

Centco4

4-JAW CHUCK
**2+2 SELF CENTERING
AND COMPENSATING**

UNIVERSAL

Independent self centering clamping
in 2 axis via 1 central actuating mechanism

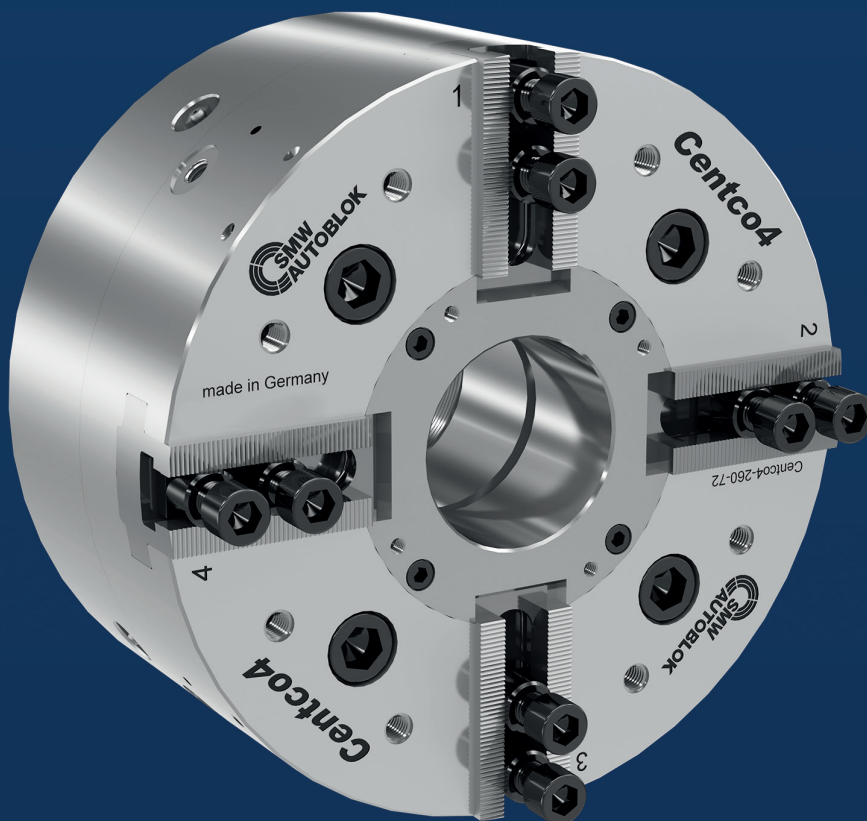
FLEXIBLE

Clamping of
every workpiece geometry

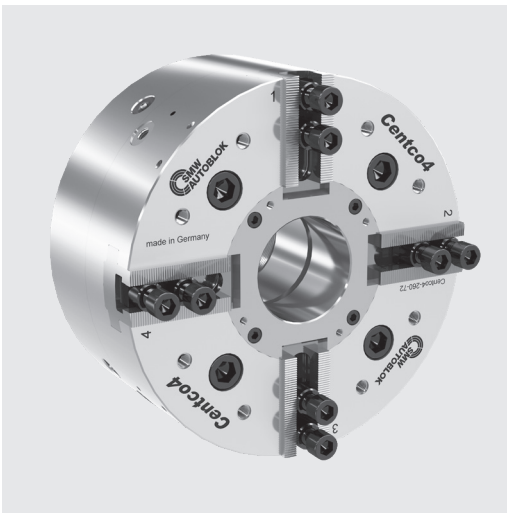
Centrifugal force compensation
for highest speed

PRECISE

Mechanical
high precision jaw drives



- 2+2 self centering
- Independent self centering clamping in 2 axis
- Centrifugal force compensation



Application/customer benefits

- Independent self centering clamping in 2 axis via 1 central actuating mechanism
- Mechanical centering of the workpiece
- Standard cylinder can be used for actuating
- Clamping of every workpiece geometry possible
- Less workpiece deformation compared to 3-jaw chucks
- Long lifetime due to case hardened parts
- Large range of standard top jaws
- Suitable for OD and ID clamping

Technical features

- Centrifugal force compensation
- Optimized lubrication system
- Large through-hole
- Jaw interface 1/16" x 90°

