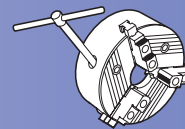


0

Manual chucks

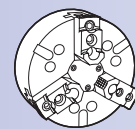
Page 5



1

Closed center power chucks

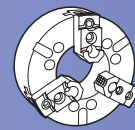
Page 29



2

Open center power chucks

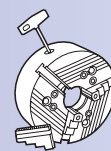
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3

Quick jaw change power chucks

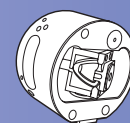
Page 99



4

Pull-down chucks ■ Compensating chucks
Indexing chucks ■ Shaft chucks
Column chucks ■ 6 jaw 2+2+2 chucks

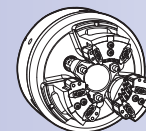
Page 139



5

Diaphragm chucks

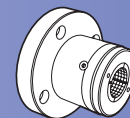
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6

Collet chucks ■ Bar pulling chucks

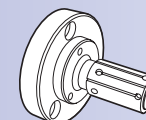
Page 223



7

Manual or power operated expanding mandrels
Adapter flanges

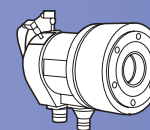
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8

Closed center cylinders ■ Open center cylinders
Double piston cylinders

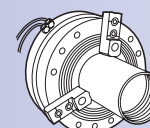
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9

Pneumatic/hydraulic front-end chucks
Control units

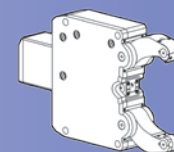
Page 269



10

Self-centering steady rests

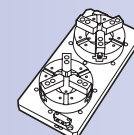
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11

Static chucks pneumatic / hydraulic

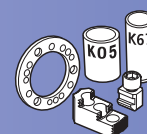
Page 351



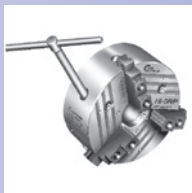
12

Chuck adapters ■ Clamping jaws ■ T-nuts ■ Grippers
Gripping force meter ■ Grease ■ Accessories

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Manual chucks



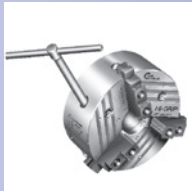
HG-N

Tongue & groove
Jaw system original SMW

Manual chucks Ø 160 - 630 mm

- with through-hole – QUICK JAW CHANGE
- 3 jaws

Page 6



HG-F

Tongue & groove
Jaw system FORKARDT

Manual chucks Ø 160 - 400 mm

- with through-hole – QUICK JAW CHANGE
- 3 jaws

Page 12



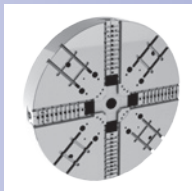
HG-2G

Tongue & groove
Jaw system original SMW

Manual chucks Ø 400 - 630 mm

- with through-hole
- 3 jaws
- lubrication channels in the jaw guide ways
- mechanic sealed - low maintenance

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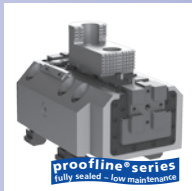
PTF

Tongue & groove
Manual clamping and radial setting of jaws

High precision 4 jaws independent
manual chucks Ø 1000 - 2000 mm

- closed center
- 4 jaws

Page 24



JBX

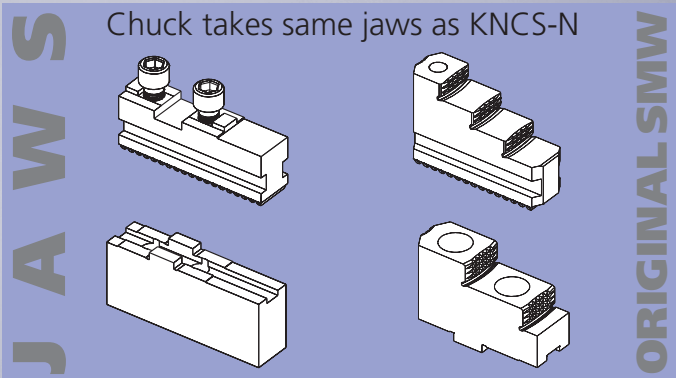
Tongue & groove
Manual jaw box

High precision, resistance and
power manual jaw

- accessory for face plates or chucks
- internal or external clamping

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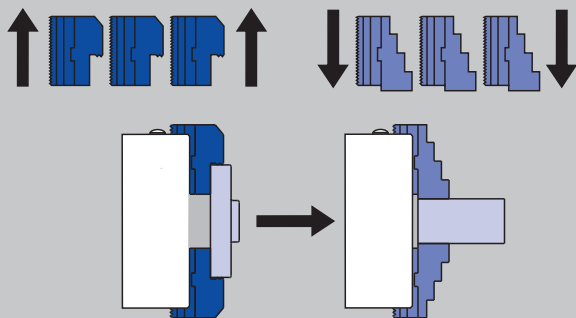
Quick jaw change



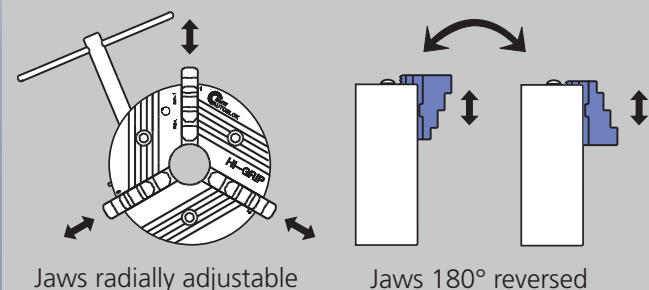
HG-N



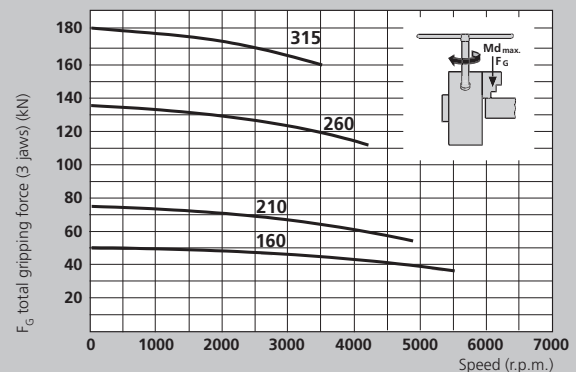
- Jaw change in less than 1 minute



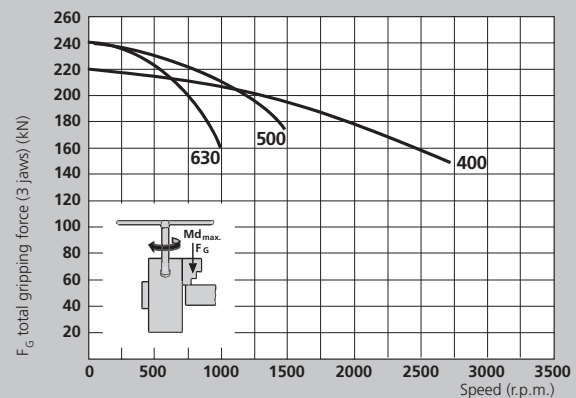
- Universal, because jaws can be radially adjusted and reversed = less jaw sets



For highest speeds
Flat gripping force curve



- The max. gripping force is the total, acting on the 3 jaws, obtained by applying to the chuck the max. allowed driving torque. The data refers to a chuck newly maintained accordingly to their service manual, using SMW K05 grease.



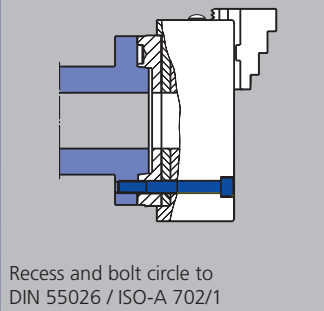
- The dynamic gripping forces have been measured using hardened standard stepped monoblock jaws type GST placed in a position not exceeding the outer diameter of the chuck.

⚠ **Safety advice/danger of damage:**

When using taller/havier jaws and/or clamping on a more external position reduce driving torque/rotating speed accordingly.

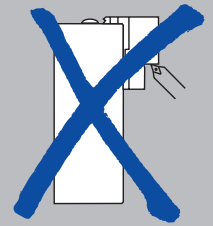
manual chuck HI-GRIP®

Direct mounting



Recess and bolt circle to DIN 55026 / ISO-A 702/1

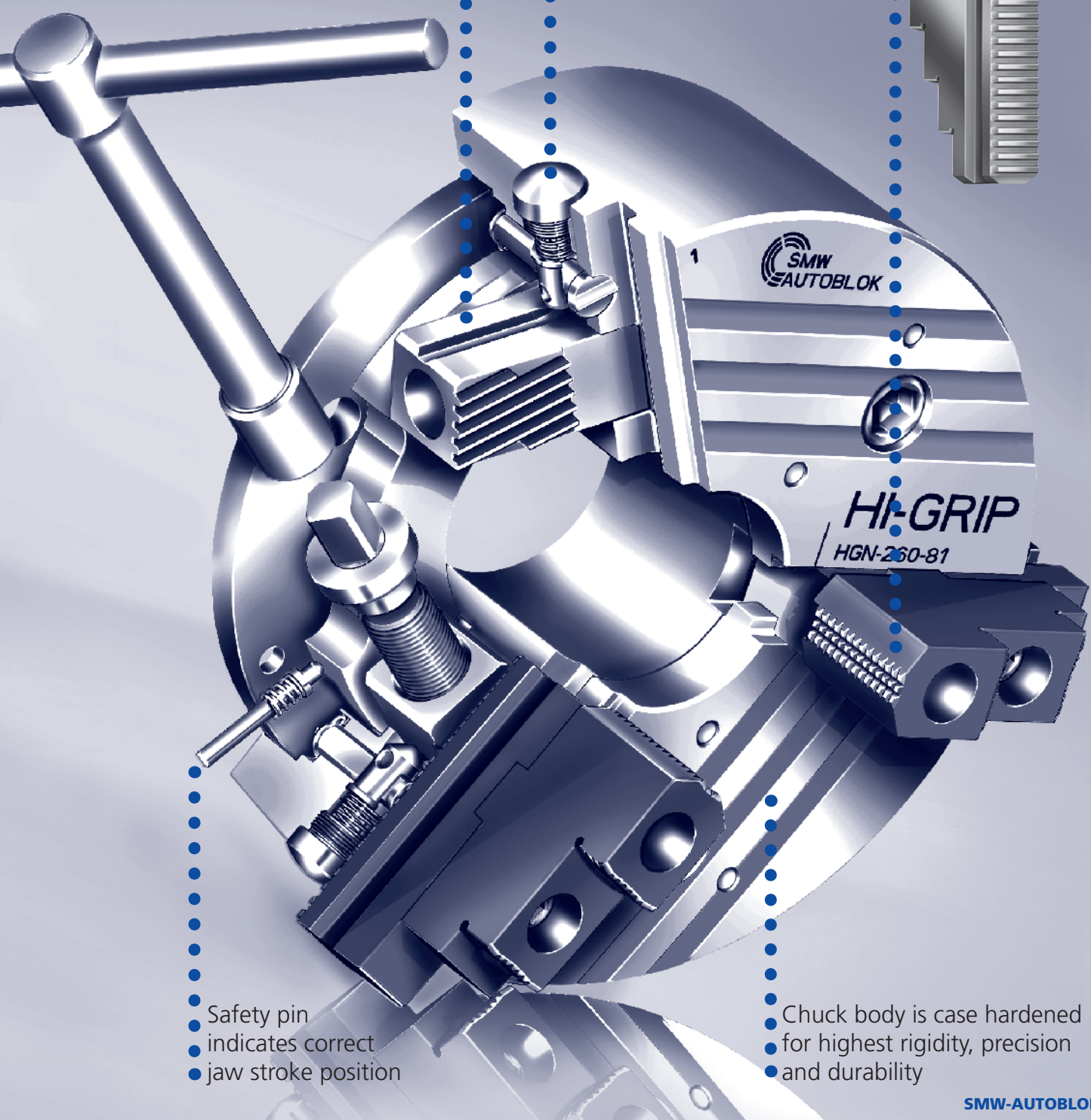
■ No re boring of already machined jaws necessary, because of runout < 0.02 (e.g. HG-N 210)



