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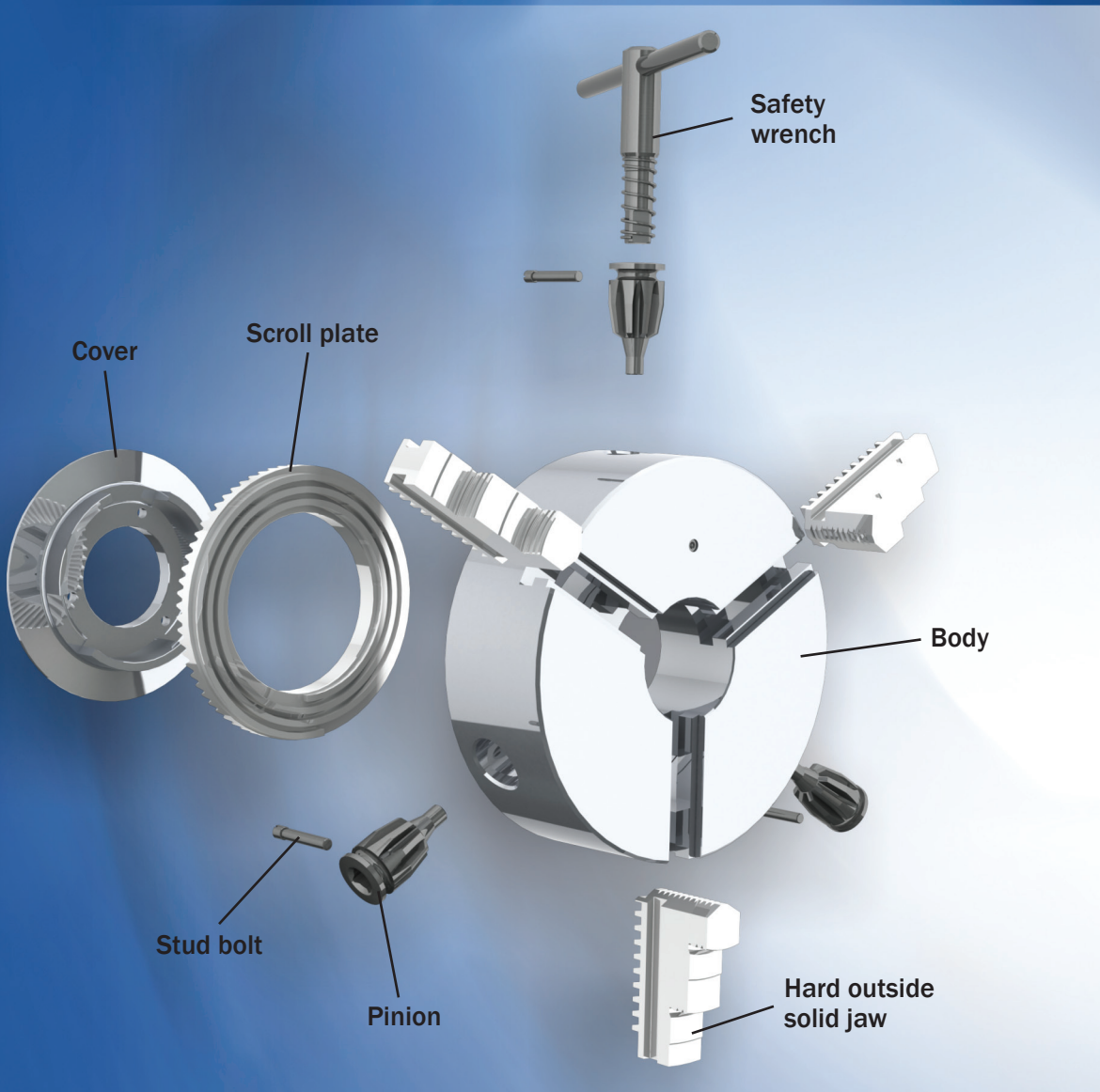
LATHE CHUCKS



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BISON-BIAL continues to manufacture our famous high quality Standard and Precision Lathe Chucks for customers with demanding applications around the world.

Our chucks are made from forged steel or cast iron; all of the working surfaces are induction hardened and ground ensuring that the finished product is a rugged chuck that meets high sliding, stability, and durability parameters that our customers have come to expect from BISON-BIAL.

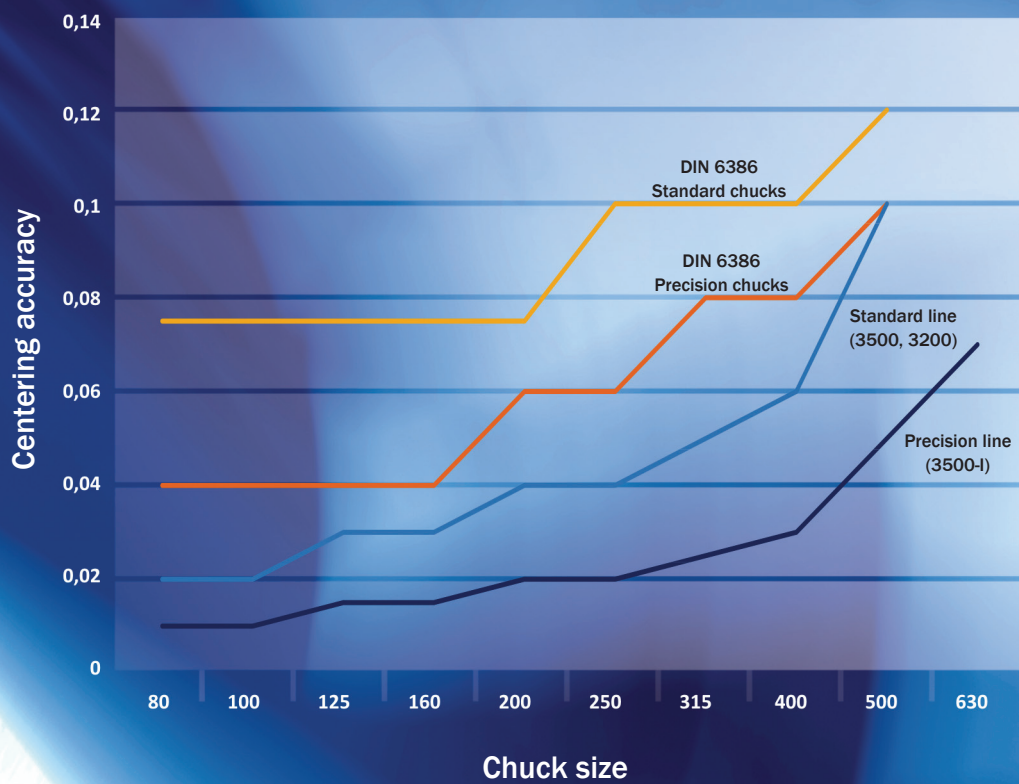


Each chuck is thoroughly inspected before the product leaves the factory. We check gripping force and run-out to ensure accuracy in order to meet BISON-BIAL's quality standards that are even more stringent than DIN standards. Only then the chuck is given the BISON-BIAL label of quality. This is our commitment to you that you have purchased the best workholding products on the market today.

We want to give you more. So when greater precision will be necessary you can choose the same BISON-BIAL lathe chucks from our precision line.

Centering accuracy of BISON-BIAL standard and precision lines are shown in the chart below in comparison to the requirements of DIN standards.

Both our standard and precision line fall below the required DIN standards throughout the various sizes.



For high precision operations we recommend the precision line of BISON-BIAL chucks. High quality products for demanding companies.

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Precision self-centering scroll chucks



3 jaw

	Body	Type	Page
DIN 6350	steel body	3504-I, 3505-I	19
DIN 55026	steel body	3514-I, 3515-I	20
DIN 55027	steel body	3534-I, 3535-I	21
DIN 55029	steel body	3544-I, 3545-I	22
DIN 6350 (FRONT MOUNTING)	steel body	3574-I, 3575-I	23

Standard self-centering scroll chucks



3 jaw

		Body	Type	Page
	DIN 6350	steel body	3504, 3505	24
		cast iron body	3204, 3205	25
	DIN 55026	steel body	3514, 3515	26
		cast iron body	3214, 3215	27
	DIN 55027	steel body	3534, 3535	28
		cast iron body	3234, 3235	29
	DIN 55029	steel body	3544, 3545	30
		cast iron body	3244, 3245	31
	DIN 6350 (FRONT MOUNTING)	steel body	3574, 3575	32
		cast iron body	3274, 3275	33







4 jaw

	DIN 6350	steel body	3704, 3705	34
		cast iron body	3604, 3605	35
	DIN 55026	steel body	3714, 3715	36
		cast iron body	3614, 3615	37
	DIN 55027	steel body	3734, 3735	38
		cast iron body	3634, 3635	39
	DIN 55029	steel body	3744, 3745	40
		cast iron body	3644, 3645	41
	DIN 6350 (FRONT MOUNTING)	steel body	3774, 3775	42
		cast iron body	3674, 3675	43





Standard self-centering scroll chucks

	2 jaw			
		Body	Type	Page
	DIN 6350	cast iron body	3105	44
	6 jaw			
	DIN 6350	steel body	3806, 3807	45
		cast iron body	3804, 3805	46

Self-centering chucks with fine adjustment

	3 jaw			
		Body	Type	Page
		steel body	3564, 3565	47
		cast iron body	3264, 3265	48
	6 jaw			
		steel body	3864, 3865	49

Lathe chucks for sharpening drills

		Type	Page
	3 jaw	3266, 3866	50
	6 jaw	3867, 3868	50
	Collet chucks	3911, 3960	51
	Self-centering scroll chucks for small turning diameters	3286	52

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Engineering data for self-centering scroll chucks

Gripping ranges	53
Maximum permissible rotation speeds	53
Total gripping force	54
Balance value	54
Centering accuracy	54


Spare parts for self-centering scroll chucks

Spare parts	55
Main dimensions of hard solid jaws and soft solid jaws for chucks type 3200, 3500, 3700, 3864	59
Mounting dimensions of hard master jaws for chucks type 3100, 3200, 3500, 3600, 3700, 3865	59
Mounting dimensions of top jaws for chucks type 3100, 3200, 3500, 3600, 3700, 3865	60


Lathe chucks with Morse Taper

		Type	Page
	Lathe chucks with Morse taper	9154, 9155, 9156, 9164, 9165 9184, 9185, 9186, 9187	61
	Independent lathe chucks with Morse taper	4954, 4956	62

Self-centering and individually adjustable scroll chucks


		Body	Type	Page
	3 jaw	steel body	4705	63
		cast iron body	4505	
	4 jaw	steel body	4805	63
		cast iron body	4605	

Self-centering chucks with large through-hole for pipe machining

		Body	Type	Page
	3 jaw	cast iron body	3295	64
		steel body	3597	65

Heavy-duty self-centering chucks with large through-hole for pipe machining

3 jaw

		Body	Type	Page
	DIN 55026	steel body	3515 HD	66

Heavy-duty independent chucks for pipe machining

4 jaw

		Body	Type	Page
	DIN 55026	steel body	4317 HD	67
	DIN 55029	steel body	4347 HD	68

Heavy-duty independent chuck

4 jaw

		Body	Type	Page
		steel body	4307 HD	69

Independent chucks

4 jaw

		Body	Type	Page
		cast steel body	4302, 4303	70
		cast iron body	4304, 4305	71
	DIN 55026	cast steel body	4312, 4313	72
		cast iron body	4314, 4315	73
	DIN 55027	cast steel body	4332, 4333	74
		cast iron body	4334, 4335	75
	DIN 55029	cast steel body	4342, 4343	76
		cast iron body	4344, 4345	77
	DIN 55026	steel body	4317-800/15 MSP	78

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Engineering data for independent chucks

Gripping ranges	79
Maximum permissible rotation speeds	79

Spare parts for independent chucks

Main dimensions of one-piece and two-piece reversible jaws	81
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Self-centering wedge bar chucks



3 jaw

	Body	Type	Page
DIN 6350	steel body	3404	82
DIN 55026	steel body	3414	82
DIN 55027	steel body	3434	82
DIN 55026	steel body	3444	82

Main dimensions of wedge bar chucks

82

Engineering data for self-centering wedge bar chucks

Gripping ranges	84
Maximum permissible rotation speeds	84
Total gripping force	84
Balance value	84
Centering accuracy	84

Spare parts for self-centering wedge bar chucks

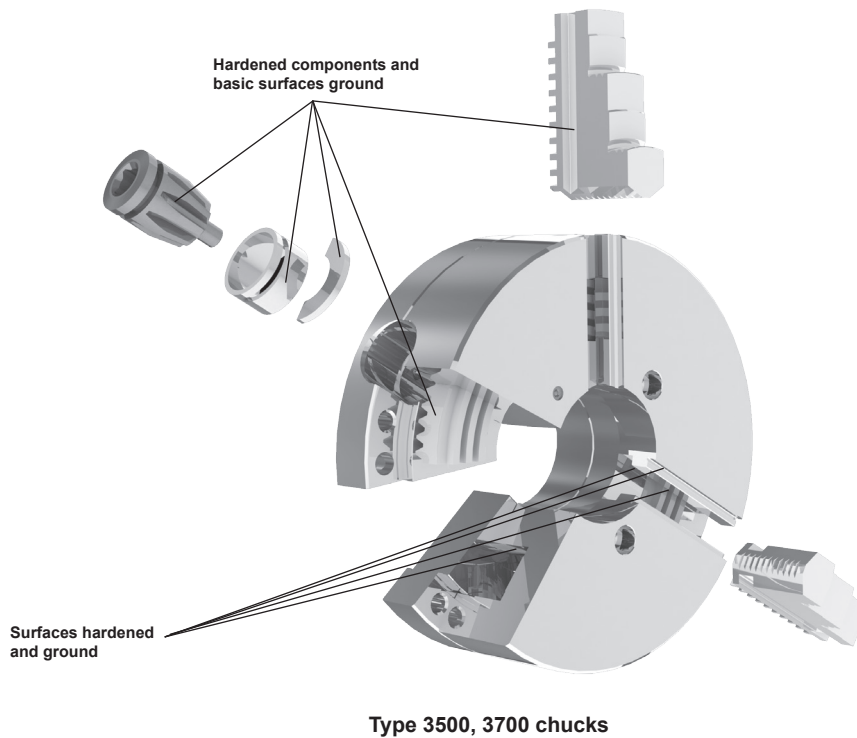
85

Adapter plates

	Type	Page
	Fully machined adapter plates for chucks with fine adjustment	8210, 8230, 8240
	Semi-finished adapter plates	8212, 8232, 8242
	Fully-finished adapter plates	8210-X, 8230-X, 8240-X

Machine spindle noses to DIN and ANSI standards

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A PROVEN DESIGN (THE CUSHMAN TYPE) FOR UNIVERSAL USE BUILT IN THREE MAIN LINES

- Standard chucks - with cast iron body for normal use (e.g. type 3204)
- Precision chucks - with steel body for high precision machining; extended period of life - expectancy (e.g. type 3504-I)
- Precision chucks with fine adjustment - with steel body for super high precision machining (e.g. type 3864)

BODY

- Type 3500, 3700 chucks: drop-forged of the highest grade steel, hardened and ground
- Type 3200, 3600 chucks: high quality cast-iron

SCROLL PLATE

- Drop-forged of fine alloy steel, carburized and hardened
- Thread flanks ground on both sides

JAWS

- Made from fine alloy steel
- Teeth, guides and other working surfaces are carburized, hardened and ground

PINIONS

- Made from fine alloy steel, carburized, hardened and ground

All components which are important for transmitting the gripping force are of modern and compact design. Each scroll plate and assembled precision chuck are statically balanced within fine limits. Lathe chucks must be orricated regularly to maintain their gripping force. Directions are included in the operating instructions supplied with each chuck. All chucks are equipped with grease nipples for convenient maintenance.

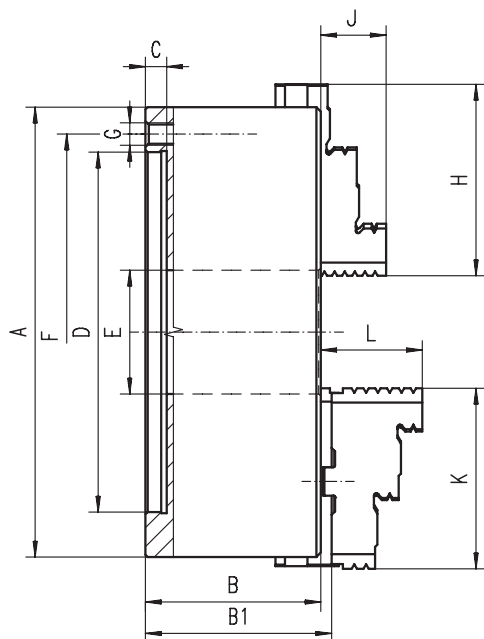
GUIDE FOR USE OF HAND-OPERATED BISON CHUCKS, SELF-CENTERING AND INDEPENDENT

Type	3500-I	3200 3600	3500 3700	3105	3264, 3265 3564, 3565 3864, 3865	3266, 3868 3866, 3867	4505, 4605 4705, 4805	4300
Machining of flange-type workpieces	●	●	●	●	●		●	●
Bar or tubework	●	●	●	●	●		●	◆
Machining of parts requiring a very high concentricity accuracy	■	●	●		■			
Twist drill grinding	■					■		
Gripping of parts on grinding machines	●	◆	●		■		◆	
Machining of eccentrical parts, of asymmetrical and irregularly shaped workpieces							■	■
Machining of workpieces requiring especially high gripping force	●	●	●				●	●
Machining of workpieces requiring a very high speed	■		■					
Measuring and inspection works	■				■			

- Normal application
- Particularly suitable
- ◆ Possible, with reservations

Type 3504-I, 3505-I

3 JAWS, STEEL BODY (DIN 6350)



ø 80 - ø 400



ø 500 - ø 630

Features:

- 3 jaw, self-centering scroll chuck with manual gripping
- Steel body extends machine life while providing higher rigidity and greater wear resistance, enabling the chuck to withstand higher machining forces
- Hardened and ground working surfaces ensure longer life with maintained accuracy and repeatability
- Balanced scroll plate allows higher rotation speeds without excess vibration
- Mounted on the machine-tool spindle from the back of the chuck, using the adapter plate

Application:

- This precision chuck, with increased gripping accuracy, is made for very high precision machining on conventional lathes and milling fixtures

Options:

- Hard solid jaws (type 3504-I) or hard two-piece jaws (type 3505-I)
- Chuck size: can be greater than 630 mm, but not exceeding 1000 mm
- Chuck design: our engineers can work with you to implement any product design changes you may require

Chuck size A	80	100	125	160	200	250	315	400	500	630
B	44	50	59,5	68	78	89	96,2	109	119	129
B1	-	-	64,3	72,8	82,8	92,8	101,3	116,8	129,8	140,3
C	3	3	4	4	4	5	5	5	5	7
D H7	56	70	95	125	160	200	260	330	420	545
E	16	20	35,5	42	55	76	103	136	190	252
F	67	83	108	140	176	224	286	362	458	586
G	3xM6	3xM8	3xM8	6xM10	6xM10	6xM12	3xM16	6xM16	6xM16	6xM16
H	32	42	51	70	85	105	125	145	180	225
J	13	17	20	32	29	34	43	55	60	70
K	-	-	56	67	80	95	110	127	127	127
L	-	-	40	43	45	53	57	67	79	87
Approx. weight [kg]	1,5	2,8	5,0	10,0	17,5	29	50	85	145,0	250,0

Other engineering data - see pages 53-54

Type	Standard accessories	1 set of outside hard solid jaws	1 set of inside hard solid jaws	1 wrench	Optional accessories	1 set of soft solid jaws
Type 3504-I						
Type 3505-I						

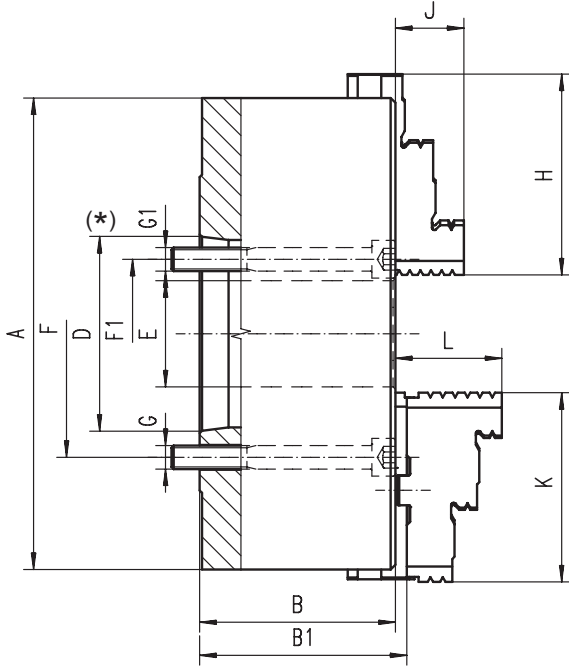
Spare parts - see pages 55-57

Example of order: 3504-250-I

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Type 3514-I, 3515-I

3 JAWS, STEEL BODY (DIN 55026)



(*) Screws inside taper type A1



- Hardened and ground working surfaces ensure longer life with maintained accuracy and repeatability
- Balanced scroll plate allows higher rotation speeds without excess vibration
- Mounted directly to "A" type machine-tool spindles

Application:

- This precision chuck, with increased gripping accuracy, is made for very high precision machining on conventional lathes and grinders

Options:

- Hard solid jaws (type 3514-I) or hard two-piece jaws (type 3515-I)
- Chuck size: can be greater than 630 mm, but not exceeding 1000 mm
- Chuck design: our engineers can work with you to implement any product design changes you may require

Features:

- 3 jaw, self-centering scroll chuck with manual gripping
- Steel body extends machine life while providing higher rigidity and greater wear resistance, enabling the chuck to withstand higher machining forces

Chuck size A	160	200			250			315		400		500		630	
Short taper 1:4	*5	*5	*6	5	*6	*8	6	*8	8	*11	8	11	11	15	
B	68	78			89			96,2		108		119		129	
B1	72,8	82,8			92,8			101,3		116,8		129,8		140,3	
D	min.	82,563	82,563	106,375	82,563	106,375	139,719	106,375	139,719	139,719	196,869	139,719	196,869	196,869	285,775
	max.	82,578	82,578	106,390	82,578	106,390	139,734	106,390	139,734	139,734	196,887	139,734	196,887	196,887	285,795
E	42	42	55	76	55	76	103	80	136	130	136	190	252	190	
F1	61,9	61,9	82,6	-	82,6	111,1	-	111,1	-	165,1	-	-	-	-	
G1	M10	M10	M12	-	M12	M16	-	M16	-	M 20	-	-	-	-	
F	-	-	-	104,8	-	-	133,4	-	171,4	-	171,4	235	235	330,2	
Qty. of mounting screws	3	3			6			6		6		6		6	
G	-	-	-	M10	-	-	M12	-	M16	-	M16	M20	M20	M24	
H	70	85	85	105	105	105	125	125	145	145	180	180	225	225	
J	32	29	29	34	34	34	43	43	55	55	60	60	70	70	
K	67	80	80	95	95	95	110	110	127	127	127	127	127	127	
L	43	45	45	53	53	53	57	57	67	67	79	79	87	87	
Approx. weight [kg]	10,0	19,0			32,0			55,0		92,0		160,0		285,0	

Other engineering data - see pages 53-54

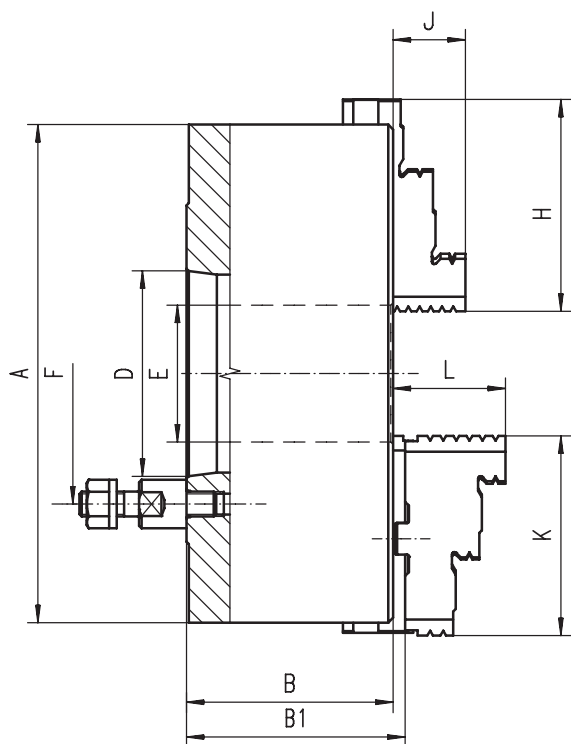
Type	Standard accessories	1 set of outside hard solid jaws	1 set of inside hard solid jaws	1 wrench	Optional accessories	1 set of soft solid jaws
Type 3514-I						
Type 3515-I						

Spare parts - see pages 55-57

Example of order: 3514-250/5-I

Type 3534-I, 3535-I

3 JAWS, STEEL BODY (DIN 55027)



Features:

- 3 jaw, self-centering scroll chuck with manual gripping
- Steel body extends machine life while providing higher rigidity and greater wear resistance, enabling the chuck to withstand higher machining forces
- Hardened and ground working surfaces ensure longer life with maintained accuracy and repeatability

- Balanced scroll plate allows higher rotation speeds without excess vibration
- Mounted directly to BAYONET type machine-tool spindles

Application:

- This precision chuck, with increased gripping accuracy, is made for very high precision machining on conventional lathes

Options:

- Hard solid jaws (type 3534-I) or hard two-piece jaws (type 3535-I)
- Chuck size: can be greater than 630 mm, but not exceeding 1000 mm
- Chuck design: our engineers can work with you to implement any product design changes you may require

Chuck size A	125		160		200		250		315		400		500		630			
Short taper 1:4	3	4	4	5	5	6	6	8	6	8	11	8	11	8	11	11	15	
B	59,5		68		78		89		96,2		111,7		108		119		129	
B1	64,8		72,8		82,8		92,8		101,3		116,8		116,8		129,8		140,3	
D	min.	53,975	63,513	63,513	82,563	82,563	106,375	106,375	139,719	139,719	196,869	139,719	196,869	139,719	196,869	196,869	285,775	
	max.	53,988	63,526	63,526	82,578	82,578	106,390	106,390	139,734	139,734	196,887	139,734	196,887	139,734	196,887	196,887	285,795	
E	32		42		55		76		103		136		136		190		252	
F	75	85	85	104,8	104,8	133,4	133,4	171,4	171,4	235	171,4	235	171,4	235	235	235	330,2	
Qty. of mounting screws	3	3	3	4	4	4	4	4	4	6	4	4	4	6	6	6	6	
H	51	51	70	70	85	85	105	105	125	125	145	145	180	180	225	225	225	
J	20	20	32	32	29	29	34	34	43	43	55	55	60	60	70	70	70	
K	56	56	67	67	80	80	95	95	110	110	127	127	127	127	127	127	127	
L	40	40	43	43	45	45	53	53	57	57	67	67	79	79	87	87	87	
Approx. weight [kg]	5,0		9,0		19,0		32,0		51,0		101,0		150,0		274,0			

Other engineering data - see pages 53-54

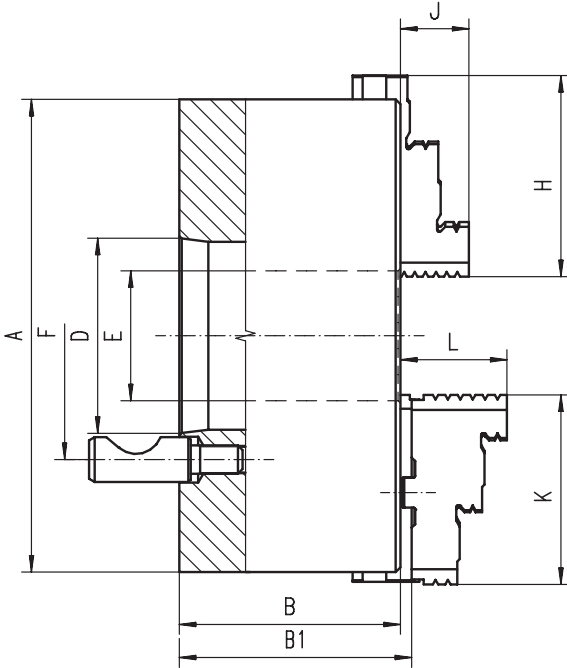
Type	Standard accessories	1 set of outside hard solid jaws	1 set of inside hard solid jaws	1 wrench	Optional accessories	1 set of soft solid jaws
Type 3534-I						
Type 3535-I						

Spare parts - see pages 55-58

Example of order: 3534-250/6-I

Type 3544-I, 3545-I

3 JAWS, STEEL BODY (DIN 55029)



Features:

- 3 jaw, self-centering scroll chuck with manual gripping
- Steel body extends machine life while providing higher rigidity and greater wear resistance, enabling the chuck to withstand higher machining forces
- Hardened and ground working surfaces ensure longer life with maintained accuracy and repeatability

- Balanced scroll plate allows higher rotation speeds without excess vibration
- Mounted directly to CAMLOCK type machine-tool spindles

Application:

- This precision chuck, with increased gripping accuracy, is made for very high precision machining on conventional lathes

Options:

- Hard solid jaws (type 3544-I) or hard two-piece jaws (type 3545-I)
- Chuck size: can be greater than 630 mm, but not exceeding 1000 mm
- Chuck design: our engineers can work with you to implement any product design changes you may require

Chuck size A	100	125			160			200			250	
Short taper 1:4	3	3	4	3	4	5	4	5	6	6	8	
B	76	59,5			68			78			89	
B1	-	64,8			72,8			82,8			92,8	
D	min.	53,975	53,975	63,513	53,975	63,513	82,563	63,513	82,563	106,375	106,375	139,719
	max.	53,988	53,988	63,526	53,988	63,526	82,578	63,526	82,578	106,390	106,390	139,734
E	20	32			42			55			76	
F	70,6	70,6	82,6	70,6	82,6	104,8	82,6	104,8	133,4	133,4	171,4	
Qty. of mounting screws	3	3	3	3	3	6	3	6	6	6	6	
H	70	51	51	70	70	70	85	85	85	105	105	
J	32	20	20	32	32	32	29	29	29	34	34	
K	67	56	56	67	67	67	80	80	80	95	95	
L	43	40	40	43	43	43	45	45	45	53	53	
Approx. weight [kg]	3,0	5,0			9,0			19,0			32,0	

Chuck size A	315			400		500		630			
Short taper 1:4	6	8	11	8	11	8	11	8	11	15	
B	96,2			111,7		108		119			
B1	101,3			116,8		116,8		129,8			
D	min.	106,375	139,719	196,869	139,719	196,869	139,719	196,869	139,719	196,869	285,775
	max.	106,390	139,734	196,887	139,734	196,887	139,734	196,887	139,734	196,887	285,795
E	103			136		136		190			
F	133,4	171,4	235	171,4	235	171,4	235	171,4	235	330,2	
Qty. of mounting screws	6	6	6	6	6	6	6	6	6	6	
H	125	125	125	145	145	180	180	225	225	225	
J	43	43	43	55	55	60	60	70	70	70	
K	-	110	110	127	127	127	127	127	127	127	
L	-	57	57	67	67	79	79	87	87	87	
Approx. weight [kg]	51,0			101,0		150,0		274,0			

Other engineering data - see pages 53-54

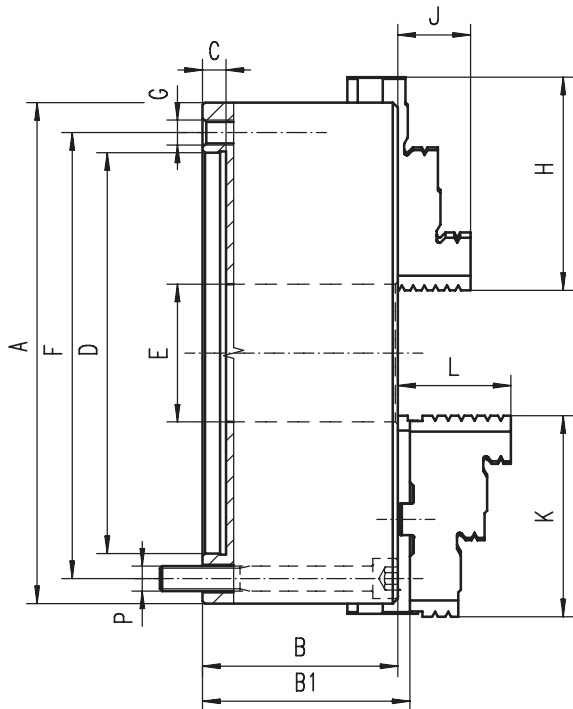
Type	Standard accessories	Optional accessories
Type 3544-I	1 set of outside hard solid jaws	1 set of soft solid jaws
Type 3545-I	1 set of hard top jaws	1 set of hard master jaws

Spare parts - see pages 55-58

Example of order: 3544-250/6-I

Type 3574-I, 3575-I

3 JAWS, STEEL BODY, FRONT MOUNTING (DIN 6350)



Features:

- 3 jaw, self-centering scroll chuck with manual gripping
- Steel body extends machine life while providing higher rigidity and greater wear resistance, enabling the chuck to withstand higher machining forces
- Hardened and ground working surfaces ensure longer life with maintained accuracy and repeatability
- Balanced scroll plate allows higher rotation speeds without excess vibration
- Flexible mounting system: mounted on machine-tool spindles using an adapter plate and can be mounted either from the back or the from the front of the chuck to the adapter plate

Application:

- This precision chuck, with increased gripping accuracy, is made for very high precision machining on conventional lathes, grinders and milling fixtures

Options:

- Hard solid jaws (type 3574-I) or hard two-piece jaws (type 3575-I)
- Chuck size: can be greater than 630 mm, but not exceeding 1000 mm
- Chuck design: our engineers can work with you to implement any product design changes you may require

Chuck size A	80	100	125	160	200	250	315	400	500	630
B	44	50	59,5	68	78	89	97,2	109	119	129
B1	-	-	64,3	72,8	82,8	92,8	101,3	116,8	129,8	140,3
C	3	3	4	4	4	5	5	5	5	7
D H7	56	70	95	125	160	200	260	330	420	545
E	16	20	35,5	42	55	76	103	136	190	252
F	67	83	108	140	176	224	286	362	458	586
G	3xM6	3xM8	3xM8	6xM10	6xM10	6xM12	6xM16	6xM16	6xM16	6xM16
H	32	42	51	70	85	105	125	145	180	225
J	13	17	20	32	29	34	43	55	60	70
K	-	-	56	67	80	95	110	127	127	127
L	-	-	40	43	45	53	57	67	79	87
P	3xM6	3xM8	3xM8	3xM10	3xM10	3xM12	3xM16	3xM16	3xM16	3xM16
Approx. weight [kg]	1,5	2,8	5,0	10,0	17,5	29	50	85	145,0	250,0

Other engineering data - see pages 53-54

Type	Standard accessories	1 set of outside hard solid jaws	1 set of inside hard solid jaws	1 wrench	Optional accessories	1 set of soft solid jaws
Type 3574-I						
Type 3575-I		1 set of hard top jaws	1 set of hard master jaws	1 wrench		1 set of soft top jaws

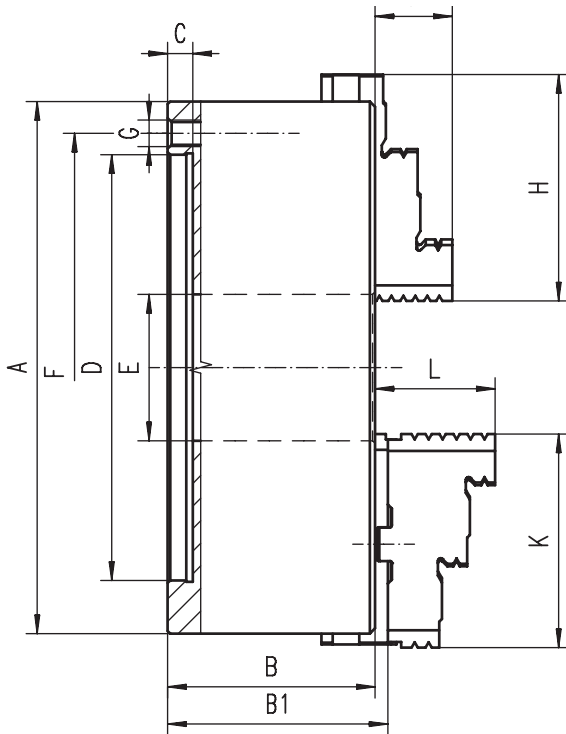
Spare parts - see pages 55-57

Example of order: 3574-250-I

1

Type 3504, 3505

3 JAWS, STEEL BODY (DIN 6350)



Features:

- 3 jaw, self-centering scroll chuck with manual gripping
- Steel body extends machine life while providing higher rigidity and greater wear resistance
- Hardened and ground working surfaces ensure longer life with maintained accuracy and repeatability
- Balanced scroll plate and chuck allows higher rotation speeds without excess vibration
- Mounted on the machine-tool spindle from the back of the chuck, using the adapter plate

Application:

- This chuck is designed for all types of workshop machining operations on conventional lathes

Options:

- Hard solid jaws (type 3504) or hard two-piece jaws (type 3505)
- Chuck design: our engineers can work with you to implement any product design changes you may require

Chuck size A	80	100	125	160	200	250	315	400
B	44	50	59,5	68	78	89	97,2	109
B1	-	-	64,3	72,8	82,8	92,8	101,3	116,8
C	3	3	4	4	4	5	5	5
D H7	56	70	95	125	160	200	260	330
E	16	20	35,5	42	55	76	103	136
F	67	83	108	140	176	224	286	362
G	3xM6	3xM8	3xM8	6xM10	6xM10	6xM12	6xM16	6xM16
H	32	42	51	70	85	105	125	145
J	13	17	20	32	29	34	43	55
K	-	-	56	67	80	95	110	127
L	-	-	40	43	45	53	57	67
Approx. weight [kg]	1,5	2,8	5,0	10,0	17,5	29	50	85

Other engineering data - see pages 53-54

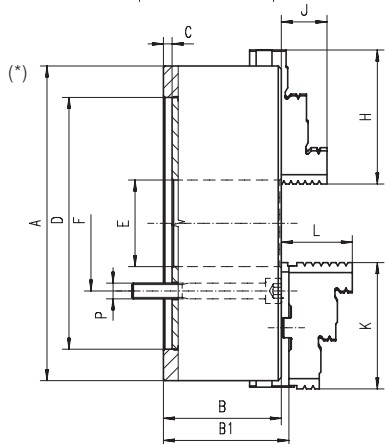
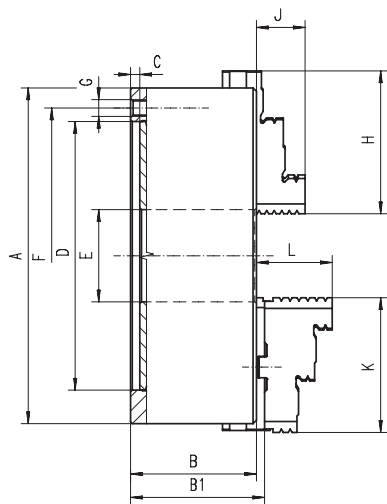
Type	Standard accessories	1 set of outside hard solid jaws	1 set of inside hard solid jaws	1 wrench	Optional accessories	1 set of soft solid jaws
Type 3504						
Type 3505		1 set of hard top jaws	1 set of hard master jaws	1 wrench		1 set of soft top jaws