Standard equipment

4-jaw chuck,
8 pieces T-nuts and bolts

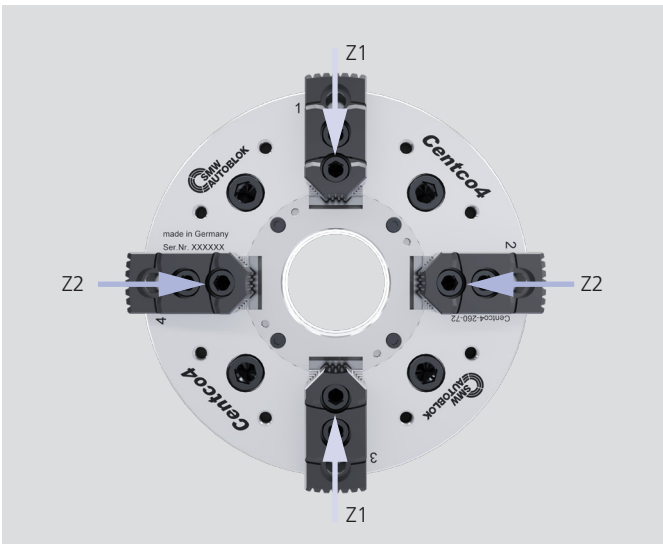
Ordering example

4-jaw chuck
Centco4-260-7-Z-220

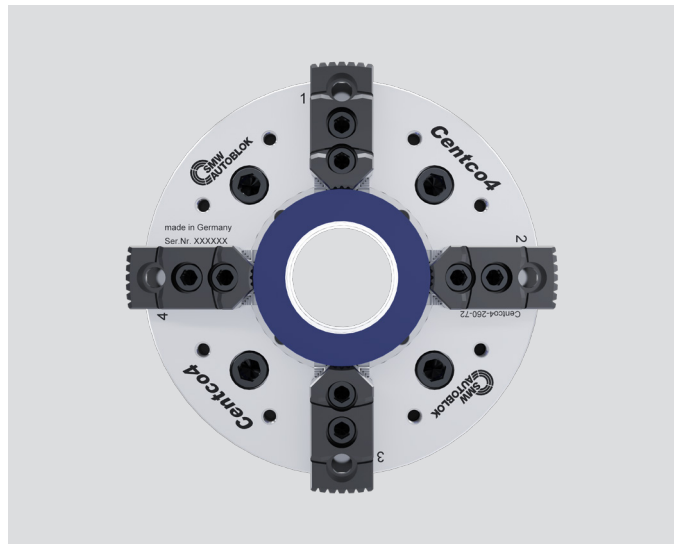
Function / Application examples

2+2 self centering and compensating clamping*

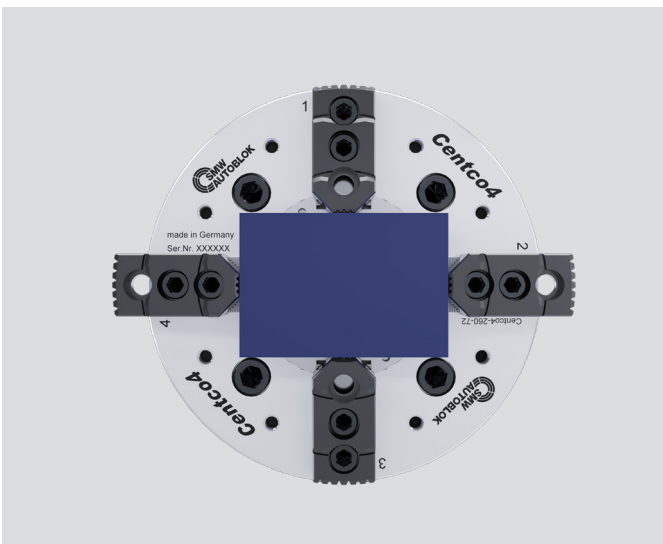
In the beginning the jaw pairs **Z1** + **Z2** only apply a force that is necessary to center the workpiece. Only if both jaw pairs **Z1** and **Z2** are in contact with the workpiece, the grip force necessary for machining is applied.



