



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

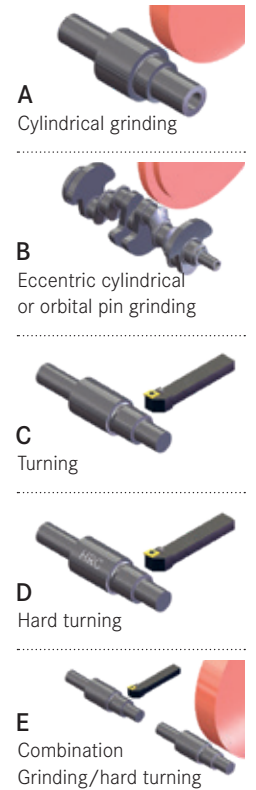
### Function



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



Suitability according to machining process:



Explanation of symbols:  
SwissChuck.com

## 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



## LZK-S – selection criteria

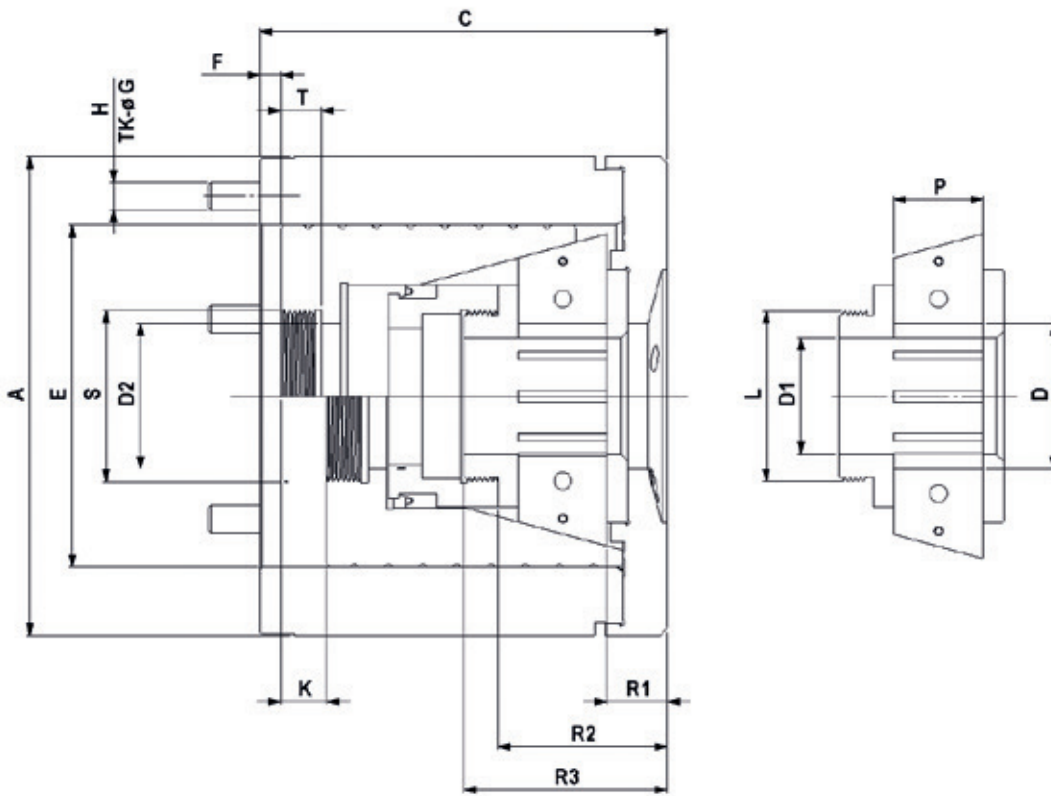
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- Largest workpiece diameter:
    - Illustration on page 5
  - Over-grip clamping required:
    - required clamping range of a collet
    - possibly special clamping range required
  - Clamping diameter range:
    - which interchangeable collets are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

LZK-S -  
Interchangeable collet



LZK-S - Collet chuck



## Collet chuck type Type LZK-S

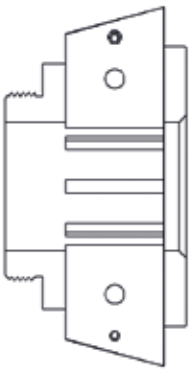
Variables	Units	LZK-AS	LZK-BS	LZK-US	LZK-CS	LZK-DS	LZK-ES
A	mm	92	140	190	220	250	330
C	mm	80	119	145	161	184	210
D2	mm	25	42.5	66	83	104	164
E	mm	60	100	140	160	190	275
F	mm	5	6	6	6	6	6
G	mm	76	118	164	185	220	300
H	Thread	6 x M6	6 x M8	6 x M8	6 x M8	6 x M10	6 x M12
K stroke	mm	9	13.5	19	19	21	32
L	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 <sup>2</sup>	0.004	0.030	0.125	0.283	0.503	1.620