Spare parts - see pages 55-57

Example of order: 3504-315

Type 3204, 3205

3 JAWS, CAST IRON BODY (DIN 6350)



3204-800, 915, 1000; 3205-800, 915, 1000



Features:

- 3 jaw, self-centering scroll chuck with manual gripping, and a high quality cast iron body
- Smart design, allowing inner parts to be replaced quickly
- Mounted on the machine-tool spindle from the back of the chuck, using the adapter plate

Application:

- This chuck is designed for all types of workshop machining operations on conventional lathes and milling fixtures

Options:

- Hard solid jaws (type 3204) or hard two-piece jaws (type 3205)
- Chuck design: our engineers can work with you to implement any product design changes you may require
- Chuck with diameters 800 mm, 915 mm and 1000 mm are front mounted with screws into cylindrical recess (*see lower drawing)

Chuck size A	80	100	125	160	200	250	315	400	500	630	(*)		
											800	915	1000
B	44	50	56	64,5	75	85	94	105	120	135	159	171	171
B1	-	-	60,8	69,3	79,8	88,8	99,1	113,8	130,8	146,3	170,3	180	180
C	3	3	4	4	4	5	5	5	5	7	20	20	20
D H7	56	70	95	125	160	200	260	330	420	545	450	520	520
E	16	20	32	42	55	76	103	136	190	252	320	408	408
F	67	83	108	140	176	224	286	362	458	586	368,3	463,6	463,6
G	3xM6	3xM8	3xM8	6xM10	6xM10	6xM12	6xM16	6xM16	6xM16	6xM16	-	-	-
H	32	42	51	70	85	105	125	145	180	225	225	-	-
J	13	17	20	32	29	34	43	55	60	70	70	-	-
K	-	-	56	67	80	95	110	127	127	127	127	175	175
L	-	-	40	43	45	53	57	67	79	87	87	100	100
P	-	-	-	-	-	-	-	-	-	-	6xM24	-	6xM24
Approx. weight [kg]	1,5	2,8	5,0	10,0	17,5	29	50	85	145,0	250,0	402	560	720

Other engineering data - see pages 53-54

Type	Standard accessories	1 set of outside hard solid jaws	1 set of inside hard solid jaws	1 wrench	Optional accessories	1 set of soft solid jaws
Type 3204						
Type 3205						

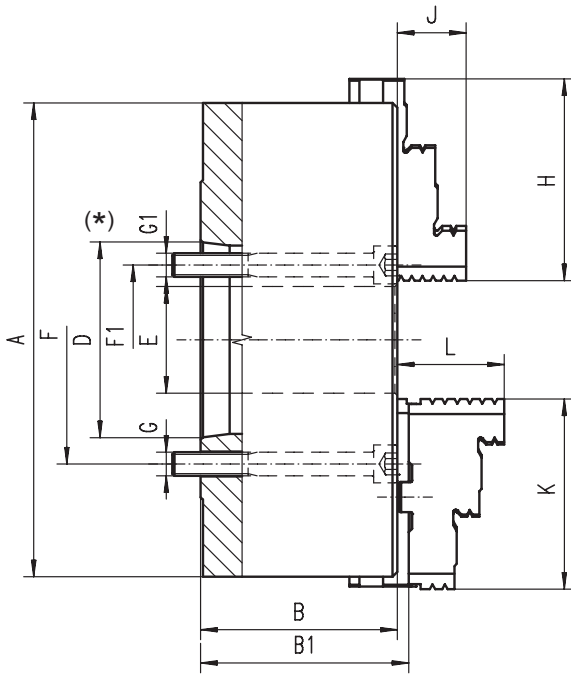
Spare parts - see pages 55-57

Example of order: 3204-250

Type 3514, 3515

3 JAWS, STEEL BODY (DIN 55026)

1



(*) Screws inside taper type A1



- Balanced scroll plate allows higher rotation speeds without excess vibration
- Mounted directly to "A" type machine-tool spindles

Application:

- This chuck is designed for all types of workshop machining operations on conventional lathes and grinders

Options:

- Hard solid jaws (type 3514) or hard two-piece jaws (type 3515)
- Chuck design: our engineers can work with you to implement any product design changes you may require

Features:

- 3 jaw, self-centering scroll chuck with manual gripping
- Steel body extends machine life while providing higher rigidity and greater wear resistance, enabling the chuck to withstand higher machining forces
- Hardened and ground working surfaces ensure longer life with maintained accuracy and repeatability

Chuck size A	160	200				250			315		400		
Short taper 1:4	*5	4	*5	*6	5	*6	*8	6	*8	6	8	*11	
B	68	78				89			96,2		108		
B1	72,8	82,8				92,8			101,3		116,8		
D	min.	82,563	63,513	82,563	106,375	82,563	106,375	139,719	106,375	139,719	106,375	139,719	196,869
	max.	82,578	63,526	82,578	106,390	82,578	106,390	139,734	106,390	139,734	106,390	139,734	196,887
E	42	42	42	55	76	55	76	103	80	103	136	130	
F1	61,9	-	61,9	82,6	-	82,6	111,1	-	111,1	-	-	165,1	
G1	M10	-	M10	M12	-	M12	M16	-	M16	-	-	M 20	
F	-	82,6	-	-	104,8	-	-	133,4	-	133,4	171,4	-	
Qty. of mounting screws	3	3				3	6		6		6		
G	-	M10	-	-	M10	-	-	M12	-	M12	M16	-	
H	70	85	85	85	105	105	105	125	125	145	145	145	
J	32	29	29	29	34	34	34	43	43	55	55	55	
K	67	80	80	80	95	95	95	110	110	127	127	127	
L	43	45	45	45	53	53	53	57	57	67	67	67	
Approx. weight [kg]	10,0	19,0				32,0			55,0		92,0		

Other engineering data - see pages 53-54

Type	Standard accessories	1 set of outside hard solid jaws	1 set of inside hard solid jaws	1 wrench	Optional accessories	1 set of soft solid jaws
Type 3514						
Type 3515						

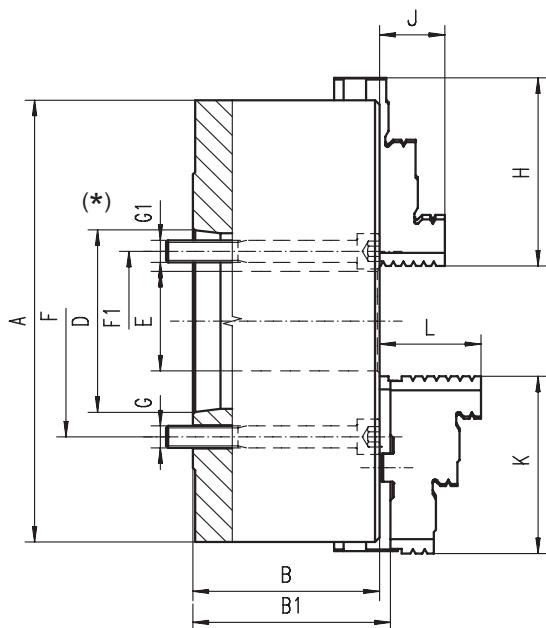
Spare parts - see pages 55-57

Example of order: 3514-315/6

Type 3214, 3215

3 JAWS, CAST IRON BODY (DIN 55026)

1



(*) Screws inside taper type A1



Features:

- 3 jaw, self-centering, scroll chuck with manual gripping, and a high quality cast iron body
- Smart design, allowing inner parts to be replaced quickly
- Mounted directly to "A" type machine-tool spindles

Application:

- This chuck is designed for all types of workshop machining operations on conventional lathes and grinders

Options:

- Hard solid jaws (type 3214) or hard two-piece jaws (type 3215)
- Chuck design: our engineers can work with you to implement any product design changes you may require

Chuck size A	160	200			250			315		400			500		630		800		1000	
Short taper 1:4	*5	*5	*6	5	*6	*8	6	*8	6	8	*11	8	11	11	*15	11	*15	20	20	
B	81,5	91		103,5			117,7		128,5			146		165		159		180	171	
B1	86,3	95,8		107,3			122,8		137,3			157,3		175,8		191,3			180	
D	min.	82,563	82,563	106,375	82,563	106,375	139,719	106,375	139,719	106,375	139,719	196,869	139,719	196,869	196,869	285,775	196,869	285,775	412,775	412,775
	max.	82,578	82,578	106,390	82,578	106,390	139,734	106,390	139,734	106,390	139,734	196,887	139,734	196,887	196,887	285,795	196,887	285,795	412,802	412,802
E	42	42	55	76	55	76	103	80	103	136	130	136	190	190	190	190	190	247,6	-	-
F1	61,9	61,9	82,6	-	82,6	111,1	-	111,1	-	-	165,1	-	-	-	-	-	-	247,6	-	-
G1	M10	M10	M12	-	M12	M16	-	M16	-	-	M 20	-	-	-	-	-	-	M 24	-	-
F	-	-	-	104,8	-	-	133,4	-	133,4	171,4	-	171,4	235	235	330,2	235	-	368,3	463,6	
Qty. of mounting screws	3	3	3	3	6			6		6			6		6		6		6	
G	-	-	-	M10	-	-	M12	-	M12	M16	-	M16	M20	M20	M24	M20	-	M24	M24	
H	70	85	85	105	105	105	125	125	145	145	145	180	180	225	225	225	225	225	225	-
J	32	29	29	34	34	34	43	43	55	55	55	60	60	70	70	70	70	70	70	-
K	67	80	80	95	95	95	110	110	127	127	127	127	127	127	127	127	127	127	127	-
L	43	45	45	53	53	53	57	57	67	67	67	79	79	87	87	87	87	87	87	-
Approx. weight [kg]	10,0	19,0		32,0			55,0		92,0			160,0		285,0		384,0		720		

Other engineering data - see pages 53-54

Type	Standard accessories	Optional accessories
Type 3214		
Type 3215		

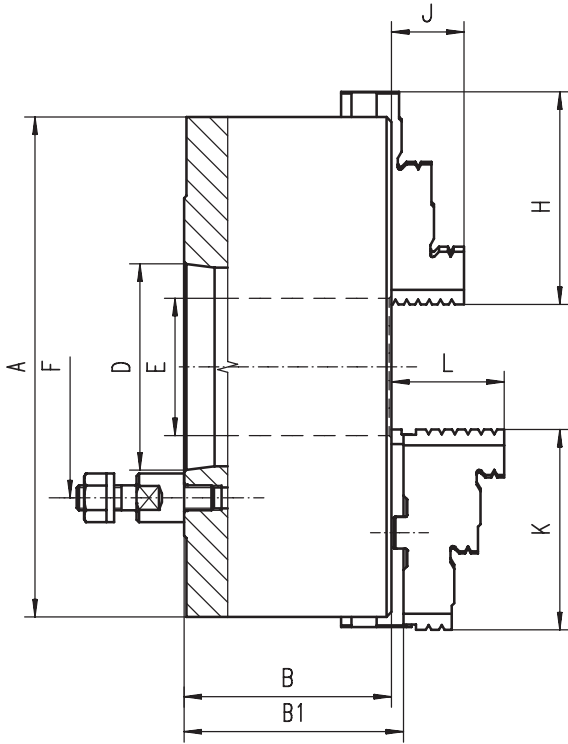
Spare parts - see pages 55-57

Example of order: 3215-250/5

Type 3534, 3535

3 JAWS, STEEL BODY (DIN 55027)

1



Features:

- 3 jaw, self-centering scroll chuck with manual gripping
- Steel body extends machine life while providing higher rigidity and greater wear resistance, enabling the chuck to withstand higher machining forces
- Hardened and ground working surfaces ensure longer life with maintained accuracy and repeatability

- Balanced scroll plate allows higher rotation speeds without excess vibration
- Mounted directly to BAYONET type machine-tool spindles

Application:

- This chuck is designed for all types of workshop machining operations on conventional lathes

Options:

- Hard solid jaws (type 3534) or hard two-piece jaws (type 3535)
- Chuck design: our engineers can work with you to implement any product design changes you may require

Chuck size A	125		160		200		250		315			400		
Short taper 1:4	3	4	4	5	5	6	6	8	6	8	11	8	11	
B	59,5		68		78		89		96,2			111,7		
B1	64,8		72,8		82,8		92,8		101,3			116,8		
D	min.	53,975	63,513	63,513	82,563	82,563	106,375	106,375	139,719	106,375	139,719	196,869	139,719	196,869
	max.	53,988	63,526	63,526	82,578	82,578	106,390	106,390	139,734	106,390	139,734	196,887	139,734	196,887
E	32		42		55		76		103			136		
F	75	85	85	104,8	104,8	133,4	133,4	171,4	133,4	171,4	235	171,4	235	
Qty. of mounting screws	3	3	3	4	4	4	4	4	4	4	6	4	6	
H	51	51	70	70	85	85	105	105	125	125	125	145	145	
J	20	20	32	32	29	29	34	34	43	43	43	55	55	
K	56	56	67	67	80	80	95	95	110	110	110	127	127	
L	40	40	43	43	45	45	53	53	57	57	57	67	67	
Approx. weight [kg]	5,0		9,0		19,0		32,0		51,0			101,0		

Other engineering data - see pages 53-54

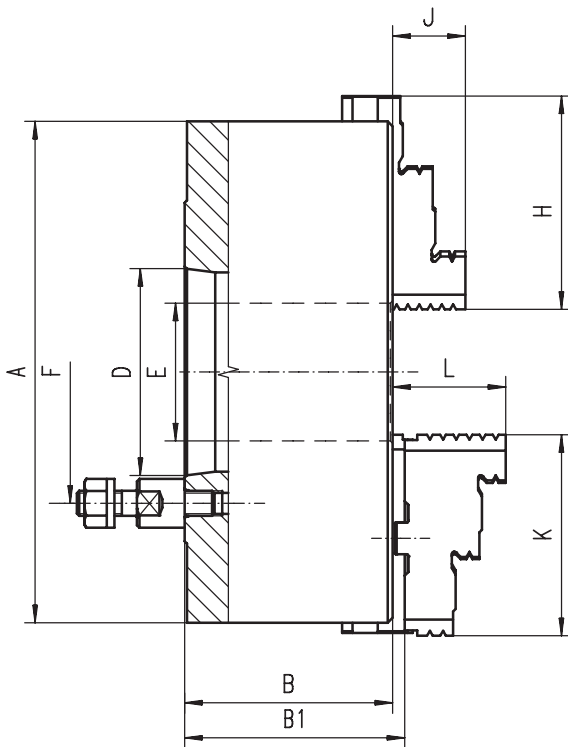
Type	Standard accessories	1 set of outside hard solid jaws	1 set of inside hard solid jaws	1 wrench	Optional accessories	1 set of soft solid jaws
Type 3534						
Type 3535						

Spare parts - see pages 55-58

Example of order: 3534-315/6

Type 3234, 3235

3 JAWS, CAST IRON BODY (DIN 55027)



Features:

- 3 jaw, self-centering, scroll chuck with manual gripping, and a high quality cast iron body
- Smart design, allowing inner parts to be replaced quickly
- Mounted directly to BAYONET type machine-tool spindles

Application:

- This chuck is designed for all types of workshop machining operations on conventional lathes

Options:

- Hard solid jaws (type 3234) or hard two-piece jaws (type 3235)
- Chuck size: can be greater than 630 mm, but not exceeding 1000 mm
- Chuck design: our engineers can work with you to implement any product design changes you may require

Chuck size A	100			125			160				200					
Short taper 1:4	3	3	4	3	4	5	6	3	4	5	6	3	4	5	6	
B	80	70			81,5				91							
B1	-	74,8			86,3				95,8							
D	min.	53,975	53,975	63,513	53,975	63,513	82,563	106,375	53,975	63,513	82,563	106,375	53,975	63,513	82,563	106,375
	max.	53,988	53,988	63,526	53,988	63,526	82,578	106,390	53,988	63,526	82,578	106,390	53,988	63,526	82,578	106,390
E	20	32			42				55							
F	75	75	85	75	85	104,8	133,4	75	85	104,8	133,4	75	85	104,8	133,4	
Qty. of mounting screws	3	3	3	3	3	4	4	3	3	4	4	3	3	4	4	
H	42	51	51	70	70	70	70	85	85	85	85	85	85	85	85	
J	17	20	20	32	32	32	32	29	29	29	29	29	29	29	29	
K	-	56	56	67	67	67	67	80	80	80	80	80	80	80	80	
L	-	40	40	43	43	43	43	45	45	45	45	45	45	45	45	
Approx. weight [kg]	3,0	5,0			9,0				19,0							

Chuck size A	250		315			400			500		630	
Short taper 1:4	6	8	6	8	11	6	8	11	8	11	11	15
B	103,5		117,7			125			128,5		146	
B1	107,3		122,8			130			137,3		156,8	
D	min.	106,375	139,719	106,375	139,719	196,869	106,375	139,719	196,869	139,719	196,869	285,775
	max.	106,390	139,734	106,390	139,734	196,887	106,390	139,734	196,887	139,734	196,887	285,795
E	76		103			103			136		190	
F	133,4	171,4	133,4	171,4	235	133,4	171,4	235	171,4	235	235	330,2
Qty. of mounting screws	4	4	4	4	6	4	4	6	4	6	6	6
H	105	105	125	125	125	145	145	145	180	180	225	225
J	34	34	43	43	43	55	55	55	60	60	70	70
K	95	95	110	110	110	127	127	127	127	127	127	127
L	53	53	57	57	57	67	67	67	79	79	87	87
Approx. weight [kg]	32,0		51,0			101,0			150,0		274,0	

Other engineering data - see pages 53-54

Type	Standard accessories	1 set of outside hard solid jaws	1 set of inside hard solid jaws	1 wrench	Optional accessories	1 set of soft solid jaws
Type 3234						
Type 3235						

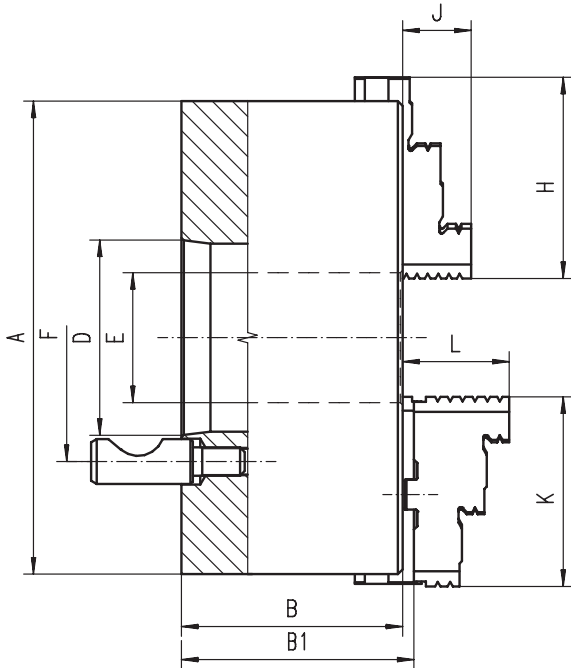
Spare parts - see pages 55-58

Example of order: 3234-250/6

Type 3544, 3545

3 JAWS, STEEL BODY (DIN 55029)

1



Features:

- 3 jaw, self-centering scroll chuck with manual gripping
- Steel body extends machine life while providing higher rigidity and greater wear resistance, enabling the chuck to withstand higher machining forces
- Hardened and ground working surfaces ensure longer life with maintained accuracy and repeatability
- Balanced scroll plate allows higher rotation speeds without excess vibration
- Mounted directly to CAMLOCK type machine-tool spindles

Application:

- This chuck is designed for all types of workshop machining operations on conventional lathes

Options:

- Hard solid jaws (type 3544) or hard two-piece jaws (type 3545)
- Chuck design: our engineers can work with you to implement any product design changes you may require

Chuck size A	125		160			200			250		315			400		
Short taper 1:4	3	4	3	4	5	4	5	6	6	8	6	8	11	8	11	
B	59,5		68			78			89		96,2			111,7		
B1	64,8		72,8			82,8			92,8		101,3			116,8		
D	min.	53,975	63,513	53,975	63,513	82,563	63,513	82,563	106,375	106,375	139,719	106,375	139,719	196,869	139,719	196,869
	max.	53,988	63,526	53,988	63,526	82,578	63,526	82,578	106,390	106,390	139,734	106,390	139,734	196,887	139,734	196,887
E	32		42			55			76		103			136		
F	70,6	82,6	70,6	82,6	104,8	82,6	104,8	133,4	133,4	171,4	133,4	171,4	235	171,4	235	
Qty. of mounting screws	3	3	3	3	6	3	6	6	6	6	6	6	6	6	6	
H	51	51	70	70	70	85	85	85	105	105	125	125	125	145	145	
J	20	20	32	32	32	29	29	29	34	34	43	43	43	55	55	
K	56	56	67	67	67	80	80	80	95	95	110	110	110	127	127	
L	40	40	43	43	43	45	45	45	53	53	57	57	57	67	67	
Approx. weight [kg]	5,0		9,0			19,0			32,0		51,0			101,0		

Other engineering data - see pages 53-54

Type	Standard accessories	1 set of outside hard solid jaws	1 set of inside hard solid jaws	1 wrench	Optional accessories	1 set of soft solid jaws
Type 3544						
Type 3545		1 set of hard top jaws	1 set of hard master jaws	1 wrench		1 set of soft top jaws

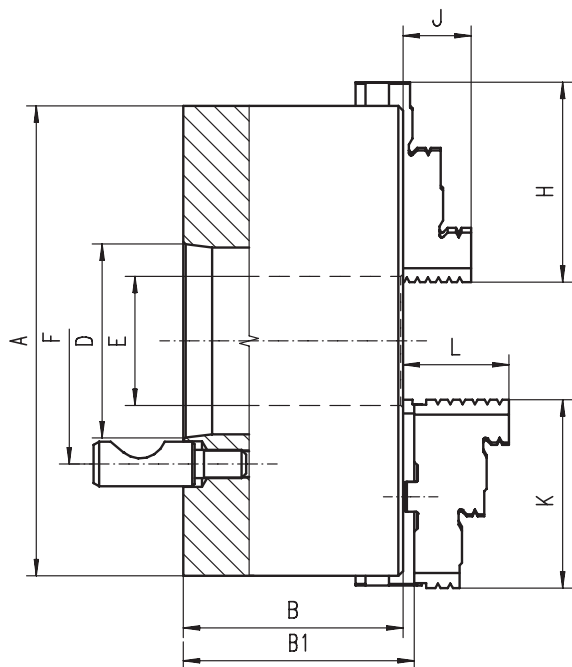
Spare parts - see pages 55-58

Example of order: 3544-315/6

Type 3244, 3245

3 JAWS, CAST IRON BODY (DIN 55029)

1



Features:

- 3 jaw, self-centering, scroll chuck with manual gripping, and a high quality cast iron body
- Smart design, allowing inner parts to be replaced quickly
- Mounted directly to CAMLOCK type machine-tool spindles

Application:

- This chuck is designed for all types of workshop machining operations on conventional lathes

Options:

- Hard solid jaws (type 3244) or hard two-piece jaws (type 3245)
- Chuck size: can be greater than 630 mm, but not exceeding 1000 mm
- Chuck design: our engineers can work with you to implement any product design changes you may require

Chuck size A	100			125			160			200			
Short taper 1:4	3	3	4	3	4	5	3	4	5	6			
B	80	70		81,5			91						
B1	-	74,8		86,3			95,8						
D	min.	53,975	53,975	63,513	53,975	63,513	82,563	53,975	63,513	82,563	106,375		
	max.	53,988	53,988	63,526	53,988	63,526	82,578	53,988	63,526	82,578	106,390		
E	20	32		42			51,5				55		
F	70,6	70,6	82,6	70,6	82,6	104,8	70,6	82,6	104,8	133,4			
Qty. of mounting screws	3	3	3	3	3	6	3	3	6	6			
H	42	51	51	70	70	70	85	85	85	85			
J	17	20	20	32	32	32	29	29	29	29			
K	-	56	56	67	67	67	80	80	80	80			
L	-	40	40	43	43	43	45	45	45	45			
Approx. weight [kg]	3,0	5,0		9,0			19,0						

Chuck size A	250			315			400			500		630	
Short taper 1:4	5	6	8	6	8	11	6	8	11	8	11	11	15
B	103,5			117,7			140			146		165	
B1	107,3			122,8			145			156,8		176,3	
D	min.	82,563	106,375	139,719	106,375	139,719	196,869	106,375	139,719	196,869	139,719	196,869	285,775
	max.	82,578	106,390	139,734	106,390	139,734	196,887	106,390	139,734	196,887	139,734	196,887	285,795
E	76			103			103			136		190	
F	104,8	133,4	171,4	133,4	171,4	235	133,4	171,4	235	171,4	235	235	330,2
Qty. of mounting screws	6	6	6	6	6	6	6	6	6	6	6	6	6
H	105	105	105	125	125	125	145	145	145	180	180	225	225
J	34	34	34	43	43	43	55	55	55	60	60	70	70
K	95	95	95	110	110	110	127	127	127	127	127	127	127
L	53	53	53	57	57	57	67	67	67	79	79	87	87
Approx. weight [kg]	32,0			51,0			101,0			150,0		274,0	

Other engineering data - see pages 53-54

Type	Standard accessories	1 set of outside hard solid jaws	1 set of inside hard solid jaws	1 wrench	Optional accessories	1 set of soft solid jaws
Type 3244						
Type 3245						

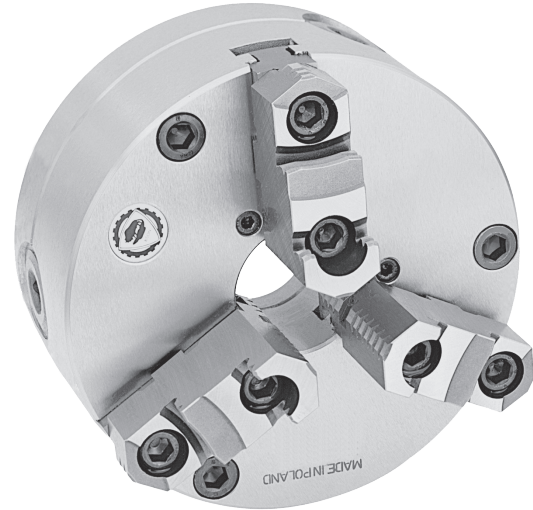
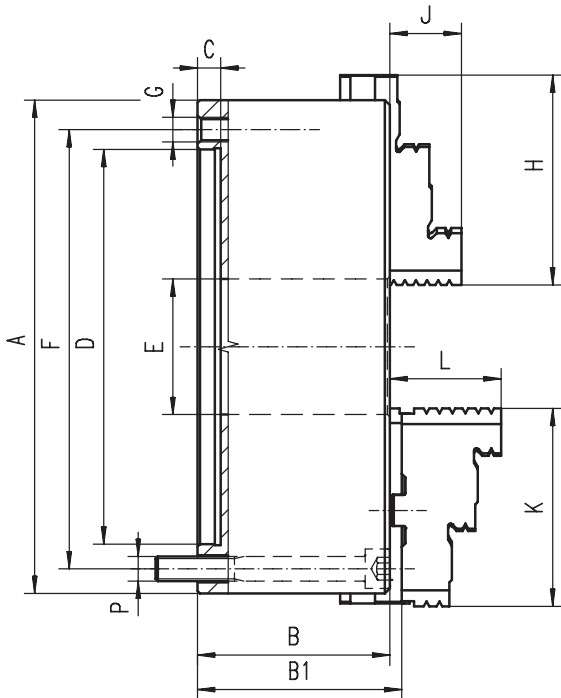
Spare parts - see pages 55-58

Example of order: 3244-250/5

1

Type 3574, 3575

3 JAWS, STEEL BODY, FRONT MOUNTING (DIN 6350)



Features:

- 3 jaw, self-centering scroll chuck with manual gripping
- Steel body extends machine life while providing higher rigidity and greater wear resistance
- Hardened and ground working surfaces ensure longer life with maintained accuracy and repeatability
- Balanced scroll plate and chuck allows higher rotation speeds without excess vibration
- Flexible mounting system: mounted on machine-tool spindles using an adapter plate and can be mounted either from the back or the from the front of the chuck to the adapter plate

Application:

- This chuck is designed for all types of workshop machining operations on conventional lathes, grinders and milling fixtures

Options:

- Hard solid jaws (type 3574) or hard two-piece jaws (type 3575)
- Chuck design: our engineers can work with you to implement any product design changes you may require

Chuck size A	80	100	125	160	200	250	315	400
B	44	50	59,5	68	78	89	97,2	109
B1	-	-	64,3	72,8	82,8	92,8	101,3	116,8
C	3	3	4	4	4	5	5	5
D H7	56	70	95	125	160	200	260	330
E	16	20	35,5	42	55	76	103	136
F	67	83	108	140	176	224	286	362
G	3xM6	3xM8	3xM8	6xM10	6xM10	6xM12	6xM16	6xM16
H	32	42	51	70	85	105	125	145
J	13	17	20	32	29	34	43	55
K	-	-	56	67	80	95	110	127
L	-	-	40	43	45	53	57	67
P	3xM6	3xM8	3xM8	3xM10	3xM10	3xM12	3xM16	3xM16
Approx. weight [kg]	1,5	2,8	5,0	10,0	17,5	29	50	85

Other engineering data - see pages 53-54

Type	Standard accessories	1 set of outside hard solid jaws	1 set of inside hard solid jaws	1 wrench	Optional accessories	1 set of soft solid jaws
Type 3574						
Type 3575		1 set of hard top jaws	1 set of hard master jaws	1 wrench		1 set of soft top jaws

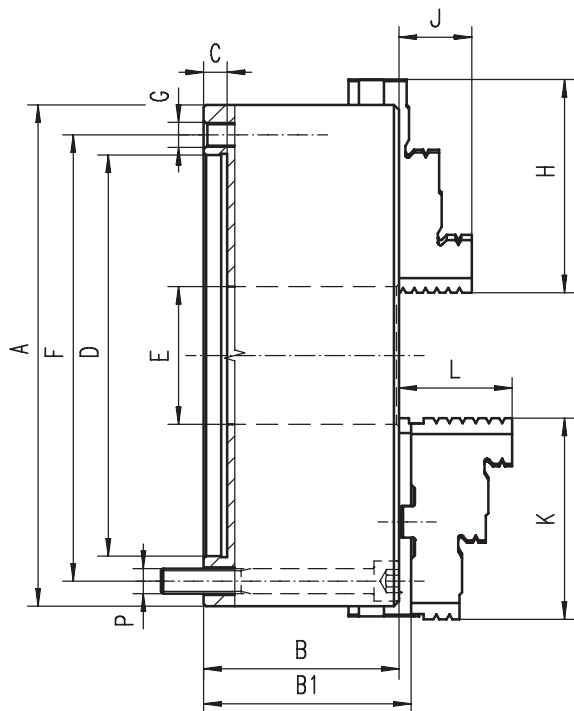
Spare parts - see pages 55-57

Example of order: 3574-315

Type 3274, 3275

3 JAWS, CAST IRON BODY, FRONT MOUNTING (DIN 6350)

1



Application:

- This chuck is designed for all types of workshop machining operations on conventional lathes and milling fixtures

Options:

- Hard solid jaws (type 3274) or hard two-piece jaws (type 3275)
- Chuck size: can be greater than 630 mm, but not exceeding 1000 mm
- Chuck design: our engineers can work with you to implement any product design changes you may require

Features:

- 3 jaw, self-centering, scroll chuck with manual gripping, and a high quality cast iron body
- Smart design, allowing inner parts to be replaced quickly
- Flexible mounting system: mounted on machine-tool spindles using an adapter plate and can be mounted either from the back or the from the front of the chuck to the adapter plate

Chuck size A	80	85	100	125	160	200	250	315	400	500	630
B	44	44	50	56	64,5	75	85	94	105	120	135
B1	-	-	-	60,8	69,3	79,8	88,8	99,1	113,8	130,8	146,3
C	3	3	3	4	4	4	5	5	5	5	7
D H7	56	62	70	95	125	160	200	260	330	420	545
E	16	18	20	32	42	55	76	103	136	190	252
F	67	72	83	108	140	176	224	286	362	458	586
G	3xM6	-	3xM8	3xM8	6xM10	6xM10	6xM12	6xM16	6xM16	6xM16	6xM16
H	32	32	42	51	70	85	105	125	145	180	225
J	13	43	17	20	32	29	34	43	55	60	70
K	-	-	-	56	67	80	95	110	127	127	127
L	-	-	-	40	43	45	53	57	67	79	87
P	3xM6	3xM6	3xM8	3xM8	3xM10	3xM10	3xM12	3xM16	3xM16	6xM16	6xM16
Approx. weight [kg]	1,5	1,9	2,8	5,0	10,0	17,5	29	50	85	145,0	250,0

Other engineering data - see pages 53-54

Type	Standard accessories	1 set of outside hard solid jaws	1 set of inside hard solid jaws	1 wrench	Optional accessories	1 set of soft solid jaws
Type 3274						
Type 3275						

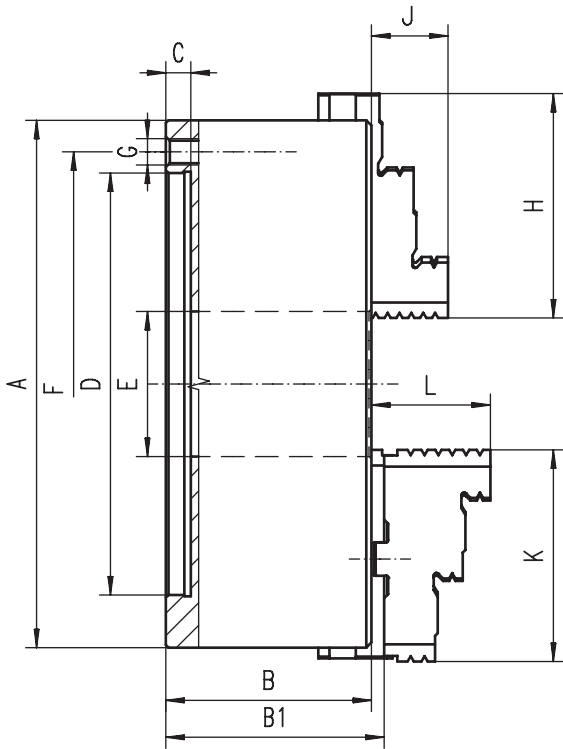
Spare parts - see pages 55-57

Example of order: 3274-250

1

Type 3704, 3705

4 JAWS, STEEL BODY, (DIN 6350)



Features:

- 4 jaw, self-centering scroll chuck with manual gripping
- Steel body extends machine life while providing higher rigidity and greater wear resistance
- Hardened and ground working surfaces ensure longer life with maintained accuracy and repeatability
- Balanced scroll plate and chuck allows higher rotation speeds without excess vibration

- Mounted on the machine-tool spindle from the back of the chuck, using the adapter plate

Application:

- This chuck is designed for all types of workshop machining operations on conventional lathes and grinders
- Suitable for machining square and round workpieces, granting greater flexibility to machining operations

Options:

- Hard solid jaws (type 3704) or hard two-piece jaws (type 3705)
- Chuck size: can be greater than 630 mm, but not exceeding 1000 mm
- Chuck design: our engineers can work with you to implement any product design changes you may require

Chuck size A	100	125	160	200	250	315	400	500	630
B	50	59,5	68	78	89	97,2	109	119	129
B1	-	64,3	72,8	82,8	92,8	101,3	116,8	129,8	140,3
C	3	4	4	4	5	5	5	5	7
D H7	70	95	125	160	200	260	330	420	545
E	20	35,5	42	55	76	103	136	190	252
F	83	108	140	176	224	286	362	458	586
G	3xM8	3xM8	6xM10	6xM10	6xM12	6xM16	6xM16	6xM16	6xM16
H	42	51	70	85	105	125	145	180	225
J	17	20	32	29	34	43	55	60	70
K	-	56	67	80	95	110	127	127	127
L	-	40	43	45	53	57	67	79	87
Approx. weight [kg]	2,8	5,0	10,0	17,5	29	50	85	145,0	250,0

Other engineering data - see pages 53-54

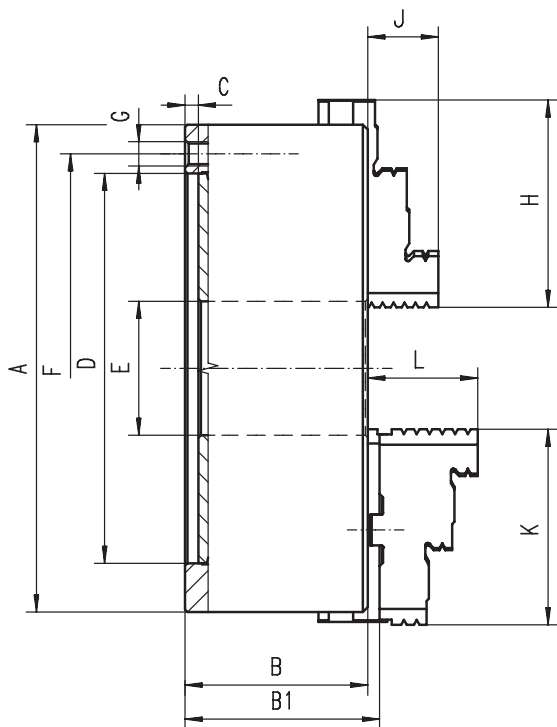
Type	Standard accessories	1 set of outside hard solid jaws	1 set of inside hard solid jaws	1 wrench	Optional accessories	1 set of soft solid jaws
Type 3704						
Type 3705		1 set of hard top jaws	1 set of hard master jaws	1 wrench		1 set of soft top jaws

Spare parts - see pages 55-57

Example of order: 3704-315

Type 3604, 3605

4 JAWS, CAST IRON BODY (DIN 6350)



Features:

- 4 jaw, self-centering, scroll chuck with manual gripping, and a high quality cast iron body
- Smart design, allowing inner parts to be replaced quickly
- Mounted on the machine-tool spindle from the back of the chuck, using the adapter plate

Application:

- This chuck is designed for all types of workshop machining operations on conventional lathes and grinders
- Suitable for machining square and round workpieces, granting greater flexibility to machining operations

Options:

- Hard solid jaws (type 3604) or hard two-piece jaws (type 3605)
- Chuck size: can be greater than 630 mm, but not exceeding 1000 mm
- Chuck design: our engineers can work with you to implement any product design changes you may require