Wedge bar design guarantees highest precision, concentricity and repeatability as well as highest gripping forces

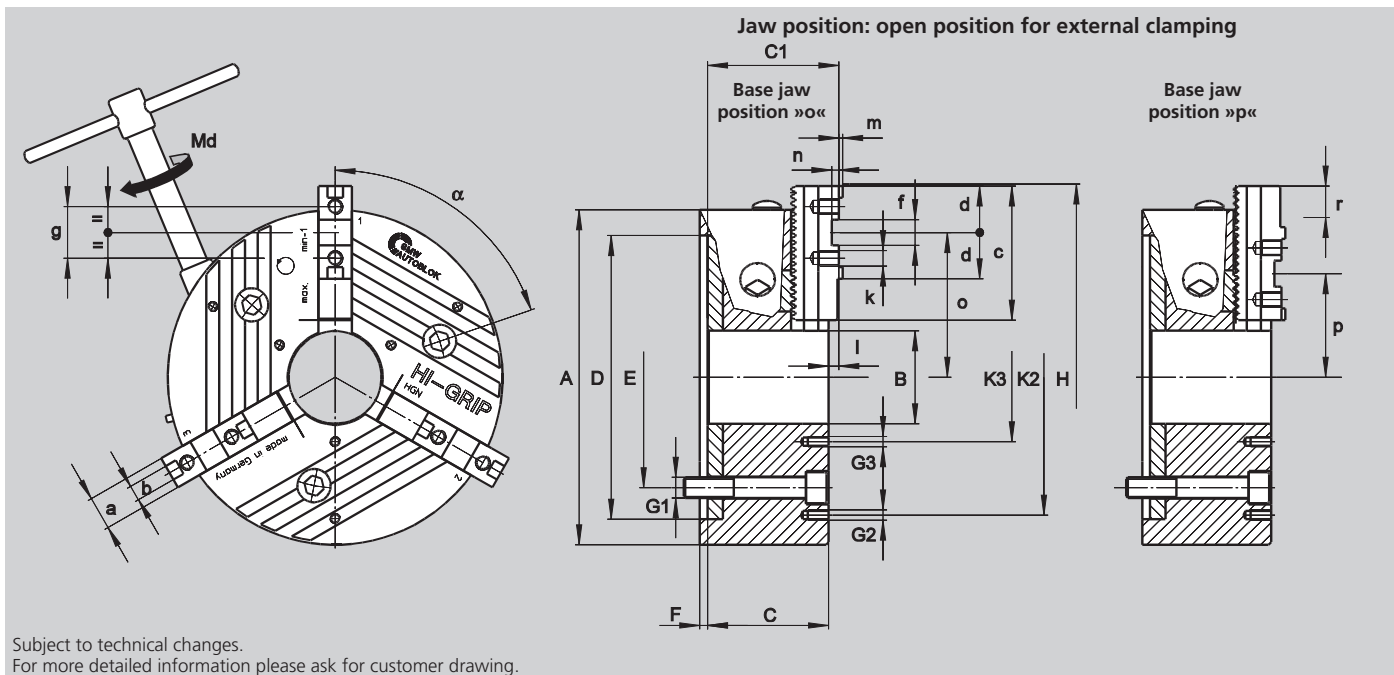
• Safety jaw release with interlock

• Jaw system SMW



• Safety pin indicates correct jaw stroke position

• Chuck body is case hardened for highest rigidity, precision and durability

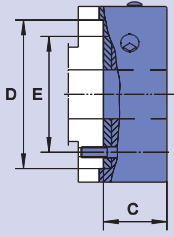


Subject to technical changes.
For more detailed information please ask for customer drawing.

SMW-AUTOBLOK Type HG-N		160-46	210-60	260-81	315-102	400-128	500-165	630-254
Mounting	Size	Z140	Z170	Z220	Z300	Z380	Z380	Z380
	A	165	210	260	315	400	500	630
	B	46	60	81	102	128	165	254
	C	64	85.5	93.7	110.8	125	136	143
	C1	71	90.4	102	120.1	134.3	146	153
H6	D	140	170	220	300	380	380	380
	E	104.8	133.4	171.4	235	330.2	330.2	330.2
	F	5	6	6	6	6	8	8
	G1	M10	M12	M16	M20	M24	M24	M24
	G2	-	M10/3 x 120°	M10/3 x 120°	M10/3 x 120°	M12/3 x 120°	M16/9 x 40°	M16/6 x 60°
	G3	M5/3 x 120°	M6/3 x 120°	M8/3 x 120°	M10/3 x 120°	M12/3 x 120°	M12/3 x 120°	M12/3 x 120°
Swing dia.	H	194	244	300	358	426	530	685
	K2	-	168	210	268	330	420	550
	K3	75	75	95	120	152	195	290
	α°	76	74	71	71	71	71	74
	β°	-	60	60	60	60	20	30
Master jaw		GBK 160	GBK 200	GBK 250	GBK 315	GBK 400	GBK 500	GBK 630
	a	20	22	26	32	32	45	45
f7	b	8	10	12	12	12	18	18
	c	65	85	104	115	125	160	200
	d	28	33	36	36	43	50	50
H7	f	18	20	20	20 (26)	26	30	30
	g	32	40	40	40 (54)	54	60	60
Thread/thread depth	k	M8/12	M8/13	M12/15	M12/17	M12/17	M16/34	M16/34
	l	6	4.9	8.3	9.3	9.3	10	10
	m	2.5	2.5	3	3	3	4	4
	n	5	4.5	5.5	6	7	9	9
max./min.	o	69/51.2	88/64.5	112.4/79.4	141.3/102.8	168.8/113.8	211/141	291.5/200.5
max./min.	p	59.3/40.5	69/45.5	80.6/47.6	97.3/58.8	129.8/74.8	150/80	191.5/100.5
Base jaw tooth pitch	-	4.7	4.7	5.5	5.5	5.5	7	7
Master jaw offset	r	18.8	23.5	33	38.5	55	70	91
Master jaw offset	teeth	4	5	6	7	10	10	10
Usable jaw stroke	mm	5.9	6.4	7.4	9.6	11.4	11.5	13
max. total gripping force	kN	60	75	130	180	220	250	250
at max. torque Md	Nm	80	120	160	200	250	260	260
Speed	r.p.m.	5500	4800	4200	3500	2700	1500	1000
Weight without jaws	kg	8.3	19	32	53	103	161	270
Moment of inertia	kg·m²	0.03	0.09	0.25	0.60	1.9	4.5	12

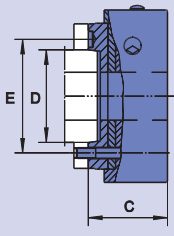
Ordering review

Chuck with center mounting DIN 6350



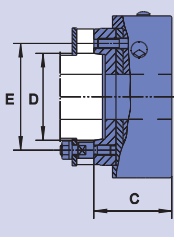
HG-N	160-46		210-60		260-81		315-102		400-128		500-165		630-254	
Mounting	Z140		Z170		Z220		Z300		Z380		Z380		Z380	
C	81		85.5		94		111		125		136		136	
D	140		170		220		300		380		380		380	
E	104.8		133.4		171.4		235		330.2		330.2		330.2	
Chuck with GBK + WAK														
Id. No.	089310		089538		089550		089562		089574		089584		089708	
Chuck with GST														
Id. No.	089312		089313		089317		089321		089325		089328		089709	
Chuck with GBK + GUA														
Id. No.	089331		089539		089551		089563		089575		089585		089710	

Chuck with ISO-A mounting DIN 55026



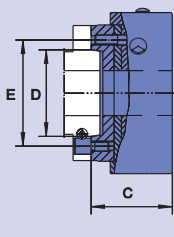
HG-N	160-46		210-60			260-81		315-102		400-128		500-165		630-254	
Mounting	A4	A5	A5	A6	A8	A6	A8	A8	A11	A11	A15	A11	A15	A11	A15
C	101	101	109.5	107.5	125.5	118	119	141	141	165	161	176	172	176	172
D	63.52	82.57	82.57	106.39	139.73	106.39	139.73	139.73	196.88	196.88	285.77	196.88	285.77	196.88	285.77
E	82.6	104.8	104.8	133.4	171.4	133.4	171.4	171.4	235.0	235.0	330.2	235.0	330.2	235.0	330.2
Chuck with GBK + WAK															
Id. No.	089332	089342	090458	089540	089542	089552	089554	089564	089566	089576	089578	089586	089588	089711	089713
Chuck with GST															
Id. No.	089962	089346	090459	089314	089315	089318	089319	089322	089323	089326	089327	089329	089330	089715	089732
Chuck with GBK + GUA															
Id. No.	089427	089434	090460	089541	089543	089553	089555	089565	089567	089577	089579	089587	089589	089749	089760

Chuck with bayonet mounting DIN 55027 Type C



HG-N	160-46		210-60			260-81		315-102		400-128		500-165		630-254	
Mounting	C4	C5	C5	C6	C8	C6	C8	C8	C11	C11	C15	C11	C15	C11	C15
C	101	101	107.5	107.5	125.5	119	119	141	141	161	161	172	172	172	172
D	63.52	82.57	82.57	106.39	139.73	106.39	139.73	139.73	196.88	196.88	285.77	196.88	285.77	196.88	285.77
E	85	104.8	104.8	133.4	171.4	133.4	171.4	171.4	235.0	235.0	330.2	235.0	330.2	235.0	330.2
Chuck with GBK + WAK															
Id. No.	089464	089487	090461	089544	089546	089556	089558	089568	089570	089580	089582	089590	089592	089761	089762
Chuck with GST															
Id. No.	089488	089489	090462	089478	089479	089480	089476	089481	089482	089483	089484	089485	089486	089765	089766
Chuck with GBK + GUA															
Id. No.	089518	089519	090463	089545	089547	089557	089559	089569	089571	089581	089583	089591	089593	089786	089802