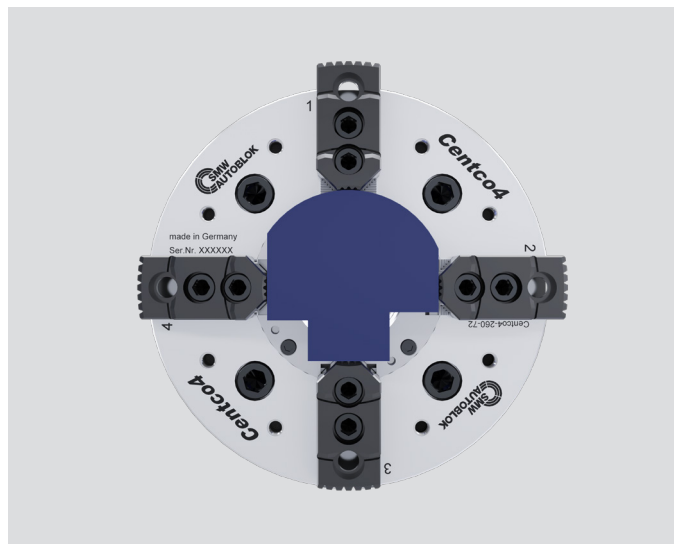
2+2 self centering clamping of round or thinwalled workpieces



2+2 self centering and compensating clamping of rectangular or square workpieces



2+2 self centering and compensating clamping of unshaped workpieces



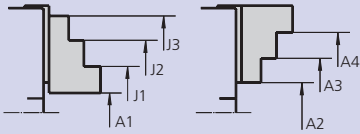
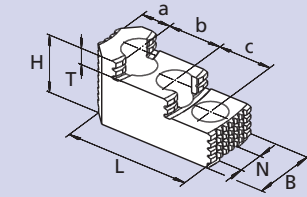
* **Z1**: Self centering clamping axis 1 / **Z2**: self centering clamping axis 2.
Z1 is compensating to **Z2**.

Centco4-D

INCH SERRATION

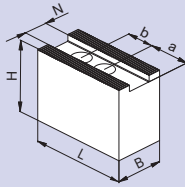
■ Jaws*

MHB-D (INCH SERRATION) Hard, reversible stepped top jaws



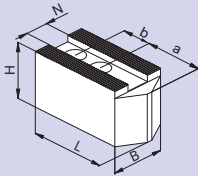
Centco4	210-52	260-72	315-92	400-112	500-115	630-165
Jaw type	MHB-D 160	MHB-D 200	MHB-D 200	MHB-D 251	MHB-D 500	MHB-D 500
Id. No.	12081638	12082038	12082038	12083038	12084548	12084548
Serration	1/16" x 90°	1/16" x 90°	1/16" x 90°	1/16" x 90°	3/32" x 90°	3/32" x 90°
B	34	40	40	45	60	60
H	39	45	45	56	75	75
L	65.2	82	82	106.2	140.8	140.8
T	10	10.5	10.5	13.5	19	19
N	14	17	17	21	25.5	25.5
a	18	19	19	26	38	38
b	16.5	23	23	30	38	38
c	16.5	23	23	30	38	38
kg / set	0.9	2.3	2.3	2.9	9.5	9.5
A1	41 - 127	52 - 161	66 - 216	69 - 263	109.5 - 320	119 - 448.5
A2	-	-	-	-	-	-
A3	90 - 173.5	102.5 - 211.5	116.5 - 265.5	160 - 355	229 - 440	239 - 573
A4	138 - 210**	177.5 - 260**	192 - 315**	245 - 400**	328 - 500**	338 - 630**
J1	87 - 172	100 - 208	114 - 263	124 - 316.5	193.5 - 403	204 - 531.5
J2	135 - 210**	174 - 260**	188 - 315**	207 - 400**	291.5 - 500**	301.5 - 630**
J3	197.5 - 210**	216 - 260**	230 - 315**	279 - 400**	389.5 - 500**	399 - 630**

MWB-D (INCH SERRATION) Soft top jaws Tall version



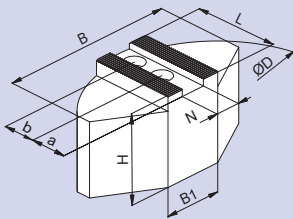
Centco4	210-52	260-72	315-92	400-112	500-115	630-165
Jaw type	MWB-D 165	MWB-D 200	MWB-D 200	MWB-D 250	MWB-D 400	MWB-D 400
Id. No.	5318607	5318837	5318837	5319680	5319831	5319831
Serration	1/16" x 90°	1/16" x 90°	1/16" x 90°	1/16" x 90°	3/32" x 90°	3/32" x 90°
B	35	40	40	50	60	60
H	60	60	60	80	90	90
L	70	90	90	120	170	170
N	14	17	17	21	25.5	25.5
a	33	43	43	62	90	90
b	16.5	22	22	28	35	35
kg / set	2.8	4.1	4.1	9.2	21.6	21.6