Chuck size A	125	160	200	250	315	400	500	630
B	56	64,5	75	85	94	105	120	135
B1	60,8	69,3	79,8	88,8	99,1	113,8	130,8	146,3
C	4	4	4	5	5	5	5	7
D H7	95	125	160	200	260	330	420	545
E	32	42	55	76	103	136	190	252
F	108	140	176	224	286	362	458	586
G	3xM8	6xM10	6xM10	6xM12	6xM16	6xM16	6xM16	6xM16
H	51	70	85	105	125	145	180	225
J	20	32	29	34	43	55	60	70
K	56	67	80	95	110	127	127	127
L	40	43	45	53	57	67	79	87
Approx. weight [kg]	5,0	10,0	17,5	29	50	85	145,0	250,0

Other engineering data - see pages 53-54

Type	Standard accessories	1 set of outside hard solid jaws	1 set of inside hard solid jaws	1 wrench	Optional accessories	1 set of soft solid jaws
Type 3604						
Type 3605		1 set of hard top jaws	1 set of hard master jaws	1 wrench		1 set of soft top jaws

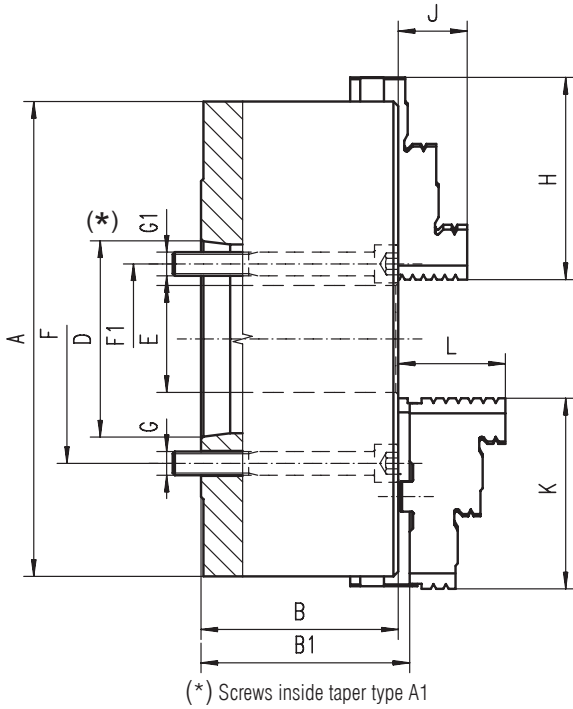
Spare parts - see pages 55-57

Example of order: 3604-250

Type 3714, 3715

4 JAWS, STEEL BODY (DIN 55026)

1



Features:

- 4 jaw, self-centering scroll chuck with manual gripping
- Steel body extends machine life while providing higher rigidity and greater wear resistance, enabling the chuck to withstand higher machining forces
- Hardened and ground working surfaces ensure longer life with maintained accuracy and repeatability
- Balanced scroll plate allows higher rotation speeds without excess vibration

- Mounted directly to "A" type machine-tool spindles

Application:

- This chuck is designed for all types of workshop machining operations on conventional lathes and grinders
- Suitable for machining square and round workpieces, granting greater flexibility to machining operations

Options:

- Hard solid jaws (type 3714) or hard two-piece jaws (type 3715)
- Chuck size: can be greater than 630 mm, but not exceeding 1000 mm
- Chuck design: our engineers can work with you to implement any product design changes you may require

Chuck size A	160	200		250			315		400			630
Short taper 1:4	*5	*5	*6	5	*6	*8	6	*8	6	8	*11	11
B	68	78		89			96,2		108			129
B1	72,8	82,8		92,8			101,3		116,8			140,3
D	min	82,563	82,563	106,375	82,563	106,375	139,719	106,375	139,719	106,375	139,719	196,869
	max.	82,578	82,578	106,390	82,578	106,390	139,734	106,390	139,734	106,390	139,734	196,887
E	42	42	55	76	55	76	103	80	103	136	130	190
F1	61,9	61,9	82,6	-	82,6	111,1	-	111,1	-	-	165,1	-
G1	M10	M10	M12	-	M12	M16	-	M16	-	-	M 20	-
F	-	-	-	104,8	-	-	133,4	-	133,4	171,4	-	235
Qty. of mounting screws	3	3		3	6			6		6		
G	-	-	-	M10	-	-	M12	-	M12	M16	-	M20
H	70	85	85	105	105	105	125	125	145	145	145	225
J	32	29	29	34	34	34	43	43	55	55	55	70
K	67	80	80	95	95	95	110	110	127	127	127	127
L	43	45	45	53	53	53	57	57	67	67	67	87
Approx. weight [kg]	10,0	19,0		32,0			55,0		92,0			285,0

Other engineering data - see pages 53-54

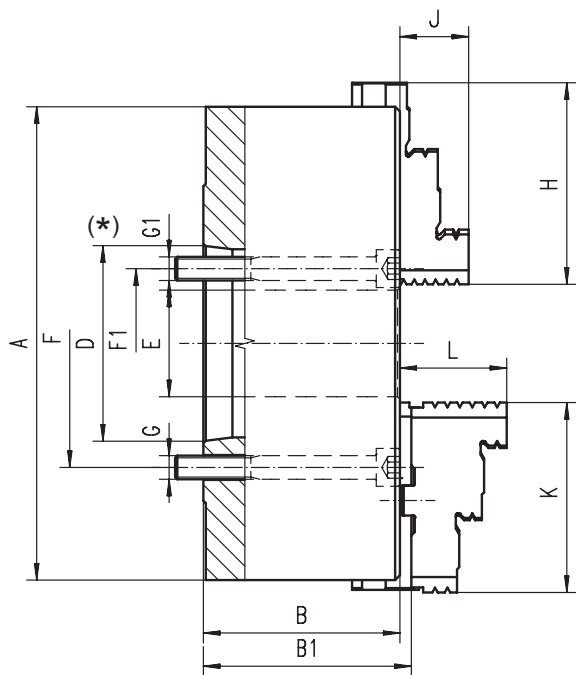
Type	Standard accessories	Optional accessories
Type 3714	1 set of outside hard solid jaws 1 set of inside hard solid jaws 1 wrench	1 set of soft solid jaws 1 set of soft top jaws
Type 3715	1 set of hard top jaws 1 set of hard master jaws 1 wrench	1 set of soft top jaws

Spare parts - see pages 55-57

Example of order: 3714-315/6

Type 3614, 3615

4 JAWS, CAST IRON BODY (DIN 55026)



(*) Screws inside taper type A1



Features:

- 4 jaw, self-centering, scroll chuck with manual gripping, and a high quality cast iron body
- Smart design, allowing inner parts to be replaced quickly
- Mounted directly to "A" type machine-tool spindles

Application:

- This chuck is designed for all types of workshop machining operations on conventional lathes and grinders
- Suitable for machining square and round workpieces, granting greater flexibility to machining operations

Options:

- Hard solid jaws (type 3614) or hard two-piece jaws (type 3615)
- Chuck size: can be greater than 500 mm, but not exceeding 1000 mm
- Chuck design: our engineers can work with you to implement any product design changes you may require

Chuck size A	200	250		315		400			500			
Short taper 1:4	*6	5	*6	*8	6	*8	6	8	*11	8	11	
B	91	103,5		117,7		128,5			146			
B1	95,8	107,3		122,8		137,3			157,3			
D	min.	106,375	82,563	106,375	139,719	106,375	139,719	106,375	139,719	196,869	139,719	196,869
	max.	106,390	82,578	106,390	139,734	106,390	139,734	106,390	139,734	196,887	139,734	196,887
E	55	76	55	76	103	80	103	136	130	136	190	
F1	82,6	-	82,6	111,1	-	111,1	-	-	165,1	-	-	
G1	M12	-	M12	M16	-	M16	-	-	M 20	-	-	
F	-	104,8	-	-	133,4	-	133,4	171,4	-	171,4	235	
Qty. of mounting screws		4		8	4	8	8	4	4	8		
G	-	M10	-	-	M12	-	M12	M16	-	M16	M20	
H	85	105	105	105	125	125	145	145	145	180	180	
J	29	34	34	34	43	43	55	55	55	60	60	
K	80	95	95	95	110	110	127	127	127	127	127	
L	45	53	53	53	57	57	67	67	67	79	79	
Approx. weight [kg]	19,0	32,0		55,0		92,0			160,0			

Other engineering data - see pages 53-54

Type	Standard accessories	1 set of outside hard solid jaws	1 set of inside hard solid jaws	1 wrench	Optional accessories	1 set of soft solid jaws
Type 3614						
Type 3615						

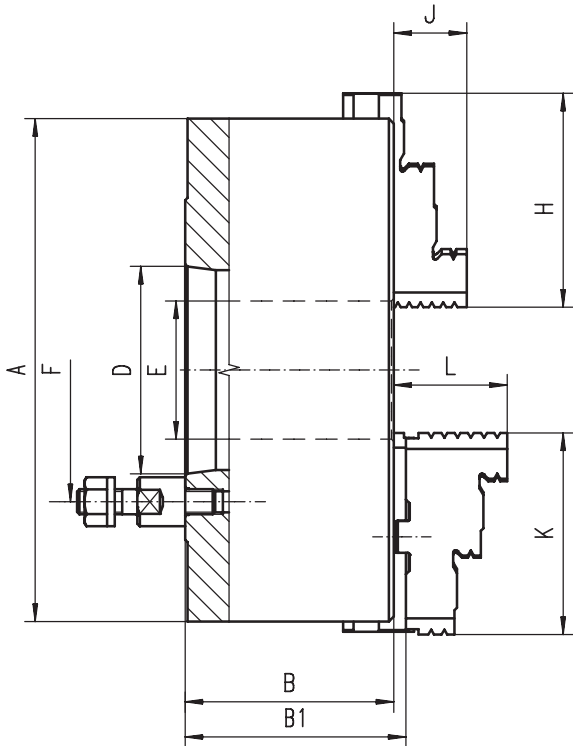
Spare parts - see pages 55-57

Example of order: 3614-250/5

1

Type 3734, 3735

4 JAWS, STEEL BODY (DIN 55027)



- Balanced scroll plate allows higher rotation speeds without excess vibration
- Mounted directly to BAYONET type machine-tool spindles

Application:

- This chuck is designed for all types of workshop machining operations on conventional lathes
- Suitable for machining square and round workpieces, granting greater flexibility to machining operations

Options:

- Hard solid jaws (type 3734) or hard two-piece jaws (type 3735)
- Chuck size: can be greater than 630 mm, but not exceeding 1000 mm
- Chuck design: our engineers can work with you to implement any product design changes you may require

Features:

- 4 jaw, self-centering scroll chuck with manual gripping
- Steel body extends machine life while providing higher rigidity and greater wear resistance, enabling the chuck to withstand higher machining forces
- Hardened and ground working surfaces ensure longer life with maintained accuracy and repeatability

Chuck size A	125		160		200		250		315		400		500		630		
Short taper 1:4	3	4	4	5	5	6	6	8	6	8	8	11	8	11	11	15	
B	59,5		68		78		89		96,2		108		119		129		
B1	64,8		72,8		82,8		92,8		101,3		116,8		129,8		140,3		
D	min.	53,975	63,513	63,513	82,563	82,563	106,375	106,375	139,719	106,375	139,719	139,719	196,869	139,719	196,869	196,869	285,775
	max.	53,988	63,526	63,526	82,578	82,578	106,390	106,390	139,734	106,390	139,734	139,734	196,887	139,734	196,887	196,887	285,795
E	32		42		55		76		103		136		136	190	190	252	
F	75	85	85	104,8	104,8	133,4	133,4	171,4	133,4	171,4	171,4	235	171,4	235	235	330,2	
Qty. of mounting screws	3	3	3	4	4	4	4	4	4	4	4	6	4	6	6	6	
H	51	51	70	70	85	85	105	105	125	125	145	145	180	180	225	225	
J	20	20	32	32	29	29	34	34	43	43	55	55	60	60	70	70	
K	56	56	67	67	80	80	95	95	110	110	127	127	127	127	127	127	
L	40	40	43	43	45	45	53	53	57	57	67	67	79	79	87	87	
Approx. weight [kg]	5,0		9,0		19,0		32,0		51,0		101,0		150,0		274,0		

Other engineering data - see pages 53-54

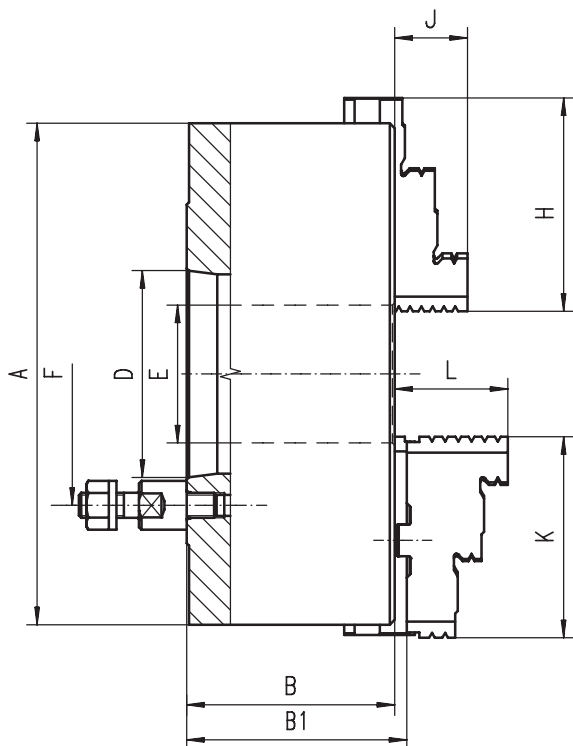
Type	Standard accessories	1 set of outside hard solid jaws	1 set of inside hard solid jaws	1 wrench	Optional accessories	1 set of soft solid jaws
Type 3734						
Type 3735						

Spare parts - see pages 55-58

Example of order: 3734-315/6

Type 3634, 3635

4 JAWS, CAST IRON BODY (DIN 55027)



Features:

- 4 jaw, self-centering, scroll chuck with manual gripping, and a high quality cast iron body
- Smart design, allowing inner parts to be replaced quickly
- Mounted directly to BAYONET type machine-tool spindles

Application:

- This chuck is designed for all types of workshop machining operations on conventional lathes

Options:

- Hard solid jaws (type 3634) or hard two-piece jaws (type 3635)
- Chuck size: can be greater than 500 mm, but not exceeding 1000 mm
- Chuck design: our engineers can work with you to implement any product design changes you may require

Chuck size A	125				160				200			
Short taper 1:4	3	4	3	4	5	6	3	4	5	6		
B	70				81,5				91			
B1	74,8				86,3				95,8			
D	min.	53,975	63,513	53,975	63,513	82,563	106,375	53,975	63,513	82,563	106,375	
	max.	53,988	63,526	53,988	63,526	82,578	106,390	53,988	63,526	82,578	106,390	
E	32				42				51,5			
F	75	85	75	85	104,8	133,4	75	85	104,8	133,4		
Qty. of mounting screws	3	3	3	3	4	4	3	3	4	4		
H	51	51	70	70	70	70	85	85	85	85		
J	20	20	32	32	32	32	29	29	29	29		
K	56	56	67	67	67	67	80	80	80	80		
L	40	40	43	43	43	43	45	45	45	45		
Approx. weight [kg]	5,0				9,0				19,0			

Chuck size A	250		315		400			500		
Short taper 1:4	6	8	6	8	6	8	11	8	11	
B	103,5		117,7		128,5			146		
B1	107,3		122,8		137,3			156,8		
D	min.	106,375	139,719	106,375	139,719	106,375	139,719	196,869	139,719	196,869
	max.	106,390	139,734	106,390	139,734	106,390	139,734	196,887	139,734	196,887
E	76		103		103			136		
F	133,4	171,4	133,4	171,4	133,4	171,4	235	171,4	235	
Qty. of mounting screws	4	4	4	4	4	4	6	4	6	
H	105	105	125	125	145	145	145	180	180	
J	34	34	43	43	55	55	55	60	60	
K	95	95	110	110	127	127	127	127	127	
L	53	53	57	57	67	67	67	79	79	
Approx. weight [kg]	32,0		51,0		101,0			150,0		

Other engineering data - see pages 53-54

Type	Standard accessories	1 set of outside hard solid jaws	1 set of inside hard solid jaws	1 wrench	Optional accessories	1 set of soft solid jaws
Type 3634						
Type 3635		1 set of hard top jaws	1 set of hard master jaws	1 wrench		1 set of soft top jaws

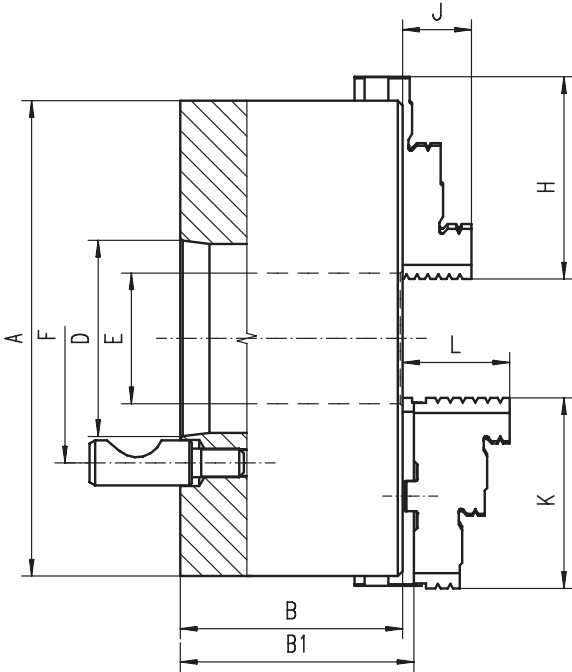
Spare parts - see pages 55-58

Example of order: 3634-250/6

Type 3744, 3745

4 JAWS, STEEL BODY (DIN 55029)

1



Features:

- 4 jaw, self-centering scroll chuck with manual gripping
- Steel body extends machine life while providing higher rigidity and greater wear resistance, enabling the chuck to withstand higher machining forces
- Hardened and ground working surfaces ensure longer life with maintained accuracy and repeatability
- Balanced scroll plate allows higher rotation speeds without excess vibration
- Mounted directly to CAMLOCK type machine-tool spindles

Application:

- This chuck is designed for all types of workshop machining operations on conventional lathes
- Suitable for machining square and round workpieces, granting greater flexibility to machining operations

Options:

- Hard solid jaws (type 3744) or hard two-piece jaws (type 3745)
- Chuck size: can be greater than 630 mm, but not exceeding 1000 mm
- Chuck design: our engineers can work with you to implement any product design changes you may require

Chuck size A	125		160			200			250		315		400		500		630			
Short taper 1:4	3	4	3	4	5	4	5	6	6	8	6	8	8	11	8	11	11	15		
B	59,5		68			78			89		96,2		108		119		129			
B1	64,8		72,8			82,8			92,8		101,3		116,8		129,8		140,3			
D	min.	53,975	63,513	53,975	63,513	82,563	63,513	82,563	106,375	106,375	139,719	106,375	139,719	139,719	196,869	139,719	196,869	196,869	285,775	
	max.	53,988	63,526	53,988	63,526	82,578	63,526	82,578	106,390	106,390	139,734	106,390	139,734	139,734	196,887	139,734	196,887	196,887	285,795	
E	32		42			55			76		103		136		136		190		252	
F	70,6	82,6	70,6	82,6	104,8	82,6	104,8	133,4	133,4	171,4	133,4	171,4	171,4	235	171,4	235	235	330,2		
Qty. of mounting screws	3	3	3	3	6	3	6	6	6	6	6	6	6	6	6	6	6	6		
H	51	51	70	70	70	85	85	85	105	105	125	125	145	145	180	180	225	225		
J	20	20	32	32	32	29	29	29	34	34	43	43	55	55	60	60	70	70		
K	56	56	67	67	67	80	80	80	95	95	110	110	127	127	127	127	127	127		
L	40	40	43	43	43	45	45	45	53	53	57	57	67	67	79	79	87	87		
Approx. weight [kg]	5,0		9,0			19,0			32,0		51,0		101,0		150,0		274,0			

Other engineering data - see pages 53-54

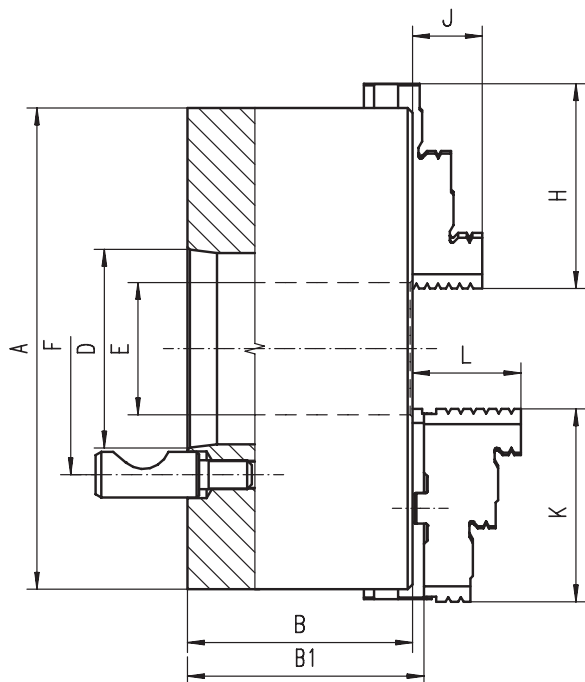
Type	Standard accessories	Optional accessories
Type 3744	1 set of outside hard solid jaws	1 set of inside hard solid jaws
Type 3745	1 set of hard top jaws	1 set of hard master jaws

Spare parts - see pages 55-58

Example of order: 3744-315/6

Type 3644, 3645

4 JAWS, CAST IRON BODY (DIN 55029)



Features:

- 4 jaw, self-centering, scroll chuck with manual gripping, and a high quality cast iron body
- Smart design, allowing inner parts to be replaced quickly
- Mounted directly to CAMLOCK type machine-tool spindles

Application:

- This chuck is designed for all types of workshop machining operations on conventional lathes
- Suitable for machining square and round workpieces, granting greater flexibility to machining operations

Options:

- Hard solid jaws (type 3644) or hard two-piece jaws (type 3645)
- Chuck size: can be greater than 500 mm, but not exceeding 1000
- Chuck design: our engineers can work with you to implement any product design changes you may require

Chuck size A	125			160			200			
Short taper 1:4	3	4		3	4	5	3	4	5	6
B	70			81,5			91			
B1	74,8			86,3			95,8			
D	min.	53,975	63,513	53,975	63,513	82,563	53,975	63,513	82,563	106,375
	max.	53,988	63,526	53,988	63,526	82,578	53,988	63,526	82,578	106,390
E	32			42			51,5		55	
F	70,6	82,6	70,6	82,6	104,8	70,6	82,6	104,8	133,4	
Qty. of mounting screws	3	3	3	3	6	3	3	6	6	6
H	51	51	70	70	70	70	85	85	85	85
J	20	20	32	32	32	32	29	29	29	29
K	56	56	67	67	67	67	80	80	80	80
L	40	40	43	43	43	43	45	45	45	45
Approx. weight [kg]	5,0			9,0			19,0			

Chuck size A	250			315			400			500	
Short taper 1:4	5	6	8	6	8		6	8	11	8	11
B	103,5			117,7			128,5			146	
B1	107,3			122,8			137,3			456,8	
D	min.	82,563	106,375	139,719	106,375	139,719	106,375	139,719	196,869	139,719	196,869
	max.	82,578	106,390	139,734	106,390	139,734	106,390	139,734	196,887	139,734	196,887
E	76			103			103		136		136
F	104,8	133,4	171,4	133,4	171,4	133,4	1714,4	235	171,4	235	
Qty. of mounting screws	6	6	6	6	6	6	6	6	6	6	
H	105	105	105	125	125	145	145	145	145	180	
J	34	34	34	43	43	55	55	55	55	60	
K	95	95	95	110	110	127	127	127	127	127	
L	53	53	53	57	57	67	67	67	67	79	
Approx. weight [kg]	32,0			51,0			101,0			150,0	

Other engineering data - see pages 53-54

Type	Standard accessories	Optional accessories
Type 3644		
Type 3645		

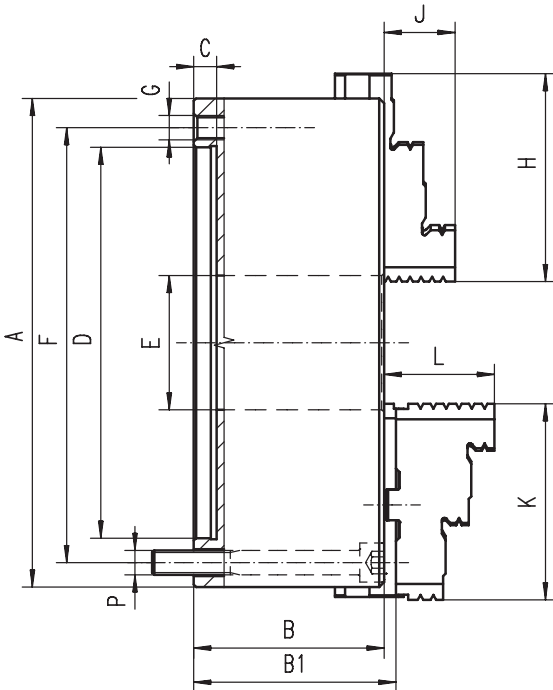
Spare parts - see pages 55-58

Example of order: 3644-250/5

1

Type 3774, 3775

4 JAWS, STEEL BODY, FRONT MOUNTING (DIN 6350)



Features:

- 4 jaw, self-centering scroll chuck with manual gripping
- Steel body extends machine life while providing higher rigidity and greater wear resistance
- Hardened and ground working surfaces ensure longer life with maintained accuracy and repeatability
- Balanced scroll plate and chuck allows higher rotation speeds without excess vibration
- Flexible mounting system: mounted on machine-tool spindles using an adapter plate and can be mounted either from the back or the front of the chuck to the adapter plate

Application:

- This chuck is designed for all types of workshop machining operations on conventional lathes, grinders and milling fixtures
- Suitable for machining square and round workpieces, granting greater flexibility to machining operations
- Can be used on CNC lathes, in place of power chucks

Options:

- Hard solid jaws (type 3774) or hard two-piece jaws (type 3775)
- Chuck size: can be greater than 400 mm, but not exceeding 1000 mm
- Chuck design: our engineers can work with you to implement any product design changes you may require

Chuck size A	125	160	200	250	315	400
B	59,5	68	78	89	97,2	109
B1	64,3	72,8	82,8	92,8	101,3	116,8
C	4	4	4	5	5	5
D H7	95	125	160	200	260	330
E	35,5	42	55	76	103	136
F	108	140	176	224	286	362
G	3xM8	6xM10	6xM10	6xM12	6xM16	6xM16
H	51	70	85	105	125	145
J	20	32	29	34	43	55
K	56	67	80	95	110	127
L	40	43	45	53	57	67
P	3xM8	3xM10	3xM10	3xM12	3xM16	3xM16
Approx. weight [kg]	5	10,0	17,5	29	50	85

Other engineering data - see pages 53-54

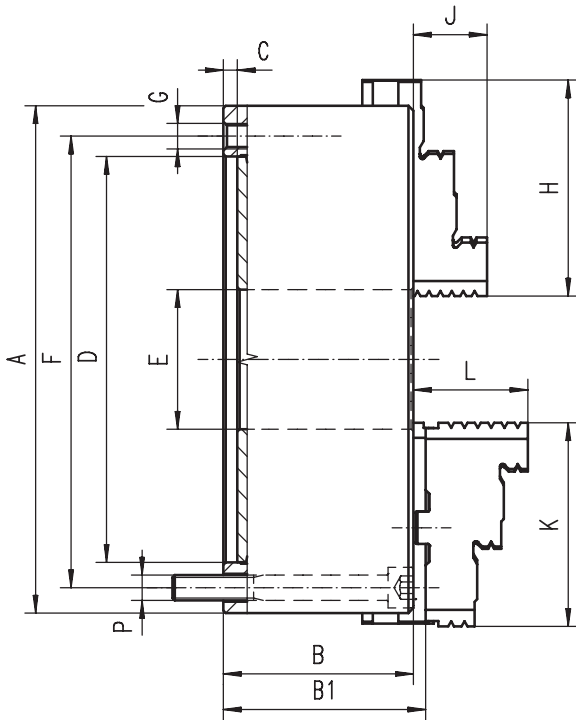
Type	Standard accessories	1 set of outside hard solid jaws	1 set of inside hard solid jaws	1 wrench	Optional accessories	1 set of soft solid jaws
Type 3774						
Type 3775		1 set of hard top jaws	1 set of hard master jaws	1 wrench		1 set of soft top jaws

Spare parts - see pages 55-57

Example of order: 3774-315

Type 3674, 3675

4 JAWS, CAST IRON BODY, FRONT MOUNTING (DIN 6350)



Features:

- 4 jaw, self-centering scroll chuck with manual gripping
- Steel body extends machine life while providing higher rigidity and greater wear resistance, enabling the chuck to withstand higher machining forces
- Hardened and ground working surfaces ensure longer life with maintained accuracy and repeatability
- Balanced scroll plate allows higher rotation speeds without excess vibration
- Flexible mounting system: mounted on machine-tool spindles using an adapter plate and can be mounted either from the back or the front of the chuck to the adapter plate

Application:

- This chuck is designed for all types of workshop machining operations on conventional lathes and milling fixtures
- Suitable for machining square and round workpieces, granting greater flexibility to machining operations
- Can be used on CNC lathes, in place of power chucks

Options:

- Hard solid jaws (type 3774) or hard two-piece jaws (type 3775)
- Chuck size: can be greater than 400 mm, but not exceeding 1000 mm
- Chuck design: our engineers can work with you to implement any product design changes you may require

Chuck size A	125	160	200	250	315	400
B	56	64,5	75	85	94	105
B1	60,8	69,3	79,8	88,8	99,1	113,8
C	4	4	4	5	5	5
D H7	95	125	160	200	260	330
E	32	42	55	76	103	136
F	108	140	176	224	286	362
G	3xM8	6xM10	6xM10	6xM12	6xM16	3xM16
H	51	70	85	105	125	145
J	20	32	29	34	43	55
K	56	67	80	95	110	127
L	40	43	45	53	57	67
P	3xM8	3xM10	3xM10	3xM12	3xM16	3xM16
Approx. weight [kg]	5,0	10,0	17,5	29	50	85

Other engineering data - see pages 53-54

Type	Standard accessories	Optional accessories
Type 3674	1 set of outside hard solid jaws	1 set of inside hard solid jaws 1 wrench
Type 3675	1 set of hard top jaws	1 set of hard master jaws 1 wrench 1 set of soft solid jaws 1 set of soft top jaws

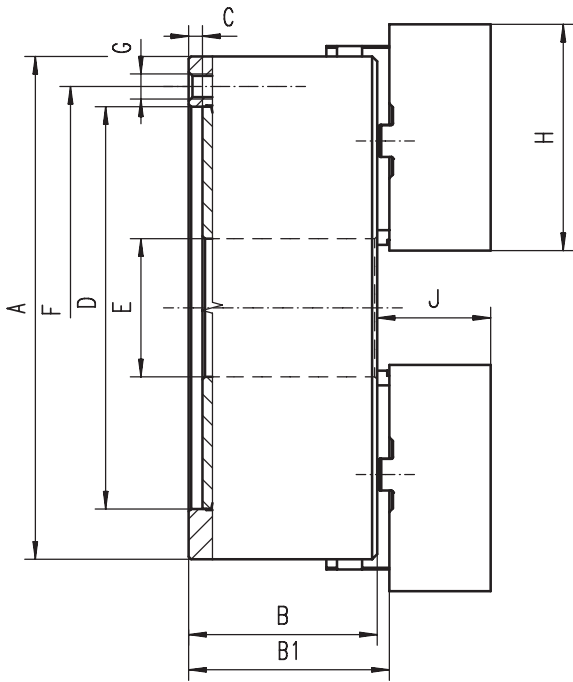
Spare parts - see pages 55-57

Example of order: 3674-250

1

Type 3105

2 JAWS, CAST IRON BODY (DIN 6350)



Features:

- 2 jaw, self-centering, scroll chuck with manual gripping, and a high quality cast iron body
- Chucks are equipped with soft, steel top jaws, which can be individually shaped by the user and clamp irregularly-shaped workpieces
- Hard solid jaws
- Smart design, allowing inner parts to be replaced quickly
- Mounted on the machine-tool spindle from the back of the chuck, using the adapter plate

Application:




- This chuck is designed for all types of workshop machining operations on conventional lathes

Options:

- Chuck size: can be greater than 400 mm, but not exceeding 1000 mm
- Chuck design: our engineers can work with you to implement any product design changes you may require

Chuck size A	160	200	250	315	400
B	64,5	75	85	94	105
B1	69,3	79,8	88,8	99,1	113,8
C	4	4	5	5	5
D H7	125	160	200	260	330
E	42	55	76	103	136
F	140	176	224	286	362
G	6xM10	6xM10	6xM12	6xM16	6xM16
H	70	85	105	125	145
J	32	29	34	43	55
Approx. weight [kg]	10	17,5	29	50	85

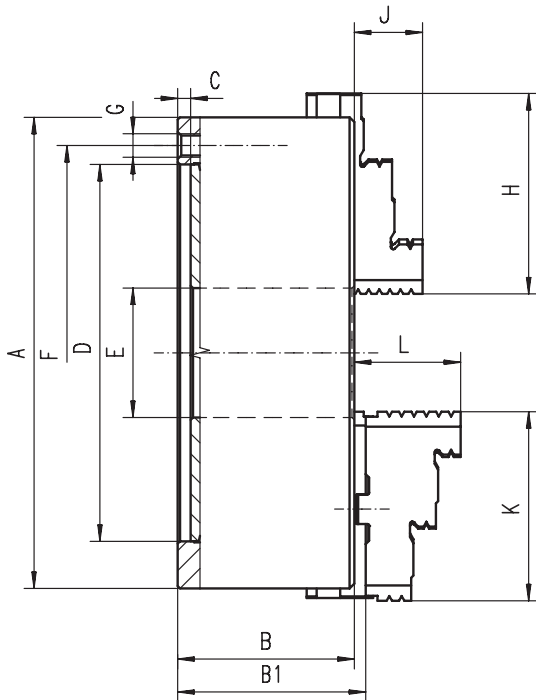
Other engineering data - see pages 53-54

Type 3105	Standard accessories		1 set of soft top jaws		1 set of hard master jaws		1 wrench
		Spare parts - see pages 55-57					

Example of order: 3105-250

Type 3806, 3807

6 JAWS, STEEL BODY (DIN 6350)



Features:

- 6 jaw, self-centering scroll chuck with manual gripping
- Steel body extends machine life while providing higher rigidity and greater wear resistance, enabling the chuck to withstand higher machining forces
- Hardened and ground working surfaces ensure longer life with maintained accuracy and repeatability
- Balanced scroll plate allows higher rotation speeds without excess vibration
- Mounted on the machine-tool spindle from the back of the chuck, using the adapter plate

Application:

- This chuck is designed for all types of workshop machining operations on conventional lathes and grinders
- Gripping force is equally distributed over 6 jaws, allowing chuck to machine thin-walled workpieces and clamp without deformation

Options:

- Large chuck size: can be greater than 630 mm, but not exceeding 1000 mm
- Chuck design: our engineers can work with you to implement any product design changes you may require

Chuck size A	200	250	315	400	500	630
B	75	85	94	105	120	135
B1	79,8	88,8	99,1	113,8	130,8	146,3
C	4	5	5	5	5	7
D H7	160	200	260	330	420	545
E	55	76	103	136	190	252
F	176	224	286	362	458	586
G	6xM10	6xM12	6xM16	6xM16	6xM16	6xM16
H	85	105	125	145	180	225
J	29	34	43	55	60	70
K	80	95	110	127	127	127
L	45	53	57	67	79	87
Approx. weight [kg]	17,5	29	50	85	145,0	250,0

Other engineering data - see pages 53-54

Type	Standard accessories	1 set of outside hard solid jaws	1 set of inside hard solid jaws	1 wrench	Optional accessories	1 set of soft solid jaws
Type 3806						
Type 3807						

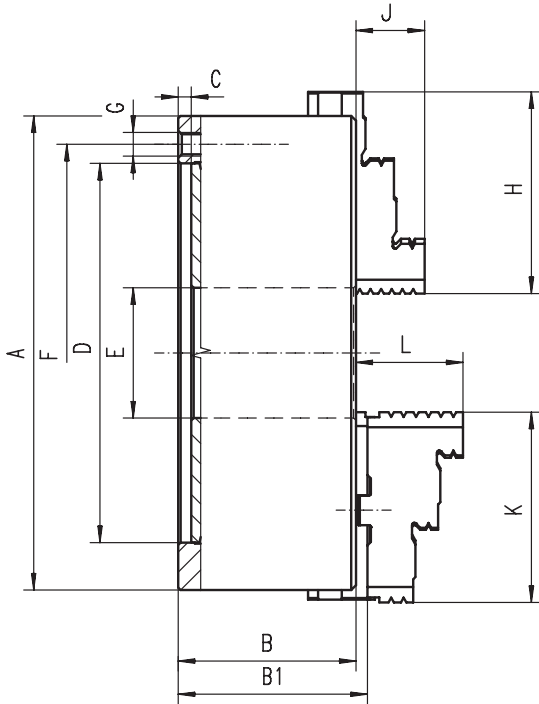
Spare parts - see pages 55-57

Example of order: 3806-315

1

Type 3804, 3805

6 JAWS, CAST IRON BODY (DIN 6350)



Features:

- 6 jaw, self-centering, scroll chuck with manual gripping, and a high quality cast iron body
- Smart design, allowing inner parts to be replaced quickly
- Mounted on the machine-tool spindle from the back of the chuck, using the adapter plate

Application:

- This chuck is designed for all types of workshop machining operations on conventional lathes and grinders

- Gripping force is equally distributed over 6 jaws, allowing chuck to machine thin-walled workpieces and clamp without deformation

Options:

- Hard solid jaws (type 3804) or hard two-piece jaws (type 3805)
- Chuck size: can be greater than 630 mm, but not exceeding 1000 mm
- Chuck design: our engineers can work with you to implement any product design changes you may require

Chuck size A	200	250	315	400	500	630
B	75	85	94	105	120	135
B1	79,8	88,8	99,1	113,8	130,8	146,3
C	4	5	5	5	5	7
D H7	160	200	260	330	420	545
E	55	76	103	136	190	252
F	176	224	286	362	458	586
G	6xM10	6xM12	6xM16	6xM16	6xM16	6xM16
H	85	105	125	145	180	225
J	29	34	43	55	60	70
K	80	95	110	127	127	127
L	45	53	57	67	79	87
Approx. weight [kg]	17,5	29	50	85	145,0	250,0

