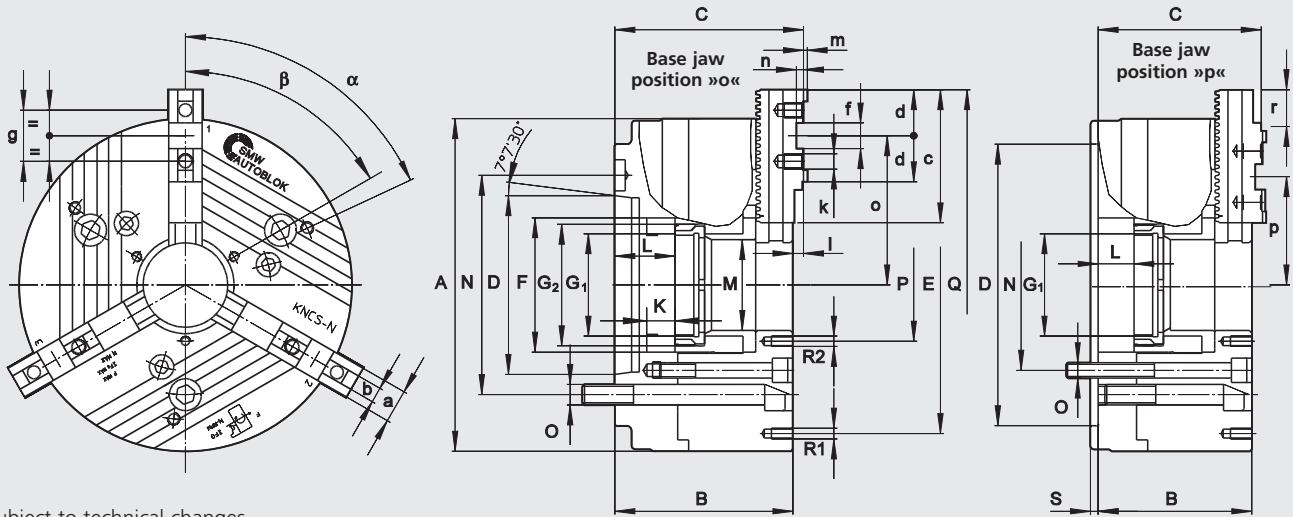


Jaw position: open position for external clamping



Subject to technical changes

Type KNCS-N		140-35			170-43			210-52			225-65			260-72				275-86		
Mounting	Dim.	Z120	A5	Z140	A5	A6	Z170	A6	A8	Z170	A6	A8	Z170	Z220	A6	A8	Z220	A6	A8	
	A	145			175			215			225			260				275		
	B	87	103	98	113	115	105	122	124	105	122	124	120	120	137	139	120	144	139	
	C	93.9	109.9	104.9	119.9	121.9	109.9	126.9	128.9	109.9	126.9	128.9	128.3	128.3	145.3	147.3	128.3	152.3	147.3	
H6	D	120	82.57	140	82.57	106.39	170	106.39	139.73	170	106.39	139.73	170	220	106.39	139.73	220	106.39	139.73	
	E	122			152			168			180			210				210		
	F	52			67			85			95			107				122		
Rotating ring nut/depth	G1	-*			M50 x 1.5/18*			M60 x 1.5/16			M75 x 1.5/16			M80 x 2/20				M95 x 2/20		
Piston thread/depth	G2	M45 x 1.5/18			M60 x 1.5/18			M75 x 2/19			M85 x 2/19			M95 x 2/23				M110 x 2/20		
Piston stroke	K	20			20/25			22/25			22/25			25/28				25/28		
max.	L	20	36	25	40	42	25	42	44	25	42	44	28	28	45	47	28	52	47	
	M	35			43			52			65			72				86		
Fixing bolt circle	N	104.8	104.8	104.8	104.8	133.4	133.4	133.4	171.4	133.4	133.4	171.4	133.4	171.4	133.4	171.4	171.4	133.4	171.4	
Fixing bolt	O	M10	M10	M10	M10	M12	M12	M12	M16	M12	M12	M16	M12	M16	M12	M16	M16	M12	M16	
	P	65			75			72			82			95				105		
	Q	166			195			261			271			307				321		
Thread/Thread depth	R1	M8/12			M8/12			M10/12			M10/12			M10/12				M10/18		
Thread/Thread depth	R2	M5/10			M5/10			M6/10			M6/10			M8/16				M8/14		
	S	6			6			6			6			6				6		
	a	20			20			22			22			26				26		
f7	b	8			8			10			10			12				12		
	c	56			65			85			85			104				104		
	d	28			28			33			33			36				36		
H7	f	18			18			20			20			20				20		
	g	32			32			40			40			40				40		
Thread/Thread depth	k	M8/12			M8/12			M8/13			M8/13			M12/15				M12/15		
	l	6.9			6.9			4.9			4.9			8.3				8.3		
	m	2.5			2.5			2.5			2.5			3				3		
	n	5			5			4.5			4.5			5.5				5.5		
max./min.	o	54/39.9			69/50.2			96.6/68.3			102/69			116.6/83.6				124/85.5		
max./min.	p	54/39.9			60/41.2			77.6/49.3			83/50			84.6/51.6				82/53.5		
Base jaw tooth pitch	-	4.7			4.7			4.7			4.7			5.5				5.5		
Base jaw offset	r	14.1			18.8			28.3			33			33				38		
Base jaw offset	teeth	3			4			6			7			6				7		
	α°	95			90			60			60			60				60		
	β°	60			60			60			60			60				60		