\* with collet

For weight D and D2, see table on page 6

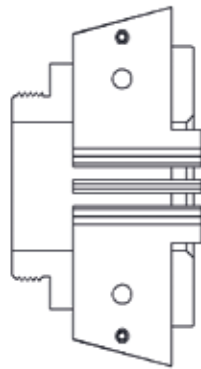
# LZK-S - COLLET RANGE

**Basic version O**



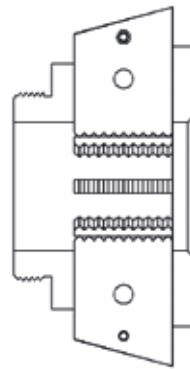
**Blade Form N**

Extended guide length

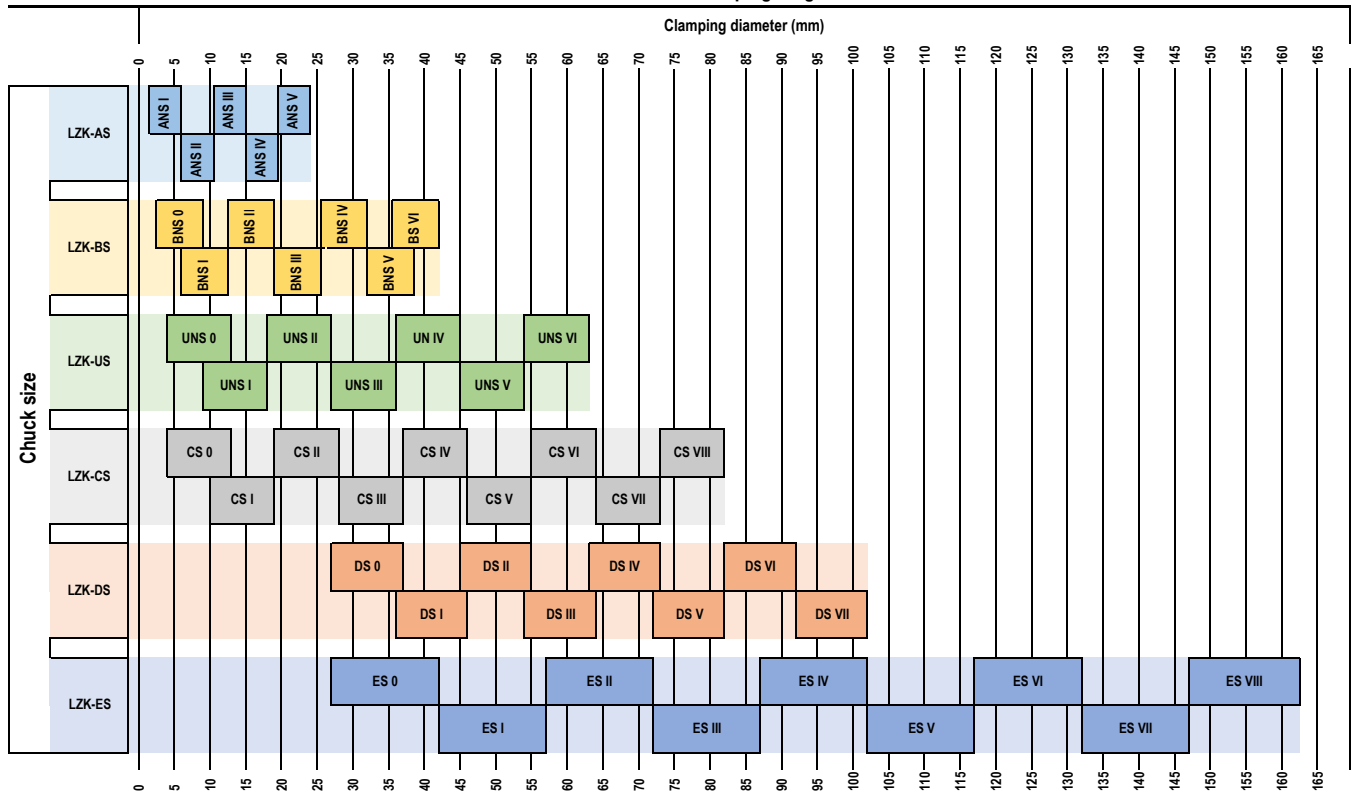


**Serrated blades Z**

Increased torque transmission for roughing processes



**Collet versions with clamping ranges**



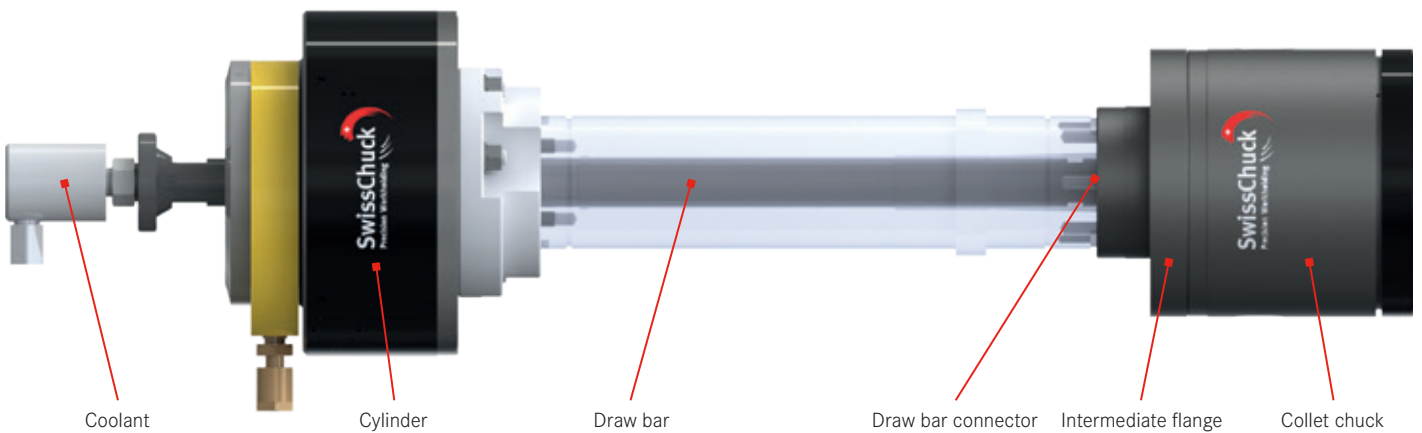
**Example order:** Collet chuck type LZK-CS / collet CS VI

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



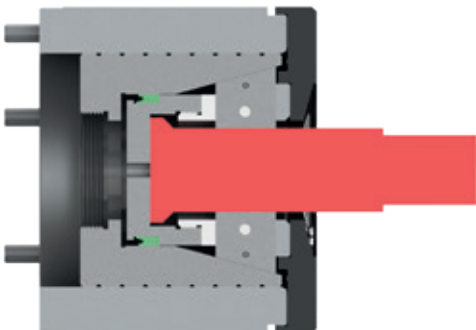
## MOUNTING EXAMPLES

**F** ↔ 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

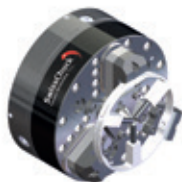
### Version with axial stops



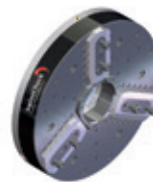
Optional stop units with simple length adjustment are available on request



**KCHP/VKHP**  
High-precision force chuck



**SAP to KCHP**  
Automated drive carrier



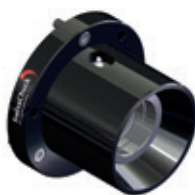