AWB-D (INCH SERRATION) Soft top jaws Low / pointed version



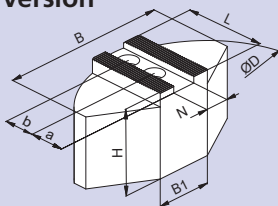
Centco4	210-52	260-72	315-92	400-112	500-115	630-165
Jaw type	AWB-D 165	AWB-D 200	AWB-D 200	AWB-D 250	AWB-D 400	AWB-D 400
Id. No.	5318608	5318838	5318838	5319681	5319834	5319834
Serration	1/16" x 90°	1/16" x 90°	1/16" x 90°	1/16" x 90°	3/32" x 90°	3/32" x 90°
B	40	40	40	50	60	60
H	40	40	40	50	60	60
L	100	110	110	120	170	170
N	14	17	17	21	25.5	25.5
a	43	53	53	70	115	115
b	22	22	22	28	35	35
kg / set	2.4	2.7	2.7	5.4	14.5	14.5

SBS-D (INCH SERRATION) Soft pie jaws



Centco4	210-52	260-72	315-92	400-112	500-115	630-165
Jaw type	SBS-D 165	SBS-D 200	SBS-D 200	SBS-D 200	SBS-D 400	SBS-D 400
Id. No.	5318610	5318839	5318839	5319684	5319832	5319832
Serration	1/16" x 90°	1/16" x 90°	1/16" x 90°	1/16" x 90°	3/32" x 90°	3/32" x 90°
B	120	140	140	180	330	330
B1	40	64	64	50	190	190
D	165	200	200	250	440	440
H	60	60	60	70	85	85
L	60	70	70	80	155	155
N	14	17	17	21	25.5	25.5
a	25	35	35	30	85	85
b	22	22	22	29	35	35
kg / set	7.1	10.3	10.3	18.3	71	71

SBA-D (INCH SERRATION) Soft pie jaws aluminium light version



Centco4	210-52	260-72	315-92	400-112	500-115	630-165
Jaw type	SBA-D 165	SBA-D 200	SBA-D 200	SBA-D 250	SBA-D 400	SBA-D 400
Id. No.	5318609	5318840	5318840	5319685	5319833	5319833
Serration	1/16" x 90°	1/16" x 90°	1/16" x 90°	1/16" x 90°	3/32" x 90°	3/32" x 90°
B	110	120	120	160	330	330
B1	40	40	40	50	190	190
D	165	200	200	250	440	440
H	58	58	58	78	98	98
L	58	72.5	72.5	87.5	160	160
N	14	17	17	21	25.5	25.5
a	25	35	35	40	85	85
b	20	22	22	29	35	35
kg / set	2.4	3.7	3.7	7.2	32	32

* Attention: The values are calculated theoretical values only at 1 mm clamping stroke and 1 mm residual jaw stroke. SMW-AUTOBLOK is recommending not to clamp any diameters, that are larger than the chuck O.D.

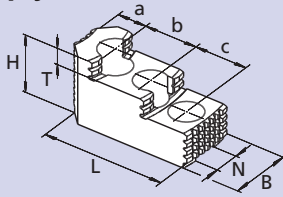
If you have any questions, please do not hesitate to contact our customer service.