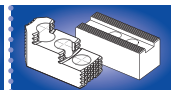
Stroke per jaw at piston stroke K	mm	5.1			6.0			6.0			7.0			7.0				25		
Stroke per jaw at piston stroke K max.	mm	5.1	20	6.8	25	7.0	25	7.0	25	7.0	25	8.0	28	8.0	28	8.0	28	8.0	28	
max. actuating force 3-jaw chuck	kN	25			32			53			53			70				70		
max. total gripping force 3-jaw chuck	kN	47			60			100			100			135				135		
max. speed 3-jaw chuck	r.p.m.	6500			6300			6000			5500			4700				4700		
Mass without top jaws	kg	9	9.6	14	15	15	24	26	26	26	29	29	40	40	43	43	48	53	50.7	
Moment of inertia	kg·m ²	0.024			0.06			0.11			0.2			0.38				0.41		

Rec. closed center cyl.	Type	SIN-S 100	SIN-S 100/125	SIN-S 125/150	SIN-S 125/150	SIN-S 150/175	SIN-S 150/175	SIN-S 150/175	SIN-S 150/175
Rec. open center cyl.	Type	VNK 70-32	VNK 102-46	VNK 130-52	VNK 150-67	VNK 170-77	VNK 170-77	VNK 225-95	VNK 225-95

*KNCS-N 140-35 and KNCS-N 170-43 are available with fixed ring nut only



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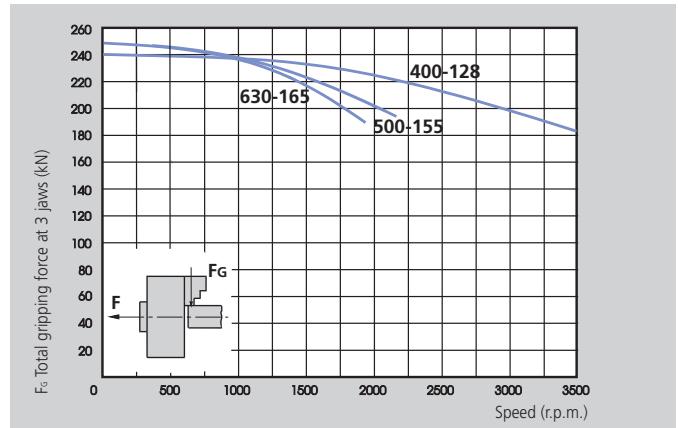
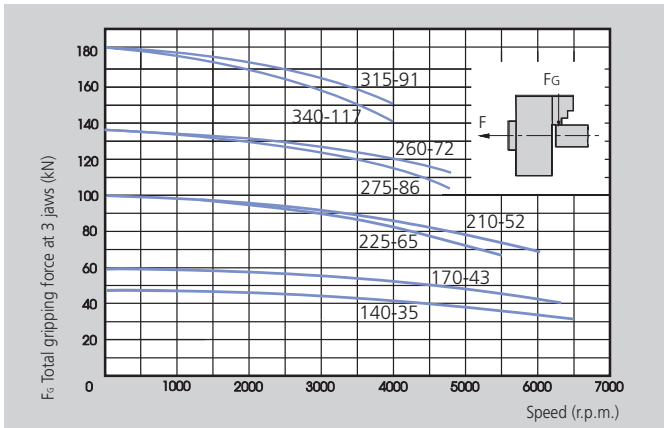


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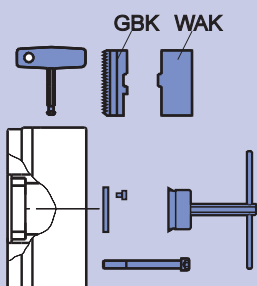
For highest speeds: flat gripping force curve



- The diagrams refer to 3-jaw chucks.
- The max. gripping force is the total, acting on the 3 jaws, obtained by applying to the chuck the max. allowed traction to the draw bar. The data refers to a chuck in good conditions, using SMW K05 grease.