Chuck with Camlock mounting DIN 55029 Type S



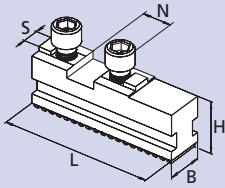
HG-N	160-46		210-60			260-81		315-102		400-128		500-165		630-254	
Mounting	S4	S5	S5	S6	S8	S6	S8	S8	S11	S11	S15	S11	S15	S11	S15
C	109	109	118.5	118.5	125.5	132	132	154	154	175	175	186	186	186	186
D	63.52	82.57	82.57	106.39	139.73	106.39	139.73	139.73	196.88	196.88	285.77	196.88	285.77	196.88	285.77
E	82.6	104.8	104.8	133.4	171.4	133.4	171.4	171.4	235.0	235.0	330.2	235.0	330.2	235.0	330.2
Chuck with GBK + WAK															
Id. No.	089520	089528	090464	089901	089905	089909	089913	089917	089921	089925	089929	089933	089937	089803	089832
Chuck with GST															
Id. No.	089602	089663	089996	089899	089903	089907	089911	089915	089919	089923	089927	089931	089935	089843	089897
Chuck with GBK + GUA															
Id. No.	089668	089674	090466	089902	089906	089910	089914	089918	089922	089926	089930	089934	089938	089942	089955

Parts included: Fixing elements (screws resp. studs resp. camlock bolts)

QUICK JAW CHANGE

GBK

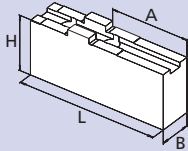
Hardened base jaws



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

WAK

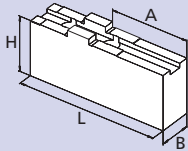
Soft top jaws



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

WAKS

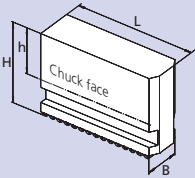
Wide soft top jaws



Chuck	HG-N 160	HG-N 210	HG-N 260	HG-N 315	HG-N 400	HG-N 500	HG-N 630
Jaw type	WAKS 140-10	WAKS 200-30	WAKS 250-20	WAKS 250-30	WAKS 400-30	WAKS 500-30	WAKS 500-30
Id. No.	012496	012497	012498	012499	012500	012501	012501
B	35	40	60	80	80	90	90
H	35.5	36	55	55	64	73	73
L	63	70	90	90	100	130	130
A	25	27	44	44	44	65	65
kg/set	1.5	1.9	6.2	8.5	11.0	16.4	16.4

UVB

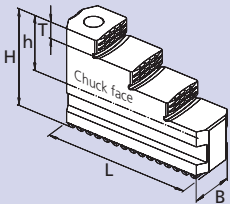
Soft monoblock jaws



Chuck	HG-N 160	HG-N 210	HG-N 260	HG-N 315	HG-N 400	HG-N 500	HG-N 630
Jaw type	UVB 160	UVB 200	UVB 250	UVB 315	UVB 400	UVB 500	UVB 630
Id. No.	012447	012448	012449	012450	012451	012452	012453
B	20	22	26	32	32	45	45
H	60	70	90	100	100	134	134
h	40	45	61	66	66	87	87
L	69	83	107	119	146.5	175	230
kg/set	1.7	2.8	4.2	6.9	10	23	30

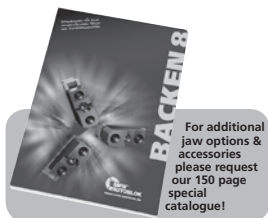
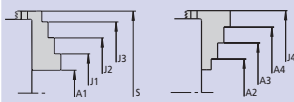
GST

Hardened stepped monoblock jaws

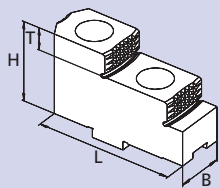


Chuck	HG-N 160	HG-N 210	HG-N 260	HG-N 315	HG-N 400	HG-N 500	HG-N 630
Jaw type	GST 170	GST 210	GST 260	GST 315	GST 400	GST 500	GST 500
Id. No.	035867	035863	037623	012457	012458	012459	012459
B	20	22	26	32	32	45	45
H	43.5	51	60	66	70	93	93
h	23	26	31	32	36	46	46
L	65	84	100	117	137	175	175
T	7	8	10	10	11	20	20
kg/set	0.7	1.3	1.9	3.4	4.4	11.7	11.7
A1	6-59	10-96	10-98	20-115	53-173	65-195	153-313
A2	42-89	56-130	62-150	85-180	116-238	160-285	241-401
A3	73-120	96-170	111-200	140-235	184-308	310-435	391-551
A4	104-151	136-210	161-250	195-290	252-378	-	-
J1	44-78	70-147	63-149	80-170	118-243	-	-
J2	74-110	109-187	112-199	135-225	186-310	170-295	254-414
J3	105-141	149-228	161-249	190-282	253-378	320-445	404-564
J4	135-182	186-260	212-300	255-350	328-448	-	-
S	198	244	303	350	456	540	660

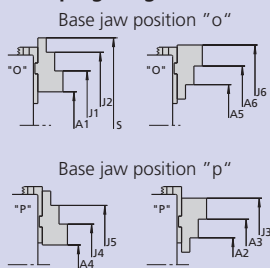
Clamping ranges



GUA
Hardened reversible stepped top jaws



Clamping ranges



Chuck	HG-N 160	HG-N 210	HG-N 260	HG-N 315	HG-N 400	HG-N 500	HG-N 630
Jaw type	GUA 160	GUA 200	GUA 250	GUA 250	GUA 400	GUA 500	GUA 500
Id. No.	012484	012485	012486	012486	012487	012488	012488
B	20	22	30	30	36	45	45
H	36.5	38	50	50	56	70	70
L	63	72	90	90	105	130	130
T	7.5	10	14	14	15	20	20
kg/set	0.6	0.8	1.9	1.9	3.2	10.8	10.8
A1	32-69	55-111	73-161	120-205	138-258	190-336	190-336
A2	60-98	69-125	45-101	48-120	78-188	80-200	80-200
A3	85-123	96-152	125-181	130-200	186-298	200-320	200-320
A4	13-51	17-73	20-97	36-188	60-183	55-200	55-200
A5	78-116	104-163	76-165	120-205	143-268	190-335	190-335
A6	103-141	131-190	156-245	205-285	253-378	315-455	315-455
J1	91-129	117-174	152-240	202-285	218-338	305-450	305-450
J2	116-154	144-201	233-321	280-365	328-448	425-570	425-570
J3	144-181	158-215	204-259	208-280	263-380	335-450	335-450
J4	74-111	80-136	101-177	110-200	138-263	170-310	170-310
J5	99-136	107-163	180-257	198-280	248-373	290-430	290-430
J6	162-200	193-253	235-323	276-365	333-458	425-570	425-570
S	198	196-253/255	333	390	-	590	590



Important for maintenance and safe operation, to be ordered with the chuck

Grease KO5®

Special grease for manual and power chucks



Cartridge 14 Oz. (DIN 1284)
Grease content 500 g
Id. No. 016440

Can 1000 g
Id. No. 011881



- High adhesion
- High resistance against coolant
- High load bearing capacity
- Low friction coefficient
- High gripping force
- Avoids tribocorrosion

Grease gun

Grease gun (DIN 1283) for cartridges 14 Oz. (DIN 1284).

■ Also refillable from grease can 1000 g.



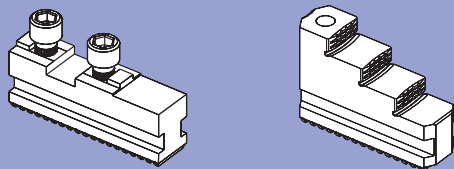
Lubrication set Id. No. 083726

Supply range

- Grease gun
- 1 Adapter flexible for high pressure grease nipple
- 1 Adapter for cone grease nipple

Quick jaw change

J A W S

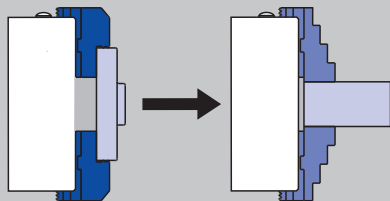


SYSTEM FORKARDT

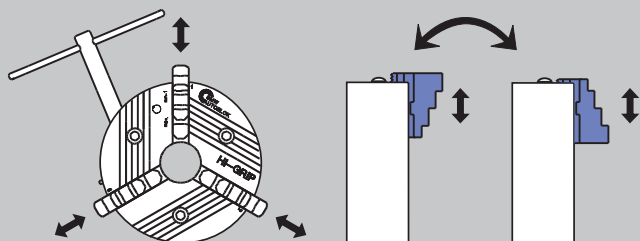
HG-F



- Jaw change in less than 1 minute



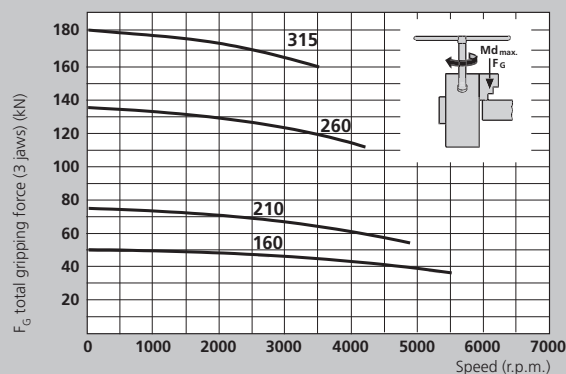
- Universal, because jaws can be radially adjusted and reversed = less jaw sets



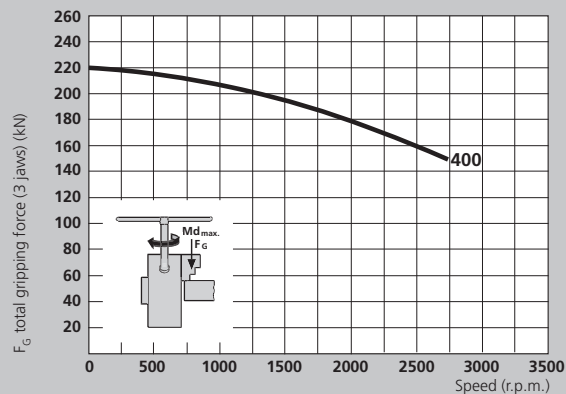
Jaws radially adjustable

Jaws 180° reversed

For highest speeds
Flat gripping force curve



- The max. gripping force is the total, acting on the 3 jaws, obtained by applying to the chuck the max. allowed driving torque. The data refers to a chuck newly maintained accordingly to their service manual, using SMW K05 grease.



