

HFKS-2G

UNIVERSAL

High precision chuck

PRECISE

Centrifugal force compensation
for highest speeds
Maximum precision

FLEXIBLE

Flats on the chuck body
Large through-hole
Best accessibility

CONSTANT CLAMPING FORCE

Optimized lubrication system



HFKS-2G

INCH / METRIC
SERRATION

High precision power chucks

- Weight reduced chuck body and large through-hole
- Centrifugal force compensation
- Direct lubrication system



Application/customer benefits

- Universal use for turning and milling
- Flats on the chuck body for best accessibility with live tools and to reduce weight and inertia
- Wedge hook mechanism combined with a multi jaw guide guarantee maximum precision and sensitivity for the workpiece clamping
- Also suitable for large batch production, with heavy duty cutting or clamping of easy deformed workpieces
- Centrifugal force compensation for highest speed
- Constant clamping forces due to the direct lubrication system
- Maximum durability due to case hardened chuck components
- Wide range of standard top jaws

Technical features

- Centrifugal force compensation
- Multi jaw guides
- Direct lubrication system
- Large through-hole
- Wedge hook mechanism

Standard equipment

3-jaw chuck,
6 pcs. T-nuts and screws,
1 set of soft top jaws

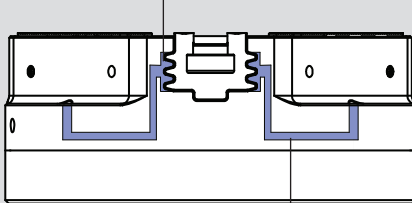
Ordering example

3-jaw chuck HFKS-2G-D-210-58-3-Z170

Product features

Direct lubrication system

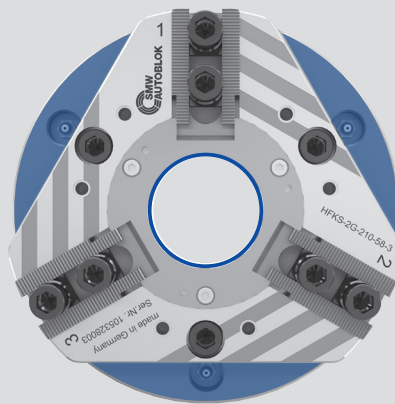
Grease reservoirs in the jaw guide ways



Direct lubrication channels

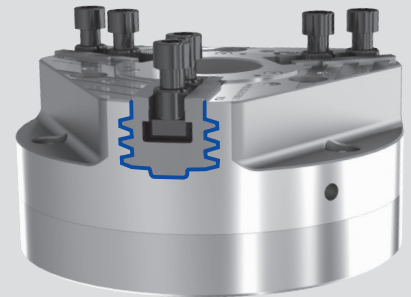
Direct lubrication system: additional lubrication channels and grease reservoirs integrated in the jaw guide ways ensure constant clamping force.

Weight optimized chuck body with large through-hole



Flats on the chuck body for best accessibility with live tools and weight reduction. Large through-hole.