- The dynamic gripping forces have been measured using hardened standard stepped monoblock jaws type GST which are not exceeding the outer diameter of the chuck. In case of heavier clamping jaws it is necessary to reduce the rotation speed.

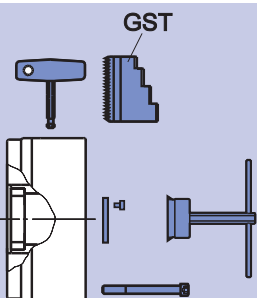
Type KNCS-N		315-91				340-117			400-128				500-155			630-165	
Mounting	Dim.	Z220	Z300	A8	A11	300	A8	A11	Z300	Z380	A11	A15	Z380	A11	A15	Z380	A15
	A	315				340			400				500			630	
	B	130	130	149	151	130	160	151	140	140	161	163	174	195	197	174	197
	C	139.3	139.3	158.3	160.3	139.3	169.3	160.4	149.2	149.2	170.2	172.2	184	205	207	184	207
H6	D	220	300	139.73	196.88	300	139.73	196.88	300	380	196.88	285.77	380	196.88	285.77	380	285.77
	E	268				270			330				420			585	
	F	134				160			180				207			217	
Rotating ring nut/depth	G1	M100 x 2/22				M125 x 2/22			M138 x 2/22				M165 x 2/25			M175 x 2/25	
Piston thread/depth	G2	M120 x 2/25				M146 x 2/25			M160 x 2/25				M185 x 2/28			M195 x 2/28	
Piston stroke	K	25/28				25/28			32				42			42	
max.	L	28	28	47	49	28	58	49	32	32	53	55	42	63	65	42	65
	M	91				117			128				155			165	
Fixing bolt circle	N	171.4	235	171.4	235	235	171.4	235	235	330.2	235	330.2	330.2	235	330.2	330.2	330.2
Fixing bolt	O	M16	M20	M16	M20	M20	M16	M20	M20	M24	M20	M24	M24	M20	M24	M24	M24
	P	115				140			152				180			195	
	Q	374				400			452				552			643	
Thread/Thread depth	R1	M10/16				M10/16			M12/18				M16/25			M16/25	
Thread/Thread depth	R2	M10/16				M10/16			M12/18				M12/18			M12/18	
	S	6				6			8				8			8	
	a	32				32			32				45			45	
f7	b	12				12			12				18			18	
	c	115				115			125				160			200	
	d	36				36			43				50			50	
H7	f	20				20			26				30			30	
	g	40				40			54				60			60	
Thread/Thread depth	k	M12/17				M12/17			M12/17				M16/34			M16/34	
	l	9.3				9.3			9.3				10			10	
	m	3				3			3				4			4	
	n	6				6			7				9			9	
max./min.	o	150.2/100.7				163.2/113.7			182.3/121.8				225/141			270.5/179.5	
max./min.	p	106.2/56.7				119.2/69.7			143.3/82.2				164/80			170.5/79.5	
Base jaw tooth pitch	-	5.5				5.5			5.5				7			7	
Base jaw offset	r	49.5				49.5			60.5				84			91	
Base jaw offset	teeth	9				9			11				12			13	
	α°	60				60/35			60				60			20/9 x 40	
	β°	60				60			60				60			60	
Stroke per jaw at piston stroke K	mm	7.0				7.0											
Stroke per jaw at piston stroke K max.	mm	8.0				8.0			8.0				10.0			10.0	
max. actuating force 3-jaw chuck	kN	95				95			115				120			120	
max. total gripping force 3-jaw chuck	kN	180				180			240				250			250	
max. speed 3-jaw chuck	r.p.m.	4000				3500			3500				2200			1700	
Mass without top jaws	kg	63	63	66	66	77	88.5	82.5	111	111	116	116	225	231	231	390	398
Moment of inertia	kg·m ²	0.85				1.24			2.5				6.5			18	
Rec. closed center cyl.	Type	SIN-S 150/175/200				SIN-S 150/175/200			SIN-S175/200				SIN-S 175/200			SIN-S 175/200	
Rec. open center cyl.	Type	VNK 225-95				VNK 320-127			VNK 320-127				VSG 450-165			VSG 450-165	



Supply range:

