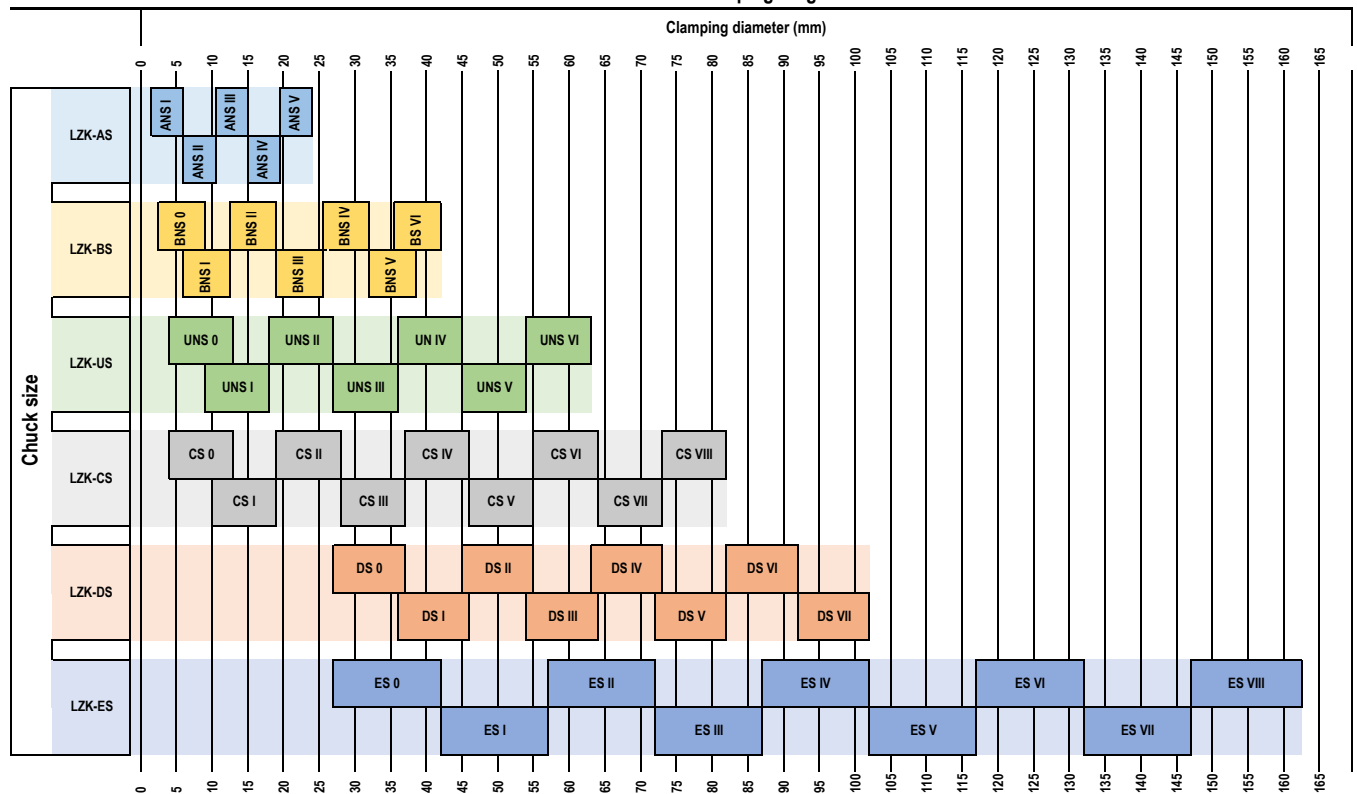


Serrated blades Z

Increased torque transmission for roughing processes



Collet versions with clamping ranges

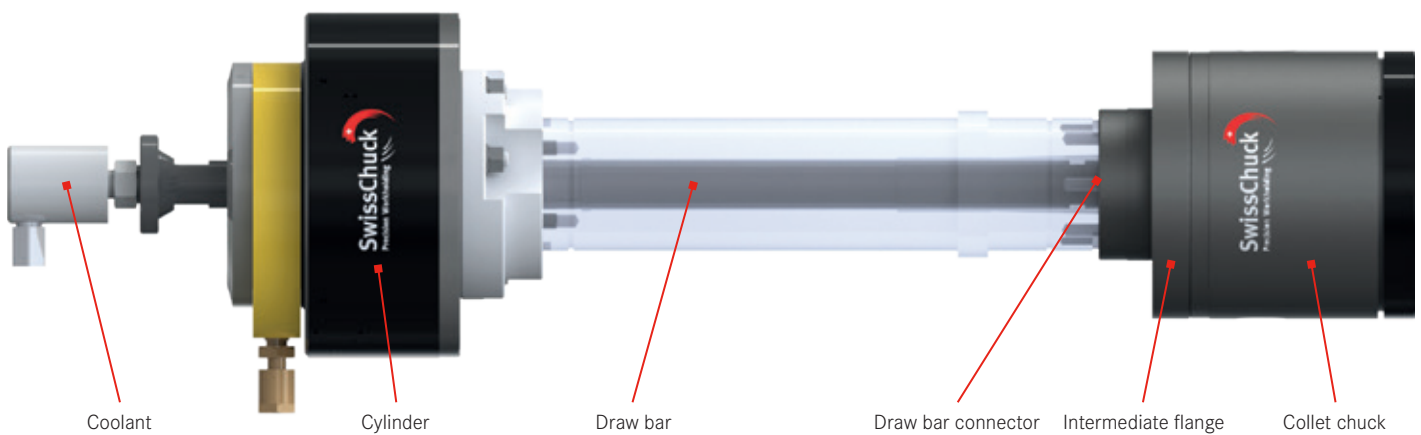


Example order: Collet chuck type LZK-CS / collet CS VI

Special collets with specific clamping ranges or special blade geometries can be manufactured. Our staff will be happy to advise you.

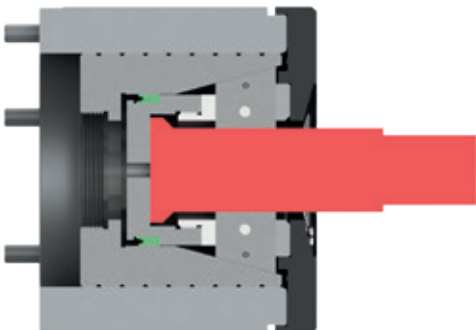
MOUNTING EXAMPLES

LZK-S



The installation of a clamping system is specific to the machine.
SwissChuck designs and produces all the necessary components.
Thus, as a customer, you receive the complete extension, ready for assembly

Version with axial stops



Optional stop units with simple length adjustment are available on request



KCHP/VKHP
High-precision force chuck