Other engineering data - see pages 53-54

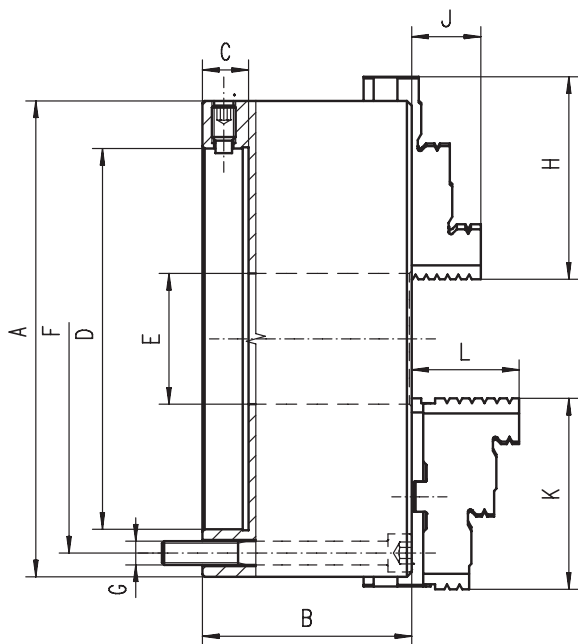
Type	Standard accessories	1 set of outside hard solid jaws	1 set of inside hard solid jaws	1 wrench	Optional accessories	1 set of soft solid jaws
Type 3804						
Type 3805		1 set of hard top jaws	1 set of hard master jaws	1 wrench		1 set of soft top jaws

Spare parts - see pages 55-57

Example of order: 3804-250

Type 3564, 3565

3 JAWS, STEEL BODY, FRONT MOUNTING



Features:

- 3 jaw, self-centering scroll chuck
- Steel body extends machine life while providing higher rigidity and greater wear resistance, enabling the chuck to withstand higher machining forces
- Hardened and ground working surfaces ensure longer life with maintained accuracy and repeatability
- Balanced scroll plate allows higher rotation speeds without excess vibration
- Repeatability: 0,015 mm
- Superior accuracy: small screws on the outside enable the chuck to be adjusted to position with nearly zero runout (adjusting accuracy within 0,005 mm)
- The clamped workpiece is adjusted to the required concentricity by means of 4 (8 for sizes 400 mm, 500 mm, 630 mm) radially arranged adjusting screws

Application:

- This precision chuck, with increased gripping accuracy, is made for universal use, but particularly advantageous for grinding machines, indexing heads and lathes
- Especially suitable for machining parts with top concentricity

Options:

- Hard solid jaws (type 3564) or hard two-piece jaws (type 3565)
- Large Chuck size: can be greater than 630 mm, but not exceeding 1000 mm
- Chuck design: our engineers can work with you to implement any product design changes you may require

Chuck size A	100	125	160	200	250	315	400	500	630
B	68	71,5	68,6	78	89	96,2	123	144	150
C	13	15	18	20	20	20	22	30	30
D	45	55	86	110	145	180	299, 237	407,16	407,16
E	20	35	42	55	76	103	136	190	252
F	83	108	140	176	224	286	171,5	235	330,2
G	3xM8	3xM8	3xM10	3xM10	3xM12	3xM16	6xM16	6xM20x120	6xM20x130
Approx. weight [kg]	3,3	5,0	9,1	15,5	26,2	46,5	90,0	171	302

Other engineering data - see pages 53-54

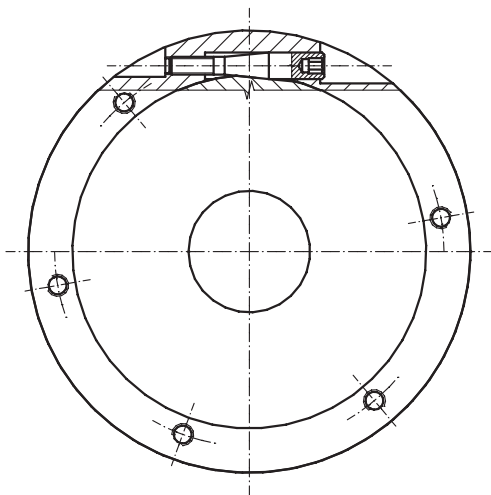
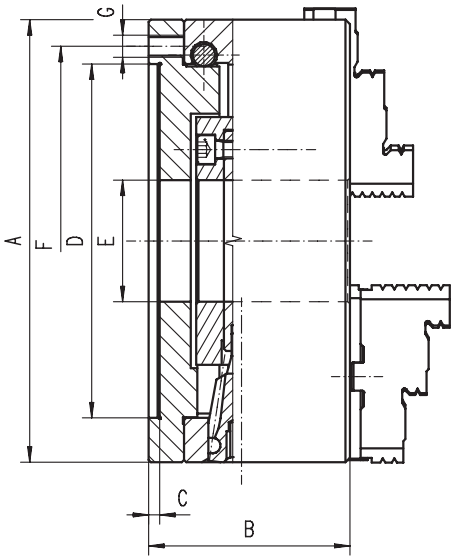
Type	Standard accessories	1 set of outside hard solid jaws	1 set of inside hard solid jaws	1 wrench	Optional accessories	1 set of soft solid jaws
Type 3564						
Type 3565						

Spare parts - see pages 55-57

Example of order: 3564-315

Type 3264, 3265

3 JAWS, CAST IRON BODY, FRONT MOUNTING



Features:

- 3 jaw, self-centering scroll chuck
- Repeatability: 0,015 mm
- Superior accuracy: chuck can be adjusted to position with nearly zero runout (adjusting accuracy within 0,005 mm)
- The clamped workpiece is adjusted to the required concentricity by means of 3 tangentially arranged adjusting spindles
- Hardened adjusting spindles
- Steel adapter plate

Application:

- This chuck is made for universal use, but is particularly advantageous for grinding machines
- Especially suitable for machining parts with top concentricity

Options:

- Hard solid jaws (type 3264) or hard two-piece jaws (type 3265)
- Chuck size: can be greater than 315 mm, but not exceeding 1000 mm
- Chuck design: our engineers can work with you to implement any product design changes you may require

Chuck size A	80	100	125	160	200	250	315	
B	59	69	70	80,5	91	103	120	
C min.	3	4	5	5	5	6	6	
D	56	70	95	125	160	200	260	
E min.	16	20	32	42	55	76	103	
F	67	83	108	140	176	224	286	
G	3xM6	3xM8	3xM8	3xM10	3xM10	3xM12	3xM16	
Approx. weight [kg]	Type 3264	2,8	3,5	5,6	10	17,2	34,5	57,5
	Type 3265	-	-	6,0	10,5	18,0	36,0	59,0

Other engineering data - see pages 53-54

Type	Standard accessories	1 set of outside hard solid jaws	1 set of inside hard solid jaws	1 wrench	Optional accessories	1 set of soft solid jaws
Type 3264						
Type 3265						

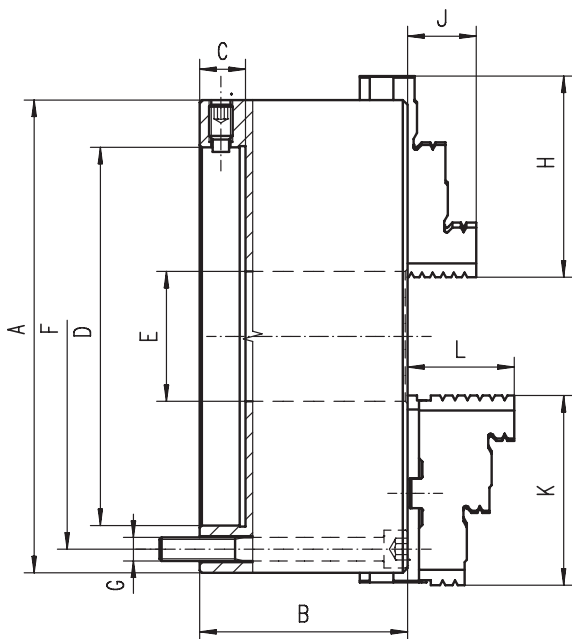
Spare parts - see pages 55-57

Example of order: 3264-250

Type 3864, 3865

6 JAWS, STEEL BODY, FRONT MOUNTING

1



Features:

- 6 jaw, self-centering chuck
- Steel body extends machine life while providing higher rigidity and greater wear resistance, enabling the chuck to withstand higher machining forces
- Hardened and ground working surfaces ensure longer life with maintained accuracy and repeatability
- Balanced scroll plate allows higher rotation speeds without excess vibration
- Repeatability: 0,015 mm
- Superior accuracy: small screws on the outside enable the chuck to be adjusted to position with nearly zero runout (adjusting accuracy within 0,005 mm)
- The clamped workpiece is adjusted to the required concentricity by means of 4 (8 for sizes 400 mm, 500 mm, 630 mm) radially arranged adjusting screws

Application:

- This precision chuck, with increased gripping accuracy, is for universal use, but particularly advantageous for grinding machines, indexing heads and lathes
- Especially suitable for machining parts with top concentricity
- Gripping force is equally distributed over 6 jaws, allowing chuck to machine thin-walled workpieces and clamp without deformation

Options:

- Hard solid jaws (type 3864) or hard two-piece jaws (type 3865)
- Chuck size: can be greater than 630 mm, but not exceeding 1000 mm
- Chuck design: our engineers can work with you to implement any product design changes you may require

Chuck size A	125	160	200	250	315	400	500	630
B	71,5	68,6	78	89	96,2	123	144	150
C	15	18	20	20	20	22	30	30
D	55	86	110	145	180	299, 237	407,16	407,16
E	35	42	55	76	103	136	190	252
F	108	140	176	224	286	171,5	235	330,2
G	3xM8	3xM10	3xM10	3xM12	3xM16	6xM16	6xM20x120	6xM20x130
H	51	70	85	105	125	145	180	225
J	20	32	29	34	41	55	60	70
K	56	67	80	95	110	127	127	127
L	40	43	45	53	56	67	79	87
Approx. weight [kg]	6,2	10,5	17,5	33,0	56,0	99,0	180	326

Other engineering data - see pages 53-54

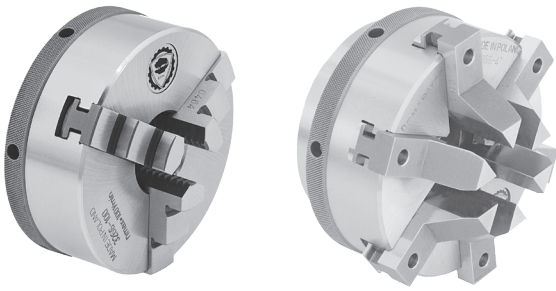
Type	Standard accessories	1 set of outside hard solid jaws	1 set of inside hard solid jaws	1 wrench	Optional accessories	1 set of soft solid jaws
Type 3864						
Type 3865						

Spare parts - see pages 55-57

Example of order: 3864-315

Type 3266, 3866

1

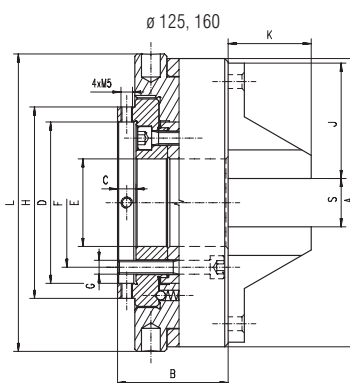
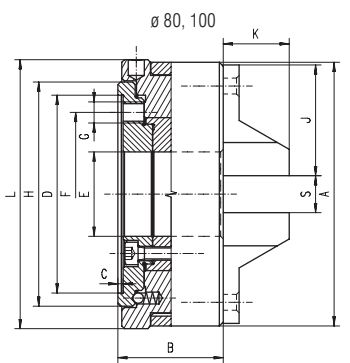
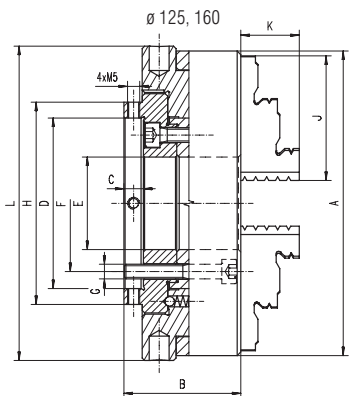
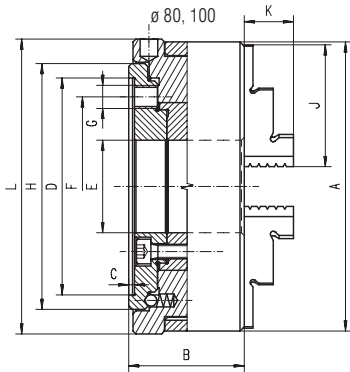





Application:

- Lever scroll chuck is specially designed for grinding twist drills and other cutting tools

Options:

- Fine adjustment in sizes 125 mm and 160 mm to the required concentricity by means of 4 radially arranged adjusting screws



Type 3266	Standard accessories		1 set of outside hard solid jaws		1 set of inside hard solid jaws		1 operating lever
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Chuck size	3 JAWS TYPE 3266					
A	B	C	D	E	F	G
80	35	1,5	48	24	39	3xM6
100	40	2	75	32	62	3xM8
125	48	8	70	38	56	3xM6
160	52	8	78,5	52	65	3xM6
200	66	13	115	64	84	3xM8

A	H	J	K	L	Operating lever length	Approx. weight [kg]
80	52	35	13	82	100	1,1
100	85	42	17	102	125	3,2
125	83	51	20	129	160	4,0
160	96	70	33	164	200	7,3
200	147	85	30	205	200	13,3

Spare parts - see page 55

Example of order: 3266-160

Type 3866	Standard accessories		1 set of hard solid jaws		1 operating lever
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Chuck size	6 JAWS TYPE 3866					
A	B	C	D	E	F	G
80	35	1,5	48	24	39	3xM6
100	40	2	75	32	62	3xM8
125	48	8	70	38	56	3xM6
160	52	8	78,5	52	65	3xM6

A	H	J	K	L	S	Operating lever length	Approx. weight [kg]
80	52	35	22	82	1-23	100	2,0
100	85	42	25	102	1,5-31	125	2,8
125	83	50	36	128	2-37	160	4,0
160	96	58	36	164	3-51	200	7,0

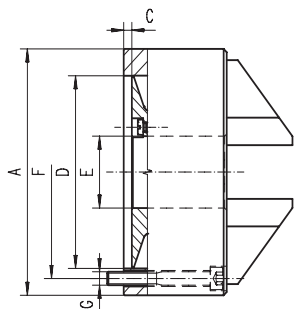
Example of order: 3866-125

Chuck size	Code No	
	for chuck type 3866	
	6 jaw set	
mm		
80	0642 985 411 106	
100	0642 985 411 208	
125	0642 985 411 300	
160	0642 985 411 401	

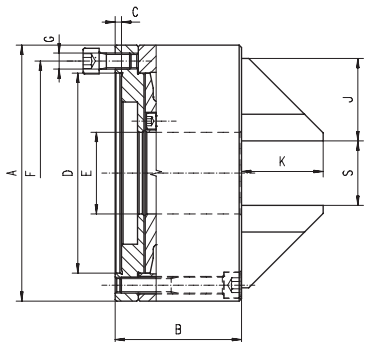
Spare parts - hard outside jaws-set

Example of order: 0642 985 411 106

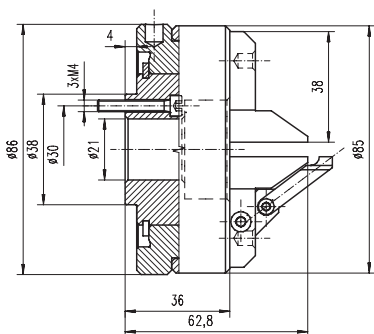
Type 3867, 3868



3867
ø80; ø110



3867
ø160



3868
ø85

Features:

- Plain back (front mounting)

Application:

- The wrench operated scroll chuck is specially designed for grinding twist drills and other cutting tools

Options:

- Additional tool support (type 3868)

Type 3867	Standard accessories		1 set of hard solid jaws		1 wrench
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Type 3867				
Chuck size	A	B	C	D
85	85	44	3,9	62
110	110	50	4	86
160	160	79	4	125

Chuck size mm	E	F	G	J	K	S	Approx. weight [kg]
85	25,5	70	3xM6	32	37	1-25	1,9
110	32,1	95	3xM6	38	33	2,3-32	3,5
160	51	140	3xM10	51	51	2,5-50	4,5

Example of order: 3868-85

Type 3868	Standard accessories		1 set of hard solid jaws		1 operating lever
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Type 3868		
Chuck size	Operating lever length	Approx. weight [kg]
85	100	2,5

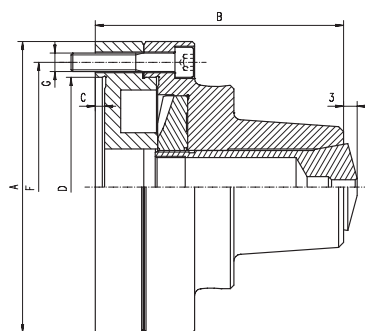
Example of order: 3868-85

Spare parts - hard solid jaws - set		
Chuck size	Code No	Code No
	for chuck type 3867	for chuck type 3868
85	0642 985 411 605	0642 985 412 107
110	0642 985 411 707	-
160	0642 985 411 809	-

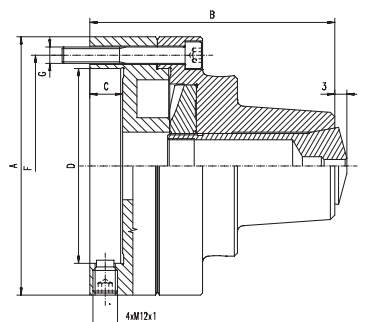
Example of order: 0642 985 411 605

5C COLLET CHUCKS

Type 3911, 3960



Spring collet 5C (not included)



Spring collet 5C (not included)

Features:

- The simple wrench operated scroll provides uniform, distortion free clamping of workpieces and low collet exchange times

Application:

- The type 3911 collet chuck is designed for use with 5C collets and can be used for turning, facing, boring, grinding and milling operations
- The type 3960 collet chuck allows for fine adjustment to the required concentricity by means of 4 radially arranged adjusting screws

Options:

- Camlock and threaded mounts available on request

Standard accessories:

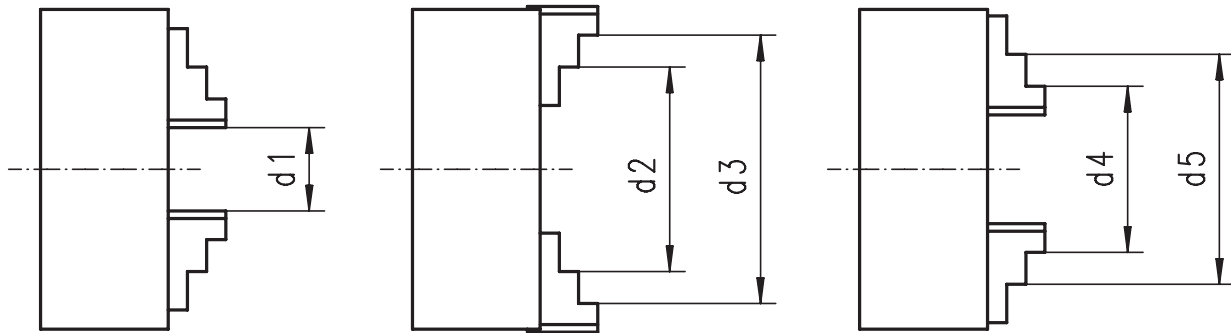
- Wrench

Type 3911							
Chuck size	A	B	C	D	F	G	Approx. weight [kg]
125	126	107,5	4	95	108	3xM8x45	4,5

Example of order: 3911-125-5C

Type 3960							
Chuck size	A	B	C	D	F	G	Approx. weight [kg]
125	126	117	15	55	108	3xM8x55	5,4

Example of order: 3960 - 125-5C



GRIPPING RANGES FOR CHUCKS TYPE 3200, 3500, 3600, 3700

Chuck size		80	100	125	160	200
Hard solid jaws	d1	2-27	3-33	3-50	3-64	4-90
	d2	25-50	32-62	39-83	50-107	60-145
	d3	48-71	62-93	80-125	98-160	130-200
	d4	22-46	25-56	34-74	42-100	52-135
	d5	45-69	56-87	72-115	94-154	120-202
Hard two-piece jaws	d1	-	-	3-50	3-64	4-90
	d2	-	-	52-96	62-121	72-156
	d3	-	-	95-125	115-160	133-200
	d4	-	-	34-76	42-97	50-130
	d5	-	-	75-118	88-146	105-190
max. swing diameter		90	117	151	204	246

Chuck size		250	315	400	500	630	800	915	1000
Hard solid jaws	d1	5-118	10-131	10-180	20-235	30-335	150-482	-	-
	d2	77-188	90-215	103-272	140-357	180-487	302-634	-	-
	d3	160-250	190-315	230-400	276-500	345-630	468-800	-	-
	d4	62-174	78-200	85-252	120-335	160-465	282-614	-	-
	d5	145-256	172-299	210-380	245-476	325-630	448-780	-	-
Hard two-piece jaws	d1	5-118	10-131	10-180	20-235	30-335	150-482	200 - 550	250 - 600
	d2	86-197	103-226	127-294	110-400	120-570	240-724	300 - 950	350 - 1080
	d3	160-250	190-315	230-400	190-500	200-630	316-800	380 - 1025	430 - 1150
	d4	58-165	65-182	72-228	120-410	140-590	252-736	350 - 1000	425 - 1070
	d5	125-235	145-265	165-329	200-485	210-665	328-812	450 - 1025	500 - 1150
max. swing diameter		306	384	472	600	770	940	-	-

GRIPPING RANGES FOR CHUCKS TYPE 3864, 3865

Chuck size		125	160	200	250	315	400	500	630
Hard solid jaws	d1	6-43	8-64	8-90	12-118	12-131	15-202	30-235	40-335
	d2	42-78	52-107	64-145	82-188	95-215	140-308	152-361	192-487
	d3	83-120	102-160	132-200	165-250	192-315	232-400	291-500	358-630
	d4	34-68	47-100	55-135	68-174	82-200	95-280	132-335	175-467
	d5	74-110	98-154	121-202	150-256	178-299	213-400	270-474	340-630
Hard two-piece jaws	d1	6-43	8-64	8-90	12-118	12-131	15-202	30-235	40-335
	d2	50-87	67-121	74-156	82-188	108-226	132-296	121-402	132-555
	d3	94-125	118-160	134-200	164-250	153-315	236-400	197-478	210-630
	d4	33-70	45-97	52-130	68-174	68-182	73-252	135-413	150-585
	d5	76-119	92-146	109-190	150-256	150-265	169-352	210-489	220-661
max. swing diameter		151	204	246	306	384	472	600	770

Do not exceed maximum gripping ranges!

MAXIMUM PERMISSIBLE ROTATION SPEEDS (rpm)

Chuck size	80	100	125	160	200	250	315	400	500	630	800	915	1000
3100*, 3200, 3600	5000	4500	4000	3600	3000	2500	2000	1600	1000	800	600	400	400
3500, 3700	7000	6300	5500	4600	4000	3500	2800	2000	1300	1000	800	700	600
3564, 3565		6300	5500	4600	4000	3500	2800	2000	1300	1000			
3864, 3865			3800	3200	2800	2400	2400	1400	900	700			
4505*					2500	2000	1500	1000	700	540			
4605*					2000	1800	1500	1000	600	480			
4705*					3000	2500	2000	1500	1000	750			
4805*					2500	2000	1700	1300	800	660			

* For lathe chucks type 3100, 4505, 4605, 4705 and 4805 the specified permissible speeds are only applicable for work-pieces not exceeding a specific unbalance of 25 gmm/kg.

1

TOTAL GRIPPING FORCE FOR CHUCKS TYPE 3100, 3200, 3500, 3600, 3700, 3800

Chuck size	80	100	125	160	200	250	315	400	500	630	800	915	1000
Torque on wrench [Nm]	35	50	75	120	160	180	200	280	360	460	500	500	500
Total gripping force [daN]	1000	1700	2400	3100 2400*	3700 2900*	4600 3600*	5500 4400*	6500 4900*	7200	8000	9000	9000	9000

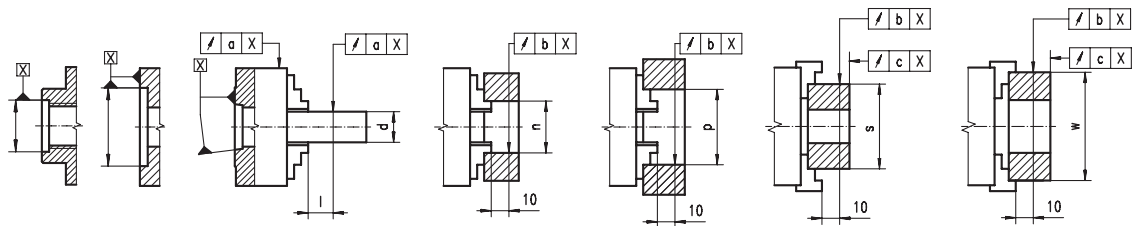
* for 3100

The total gripping force is the sum of all jaw forces acting radially on the stationary workpiece. The specified gripping forces are approximate values. They apply to chucks in perfect condition which have been lubricated with greases recommended in operating instructions.

BALANCE VALUE FOR SELF-CENTERING CHUCKS TYPE 3500, 3700

Chuck size	80	100	125	160	200	250	315	400	500	630
gcm	11	16	23	32	45	63	90	140	300	640

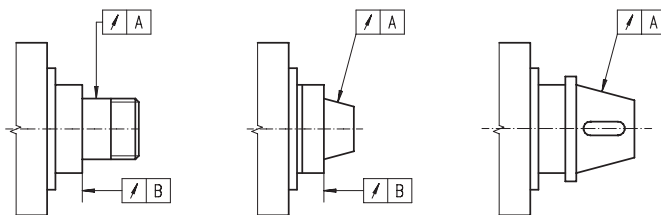
CENTERING ACCURACY FOR SELF-CENTERING CHUCKS TYPE 3200, 3500, 3600, 3700, 3800



Chuck size	mm	80	100	125	160	200	250	315	400	500	630	800	915	1000
d		10	10	18	18	30	30	53	53	75	75	160	250	250
		-	14	25	30	40	53	75	100	100	125	200	315	315
l		40	40	60	60	80	80	120	120	160	160	160	160	160
		40	40	50	50	80	80	125	125	200	200	325	500	500
n		40	40	50	50	80	80	125	125	200	200	325	500	500
p		60	75	100	135	162	200	252	282	282	325	500	630	630
s		35	50	62	88	96	150	210	250	300	400	400	500	500
w	Hard solid jaws	63	80	100	100	160	160	250	250	400	400	500	-	-
	Hard two-piece jaws	-	-	120	150	185	225	300	350	400	400	500	630	630

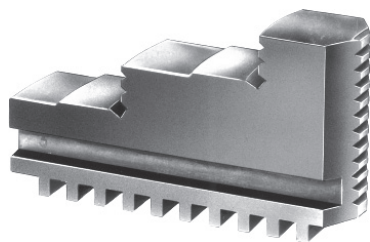
Centering accuracy (mm)

3500-l	a	0,010	0,015	0,020	0,025	0,030	0,050	0,070						
	b	0,013	0,018	0,023	0,028	0,033	0,055	0,075						
	c	0,008	0,010	0,013	0,015	0,015	0,030	0,050						
3500 3700 3800	a	0,020	0,030	0,040	0,050	0,060	0,10	0,10						
	b	0,025	0,035	0,045	0,055	0,065	0,10	0,10						
	c	0,015	0,020	0,025	0,030	0,030	0,05	0,05						
3200 3600	a	0,020	0,030	0,040	0,050	0,060	0,10	0,10	0,15	0,15	0,15	0,15	0,15	0,15
	b	0,025	0,035	0,045	0,055	0,065	0,10	0,10	0,15	0,15	0,15	0,15	0,15	0,15
	c	0,015	0,020	0,025	0,030	0,030	0,05	0,05	0,06	0,06	0,06	0,06	0,06	0,06
3284 3285	a		0,05		0,08									
	b		0,075		0,075									
	c		0,04		0,07									



SPINDLE NOSE CENTERING ACCURACY

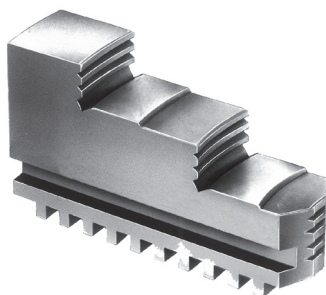
3500	A, B	Ø 80 - 400	Ø 500 - 630	To obtain the specified centering accuracy of a chuck mounted on a machine tool it is necessary: 1) to ensure the machine spindle nose runout does not exceed the values specified, 2) to meet the basic requirements for correct mounting of the chuck on the spindle nose, according to the chuck installation instructions.
		0,003 mm	0,005 mm	
3200, 3600, 3700	A, B	Ø 80 - 160	Ø 200 - 800	
		0,003 mm	0,005 mm	



HARD OUTSIDE SOLID JAWS - SETS ¹⁾

Chuck size mm	Code No	Code No	Code No	Code No
	For chuck type 3200, 3500	For chuck type 3600, 3700	For chuck type 3864	For chuck type 3266
	3 jaw set	4 jaw set	6 jaw set	3 jaw set
80	0642 985 350 009	-	-	0642 985 350 024
100	0642 985 350 100	0642 985 381 970*	-	0642 985 350 126
125	0642 985 350 202	0642 985 390 205	0642 985 400 209	0642 985 350 228
160	0642 985 350 304	0642 985 390 307	0642 985 400 300	0642 985 350 304
200	0642 985 350 406	0642 985 390 409	0642 985 400 402	0642 985 350 406
250	0642 985 350 508	0642 985 390 500	0642 985 400 504	-
315	0642 985 350 600	0642 985 390 602	0642 985 400 606	-
400	0642 985 350 701	0642 985 390 704	0642 985 400 708	-
500	0642 985 350 803	0642 985 390 806	0642 985 400 800	-
630	0642 985 350 905	0642 985 390 819	0642 985 349 009	-
800	0642 985 352 000	-	-	-

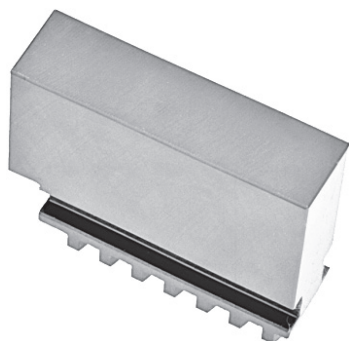
* for 3700



HARD INSIDE SOLID JAWS - SETS ¹⁾

Chuck size mm	Code No	Code No	Code No	Code No
	For chuck type 3200, 3500	For chuck type 3600, 3700	For chuck type 3864	For chuck type 3266
	3 jaw set	4 jaw set	6 jaw set	3 jaw set
80	0642 985 351 000	-	-	0642 985 351 025
100	0642 985 351 101	0642 985 381 982 *	-	0642 985 351 127
125	0642 985 351 203	0642 985 391 206	0642 985 401 200	0642 985 351 229
160	0642 985 351 305	0642 985 391 308	0642 985 401 301	0642 985 351 305
200	0642 985 351 407	0642 985 391 400	0642 985 401 403	0642 985 351 407
250	0642 985 351 509	0642 985 391 501	0642 985 401 505	-
315	0642 985 351 600	0642 985 391 603	0642 985 401 607	-
400	0642 985 351 702	0642 985 391 705	0642 985 401 709	-
500	0642 985 351 804	0642 985 391 807	0642 985 401 800	-
630	0642 985 351 906	0642 985 391 810	0642 985 351 975	-
800	0642 985 352 102	-	-	-

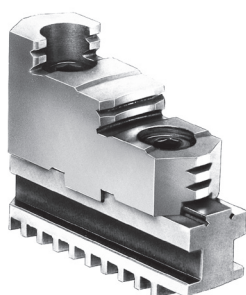
* for 3700



SOFT SOLID JAWS - SETS

Chuck size mm	Code No	Code No	Code No
	For chuck type 3200, 3500	For chuck type 3600, 3700	For chuck type 3864
	3 jaw set	4 jaw set	6 jaw set
80	0642 985 360 007	-	-
100	0642 985 360 109	0642 985 398 100 *	-
125	0642 985 360 200	0642 985 398 202	0642 985 402 200
160	0642 985 360 302	0642 985 398 304	0642 985 402 302
200	0642 985 360 404	0642 985 398 406	0642 985 402 404
250	0642 985 360 506	0642 985 398 508	0642 985 402 506
315	0642 985 360 608	0642 985 398 600	0642 985 402 608
400	0642 985 360 700	0642 985 398 701	0642 985 402 700
500	0642 985 360 801	0642 985 398 803	0642 985 402 801
630	0642 985 360 903	0642 985 398 905	0642 985 402 903
800	0642 985 360 929	-	-

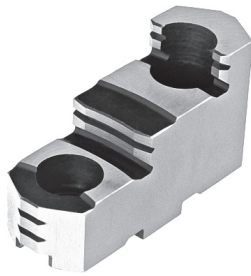
* for 3700



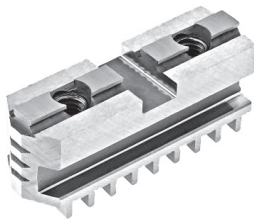
HARD 2-PIECE REVERSIBLE JAWS - SETS ¹⁾

Chuck size mm	Code No	Code No	Code No
	For chuck type 3200, 3500	For chuck type 3600, 3700	For chuck type 3865
	3 jaw set	4 jaw set	6 jaw set
125	0642 985 353 205	0642 985 392 207	0642 985 403 201
160	0642 985 353 307	0642 985 392 309	0642 985 403 303
200	0642 985 353 409	0642 985 392 400	0642 985 403 405
250	0642 985 353 500	0642 985 392 502	0642 985 403 507
315	0642 985 353 602	0642 985 392 604	0642 985 403 609
400	0642 985 353 704	0642 985 392 706	0642 985 403 700
500	0642 985 353 806	0642 985 392 808	0642 985 403 802
630	0642 985 353 908	0642 985 392 900	0642 985 403 904
800	0642 985 354 002	-	-

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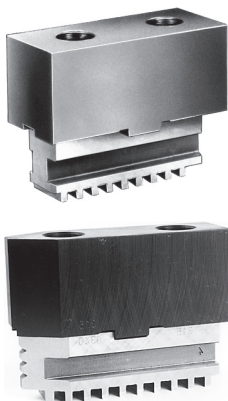


HARD TOP JAWS - SETS ¹⁾			
Chuck size	Code No	Code No	Code No
	For chuck type 3200, 3500	For chuck type 3600, 3700	For chuck type 3865
mm	3 jaw set	4 jaw set	6 jaw set
125	0642 985 328 205	0642 985 378 206	0642 985 408 206
160	0642 985 328 307	0642 985 378 308	0642 985 408 308
200	0642 985 328 409	0642 985 378 400	0642 985 408 400
250	0642 985 328 500	0642 985 378 501	0642 985 408 501
315	0642 985 328 602	0642 985 378 603	0642 985 408 603
400	0642 985 328 704	0642 985 378 705	0642 985 408 705
500	0642 985 328 806	0642 985 378 807	0642 985 408 807
630	0642 985 328 908	0642 985 378 909	0642 985 408 909
800	0642 985 328 908	-	-



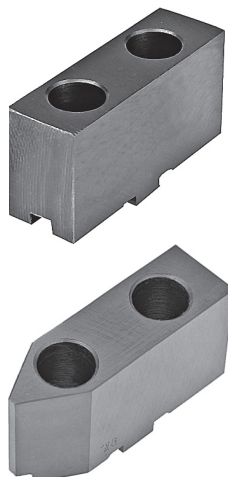
HARD MASTER JAWS - SETS ¹⁾					
Chuck size	Code No	Code No	Code No	Code No	Code No
	For chuck type 3100	For chuck type 3200, 3500	For chuck type 3600, 3700	For chuck type 3865	For chuck type 3295
mm	2 jaw set	3 jaw set	4 jaw set	6 jaw set	3 jaw set
125	-	0642 985 357 209	0642 985 396 200	0642 985 409 207	-
160	0642 985 307 106	0642 985 357 300	0642 985 396 302	0642 985 409 309	-
200	0642 985 307 208	0642 985 357 402	0642 985 396 404	0642 985 409 400	-
250	0642 985 307 300	0642 985 357 504	0642 985 396 506	0642 985 409 502	-
315	0642 985 307 401	0642 985 357 606	0642 985 396 608	0642 985 409 604	-
400	0642 985 307 900	0642 985 357 708	0642 985 396 700	0642 985 409 706	0642 985 399 860
500	-	0642 985 357 800	0642 985 396 801	0642 985 409 808	0642 985 399 873
630*	-	0642 985 357 901	0642 985 396 814	0642 985 409 900	0642 985 399 886
800	-	0642 985 358 006	-	-	-

* for 3295 - 630



Type 3865

SOFT 2-PIECE JAWS - SETS				
Chuck size	Code No	Code No	Code No	Code No
	For chuck type 3100	For chuck type 3200, 3500	For chuck type 3600, 3700	For chuck type 3865
mm	2 jaw set	3 jaw set	4 jaw set	6 jaw set
125	-	0642 985 355 207	0642 985 394 209	0642 985 405 216
160	0642 985 300 100	0642 985 355 309	0642 985 394 300	0642 985 405 318
200	0642 985 300 201	0642 985 355 400	0642 985 394 402	0642 985 405 410
250	0642 985 300 303	0642 985 355 502	0642 985 394 504	0642 985 405 511
315	0642 985 300 405	0642 985 355 604	0642 985 394 606	0642 985 405 613
400	0642 985 301 100	0642 985 355 706	0642 985 394 708	0642 985 405 715
500	-	0642 985 355 808	0642 985 394 800	0642 985 405 804
630	-	0642 985 355 900	0642 985 394 901	0642 985 356 017
800	-	0642 985 356 004	-	-



SOFT TOP JAWS - SETS				
Chuck size	Code No	Code No	Code No	Code No
	For chuck type 3100	For chuck type 3200, 3500	For chuck type 3600, 3700	For chuck type 3865
mm	2 jaw set	3 jaw set	4 jaw set	6 jaw set
125	-	0642 985 330 206	0642 985 382 209	0642 985 407 220
160	0642 985 305 308	0642 985 330 308	0642 985 382 300	0642 985 407 322
200	0642 985 305 400	0642 985 330 400	0642 985 382 402	0642 985 407 424
250	0642 985 305 501	0642 985 330 501	0642 985 382 504	0642 985 407 526
315	0642 985 305 603	0642 985 330 603	0642 985 382 606	0642 985 407 628
400	0642 985 305 705	0642 985 330 705	0642 985 382 708	0642 985 407 720
500	-	0642 985 330 807	0642 985 382 800	0642 985 407 806 *
630	-	0642 985 330 909	0642 985 382 901	0642 985 407 908 *
800	-	0642 985 330 909	-	-

* not bevelled

Example of order: 0642 985 305 400

¹⁾ Hard jaws, supplied as supplement or as spares, must be ground on the chuck, otherwise centering accuracy does not conform to the limits. This job can be done in the BISON plant at an extra charge. In case of a subsequent jaw delivery please return the chuck.



