## **KNCS-NB-CL**

#### **CENTER LINE**



#### High precision power chucks Ø 630 ■ Quick jaw change ■ Large through hole ■ Wide master jaws – Radial fine adjustment ■ High flexibility: jaws radially adjustable / reversible

#### Application/customer benefits

- For workpieces with high concentricity callout
- For radial readjustment of workpieces with big changes in weight during machining
- To apply additional grip force to the workpiece by the adjustment screws
- Readjustment of the centerline of the workpiece in process

#### **Technical features**

- Integrated fine adjustment to center the workpiece
- Fine adjustment is radially displaceable for different workpiece diameters
- Concentricities higher than the repeatability of the chuck can be reached

#### **Standard equipment** 3 jaw chuck with disengaging key

Mounting key Set of coverplates Fine adjustment Ordering example

3 jaw chuck KNCS-NB-CL 630

### Actual gripping force diagrams



The data in the diagrams refer to 3 jaw chucks, newly maintained according to their service manuals using SMW-AUTOBLOK K05 grease. The static and dynamic gripping forces have been measured using standard soft top jaws, placed in a position not exceeding the outer diameter of the chuck.

#### ▲ Safety advice / danger of damage:

When using taller / heavier jaws and / or clamping on a bigger diameter reduce draw pull / rotating speed accordingly.

#### Radial fine adjustment CL



The centerline is affected by changes of weight of the workpiece and the mechanic repeatability of the chuck itself. The center of the workpiece can be fine adjusted even more accurate than the repeatability of the chuck, using the CL fine adjustment. Integrated CL fine adjustment devices allow to bring any workpiece into the exact rotation center of the machine while clamped. This is ideal for high accurate tubine shafts, aerospace parts etc.

#### **Technical data**

SMW-AUTOBLOK Type		KNCS-NB-CL 630		
ld. No.		161250		
Number of jaws		3		
Radial jaw stroke	mm	10		
Axial piston stroke	mm	42		
Max. draw-pull	kN	120		
Max. gripping force	kN	250		
Max. speed	r.p.m.	1500		
Weight (without top jaws)	kg	390		
Moment of inertia	kg∙m²	18		
Recommended closed center cylinder		SIN-S 175 / 200		
Recommended open center cylinder		VSG 450-165		

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Base jaw position "p"



Base jaw position "o"

Min. position of adjustment (CL)

Max. position of adjustment (CL)

Subject to technical changes.

For more detailed information please ask our customer service or see the technical data of KNCS-NB.

SMW-AUTOBLOK Type	KNCS-NB-CL 630 161250		
Id. No.			
	А	mm	630
Chuck bore	В	mm	165
	С	mm	174
	D	mm	380
Min. clamping diameter	E	mm	150
Max. clamping diameter	F	mm	540
	G	mm	5
	Н	mm	42.6
Swing diameter max.	J	mm	812
	К	mm	110
	L	mm	125
	Μ	mm	60
Residual stroke CL (min. position)	Q	mm	2
Approach stroke CL (min. position)	R	mm	27
Total stroke CL (min. position)	S	mm	29
Residual stroke CL (max. position)	Т	mm	1.8
Approach stroke CL (max. position)	V	mm	27.2
Total stroke CL (max. position)	W	mm	29
Radial adjustment range CL to the center line	Х	mm	~ ± 0.05
	Y	mm	90