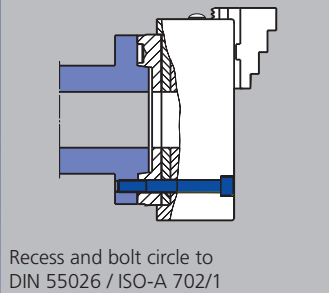
- The dynamic gripping forces have been measured using hardened standard stepped monoblock jaws type GST placed in a position not exceeding the outer diameter of the chuck.

⚠ Safety advice/danger of damage:

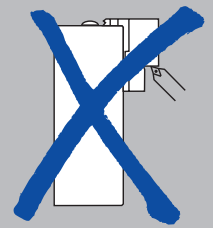
When using taller/havier jaws and/or clamping on a more external position reduce driving torque/rotating speed accordingly.

manual chuck HI-GRIP®

Direct mounting



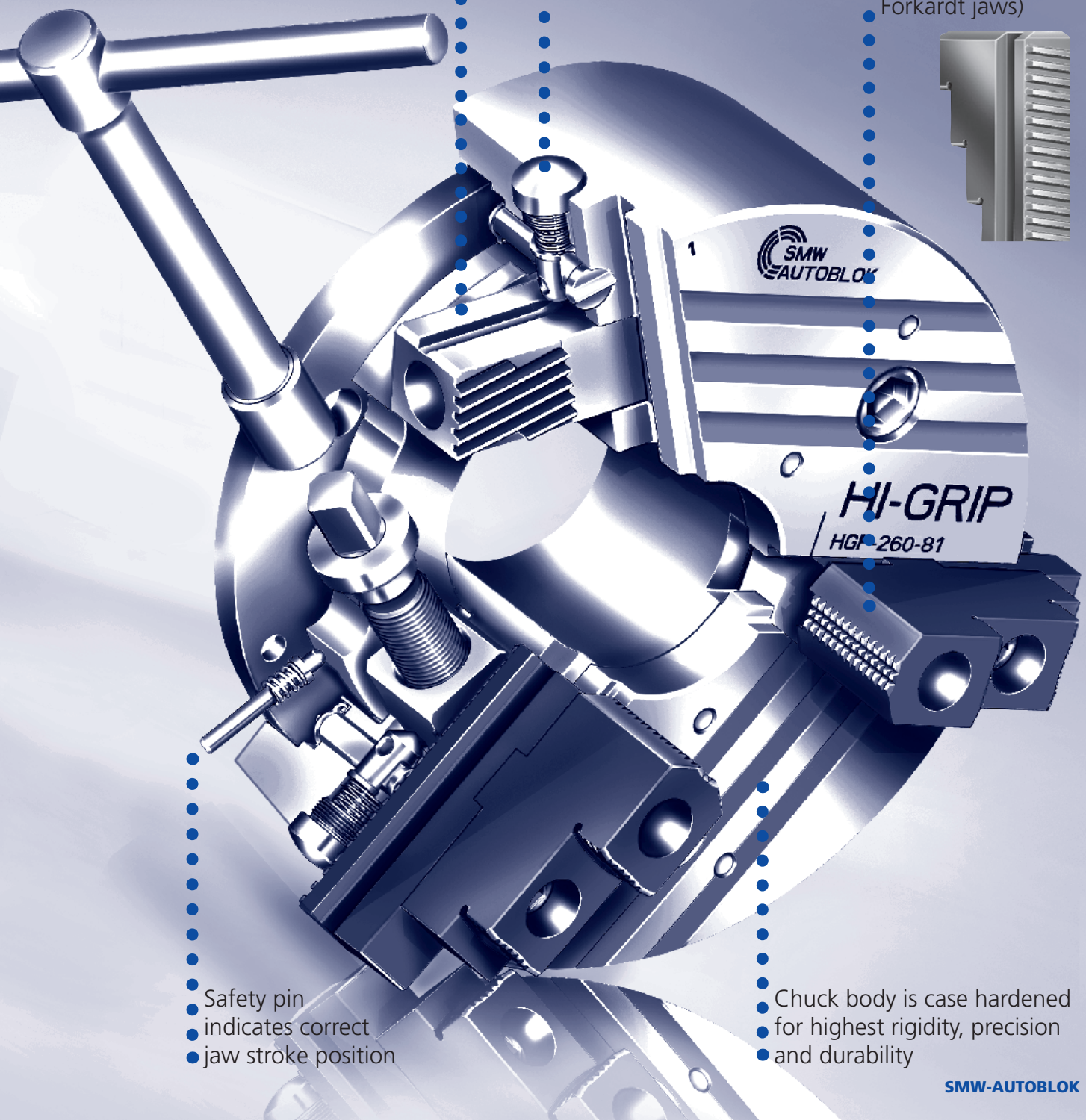
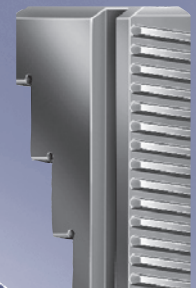
■ No re boring of already machined jaws necessary, because of runout < 0.02 (e.g. HG-F 210)



Wedge bar design guarantees highest precision, concentricity and repeatability as well as highest gripping forces

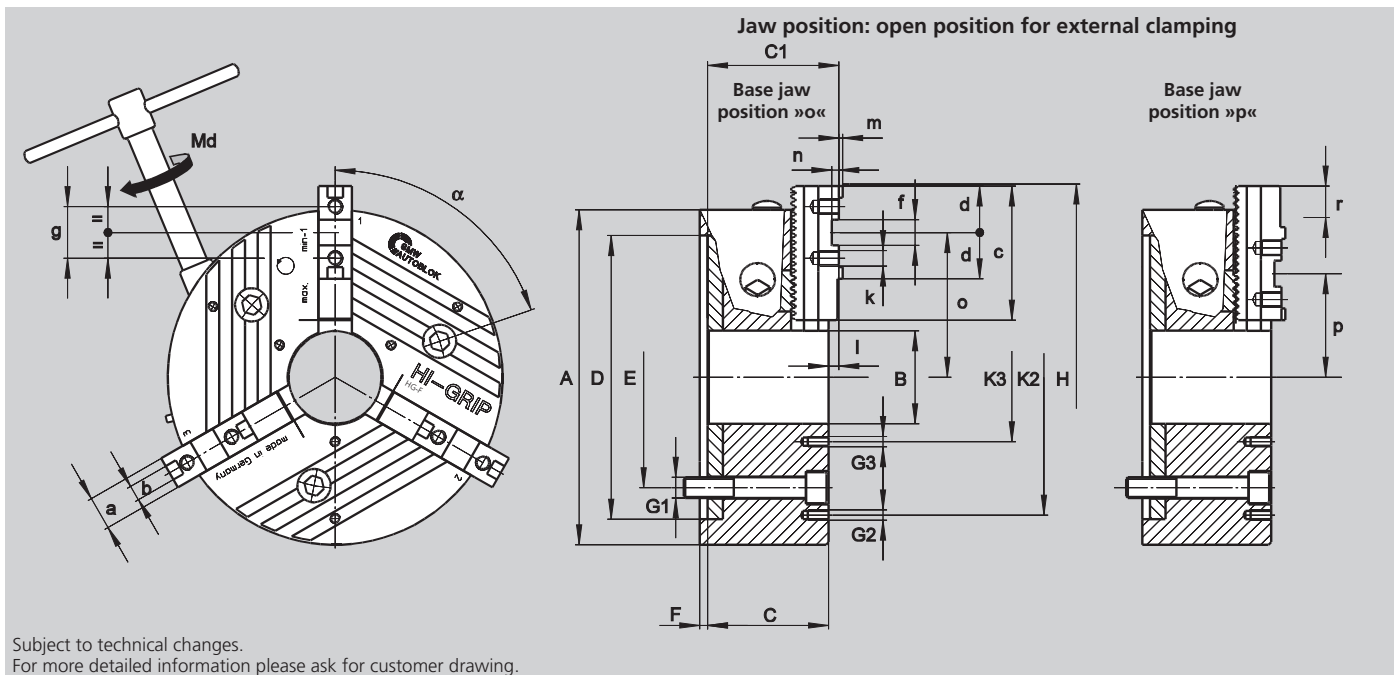
• Safety jaw release with interlock

• Jaw system "F" (compatible with Forkardt jaws)



• Safety pin indicates correct jaw stroke position

• Chuck body is case hardened for highest rigidity, precision and durability

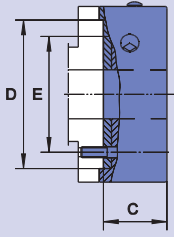


Subject to technical changes.
For more detailed information please ask for customer drawing.

SMW-AUTOBLOK Type HG-F		160-46	210-60	260-81	315-102	400-128
Mounting	Size	Z140	Z170	Z220	Z300	Z380
H6	A	165	210	260	315	400
	B	46	60	81	102	128
	C	64	85.5	94	111	132
	C1	71	92.7	101.7	120.1	141.9
	D	140	170	220	300	380
	E	104.8	133.4	171.4	235	330.2
	F	5	6	6	6	6
	G1	M10	M12	M16	M20	M24
	G2	-	M10/3 x 120°	M10/3 x 120°	M10/3 x 120°	M12/3 x 120°
	G3	M5/3 x 120°	M6/3 x 120°	M8/3 x 120°	M10/3 x 120°	M12/3 x 120°
Swing dia.	H	195	250	300	372	492
	K2	-	168	210	268	330
	K3	75	75	95	120	160
	α°	68	64	66	65.5	64.5
	β°	-	60	60	55	45
Master jaw		MFG 160	MFG 200	MFG 250	MFG 315	MFG 400
	a	20	22	26	32	45
f7	b	8	10	12	12	18
	c	74	90	110	125	160
	d	28	33	36	36	50
H7	f	18	20	20	26	30
	g	32	40	40	54	60
	k	M8x1/12	M8x1/13	M12x1.5/15	M12x1.5/17	M16/30
Thread/thread depth	l	6	7.2	7.7	9.3	9.9
	m	2.5	3	3	3	4
	n	5	6	6	8	9
	o	69.5/55.1	86.5/62	112.2/82.4	149/93	193.6/125.6
max./min.	p	51.5/37.1	67.3/42.8	74.3/44.3	103/54	134.3/66.3
Base jaw tooth pitch	-	4.8	4.9	6	7	8.5
Master jaw offset	r	14.4	24.5	30	56	68
Master jaw offset	teeth	3	5	5	8	8
Usable jaw stroke	mm	5.9	6.2	7.4	9.6	11.4
max. total gripping force	kN	60	75	130	180	220
at max. torque Md	Nm	80	120	160	200	250
Speed	r.p.m.	5500	4800	4200	3500	2700
Weight without jaws	kg	8.3	19	32	53	103
Moment of inertia	kg·m ²	0.03	0.09	0.25	0.60	1.9