Safety wrench



Locking half-ring



Sleeve bearing



STUD BOLT			
Chuck size	Code No	Chuck size	Code No
mm	For chuck type 3100, 3200, 3600, 4500, 4600, 4700, 4800	mm	For chuck type 3100, 3200, 3600, 4500, 4600, 4700, 4800
80	0642 985 335 109	315	0642 985 335 404
100	0642 985 335 109	400	0642 985 335 700
125	0642 985 335 200	500	0642 985 335 700
160	0642 985 335 200	630	0642 985 335 700
200	0642 985 335 404	800	0642 985 335 700
250	0642 985 335 404		

PINION			
Chuck size	Code No	Code No	Code No
mm	For chuck type 3100, 3200, 3600, 4500, 4600, 4700, 4800	For chuck type 3500, 3700, 3800	For chuck type 3295
80	0642 985 334 006	0642 985 334 006	-
100	0642 985 334 108	0642 985 334 108	-
125	0642 985 334 200	0642 985 362 202	-
160	0642 985 334 301	0642 985 362 304	-
200	0642 985 334 403	0642 985 362 406	-
250	0642 985 334 505	0642 985 362 508	-
315	0642 985 334 607	0642 985 362 600	-
400	0642 985 334 709	0642 985 362 701	0642 985 399 613
500	0642 985 334 800	0642 985 362 803	0642 985 399 626
630*	0642 985 334 902	0642 985 362 905	0642 985 399 639
800	0642 985 335 007	-	-

* for 3295 - 660

SCROLL PLATE			
Chuck size	Code No	Code No	Code No
mm	For chuck type 3100, 3200, 3600, 4500, 4600, 4700, 4800	For chuck type 3500, 3700, 3800	For chuck type 3295
80	0642 985 361 008	0642 985 361 010	-
100	0642 985 361 100	0642 985 361 112	-
125	0642 985 367 207	0642 985 361 201	-
160	0642 985 367 309	0642 985 361 303	-
200	0642 985 367 400	0642 985 361 405	-
250	0642 985 367 502	0642 985 361 507	-
315	0642 985 367 604	0642 985 361 609	-
400	0642 985 367 706	0642 985 361 700	0642 985 399 715
500	0642 985 367 808	0642 985 361 726	0642 985 399 728
630*	0642 985 367 900	0642 985 361 741	0642 985 399 730
800	0642 985 367 003	-	-

* for 3295-660

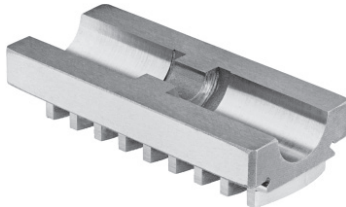
	SAFETY WRENCH	LOCKING HALF-RING	SLEEVE BEARING
Chuck size	Code No	Code No	Code No
mm	For chuck type 3100, 3200, 3500, 3600, 3700, 3800	For chuck type 3500, 3700, 3800	For chuck type 3500, 3700, 3800
80	0642 985 340 102	-	-
85	0642 985 340 102	-	-
100	0642 985 340 204	-	-
125	0642 985 340 204	0642 985 363 203	0642 985 364 204
160	0642 985 340 306	0642 985 363 305	0642 985 364 306
200	0642 985 340 306	0642 985 363 407	0642 985 364 408
250	0642 985 340 408	0642 985 363 509	0642 985 364 500
315	0642 985 340 408	0642 985 363 600	0642 985 364 601
400	0642 985 340 500	0642 985 363 702	0642 985 364 703
500	0642 985 340 601	0642 985 363 804	0642 985 364 805
630	0642 985 340 601	0642 985 363 906	0642 985 364 907
800	0642 985 340 703	-	-

Example of order: 0642 985 340 306

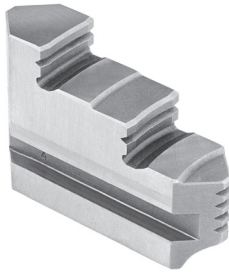
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ADJUSTING SPINDLE	
Chuck size	Code No
mm	For chuck type 4500, 4600, 4700, 4800
200	0642 985 751 100
250	0642 985 751 202
315	0642 985 751 304
400	0642 985 755 104
500	0642 985 755 206
630	0642 985 755 308



HARD MASTER JAW - SETS		
Chuck size	Code No	Code No
	For chuck type 4500, 4700	For chuck type 4600, 4800
mm	3 jaw set	4 jaw set
200	0642 985 752 305	0642 985 753 408
250	0642 985 752 407	0642 985 753 500
315	0642 985 752 509	0642 985 753 601
400	0642 985 756 502	0642 985 758 107
500	0642 985 756 604	0642 985 758 209
630	0642 985 756 706	0642 985 758 300



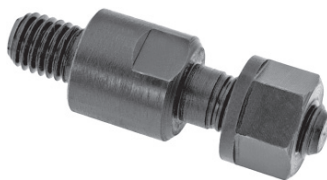
HARD SOLID REVERSIBLE JAW - SETS		
Chuck size	Code No	Code No
	For chuck type 4500, 4700	For chuck type 4600, 4800
mm	3 jaw set	4 jaw set
200	0642 985 751 508	0642 985 752 600
250	0642 985 751 600	0642 985 752 702
315	0642 985 751 701	0642 985 752 804
400	0642 985 755 501	0642 985 757 106
500	0642 985 755 603	0642 985 757 208
630	0642 985 755 705	0642 985 757 300



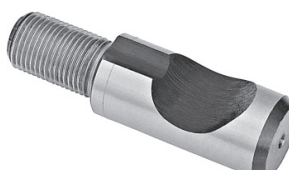
SOFT SOLID JAW - SETS		
Chuck size	Code No	Code No
	For chuck type 4500, 4700	For chuck type 4600, 4800
mm	3 jaw set	4 jaw set
200	0642 985 751 905	0642 985 753 000
250	0642 985 752 000	0642 985 753 102
315	0642 985 752 101	0642 985 753 204
400	0642 985 756 105	0642 985 757 503
500	0642 985 756 207	0642 985 757 605
630	0642 985 756 309	0642 985 757 707

Example of order: 0642 985 752 000

MOUNTING BOLTS FOR LATHE CHUCKS TYPE 3100, 3200, 3500, 3600, 3700, 4300 AND FOR ADAPTER PLATES TYPE 8200



STUD AND LOCKNUT - DIN 55027			
Size	Taper size 1 : 4	jaws - set	Code No ¹⁾
M10x34	3	3	0642 985 821 103
M10x39	4	3	0642 985 821 205
M10x43	5	4	0642 985 821 307
M12x50	6	4	0642 985 821 409
M16x60	8	4	0642 985 821 500
M20x75	11	6	0642 985 821 602
M24x90	15	6	0642 985 821 704

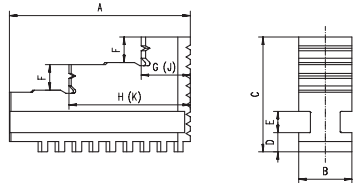


STUD FOR CAMLOCK - DIN 55029			
Size	Taper size 1 : 4	jaws - set	Code No ¹⁾
M10x1-35	3	3	0642 985 825 107
M10x1-37	4	3	0642 985 825 209
M12x1-43	5	6	0642 985 825 300
M16x1,5-49	6	6	0642 985 825 402
M20x1,5-55,5	8	6	0642 985 825 504
M22x1,5-67	11	6	0642 985 825 606
M24x1,5-76	15	6	0642 985 825 708
M27x2-89	20	6	0642 985 825 800

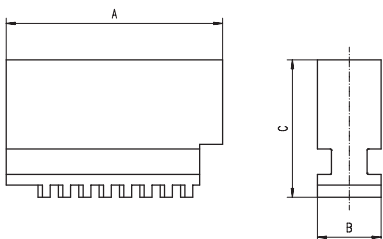
¹⁾ for one piece

Example of order: 0642 985 825 209

Hard solid inside and outside jaws



Soft solid jaws

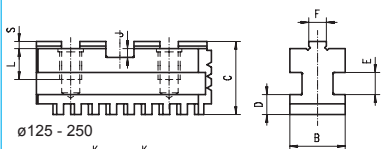


Dimensions G and H apply to outside jaws
Dimensions J and K apply to inside jaws

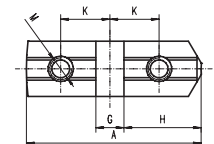
Chuck size		80	100	125	160
A		32	42	51	70
B		11	15	20	20
C		28	32	40	53
D		6	6	8	8
E		6	6	8	8
F		6	7	8	10
G		9,5	11	13	19
H		21	27	33,5	45
J		9,5	12	13	22
K		21	27,5	33,5	47,5
Approx. weight [kg]	hard jaws	0,03	0,09	0,18	0,36
	soft jaws	0,07	0,13	0,26	0,50

Chuck size		200	250	315	400	500	630	800
A		85	105	125	145	180	225	225
B		25	28	32	36	40	50	50
C		54	63	73	92	100	110	110
D		9	11	12,7	15	16	16	16
E		10	12	12	14	14	14	14
F		12	14	18	22	26	28	28
G		23	28	34,5	36	50	66	66
H		57	69,5	83	99	119,5	149	149
J		23	28	34,5	36	50	66	66
K		57	69,5	83	99	119,5	149	149
Approx. weight [kg]	hard jaws	0,50	0,80	1,32	2,35	3,36	5,80	5,80
	soft jaws	0,80	1,36	1,90	2,46	5,00	8,36	8,36

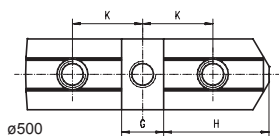
MOUNTING DIMENSIONS OF HARD MASTER JAWS FOR CHUCKS TYPE 3100, 3200, 3500, 3600, 3700, 3865



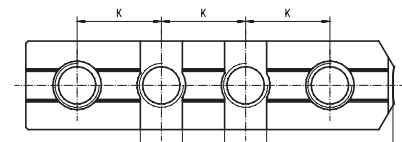
ø125 - 250



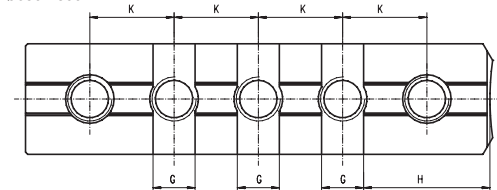
ø315 - 400



ø500



ø630 - 800



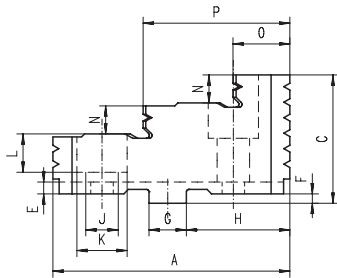
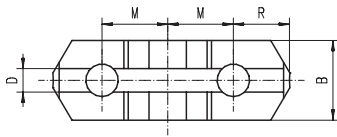
Chuck size	125		160		200		250	315
A	54		65		79		92	110
B	20		20		25		28	32
C	28		29		33		36	40
D	8		8		9		11	12,7
E	8		8		10		12	12
F - 0,03	7,94		7,94		7,94		12,7	12,7
G + 0,01	12,69		12,69		12,69		19,04	19,4
H	22,6		28,6		34,9		39,7	47,6
J	4		4		4		4	4
K	16		19,05		22,25		27	31,75
L	13,5		14		14		16	16
M	M8	M6*	M10	M8*	M10	M8*	M12	M12
S	3,2		3,2		3,2		3,2	3,2
Approx. weight [kg]	0,14		0,18		0,30		0,48	0,77

Chuck size	400	500	630	800	915	1000
A	130	166	210	225	283	328
B	36	40	50	50	70	70
C	49	54	54,5	54,5	64	64
D	15	16	16	16	22	22
E	14	14	14	14	20	20
F - 0,03	12,7	12,7	12,7	12,7	12,7	12,7
G + 0,01	19,04	19,04	19,04	19,04	19,04	19,04
H	57,1	57,1	57,1	57,1	57,1	57,1
J	7,2	7,2	7,2	7,2	7,2	7,2
K	38,1	38,1	38,1	38,1	38,1	38,1
L	22	32,5	32,5	32,5	36	36
M	M16	M20	M20	M20	M22	M22
S	3,2	3,2	3,2	3,2	3,2	3,2
Approx. weight [kg]	1,10	2,18	3,34	3,4	6,65	7,7

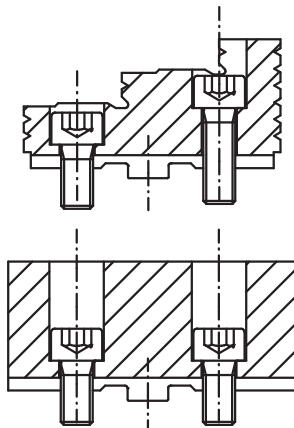
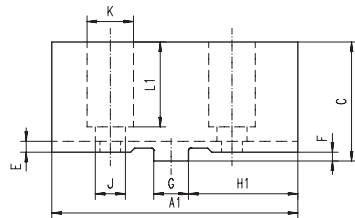
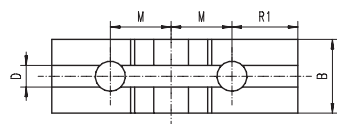
* for 3865

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Hard top jaws



Soft top jaws



Chuck size	125		160		200		250		315	
A	56		67		80		95		110	
A1	64		78		90		106		120	
B	22		25		27		32,5		37	
B do 3100	-		40		40		47		52	
C	38,5		41,5		41,5* 43,5		51,5		55	
D	7,95		7,95		7,95		12,71		12,71	
E	4		4		4		4		4	
F	3,2		3,2		3,2		3,2		3,2	
G	12,69		12,69		12,69		19,04		19,04	
H	22,6		28,6		34,9		39,7		47,6	
H1	25		34		40		45		53	
J	9		6,6**		11		9**		14	
K	15		11**		18		14**		20	
L	10		12		12		14,5		14,5	
L1	26		29		31		38		40	
M	16		19,05		22,25		27		31,75	
N	8		8,5		9,5		12		13	
O	14,5		18		21,5		24,5		26,5	
P	35		41,5		51		59		68	
R	13		16		19		22		35,4	
R1	15		21		24		27,5		30,7	
Approx. weight [kg]	hard jaws		0,17		0,26		0,36		0,62	
	soft jaws		0,30		0,46		0,65		1,15	

* for 3100
** for 3865

Chuck size	400	500	630	800	915	1000						
A	127	127	127	127	175	175						
A1	140	140	160	160	190	190						
B	42	42	52	52	75	75						
B do 3100	52	-	-	-	-	-						
C	64,5	74,5	82	82	97	97						
D	12,71	12,71	12,71	12,71	12,71	12,71						
E	4	41	4	4	4,5	4,5						
F	6,3	6,3	6,3	6,3	6,3	6,3						
G	19,04	19,04	19,04	19,04	19,04	19,04						
H	57,1	57,1	57,1	57,1	95,2	95,2						
H1	63	63	63	63	105	105						
J	18	22	22	22	24	24						
K	26	33	33	33	35	35						
L	18,5	21	21	21	23	23						
L1	45,5	56	64	64	78	78						
M	38,1	38,1	38,1	38,1	38,1	38,1						
N	13,5	17	21	21	28	28						
O	27	50	51	51	48	48						
P	76,5	88	89	89	124	124						
R	28,5	28,5	28,5	28,5	67	67						
R1	34,4	34,4	34,4	34,4	76,5	76,5						
Approx. weight (kg)	hard jaws		1,35		1,55		2,42		2,42		5,5	
	soft jaws		2,20		2,40		4,20		4,20		-	

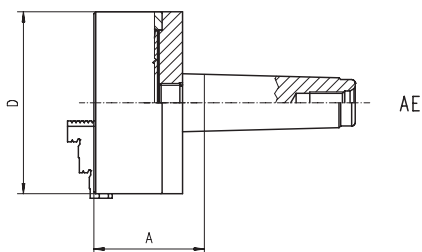
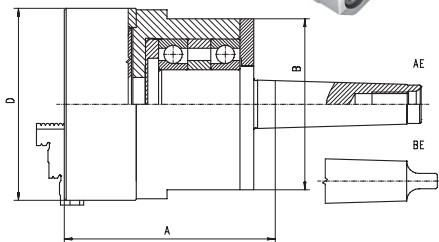
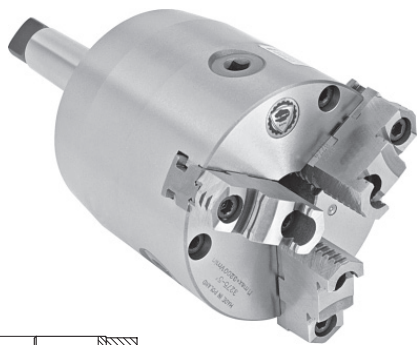
MOUNTING BOLTS FOR TOP JAWS

Chuck size	bolt 1		bolt 2	
mm				
125	M8x25	M6x30*	M8x20	M6x20*
140	M8x25	-	M8x20	-
160	M10x30	M8x30*	M10x20	M8x20*
200	M10x30	M8x30*	M10x20	M8x20*
250		M12x40		M12x25
315		M12x40		M12x25
400		M16x45		M16x30
500		M20x75		M20x40
630		M20x80		M20x40
800		M20x80		M20x40

* for 3865

Example of order: M10x30

Type 9154, 9155, 9156, 9164, 9165, 9184, 9185, 9186, 9187, 4954, 4956



Features:

- 3 jaw chuck with morse taper
- Able to work in horizontal and vertical positions
- Able to divide and block workpiece during machining (type 9184, 9185, 9186 and 9187)

Application:

- Designed for simultaneously supporting and gripping long objects (tubes, shaft etc.) during turning, milling and grinding operations
- Can replace typical center in machine tailstock

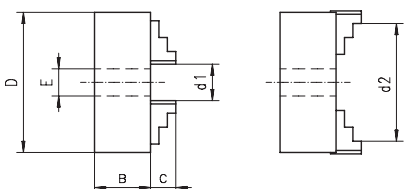
ROTATING - Type 9154, 9155

D	SM	A	B	rpm	Approx. weight [kg]
80	2	102,5	-	4000	3,5
80	3	102,5	-		3,8
100	3	111,5	-	3500	5,5
100	4	113,0	-		5,9
125	4	127,0	-	3200	7,9
125	5	127,0	-		8,6
160	5	149,5	110	3000	14,3

DEAD - Type 9156

D	SM	A	rpm	Approx. weight [kg]
80	2	65,5	4000	2,2
80	3	62,5		2,3
100	3	68,5	3500	3,7
125	4	85,0	3200	6,7
125	5	105,0		7,0
160	4	93,5	3000	14,9
160	5	93,5		15,2

Type	Standard accessories	Chuck	Outside hard solid jaws	Inside hard solid jaws	Wrench
Type 9154, 9156		1 chuck 3274	1 set of outside hard solid jaws	1 set of inside hard solid jaws	1 wrench
Type 9155		1 chuck 3275	1 set of hard top jaws	1 set of hard master jaws	1 wrench



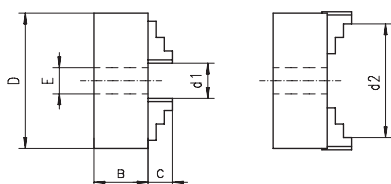
D	B	E	C		d1 min.	d2 max.
			Solid jaws	2-piece reversible jaws		
80	44	16	13	-	2	71
100	50	20	17	-	3	83
125	56	32	20	40	3	125
160	64,5	42	32	43	3	160

ROTATING WITH FINE ADJUSTMENT CHUCKS - Type 9164, 9165

D	SM	A	rpm	Approx. weight [kg]
100	3	151	2500	6,8
100	4	154,5	2500	7,1
125	4	155,5	2000	9,2
125	5	160,5	2000	10,3
160	5	156,5	1800	32,4

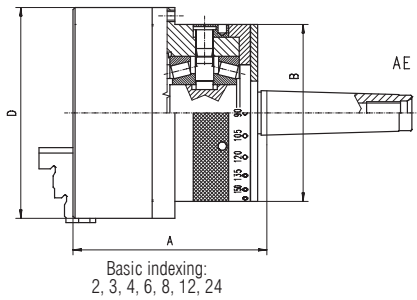
Example of order: 9164 - 100/3 AE

Type	Standard accessories	Chuck	Outside hard solid jaws	Inside hard solid jaws	Wrench
Type 9164		1 chuck 3564	1 set of outside hard solid jaws	1 set of inside hard solid jaws	1 wrench
Type 9165		1 chuck 3565	1 set of hard top jaws	1 set of hard master jaws	1 wrench

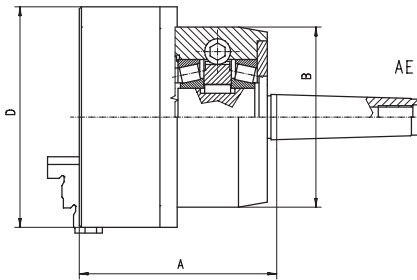


D	B	E	C		d1 min.	d2 max.
			Solid jaws	2-piece reversible jaws		
100	68	20	17	-	3	83
125	71,5	35	20	40	3	125
160	68,6	42	32	43	3	160

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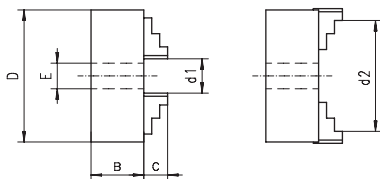
ROTATING DIVIDING WITH BLOCKING - Type 9184, 9185					
D	SM	A	B	rpm	Approx. weight [kg]
80	2	113,9	-	3000	3,9
80	3	113,9	-		4,1
100	3	123,4	-	2500	6,2
100	4	124,9	-		6,5
125	4	139,5	-	2000	11,0
125	5	139,5	-		12,0
160	4	148	125	1800	18,0
160	5	148	125		19,0



ROTATING WITH BLOCKING - Type 9186, 9187					
D	SM	A	B	rpm	Approx. weight [kg]
80	2	109	-	3200	3,6
80	3	109	-	3200	3,8
100	3	118,5	-	2800	6,0
100	4	120	-	2800	6,0
125	4	138,5	-	2500	11,0
125	5	138,5	-	2500	12,0
160	4	147	125	2200	18,0
160	5	147	125	2200	18,9

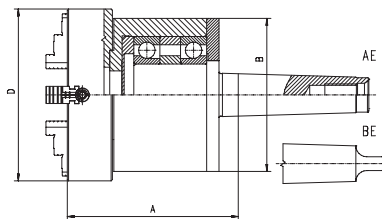
Example of order: 9186 - 80/2

Type	Standard accessories	Chuck	Outside jaws	Inside jaws	Wrench
Type 9184, 9186		1 chuck 3274	1 set of outside hard solid jaws	1 set of inside hard solid jaws	1 wrench
Type 9185, 9187		1 chuck 3275	1 set of hard top jaws	1 set of hard master jaws	1 wrench



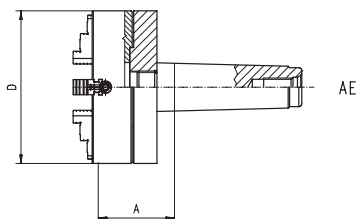
D	B	E	C		d1 min.	d2 max.
			Solid jaws	2-piece reversible jaws		
80	44	16	13	-	2	71
100	50	20	17	-	3	83
125	56	32	20	40	3	125
160	64,5	42	32	43	3	160

INDEPENDENT CHUCKS WITH MORSE TAPER



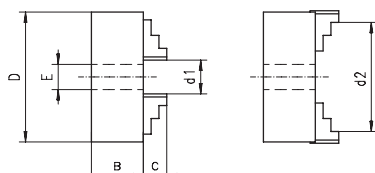
ROTATING - Type 4954					
D	SM	A	B	rpm	Approx. weight [kg]
100	4 AE	115	98	3500	6,0
125	4 AE	135,5	115	3200	8,0
160	4 AE	135,5	115	2800	11,2
160	5 AE	135,5	115	2800	12,0

Example of order: 4954-160/4AE



DEAD - Type 4956				
D	SM	A	rpm	Approx. weight [kg]
125	4 AE	72	3200	6,0

Example of order: 4956-125/4AE



D	B	C	E	d1 min.	d2 max.
100	40	17	25	3	100
125	43	20	26	8	125
160	43	20	42	8	160

Type 4505, 4605, 4705, 4805





Features:

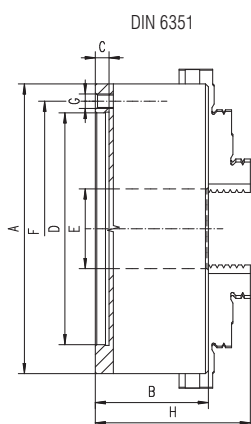
- Combines features of both self-centering scroll and independent chuck: user can adjust chuck once and the self-centering option assures repeatability throughout the rest of the batch
- 4 jaw chuck (type 4605 and type 4805) is able to machine both square and round workpieces, granting greater flexibility
- Steel body (type 4705 and type 4805) extends machine life while providing higher rigidity and greater wear resistance, enabling the chuck to withstand higher machining forces

Application:

- Particularly suitable for lining up and gripping workpieces of irregular shape

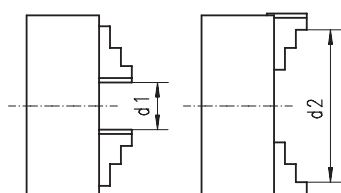
3 jaw chucks		4 jaw chucks	
Cast iron body	Steel body	Cast iron body	Steel body
Type 4505	Type 4705	Type 4605	Type 4805

Type 4505, 4605, 4705, 4805	Standard accessories		1 set of hard solid jaws		1 wrench
		Spare parts - see pages 57-58			

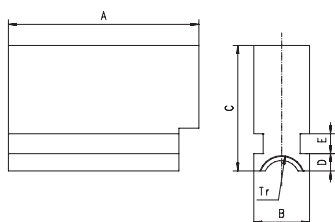


Example of order: 4505-200

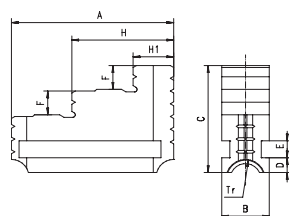
Chuck size A	B	C	D H6	E	F	G	H
200	96	5,5	160	55	176	6xM10	127
250	102	6	200	76	224	6xM12	135
315	117	6	260	103	286	6xM16	158,5
400	123	6,3	330	136	362	6xM16	182
500	145	8	420	190	458	6xM16	206
630	160	10	545	252	586	6xM16	232



Chuck size A	Gripping ranges		Approx. weight [kg]
	d1 min.	d2 max.	
200	4	200	18,5
250	5	250	31
315	10	315	54,5
400	15	400	88
500	20	500	150
630	30	630	245



Soft solid jaws



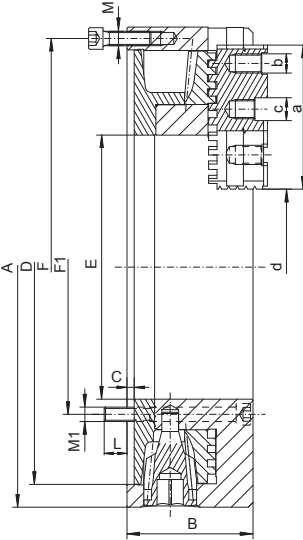
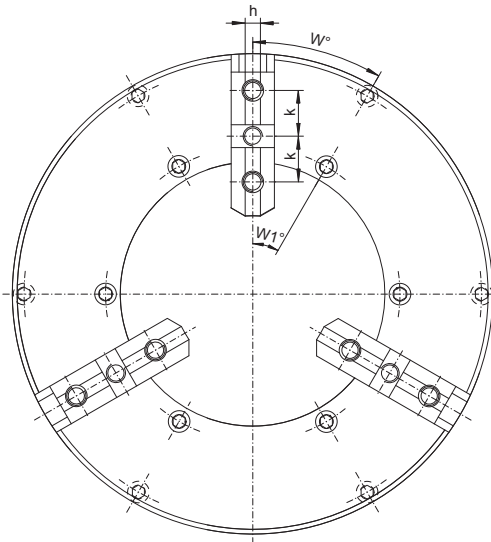
Hard solid jaws

MAIN DIMENSIONS OF HARD SOLID AND SOFT SOLID JAWS						
Chuck size	200	250	315	400	500	630
A	85	91	125	145	180	225
B	25	28	32	36	40	50
C	58	61	73	90	100	108
D	11	10	13,5	12	15	14
E	10	10	12	14	14	14
F	12	14	18	22	26	28
Tr-left hand	Tr 18 x 2	Tr 18 x 2	Tr 24 x 3	Tr 24 x 3	Tr 26 x 3	Tr 26 x 3
H1	25	26,5	27	35	49,7	65
H	56	60	76	98,2	119,3	148
Approx. weight [kg]	0,55	0,76	1,60	1,80	3,85	4,50

1

Type 3295

3 JAWS, CAST IRON BODY



Features:





- Cast iron body
- Chucks may work individually or in pairs, mounted on opposite sides of the lathe spindle, ensuring the same vertical position of the jaws in both chucks
- Large through-hole compared to the outside diameter of the chuck body

- Able to machine very long workpieces

Application:

- Designed for gripping long pipes during machining for conventional and specialized machine-tools

Chuck size		400	500	660	800	
A		400	508	660	800	
B		105	120	135	151	
C		6	8	14	7	
D		362	462	580	710	
E		220	320	406	410	
F		381	481,5	620	-	
F1		-	-	-	460	
M		6xM12	6xM16	6xM16	-	
M1		-	-	-	6xM24	
W		30°	30°	30°	-	
W1		-	-	-	30°	
L		-	-	-	25	
a		120	120	127	225	
b		M16	M20	M20	M20	
c		19,04	19,04	19,04	19,04	
h		12,7	12,7	12,7	12,7	
d	min.	168	250	376	260	
	max.	288	380	497	566	
Max. speed		rpm	500	350	250	200
Approx. weight [kg]		kg	57,7	75,8	128,9	212,0

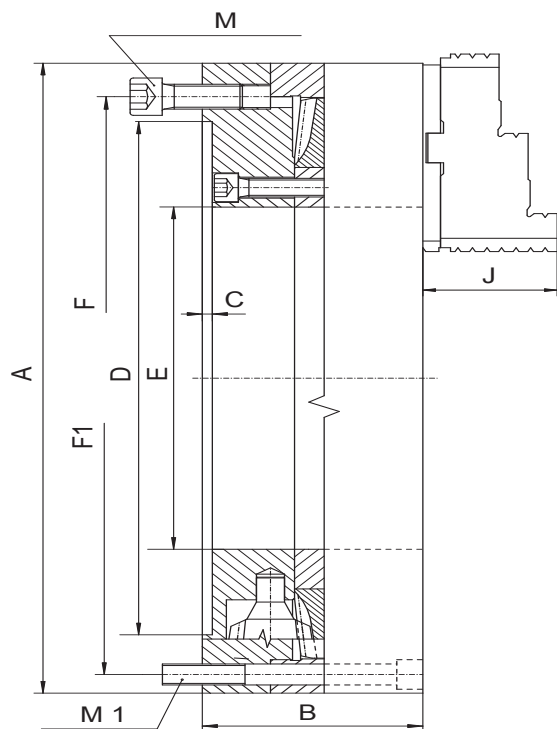
Type 3295	Standard accessories		1 set of soft top jaws		1 set of hard master jaws		1 wrench	Optional accessories		1 set of hard top jaws
		Spare parts - see pages 56-57								

Example of order: 3295-500

Type 3597

3 JAW, STEEL BODY (DIN 6350)

1



Features:

- Steel body extends machine life while providing higher rigidity and greater wear resistance, enabling the chuck to withstand higher machining forces
- Chucks may work individually or in pairs, mounted on opposite sides of the lathe spindle, ensuring the same vertical position of the jaws in both chucks
- Large through-hole compared to the outside diameter of the chuck body
- High gripping force

- Able to machine very long workpieces
- High machining accuracy
- Heavy-duty components

Application:

- This chuck is designed for gripping long pipes during medium-duty machining for conventional and specialized machine-tools

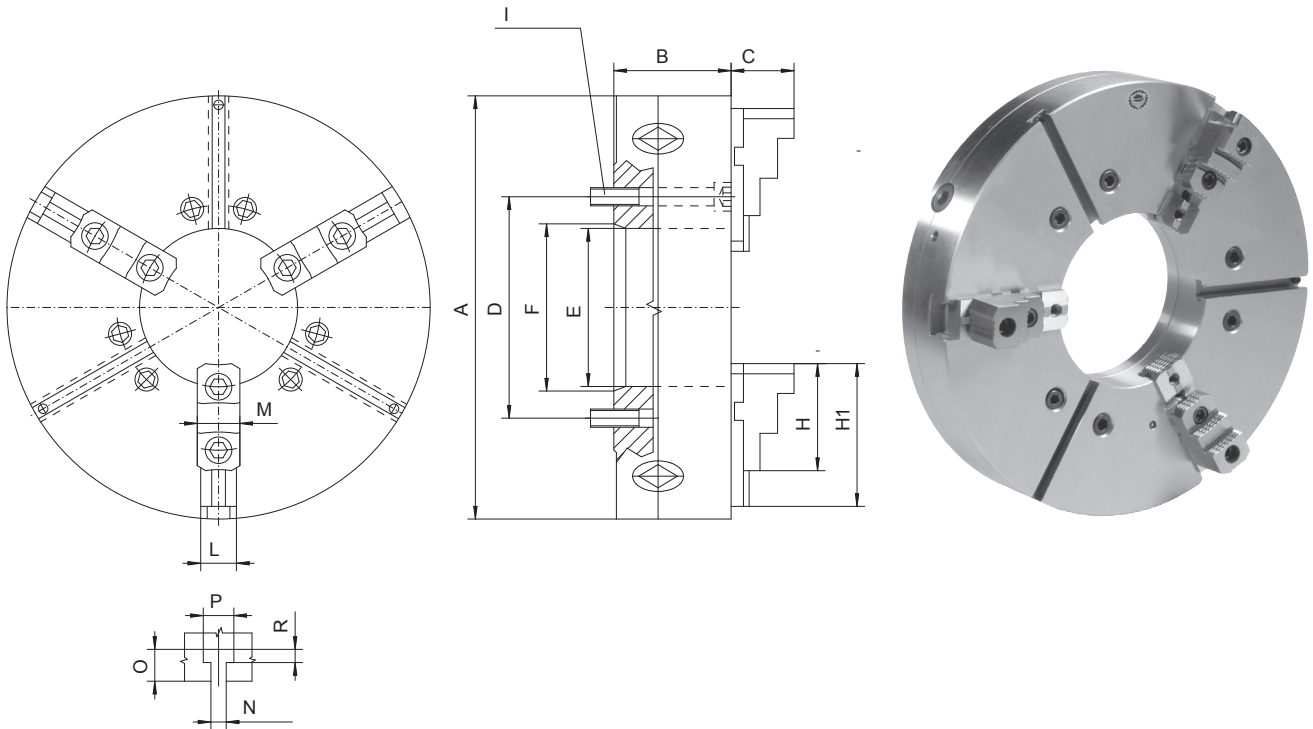
Chuck size		315	405	515	660	800
A		315	405	515	660	800
B		97	110	120	140	150
C		5	5	5	7	7
D		260	330	420	545	710
E		145	220	320	406	460
F		286	362	458	586	760
F1		286	381	481,5	620	760
J		56,9	67	79	87	-
M		3x M16x30	6x M16x40	6x M16x40	6x M16x40	6x M20x50
M1		3x M16x100	6x M12x120	6x M16x130	6x M16x150	6x M20x160
Gripping range	mm	40 - 140	138-406	264 - 516	349 - 630	260 - 460
Max. speed	rpm	2500	1000	800	600	700
Approx. weight [kg]	kg	47	73	120	230	398

Type 3597	Standard accessories		1 set of hard master jaws		1 set of hard top jaws		1 wrench

Example of order: 3597-315

Type 3515 HD

3 JAWS, STEEL BODY (DIN 55026)



Features:

- Steel body extends machine life while providing higher rigidity and greater wear resistance, enabling the chuck to withstand higher machining forces
- Chucks may work individually or in pairs, mounted on opposite sides of the lathe spindle, ensuring the same vertical position of the jaws in both chucks
- Large through-hole compared to the outside diameter of the chuck body

- High gripping force
- Able to machine very long workpieces
- High machining accuracy




Application:

- This precision chuck, with increased gripping accuracy, is designed for gripping long pipes during heavy-duty machining for conventional and specialized machine-tools

Options:

- Chuck metric execution available on request

Chuck size		15,1/4"- 6-4,0" HD	15,1/4"- 8-5,3" HD	15,3/4"- 11-5,0" HD	20"- 11-7,5" HD	25"- 15-10,75" HD	25"- 20-12,5" HD	31,1/2"- 15- 10,75" HD	31,1/2"- 20- 12,5" HD
Short taper	mm	6	8	11	11	15	20	15	20
A		400	400	400	500	630	630	800	800
B		111	111	111	119	144	144	150	150
C		87	87	87	87	92,5	92,5	92,5	92,5
D		133,4	171,4	165,1	235	330,2	368,3	330,2	463,5
E		103	136	130	192	275	320	275	320
F		106,375	139,719	196,869	196,869	285,775	412,775	285,775	412,775
H		135	135	135	135	135	135	135	135
H1		-	-	-	169	210	210	225	225
I		6x1/2"-13x4,1/2"	6x5/8"-11x4,1/2"	6x3/4"-10x4"	6x3/4"-10x5"	6x7/8"-9x6"	6x1"-8x5"	6x7/8"-9x6"	6x1"-8x5"
L		50	50	50	50	70	70	70	70
M		54	54	54	54	75	75	75	75
N		14H10	14H10	14H10	14H10	22H10	22H10	22H10	22H10
O		21	21	21	21	33	33	33	33
P		23	23	23	23	37	37	37	37
R		10	10	10	10	16	16	16	16
Gripping range	mm	25 - 400	25 - 400	25 - 400	45 - 500	80 - 630	160 - 630	130 - 800	180 - 800
Gripping force	daN	6200	6200	6200	7700	8200	8200	9000	9000
Max. speed	rpm	1400	1400	1400	1000	850	850	600	600
Approx. weight [kg]	kg	102,11	98,32	96,22	156,46	278,2	251,48	502,2	489,00