** Not larger than Chuck O.D.

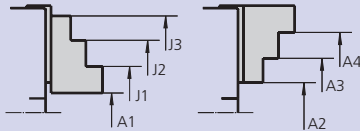
■ Jaws*

METRIC SERRATION

MHB-M (METRIC SERRATION)
Hardened reversible
top jaws

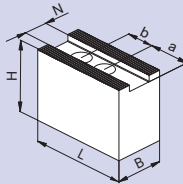


Clamping ranges



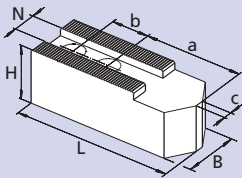
Centco4	210-52	260-72	315-92
Jaw type	MHB-M 140/4	MHB-M 140/4	MHB-M 140/4
Id. No.	12082129	12082129	12082129
Serration	1.5 x 60°	1.5 x 60°	1.5 x 60°
B	40	40	40
H	45	45	45
L	86	86	86
T	10.5	10.5	10.5
N	14	14	14
a	19	19	19
b	25	25	25
c	25	25	25
kg / set	2.4	2.4	2.4
A1	23.5 - 61.5	55 - 112	60.5 - 167
A2	-	-	-
A3	78.5 - 116	109.5 - 166	115 - 220
A4	153.5 - 191	185 - 242	191 - 296
J1	79 - 113.5	108 - 163	113 - 218
J2	150.5 - 187.5	181.5 - 238	186.5 - 293
J3	196 - 210**	227 - 260**	232.5 - 315**

WBJ-M (METRIC SERRATION)
Soft top jaws
Tall version



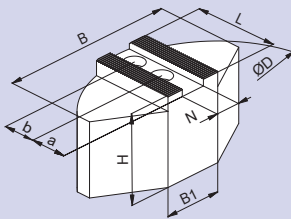
Centco4	210-52	260-72	315-92
Jaw type	WBJ-M 1403/4	WBJ-M 1403/4	WBJ-M 1403/4
Id. No.	5311479	5311479	5311479
Serration	1.5 x 60°	1.5 x 60°	1.5 x 60°
B	40	40	40
H	60	60	60
L	90	90	90
N	14	14	14
a	45	45	45
b	25	25	25
kg / set	3.6	3.6	3.6

AWB-M (METRIC SERRATION)
Soft top jaws



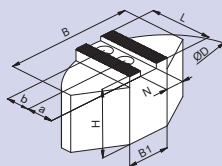
Centco4	210-52	260-72	315-92
Jaw type	AWB-M 1401/4	AWB-M 1401/4	AWB-M 1401/4
Id. No.	5311476	5311476	5311476
Serration	1.5 x 60°	1.5 x 60°	1.5 x 60°
B	35	35	35
H	40	40	40
L	102	102	102
N	14	14	14
a	57	57	57
b	25	25	25
c	4	4	4
kg / set	3.5	3.5	3.5

SBJ-M (METRIC SERRATION)
Soft pie jaws



Centco4	210-52	260-72	315-92
Jaw type	SBJ-M 200/4	SBJ-M 200/4	SBJ-M 200/4
Id. No.	5311478	5311478	5311478
Serration	1.5 x 60°	1.5 x 60°	1.5 x 60°
B	140	140	140
B1	70	70	70
D	200	200	200
H	60	60	60
L	70	70	70
N	14	14	14
a	30	30	30
b	25	25	25
kg / set	12	12	12

SBJ-MA (METRIC SERRATION)
Soft pie jaws
aluminium
Light version



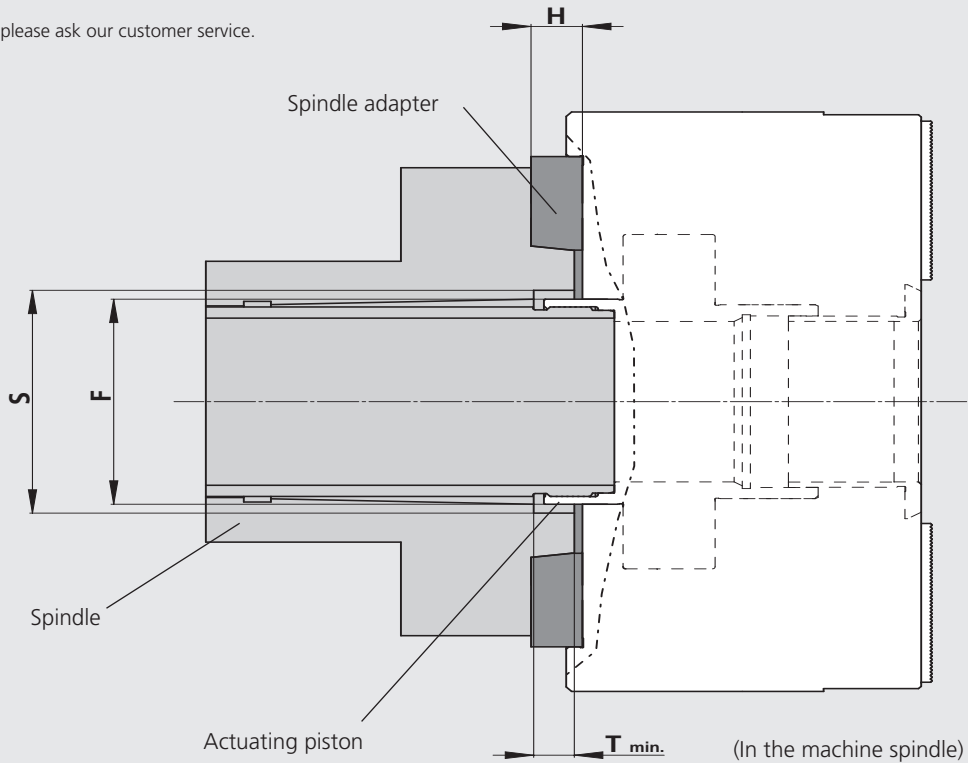
Centco4	210-52	260-72	315-92
Jaw type	SBJ-MA 200/4	SBJ-MA 200/4	SBJ-MA 200/4
Id. No.	5311477	5311477	5311477
Serration	1.5 x 60°	1.5 x 60°	1.5 x 60°
B	140	140	140
B1	50	50	50
D	200	200	200
H	58	58	58
L	75	75	75
N	14	14	14
a	35	35	35
b	25	25	25
kg / set	4.1	4.1	4.1