Multi jaw guide



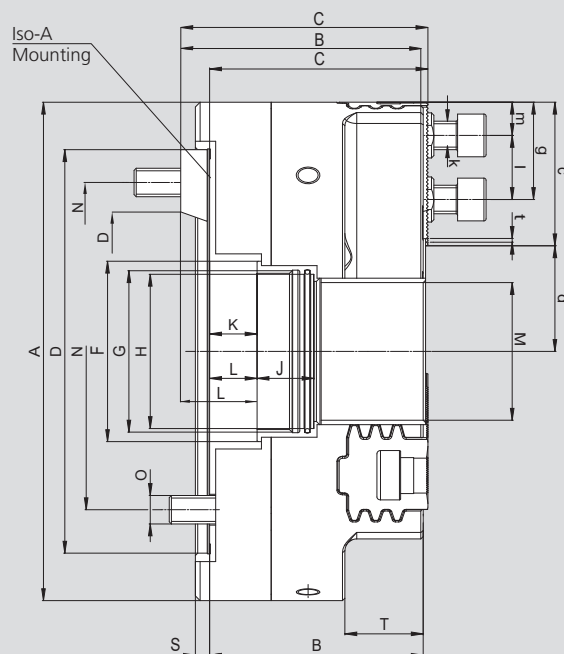
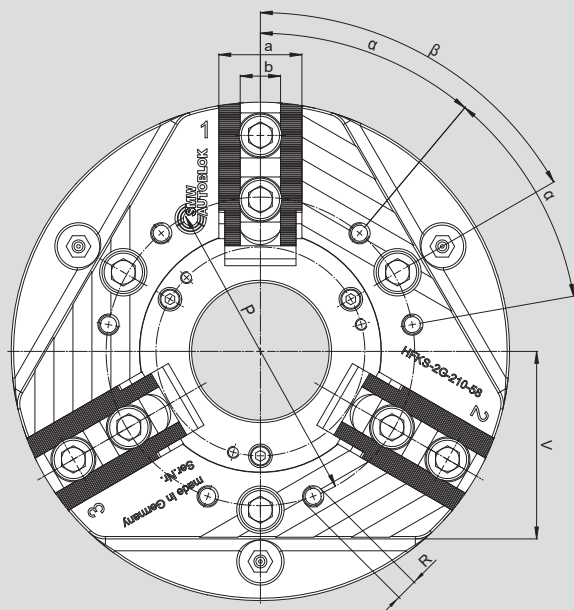
Wedge hook mechanism combined with a multi jaw guide and centrifugal force compensation for maximum precision and sensitivity (also for easy deformed workpieces). Ideal also for I. D. gripping and for milling.

High precision power chucks

- Weight reduced chuck body and large through-hole
- Centrifugal force compensation
- Direct lubrication system

HFKS-2G

INCH
SERRATION



Subject to technical changes.

For more detailed information please ask our customer service.

SMW-AUTOBLOK Type HFKS-2G		165-46		210-58		255-72		320-88		320-88	
Mounting		Z140	A05	Z170	A06	Z220	A08	Z220	A08	Z300	A11
Outside diameter	A	165		210		255		320		320	
	B	90	105	90	107	98	117	98	117	98	119
	C	92.5	107.5	92	109	100	119	100	119	100	121
	D H6	140	82.57	170	106.39	220	139.73	220	139.73	300	196.88
	F	60		76		90		110		110	
Piston thread / depth	G	M54 x 1.5 / 18		M68 x 2 / 18		M82 x 2 / 24		M100 x 2 / 24		M100 x 2 / 24	
	H H6	52		65		77		93		93	
	J	24		24		34		34		34	
Piston stroke	K	17		20		20		20		20	
Max.	L	17	32	20	37	20	39	20	39	20	41
Through-hole	M	46		58		72		88		88	
Bolt circle	N	104.8		133.4		171.4		171.4		235	
Fixing bolt	O	M10		M12		M16		M16		M20	
	P	115		130		150		170		170	
Thread / thread depth	R	M6 / 11		M8 / 15		M8 / 15		M8 / 15		M8 / 15	
	S	6		6		6		6		6	
	T	33		33		42		42		42	
	V	65		79		100		100*		100*	
	a	35		35		45		45		45	
Groove width inch serration	b H7	14**		17		21		21		21	
Groove width metric serration	b H7	12		14		16		21		21	
	c	46.5		59.5		72.5		99.5		99.5	
Max.	d	37		45.5		53.5		60.5		60.5	
Max. / min.	g	21 / 34		50 / 25		62 / 35		82 / 35		82 / 35	
Bolt ISO 4762 12.9 inch serration	k	M10		M12		M16		M16		M16	
Bolt ISO 4762 12.9 metric serration	k	M10		M12		M12		M16		M16	
Min.	l	16****		19		19		25		25	
Min.	m	5		6		10		10		10	
inch serration	t	1/16" x 90°		1/16" x 90°		1/16" x 90°		1/16" x 90°		1/16" x 90°	
metric serration	t	1.5 x 60°		1.5 x 60°		1.5 x 60°		1.5 x 60°		1.5 x 60°	
	α°	42.5***		40		40		30 / 60		30 / 60	
	β°	60		60		60		60		60	
Stroke per jaw	mm	4.5		5.25		5.25		5.25		5.25	
Max. actuating force	kN	27		45		70		70		70	
Max. total gripping force	kN	60		100		150		150		150	
Max. speed	r.p.m.	7000		6300		4500		4000		4000	
Weight (without jaws)	kg	11		18.1		29.5		44.5		43.5	
Moment of inertia	kg·m²	0.04		0.12		0.26		0.60		0.58	