**KFHP**  
Precision power chuck



**KCHSF**  
Centrifugal force chuck



**VMCHP**  
Diaphragm chuck



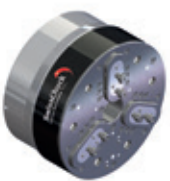
**LZK/LSK-S**  
Collet chuck with clamping lamellas



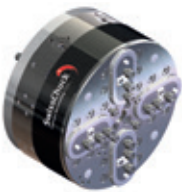
**DL**  
Collet expanding mandrel



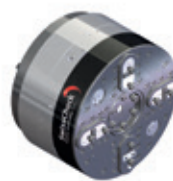
**TGC/FTGC**  
Tool chuck



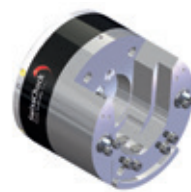
**OVEK**  
High-precision force chuck



**OVEKA**  
Compensating chuck



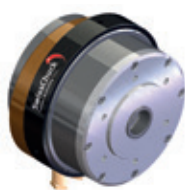
**OVEKAV**  
Moving compensating chucks



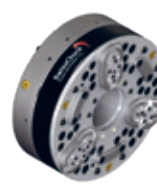
**FLD/AFLD**  
Twist finger type console chuck



**SPECIAL SOLUTIONS**  
Tailor made solutions



**PZLHM**  
Pneumatic force clamping cylinder



**TRITON**  
Precision lathe chuck



**LZK-S**  
Collet system

SwissChuck AG  
Industriestrasse 3  
CH-8307 Effretikon  
P +41 52 355 31 31  
F +41 52 343 52 40  
SwissChuck.com



[Service@SwissChuck.com](mailto:Service@SwissChuck.com)



[Sales@SwissChuck.com](mailto:Sales@SwissChuck.com)