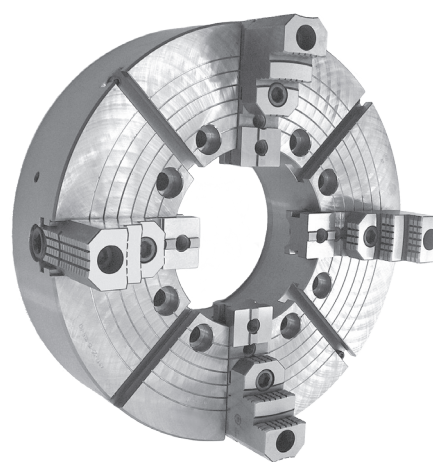
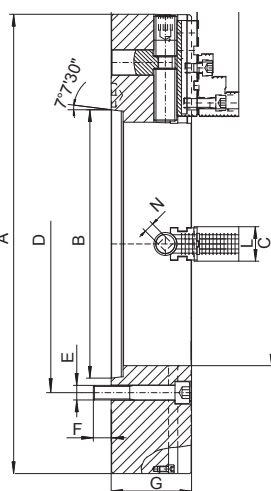
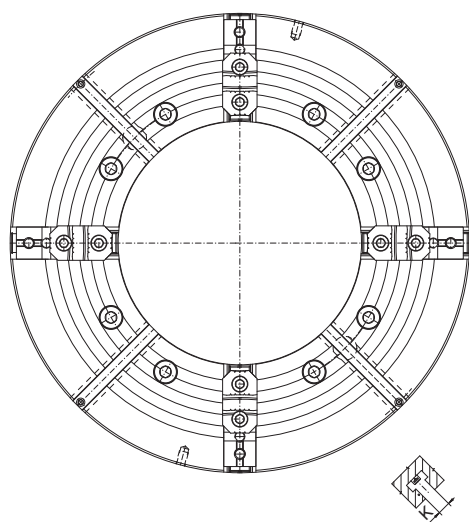
Type 3515 HD	Standard accessories		1 set of hard master jaws		1 set of hard top jaws		1 wrench
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Example of order: 3515 - 15.1/4" - 6- 4.0" HD

Type 4317 HD

4 JAWS, STEEL BODY (DIN 55026)

1



■ Features and applications see page 69

Chuck size		16"- 8-5.3" HD	16"- 11-6.5" HD	20"- 11-6.5" HD	20"- 15-8" HD	25"- 15-10.5" HD	25"- 20-10.5" HD	25"- 20-12.5" HD
Short taper 1:4	mm	8	11	11	15	15	20	20
A		415	415	500	500	630	630	630
B		139,719	196,869	196,869	285,775	285,775	412,775	412,775
C		136	168	168	205	270	270	320
D		171,4	235,0	235,0	330,2	330,2	463,6	463,6
E		4 x M16x110	4 x M20x110	8 x M20x110	8 x M24x150	8 x M24x160	8 x M24x160	8 x M24x160
F		21,3	25,3	25,4	31,4	34,1	38,1	38,1
G		145	145	145	145	155	155	155
H		154,1	154,1	154,1	154,1	167,1	167,1	167,1
I		75,7	75,7	75,7	75,7	90,7	90,7	90,7
K		18	18	22	22	22	22	22
L		62	62	60	60	75	75	75
N		19	19	19	19	22	22	22
Gripping range	mm	45-415	45-415	45-500	45-500	50 - 630	50 - 630	100 - 630
Torque on wrench	Nm	350	350	350	350	400	400	400
Gripping force per jaw	daN	3200	3200	3200	3200	3700	3700	3700
Max. speed	rpm	1200	1200	1000	1000	850	850	850
Approx. weight [kg]	kg	145	137	204	188	310	295	300

Chuck size		28"- 15-10.5" HD	28"- 20-12.5" HD	31.1/2"- 15-10.5" HD	31.1/2"- 20-12.5" HD	31.1/2"- 20-14.5" HD	40"- 28-20.5" HD	49"- 15-11" HD
Short taper 1:4	mm	15	20	15	20	20	28	15
A		710	710	800	800	800	1000	1250
B		285,775	412,775	285,775	412,775	412,775	584,225	285,775
C		270	320	270	320	370	530	281
D		330,2	463,6	330,2	463,6	463,6	647,6	330,2
E		8 x M24x160	8 x M24x160	8 x M24x160	8 x M24x160	8 x M24x160	8 x M30x180	8 x M24x180
F		34,1	38,1	34,1	38,1	38,1	38,8	28,8
G		155	155	165	165	165	175	175
H		167,1	167,1	177,1	177,1	177,1	187,1	187,1
I		90,7	90,7	90,7	90,7	90,7	90,7	90,7
K		22	22	22	22	22	28	28
L		75	75	75	75	75	75	75
N		22	22	22	22	22	22	22
Gripping range	mm	75 - 710	100 - 710	75 - 800	115 - 800	155 - 800	350 - 1000	100 - 1250
Torque on wrench	Nm	450	450	450	450	450	500	500
Gripping force per jaw	daN	4100	4100	4100	4100	4100	4500	5000
Max. speed	rpm	750	750	600	600	600	430	350
Approx. weight [kg]	kg	415	395	585	565	545	765	1606

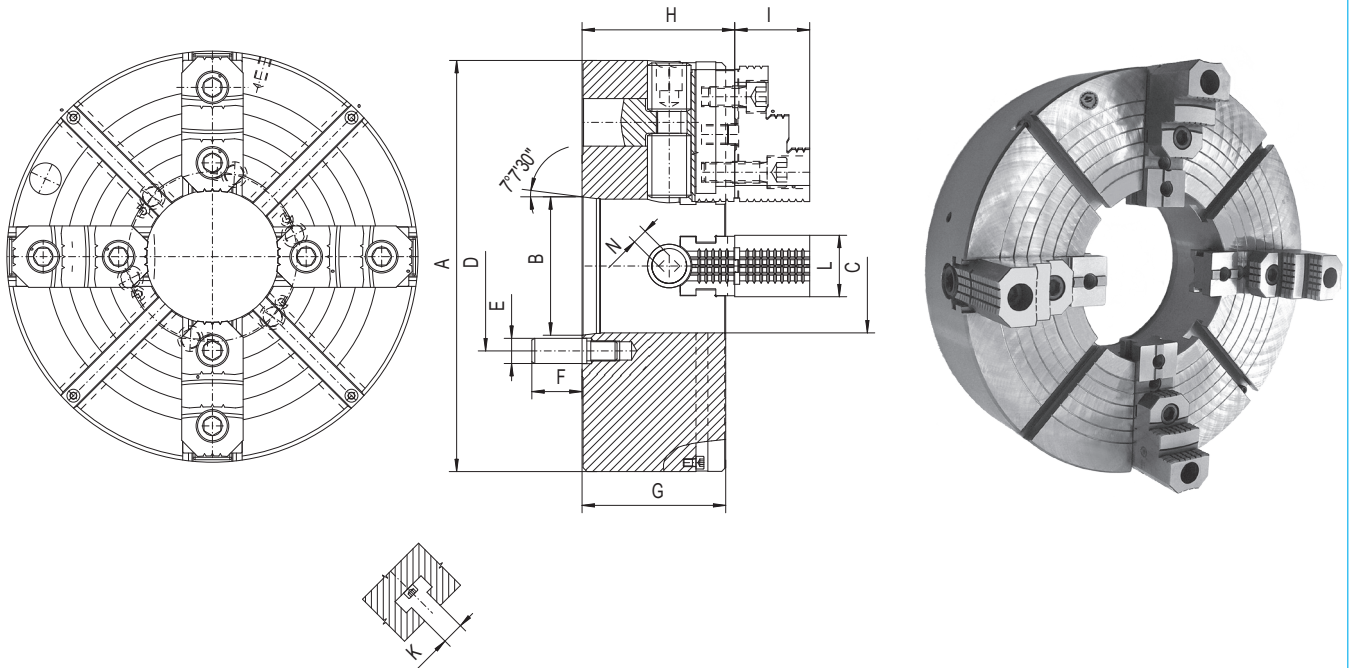
Example of order: 4317-28"-15-10.5" HD

Type 4317 HD	Standard accessories		1 set of hard sectional jaws (master + hard top reversible)		1 wrench
		Example of order: 4317 - 28"- 15- 10.5" HD			

1

Type 4347 HD

4 JAWS, STEEL BODY (DIN 55029)



Features:

- Steel body extends machine life while providing higher rigidity and greater wear resistance, enabling the chuck to withstand higher machining forces
- Chucks may work individually or in pairs, mounted on opposite sides of the lathe spindle, ensuring the same vertical position of the jaws in both chucks
- Large through-hole compared to the outside diameter of the chuck body

- High gripping force
- Able to machine very long workpieces
- High machining accuracy

Application:

- This precision chuck, with increased gripping accuracy, is designed for gripping long pipes during heavy-duty machining for conventional and specialized machine-tools

Chuck size		16"- 8- 5,3" HD	16"- 11- 6,5" HD	20"- 8- 5,3" HD	20"- 11- 6,5" HD	28"- 11- 7,5" HD
Short taper	mm	8	11	8	11	11
A		415	415	500	500	710
B		139,719	196,869	139,719	196,869	196,869
C		136	168	136	168	192
D		171,4	235	171,4	235	235
E		25,4	30,2	25,4	30,2	30,2
F		50,7	60,6	50,7	60,6	60,6
G		145	145	145	145	155
H		154,1	154,1	154,1	154,1	167,1
I		75,7	75,7	75,7	75,7	90,7
K		18	18	22	22	22
L		60	60	60	60	75
N		19	19	19	19	22
Gripping range	mm	45 - 400	45 - 400	45 - 500	45 - 500	75 - 710
Torque on wrench	Nm	350	350	350	350	450
Gripping force per jaw	daN	3200	3200	3200	3200	4100
Max. speed	rpm	1200	1200	1000	1000	750
Approx. weight [kg]	kg	136	128	212	205	450

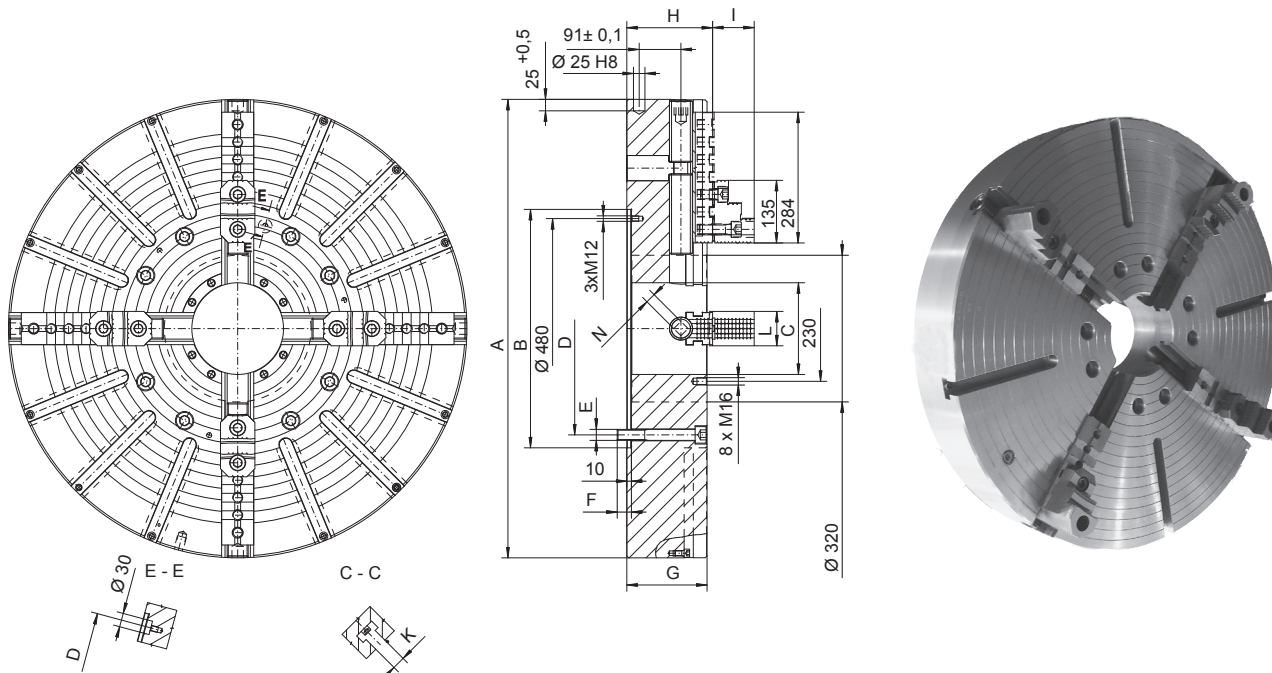
Type 4347 HD	Standard accessories		1 set of hard sectional jaws (master + hard top reversible)		1 wrench

Example of order: 4347 - 28" - 11 - 7.5" HD

Type 4307 HD

4 JAWS, STEEL BODY

1



Features:

- Steel body extends machine life while providing higher rigidity and greater wear resistance, enabling the chuck to withstand higher machining forces
- Chucks may work individually or in pairs, mounted on opposite sides of the lathe spindle, ensuring the same vertical position of the jaws in both chucks
- High gripping force
- Able to machine very long workpieces
- High machining accuracy
- Heavy-duty components

Application:

- This chuck is designed for gripping long pipes during medium-duty machining for conventional and specialized machine-tools

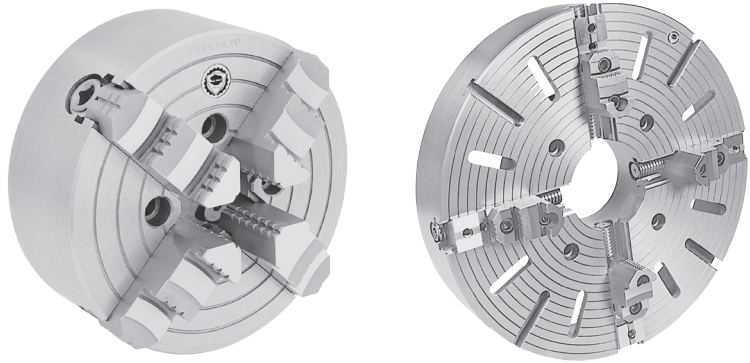
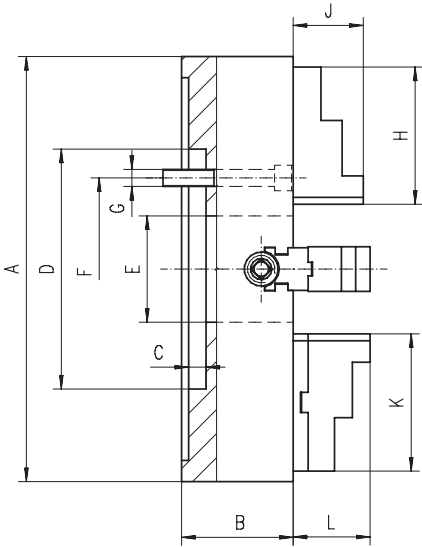
Chuck size		4307-1000/520-200 HD	4307-1250/520-200 HD
A		1000	1250
B		520	520
C		200	200
D		463,6	463,6
E		8 x M24	8 x M24
F		31	31
G		175	175
H		187,1	187,1
I		90,7	90,7
K		28	28
L		75	75
N		22	22
Gripping range	mm	50 - 1000	50 - 1250
Torque on wrench	Nm	500	500
Gripping force per jaw	daN	5000	5000
Max. speed	rpm	430	350
Approx. weight [kg]	kg	0642 985	1560

Type 4307 HD	Standard accessories		1 set of hard sectional jaws (master + hard top reversible)		1 wrench

Example of order: 4307- 1000/520-200 HD

Type 4302, 4303

4 JAWS, CAST STEEL BODY



Features:

- 4 jaw, independent chuck with manual gripping, and a high quality steel body
- Steel body extends machine life while providing higher rigidity and greater wear resistance, enabling the chuck to withstand higher machining forces
- 4 jaws ensure the precise centering of square-shaped workpieces with the maximum permitted gripping force

- Chucks with diameters 250 mm and above are equipped with additional T-slots, permitting the addition of extra jaws
- Mounted on the machine-tool spindle from the back of the chuck, using the adapter plate

Application:

- This precision chuck, with increased gripping accuracy, is made for all types of very high precision workshop machining operations on conventional lathes
- Suitable for machining square and round workpieces

Options:

- Hard solid jaws (type 4304) or hard two-piece jaws (type 4305)
- Chuck design: our engineers can work with you to implement any product design changes you may require

Chuck size	200	250	315	400	500
A	200	250	315	400	500
B	80	85	95	105	120
C	5	7	7	10	12
D H7	110	150	175	200	270
E	50	65	80	100	125
F	82,6	104,8	133,4	171,4	235
G	4xM10	4xM12	4xM16	4xM16	4xM20
H	81	96,5	111	129	152,5
J	40,3	40,3	49,8	49,8	59,8
L	46,4	60,4	60,9	72,3	90,3
K	82	96,5	112,5	129	136
Approx. weight [kg]	14,0	25,0	39,0	61,0	105

Chuck size	630	800	915	1000	1250
A	630	800	915	1000	1250
B	140	160	170	170	190
C	12	12	18	18	18
D H7	270	380	370	370	550
E	160	200	190	190	190
F	235	330	330	330	500
G	4xM20	4xM24	8xM24	8xM24	8xM24
H	177	202	-	-	-
J	59,8	70,8	-	-	-
L	97,8	93,8	102,8	102,8	102,8
K	136	136	160	160	160
Approx. weight [kg]	163	319	350	410	950

Other engineering data - see page 79

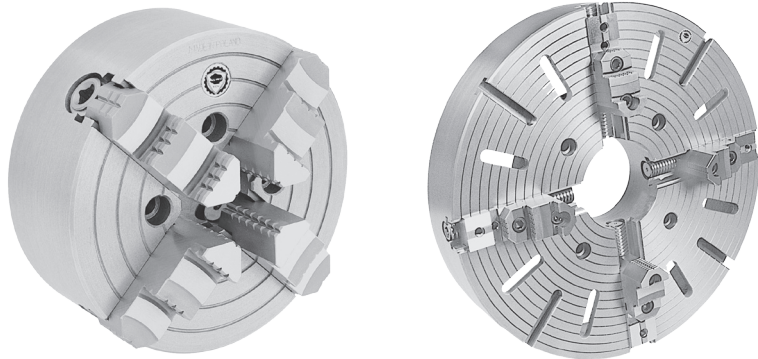
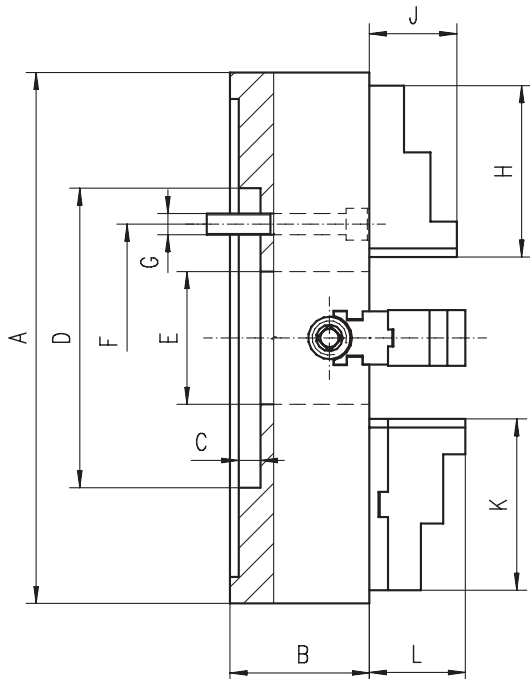
Type	Standard accessories	1 set of solid jaws	1 set of hard master jaws	1 wrench	Optional accessories	1 set of soft solid jaws	1 set of soft solid top jaws
Type 4302							
Type 4303							

Spare parts - see page 80

Example of order: 4302 - 200

Type 4304, 4305

4 JAWS, CAST IRON BODY



Features:

- 4 jaw, independent chuck with manual gripping, and a high quality cast iron body
- Chuck bodies in sizes up to 160 mm diameter, are made from steel
- 4 jaws ensure the precise centering of square-shaped workpieces with the maximum permitted gripping force
- Chucks with diameters 250 mm and above are equipped with additional T-slots, permitting the addition of extra jaws
- Mounted on the machine-tool spindle from the back of the chuck, using the adapter plate

Application:

- Suitable for machining square and round workpieces on all types of workshop machining operations on conventional lathes

Options:

- Hard solid jaws (type 4304) or hard two-piece jaws (type 4305)
- Chuck design: our engineers can work with you to implement any product design changes you may require

Chuck size	85	100	125	160	200	250	315
A	86	100	130	156	200	250	315
B	40	40	43	43	80	85	95
C	5	2,5	2,5	2,5	5	7	7
D H7	62	79,38	69,85	82,55	110	150	175
E	25	25	26	42	50	65	80
F	72	54	54	69,85	82,6	104,8	133,4
G	4xM6	4xM8	4xM8	4xM10	4xM10	4xM12	4xM16
H	34	34	51	51	81	96,5	111
J	17	17	20	20	40,3	40,3	49,8
K	-	-	-	-	82	96,5	112,5
L	-	-	-	-	46,4	60,4	60,9
Approx. weight [kg]	1,9	2,4	3,8	4,3	14,0	25,0	39,0

Chuck size	350	400	500	630	800	915	1000	1250
A	350	400	500	630	800	915	1000	1250
B	95	105	120	140	160	170	170	190
C	7	10	12	12	12	18	18	18
D H7	175	200	270	270	380	370	370	550
E	80	100	125	160	200	190	190	190
F	133,4	171,4	235	235	330	330	330	500
G	4xM16	4xM16	4xM20	4xM20	4xM24	8xM24	8xM24	8xM24
H	111	129	152,5	177	202	-	-	-
J	49,8	49,8	59,8	59,8	70,8	-	-	-
K	-	129	136	136	136	160	160	160
L	-	72,3	90,3	97,8	93,8	102,8	102,8	102,8
Approx. weight [kg] ca. kg	47,5	61,0	105	163	319	350	410	950

Other engineering data - see page 79

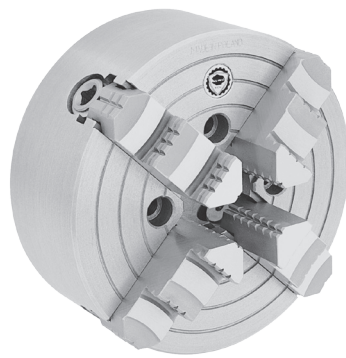
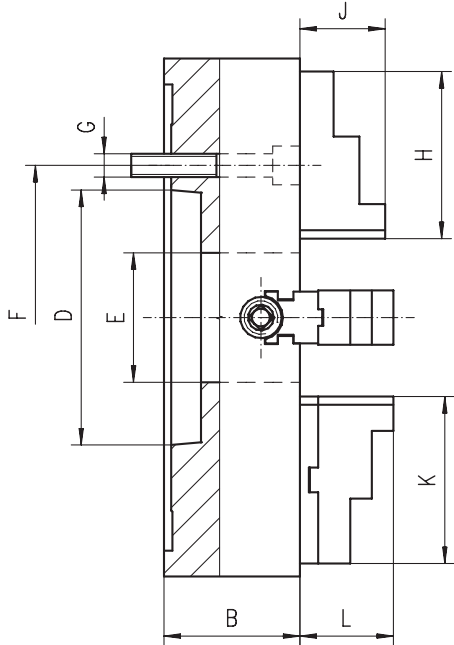
Type	Standard accessories	Optional accessories
Type 4304	1 set of solid jaws	1 set of soft solid jaws
Type 4305	1 set of hard top jaws	1 set of soft solid top jaws

Spare parts - see page 80

Example of order: 4304 - 85

Type 4312, 4313

4 JAWS, CAST STEEL BODY (DIN 55026)



- 4 jaws ensure the precise centering of square-shaped workpieces with the maximum permitted gripping force
- Chucks with diameters 250 mm and above are equipped with additional T-slots, permitting the addition of extra jaws
- Mounted directly to "A" type machine-tool spindles

Application:

- This precision chuck, with increased gripping accuracy, is made for all types of very high precision workshop machining operations on conventional lathes

- Suitable for machining square and round workpieces

Options:

- Hard solid jaws (type 4312) or hard two-piece jaws (type 4313)
- Chuck design: our engineers can work with you to implement any product design changes you may require

Features:

- 4 jaw, independent chuck with manual gripping, and a high quality steel body
- Steel body extends machine life while providing higher rigidity and greater wear resistance, enabling the chuck to withstand higher machining forces

Chuck size	200			250				315			400			500			
Short taper 1:4	4	5	6	4	5	6	8	5	6	8	6	8	11	6	8	11	15
B	80			85				95			105			120			
D min.	63,513	82,563	106,375	63,513	82,563	106,375	139,719	82,563	106,375	139,719	106,375	139,719	196,869	106,375	139,719	196,869	285,775
D max.	63,526	82,578	106,390	63,526	82,578	106,390	139,734	82,578	106,390	139,734	106,390	139,734	196,887	106,390	139,734	196,887	285,795
E	50			65				80			100			125			
F	82,6	104,8	133,4	82,6	104,8	133,4	171,4	104,8	133,4	171,4	133,4	171,7	235	133,4	171,4	235	330,2
G	4xM10	4xM10	4xM12	8xM10	8xM10	4xM12	4xM16	4xM10	8xM12	4xM16	8xM12	4xM16	4xM20	4xM12	8xM16	8xM20	4xM24
H	81			96,5				111			129			152,5			
J	40,3			40,3				49,8			49,8			59,8			
K	82			96,5				112,5			129			136			
L	46,4			60,4				60,9			72,3			90,3			
Approx. weight [kg]	17,0			25,5				40,0			65			114,0			

Chuck size	630			800				915		1000			1250		
Short taper 1:4	8	11	15	8	11	15	20	11	15	11	15	20	11	15	20
B	140			160				170		170			190		
D min.	139,719	196,869	285,775	139,719	196,869	285,775	412,775	196,869	285,775	196,869	285,775	412,775	196,869	285,775	412,775
D max.	139,734	196,887	285,795	139,734	196,887	285,795	412,802	196,887	285,795	196,887	285,795	412,802	196,887	285,795	412,802
E	125	160		125	180	200	200	190		190			190		
F	171,4	235	330,2	171,4	235	330,2	463,6	235	330,2	235	330,2	463,6	235	330,2	463,6
G	8xM16	8xM20	4xM24	4xM16	8xM20	8xM24	4xM24	8xM20	8xM24	8xM20	8xM24	8xM24	8xM20	8xM24	8xM24
H	177			202				-		-			-		
J	59,8			70,8				-		-			-		
K	136			136				160		160			160		
L	97,8			93,8				102,8		102,8			102,8		
Approx. weight [kg]	165,0			305				315,0		395,0			950		

Other engineering data - see page 79

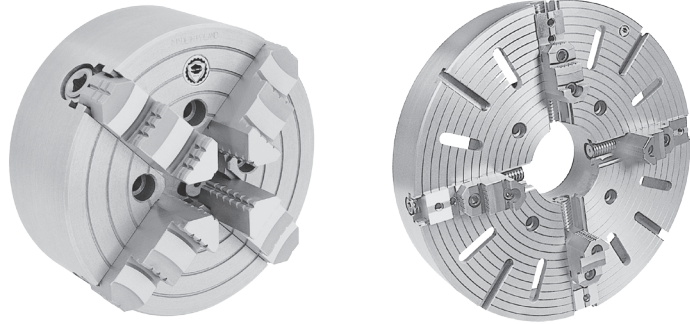
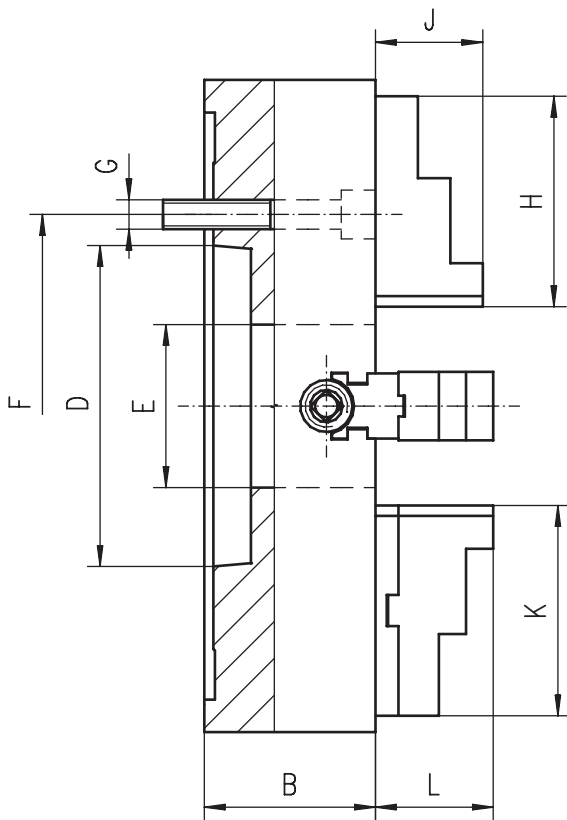
Type 4312	Standard accessories		1 set of solid jaws			1 wrench	Optional accessories		1 set of soft solid jaws
Type 4313			1 set of hard top jaws		1 set of hard master jaws			1 wrench	

Spare parts - see page 80

Example of order: 4312-250/6

Type 4314, 4315

4 JAW, CAST IRON BODY (DIN 55026)



Features:

- 4 jaw, independent chuck with manual gripping, and a high quality cast iron body
- 4 jaws ensure the precise centering of square-shaped workpieces with the maximum permitted gripping force
- Chucks with diameters 250 mm and above are equipped with additional T-slots, permitting the addition of extra jaws
- Mounted directly to "A" type machine-tool spindles

Application:

- Suitable for machining square and round workpieces on all types of workshop machining operations on conventional lathes

Options:

- Hard solid jaws (type 4314) or hard two-piece jaws (type 4315)
- Chuck design: our engineers can work with you to implement any product design changes you may require

Chuck size	200				250				315			400			500			
Short taper 1:4	4	5	6		4	5	6	8	5	6	8	6	8	11	6	8	11	15
B	80				85				95			105			120			
D min.	63,513	82,563	106,375		63,513	82,563	106,375	139,719	82,563	106,375	139,719	106,375	139,719	196,869	106,375	139,719	196,869	285,775
D max.	63,526	82,578	106,390		63,526	82,578	106,390	139,734	82,578	106,390	139,734	106,390	139,734	196,887	106,390	139,734	196,887	285,795
E	50				65				80			100			125			
F	82,6	104,8	133,4		82,6	104,8	133,4	171,4	104,8	133,4	171,4	133,4	171,4	235	133,4	171,4	235	330,2
G	4xM10	4xM10	4xM12		8xM10	8xM10	4xM12	4xM16	4xM10	8xM12	4xM16	8xM12	4xM16	4xM20	4xM12	8xM16	8xM20	4xM24
H	81				96,5				111			111			152,5			
J	40,3				40,3				49,8			49,8			59,8			
K	82				96,5				112,5			129			136			
L	46,4				60,4				60,9			72,3			90,3			
Approx. weight [kg]	17,0				25,5				40,0			65			114,0			

Chuck size	630			800				1000		1250	
Short taper 1:4	8	11	15	8	11	15	20	11	15	11	15
B	140			160				170		190	
D min.	139,719	196,869	285,775	139,719	196,869	285,775	412,775	196,869	285,775	196,869	285,775
D max.	139,734	196,887	285,795	139,734	196,887	285,795	412,802	196,887	285,795	196,887	285,795
E	125	160		125	180	200	200	190		190	
F	171,4	235	330,2	171,4	235	330,2	463,6	235	330,2	235	330,2
G	8xM16	8xM20	4xM24	4xM16	8xM20	8xM24	4xM24	8xM20	8xM24	8xM20	8xM24
H	177			202				-		-	
J	59,8			70,8				-		-	
K	136			136				160		160	
L	97,8			93,8				102,8		102,8	
Approx. weight [kg]	165,0			305				395,0		950	

Other engineering data - see page 79

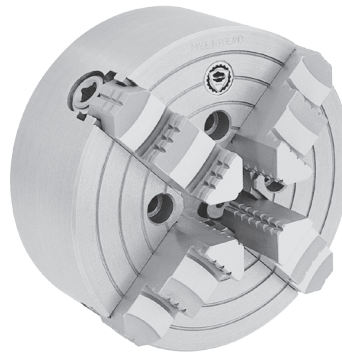
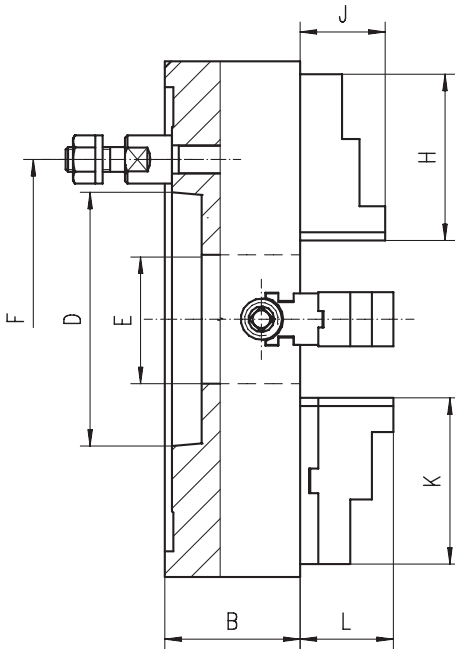
Type	Standard accessories	Optional accessories
Type 4314	1 set of solid jaws	1 set of soft solid jaws
Type 4315	1 set of hard top jaws	1 set of soft solid top jaws

Spare parts - see page 80

Example of order: 4314-250/5

Type 4332, 4333

4 JAWS, CAST STEEL BODY (DIN 55027)



- 4 jaws ensure the precise centering of square-shaped workpieces with the maximum permitted gripping force
- Chucks with diameters 250 mm and above are equipped with additional T-slots, permitting the addition of extra jaws
- Mounted directly to BAYONET type machine-tool spindles

Application:

- This precision chuck, with increased gripping accuracy, is made for all types of very high precision workshop machining operations on conventional lathes
- Suitable for machining square and round workpieces

Options:

- Hard solid jaws (type 4332) or hard two-piece jaws (type 4333)
- Chuck design: our engineers can work with you to implement any product design changes you may require

Features:

- 4 jaw, independent chuck with manual gripping, and a high quality steel body
- Steel body extends machine life while providing higher rigidity and greater wear resistance, enabling the chuck to withstand higher machining forces

Chuck size	200		250		315				400				500				
Short taper 1:4	5	6	5	8	5	6	8	11	5	6	8	11	6	8	11	15	
B	80		85		95				105				120				
D max.	82,578	106,390	82,578	106,390	139,734	82,578	106,390	139,734	196,887	82,578	106,390	139,734	196,887	106,390	139,734	196,887	285,795
D min.	82,563	106,375	82,563	106,375	139,719	82,563	106,375	139,719	196,869	82,563	106,375	139,719	196,869	106,375	139,719	196,869	285,775
E	50		65		80				79,5				100				
F	104,8	133,4	104,8	133,4	171,4	104,8	133,4	171,4	235	104,8	133,4	171,4	235	133,4	171,4	235	330,2
Qty. of mounting screws	4	4	4	4	4	4	4	4	6	4	4	4	6	4	4	6	6
H	81		96,5		111				129				152,5				
J	40,3		40,3		49,8				49,8				59,8				
K	82		96,5		112,5				129				136				
L	46,4		60,4		60,9				72,3				90,3				
Approx. weight [kg]	16,5		27,5		39,5				60,0				95,5				

Chuck size	630			800			915		1000			1250		
Short taper 1:4	8	11	15	8	11	15	11	15	11	15	20	11	15	15
B	140			160			170		170			190		
D max.	139,734	196,887	285,795	139,734	196,887	285,795	196,887	285,795	196,887	285,795	412,802	196,887	285,795	285,795
D min.	139,719	196,869	285,775	139,719	196,869	285,775	196,869	285,775	196,869	285,775	412,775	196,869	285,775	285,775
E	125	160		125	180	200	190		190			190		
F	171,4	235	330,2	171,4	235	330,2	235	330,2	235	330,2	463,6	235	330,2	330,2
Qty. of mounting screws	4	6	6	4	6	6	6	6	6	6	6	6	6	6
H	177			202			-		-			-		
J	59,8			70,8			-		-			-		
K	136			136			160		160			160		
L	97,8			93,8			102,8		102,8			102,8		
Approx. weight [kg]	165,0			298,0			326,0		386,0			950		

Other engineering data - see page 79

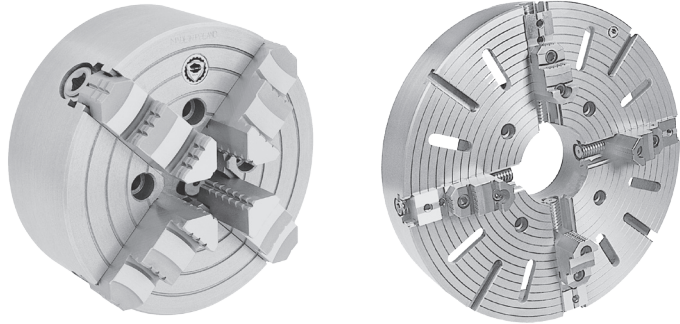
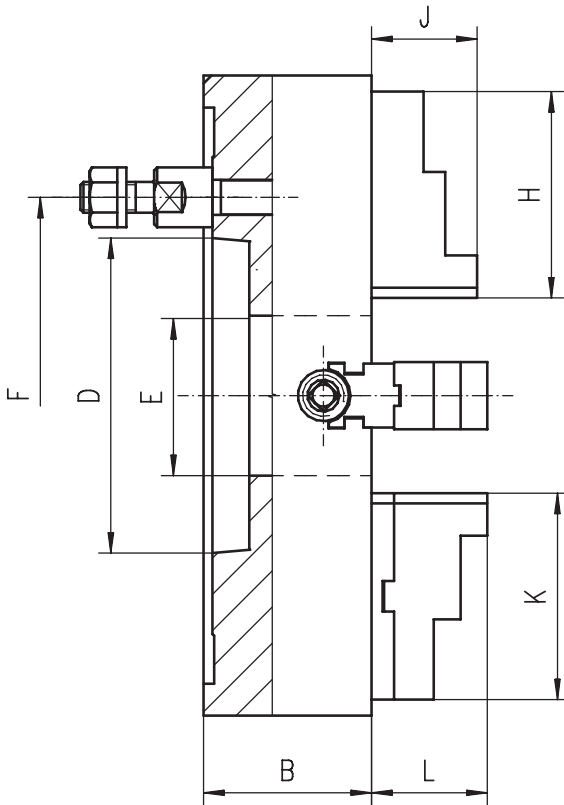
Type 4332	Standard accessories		1 set of solid jaws		1 wrench	Optional accessories		1 set of soft solid jaws
			1 set of hard top jaws					1 set of hard master jaws

Spare parts - see pages 58 and 80

Example of order: 4332-250/5

Type 4334, 4335

4 JAW, CAST IRON BODY (DIN 55027)



Features:

- 4 jaw, independent chuck with manual gripping, and a high quality cast iron body
- 4 jaws ensure the precise centering of square-shaped workpieces with the maximum permitted gripping force
- Chucks with diameters 250 mm and above are equipped with additional T-slots, permitting the addition of extra jaws
- Mounted directly to BAYONET type machine-tool spindles

Application:

- Suitable for machining square and round workpieces on all types of workshop machining operations on conventional lathes

Options:

- Hard solid jaws (type 4334) or hard two-piece jaws (type 4335)
- Chuck size: can be greater than 800 mm, but not exceeding 1250 mm
- Chuck design: our engineers can work with you to implement any product design changes you may require