* Attention: Flat on distance V = 70 mm wide, then under 11.5°

** Optionally available with groove 17

*** Only 1 thread between each 2 jaws

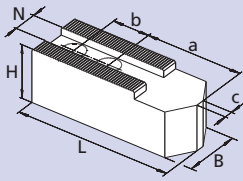
**** Fix 20 (double T-nut) used in metric serration

HFKS-2G

INCH / METRIC
SERRATION

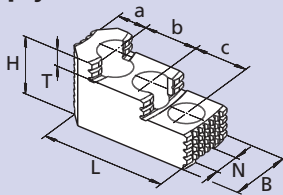
Jaws

AWB-D (INCH SERRATION) Soft top jaws

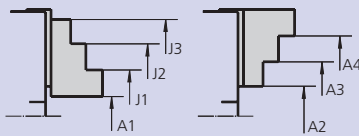


Chuck	HFKS-2G-D 165	HFKS-2G-D 210	HFKS-2G-D 255	HFKS-2G-D 320
Jaw type	AWB-D	AWB-D	AWB-D	AWB-D
Id. No.	035954	081616	081618	081618
Serration	1/16" x 90°	1/16" x 90°	1/16" x 90°	1/16" x 90°
B	40	40	50	50
H	40	40	50	50
L	80	90	120	120
N	14	17	21	21
a	43	53	70	70
b	22	22	28	28
c	4	4	6	6
kg / set	2.0	2.7	5.1	5.1

MHB-D (INCH SERRATION) Hardened reversible top jaws

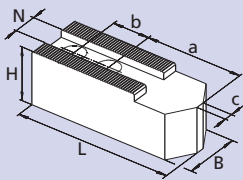


Clamping ranges



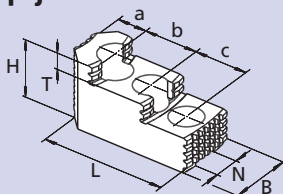
Chuck	HFKS-2G-D 165	HFKS-2G-D 210	HFKS-2G-D 255	HFKS-2G-D 320
Jaw type	MHB-D	MHB-D	MHB-D	MHB-D
Id. No.	12081636	12082036	12083036	12083036
Serration	1/16" x 90°	1/16" x 90°	1/16" x 90°	1/16" x 90°
B	34	40	45	45
H	39	45	56	56
L	65	82	105	105
T	10	10.5	13.5	13.5
N	14	17	21	21
a	18	19	26	26
b	16	23	30	30
c	16	23	30	30
kg / set	0.9	1.71	2.85	2.85
A1	23-83	26-105	16-110	35-162
A2	-	-	-	-
A3	70-128	78-155	93-193	85-257
A4	118-183	156-235	178-273	170-342
J1	73-133	81-155	68-153	75-217
J2	123-183	151-235	149-237	130-302
J3	153-219*	196-270	218-313	205-372

AWB-M (METRIC SERRATION) Soft top jaws

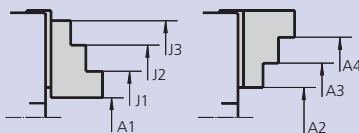


Chuck	HFKS-2G-M 165	HFKS-2G-M 210	HFKS-2G-M 255	HFKS-2G-M 320
Jaw type	AWB-M	AWB-M	AWB-M	AWB-M
Id. No.	081719	081720	081722	236517
Serration	1.5 x 60°	1.5 x 60°	1.5 x 60°	1.5 x 90°
B	30	35	40	50
H	32	40	42	50
L	82	102	125	145
N	12	14	16	21
a	47	57	65	85
b	20	25	30	30
c	4	4	6	10
kg / set	1.4	2.7	3.95	6.83