SAP to KCHP
Automated drive carrier



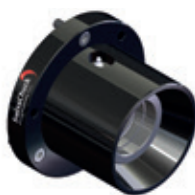
KFHP
Precision power chuck



KCHSF
Centrifugal force chuck



VMCHP
Diaphragm chuck



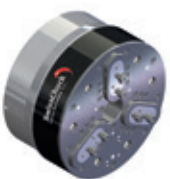
LZK/LSK-S
Collet chuck with clamping lamellas



DL
Collet expanding mandrel



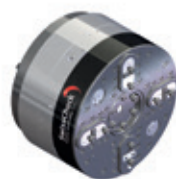
TGC/FTGC
Tool chuck



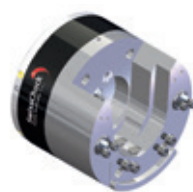
OVEK
High-precision force chuck



OVEKA
Compensating chuck



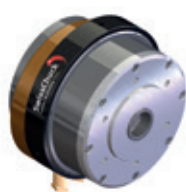
OVEKAV
Moving compensating chucks



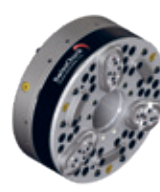
FLD/AFLD
Twist finger type console chuck



SPECIAL SOLUTIONS
Tailor made solutions



PZLHM
Pneumatic force clamping cylinder



TRITON
Precision lathe chuck



LZK-S
Collet system

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