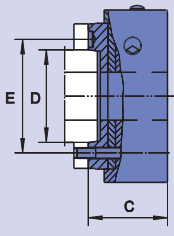
Ordering review

Chuck with center mounting DIN 6350



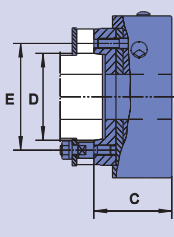
HG-N	160-46		210-60		260-81		315-102		400-128	
Mounting	Z140		Z170		Z220		Z300		Z380	
C	64		85.5		94		111		132	
D	140		170		220		300		380	
E	104.8		133.4		171.4		235		330.2	
Chuck with MFG + WAK										
Id. No.	090521		090026		090058		090090		090122	
Chuck with FST										
Id. No.	090523		090028		090060		090092		090124	
Chuck with MFG + GUA										
Id. No.	090522		090027		090059		090091		090123	

Chuck with ISO-A mounting DIN 55026



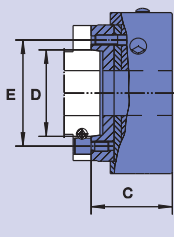
HG-N	160-46		210-60			260-81		315-102		400-128	
Mounting	A4	A5	A5	A6	A8	A6	A8	A8	A11	A11	A15
C	84	79	109.5	107.5	125.5	118	119	141	141	168	168
D	63.51	82.56	82.56	106.39	139.73	106.39	139.73	139.73	196.88	196.88	285.77
E	82.6	104.8	104.8	133.4	171.4	133.4	171.4	171.4	235.0	235.0	330.2
Chuck with MFG + WAK											
Id. No.	090524	090527	090543	090030	090034	090062	090066	090094	090098	090126	090130
Chuck with FST											
Id. No.	090526	090529	090545	090032	090036	090064	090068	090096	090100	090128	090132
Chuck with MFG + GUA											
Id. No.	090525	090528	090544	090031	090035	090063	090067	090095	090099	090127	090131

Chuck with bayonet mounting DIN 55027 Type C



HG-N	160-46		210-60			260-81		315-102		400-128	
Mounting	C4	C5	C5	C6	C8	C6	C8	C8	C11	C11	C15
C	84	84	107.5	107.5	125.5	119	119	141	141	168	168
D	63.51	82.56	82.56	106.39	139.73	106.39	139.73	139.73	196.88	196.88	285.77
E	85	104.8	104.8	133.4	171.4	133.4	171.4	171.4	235.0	235.0	330.2
Chuck with MFG + WAK											
Id. No.	090530	090533	090546	090038	090042	090070	090074	090102	090106	090134	090138
Chuck with FST											
Id. No.	090532	090535	090548	090040	090044	090072	090076	090104	090108	090136	090140
Chuck with MFG + GUA											
Id. No.	090531	090534	090547	090039	090043	090071	090075	090103	090107	090135	090139

Chuck with camlock mounting DIN 55029 Type S



HG-N	160-46		210-60			260-81		315-102		400-128	
Mounting	S4	S5	S5	S6	S8	S6	S8	S8	S11	S11	S15
C	92	92	118.5	118.5	125.5	132	132	154	154	182	182
D	63.51	82.56	82.56	106.39	139.73	106.39	139.73	139.73	196.88	196.88	285.77
E	82.6	104.8	104.8	133.4	171.4	133.4	171.4	171.4	235.0	235.0	330.2
Chuck with MFG + WAK											
Id. No.	090536	090539	090549	090046	090050	090078	090082	090110	090114	090142	090146
Chuck with FST											
Id. No.	090538	090541	090551	090048	090052	090080	090084	090112	090116	090144	090148
Chuck with MFG + GUA											
Id. No.	090537	090540	090550	090047	090051	090079	090083	090111	090115	090143	090147

Parts included: Fixing elements (screws resp. studs resp. camlock bolts)

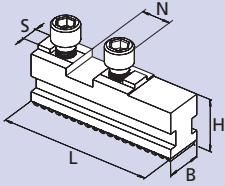
HG-F

JAWS

QUICK JAW CHANGE Jaw system Forkardt

MFG

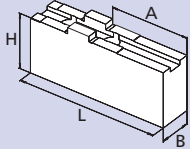
Hardened base jaws



Chuck	HG-F 160	HG-F 210	HG-F 260	HG-F 315	HG-F 400
Jaw type	MFG 160	MFG 200	MFG 250	MFG 315	MFG 400
Id. No.	081303	081304	081305	081306	081307
B	20	22	26	32	45
H	29.5	35	40	46	55
L	74	90	110	125	160
N	18	20	20	26	30
S	8	10	12	12	18
kg/set	0.8	1.2	2.0	3.3	7.3

WAK

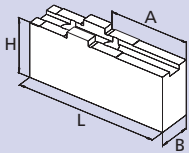
Soft top jaws



Chuck	HG-F 160	HG-F 210	HG-F 260	HG-F 315	HG-F 400
Jaw type	WAK 160-10	WAK 200-10	WAK 250-10	WAK 400-10	WAK 500-10
Id. No.	012491	012492	012493	012494	012495
B	20	22	30	35	50
H	35.5	42	50	54	75.5
L	85	105	125	145	180
A	42	50	70	74	100
kg/set	1.2	2.0	3.6	5.8	13.7

WAKS

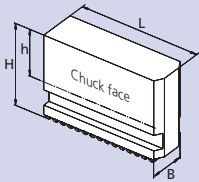
Wide soft top jaws



Chuck	HG-F 160	HG-F 210	HG-F 260	HG-F 315	HG-F 400
Jaw type	WAKS 140-10	WAKS 200-30	WAKS 250-20	WAKS 400-30	WAKS 500-30
Id. No.	012496	012497	012498	012500	012501
B	35	40	60	80	90
H	35.5	36	55	64	73
L	63	70	90	100	130
A	25	27	44	44	65
kg/set	1.5	1.9	6.2	11.0	16.4

BFR

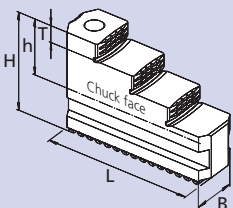
Soft monoblock jaws



Chuck	HG-F 160	HG-F 210	HG-F 260	HG-F 315	HG-F 400
Jaw type	BFR 160	BFR 200	BFR 250	BFR 315	BFR 400
Id. No.	081272	081273	081274	081275	081276
B	20	22	26	32	45
H	45	60	70	81	93
h	24	35	40	46	53
L	79	94	115	140	176
kg/set	1.4	2.6	4.4	7.3	15.7

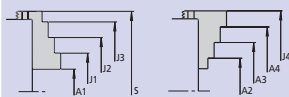
FST

Hardened stepped monoblock jaws

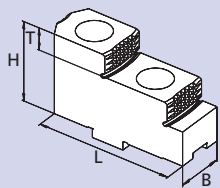


Chuck	HG-F 160	HG-F 210	HG-F 260	HG-F 315	HG-F 400
Jaw type	FST 170	FST 210	FST 250	FST 315	FST 400
Id. No.	081282	081283	081284	081285	081286
B	20	22	26	32	45
H	45	60	70	79	93
h	24	35	40	46	53
L	79	94	114	130	167
T	7.5	1.0	14	15	20
kg/set	1.1	1.9	3.3	5.2	10.8
A1	6-59	10-96	19-99	20-115	48-173
A2	42-89	56-130	76-142	85-180	116-238
A3	73-120	96-170	120-186	140-235	184-308
A4	104-151	136-210	164-230	195-290	252-378
J1	44-78	70-147	81-147	80-170	118-243
J2	74-110	109-187	125-191	135-225	186-310
J3	105-141	149-228	169-235	190-282	253-378
J4	135-182	186-260	211-278	255-350	328-448
S	198	244	280	350	456

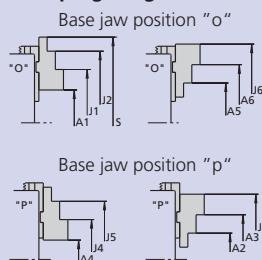
Clamping ranges



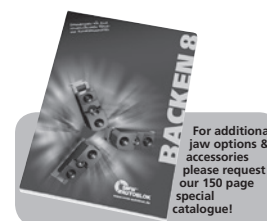
GUA
Hardened reversible
stepped top jaws



Clamping ranges



Chuck	HG-F 160	HG-F 210	HG-F 260	HG-F 315	HG-F 400
Jaw type	GUA 160	GUA 200	GUA 250	GUA 400	GUA 500
Id. No.	012484	012485	012486	012487	012488
B	20	22	30	36	45
H	36.5	38	50	56	70
L	63	72	90	105	130
T	7.5	10	14	15	20
kg/set	0.6	0.8	1.9	3.2	10.8
A1	32-69	55-111	73-161	64-194	108-264
A2	60-98	69-125	45-101	44-108	70-158
A3	85-123	96-152	125-181	156-220	171-259
A4	13-51	17-73	20-97	22-100	24-146
A5	78-116	104-163	76-165	72-202	121-277
A6	103-141	131-190	156-245	134-314	222-378
J1	91-129	117-174	152-240	140-270	223-379
J2	116-154	144-201	233-321	256-382	324-480
J3	144-181	158-215	204-259	323-296	286-374
J4	74-111	80-136	101-177	93-176	138-260
J5	99-136	107-163	180-257	210-288	239-361
J6	162-200	193-253	235-323	260-390	336-492
S	198	196-253/255	333	372	492



Important for maintenance and safe operation, to be ordered with the chuck

Grease KO5®

Special grease for manual and power chucks



Cartridge 14 Oz. (DIN 1284)
Grease content 500 g
Id. No. 016440

Can 1000 g
Id. No. 011881



- High adhesion
- High resistance against coolant
- High load bearing capacity
- Low friction coefficient
- High gripping force
- Avoids tribocorrosion

Grease gun

Grease gun (DIN 1283) for cartridges 14 Oz. (DIN 1284).

■ Also refillable from grease can 1000 g.



Lubrication set Id. No. 083726

Supply range

- Grease gun
- 1 Adapter flexible for high pressure grease nipple
- 1 Adapter for cone grease nipple

NEW GENERATION

The sealed quick jaw change manual chuck

HG-2G

Customer Benefits

	HG-N	HG-2G
Minimized set up times due to the quick jaw change system	■	■
Highest accuracy of the jaw change	■	■
Universal	■	■
Case hardened parts	■	■
Wedge bar drive	■	■
Jaw safety interlock	■	■
Ideal for vertical mounting of chuck		■
Sealed base jaws		■
Sealed chuck body		■
Optimized lubrication in the jaw guides		■
Low maintenance		■

Economic and Efficiency

Example: Maintenance costs at high accumulation of dirt / coolant

	HG-N	HG-2G
Lubrication interval	every shift	every 3rd shift
Required time for lubricating	10 Min.	10 Min.
Working days/year	230	230
Required time/year	2.300 Min.	767 Min.
Machine costs/hour	€ 60.–	€ 60.–
Total costs per year	€ 2.300.–	€ 767.–
Profit per year	at 1-shift operation	€ 1.533.–
	at 2-shift operation	€ 3.066.–
	at 3-shift operation	€ 4.599.–

Clamping glossary

HG-2G: Evolution of the quick jaw change power chuck HG-N. The HG-2G features additional seals and an improved lubrication system for low maintenance. The chuck still offers all the advantages same as the HG-N.