Chuck + key + mounting bolts + mounting key (from diameter 210)
 + 1 set hardened base jaws type GBK + 1 set soft top jaws type WAK
 + set of coverplates

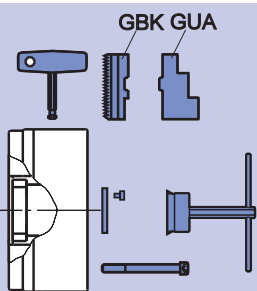
Spindle mounting	Size	KNCS-N 140-35	KNCS-N 170-43	KNCS-N 210-52	KNCS-N 225-65	KNCS-N 260-72	KNCS-N 275-86	KNCS-N 315-91	KNCS-N 340-117	KNCS-N 400-128	KNCS-N 500-155	KNCS-N 630-165
Centering rim small						Z 170 088813		Z 220 088818		Z 300 088822	Z 300 088889	
Centering rim large		Z 120 088800	Z 140 088802	Z 170 088806	Z 170 088809	Z 220 088814	Z 220 067910	Z 300 088819	Z 300 067920	Z 380 088823	Z 380 088826	Z 380 088829
A 05		088801	088803									
A 06			088804	088807	088810	088815	067911					
A 08				088808	088811	088816	067912	088820	067921			
A 11								088821	067922	088824	088827	
A 15										088825	088828	088830



Supply range:

Chuck + key + mounting bolts + mounting key (from diameter 210)
 + 1 set hardened, reversible stepped monoblock jaws type GST,
 ground on chuck + set of coverplates

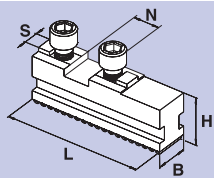
Spindle mounting	Size	KNCS-N 140-35	KNCS-N 170-43	KNCS-N 210-52	KNCS-N 225-65	KNCS-N 260-72	KNCS-N 275-86	KNCS-N 315-91	KNCS-N 340-117	KNCS-N 400-128	KNCS-N 500-155	KNCS-N 630-165
Centering rim small						Z 170 088842		Z 220 088846		Z 300 088850	Z 300 088859	
Centering rim large		Z 120 088831	Z 140 088833	Z 170 088836	Z 170 088839	Z 220 088843	Z 220 067913	Z 300 088847	Z 300 067923	Z 380 088851	Z 380 088854	Z 380 088857
A 05		088832	088834									
A 06			088835	088837	088840	088844	067914					
A 08				088838	088841	088845	067915	088848	067924			
A 11								088849	067925	088852	088855	
A 15										088853	088856	088858



Supply range:

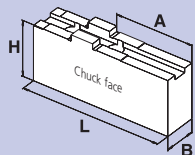
Chuck + key + mounting bolts + mounting key (from diameter 210)
 + 1 set hardened base jaws type GBK
 + 1 set hardened, reversible top jaws type GUA, ground on chuck
 + set of coverplates

Spindle mounting	Size	KNCS-N 140-35	KNCS-N 170-43	KNCS-N 210-52	KNCS-N 225-65	KNCS-N 260-72	KNCS-N 275-86	KNCS-N 315-91	KNCS-N 340-117	KNCS-N 400-128	KNCS-N 500-155	KNCS-N 630-165
Centering rim small						Z 170 088871		Z 220 088875		Z 300 088879	Z 300 088888	
Centering rim large		Z 120 088860	Z 140 088862	Z 170 088865	Z 170 088868	Z 220 088872	Z 220 067916	Z 300 088876	Z 300 067926	Z 380 088880	Z 380 088883	Z 380 088886
A 05		088861	088863									
A 06			088864	088866	088869	088873	067917					
A 08				088867	088870	088874	067918	088877	067927			
A 11								088878	067928	088881	088884	
A 15										088882	088885	088887



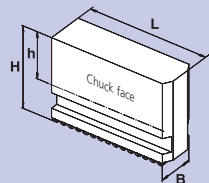
GBK
Hardened base jaws

Chuck	KNCS-N 140	KNCS-N 170	KNCS-N 210	KNCS-N 225	KNCS-N 260	KNCS-N 275	KNCS-N 315	KNCS-N 340	KNCS-N 400	KNCS-N 500	KNCS-N 630
Jaw type	GBK 140	GBK 160	GBK 200	GBK 200	GBK 250	GBK 250	GBK 315	GBK 315	GBK 400	GBK 500	GBK 630
Id. No.	012438	012439	012440	012440	012441	012441	012442	012442	012443	012444	012445
B	20	20	22	22	26	26	32	32	32	45	45
H	27.5	27.5	29.5	29.5	37	37	43	43	43	57	57
L	56	65	85	85	104	104	115	115	125	160	200
N	18	18	20	20	20	20	20	20	26	30	30
S	8	8	10	10	12	12	12	12	12	18	18
kg/set	0.6	0.7	1.0	1.0	1.8	1.8	2.7	2.7	3.0	7.1	9.0