MHB-M (METRIC SERRATION) Hardened reversible top jaws



Clamping ranges



Chuck	HFKS-2G-M 165	HFKS-2G-M 210	HFKS-2G-M 255	HFKS-2G-M 320
Jaw type	MHB-M	MHB-M	MHB-M	MHB-M
Id. No.	12081627	12082127	12082627	12083037
Serration	1.5 x 60°	1.5 x 60°	1.5 x 60°	1.5 x 60°
B	34	40	45	45
H	39	45	56	56
L	67	86	100	105
T	10	10.5	15.5	13.5
N	12	14	16	21
a	14	19	23	26
b	20	25	30	30
c	20	25	30	30
kg / set	0.9	1.8	2.55	2.85
A1	23-83	26-105	16-110	35-162
A2	-	-	-	-
A3	70-128	78-155	93-193	85-257
A4	118-183	156-235	178-273	170-342
J1	73-133	81-155	68-153	75-217
J2	123-183	151-235	149-237	130-302
J3	153-219*	196-270	218-313	205-372

*Attention: The values are calculated theoretical values only. SMW-AUTOBLOK is recommending not to clamp any diameters, that are larger than the chuck O.D.

JAWS-CATALOG

Request or
download:
www.smw-autoblok.de

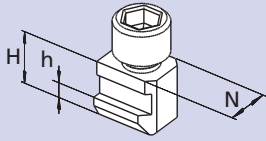


HFKS-2G

INCH / METRIC
SERRATION

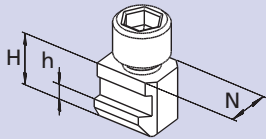
■ T-Nuts

NST T-nuts suitable for HFKS-2G-D



Chuck	HFKS-2G-D 165	HFKS-2G-D 210	HFKS-2G-D 255	HFKS-2G-D 320
T-nut type	NST14-3	NST17	NST21	NST21
Id. No.	163134	016021	014788	014788
N	14	17	21	21
H	20	23	27	27
h	7.5	7.5	10	10
Cyl.-screw ISO 4762-12.9	M10 x 25	M12 x 30	M16 x 35	M16 x 35
Torque Md max. (Nm)	50	70	150	150

NST / NSTE-M T-nuts suitable for HFKS-2G-M



Chuck	HFKS-2G-M 165	HFKS-2G-M 210	HFKS-2G-M 255	HFKS-2G-M 320
T-nut type	NSTE-M120	NST17/14	NST21/16	NST21-6
Id. No.	73061602*	036976	162744	034197
N	12	14	16	21
H	18.5	20.5	26.5	26.5
h	6.5	-	10	10
Cyl.-screw ISO 4762-12.9	M10 x 20	M12 x 25	M12 x 30	M16 x 30
Torque Md max. (Nm)	50	70	70	150

* Double T-nut thread spacing 20 mm

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

Interflon Grease 2 / 3

Special grease for
manual and power chucks

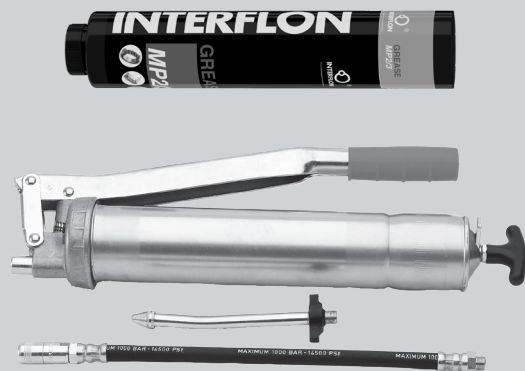


Cartridge 14 Oz. (DIN 1284)
Grease content 400ml
Id. No. 205087

- Ideal for high speed applications
- High adhesion
- High resistance against coolant
- High load bearing capacity
- Low friction coefficient
- Avoids tribocorrosion

Grease gun

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



Lubrication set Id. No. 083726

Supply range

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

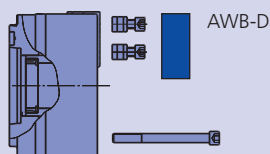
HFKS-2G

INCH / METRIC
SERRATION

Order review

Order review HFKS-2G-D (inch serration)