Chuck size	200			250			315			
Short taper 1:4	4	5	6	5	6	8	5	6	8	11
B	80			85			95			
D max.	63,526	82,578	106,390	82,578	106,390	139,734	82,578	106,390	139,734	196,887
D min.	63,513	82,563	106,375	82,563	106,375	139,719	82,563	106,375	139,719	196,869
E	50			65			80			
F	85	104,8	133,4	104,8	133,4	171,4	104,8	133,4	171,4	235
Qty. of mounting screws	3	4	4	4	4	4	4	4	4	6
H	81			96,5			111			
J	40,3			40,3			49,8			
K	82			96,5			112,5			
L	46,4			60,4			60,9			
Approx. weight [kg]	16,5			27,5			39,5			

Chuck size	400				500				630			800		
Short taper 1:4	5	6	8	11	6	8	11	15	8	11	15	8	11	15
B	105				120				140			160		
D max.	82,578	106,390	139,734	196,887	106,390	139,734	196,887	285,795	139,734	196,887	285,795	139,734	196,887	285,795
D min.	82,563	106,375	139,719	196,869	106,375	139,719	196,869	285,775	139,719	196,869	285,775	139,719	196,869	285,775
E	79,5	100			100	125			125	160		125	180	200
F	104,8	133,4	171,4	235	133,4	171,4	235	330,2	171,4	235	330,2	171,4	235	330,2
Qty. of mounting screws	4	4	4	6	4	4	6	6	4	6	6	4	6	6
H	129				152,5				177			202		
J	49,8				59,8				59,8			70,8		
K	129				136				136			136		
L	72,3				90,3				97,8			93,8		
Approx. weight [kg]	60,0				95,5				165,0			298,0		

Other engineering data - see page 79

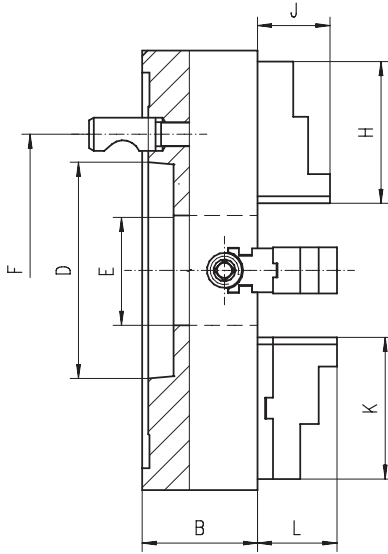
Type	Standard accessories	Qty.	Optional accessories	Qty.
Type 4334		1 set of solid jaws		1 wrench
Type 4335		1 set of hard top jaws		1 wrench
		1 set of hard master jaws		1 set of soft solid jaws
		1 set of soft top jaws		1 set of soft solid top jaws

Spare parts - see pages 58 and 80

Example of order: 4334-250/6

Type 4342, 4343

4 JAWS, CAST STEEL BODY (DIN 55029)



Features:

- 4 jaw, independent chuck with manual gripping, and a high quality steel body
- Steel body extends machine life while providing higher rigidity and greater wear resistance, enabling the chuck to withstand higher machining forces

- 4 jaws ensure the precise centering of square-shaped workpieces with the maximum permitted gripping force
- Chucks with diameters 250 mm and above are equipped with additional T-slots, permitting the addition of extra jaws
- Mounted directly to CAMLOCK type machine-tool spindles

Application:

- This precision chuck, with increased gripping accuracy, is made for all types of very high precision workshop machining operations on conventional lathes
- Suitable for machining square and round workpieces

Options:

- Hard solid jaws (type 4342) or hard two-piece jaws (type 4343)
- Chuck design: our engineers can work with you to implement any product design changes you may require

Chuck size	200				250					315			400			500			
	3	4	5	6	3	4	5	6	8	5	6	8	6	8	11	6	8	11	15
Short taper 1:4	3	4	5	6	3	4	5	6	8	5	6	8	6	8	11	6	8	11	15
B	80				85					95			105			120			
D max.	53,988	63,526	82,578	106,390	53,988	63,526	82,578	106,390	139,734	82,578	106,390	139,734	106,390	139,734	196,887	106,390	139,734	196,887	285,795
D min.	53,975	63,513	82,563	106,375	53,975	63,513	82,563	106,375	139,719	82,563	106,375	139,719	106,375	139,719	196,869	106,375	139,719	196,869	285,775
E	50				50	60	65			80			100			100		125	
F	70,6	85	104,8	133,4	70,6	82,6	104,8	133,4	171,4	104,8	133,4	171,4	133,4	171,4	235	133,4	171,4	235	330,2
Qty. of mounting screws	3	3	4	4	3	3	6	6	6	6	6	6	6	6	6	6	6	6	6
H	81				96,5					111			129			59,8			
J	40,3				40,3					49,8			49,8			90,3			
K	82				96,5					112,5			129			136			
L	46,4				60,4					60,9			72,3			90,3			
Approx. weight (kg)	16,5				27,5					39,5			60,0			95,5			

Chuck size	630			800				915		1000			1250	
	8	11	15	8	11	15	20	11	15	11	15	20	11	15
Short taper 1:4	8	11	15	8	11	15	20	11	15	11	15	20	11	15
B	140			160				170		170			190	
D max.	139,734	196,887	285,795	139,734	196,887	285,795	412,802	196,887	285,795	196,887	285,795	412,802	196,887	285,795
D min.	139,719	196,869	285,775	139,719	196,869	285,775	412,775	196,869	285,775	196,869	285,775	412,775	196,869	285,775
E	125	160		125	180	200		190		190			190	
F	171,4	235	330,2	171,4	235	330,2	463,6	235	330,2	235	330,2	463,6	235	330,2
Qty. of mounting screws	6	6	6	6	6	6	6	6	6	6	6	6	6	6
H	177			202				-		-			-	
J	59,8			70,8				-		-			-	
K	136			136				160		160			160	
L	97,8			93,8				102,8		102,8			102,8	
Approx. weight [kg]	165,0			298,0				326,0		386,0			950	

Other engineering data - see page 79

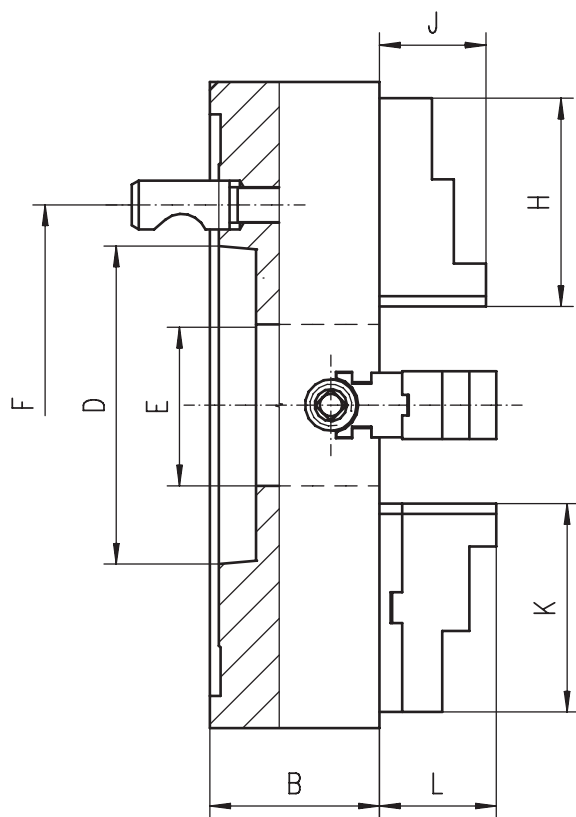
Type	Standard accessories	Qty.	Optional accessories	Qty.
Type 4342		1 set of solid jaws		1 wrench
Type 4343		1 set of hard top jaws		1 wrench
		1 set of hard master jaws		1 set of soft solid jaws
				1 set of soft solid top jaws

Spare parts - see pages 58 and 80

Example of order: 4342-250/6

Type 4344, 4345

4 JAW, CAST IRON BODY (DIN 55029)



Features:

- 4 jaw, independent chuck with manual gripping, and a high quality cast iron body
- 4 jaws ensure the precise centering of square-shaped workpieces with the maximum permitted gripping force
- Chucks with diameters 250 mm and above are equipped with additional T-slots, permitting the addition of extra jaws
- Mounted directly to CAMLOCK type machine-tool spindles

Application:

- Suitable for machining square and round workpieces on all types of workshop machining operations on conventional lathes

Options:

- Hard solid jaws (type 4344) or hard two-piece jaws (type 4345)
- Chuck size: can be greater than 800 mm, but not exceeding 1250 mm
- Chuck design: our engineers can work with you to implement any product design changes you may require

Chuck size	160				200				250				315			
	3	4	3	4	5	6	3	4	5	6	8	5	6	8	11	
Short taper 1:4																
B	54				80				85				95			
D max.	53,988				53,988 63,526 82,578 106,390				53,988 63,526 82,578 106,390 139,734				82,578 106,390 139,734 196,887			
D min.	53,975				53,975 63,513 82,563 106,375				53,975 63,513 82,563 106,375 139,719				82,563 106,375 139,719 196,869			
E	42				50				50 60				65 80			
F	70,6				70,6 82,6 104,8 133,4				70,6 82,6 104,8 133,4 171,4				104,8 133,4 171,4 235			
Qty. of mounting screws	3				3 3 6 6				3 3 6 6				6 6 6 6			
H	51				81				96,5				111			
J	20				40,3				40,3				49,8			
K	-				82				96,5				112,5			
L	-				46,4				60,4				60,9			
Approx. weight [kg]	6,0				16,5				27,5				39,5			

Chuck size	400			500			630			800			
	6	8	11	8	11	15	8	11	15	8	11	15	20
Short taper 1:4													
B	105			120			140			160			
D max.	106,390 139,734 196,887			139,734 196,887 285,795			139,734 196,887 285,795 330,2			139,734 196,887 285,795 412,802			
D min.	106,375 139,719 196,869			139,719 196,869 285,775			139,719 196,869 285,775 330,2			139,719 196,869 285,775 412,775			
E	100			125			125 160			125 180 200			
F	133,4 171,4 235			171,4 235 330,2			171,4 235 330,2			171,4 235 330,2 463,6			
Qty. of mounting screws	6 6 6			6 6 6			6 6 6			6 6 6 6			
H	129			152,5			177			202			
J	49,8			59,8			59,8			70,8			
K	129			136			136			136			
L	72,3			90,3			97,8			93,8			
Approx. weight [kg]	60,0			95,5			165,0			298,0			

Other engineering data - see page 79

Type	Standard accessories	Optional accessories
Type 4344	1 set of solid jaws	1 set of soft solid jaws
Type 4345	1 set of hard top jaws	1 set of soft solid top jaws

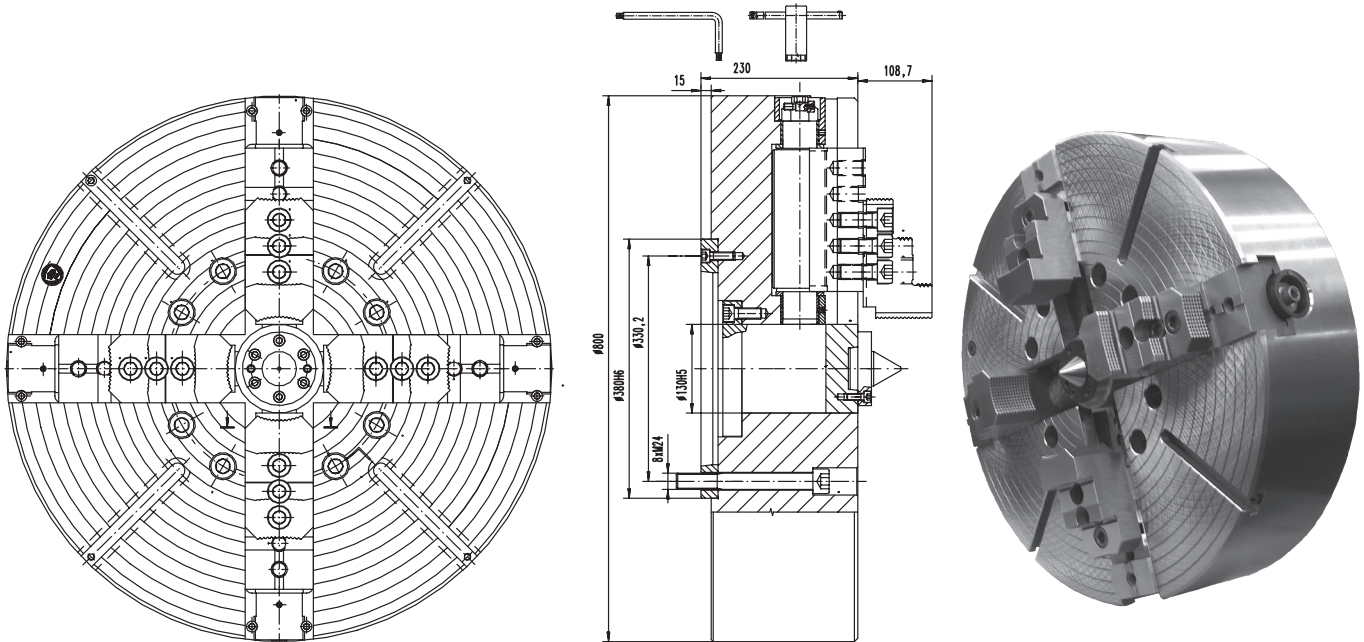
Spare parts - see pages 58 and 80

Example of order: 4344-160/3

1

Type 4317 MSP

4 JAWS, STEEL BODY (55026)



Features:

- 4 jaw, independent chuck with manual gripping, and a high quality steel body
- Steel body extends machine life while providing higher rigidity and greater wear resistance, enabling the chuck to withstand higher machining forces
- 4 jaws ensure the precise centering of square-shaped workpieces with the maximum permitted gripping force
- The design of this lathe chuck allows workpieces to be clamped with a gripping force equal to:
 - 20 000 daN per jaw for $\varnothing 800$
 - 25 000 daN per jaw for $\varnothing 1000$

- Chucks with diameters 250 mm and above are equipped with additional T-slots, permitting the addition of extra jaws
- Mounted directly to "A" type machine-tool spindles

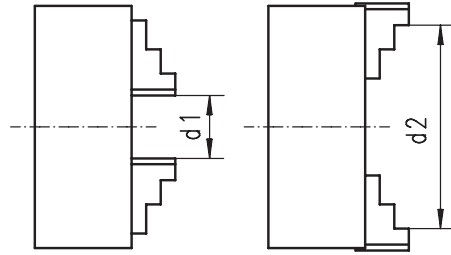
Application:

- This precision chuck, with increased gripping accuracy, can be used on machine tools with small gripping diameters for applications requiring high gripping forces (i.e. for machining heavy crank shafts, turbine rotors, etc.)
- Suitable for machining square and round workpieces

Chuck size	800	1000
Height [mm]	230	265
Max. speed [rpm]	800	600
Gripping force per jaw [daN]	20 000	25 000
Torque on wrench [Nm]	110	130
Gripping range [mm]	100-825	100-1025
Approx. total weight (without top jaws) [kg]	800	1400

Type 4317 MSP	Standard accessories		1 set of hard top jaws		1 set of hard master jaws		1 allen wrench		1 hex wrench

Example of order: 4317 - 800/15 MSP



GRIPPING RANGES

Chuck size	85	100	125	160	200	250	315	350
d1 min.	3	3	8	8	10	10	15	15
d2 max.	85	100	125	160	200	250	315	350
max. swing diameter	101	116	150	185	235	296	369	404

Chuck size	400	500	630	800	915	1000	1250	
d1 min.	20	45	50	50	120	170	170	
d2 max.	400	500	630	800	915	1000	1250	
max. swing diameter	465	570	720	888	1003	1088	1338	

Gripping ranges are valid for lathe chucks with reversible jaws. Do not exceed maximum gripping ranges!

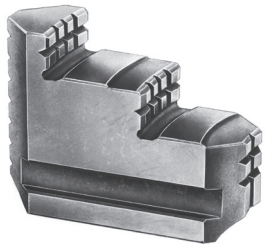
MAXIMUM PERMISSIBLE ROTATION SPEEDS * (rpm)

Chuck size	85	100	125	160	200	250	315	350
steel body or cast steel body	4000	3800	3500	3200	2500	2000	1500	1500
cast iron body	-	-	-	-	1800	1500	1200	1200

Chuck size	400	500	630	800	915	1000	1250	
steel body or cast steel body	1100	700	550	450	200	200	150	
cast iron body	800	500	400	300	150	150	100	

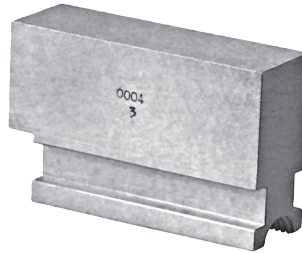
* The specified permissible speeds are only applicable for work-pieces not exceeding a specific unbalance of 25 gmm/kg

1



HARD SOLID REVERSIBLE JAWS - SETS

Chuck size mm	Code No
	4 jaw set
85	0642 985 731 002
100	0642 985 740 101
125	0642 985 731 104
160	0642 985 731 104
200	0642 985 731 206
250	0642 985 731 308
315	0642 985 731 400
350	0642 985 731 400
400	0642 985 731 501
500	0642 985 731 603
630	0642 985 731 705
800	0642 985 731 807

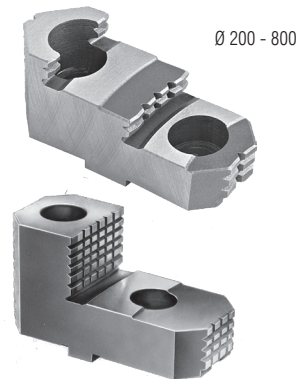
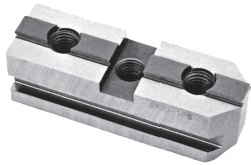


SOFT SOLID JAWS - SETS

Chuck size mm	Code No
	4 jaw set
85	-
100	-
125	-
160	-
200	0642 985 730 205
250	0642 985 730 307
315	0642 985 730 409
350	-
400	0642 985 730 500
500	0642 985 730 602
630	0642 985 730 704
800	0642 985 730 806

HARD MASTER JAWS - SETS

Chuck size mm	Code No
	4 jaw set
200	0642 985 735 200
250	0642 985 735 301
315	0642 985 735 403
400	0642 985 735 505
500	0642 985 735 607
630	0642 985 735 709
800	0642 985 735 800
915	0642 985 735 902
1000	0642 985 735 902
1250	0642 985 735 902

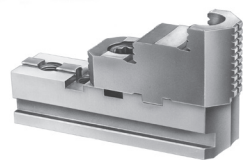


HARD TOP JAWS - SETS

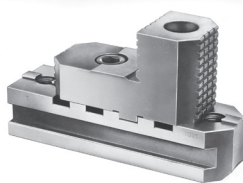
Chuck size mm	Code No
	4 jaw set
200	0642 985 736 200
250	0642 985 736 302
315	0642 985 736 404
400	0642 985 736 506
500	0642 985 736 608
630	0642 985 736 700
800	0642 985 736 801
915	0642 985 744 900
1000	0642 985 744 900
1250	0642 985 744 900

HARD 2-PIECE REVERSIBLE JAWS - SETS

Chuck size mm	Code No
	4 jaw set
200	0642 985 738 202
250	0642 985 738 304
315	0642 985 738 406
400	0642 985 738 508
500	0642 985 738 600
630	0642 985 738 701
800	0642 985 738 803
915	0642 985 742 908
1000	0642 985 742 908
1250	0642 985 742 908



Ø 200 - 800



Ø 915 -1250

Ø 915 - 1250

OPERATING SCREW

Chuck size mm	Code No
85	0642 985 732 003
100	0642 985 732 029
125	0642 985 732 105
160	0642 985 732 105
200	0642 985 732 207
250	0642 985 732 309
315	0642 985 732 400
350	0642 985 740 509
400	0642 985 732 502
500	0642 985 732 604
630	0642 985 732 706
800	0642 985 732 808
915	0642 985 740 702
1000	0642 985 740 804
1250	0642 985 740 906



THRUST BEARING

Chuck size mm	Code No
85	0642 985 733 004
100	0642 985 733 020
125	0642 985 733 106
160	0642 985 733 106
200	0642 985 733 208
250	0642 985 733 300
315	0642 985 733 401
350	0642 985 733 401
400	0642 985 733 503
500	0642 985 733 605
630	0642 985 733 707
800	0642 985 733 809
915	0642 985 733 900
1000	0642 985 733 900
1250	0642 985 733 900



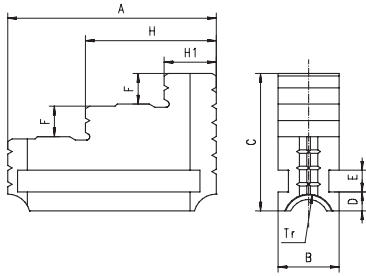
for chucks type 4500, 4600, 4700, 4800

SAFETY WRENCH

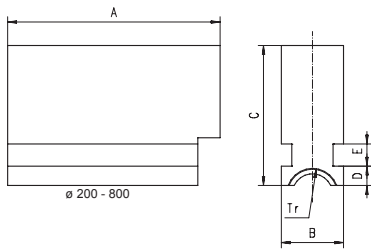
Chuck size mm	Code No	Code No
	For chucks type 4500, 4600, 4700, 4800	For chucks type 4300
85	-	0642 985 340 102
100	-	0642 985 340 102
125	-	0642 985 344 106
160	-	0642 985 344 106
200	0642 985 754 001	0642 985 344 208
250	0642 985 754 014	0642 985 344 208
315	0642 985 754 103	0642 985 344 300
400	0642 985 754 205	0642 985 344 300
500	0642 985 754 307	0642 985 344 401
630	0642 985 754 307	0642 985 344 401
800	-	0642 985 344 503
915	-	0642 985 344 503
1000	-	0642 985 344 503
1250	-	0642 985 344 503

Example of order: 0642 985 732 400

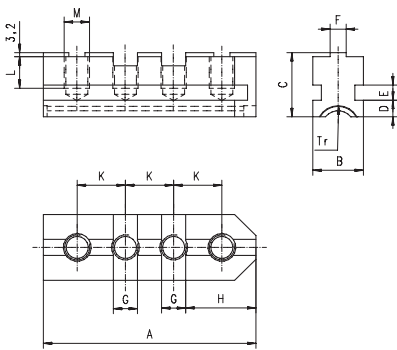
One-piece solid reversible jaws



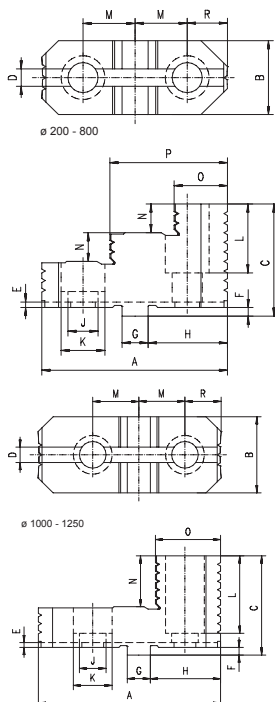
Soft solid jaws



Hard master jaws



Hard top jaws



ONE-PIECE SOLID REVERSIBLE JAWS

Chuck size	85	100	125	160	200	250
A	34	34	51	51	81	96,5
B	13	13	16	16	32	32
C	30	30	34,5	34,5	63	63
D	4,5	4,5	6	6	8,7	8,7
E	5	5	5	5	10	10
F	7	7	8	8	14	14
H1	8	8	12,5	12,5	17,5	23
H	17,5	17,5	31,5	31,5	48,5	59
Tr-left hand	Tr 16x2	Tr 16x2	Tr 18x4	Tr 18x4	Tr 28x5	Tr 28x5
Approx. weight [kg]	0,1	0,1	0,12	0,12	0,72	1,3

Chuck size	315	350	400	500	630	800
A	111	111	129	152,5	177	202
B	40	40	40	52	52	70
C	76,5	76,5	76,5	93,5	93,5	114,5
D	9,7	9,7	9,7	11,7	11,7	15,7
E	12	12	12	15	15	20
F	18	18	18	22	25	25
H1	27	27	32,5	35	45	44
H	67	67	78,5	93	109	122
Tr-left hand	Tr 32x6	Tr 32x6	Tr 32x6	Tr 36x6	Tr 40x6	Tr 44x8
Approx. weight [kg]	1,5	1,5	1,8	3,4	4,0	7,8

HARD MASTER JAWS

Chuck size	200	250	315	400	500	630	800	915	1000	1250
A	79	94	110	129	168	206	206	244	244	244
B	32	32	40	40	52	52	70	70	70	70
C	32	38	39	44	59	59	59	59	59	59
D	8,7	8,7	9,7	9,7	11,7	11,7	15,7	15,7	15,7	15,7
E	10	10	12	12	15	15	20	20	20	20
F-0,03	7,94	12,7	12,7	12,7	12,7	12,7	12,7	12,7	12,7	12,7
G+0,01	12,69	19,04	19,04	19,04	19,04	19,04	19,04	19,04	19,04	19,04
H	33,2	37,5	45,4	54,9	55,5	55,5	55,5	55,5	55,5	55,5
J	4	4	4	7,2	7,2	7,2	7,2	7,2	7,2	7,2
K	22,25	27	31,75	38,1	38,1	38,1	38,1	38,1	38,1	38,1
L	14	20	17,5	22	33,5	33,5	33,5	33,5	33,5	33,5
M	M10	M12	M12	M16	M20	M20	M20	M20	M20	M20
	3/8"-16	1/2"-13	1/2"-13	5/8"-11	3/4"-10	3/4"-10	3/4"-10	3/4"-10	3/4"-10	3/4"-10
Tr-left hand	Tr 28x5	Tr 28x5	Tr 32x6	Tr 32x6	Tr 36x6	Tr 40x6	Tr 44x8	Tr 44x6	Tr 44x6	Tr 44x8
Approx. weight [kg]	0,6	0,9	1,1	1,2	1,5	2,4	2,4	5,4	5,4	5,4

HARD TOP JAWS

Chuck size	200	250	315	400	500	630	800	915	1000	1250
A	82	96,5	112,5	129	136	136	136	160	160	160
B	34	34	42	42	54	54	72	72	72	72
C	43,5	51,5	55	64,5	74,5	82	88	97	97	97
D	7,95	12,71	12,71	12,71	12,71	12,71	12,71	12,71	12,71	12,71
E	4	4	4	4	4	4	4	4	4	4
F-0,03	3,2	3,2	3,2	6,3	6,3	6,3	6,3	6,3	6,3	6,3
G+0,01	12,69	19,04	19,04	19,04	19,04	19,04	19,04	19,04	19,04	19,04
H	35,2	40	47,9	57,4	58	58	58	58	58	58
J	11	14	14	18	22	22	22	22	22	22
K	18	20	20	26	33	33	33	33	33	33
L	21,5	26,5	27,5	32	39,5	43	46	71	71	71
M	22,25	27	31,75	38,1	38,1	38,1	38,1	38,1	38,1	38,1
N	9,5	12	13	13,5	18	21	24	50	50	50
O	22	25	27	26,5	37,5	37,5	40	60	60	60
P	53	62	70,5	79	87	87	89	-	-	-
R	19,3	22,5	25,7	28,8	29,4	29,4	29,4	29,4	29,4	29,4
Approx. weight [kg]	0,5	0,7	1,3	2,1	3,0	3,0	4,2	4,2	4,2	4,2

1 Type 3404, 3414, 3434, 3444



Features:

- Jaw locking system
- Hardened and ground jaw guides ensure longer life with maintained accuracy and repeatability
- Steel body extends machine life while providing higher rigidity and greater wear resistance, enabling the chuck to withstand higher machining forces

Application:

- This precision chuck, with increased gripping accuracy, is designed for turning work demanding high concentricity, reliable repeatability and high gripping force

Options:

- Hard solid jaws or hard two-piece jaws

Standard accessories:

- 1 set of hard solid jaws
- 1 wrench
- 1 set of mounting screws

Optional accessories:

- 1 set of hard top jaws

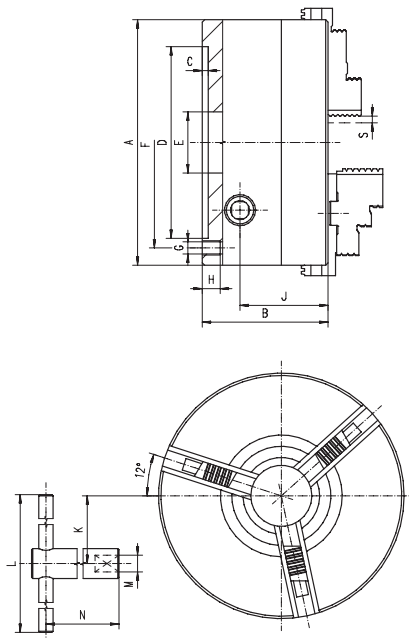
Jaw weight in dimension tables; Spare parts - see page 86; Engineering data - see page 85

SELF-CENTERING 3 JAW WEDGE BAR CHUCKS, HARD SOLID JAWS

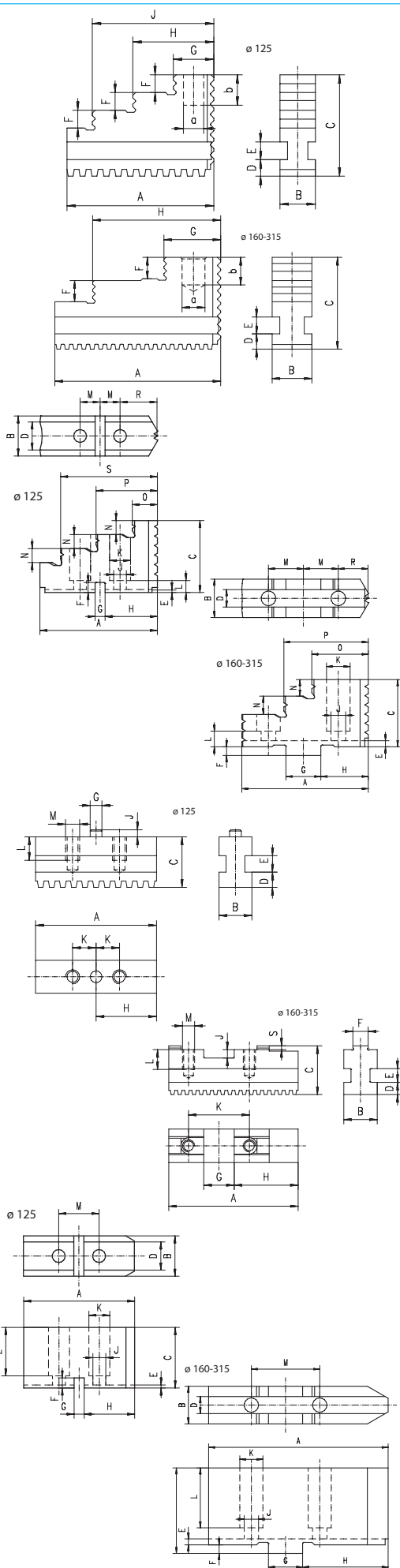
	Chuck size	Short taper 1:4	B	Approx. weight [kg]		Chuck size	Short taper 1:4	B	Approx. weight [kg]
	Type 3404				DIN 55026	Type 3414			
	125	-	67	5,6		160	4	84,5	11
	160	-	84	11,8		160	5	92	13
	200	-	97	20		200	5	99	21
	250	-	112	36		200	6	105	22
	315	-	127	60		250	6	117	35,5
						250	8	122	36,7
						315	8	136	64
						315	11	139	65,5
DIN 55027	Type 3434				DIN 55029	Type 3444			
	125	3	70	5,9		125	3	70	5,9
	125	4	74	6,3		125	4	74	6,3
	160	4	84,5	11,4		160	4	84,5	11,4
	160	5	92	13		160	5	92	13
	200	5	99	21,4		200	5	99,5	21,4
	200	6	105	22,8		200	6	105	22,8
	250	6	117	35,5		250	6	126	39
	250	8	122	36,7		250	8	129	40,3
	315	8	136	64		315	8	142	66
	315	11	139	66,5		315	11	144	68

Example of order: 3444-315/11

MAIN DIMENSIONS OF WEDGE BAR CHUCKS



Chuck size	125	160	200	250	315
A	130	165	205	252	315
B	67	84	97	112	127
C	4	5	5	6	6
D	95	125	160	200	260
E	30	40	51	66	90
F	108	140	176	224	286
G	3xM8	3xM10	3xM12	3xM16	3xM18
H	16	17	20	24	30
J	51,5	65	73,5	84,5	95,5
K	35,5	45,5	56,5	72	88
L	150	200	290	440	500
M	9	11	14	16	18
N	125	130	149	173	219
S	5,2	5,2	5,6	6,2	9,1



HARD SOLID JAWS					
Chuck size	125	160	200	250	315
A	58	69	90	108,5	132
B	14	20	22	26	32
C	40	45	50	60	70
D	6,5	7,5	8	10	12
E	7	9	9	11	14
F	7	8	11,5	14	17
G	16	26	33	36	41,5
H	32	58	72,5	83	104,5
J	48	-	-	-	-
a	8	10	12	15	20
b	12	12	15	20	20
Approx. weight [kg]	0,4	1,0	1,5	2,6	4,4

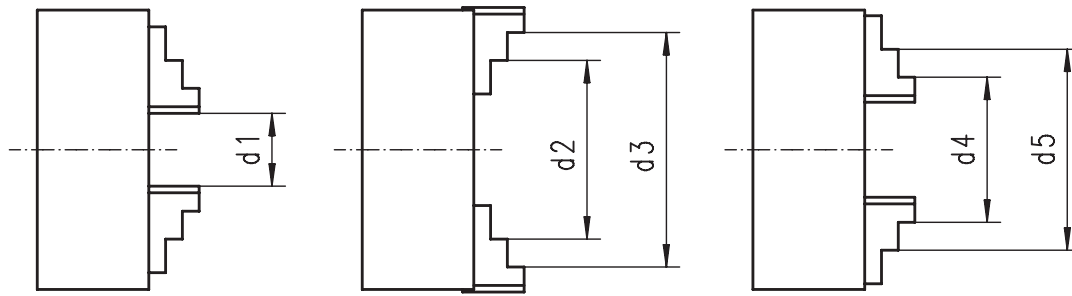
HARD TOP JAWS					
Chuck size	125	160	200	250	315
A	59	63	72,5	91	105
B h11	20	20	22	30	35
C	36	37	43,5	55	60
D H9	14	8	10	12	12
E	1,5	3	3,5	3,5	6,5
F	5	4,5	5	5	5
G h7	5	18	20	20	26
H	26	23	27	30	35,3
J	6,4	8,4	8,4	13	13
K	10,4	13,5	13,5	19	19
L	6	9	9	7	15,5
M	10	16	20	20	27
N	7	7,5	9,5	14	15
O	16	27	33	40,5	40
P	31	40	58	81	95
R	18,5	16	17	20	21
S	47	-	-	-	-
Approx. weight [kg]	0,18	0,25	0,35	0,50	0,80

HARD MASTER JAWS					
Chuck size	125	160	200	250	315
A	51,5	65	85	87,5	125
B	14	20	22	26	32
C	21,5	26,5	28,5	36	42
D	6,5	7,5	8	10	12
E	7	9	9	11	14
F	-	8	10	12	12
G H7 ¹⁾	5	18	20	20	26
H	25,75	28	42	41,5	69
J	3	5	5,5	5,5	7
K	10	32	40	40	54
L	10	12	12	17	17
M	M6	M8	M8	M12	M12
S	-	2,5	2,5	3	3
Approx. weight [kg]	0,3	0,6	0,9	1,8	3,0

1) H7 without chuck size 125 mm

SOFT TOP JAWS					
Chuck size	125	160	200	250	315
A	55	85	105	125	145
B	20	20	22	30	35
C	30	40	50	55	60
D H9	14	8	10	12	12
E	1,5	4,5	5	5	6
F	5	3	3	3,5	3,5
G h7	5	18	20	20	26
H	25	35	40	60	60
J	6,4	8,4	8,4	13	13
K	10,4	13,5	13,5	19	19
L	24	26,5	35	41	38
M	20	32	40	40	54
Approx. weight [kg]	0,6	1,2	2,1	4,2	6,2

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GRIPPING RANGES

Chuck size	125	160	200	250	315
d1	4-29	4-90	5-105	8-130	10-155
d2	38-63	61-150	70-170	81-170	95-189
d3	100-125	90-160	100-200	120-250	152-315
d4	28-53	34-120	49-149	66-188	74-200
d5	100-125	90-160	100-200	128-250	142-315
max. swing diameter	151	212	264	322	393

MAXIMUM PERMISSIBLE ROTATION SPEEDS (rpm)

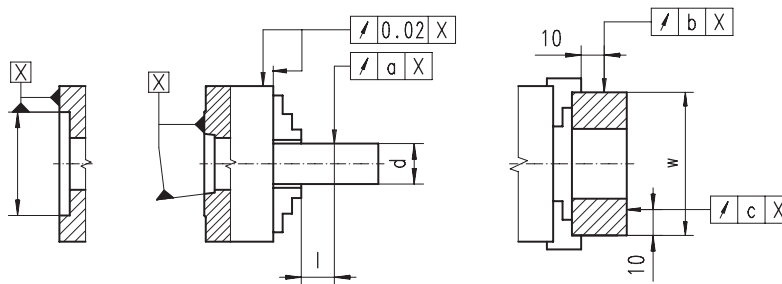
Chuck size	125	160	200	250	315
max. rpm	6000	5400	4600	4200	3300

TOTAL GRIPPING FORCE

Chuck size	125	160	200	250	315
Torque on wrench [Nm]	40	100	160	200	250
Total gripping force [daN]	3000	6000	8500	11000	13000

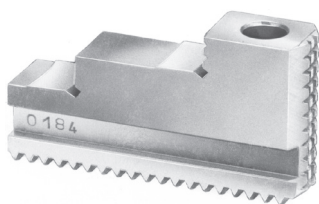
BALANCE VALUE

Chuck size	125	160	200	250	315
gcm	16	32	63	125	250



CENTERING ACCURACY

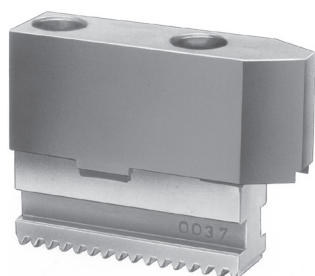
Chuck size	125	160	200	250	315
d	14	14	14	15	20
	20	20	22	32	64
	29	39	50	64	89
l	60	60	80	80	120
w	95	95	125	180	189
	125	160	200	245	290
Centering accuracy (mm)					
a	0,015	0,015	0,015	0,015	0,020
b	0,010	0,010	0,010	0,010	0,010
c	0,015	0,015	0,015	0,015	0,020



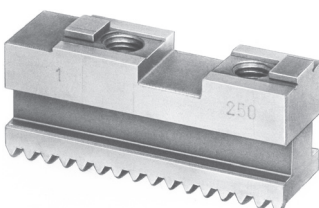
HARD SOLID JAWS - SETS	
Chuck size mm	Code No 0642 985
	3 jaws - set
125	0642 985 309 108
160	0642 985 309 200
200	0642 985 309 301
250	0642 985 309 403
315	0642 985 309 505