* Attention: The values are calculated theoretical values only at 1 mm clamping stroke and 1 mm residual jaw stroke. SMW-AUTOBLOK is recommending not to clamp any diameters, that are larger than the chuck O.D.

If you have any questions, please do not hesitate to contact our customer service.

** Not larger than Chuck O.D.

Subject to technical changes.
For more detailed information please ask our customer service.

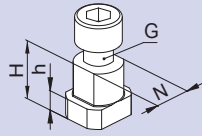


Base chuck type Centco4 D / M	Spindle mounting	Actuating piston dia. F [mm]	Clearance - dia. S [mm]	Clearance - depth T min. [mm]*	Id. No. Spindle adapter	Spindle adapter height H [mm]	Order review ASA	
							Id. No. cpl. Chuck + Spindle adapter inch serration D	Id. No. cpl. Chuck + Spindle adapter metric serration M
210-52-Z170	A06	68	> 68	14	24162000	17	163842	163844
			< 68	-	24162110	40	163843	163845
260-72-Z220	A06	92	< 92	-	24162532	50	163874	163877
	A08	92	> 92	17	24182500	19	163875	163878
< 92			-	24182520	43	163876	163879	
315-92-Z300	A08	115	> 115	10	24183100	30	163880	163885
			< 115	-	24184000	40	163881	163886
	A11	115	> 115	20	24113100	21	163882	163887
			> 115	11	24113110	30	163883	163888
< 115	-	2704390	44	163884	163889			
400-112-Z300	A11	142	< 142	-	2704390	44	163890	-
400-112-Z380	A11	142	> 142	2	24115000	40	163891	-
			< 142	-	2704391	44	163892	-
	A15	142	> 142	23	24125000	23	163893	-
			< 142	-	2704392	47	163894	-
500-155-Z380	A11	178	> 178	8	24115000	40	163895	-
			< 178	-	2704606	50	163896	-
	A15	178	> 178	26.5	24125000	23	163897	-
			< 178	-	273765	50	163898	-
630-165-Z380	A11	188	> 188	8	24115000	40	163899	-
			< 188	-	2704606	50	163900	-
	A15	188	> 188	26.5	24125000	23	163901	-
			< 188	-	273765	50	163902	-

* to clear the axial stroke of the actuating piston (see „technical details piston stroke“ K)

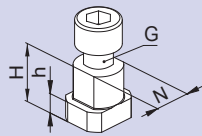
- T-Nuts
- Covers for through-hole

NST T-nuts suitable for Centco4-D



Centco4	210-52	260-72	315-92	400-112	500-155	630-165
T-nut type	NST14	NST17	NST17	NST21	NST25	NST25
Id. No.	163134	016021	016021	014788	014812	014812
	N 14	17	17	21	25.5	25.5
	H 20	23	23	27	29	29
	h 7.5	9	9	10	11	11
	G					
Cyl.-screw ISO 4762-12.9	M10 x 25	M12 x 30	M12 x 30	M16 x 35	M20 x 40	M20 x 40
Torque Md max. (Nm)	50	70	70	150	250	250