HFKS-2G-D with soft top jaws AWB-D

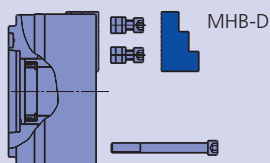


Supply range:

- Chuck + mounting bolts
- Soft top jaws AWB-D
- 1 set T-nuts with bolts

Size Spindle mounting	HFKS-2G-D 165-46	HFKS-2G-D 210-58	HFKS-2G-D 255-72	HFKS-2G-D 320-88
Centering rim small	-	-	-	Z 220 163749
Centering rim large	Z140 163741	Z 170 163745	Z 220 163747	Z 300 163750
A 05	163744	-	-	-
A 06	-	163746	-	-
A 08	-	-	163748	163751
A 11	-	-	-	163752

HFKS-2G-D with hardened reversible top jaws MHB-D



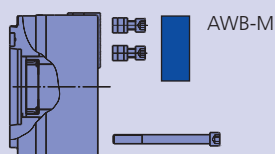
Supply range:

- Chuck + mounting bolts
- Hardened ground reversible top jaws MHB-D
- 1 set T-nuts with bolts

Size Spindle mounting	HFKS-2G-D 165-46	HFKS-2G-D 210-58	HFKS-2G-D 255-72	HFKS-2G-D 320-88
Centering rim small	-	-	-	Z220 162884
Centering rim large	Z140 163740	Z170 162880	Z220 162882	Z300 162885
A 05	163743	-	-	-
A 06	-	162881	-	-
A 08	-	-	162883	162886
A 11	-	-	-	162887

Order review HFKS-2G-M (metric serration)

HFKS-2G-M with soft top jaws AWB-M

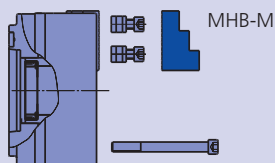


Supply range:

- Chuck + mounting bolts
- Soft top jaws AWB-M
- 1 set T-nuts with bolts

Size Spindle mounting	HFKS-2G-M 165-46	HFKS-2G-M 210-58	HFKS-2G-M 255-72	HFKS-2G-M 320-88
Centering rim small	-	-	-	Z 220 162749
Centering rim large	Z140 163755	Z 170 162734	Z 220 162739	Z 300 162763
A 05	163758	-	-	-
A 06	-	162737	-	-
A 08	-	-	162748	162598
A 11	-	-	-	162776

HFKS-2G-M with hardened reversible top jaws MHB-M



Supply range:

- Chuck + mounting bolts
- Hardened ground reversible top jaws MHB-M
- 1 set T-nuts with bolts

Size Spindle mounting	HFKS-2G-M 165-46	HFKS-2G-M 210-58	HFKS-2G-M 255-72	HFKS-2G-M 320-88
Centering rim small	-	-	-	Z220 162762
Centering rim large	Z140 163754	Z170 162735	Z220 162747	Z300 162764
A 05	163757	-	-	-
A 06	-	162788	-	-
A 08	-	-	162746	162599
A 11	-	-	-	162777

Notes

**Germany**

SMW-AUTOBLOK Spannsysteme GmbH
Postfach 1151 • D-88070 Meckenbeuren
Wiesentalstraße 28 • D-88074 Meckenbeuren
Tel.: +49 (0) 7542 - 405 - 0
Vertrieb Inland ► vertrieb@smw-autoblok.de
Fax: +49 (0) 7542 - 3886
Sales International ► sales@smw-autoblok.de
Fax: +49 (0) 7542 - 405 - 181

**Italy**

AUTOBLOK s.p.a.
Via Duca D'Aosta n.24
Fraz. Novaretto
I-10040 Caprie - Torino
Tel. +39 011 - 9638411
Tel. +39 011 - 9632020
Fax +39 011 - 9632288
E-mail ► info@smwautoblok.it

**U.S.A.**

SMW-AUTOBLOK Corporation
285 Egidi Drive - Wheeling, IL 60090
Tel. +1 847 - 215 - 0591
Fax +1 847 - 215 - 0594
E-mail ► autoblok@smwautoblok.com