The proven wedge bar drive guaranties unmatched accuracy and rigidity. A low loss of grip force due to centrifugal force makes the chuck ideal for high speed applications.

Sealing: The HG-2G is sealed by seals attached to both faces of the base jaws and additional seals in the chuck body. The seals protect the chuck against penetration of dirt and swarf. Also the wedge bar is protected by mechanical seals.

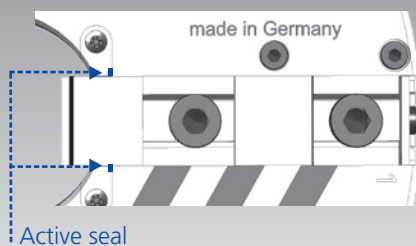
Low Maintenance: The lubrication system of the HG-2G is optimized. Additional lubrication channels and grease pockets integrated in the jaw guide ways ensure constant clamping force. The lubrication intervals are significantly longer reducing down times and cost for maintenance.

Mass production: The sealing and the new lubrication system make the HG-2G also suitable for use on machining centers or turning and milling centers in vertical operation.

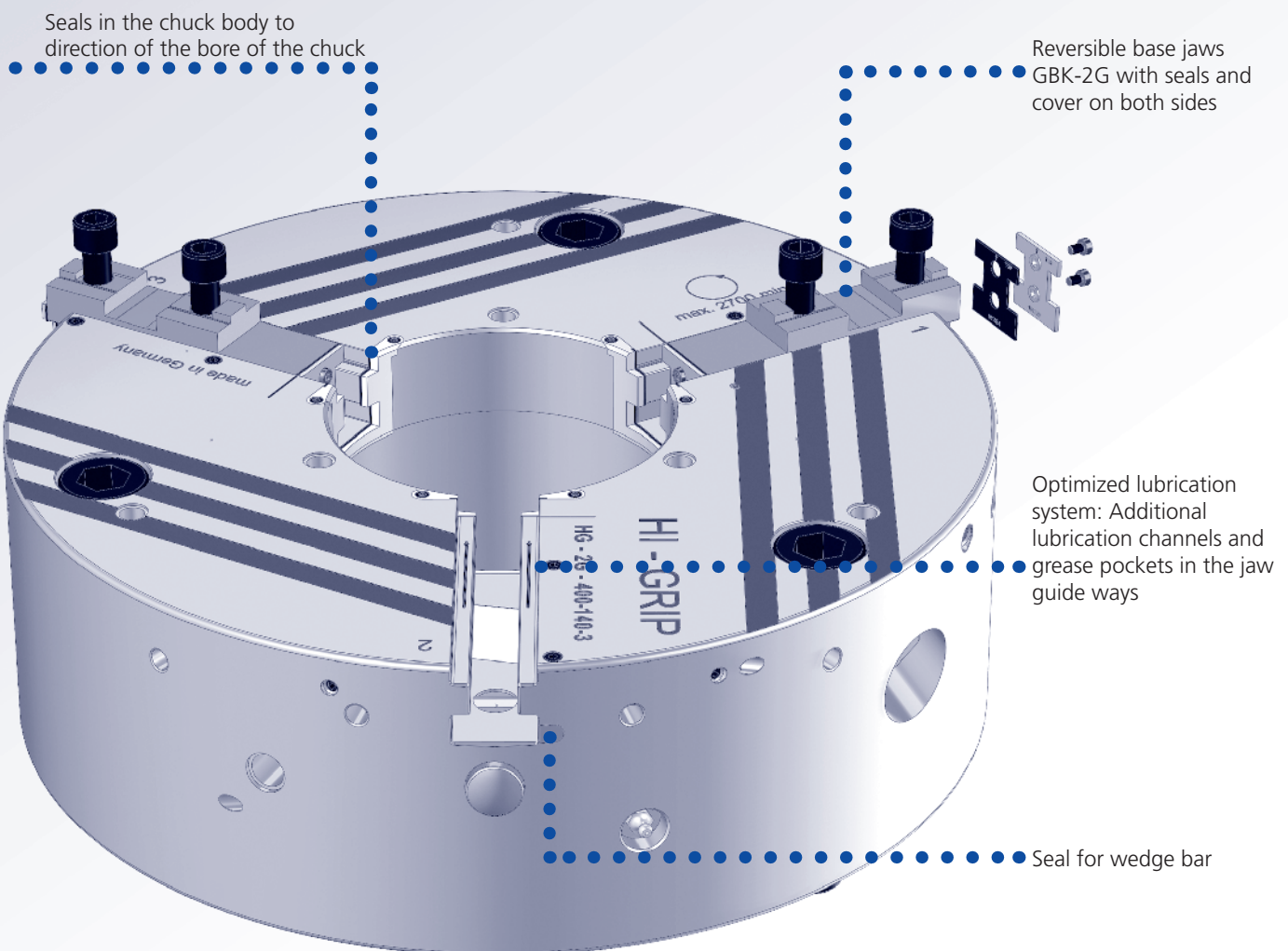
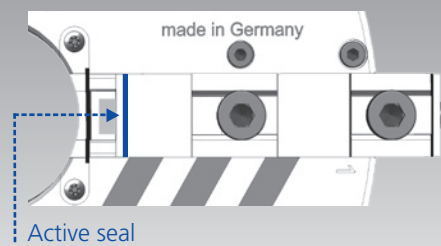
Compatibility: The HG-2G is interchangeable with the standard series of quick jaw change chucks HG-N. Existing master jaws still can be used without sealing. A small modification made to the master jaws and a mounting kit can upgrade existing master jaws to become 2G master jaws.

Safe sealing in every position of the base jaw

Position base jaw 1



Position base jaw 2

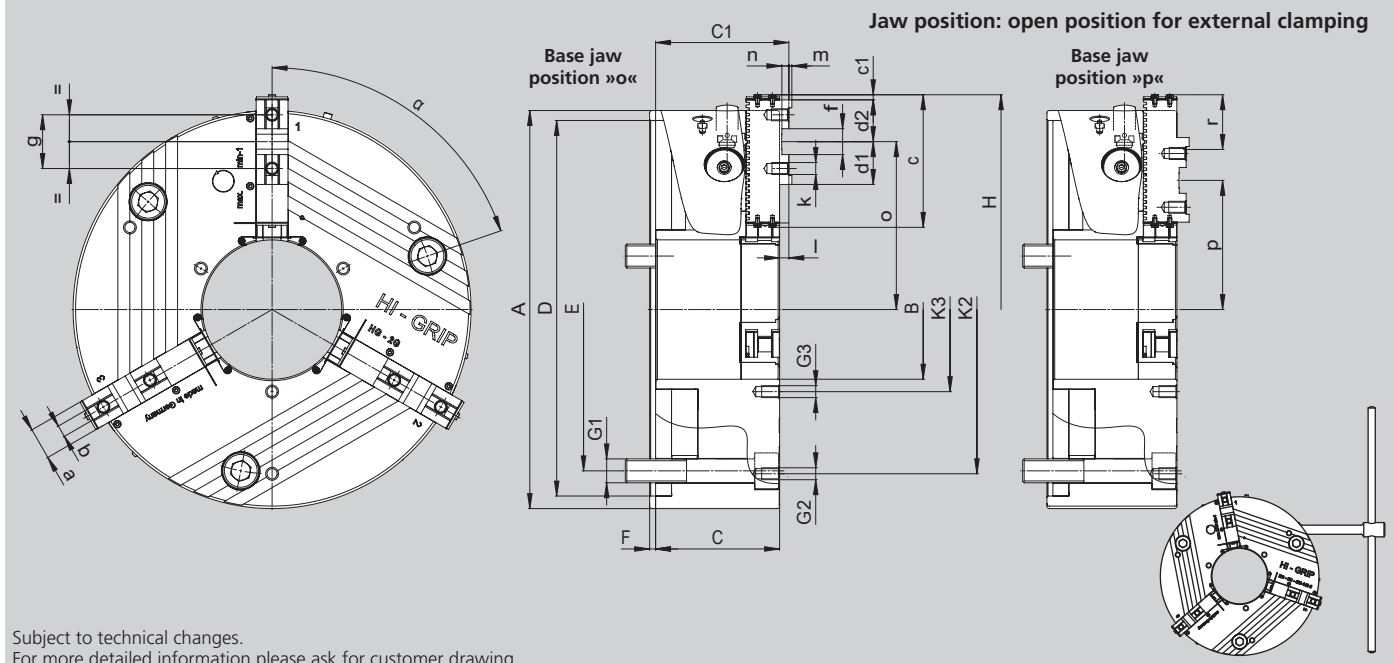


HG-2G

Manual chucks \varnothing 400 - 630 mm

QUICK JAW CHANGE
Jaw system original SMW

Main dimensions and technical data

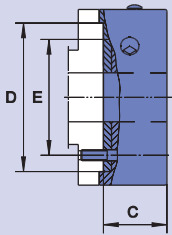


Subject to technical changes.
For more detailed information please ask for customer drawing.

SMW-AUTOBLOK Type HG-2G		400-128	500-165	630-254
Mounting	Size	Z380	Z380	Z380
	A	400	500	630
	B	140	165	254
	C	124.6	136	143
	C1	133.9	146	153
H6	D	380	380	380
	E	330.2	330.2	330.2
	F	6	8	8
	G1	M24	M24	M24
	G2	M12/3 x 120°	M16/9 x 40°	M16/6 x 60°
	G3	M12/3 x 120°	M12/3 x 120°	M12/3 x 120°
Swing dia.	H	432	on request	on request
	K2	330	420	550
	K3	165	195	290
	α°	71	71	74
Master jaw		GBK-2G 400	GBK-2G 500	GBK-2G 630
	a	32	45	45
f7	b	12	18	18
	c1	133.2	on request	on request
	d1	43	on request	on request
	d2	42	on request	on request
H7	f	26	30	30
	g	54	60	60
Thread/thread depth	k	M12/17	M16/34	M16/34
	l	9.3	10	10
	m	3	4	4
	n	7	9	9
max./min.	o	168.8/113.8	211/141	291.5/200.5
max./min.	p	129.8/74.8	150/80	191.5/100.5
Base jaw tooth pitch	-	5.5	7	7
Master jaw offset	r	55	70	91
Master jaw offset	teeth	10	10	13
Usable jaw stroke	mm	8.5	11.5	13
max. total gripping force	kN	220	250	250
at max. torque Md	Nm	250	260	260
Speed	r.p.m.	2700	1500	1000
Weight without jaws	kg	99	161	270
Moment of inertia	kg·m ²	1.9	4.5	12