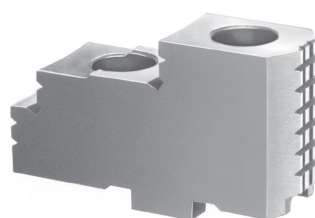
SOFT TOP JAWS - SETS	
Chuck size mm	Code No
	3 jaws - set
125	0642 985 310 301
160	0642 985 310 403
200	0642 985 310 505
250	0642 985 310 607
315	0642 985 310 709



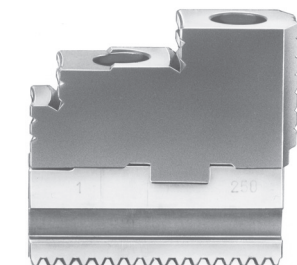
SOFT 2-PIECE JAWS - SETS	
Chuck size mm	Code No
	3 jaws - set
125	0642 985 312 700
160	0642 985 312 802
200	0642 985 312 904
250	0642 985 312 920
315	0642 985 312 945



HARD MASTER JAWS - SETS	
Chuck size mm	Code No
	3 jaws - set
125	0642 985 309 709
160	0642 985 309 800
200	0642 985 309 902
250	0642 985 310 006
315	0642 985 310 108



HARD TOP JAWS - SETS	
Chuck size mm	Code No
	3 jaws - set
125	0642 985 310 813
160	0642 985 310 826
200	0642 985 310 839
250	0642 985 310 841
315	0642 985 310 854

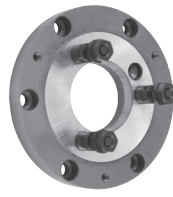


HARD 2-PIECE REVERSIBLE JAWS - SETS	
Chuck size mm	Code No
	3 jaws - set
125	0642 985 312 100
160	0642 985 312 201
200	0642 985 312 303
250	0642 985 312 405
315	0642 985 312 507

Type 8210



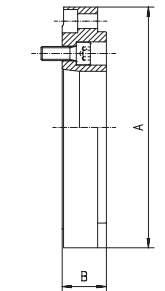
Type 8230



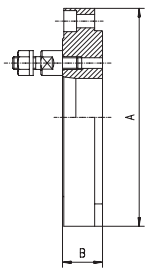
Type 8240



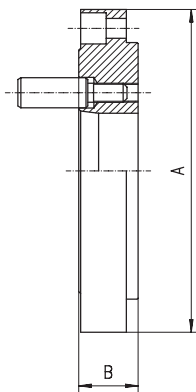
- Cast-iron adapters for plain back self-centering chucks
- For mounting instructions, see chuck service manual



DIN 55026 - Type 8210



DIN 55027 - Type 8230



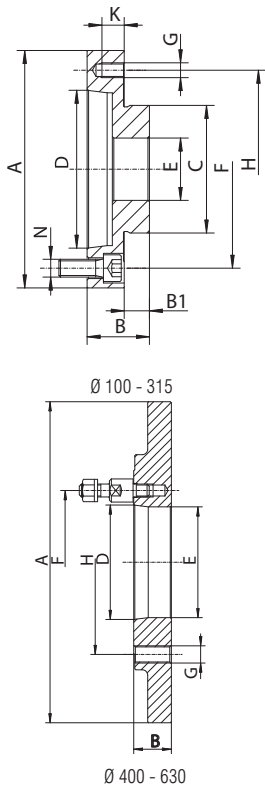
DIN 55029 - Type 8240

Size mm	Short taper 1:4	A mm	B mm		Approx. weight [kg]
			Type 8210	Type 8230	
100	3	100,5	18,5	16,5	1,6
125	3	125,5	18,5	18,5	2,4
125	4	125,5	18,5	18,5	2,4
160	3	160,5	18,5	21	4,3
160	4	160,5	21	21	4,3
160	5	160,5	21	21	4,3
200	3	201	21	21	7,0
200	4	201	21	21	7,0
200	5	201	21	21	7,0
200	6	201	21	21	7,0
250	5	251	21	21	11,0
250	6	251	26	21	11,0
250	8	251	26	26	18,0
315	6	316	33	33	18,0
315	8	316	33	33	18,0
315	11	316	33	33	18,0
400	6	402	33	33	36,0
400	8	402	33	33	36,0
400	11	402	33	33	36,0
500	8	502	34	34	60,0
500	11	502	34	34	60,0
500	15	502	34	34	60,0
630	8	633	42	42	105,0
630	11	633	42	42	105,0
630	15	633	42	42	105,0

Size mm	Short taper 1:4	A mm	B mm		Approx. weight [kg]
			Type 8240		
100	3	100,5	26	26	1,6
125	3	125,5	26	26	2,4
125	4	125,5	26	26	2,4
160	3	160,5	27	27	4,3
160	4	160,5	27	27	4,3
160	5	160,5	30	30	4,3
160	6	160,5	36,5	36,5	4,3
200	3	201	27	27	7,0
200	4	201	27	27	7,0
200	5	201	30	30	7,0
200	6	201	36,5	36,5	7,0
200	8	201	40	40	7,0
250	4	251	28	28	11,0
250	5	251	30	30	11,0
250	6	251	36,5	36,5	18,0
250	8	251	39	39	18,0
315	6	316	39,5	39,5	18,0
315	8	316	42	42	18,0
315	11	316	47	47	18,0
400	6	402	36,5	36,5	36,0
400	8	402	39	39	36,0
400	11	402	47	47	36,0
500	8	502	39	39	60,0
500	11	502	47	47	60,0
500	15	502	50	50	60,0
630	8	633	39	39	105,0
630	11	633	47	47	105,0
630	15	633	50	50	105,0

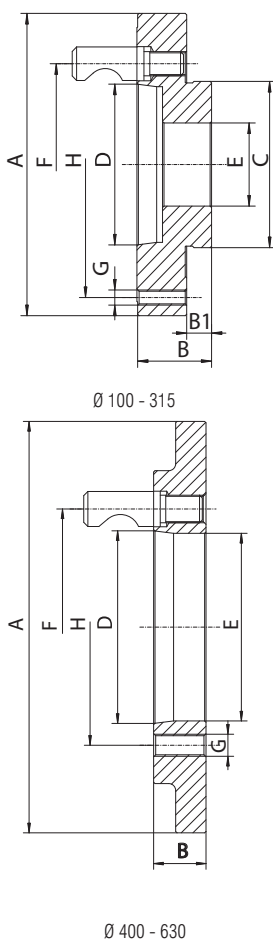
Example of order: 8240-250/6

DIN 55027 - Type 8235



BAYONET											
Size mm	A mm	Short taper 1:4	B	B1	C	D	E	F	G	H	Approx. weight [kg]
Type 8235 DIN 55027											
100	100	3	31	12	45	53,975	20	75	M8	83	1,3
	105	4	31	12	45	63,513	20	85	M8	83	1,2
125	125	3	33	14	55	53,975	35	75	M8	108	1,8
	125	4	33	14	55	63,513	35	85	M8	108	1,7
160	160	3	35	14	55	82,563	35	104,8	M8	108	1,8
		4	32	16	86	53,975	42	75	M10	140	2,8
		5	37	16	86	63,513	42	104,8	M10	140	3,0
200	200	4	33	17	110	63,513	55	85	M10	176	4,0
		5	33	17	110	82,563	55	104,8	M10	176	4,4
		6	40	17	110	106,375	55	133,4	M10	176	5,3
250	250	5	38	19	145	82,563	76	104,8	M12	224	8,4
		6	38	19	145	106,375	76	133,4	M12	224	7,9
		8	43	19	145	139,719	76	171,4	M12	224	10,3
315	315	6	43	19	180	106,375	103	133,4	M16	286	12,9
		8	43	19	180	139,719	103	171,4	M16	286	15,0
		11	50	19	180	196,869	103	235	M16	286	17,9
400	298,45	6	35	-	298,45	106,375	103	133,4	M16	171,4	12,8
		8	37	-	298,45	139,719	135,8	171,4	M16	171,4	15,0
		11	37	-	298,45	196,869	120	235	M16	171,4	17,0
500	407	8	36	-	407	139,719	136	171,4	M20	235	31,5
		11	36	-	407	196,869	192,8	235	M20	235	29,6
		15	52	-	407	285,775	190	235	M20	235	39
630	407	8	36	-	407	139,719	136	171,4	M20	330,2	31,5
		11	36	-	407	196,869	192,8	330,2	M20	330,2	29,6
		15	52	-	407	285,775	252	330,2	M20	330,2	34

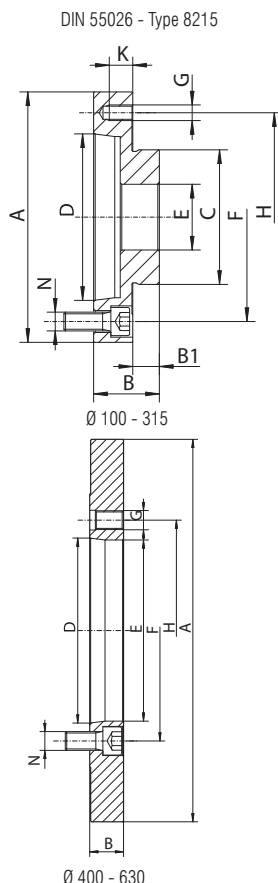
DIN 55029 - Type 8245



CAMLOCK											
Size mm	A mm	Short taper 1:4	B	B1	C	D	E	F	G	H	Approx. weight [kg]
Type 8245 DIN 55029											
100	100	3	38	12	45	53,975	20	70,6	M8	83	1,5
	108	4	40	12	45	63,513	20	82,6	M8	83	1,8
125	125	3	40	14	55	53,975	35	70,6	M8	108	2,7
	125	4	39	14	55	63,513	35	82,6	M8	108	2,6
160	160	5	44	14	55	82,563	35	104,8	M8	108	3,1
		3	46	16	86	53,975	42	70,6	M10	140	4,9
		4	46	16	86	63,513	42	82,6	M10	140	4,5
200	200	5	46	16	86	82,563	42	104,8	M10	140	4,5
		6	51	16	86	106,375	42	133,4	M10	140	5,9
		3	33	17	110	53,975	51,4	70,6	M10	176	4,7
250	250	4	33	17	110	63,513	55	82,6	M10	176	4,7
		5	47	17	110	82,563	55	104,8	M10	176	7,2
		6	51	17	110	106,375	55	133,4	M10	176	8,0
		4	38	19	145	63,513	60,5	82,6	M12	224	8,6
315	315	5	38	19	145	82,563	76	104,8	M12	224	8,0
		6	53	19	145	106,375	76	133,4	M12	224	12,9
		8	60	19	145	139,719	76	171,4	M12	224	14,7
400	298,45	6	38	19	180	106,375	103	133,4	M16	286	12,9
		8	57	19	180	139,719	103	171,4	M16	286	21,7
		11	64	19	180	196,869	103	235	M16	286	24,0
500	407	6	35	-	183	106,375	103	133,4	M16	171,4	11,7
		8	38	-	227	139,719	136,1	171,4	M16	171,4	11,9
		11	48	-	297	196,869	136	235	M16	171,4	17,5
630	407	8	36	-	407	139,719	136	171,4	M20	235	33,5
		11	36	-	407	196,869	192,8	235	M20	235	35,3
		15	52	-	407	285,775	190	330,2	M20	235	37,8

Example of order: 8245-160/3

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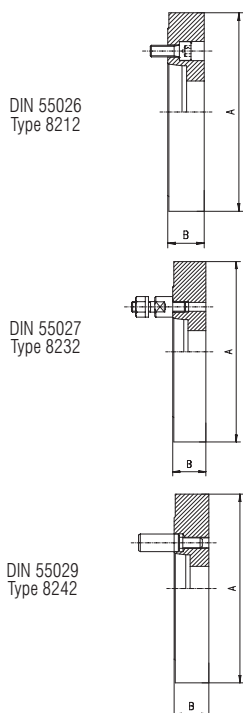
FORM A MOUNTING												
Size mm	A mm	Short taper 1:4	B	B1	C	D	E	F	G	H	K	Approx. weight [kg]
Type 8215 DIN 55026												
100	100 105	3	40	12	45	53,975	20	70,6	M8	83	14	1,6
		4	40	12	45	63,513	20	82,6	M8	83	14	1,5
125	125	4	36	14	55	63,513	35	82,6	M8	108	22	2,2
		5	36	14	55	82,563	35	104,8	M8	108	22	1,9
160	160	3	45	16	86	53,975	42	70,6	M10	140	20	4,4
		4	45	16	86	63,513	42	82,6	M10	140	29	4,4
		5	37	16	86	82,563	42	104,8	M10	140	21	3,1
200	200	6	42	16	86	106,375	42	133,4	M10	140	26	3,3
		4	33	17	110	63,513	55	82,6	M10	176	16	4,4
		5	33	17	110	82,563	55	104,8	M10	176	16	4,2
250	250	6	45	17	110	106,375	55	133,4	M10	176	28	6,2
		5	38	19	145	82,563	76	104,8	M12	224	19	7,8
		6	38	19	145	106,375	76	133,4	M12	224	19	7,9
315	315	8	46	19	145	139,719	76	171,4	M12	224	26	9,2
		6	38	19	180	106,375	103	133,4	M16	286	19	12,3
		8	46	19	180	139,719	103	171,4	M16	286	27	16,0
400	298,45	11	55	19	180	196,869	103	235	M16	286	36	18,7
		6	35	-	298,45	106,375	136	133,4	M16	171,4	35	14,3
		8	37	-	298,45	139,719	136	171,4	M16	171,4	29	12,8
500	407	11	48	-	298,45	196,869	136	235	M16	171,4	27	16,2
		8	36	-	407	139,719	136	171,4	M20	235	36	31,5
		15	52	-	407	285,775	190	330,2	M20	235	52	34,6
630	407	8	36	-	407	139,719	136	171,4	M20	330,2	36	31,5
		11	36	-	407	196,869	192,8	235	M20	330,2	36	27,6
		15	52	-	407	285,775	252	330,2	M20	330,2	52	29,6

Example of order: 8215-250/6

SEMI-FINISHED ADAPTER PLATES

- Cast-iron adapters for plain back self-centering and independent chuck, rough on the chuck side (for mounting instructions, see the chuck service manual)

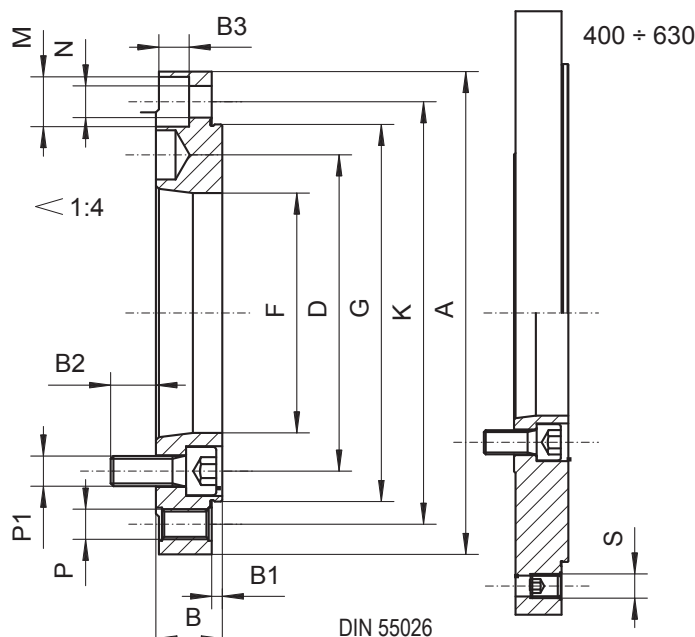
DIN 55026 and DIN 55027



Size mm	Short taper 1:4	A mm	B mm			Approx. weight [kg]
			Type 8212	Type 8232	Type 8242	
100	3	102	18	18	28	1,8
125	3	127	19,5	19,5	50	2,4
125	4	127	19,5	19,5	30	2,4
160	3	162	-	-	50	4,2
160	4	162	24	24	55	4,2
160	5	162	24	24	35	4,2
200	4	203	-	-	44	12,0
200	5	203	38	38	50	12,0
200	6	203	33	33	35	12,0
250	5	253	33	33	49	16,0
250	6	253	50	50	49	16,0
250	8	253	46	46	49	16,0
315	6	318	33	33	70	22,0
315	8	318	55	55	55	22,0
315	11	318	55	47	55	22,0
400	8	405	43	43	70	42,0
400	11	405	75	47	50	42,0
500	8	505	45	45	46	72,0
500	11	505	45	45	72	72,0
630	11	635	45	45	72	105,0
630	15	635	56	56	60	105,0
800	11	385	45	45	50	130,0
800	15	408	45	45	55	130,0

Example of order: 8212-250/6

TYPE 8210-X



■ Fully finished cast-iron adapters for plain back self-centering chucks, suitable for direct mounting on spindle nose type A

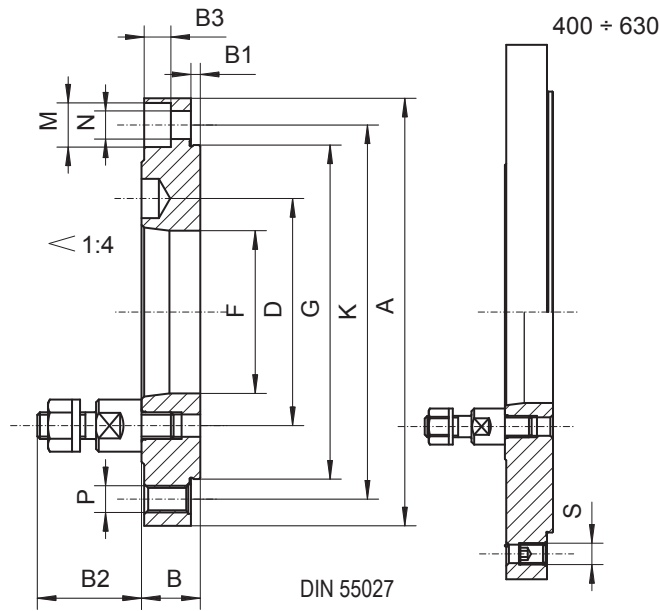
FORM A MOUNTING

Size	Short taper 1:4	A mm	B	B1	B2	B3	D	F	G(h4)	K	M	N	P	P1	S	Approx. weight [kg]	
Type 8210-X																	
100	3	100	22	2,5	14	-	70,6	51,4	70	83	-	-	3xM8	3xM10	-	0,766	
125	3	125	22	3,5	14	10	70,6	51,4	95	108	3x13,5	3x8,4	3xM8	3xM10	-	1,362	
	4				13	-	82,6	60,9			-	-				1,249	
160	3	160	22	3,5	14	10	70,6	51,4	125	140	6x16,5	6x10,5	3xM10	6xM10	-	2,392	
	4				82,6		60,9	2,24									
	5				104,8		79,5	1,94									
	6				19,5		-	133,4								103	-
180	3	180	22	3,5	12	10	70,6	51,4	145	160	3x16,5	3x10,5	3xM10	6xM10	-	3,235	
	4				82,6		60,9	3,09									
	5				104,8		79,5	2,784									
	6				21		-	133,4								103	-
200	4	200	22	3,5	15	10	82,6	60,9	160	176	6x16,5	6x10,5	3xM10	6xM10	-	3,884	
	5						104,8	79,5								3,57	
	6						133,4	103								6xM12	3,09
230	3	230	28	4,5	13	12	70,6	51,4	191	208	3x19	3x13	3xM12	6xM10	-	7,092	
	4				82,6		60,9	6,904									
	5				104,8		79,5	6,617									
	6				19		133,4	103								6xM12	5,94
250	5	250	28	4,5	12	12	104,8	79,5	200	224	6x19	6x13	3xM12	6xM10	-	7,724	
	6				19		133,4	103								6xM12	7,07
	8				24		171,4	138,1								6xM16	5,93
270	5	270	28	4,5	17	12	104,8	79,5	228	246	3x19	3x13	3xM12	6xM10	-	9,597	
	6				19		133,4	103								6xM12	8,92
	8				24		171,4	136,1								6xM16	7,784
315	6	315	33	4,5	19	16	133,4	103	260	286	6x25	6x17	3xM16	6xM12	-	14,637	
	8				22		171,4	136,1								6xM16	13,19
	11				32		-	235								192,8	-
400	6	400	36	4,5	21	16	133,4	103	330	362	6x25	6x17	6xM16	6xM12	3xM16	27,665	
	8				20		171,4	136,1								6xM16	26,03
	11				30		235	192,8								6xM18	22,33
450	8	450	40	4,5	20	17	171,4	136,1	386	415	6x25	6x17	3xM16	6xM16	3xM16	38,54	
	8				20		171,4	136,1								6xM16	43,38
500	11	500	36	4,5	30	16	235	192,8	420	458	6x25	6x17	6xM16	6xM18	3xM16	39,66	
	15				32		330,2	281,4								6xM22	31,65
	8				22		171,4	136,1								6xM16	83,978
630	11	630	42	6	24	19	235	192,8	545	586	6x25	6x17	6xM16	6xM18	3xM16	79,47	
	15				36		330,2	281,4								6xM22	79,08
	8				22		171,4	136,1								6xM16	83,978

Example of order: 8210-250/5-X

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TYPE 8230-X

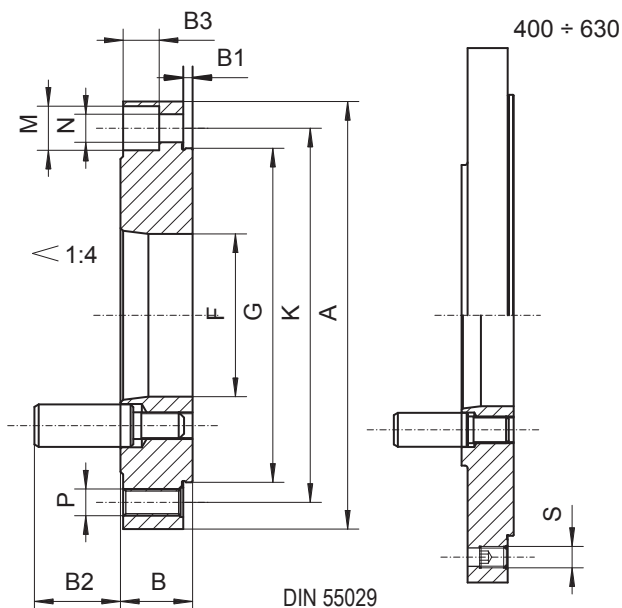


■ Fully finished cast-iron adapters for plain back self-centering chucks, suitable for direct mounting on BAYONET spindle nose

BAYONET														
Size	Short taper 1:4	A mm	B	B1	B2	D	F	G(h4)	K	M	N	P	S	Approx. weight [kg]
Type 8230-X														
100	3	100	22	2,5	34	70,6	51,4	70	83	3x13,5	3x8,4	6xM8	-	0,91
125	3	125	22	3,5	34	70,6	51,4	95	108	3x13,5	3x8,4	6xM8	-	1,56
	4				39	82,6	60,9							1,424
160	3	160	22	3,5	34	70,6	51,4	125	140	6x16,5	6x10,5	6xM10	-	2,58
	4				39	82,6	60,9							2,464
	5				43	104,8	79,5							2,23
	6				50	133,4	103							1,88
180	3	180	22	3,5	34	70,6	51,4	154	160	3x16,5	3x10,5	6xM10	-	3,43
	4				39	82,6	60,9							3,304
	5				43	104,8	79,5							3,08
	6				50	133,4	103							2,74
200	3	200	22	3,5	34	70,6	51,4	160	176	6x16,5	6x10,5	6xM10	-	4,21
	4				39	82,6	60,9							4,094
	5				43	104,8	79,5							3,86
	6				50	133,4	103							3,55
230	4	230	28	4,5	39	82,6	60,9	191	208	3x19	3x13	6xM12	-	7,234
	5				43	104,8	79,5							6,92
	6				50	133,4	103							6,44
250	5	250	28	4,5	43	104,8	79,5	200	224	6x19	6x13	6xM12	-	8,05
	6				50	133,4	103							7,57
	8				60	171,4	136,1							6,71
	5				43	104,8	79,5							9,9
270	6	270	28	4,5	50	133,4	103	228	246	3x19	3x13	6xM12	-	8,62
	8				60	171,4	136,1							8,56
	6				50	133,4	103							15,13
315	6	315	33	4,5	50	133,4	103	260	286	6x25	6x17	6xM16	-	15,13
	8				60	171,4	136,1							14,02
	11				75	235	192,8							12,18
400	6	400	36	4,5	50	133,4	103	330	362	6x25	6x17	6xM16	3xM16	28,163
	8				60	171,4	136,1							26,893
	11				75	235	192,8							24,703
450	8	450	40	4,5	60	171,4	136,1	386	415	6x25	6x17	6xM16	3xM16	39,373
	11				75	235	192,8							36,733
500	8	500	36	4,5	60	171,4	136,1	420	458	6x25	6x17	6xM16	3xM16	44,253
	11				75	235	192,8							42,063
	15				90	330,2	281,4							35,661
630	8	630	42	6	60	171,4	136,1	545	586	6x25	6x17	6xM16	3xM16	84,763
	11				75	235	192,8							81,893
	15				90	330,2	281,4							74,021

Example of order: 8230-160/5-X

TYPE 8240-X



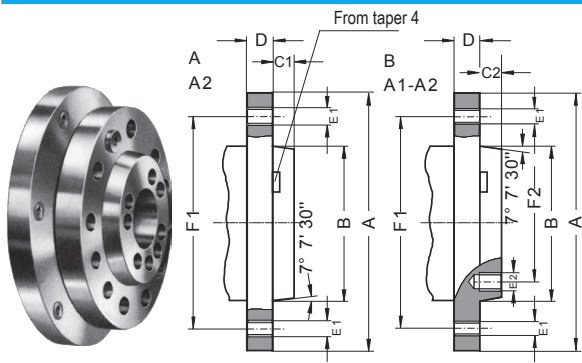
■ Fully finished cast-iron adapters for plain back self-centering chucks, suitable for direct mounting on CAMLOCK spindle nose

CAMLOCK													
Size	Short taper 1:4	A mm	B	B1	B2	F	G(h4)	K	M	N	P	S	Approx. weight [kg]
Type 8240-X													
125	4	125	26	3,5	32,2	60	95	108	3x13,5	3x8,4	6xM8	-	1,56
160	3	160	27	3,5	30,8	51,4	125	140	6x16,5	6x10,5	6xM10	-	3,07
	4				32,2	60							2,911
160	5	160	30	3,5	38,2	79,5	145	160	3x16,5	3x10,5	6xM10	-	2,962
	5				38,2	79,5							4,159
180	5	180	30	3,5	38,2	79,5	145	160	3x16,5	3x10,5	6xM10	-	4,159
200	3	200	27	3,5	30,8	51,4	160	176	6x16,5	6x10,5	6xM10	-	5,077
	4				32,8	60							4,944
	5				38,2	79,5							4,745
	6				44,2	103							5,94
230	5	230	30	4,5	38,2	79,5	191	208	3x19	3x13	6xM12	-	6,876
	6		36,5		44,2	103							7,502
250	5	250	30	4,5	38,2	79,5	200	224	6x19	6x13	6xM12	-	8,605
	6		36,5		44,2	103							8,724
	8		39		50,7	136,1							9,393
270	6	270	36,5	4,5	44,2	103	228	246	3x19	3x13	6xM12	-	10,436
	8		39		50,7	136,1							10,528
315	6	315	39	4,5	44,2	103	260	286	6x25	6x17	6xM16	-	17,376
	8				50,7	136,1							15,936
	11				60,6	192,8							16,304
400	8	400	39	4,5	50,7	136,1	330	362	6x25	6x17	6xM16	3xM16	27,353
	11		47		60,6	192,8							27,431
450	8	450	40	4,5	50,7	136,1	386	415	6x25	6x17	6xM16	3xM16	39,627
	11		47		60,6	192,8							42,84
500	8	500	39	4,5	50,7	136,1	420	458	6x25	6x17	6xM16	3xM16	45,405
	11		47		60,6	192,8							44,531
630	11	630	47	6	60,6	192,8	545	586	6x25	6x17	6xM16	3xM16	74,48
	15		50		69,6	281,4							70,339

Example of order: 8240-160/4-X

1

DIN 55026 Type A Type B - ISO 702/I Type A2 Type A1-A2

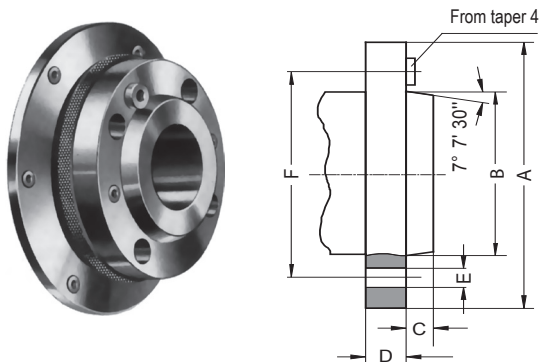


Spindle nose size	A	B max.	C1	C2	D	E1	F1	E2	F2
3	92	53,983	11	-	16	3xM10	70,6	-	-
4	108	63,521	11	-	20	11xM10	82,6	-	-
5	133	82,573	13	14,288	22	11xM10	104,8	8xM10	61,9
6	165	106,385	14	15,875	25	11xM12	133,4	8xM12	82,6
8	210	139,731	16	17,462	28	11xM16	171,4	8xM16	111,1
11	280	196,883	18	19,05	35	11xM20 (11xM18)	235	8xM20 (8xM18)	165,1
15	380	285,791	19	20,638	42	12xM24 (12xM22)	330,2	11xM24 (11xM22)	247,6
20	520	412,795	21	22,225	48	12xM24	463,6	11xM24	368,3
28	725	584,248	24	25,400	56	12xM30	647,6	11xM30	530,2

Type A: Tapped holes in flange (outer bolt circle) without inner bolt circle
 Type B: Tapped holes in flange (outer bolt circle) and in inner bolt circle
 Dimensions in brackets according to ISO 702/I

DIN 55027 & ISO 702/III

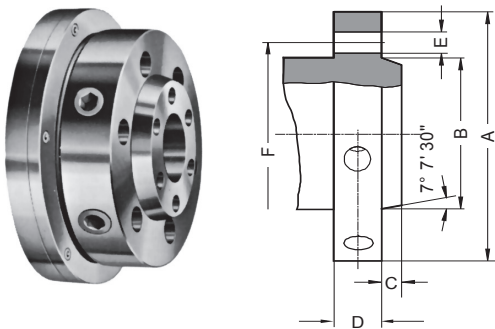
WITH BAYONET RING FIXING



Spindle nose size	A	B max.	C	D	E	F
3	102	53,983	11	16	3x21	75
4	112	63,521	11	20	3x21	85
5	135	82,573	13	22	4x21	104,8
6	170	106,385	14	25	4x23	133,4
8	220	139,731	16	28	4x29	171,4
11	290	196,883	18	35	6x36	235
15	400	285,791	19	42	6x43	330,2
20	540	412,795	21	48	6x43	463,6

DIN 55029, ANSI B 5,9 & ISO 702/II

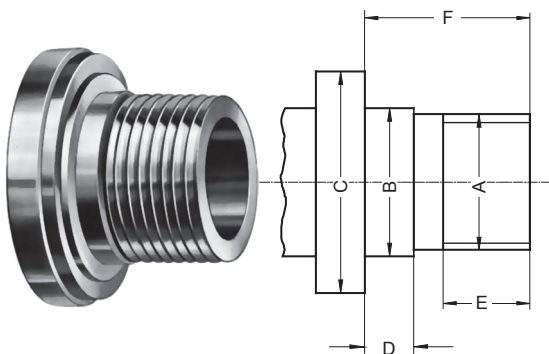
CAMLOCK FIXING



Spindle nose size	A	B max.	C	D	E	F
3	92	53,983	11	32	3x15,1	70,6
4	117	63,521	11	34	3x16,7	82,6
5	146	82,573	13	38	6x19,8	104,8
6	181	106,385	14	45	6x23	133,4
8	225	139,731	16	50	6x26,2	171,4
11	298	196,883	18	60	6x31	235
15	403	285,791	19	70	6x35,7	330,2
20	546	412,795	21	82	6x42,1	463,6

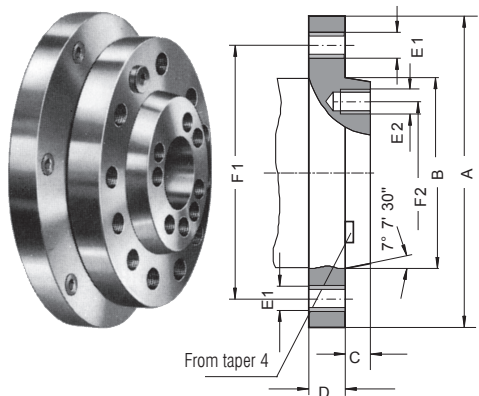
DIN 800

WITH THREAD



	A	Bg5	C min.	D	E	F
M 20	21	30	6,3	10	20	
M 24	25	36	8	12	24	
M 33	34	50	9	14	30	
M 39	40	56	10	16	35	
M 45	46	67	11	18	40	
M 52	55	80	12	20	45	
M 60	62	90	14	22	50	
M 76x6	78	112	16	30	63	
M 105x6	106	150	20	40	80	

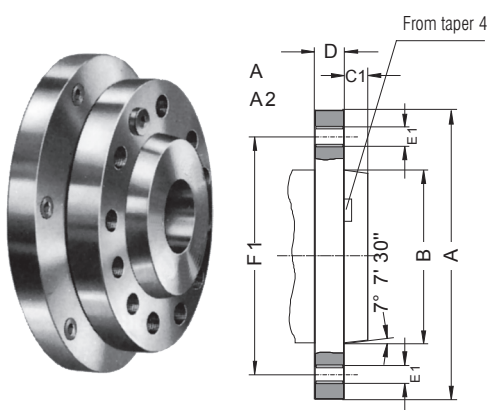
TYPE A1 - A2



		A1						
Spindle nose size	A	B max.	C -0,025	D	E1	F1	E2	F2
5	133.4	82.575	14.288	22.2	11x7/16-14 UNC	104.8	8x7/16-14 UNC	61.9
6	165.1	106.390	15.875	25.4	11x1/2-13 UNC	133.4	8x1/2-13 UNC	82.6
8	209.5	139.735	17.462	28.6	11x5/8-11 UNC	171.4	8x5/8-11 UNC	111.1
11	279.4	196.885	19.05	34.9	11x3/4-10 UNC	235	8x3/4-10 UNC	165.1
15	381	285.8	20.638	41.3	12x7/8-9 UNC	330.2	11x7/8-9 UNC	247.6
20	520	412.8	22.225	47.6	12x1-8 UNC	463.6	11x1-8 UNC	368.3

Tapped holes in flange (outer bolt circle) without inner bolt circle

TYPE A2

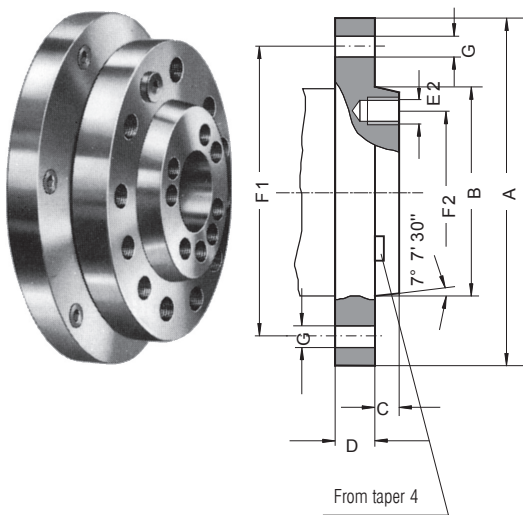


		A2				
Spindle nose size	A	B max.	C	D	E1	F1
3	92.1	53.0642 985	11.1	15.9	3x7/16-14 UNC	70.66
4	108	63.525	11.1	19	11x7/16-14 UNC	82.55
5	133.4	82.575	12.7	22.2	11x7/16-14 UNC	104.8
6	165.1	106.390	14.3	25.4	11x1/2-13 UNC	133.4
8	209.5	139.735	15.9	28.6	11x5/8-11 UNC	171.4
11	279.4	196.885	17.5	34.9	11x3/4-10 UNC	235
15	381	285.8	19	41.3	12x7/8-9 UNC	330.2
20	520	412.8	20.6	47.6	12x1-8 UNC	463.6

Tapped holes in flange (outer bolt circle) without inner bolt circle

Type A1-A2 correspond to ISO 702/1

TYPE B1 - B2



		B1						
Spindle nose size	A	B max.	C -0,025	D	G	F1	E2	F2
5	133.4	82.575	14.288	22.2	11x11.9	104.8	8x7/16-14 UNC	61.9
6	165.1	106.390	15.875	25.4	11x13.5	133.4	8x1/2-13 UNC	82.6
8	209.5	139.735	17.462	28.6	11x16.7	171.4	8x5/8-11 UNC	111.1
11	279.4	196.885	19.05	34.9	11x20.2	235	8x3/4-10 UNC	165.1
15	381	285.8	20.638	41.3	12x23.4	330.2	11x7/8-9 UNC	247.6
20	520	412.8	22.225	47.6	12x26.6	463.6	11x1-8 UNC	368.3

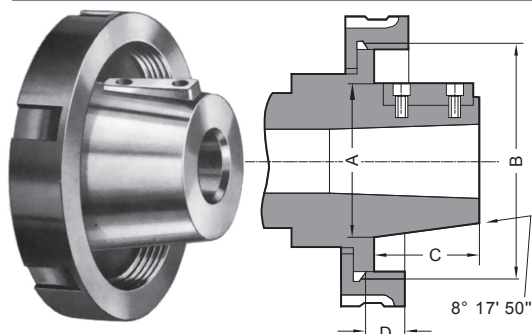
Through-hole in flange (outer bolt circle) tapped holes in inner bolt circle. Driver supplied from taper size 4.

		B2				
Spindle nose size	A	B max.	C	D	G	F1
3	92.1	53.0642 985	11.1	15.9	3x11.9	70.66
4	108	63.525	11.1	19	11x11.9	82.55
5	133.4	82.575	12.7	22.2	11x11.9	104.8
6	165.1	106.390	14.3	25.4	11x13.5	133.4
8	209.5	139.735	15.9	28.6	11x16.7	171.4
11	279.4	196.885	17.5	34.9	11x20.2	235
15	381	285.8	19	41.3	12x23.2	330.2
20	520	412.8	20.6	47.6	12x26.6	463.6

Through-hole in flange (outer bolt circle) without inner bolt circle

TYPE L

LONG TAPER



Spindle nose size	A+0.051	B	C	D	Driving block
L00	69.850	3 3/4-6 UNS	50.800	14.288	∅ 9.525x38.1
L0	82.550	4 1/2-6 UNS	60.325	15.875	∅ 9.525x44.45
L1	104.775	6-6 UNS	73.025	19.050	∅ 15.875x60.32
L2	133.350	7 3/4-5 UNS	85.725	25.400	∅ 19.05x73.02
L3	165.100	10 3/8-4 UNS	94.425	28.575	∅ 25.4x82.55