**France**

SMW-AUTOBLOK
17, Avenue des Frères Montgolfier - Z.I. Mi-Plaine
F-69680 Chassieu
Tel. +33 (0) 4 - 727 - 918 18
Fax +33 (0) 4 - 727 - 918 19
E-mail ► autoblok@smwautoblok.fr

**Japan**

SMW-AUTOBLOK Japan Inc.
1-56 Hira, Nishi-Ku
461-Nagoya
Tel. +81 (0) 52 - 504 - 0203
Fax +81 (0) 52 - 504 - 0205
E-mail ► japan@smwautoblok.co.jp

**Great Britain**

SMW-Autoblok Telbrook Ltd.
7 Wilford Industrial Estate
Ruddington Lane, Wilford
GB-Nottingham, NG11 7EP
Tel. +44 (0) 115 - 982 1133
E-mail ► info@smw-autoblok-telbrook.co.uk

**China**

SMW-AUTOBLOK (Shanghai) Work Holding Co., Ltd.
Building 6, No.72, JinWen Road, KongGang
Industrial Zone, ZhuQiao Town, Pudong District
201323, Shanghai P.R. China
Tel. +86 21 - 5810 - 6396
Fax +86 21 - 5810 - 6395
E-mail ► china@smwautoblok.cn

**Spain**

SMW-AUTOBLOK IBERICA, S.L.
Ursalto 4 – Pab. 9-10 Pol. 27
20014 Donostia - San Sebastián (Gipuzkoa)
Tel.: +34 943 - 225 079
Fax: +34 943 - 225 074
E-mail ► info@smwautoblok.es

**Mexico**

SMW-AUTOBLOK Mexico, S.A. de C.V.
Acceso III No. 16 Int.9,
Condominio Quadrum
Industrial Benito Juárez
Querétaro, Qro. C.P. 76120
Tel. +52 (442) 209 - 5118
Fax +52 (442) 209 - 5121
E-mail ► smwmex@smwautoblok.mx

**Russia**

SMW-AUTOBLOK Russia
B.Tulskaya str., 10, bld.3, off. 323,
115191 Moscow (Russia)
Tel. +7 495 -231-1011
Fax +7 495 -231-1011
E-mail ► info@smw-autoblok.ru

**India**

SMW-AUTOBLOK Workholding Pvt. Ltd.,
Plot No. 4, Weikfield Industrial Estate,
Gat No. 1251, Sanaswadi, Tal - Shirur,
Dist – Pune, 412 208
Tel. +91 2137 - 616 974
Fax +91 2137 - 616 972
E-mail ► info@smwautoblok.in

**Taiwan**

AUTOBLOK Company Ltd.
No.6, Shuyi Rd., South Dist.,
Taichung, Taiwan
Tel. +886 4-226 10826
Fax +886 4-226 12109
E-mail ► taiwan@smwautoblok.tw

**Turkey**

SMW AUTOBLOK Makina San. Ve Tic. Ltd. Şti.
Yenişehir Mah, Osmanlı Blv, Volume Kurtköy Ofis
No:9, Kat:1, D:4, PK: 34912, Pendik, İstanbul
Tel. +90 216 629 - 2019
E-mail ► info@smwautoblok.com.tr

**Czech Republic / Slovakia**

SMW-AUTOBLOK s.r.o.
Merhautova 20
CZ - 613 00 Brno
Tel. +420 513 034 157
Fax +420 513 034 158
E-mail ► info@smw-autoblok.cz

**Sweden / Norway**

SMW-Autoblok Scandinavia AB
Kasernvägen 2
SE - 281 35 Hässleholm
Tel. +46 (0) 761 420 111
E-mail ► info@smw-autoblok.se

**Poland**

SMW-AUTOBLOK Poland Sp. z o.o.
Ul Ligocka 103 - Building 8
40-568 Katowice
Tel. +48 (0) 664 673 428
E-mail ► info@smwautoblok.pl

**Korea**

SMW-AUTOBLOK KOREA CO., LTD.
1108 ho, Baeksang Startower 1st,
65, Digital-ro 9-gil, Geumcheon-gu
Seoul, ROK-08511, Korea
Tel. +82 2 6267 9505
Fax +82 2 6267 9507
E-mail ► info-korea@smw-autoblok.net