NST T-nuts suitable for Centco4-M



Centco4	210-52	260-72	315-92
T-nut type	NST17/14	NST17/14	NST17/14
Id. No.	036976	036976	036976
	N 14	14	14
	H 20.5	20.5	20.5
	h -	-	-
	G		
Cyl.-screw ISO 4762-12.9	M12 x 25	M12 x 25	M12 x 25
Torque Md max. (Nm)	70	70	70

cover for through-hole



Centco4	210-52	260-72	315-92	400-112	500-155	630-165
Id. No.	163135	163136	163137	163138	163584	163585

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

Grease K67

Special grease for
manual and power chucks



Cartridge 14 Oz. (DIN 1284)
Grease content 500 g
Id. No. 10731223

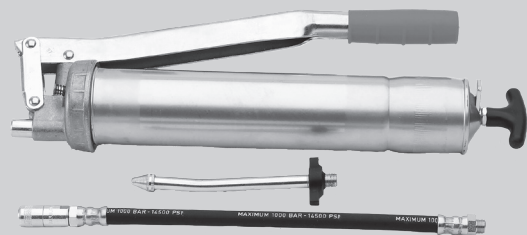
Can 1000 g
Id. No. 10731224



- 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)



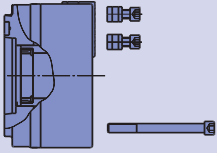
Lubrication set Id. No. 083726

Supply range

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

Ordering review Centco4-D (inch serration)

Centco4-D



Supply range:

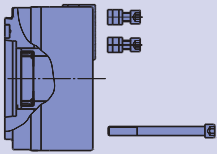
- Chuck + mounting bolts
- 8 pieces T-nuts with bolts

Spindle mounting / Flange height (*)	Size					
	Centco4-D 210-52	Centco4-D 260-72	Centco4-D 315-92	Centco4-D 400-112	Centco4-D 500-155	Centco4-D 630-165
Centering rim small	-	-	-	Z 300 163175	-	-
Centering rim large	Z 170 163120	Z 220 162780	Z 300 163140	Z 380 163160	Z 380 163580	Z 380 163770
A 06 (17**)	163842	-	-	-	-	-
A 06 (40**)	163843	-	-	-	-	-
A 06 (50**)	-	163874	-	-	-	-
A 08 (19**)	-	163875	-	-	-	-
A 08 (30**)	-	-	163880	-	-	-
A 08 (40**)	-	-	163881	-	-	-
A 08 (43**)	-	163876	-	-	-	-
A 11 (21**)	-	-	163882	-	-	-
A 11 (30**)	-	-	163883	-	-	-
A 11 (40**)	-	-	-	163891	163895	163899
A 11 (44**)	-	-	163884	163890	-	-
A 11 (44**)	-	-	-	163892*	-	-
A 11 (50**)	-	-	-	-	163896	163900
A 15 (23**)	-	-	-	163893	163897	163901
A 15 (47**)	-	-	-	163894	-	-
A 15 (50**)	-	-	-	-	163898	163902

* With base chuck Centco4-400-112-Z380

Ordering review Centco4-M (metric serration)

Centco4-M



Supply range:

- Chuck + mounting bolts
- 8 pieces T-nuts with bolts

Spindle mounting / Flange height (*)	Size		
	Centco4-M 210-52	Centco4-M 260-72	Centco4-M 315-92
Centering rim small	-	-	-
Centering rim large	Z 170 163795	Z 220 162795	Z 300 163797
A 06 (17**)	163844	-	-
A 06 (40**)	163845	-	-
A 06 (50**)	-	163877	-
A 08 (19**)	-	163878	-
A 08 (30**)	-	-	163885
A 08 (40**)	-	-	163886
A 08 (43**)	-	163879	-
A 11 (21**)	-	-	163887
A 11 (30**)	-	-	163888
A 11 (44**)	-	-	163889

** Refers to height of spindle flange see page „flanges“

Notes

The page contains a series of horizontal stripes in two shades of blue, alternating from top to bottom. The stripes are uniform in width and extend across the entire width of the page, providing a template for writing notes.

Notes

A series of horizontal stripes in two shades of blue, alternating between a medium blue and a light blue. The stripes are uniform in width and extend across the entire width of the page, providing a template for writing notes.

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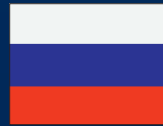
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