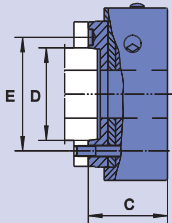
Ordering review

Chuck with center mounting DIN 6350



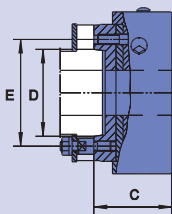
HG-2G	400-128		500-165		630-254	
Mounting	Z380		Z380		Z380	
C	125		136		136	
D	380		380		380	
E	330.2		330.2		330.2	
	Chuck with GBK-2G + WAK					
Id. No.	161729		161813		161827	
	Chuck with GBK-2G + GUA					
Id. No.	161800		161814		161828	

Chuck with ISO-A mounting DIN 55026



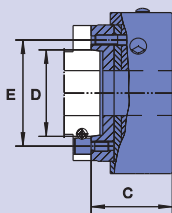
HG-2G	400-128		500-165		630-254	
Mounting	A11	A15	A11	A15	A11	A15
C	165	161	176	172	176	172
D	196.88	285.77	196.88	285.77	196.88	285.77
E	235.0	330.2	235.0	330.2	235.0	330.2
	Chuck with GBK-2G + WAK					
Id. No.	161801	161807	161815	161821	161829	161835
	Chuck with GBK-2G + GUA					
Id. No.	161802	161808	161816	161822	161830	161836

Chuck with bayonet mounting DIN 55027 Type C



HG-2G	400-128		500-165		630-254	
Mounting	C11	C15	C11	C15	C11	C15
C	161	161	172	172	172	172
D	196.88	285.77	196.88	285.77	196.88	285.77
E	235.0	330.2	235.0	330.2	235.0	330.2
	Chuck with GBK-2G + WAK					
Id. No.	161803	161809	161817	161823	161831	161837
	Chuck with GBK-2G + GUA					
Id. No.	161804	161810	161818	161824	161832	161838

Chuck with Camlock mounting DIN 55029 Type S



HG-2G	400-128		500-165		630-254	
Mounting	S11	S15	S11	S15	S11	S15
C	175	175	186	186	186	186
D	196.88	285.77	196.88	285.77	196.88	285.77
E	235.0	330.2	235.0	330.2	235.0	330.2
	Chuck with GBK-2G + WAK					
Id. No.	161805	161811	161819	161825	161833	161839
	Chuck with GBK-2G + GUA					
Id. No.	161806	161812	161820	161826	161834	161840

Parts included: Fixing elements (screws resp. studs resp. camlock bolts)

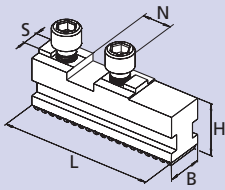
HG-2G

JAWS

QUICK JAW CHANGE

GBK-2G

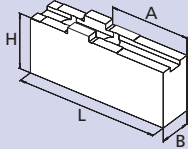
Hardened base jaws



Chuck	HG-2G 400	HG-2G 500	HG-2G 630
Jaw type	GBK-2G 400	GBK-2G 500	GBK-2G 630
Id. No.	161605	161843	161846
B	32	45	45
H	43	57	57
L	125	160	200
N	26	30	30
S	12	18	18
kg/set	3.0	7.1	9.0

WAK

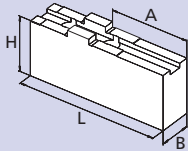
Soft top jaws



Chuck	HG-2G 400	HG-2G 500	HG-2G 630
Jaw type	WAK 400-10	WAK 500-10	WAK 500-10
Id. No.	012494	012495	012495
B	35	50	50
H	54	75.5	75.5
L	145	180	180
A	74	100	100
kg/set	5.8	13.7	13.7

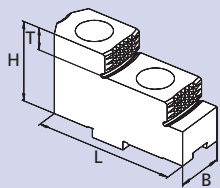
WAKS

Wide soft top jaws



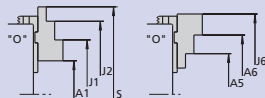
Chuck	HG-2G 400	HG-2G 500	HG-2G 630
Jaw type	WAKS 400-30	WAKS 500-30	WAKS 500-30
Id. No.	012500	012501	012501
B	80	90	90
H	64	73	73
L	100	130	130
A	44	65	65
kg/set	11.0	16.4	16.4

GUA
Hardened reversible stepped top jaws

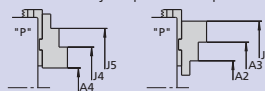


Clamping ranges

Base jaw position "o"



Base jaw position "p"



Chuck	HG-2G 400	HG-2G 500	HG-2G 630
Jaw type	GUA 400	GUA 500	GUA 500
Id. No.	012487	012488	012488
B	36	45	45
H	56	70	70
L	105	130	130
T	15	20	20
kg/set	3.2	10.8	10.8
A1	138-258	190-336	190-336
A2	78-188	80-200	80-200
A3	186-298	200-320	200-320
A4	60-183	55-200	55-200
A5	143-268	190-335	190-335
A6	253-378	315-455	315-455
J1	218-338	305-450	305-450
J2	328-448	425-570	425-570
J3	263-380	335-450	335-450
J4	138-263	170-310	170-310
J5	248-373	290-430	290-430
J6	333-458	425-570	425-570
S	-	590	590

Important for maintenance and safe operation, to be ordered with the chuck

Grease K05®

Special grease for manual and power chucks



Cartridge 14 Oz. (DIN 1284)
Grease content 500 g
Id. No. 016440

Can 1000 g
Id. No. 011881



- High adhesion
- High resistance against coolant
- High load bearing capacity
- Low friction coefficient
- High gripping force
- Avoids tribocorrosion

Grease gun

Grease gun (DIN 1283) for cartridges 14 Oz. (DIN 1284).

■ Also refillable from grease can 1000 g.



Lubrication set Id. No. 083726

Supply range

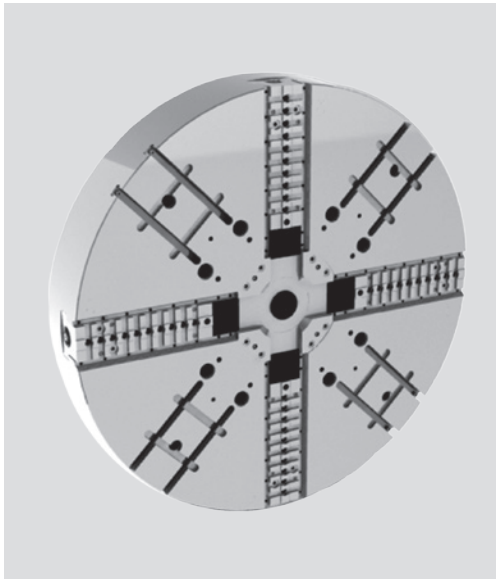
- Grease gun
- 1 Adapter flexible for high pressure grease nipple
- 1 Adapter for cone grease nipple

PTF

Tongue & groove
Manual clamping and radial setting of jaws

High precision 4 jaws independent manual chucks Ø 1000 - 2000 mm

- closed center
- 4 jaws (all diameters)



Application/customer benefits

- Clamping of large round, square and irregular parts
- Manual radial setting of component and manual clamping
- Suitable for vertical machines. Strong body and master jaws design and option to easily mount a strong center point
- High gripping force allowed by the strong design, with the option to increase it with a torque multiplier
- Tongue & groove master jaws (type "American Standard")

Technical features

- Manual gripping force applied by a strong and protected screw on a strong and rigid master jaw
- Manual and fine setting of master jaws for workpiece centering
- Protection from contamination with seals along the master jaw profiles
- Possibility to use jaw boxes for manual clamping mounted on the T-slots between the master jaws

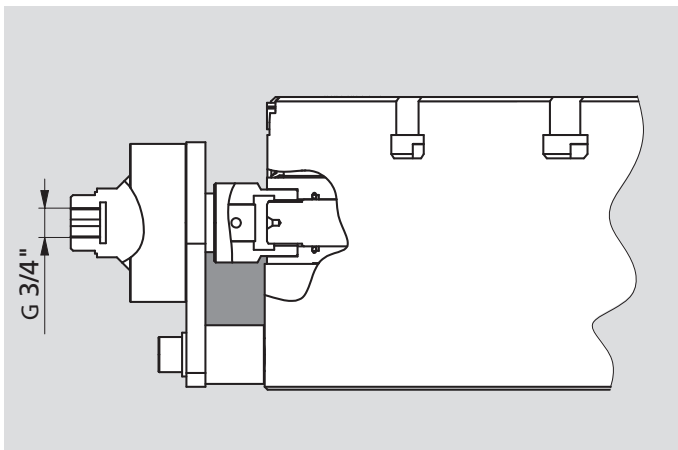
Standard equipment

- 4 jaws independent manual chuck
- 1 set of soft top jaws
- 1 regulation and actuation key
- 1 grease gun and 500 g grease

Ordering example

- 4 jaws independent chuck PTF 1600/Z720
- Id. No. 77137063
- Option: 5:1 torque multiplier
- Id. No. 13506320

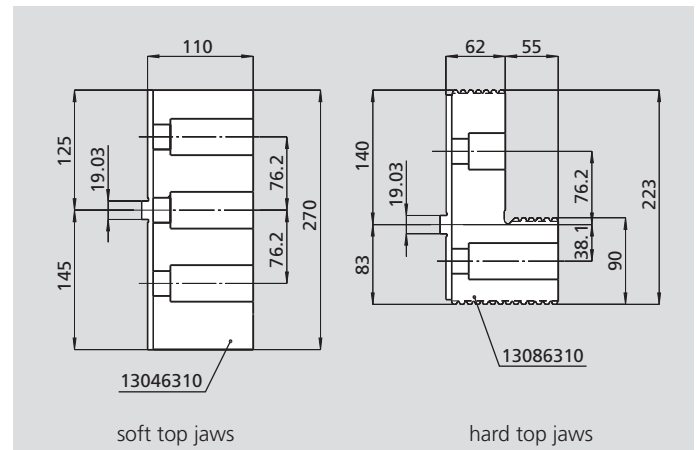
Optional: 5:1 Torque Multiplier



Optional 5:1 Torque multiplier

To achieve the maximum gripping force and speed, the easiest and more comfortable way is to use this multiplier that will increase 5 times the input torque.
Id. No. 13506320

Soft and hard top jaws for PTF



Safety advice/danger of damage:

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

Technical data

SMW-AUTOBLOK Type		PTF 1000	PTF 1250	PTF 1400	PTF 1600	PTF 2000
Radial jaw stroke (manual setting)	mm	60	60	60	60	80
Max. manual operating torque	Nm	600	600	700	700	700
Max. total gripping force*	kN	360	360	360	360	360
Max. speed	r.p.m.	550	450	380	340	280
Weight (without top jaws)	kg	730	930	1435	1860	2730
Moment of inertia	kg·m ²	89	183	364	565	1380
Hard top jaw (piece)	Id. No.	13086310	13086310	13086310	13086310	13086310
Soft top jaw (piece)	Id. No.	13046310	13046310	13046310	13046310	13046310
Id. No.		77137039	77137049	77137055	77137063	77137079