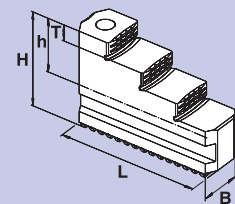
WAK
Soft top jaws

Chuck	KNCS-N 140	KNCS-N 170	KNCS-N 210	KNCS-N 225	KNCS-N 260	KNCS-N 275	KNCS-N 315	KNCS-N 340	KNCS-N 400	KNCS-N 500	KNCS-N 630
Jaw type	WAK 140-10	WAK 160-10	WAK 200-10	WAK 200-10	WAK 250-10	WAK 250-10	WAK 250-10	WAK 250-10	WAK 400-10	WAK 500-10	WAK 500-10
Id. No.	012490	012491	012492	012492	012493	012493	012493	012493	012494	012495	012495
B	20	20	22	22	30	30	30	30	35	45	45
H	35.5	35.5	42	42	50	50	50	50	54	75.5	75.5
L	69	85	105	105	125	125	125	125	145	180	180
A	26	42	50	50	70	70	70	70	74	100	100
kg/set	0.9	1.2	2.0	2.0	3.6	3.6	3.6	3.6	5.8	13.7	13.7



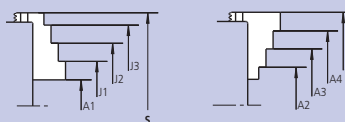
UVB
Soft monoblock jaws

Chuck	KNCS-N 140	KNCS-N 170	KNCS-N 210	KNCS-N 225	KNCS-N 260	KNCS-N 275	KNCS-N 315	KNCS-N 340	KNCS-N 400	KNCS-N 500	KNCS-N 630
Jaw type	UVB 140	UVB 160	UVB 200	UVB 200	UVB 250	UVB 250	UVB 315	UVB 315	UVB 400	UVB 500	UVB 630
Id. No.	012446	012447	012448	012448	012449	012449	012450	012450	012451	012452	012453
B	20	20	22	22	26	26	32	32	32	45	45
H	55.5	60	64.5	64.5	84	84	90	90	100	124	134
h	35	40	40	40	55	55	56	56	66	77	87
L	58	69	77	77	97	97	118	118	145	175	230
kg/set	1.35	1.7	2.0	2.0	4.2	4.2	6.6	6.6	9.0	19.5	27.5



GST
Hardened stepped monoblock jaws

Gripping ranges



Chuck	KNCS-N 140	KNCS-N 170	KNCS-N 210	KNCS-N 225	KNCS-N 260	KNCS-N 275	KNCS-N 315	KNCS-N 340	KNCS-N 400	KNCS-N 500	KNCS-N 630
Jaw type	GST 160-2	GST 170	GST 210	GST 210	GST 260	GST 260	GST 315	GST 315	GST 400	GST 500	GST 500
Id. No.	012454	035867	035863	035863	037623	037623	012457	012457	012458	012459	012459
B	20	20	22	22	26	26	32	32	32	45	45
H	43.5	43.5	51	51	60	60	66	66	70	93	93
h	23	23	26	26	31	31	32	32	36	46	46
L	58	65	84	84	100	100	117	117	137	175	175
T	7	7	8	8	10	10	10	10	11	20	20
kg/set	0.6	0.7	1.3	1.3	1.9	1.9	3.4	3.4	4.4	11.7	11.7
A1	5-40	6-59	10-96	12-93	10-98	14-113	20-115	46-141	48-173	70-225	40-240
A2	35-70	42-89	56-130	48-130	62-150	66-165	85-180	111-206	116-238	170-320	125-335
A3	66-101	73-120	96-170	88-170	111-200	115-215	140-235	166-261	184-308	315-470	292-500
A4	97-132	104-151	136-210	128-210	161-250	165-265	195-290	221-316	252-378	-	-
J1	39-72	44-78	70-147	63-144	63-149	67-164	80-170	106-196	118-243	-	-
J2	69-103	74-110	109-187	102-184	112-199	116-214	135-225	161-251	186-310	180-330	140-340
J3	99-134	105-141	149-228	142-224	161-249	165-264	190-282	216-308	253-378	325-475	296-505
J4	131-163	135-182	186-260	178-260	212-300	216-315	255-350	281-376	328-448	425-560	400-595
S	166	198	244	265	303	318	350	376	456	585	-