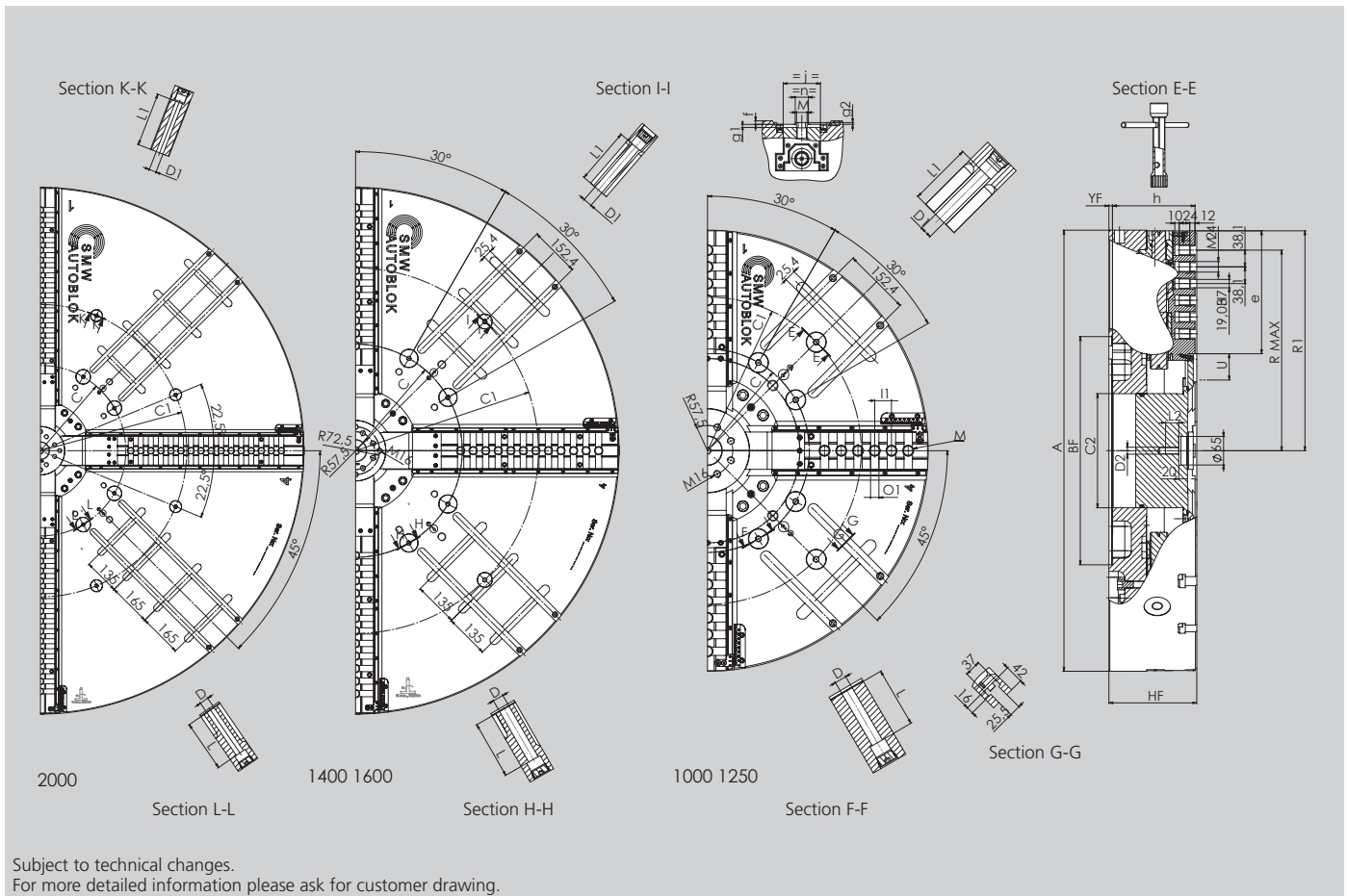
* at max. torque

High precision 4 jaws independent manual chucks Ø 1000 - 2000 mm

- closed center
- 4 jaws (all diameters)

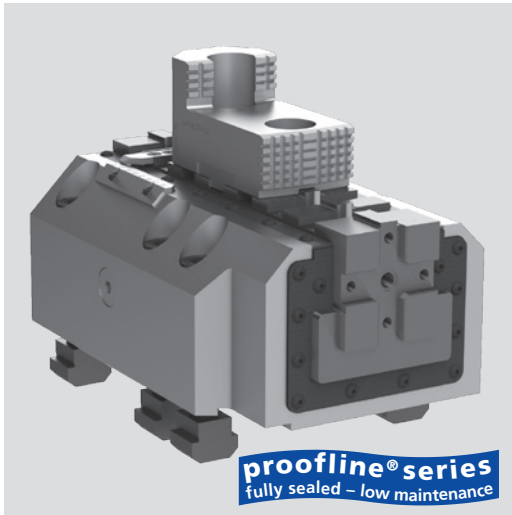
PTF

Tongue & groove
Manual clamping and radial setting of jaws



SMW-AUTOBLOK Type			PTF 1000	PTF 1250	PTF 1400	PTF 1600	PTF 2000
Mounting			Z520	Z520	Z720	Z720	Z720
A	mm		1005	1250	1400	1600	2000
Bf	H6 mm		520	520	720	720	720
C	mm		463.6	463.6	647.6	647.6	647.6
C1	mm		700	700	1110	1110	1110
C2	mm		260	260	300	300	300
D	mm		27	27	33	33	33
D1	mm		27	27	27	27	27
D2	mm		M16	M16	M24	M24	M24
Hf	mm		200	200	240	240	260
L	mm		137	139	177	177	197
L1	mm		145	145	177	173	205
L2	mm		30	30	24	24	24
Chuck open	R1	mm	501	623	696	796	996
Chuck open	Rmax	mm	457	563	657	738	914
Radial stroke	U	mm	60	60	60	60	80
	Yf	mm	8	8	8	8	8
	e	mm	280	402	439	536	704
	f	mm	8	8	8	8	8
	g1	mm	7	7	7	7	7
	g2	mm	4	4	4	4	4
	h	mm	188	188	228	228	248
	j	mm	85	85	110	110	110
	l1	mm	38.1	38.1	38.1	38.1	38.1
	m	mm	M24	M24	M24	M24	M24
	n	h8 mm	30	30	30	30	30
	o1	H7 mm	19.03	19.03	19.03	19.03	19.03
Number of "o1" cross grooves			6	9	10	12	16
Number of "m" threads			6	9	11	12	16

- accessory for face plates or chucks
- internal or external clamping



Application/customer benefits

- Manual radial setting and clamping of large components on large plates or chuck
- On chucks it gives more gripping force to apply a higher torque on the workpiece
- On chucks it gives more contact points with the workpiece to better distribute the gripping force thus reducing distortion
- Very powerful and accurate clamping allowed by strong design
- Suitable for vertical machines thanks to the body fully protected
- Use of standard hard or soft jaw on top of the master jaw or special frontal jaws on the front side of the master jaw
- Tongue & groove master jaws (type "American Standard")

Technical features

- Manual gripping force applied by a strong and protected screw on a strong and rigid master jaw
- Manual and fine setting of master jaws for workpiece centering
- Protection from contamination with seals along the master jaw profiles
- Designed to work on SMW-AUTOBLOK large manual or power chucks or on special plates
- Body designed for better chip evacuation

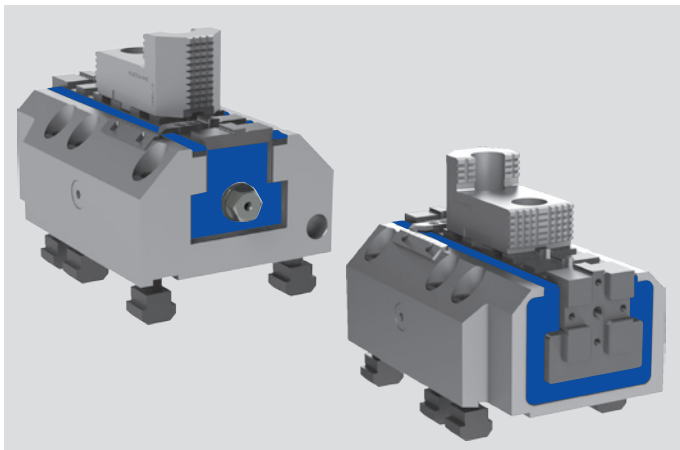
Standard equipment

Manual jaws box
1 radial key
6 T-nuts and mounting screws

Ordering example

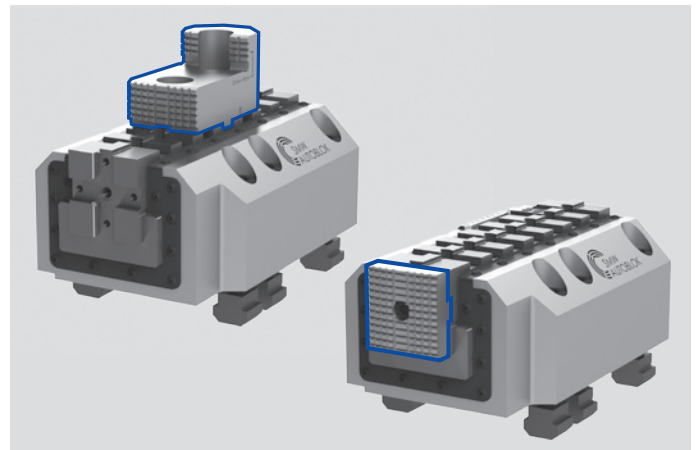
Qty. 1/2/3/4 manual jaw box JBX
Id. No. 77653003
Option: actuation key Id. No. 11122700

Maximum protection



Master jaw protected on each side by lip seals protected with steel profiles. Maximum protection from the penetration of chips, swarf and coolant allowing less maintenance, to work in bad environments and for a longer operative life.

Flexibility of use



The jaw box can carry standard or special hard or soft jaws mounted on the upper side of the master jaw or special jaws mounted on the front side of the master jaw. The jaws on the front side allow an optimal clamping, in the same axis of the master jaws thus reducing deformation of the jaw and the jaw box. This allows a more rigid and accurate clamping. Also the frontal jaw option increases the flexibility allowing the customer to clamp the component in a very low area where it would be impossible to clamp with traditional jaws mounted on the upper side of the master jaw.

Technical data

SMW-AUTOBLOK Type		JBX
Jaw stroke (manual setting)	mm	50
Max. manual operating torque	Nm	220
Max. gripping force	kN	40
Weight (without top jaws)	kg	50
Hard top jaw (piece)*	Id. No.	12087110 + 12418013
Soft top jaw (piece)*	Id. No.	12044050
Id. No.		77653003

* The soft and tempered jaws are not supply, the Id. No. are indicated in the table.

High precision, resistance and power manual jaw box

- accessory for face plates or chucks
- internal or external clamping

JBX

Tongue & groove
Manual jaw box

